#### INTERNATIONAL COURT OF JUSTICE

## REQUEST BY THE UNITED NATIONS GENERAL ASSEMBLY FOR AN ADVISORY OPINION

# "OBLIGATIONS OF STATES IN RESPECT OF CLIMATE CHANGE"

# WRITTEN STATEMENT OF THE UNITED STATES OF AMERICA

**MARCH 22, 2024** 

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#### **CHAPTER I**

#### **INTRODUCTION**

- 1.1 Pursuant to the Orders of the Court dated April 20, 2023, and December 15, 2023, the United States of America submits this written statement (the "Statement") on the questions referred to the Court by the United Nations (UN) General Assembly in its resolution 77/276 of March 29, 2023, regarding States' current obligations under international law in respect of climate change.<sup>1</sup>
- 1.2 Although the question before the Court is framed in terms of States' current obligations "to ensure" the protection of "the climate system and other parts of the environment" from anthropogenic greenhouse gas emissions, the United States interprets it to encompass States' current international obligations relating to the mitigation of those emissions more generally.
- 1.3 These obligations are found, first and foremost, in the UN climate change regime,<sup>4</sup> and particularly the Paris Agreement,<sup>5</sup> with that regime embodying the clearest, most specific, and most current expression of States' consent to be bound by international law in respect of climate change. States' implementation of their obligations under the UN climate change

<sup>&</sup>lt;sup>1</sup> G.A. Res. 77/276, U.N. Doc. A/RES/77/276 (Mar. 29, 2023), <a href="https://perma.cc/YZ4U-H8GZ">https://perma.cc/YZ4U-H8GZ</a> [Dossier No. 2] ("G.A. Res. 77/276"). The UN General Assembly requested the Court's advisory opinion on the following questions: "(a) What are the obligations of States under international law to ensure the protection of the climate system and other parts of the environment from anthropogenic emissions of greenhouse gases for States and for present and future generations; (b) What are the legal consequences under these obligations for States where they, by their acts and omissions, have caused significant harm to the climate system and other parts of the environment, with respect to: (i) States, including, in particular, small island developing States, which due to their geographical circumstances and level of development, are injured or specially affected by or are particularly vulnerable to the adverse effects of climate change? (ii) Peoples and individuals of the present and future generations affected by the adverse effects of climate change?" *Id*.

<sup>&</sup>lt;sup>2</sup> The UN Framework Convention on Climate Change defines "climate system" to mean "the totality of the atmosphere, hydrosphere, biosphere and geosphere and their interactions." United Nations Framework Convention on Climate Change, art. 1(3), May 9, 1992, S. Treaty Doc. No. 102-38, 1771 U.N.T.S. 107 (entered into force Mar. 21, 1994), <a href="https://perma.cc/98AS-N3U4">https://perma.cc/98AS-N3U4</a>; see also United Nations Framework Convention on Climate Change (consolidated text reflecting amendments to the Convention's annexes), <a href="https://perma.cc/88LK-37L5">https://perma.cc/88LK-37L5</a> [Dossier Nos. 4-10] ("UNFCCC"). The United States does not read the phrase "and other parts of the environment" as materially altering the scope of the questions presented regarding States' current obligations in respect of climate change.

<sup>&</sup>lt;sup>3</sup> The United States further notes that neither the matters addressed in the preamble of resolution 77/276 nor the questions presented prejudge the nature of States' current obligations in respect of climate change or the legal consequences for any breach of those obligations, nor do they presuppose that such breaches have occurred or are occurring.

<sup>&</sup>lt;sup>4</sup> As used in this Statement, the term "UN climate change regime" comprises the UN Framework Convention on Climate Change and the Paris Agreement, as well as the decisions adopted under those agreements.

<sup>&</sup>lt;sup>5</sup> Paris Agreement, Dec. 12, 2015, T.I.A.S. 16-1104, 3156 U.N.T.S. 79 (entered into force Nov. 4, 2016), <a href="https://perma.cc/CSF5-4SRK">https://perma.cc/CSF5-4SRK</a> ("Paris Agreement") [Dossier No. 16].

regime—especially through the Paris Agreement's mechanism for driving increasingly ambitious climate action over time—provides the best hope for protecting the climate system for the benefit of present and future generations.

- 1.4 Chapter II of this Statement describes the current state of climate science, including climate attribution science, which is important to understand in considering climate change-related legal issues. It explains how States' knowledge of the more specific risks of global harm posed by anthropogenic greenhouse gas emissions has increased significantly since States first gained a general awareness of the risks in the late 1980s, how alternatives to greenhouse gas-emitting activities also have expanded dramatically since then, and why climate action by all States is needed to avoid the worst impacts. Chapter II then provides a history of States' collective efforts to address climate change, explaining how the international climate change regime has evolved over three decades of ongoing and painstaking negotiations, beginning with the 1992 UN Framework Convention on Climate Change and now focusing on implementing the 2015 Paris Agreement. This provides important context for consideration of States' obligations under the UN climate change regime, which are addressed in Chapter III.
- 1.5 **Chapter III** addresses the substance of the first question posed<sup>6</sup> by reviewing the primary source of States' obligations under international law relating to anthropogenic emissions of greenhouses gases: the UN climate change regime, and particularly the Paris Agreement. It also examines supplemental obligations of States in respect of climate change under sectoral regimes.
- 1.6 **Chapter IV** then considers any obligations in respect of climate change that might exist under other sources of international law, including customary international law, the law of the sea, and international human rights law. As explained in Chapter IV, to the extent other sources of international law might establish such obligations, those obligations are, at most, quite general, and would be satisfied in the climate change context by States' implementation of their obligations under the climate change-specific treaties they have negotiated and joined.

<sup>&</sup>lt;sup>6</sup> G.A. Res. 77/276 ("(a) What are the obligations of States under international law to ensure the protection of the climate system and other parts of the environment from anthropogenic emissions of greenhouse gases for States and for present and future generations"?).

- 1.7 **Chapter V** addresses the second question posed<sup>7</sup> by describing key elements of the international legal framework for assessing the legal consequences for States for any potential breach of obligations relating to climate change.
- 1.8 **Chapter VI** concludes the Statement by explaining how the Court through its advisory opinion could reinforce the vital and impactful efforts of States to address anthropogenic climate change through the UN climate change regime, particularly the Paris Agreement.
- 1.9 As recognized in resolution 77/276, climate change is a global and "unprecedented challenge." Addressing it—including through the 1992 UN Framework Convention on Climate Change and the 2015 Paris Agreement, which the UN General Assembly has acknowledged "are the primary international, intergovernmental forums for negotiating the global response to climate change" —is of the highest priority to the United States and many other States throughout the world. <sup>10</sup>
- 1.10 The United States has vigorously pursued climate action, both domestically and internationally, and remains on track to achieve its ambitious nationally determined contribution (NDC) under the 2015 Paris Agreement of "achiev[ing] an economy-wide target of reducing its net greenhouse gas emissions by 50-52 percent below 2005 levels in 2030," which is consistent with limiting the global average temperature rise to 1.5 degrees

<sup>&</sup>lt;sup>7</sup> *Id.* ("(b) What are the legal consequences under these obligations for States where they, by their acts and omissions, have caused significant harm to the climate system and other parts of the environment, with respect to: (i) States, including, in particular, small island developing States, which due to their geographical circumstances and level of development, are injured or specially affected by or are particularly vulnerable to the adverse effects of climate change? (ii) Peoples and individuals of the present and future generations affected by the adverse effects of climate change?").

<sup>&</sup>lt;sup>8</sup> *Id.* pmbl.

<sup>&</sup>lt;sup>9</sup> G.A. Res. 78/153, pmbl., U.N. Doc. A/RES/78/153 (Dec. 19, 2023), <a href="https://perma.cc/48LN-SPLT">https://perma.cc/48LN-SPLT</a>; G.A. Res. 78/165, pmbl., U.N. Doc. A/RES/77/165 (Dec. 14, 2022), <a href="https://perma.cc/XD3B-TZZL">https://perma.cc/XD3B-TZZL</a> [Dossier No. 135]; G.A. Res. 76/205, pmbl., U.N. Doc. A/RES/76/205 (Dec. 17, 2021), <a href="https://perma.cc/WZX6-SK8Y">https://perma.cc/WZX6-SK8Y</a> [Dossier No. 134]; G.A. Res. 75/217, pmbl., U.N. Doc. A/RES/75/217 (Dec. 21, 2020), <a href="https://perma.cc/7J95-9WB7">https://perma.cc/7J95-9WB7</a> [Dossier No. 133]; G.A. Res. 74/219, pmbl., U.N. Doc. A/RES/74/219 (Dec. 19, 2019), <a href="https://perma.cc/85EZ-7XYY">https://perma.cc/2C5V-YM3L</a> [Dossier No. 131]; G.A. Res. 72/219, pmbl., U.N. Doc. A/RES/72/219 (Dec. 20, 2017), <a href="https://perma.cc/2C5V-YM3L">https://perma.cc/2C5V-YM3L</a> [Dossier No. 130]; G.A. Res. 70/205, pmbl., U.N. Doc. A/RES/70/205 (Dec. 22, 2015), <a href="https://perma.cc/8E7J-J5RZ">https://perma.cc/TP6L-LV9P</a> [Dossier No. 130]; G.A. Res. 70/205, pmbl., U.N. Doc. A/RES/70/105 (Dec. 22, 2015), <a href="https://perma.cc/8E7J-J5RZ">https://perma.cc/8E7J-J5RZ</a> [Dossier No. 128] (acknowledging, prior to the Paris Agreement's entry into force, the same with respect to the UNFCCC only); G.A. Res. 70/1, ¶ 31, U.N. Doc. A/RES/70/1 (Sept. 25, 2015), <a href="https://perma.cc/KVR9-LR4B">https://perma.cc/KVR9-LR4B</a> [Dossier No. 219] (same).

<sup>&</sup>lt;sup>10</sup> See, e.g., U.S. White House, 2022 National Security Strategy, 9 (Oct. 2022), <a href="https://perma.cc/9JAG-LVE2">https://perma.cc/9JAG-LVE2</a> ("Of all the shared problems we face, climate change is the greatest and potentially existential for all nations."); U.S. Exec. Order No. 14,008 of Jan. 27, 2021 (Tackling the Climate Crisis at Home and Abroad), 86 Fed. Reg. 7619, 7619 (Feb. 1, 2021), <a href="https://perma.cc/GS78-VUZC">https://perma.cc/GS78-VUZC</a> ("U.S. Exec. Order No. 14,008") (stating that it is U.S. policy "that climate considerations shall be an essential element of United States foreign policy and national security").

Celsius.<sup>11</sup> In 2022, the United States enacted legislation that marked the most aggressive and enduring action ever by the U.S. government to combat the climate crisis.<sup>12</sup> The United States is now on a path to achieve not only its NDC target but also its goal of reaching net-zero emissions no later than 2050.<sup>13</sup> The United States is also advancing habitat conservation and restoration as climate solutions, including through the America the Beautiful Initiative, which seeks to restore and conserve 30 percent of U.S. lands and waters by 2030,<sup>14</sup> and is working to implement national ocean-based climate mitigation<sup>15</sup> and adaptation<sup>16</sup> activities.<sup>17</sup> Additionally, the United States is advancing national climate resilience<sup>18</sup> and placing the delivery of environmental justice in communities all across the country at the center of its domestic climate action.<sup>19</sup>

1.11 Internationally, the United States has been a leader in efforts to address climate change. Since 2020, the United States has convened leaders of the world's largest economies four times to press them to enhance their ambitions to keep the 1.5-degree Celsius limit within

<sup>&</sup>lt;sup>11</sup> United States, *The United States of America Nationally Determined Contribution – Reducing Greenhouse Gases in the United States: A 2030 Emissions Target*, 6 (2021), https://perma.cc/4P3Y-5GWF.

<sup>&</sup>lt;sup>12</sup> See U.S. White House, *Inflation Reduction Act Guidebook* (2d vers., Jan. 2023), <a href="https://perma.cc/F4M8-KBJA">https://perma.cc/F4M8-KBJA</a>. Additionally, in 2021, the United States enacted the Bipartisan Infrastructure Law, which is the largest investment in clean energy infrastructure in U.S. history. *See* U.S. White House, *Fact Sheet: The Bipartisan Infrastructure Deal* (Nov. 6, 2021), <a href="https://perma.cc/7DA4-Y9TH">https://perma.cc/7DA4-Y9TH</a>. The Inflation Reduction Act and the Bipartisan Infrastructure Law include provisions to support the growth of clean energy jobs, increase the deployment of renewable energy infrastructure like wind and solar, and build climate resilience for ecosystems and human communities.

<sup>&</sup>lt;sup>13</sup> See U.S. Dep't of State & Exec. Off. of the President, *The Long-Term Strategy of the United States: Pathways to Net-Zero Greenhouse Gas Emissions by 2050*, 5 (Nov. 2021), <a href="https://perma.cc/VHG4-5H4L">https://perma.cc/VHG4-5H4L</a>.

<sup>&</sup>lt;sup>14</sup> See U.S. Exec. Order No. 14,008, at 7627; see also U.S. White House, Biden-Harris Administration Outlines "America the Beautiful" Initiative (May 6, 2021), https://perma.cc/E34Q-MXJD.

<sup>&</sup>lt;sup>15</sup> In the climate change context, the term "climate mitigation" refers to "[m]easures to reduce the amount and rate of future climate change by reducing emissions of heat-trapping [greenhouse] gases or removing carbon dioxide from the atmosphere." U.S. GOV'T, FIFTH NATIONAL CLIMATE ASSESSMENT app. 5 (Glossary) (2023), <a href="https://perma.cc/9KXX-LTQJ">https://perma.cc/9KXX-LTQJ</a>.

<sup>&</sup>lt;sup>16</sup> The term "adaptation" refers, "[i]n human systems, [to] the process of adjustment to actual or expected climate and its effects to moderate harm or exploit beneficial opportunities," and "[i]n natural systems [to] the process of adjustment to actual climate and its effects," noting that "[h]uman intervention may facilitate adjustment to expected climate and its effects." U.S. GOV'T, FIFTH NATIONAL CLIMATE ASSESSMENT app. 5 (Glossary) (2023), <a href="https://perma.cc/9KXX-LTQJ">https://perma.cc/9KXX-LTQJ</a>.

<sup>&</sup>lt;sup>17</sup> See U.S. WHITE HOUSE, OCEAN CLIMATE ACTION PLAN: A REPORT BY THE OCEAN POLICY COMMITTEE (2023), https://perma.cc/RZQ8-QD4C.

<sup>&</sup>lt;sup>18</sup> See U.S. WHITE HOUSE, NATIONAL CLIMATE RESILIENCE FRAMEWORK (2023), https://perma.cc/D9FE-6G4W.

<sup>&</sup>lt;sup>19</sup> U.S. Exec. Order No. 14,096 of Apr. 21, 2023 (Revitalizing Our Nation's Commitment to Environmental Justice for All), 88 Fed. Reg. 25251 (Apr. 26, 2023), <a href="https://perma.cc/J7NB-PVUS">https://perma.cc/J7NB-PVUS</a>; see also U.S. White House, <a href="https://perma.cc/RG85-7FST">Environmental Justice</a>, <a href="https://perma.cc/RG85-7FST">https://perma.cc/RG85-7FST</a>.

reach.<sup>20</sup> This has complemented the broader efforts of the United States at the annual UN Climate Change Conference<sup>21</sup> to drive ambitious implementation of the Paris Agreement.<sup>22</sup> The United States has also championed the promotion of greenhouse gas emissions reductions in such sectoral fora as the International Civil Aviation Organization, the International Maritime Organization, and Meetings of the Parties to the Montreal Protocol.<sup>23</sup> It also has spearheaded such bilateral, multilateral, and multistakeholder cooperative initiatives as the Global Methane Pledge,<sup>24</sup> the Green Shipping Challenge,<sup>25</sup> and the First Movers Coalition.<sup>26</sup> In addition, it is co-chairing the Forest and Climate Leaders' Partnership effort to

<sup>&</sup>lt;sup>20</sup> U.S. White House, Fact Sheet: President Biden's Leaders Summit on Climate (Apr. 23, 2021), <a href="https://perma.cc/MSJ8-X3BN">https://perma.cc/MSJ8-X3BN</a>; U.S. White House, Meeting of the Major Economies Forum on Energy and Climate September 17, 2021: Chair's Summary (Sept. 17, 2021), <a href="https://perma.cc/4NV3-Y4SR">https://perma.cc/4NV3-Y4SR</a>; U.S. White House, Chair's Summary of the Major Economies Forum on Energy and Climate Held by President Joe Biden (Apr. 21, 2023), <a href="https://perma.cc/3JT-8Q42">https://perma.cc/FHJ5-EVST</a>; U.S. White House, Chair's Summary of the Major Economies Forum on Energy and Climate Held by President Joe Biden (Apr. 21, 2023), <a href="https://perma.cc/3JT-8Q42">https://perma.cc/3JT-8Q42</a>.

<sup>&</sup>lt;sup>21</sup> The annual UN Climate Change Conference includes sessions of, *inter alia*, the governing bodies of the UN Framework Convention on Climate Change (the Conference of the Parties, or COP) and the Paris Agreement (the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement, or CMA). Beyond these sessions, thousands gather to discuss and drive forward climate action outside the formal negotiations. The annual conferences "have grown exponentially in size over the past two decades—from small working sessions into the largest annual conferences currently held under the auspices of the United Nations—and are now among the largest international meetings in the world." UN Climate Change Secretariat, *What Are United Nations Climate Conferences*?, https://perma.cc/E9WA-FZ39.

<sup>&</sup>lt;sup>22</sup> See U.S. White House, Fact Sheet: Biden-Harris Administration Leverages Historic U.S. Climate Leadership at Home and Abroad to Urge Countries to Accelerate Global Climate Action at U.N. Climate Conference (COP28) (Dec. 2, 2023), <a href="https://perma.cc/YP6V-VTH8">https://perma.cc/YP6V-VTH8</a>; U.S. White House, Fact Sheet: President Biden Announces New Initiative at COP27 to Strengthen U.S. Leadership in Tackling Climate Change (Nov. 11, 2022), <a href="https://perma.cc/2XWW-D3KV">https://perma.cc/2XWW-D3KV</a>; U.S. White House, Fact Sheet: Renewed U.S. Leadership in Glasgow Raises Ambition to Tackle Climate Crisis (Nov. 13, 2021), <a href="https://perma.cc/PWC7-JRTS">https://perma.cc/PWC7-JRTS</a>.

<sup>&</sup>lt;sup>23</sup> See U.S. FED. AVIATION AUTH. (FAA), 2021 AVIATION CLIMATE ACTION PLAN 24-26 (2021), <a href="https://perma.cc/79G7-3PNB">https://perma.cc/79G7-3PNB</a>; U.S. Dep't of State, Fact Sheet: U.S. Announcements Under the Green Shipping Challenge at COP27 (Nov. 7, 2022), <a href="https://perma.cc/L59T-PKGU">https://perma.cc/L59T-PKGU</a>; U.S. Env't Prot. Agency (EPA), Timeline of Actions on HFCs, <a href="https://perma.cc/3EWA-AA52">https://perma.cc/3EWA-AA52</a> (detailing various "North American proposals" submitted by the United States, Canada, and Mexico to amend the Montreal Protocol to phase down production and consumption of hydrofluorocarbons (HFCs), ultimately leading to the adoption of the Kigali Amendment).

<sup>&</sup>lt;sup>24</sup> See GLOBAL METHANE PLEDGE, <a href="https://perma.cc/4VAT-W9XN">https://perma.cc/4VAT-W9XN</a> (involving a non-legally-binding commitment by participating States "to take voluntary actions to contribute to a collective effort to reduce global methane emissions at least 30 percent from 2020 levels by 2030").

<sup>&</sup>lt;sup>25</sup> See GREEN SHIPPING CHALLENGE, <a href="https://perma.cc/5UXA-C597">https://perma.cc/5UXA-C597</a> (designed "to encourage countries, ports, companies, and other actors in the shipping value chain to come forward with concrete announcements that will help put the shipping sector on a pathway this decade that is aligned with the goal of limiting global temperature rise to 1.5 degrees Celsius").

<sup>&</sup>lt;sup>26</sup> U.S. Dep't of State, Fact Sheet: Launching the First Movers Coalition at the 2021 UN Climate Change Conference (Nov. 4, 2021), <a href="https://perma.cc/VEH9-FU6X">https://perma.cc/VEH9-FU6X</a> (a public-private partnership to commercialize clean technologies through advance purchase commitments in "hard-to-abate" sectors).

halt and reverse deforestation and forest degradation by 2030<sup>27</sup> and working with developing countries to help over 500 million people worldwide adapt to climate change.<sup>28</sup>

1.12 The United States has continued to focus on mobilizing resources to support the efforts of developing countries to address the climate crisis and on aligning broader global finance flows with the goals of the Paris Agreement.<sup>29</sup> In 2021, the United States released the first-ever U.S. International Climate Finance Plan, which launched a whole-of-government effort to support developing countries in their efforts to mitigate their emissions of greenhouse gases, pursue clean energy transitions, and build resilience to the adverse effects of climate change.<sup>30</sup> That same year, President Biden announced his intention to work with Congress to scale up U.S. international public climate finance to over \$11 billion per year by 2024, including a sixfold increase in adaptation finance under the President's Emergency Plan for Adaptation and Resilience (PREPARE).<sup>31</sup> The United States has made significant progress in this regard: it delivered an estimated \$9.5 billion in climate finance in 2023 and is on track to meet the \$11 billion pledge in 2024.<sup>32</sup> U.S. efforts in this context have been a critical catalyst for climate action in developing countries around the globe and have helped developed countries to make

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<sup>&</sup>lt;sup>27</sup> U.S. White House, Fact Sheet: Biden-Harris Administration Leverages Historic U.S. Climate Leadership at Home and Abroad to Urge Countries to Accelerate Global Climate Action at U.N. Climate Conference (COP28) (Dec. 2, 2023), https://perma.cc/J2K4-3HEX.

<sup>&</sup>lt;sup>28</sup> See U.S. White House, President's Emergency Plan for Adaptation and Resilience (PREPARE) ACTION Plan 5 (2022), <a href="https://perma.cc/LWG5-NEJE">https://perma.cc/LWG5-NEJE</a>.

<sup>&</sup>lt;sup>29</sup> The United States is mobilizing climate finance through initiatives such as the Blended Finance for the Energy Transition (BFET) program, Climate Finance for Development Accelerator, and continued support to the Green Climate Fund, Clean Technology Fund, and other funding mechanisms. *See* U.S. Dep't of State, *Fact Sheet: Progress Report on President Biden's Climate Finance Pledge* (Dec. 2, 2023), <a href="https://perma.cc/Z2VQ-Z5EH">https://perma.cc/Z2VQ-Z5EH</a>; U.S. Agency for Int'l Dev., *Blended Finance for the Energy Transition (BFET)*, <a href="https://perma.cc/6PZW-2J5Z">https://perma.cc/6PZW-2J5Z</a>.

<sup>&</sup>lt;sup>30</sup> U.S. White House, *Executive Summary: U.S. International Climate Finance Plan* (Apr. 22, 2021), https://perma.cc/A36W-WRU5.

<sup>&</sup>lt;sup>31</sup> U.S. White House, *Remarks by President Biden Before the 76th Session of the United Nations General Assembly* (Sept. 21, 2021), <a href="https://perma.cc/JP7W-YA2U">https://perma.cc/JP7W-YA2U</a>; U.S. White House, *Fact Sheet: President Biden to Catalyze Global Climate Action through the Major Economies Forum on Energy and Climate* (Apr. 20, 2023) ("In 2021, President Biden pledged to work with Congress to quadruple U.S. climate support for developing countries to more than \$11 billion a year by 2024."), <a href="https://perma.cc/4P45-H3FJ">https://perma.cc/4P45-H3FJ</a>. This dramatic increase is relative to the highest-ever levels of previous U.S. support for climate action internationally under the Obama-Biden administration and is in addition to ongoing efforts to support climate action through multilateral development banks and to mobilize the private sector.

<sup>&</sup>lt;sup>32</sup> U.S. Dep't of State, *Fact Sheet: Progress Report on President Biden's Climate Finance Pledge* (Dec. 2, 2023), <a href="https://perma.cc/Z2VQ-Z5EH">https://perma.cc/Z2VQ-Z5EH</a>.

progress toward their goal of jointly mobilizing \$100 billion per year in climate finance for developing countries, which was likely met for the first time in 2022.<sup>33</sup>

1.13 The United States also has focused on minimizing the risks and effects of sea-level rise for small island and low-lying States. These efforts include President Biden's 2022 announcement that the United States is committed to preserving the legitimacy of States' maritime zones, and associated rights and entitlements, that have been established consistent with international law and that are not subsequently updated despite sea-level rise caused by climate change.<sup>34</sup> Efforts also include President Biden's September 2023 announcement of the U.S. policy that human-induced sea-level rise should not cause any country to lose its statehood or its membership in the United Nations or other international organizations.<sup>35</sup>

1.14 As a State committed to climate action, the United States joined consensus on UN General Assembly resolution 77/276, while reiterating its view that diplomatic efforts remain the best way to address climate change, <sup>36</sup> a problem that requires collective action by all States—and, in particular, all the world's major greenhouse gas emitters. The United States considers that these ongoing diplomatic efforts, particularly multilateral engagement in the UN climate change regime and especially under the Paris Agreement, offer the best means for achieving the international community's shared climate goals.

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<sup>&</sup>lt;sup>33</sup> Organization for Economic Co-operation and Development (OECD), *Growth Accelerated in the Climate Finance Provided and Mobilised in 2021 But Developed Countries Remain Short and Must Continue Scaling Up to Reach the USD 100 Billion Goal* (Nov. 16, 2023), <a href="https://perma.cc/2LJE-UPAD">https://perma.cc/2LJE-UPAD</a> ("On the basis of preliminary and as yet unverified data available to the OECD to date, the goal looks likely to have already been met as of 2022.").

<sup>&</sup>lt;sup>34</sup> U.S. Dep't of State, U.S. Policy on Sea-level Rise and Maritime Zones, https://perma.cc/W74P-LJZS.

<sup>&</sup>lt;sup>35</sup> U.S. White House, *Fact Sheet: Enhancing the U.S.-Pacific Islands Partnership* (Sept. 25, 2023), <a href="https://perma.cc/U9TH-UVL2">https://perma.cc/U9TH-UVL2</a>.

<sup>&</sup>lt;sup>36</sup> United States, Explanation of Position on Resolution Entitled Request for an Advisory Opinion of the International Court of Justice (Mar. 29, 2023), <a href="https://perma.cc/KWR8-STQN">https://perma.cc/KWR8-STQN</a>.

#### **CHAPTER II**

#### HUMAN-CAUSED CLIMATE CHANGE AND STATES' COLLECTIVE EFFORTS TO MITIGATE ANTHROPOGENIC GREENHOUSE GAS EMISSIONS

- 2.1 As the United States and many other States have recognized, anthropogenic—or human-caused—climate change is perhaps the most challenging collective action problem humanity has ever faced.<sup>37</sup> Anthropogenic emissions of greenhouse gases come from all corners of the globe and from a vast array of human activities, including power generation, transportation, agriculture and other land use, and industrial processes at the core of the modern global economy. The scale and scope of the problem necessarily requires commensurate solutions: efforts by all States to mitigate global greenhouse gas emissions, involving socioeconomic transformations without parallel in human history, and to adapt to the effects of climate change.
- 2.2 As a global collective action problem, anthropogenic climate change inherently requires near-universal action by States. No single State can solve it alone, and every emitter must do its part.
- 2.3 Beginning in the late 1980s, when scientific consensus about anthropogenic climate change began to emerge and States became aware of the significant risk it posed, the international community has progressively taken steps to address it. Initially, States negotiated and concluded a framework convention that established a basic system of international governance for the climate change problem.<sup>38</sup> Since then, the UN climate change regime has evolved significantly through a process that led to the Paris Agreement, which has nearly universal participation and requires every Party to communicate and maintain a nationally determined contribution toward mitigation of greenhouse gas emissions that it intends to achieve.<sup>39</sup> As described in detail in Chapters II.B and III, States carefully crafted the Paris Agreement to generate the broad participation and global mitigation action needed to address climate change, while allowing States to take into account myriad differences in their national circumstances.

<sup>&</sup>lt;sup>37</sup> See, e.g., U.S. White House, Fact Sheet: President Biden's Leaders Summit on Climate (Apr. 23, 2021), <a href="https://perma.cc/MSJ8-X3BN">https://perma.cc/MSJ8-X3BN</a> (noting "the need for unprecedented global cooperation and ambition to meet the moment" and address the climate crisis).

<sup>&</sup>lt;sup>38</sup> See infra Chapters II.B and III.A.

<sup>&</sup>lt;sup>39</sup> See infra Chapters II.B and III.B.

2.4 The facts set out in this chapter provide critical context for the examination of international law in Chapters III-V. **Part A** of this chapter provides an overview of the causes of global warming and the history and current state of knowledge about the risks and effects of anthropogenic greenhouse gas emissions, as well as the current state of climate attribution science. **Part B** provides a brief history of States' collective efforts to address climate change, from the late 1980s until today, which provides important context for understanding States' international legal obligations under the UN climate change regime, and particularly the Paris Agreement, which are then addressed in Chapter III.

### A. Global Warming and the Science of Climate Change, including Climate Attribution Science

- i. Global Warming and the Current State of Climate Science
- 2.5 Global warming occurs because the Earth's atmosphere is mostly transparent to incoming sunlight, but components of the atmosphere known as greenhouse gases (GHGs) absorb the infrared radiation—a form of heat—re-radiated from the Earth, causing the Earth's atmosphere to warm.<sup>40</sup> This retention of heat in the atmosphere creates what is known as the "greenhouse effect."<sup>41</sup>
- 2.6 The greenhouse effect is a naturally occurring phenomenon that is vital to life on Earth as we know it. Without GHGs in the atmosphere moderating the loss of heat into space, the

<sup>&</sup>lt;sup>40</sup> U.S. Nat'l Aeronautics & Space Admin. (NASA), The Causes of Climate Change, https://perma.cc/T65W-F5NZ. GHGs include water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), tropospheric ozone, and various synthetic (human-made) fluorinated gases. These fluorinated gases are hydrofluorocarbons perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and nitrogen trifluoride (HFCs). INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC), CLIMATE CHANGE 2023: SYNTHESIS REPORT OF THE IPCC SIXTH ASSESSMENT REPORT 43 (2023), <a href="https://perma.cc/LTT9-DWMY">https://perma.cc/LTT9-DWMY</a> ("IPCC AR6"). Different GHGs have different "global warming potentials" (GWPs), depending on their ability to absorb infrared energy and how long they remain in the atmosphere. Id. at 124. Using the GWP of CO<sub>2</sub> over a 100-year timeline as a baseline, each molecule of CH<sub>4</sub> is close to 30 times more potent than each molecule of CO<sub>2</sub>; N<sub>2</sub>O is more than 260 times more potent; HFCs up to 12,400 times more potent; PFCs up to 11,110 times more potent; SF<sub>6</sub> 23,500 times more potent; and NF<sub>3</sub> 16,100 times more potent. IPCC, CLIMATE CHANGE 2013: THE PHYSICAL SCIENCE BASIS, CONTRIBUTION OF WORKING GROUP I TO THE FIFTH ASSESSMENT REPORT OF THE IPCC 731-37 (2013), https://perma.cc/F7PQ-DRR4 ("IPCC WGI AR5"). Although CO2 has the lowest GWP among anthropogenic GHGs, it is responsible for two-thirds of anthropogenic global warming above a 1990 baseline both because of the quantity of anthropogenic CO<sub>2</sub> emissions and because CO<sub>2</sub> remains in the climate system for such a long time. See U.S. Nat'l Oceanic & Atmospheric Admin. (NOAA), NOAA Annual Greenhouse Gas Index (2023), https://perma.cc/LU5E-KVBR. Although water vapor is the most abundant GHG in the atmosphere, its atmospheric concentration is not linked directly to human-caused activities as is the case for atmospheric concentrations of other GHGs, but rather indirectly to the anthropogenic global warming caused by increased atmospheric concentrations of those other GHGs because a warmer atmosphere holds more water vapor. IPCC, Fourth Assessment Report: Climate Change 2007, Frequently Asked Question 2.1: How Do Human Activities Contribute to Climate Change and How Do They Compare with Natural Influences? (2007), https://perma.cc/LT2Y-K7VM.

<sup>&</sup>lt;sup>41</sup> NASA, The Causes of Climate Change, <a href="https://perma.cc/T65W-F5NZ">https://perma.cc/T65W-F5NZ</a>.

Earth's global average temperature would be below the freezing point of water. <sup>42</sup> Increased atmospheric concentrations of GHGs due to anthropogenic emissions, however, have resulted in more heat being retained in the atmosphere and at the Earth's surface before it is ultimately radiated into space. In other words, increased atmospheric concentrations of GHGs have caused and are continuing to cause global warming. <sup>43</sup>

- 2.7 Atmospheric concentrations of GHGs have increased since around 1750, with those increased concentrations "unequivocally caused by human activities."<sup>44</sup> The anthropogenic GHG emissions, including those of carbon dioxide (CO<sub>2</sub>), methane, and nitrous oxide, that have led to the increased atmospheric concentrations of GHGs have come from activities that are essentially universal in the modern world, occurring in every economy worldwide, including activities of great and fundamental societal benefit, such as the production of energy and food.
- 2.8 Most anthropogenic emissions of CO<sub>2</sub> to date (around 65 percent) have come from the burning of fossil fuels (petroleum, coal, natural gas) and cement production; the remainder (around 35 percent) have come from land use and land-use change (agriculture and deforestation).<sup>45</sup> About 42 percent of the emitted CO<sub>2</sub> has remained in the atmosphere, with the rest being absorbed by the land biosphere (around 34 percent) and by the ocean (around 25 percent).<sup>46</sup>
- 2.9 Anthropogenic methane emissions over the past decade have come mainly from agriculture and waste (around 60 percent) and from release during fossil fuel extraction and use (around 30 percent).<sup>47</sup> Such emissions remain in the atmosphere until destroyed by chemical reactions on time scales of about a decade.<sup>48</sup> Nitrous oxide emissions have come primarily from agriculture (around 50 percent), with smaller contributions associated with

<sup>&</sup>lt;sup>42</sup> IPCC, Fourth Assessment Report: Climate Change 2007, Frequently Asked Question 1.3: What is the Greenhouse Effect? (2007), <a href="https://perma.cc/97WA-BK3S">https://perma.cc/97WA-BK3S</a>.

<sup>&</sup>lt;sup>43</sup> IPCC AR6, 42-44.

<sup>&</sup>lt;sup>44</sup> IPCC, CLIMATE CHANGE 2021: THE PHYSICAL SCIENCE BASIS, CONTRIBUTION OF WORKING GROUP I TO THE SIXTH ASSESSMENT REPORT OF THE IPCC 4, ¶ A.1.1 (2021), <a href="https://perma.cc/4WPS-J6D5">https://perma.cc/4WPS-J6D5</a> ("IPCC WGI AR6").

<sup>&</sup>lt;sup>45</sup> *Id.* at 699.

<sup>&</sup>lt;sup>46</sup> *Id*.

<sup>&</sup>lt;sup>47</sup> *Id.* at 703.

<sup>&</sup>lt;sup>48</sup> U.S. EPA, Understanding Global Warming Potentials (Apr. 18, 2023), <a href="https://perma.cc/JD3R-D9KP">https://perma.cc/JD3R-D9KP</a>.

combustion, industrial processes, and wastewater<sup>49</sup>—remaining in the atmosphere until destroyed by chemical reactions on time scales of about a century.<sup>50</sup>

- 2.10 Regardless of how, where, or when they were emitted, many GHGs, such as CO<sub>2</sub>, methane, and nitrous oxide, have long enough lifetimes in the atmosphere that they are "well-mixed," meaning that concentrations of these GHGs are relatively uniform throughout the atmosphere and their climate impact is essentially the same regardless of the location of the emissions.<sup>51</sup>
- 2.11 Although the greenhouse effect has been understood since 1822,<sup>52</sup> the comprehensive study and measurement of atmospheric concentrations of CO<sub>2</sub> did not begin until the mid-20th century. The systematic consideration of other GHGs (*e.g.*, methane, nitrous oxide) did not occur until the 1970s, and fluorinated gases were recognized as potent GHGs only in the 1970s and 1980s.<sup>53</sup> Climate modeling adequate for the projection of global warming that might result from anthropogenic GHG emissions began in the late 1960s.<sup>54</sup>
- 2.12 It was only in the late 1980s, however, that a general awareness developed among States of the significant global risks that could arise from global warming resulting from increased atmospheric concentrations of GHGs due to human activities.<sup>55</sup> This led, in 1988, to the World Meteorological Organization and the UN Environment Programme's joint decision to establish the Intergovernmental Panel on Climate Change (IPCC), in order to "make assessments of available scientific information on climate change," "make assessments of environmental and socio-economic impacts of climate change," and "formulate response strategies to meet the challenge of climate change." Today, the IPCC has more than 190

<sup>&</sup>lt;sup>49</sup> IPCC WGI AR6, 712.

<sup>&</sup>lt;sup>50</sup> U.S. EPA, Understanding Global Warming Potentials (Apr. 18, 2023), https://perma.cc/JD3R-D9KP.

<sup>&</sup>lt;sup>51</sup> IPCC WGI AR6, 680.

<sup>&</sup>lt;sup>52</sup> *Id.* at 178 (noting that some scientists already hypothesized in the late 19th and early 20th centuries that CO<sub>2</sub> emissions from the burning of fossil fuels could cause global warming).

<sup>&</sup>lt;sup>53</sup> *Id.* at 180.

<sup>&</sup>lt;sup>54</sup> See U.S. NOAA, The First Climate Model, <a href="https://perma.cc/RN9X-Y54J">https://perma.cc/RN9X-Y54J</a>; see also IPCC, CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS, CONTRIBUTION OF WORKING GROUP I TO THE FOURTH ASSESSMENT REPORT OF THE IPCC, ch. 1 (2007), <a href="https://perma.cc/3EJK-ZBNT">https://perma.cc/3EJK-ZBNT</a> ("IPCC WGI AR4").

<sup>&</sup>lt;sup>55</sup> In 1988 in the United States, for example, a scientist at the U.S. National Aeronautics and Space Administration, Dr. James E. Hansen, issued in testimony before the U.S. Congress what is often regarded as one of the first widely reported clarion calls regarding anthropogenic global warming. *See* Philip Shabecoff, *Global Warming Has Begun, Expert Tells Senate*, N.Y. TIMES, June 24, 1988, <a href="https://perma.cc/R9Q7-PBG8">https://perma.cc/R9Q7-PBG8</a>.

<sup>&</sup>lt;sup>56</sup> See Memorandum of Understanding Between the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) on the Intergovernmental Panel on Climate Change (IPCC), ¶ 1

member governments that, among other things, approve and adopt IPCC reports, with the authors of the reports selected on the basis of their expertise and the author teams comprising experts from different regions and from developed and developing countries.<sup>57</sup>

- 2.13 In a December 1988 resolution, the UN General Assembly noted with concern, for the first time, "that the emerging evidence indicates that continued growth in atmospheric concentrations of 'greenhouse' gases could produce global warming with an eventual rise in sea levels, the effects of which could be disastrous for mankind if timely steps are not taken at all levels." The General Assembly endorsed the establishment of the IPCC and requested "a comprehensive review and recommendation" regarding, *inter alia*, "[t]he state of knowledge of the science of climate and climatic change" and "[e]lements for inclusion in a possible future international convention on climate." 59
- 2.14 The IPCC issued its first assessment report (FAR) in 1990.<sup>60</sup> The FAR "concluded that while both theory and models suggested that anthropogenic warming was already well underway, its signal could not yet be detected in observational data against the 'noise' of natural [climate] variability."<sup>61</sup> In other words, it was not yet clear from the data that such global warming was happening. The FAR found that "[e]missions resulting from human activities are substantially increasing the atmospheric concentrations of [GHGs]" and that "[t]hese increases will enhance the greenhouse effect, resulting on average in an additional warming of the Earth's surface."<sup>62</sup> The IPCC estimated that by 2025 the global mean temperature likely would rise approximately two degrees Celsius (2°C) above that in the pre-

<sup>(1989), &</sup>lt;a href="https://perma.cc/ZRP6-SFMD">https://perma.cc/ZRP6-SFMD</a>; WMO Exec. Council Res. 4(EX-XL) (1988), <a href="https://perma.cc/L2CL-DBS5">https://perma.cc/L2CL-DBS5</a> (considering "[t]hat there is growing international concern about the possible socio-economic consequences of the increasing atmospheric concentrations of radiatively active trace substances (greenhouse gases and particulates)," and "[a]gree[ing] that an Intergovernmental Panel on Climate Change should be established").

<sup>&</sup>lt;sup>57</sup> IPCC, *Structure of the IPCC* (undated) (explaining that the IPCC "brings together experts from all around the world," and that experts are selected "taking into account the range of scientific, technical and socio-economic views and backgrounds, as well as geographical and gender balance," with author teams assembled to ensure both "that the teams include a mixture of experts with and without previous IPCC experience" and "that reports are not biased towards the perspective of any one region and that questions of importance to particular groups are not overlooked"), <a href="https://perma.cc/VC88-HVU2">https://perma.cc/VC88-HVU2</a>; IPCC, <a href="fact Sheet: How does the IPCC select its authors?">Fact Sheet: How does the IPCC select its authors?</a> (Aug. 30, 2013), <a href="https://perma.cc/9YS3-DHWN">https://perma.cc/9YS3-DHWN</a>.

<sup>&</sup>lt;sup>58</sup> G.A. Res. 43/53, pmbl., U.N. Doc. A/RES/43/53 (Dec. 6, 1988), <a href="https://perma.cc/8WL8-X9NQ">https://perma.cc/8WL8-X9NQ</a> [Dossier No. 104] ("G.A. Res. 43/53").

<sup>&</sup>lt;sup>59</sup> *Id.* ¶¶ 5, 10.

<sup>&</sup>lt;sup>60</sup> IPCC, First Assessment Report on Climate Change: The IPCC 1990 and 1992 Assessments 47-168 (1992), <a href="https://perma.cc/U75Y-XQKD">https://perma.cc/U75Y-XQKD</a> ("IPCC FAR").

<sup>&</sup>lt;sup>61</sup> IPCC WGI AR6, 182.

<sup>&</sup>lt;sup>62</sup> IPCC FAR, 52.

industrial period, and that it would rise about 4°C before the end of the 21st century, in a "business-as-usual" scenario. However, this estimate came with the acknowledgment of "many uncertainties . . . particularly with regard to the timing, magnitude and regional patterns of climate change," due to an "incomplete understanding" of sources and sinks (processes, activities, or mechanisms that remove GHGs from the atmosphere, such as forests) on future atmospheric concentrations of GHGs, as well as of the effects of clouds, oceans, and polar ice sheets on global warming and sea-level rise. However, this estimate came with the acknowledgment of "many uncertainties . . . particularly with regard to the timing, magnitude and regional patterns of climate change," due to an "incomplete understanding" of sources and sinks (processes, activities, or mechanisms that remove GHGs from the atmosphere, such as forests) on future atmospheric concentrations of GHGs, as well as of the effects of clouds, oceans, and polar ice sheets on global warming and sea-level rise.

2.15 Over the next three decades, the IPCC completed five further assessment cycles and issued numerous reports, based on the best available climate science at the time. Increased scientific study of global warming and significantly improved climate modeling techniques and computing power have informed the successive IPCC assessments, with the IPCC's level of certainty in its conclusions and predictions increasing substantially over this period. The IPCC went from being unable to detect anthropogenic global warming in 1990 to finding that the "the balance of evidence suggests a discernable human influence on global climate" (1995),65 "most of the observed warming over the last 50 years is *likely* to have been due to the increase in [GHG] concentrations" (2001),66 "[m]ost of the observed increase in global average temperatures since the mid-20th century is *very likely* due to the observed increase in anthropogenic GHG concentrations" (2007),67 and anthropogenic GHG emissions are "extremely likely to have been the dominant cause of the observed warming since the mid-20th century" (2014).68 Associated uncertainties in the IPCC's assessments also decreased over that period.69 Additionally, it was only in 2014 that the IPCC for the first time assessed

<sup>63</sup> *Id.* at 52.

<sup>&</sup>lt;sup>64</sup> *Id.* at 53.

<sup>65</sup> IPCC, SECOND ASSESSMENT REPORT ON CLIMATE CHANGE: SYNTHESIS REPORT, 22 (1995) https://perma.cc/RES5-SF59 ("IPCC SAR").

<sup>&</sup>lt;sup>66</sup> IPCC, THIRD ASSESSMENT REPORT ON CLIMATE CHANGE: SYNTHESIS REPORT, 51 (2001) <a href="https://perma.cc/HVP5-QV4W">https://perma.cc/HVP5-QV4W</a> ("IPCC TAR") (emphasis added).

<sup>&</sup>lt;sup>67</sup> IPCC, FOURTH ASSESSMENT REPORT ON CLIMATE CHANGE: SYNTHESIS REPORT, 5 (2007) <a href="https://perma.cc/3L4J-WQXB">https://perma.cc/3L4J-WQXB</a> ("IPCC AR4") (emphasis in original).

<sup>&</sup>lt;sup>68</sup> IPCC, FIFTH ASSESSMENT REPORT ON CLIMATE CHANGE: SYNTHESIS REPORT, 47 (2014) <a href="https://perma.cc/3WLQ-DT4W">https://perma.cc/3WLQ-DT4W</a> ("IPCC AR5") (emphasis in original).

<sup>&</sup>lt;sup>69</sup> See, e.g., IPCC SAR, 22 (emphasizing that the IPCC's "ability to quantify the human influence on global climate is currently limited because the expected signal is still emerging from the noise of natural variability, and because there are uncertainties in key factors"); id. at 5 ("There are inadequate data to determine whether consistent global changes in climate variability or weather extremes have occurred over the 20th century. On regional scales there is clear evidence of changes in some extremes and climate variability indicators. Some of these changes have been toward greater variability, some have been toward lower variability. However, to date it has not been

scientific literature on the concept of a "fixed cumulative CO<sub>2</sub> budget" that estimated a maximum amount of anthropogenic CO<sub>2</sub> emissions that could occur while still limiting global warming to below a particular temperature (a 2°C limit on warming was used).<sup>70</sup>

2.16 The reports of the IPCC's most recent (sixth) assessment cycle (AR6), which concluded in 2023, represent the most comprehensive and robust assessment of climate change to date. The central findings of AR6 are clear: it found, for the first time, that it is "unequivocal" that human influence—primarily through anthropogenic emissions of GHGs—has warmed the Earth's atmosphere, oceans, and land, and that "[o]bserved increases in well-mixed [atmospheric GHG] concentrations since around 1750 are unequivocally caused by human activities." Each of the last four decades has been successively warmer than any decade that preceded it since 1850." The best estimate of total anthropogenic global surface temperature increase from 1850–1900 to 2010–2019 is 1.07°C, with at most 0.3°C of warming from natural climate variability. The second of the last four decades has been successively warmer than any decade temperature increase from 1850–1900 to 2010–2019 is 1.07°C, with at most 0.3°C of warming from natural climate variability.

2.17 The IPCC's most recent assessment in AR6 also clarified the significant consequences of human-caused global warming.<sup>75</sup> Additionally, it made clear what is needed to limit

possible to firmly establish a clear connection between these regional changes and human activities."); IPCC TAR, 158 (noting that "many of the sources of uncertainty identified in the [second assessment report] still remain to some degree"); IPCC AR4, 40 ("Difficulties remain in simulating and attributing observed temperature changes at smaller [than continental] scales. On these scales, natural climate variability is relatively larger, making it harder to distinguish changes expected due to external forcings. Uncertainties in local forcings, such as those due to aerosols and land-use change, and feedbacks also make it difficult to estimate the contribution of GHG increases to observed small-scale temperature changes."); IPCC AR5, 48, 53 (specifying areas in which sufficient knowledge was still lacking, such as anthropogenic contributions to warming in Antarctica and "changes in drought over global land areas," and clarifying that "[t]he contribution from the combined anthropogenic forcings can be estimated with less uncertainty than the separate contributions from greenhouse gases and other anthropogenic forcings [such as aerosol, land surface reflectivity, and ozone changes] separately," illustrating the remaining gaps in the capacity to attribute warming to particular anthropogenic causes).

<sup>&</sup>lt;sup>70</sup> IPCC WGI AR5, 103. The IPCC did not include a discussion of a "carbon budget" in its synthesis report for the fifth assessment cycle. *See* IPCC AR5. Instead, discussion of the concept was confined to the more detailed physical science analysis presented in the report of Working Group I, focusing on the modeled impact of global aggregate cumulative CO<sub>2</sub> emissions. The IPCC AR5 does not comment on the distribution of this budget across regions or timeframes and notes significant uncertainty in the estimate. *Id.* at 103.

<sup>&</sup>lt;sup>71</sup> IPCC AR6, v.

<sup>&</sup>lt;sup>72</sup> IPCC WGI AR6, 4, ¶¶ A.1, A.1.1 (emphases added).

<sup>&</sup>lt;sup>73</sup> *Id.* at 5,  $\P$  A.1.2.

<sup>&</sup>lt;sup>74</sup> *Id.* at 5, ¶ A.1.3.

<sup>&</sup>lt;sup>75</sup> See, e.g., id. at 4, ¶ A.1 (finding that climate change has led to "[w]idespread and rapid changes in the atmosphere, ocean, cryosphere [the parts of the Earth covered in frozen water] and biosphere"); id. at 8, ¶ A.2 (stating that the "[t]he scale of recent changes across the climate system as a whole – and the present state of many aspects of the climate system – are unprecedented over many centuries to many thousands of years"); id. at 8, ¶ A.3 ("Human-induced climate change is already affecting many weather and climate extremes in every region across the globe."); id. at 15, ¶ B.2 ("Many changes in the climate system become larger in direct relation to

anthropogenic global warming to a specific level: net-zero CO<sub>2</sub> emissions must be reached as soon as possible, CO<sub>2</sub> emissions prior to reaching net zero must be minimized, and strong reductions in other GHG emissions must be made.<sup>76</sup>

- 2.18 Given advances in technology since the IPCC's FAR in 1990 and changes in policies, there are now multiple feasible and inexpensive alternatives to many human activities that emit GHGs. In particular, the availability and economic feasibility of no- or low-emissions technologies increased dramatically over the last three decades, with particularly pronounced decreases in the unit costs of some of these technologies over the most recent decade. With respect to electricity generation, for example, the unit costs of solar energy decreased 85 percent from 2010 to 2019, with the unit costs of wind energy decreasing 55 percent over the same time period. The result is that solar power is now cheaper than electricity generated from fossil fuels in many cases. As another example, the cost of lithium-ion batteries, such as those used for electric vehicles or grid-level electricity storage, decreased 85 percent over the same period.
- 2.19 States therefore are in a very different position now—both in terms of knowledge about anthropogenic global warming and options for limiting such warming to a specific level—from the one they occupied a decade ago, and far more from ones in the late 1980s and before.

increasing global warming," including "increases in the frequency and intensity of hot extremes, marine heatwaves, heavy precipitation, and, in some regions, agricultural and ecological droughts; an increase in the proportion of intense tropical cyclones; and reductions in Arctic sea ice, snow cover and permafrost."); *id.* at 21, ¶ B.5 ("Many changes due to past and future greenhouse gas emissions are irreversible for centuries to millennia, especially changes in the ocean, ice sheets and global sea level.").

<sup>&</sup>lt;sup>76</sup> *Id.* at 27, ¶ D.1. The IPCC recently found that "[a]ll global modelled pathways that limit warming to 1.5°C [with a greater than 50 percent probability] with no or limited overshoot, and those that limit warming to 2°C [with a greater than 67 percent probability], involve rapid and deep and, in most cases, immediate [GHG] emissions reductions in all sectors this decade." IPCC AR6, 20, ¶ B.6. The IPCC further noted that "[d]eep, rapid, and sustained reductions in [GHG] emissions would lead to a discernible slowdown in global warming within around two decades, and also to discernible changes in atmospheric composition within a few years." *Id.* at 12, ¶ B.1. In pathways that limit warming to 1.5°C with no or limited overshoot, net global GHG emissions are reduced by 43 percent below 2019 levels by 2030 and 60 percent by 2035, reaching net-zero CO₂ emissions globally by 2050. *Id.* at 59. These are median values for a range of pathways, however, and pathways where emissions are higher than 43 percent in 2030, for example, require greater and more rapid reductions in later decades to limit warming to 1.5°C. *Id.* 

<sup>&</sup>lt;sup>77</sup> IPCC AR6, 27.

 $<sup>^{78}</sup>$  IPCC, CLIMATE CHANGE 2022: MITIGATION OF CLIMATE CHANGE, CONTRIBUTION OF WORKING GROUP III TO THE SIXTH ASSESSMENT REPORT OF THE IPCC 11, ¶ B.4.1 (2022), <a href="https://perma.cc/F735-YCVA">https://perma.cc/F735-YCVA</a> ("IPCC WGIII AR6").

<sup>&</sup>lt;sup>79</sup> *Id.* at 89.

 $<sup>^{80}</sup>$  *Id.* at 11, ¶ B.4.1.

#### ii. Climate Attribution Science Is Evolving But Still Imprecise

- 2.20 Climate event attribution is the science of determining the extent to which extreme weather events such as hurricanes and floods or "slow-onset" events or changes such as sealevel rise, glacial retreat, or changes in regional precipitation patterns are due to anthropogenic global warming. Event attribution is a rapidly evolving field. As a general matter, attributing a particular extreme weather event or slow-onset event or change to anthropogenic global warming involves a two-step process: (i) "detection" of a change against a baseline—that is, demonstrating that events of a particular type have changed in a defined, statistically-relevant sense; 2 and (ii) "attribution" of that change to particular causes—that is, evaluating the relative contributions of multiple causal factors to the detected change. Scientific progress over time has improved these determinations, but both of these steps entail substantial uncertainties.
- 2.21 These uncertainties are highlighted in the IPCC's own work, which attributes various types of events or changes to anthropogenic global warming with various degrees of confidence. For example, the IPCC has found with high confidence that sea-level rise and warm water coral bleaching and mortality are attributable to anthropogenic global warming, and with medium confidence that heat-related human mortality increases are attributable to anthropogenic global warming. For other types of potential climate changes, such as the increased likelihood of droughts or cyclones, or regional changes in climate, attribution to anthropogenic global warming is much more difficult. Reference of the property of the propert
- 2.22 In general, the shorter the timescale or smaller the spatial scale of a particular climate or weather event or change, the greater the uncertainty about the degree to which the event or change can be attributed to anthropogenic global warming.<sup>87</sup> Moreover, conducting climate

<sup>&</sup>lt;sup>81</sup> "Attribution" is defined as the process of evaluating the relative contributions of multiple causal factors to a change or event with an assessment of confidence. IPCC, CLIMATE CHANGE 2022: IMPACTS, ADAPTATION AND VULNERABILITY, WORKING GROUP II CONTRIBUTION TO THE SIXTH ASSESSMENT REPORT OF THE IPCC, 9 n.28 (2022), https://perma.cc/8RVL-U7J4 ("IPCC WGII AR6").

<sup>82</sup> Id. at 2905.

<sup>83</sup> Id. at 2900.

<sup>84</sup> *Id.* at 10, fig. SPM.2.

<sup>&</sup>lt;sup>85</sup> *Id.* at 9,  $\P$  B.1.1.

<sup>86</sup> IPCC WGI AR6, 108.

<sup>&</sup>lt;sup>87</sup> *Id.* at 1540 ("[L]arge-scale averages [over time and space] generally yield higher attributable changes in magnitude or probability due to the smoothing out of noise."); *see also* Rebecca Lindsey, *Extreme event attribution: the climate versus weather blame game*, NOAA (Dec. 15, 2016), <a href="https://perma.cc/3V9W-LMBR">https://perma.cc/3V9W-LMBR</a>.

attribution studies rapidly without an appropriate peer review process can add to the uncertainty of the results.

2.23 In contrast to "event" attribution, which seeks to link anthropogenic global warming to specific climate or weather events or changes, "source" attribution is the science of estimating the contributions of GHG emissions from individual sources to present-day global warming.<sup>88</sup>

2.24 Source attribution has its own uncertainties. For example, quantifying GHG emissions is challenging due to the multiple emission and removal processes, which vary over time and space, encompassing many discrete sources and sinks. <sup>89</sup> There are two main categories of approaches for estimating GHG emissions. The first uses estimates of the emissions intensity of various human activities combined with estimates of the magnitude of specific activities to generate estimates of total GHG emissions for a particular geographic area. Uncertainties in such estimates can be significant and arise due to inaccuracy in activity reporting and/or emissions intensity estimates, reflecting either different local and regional technologies and practices or incomplete scientific understanding, <sup>90</sup> with those uncertainties potentially much higher in national versus global estimates. <sup>91</sup> In recent years, a newer category of approaches to estimating emissions using atmospheric measurements has been developed. These methods combine measured atmospheric concentrations of GHGs with an understanding of atmospheric transport and chemical processes to infer emissions and removals for a specific location and

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Climate change attribution studies such as those assessed by the IPCC use climate models to generate statistical estimates of the likelihood of a particular climate or weather event happening with or without anthropogenic global warming. To do this, the studies set up two types of model simulations: one using the present-day atmospheric concentrations of GHGs and thus reflecting the current degree of anthropogenic global warming, and the other using the pre-industrial atmospheric GHG concentrations and thus simulating the likelihood of a particular climate or weather event in a hypothetical world in which there has been no anthropogenic global warming. These studies then compare the probability of specific climate or weather events occurring in each of the two types of model simulations to generate estimates for how likely it is that anthropogenic global warming is responsible for a given change. For example, the models may estimate that a heat wave in a given location is twice as likely to occur in the present-day climate compared to the pre-industrial climate. In this case, the attribution study might conclude, for example, that anthropogenic global warming made the heat wave twice as likely to happen. IPCC WGI AR6, 1541.

<sup>&</sup>lt;sup>88</sup> Compare IPCC WGI AR6, 1540 (evaluating "attribution of extreme weather events") with IPCC WGI AR6, 869 (analyzing "source attribution" for particle pollution by geographic region).

<sup>&</sup>lt;sup>89</sup> THE NAT'L ACADS. OF SCIS., ENG'G, AND MED., GREENHOUSE GAS EMISSIONS INFORMATION FOR DECISION MAKING: A FRAMEWORK GOING FORWARD 2 (2022), https://perma.cc/SH59-USQ3 ("NASEM REPORT").

<sup>&</sup>lt;sup>90</sup> IPCC WGIII AR6, 222; NASEM REPORT, 7, 27. For example, estimates of global net emissions of CO<sub>2</sub> from fossil fuel combustion and industrial processes are subject to an uncertainty of 8 percent, while CO<sub>2</sub> emissions from land use, land-use change, and deforestation are subject to an uncertainty of 70 percent. IPCC WGIII AR6, 224. Global methane emissions have a 30 percent uncertainty and nitrous oxide emissions 60 percent. *Id.* 

<sup>&</sup>lt;sup>91</sup> IPCC, CLIMATE CHANGE 2022: MITIGATION OF CLIMATE CHANGE, CONTRIBUTION OF WORKING GROUP III TO THE SIXTH ASSESSMENT REPORT OF THE IPCC, Ch. 2 EMISSIONS TRENDS AND DRIVERS SUPPLEMENTARY MATERIAL, 2SM-14, 2SM-18 (2022), <a href="https://perma.cc/F4HL-LXZK">https://perma.cc/F4HL-LXZK</a> ("IPCC WGIII AR6 2-SM").

time. 92 The accuracy of these methods is currently limited by the difficulties in measuring very small differences in GHG concentrations, and in separating natural and anthropogenic sources and sinks. 93 The emissions estimates based on atmospheric measurements and those based on activity data and emissions intensity often do not align, and there can be large differences between such estimates. 94 These uncertainties all complicate source attribution.

2.25 Additionally, many estimates that seek to assess relative contributions to global warming only consider cumulative historic CO<sub>2</sub> emissions from fossil fuels. However, half of current global warming is due to emissions of non-CO<sub>2</sub> GHGs and their precursors. This means that attempts at source attribution that consider only CO<sub>2</sub> emissions capture, at best, only around 50 percent of the problem. Moreover, attempts at source attribution that focus only on CO<sub>2</sub> emissions from fossil fuels—excluding other sources of CO<sub>2</sub> emissions like deforestation and other land use change or degradation—capture even less.

2.26 Beyond event and source attribution, attributing particular harms to anthropogenic climate change presents even greater difficulties. Many factors determine the effects of a particular climate or weather event. 97 Changes in climate are not the entire story. For example, the same exact climate or weather event can have dramatically different effects in different locations depending on what adaptation, resilience, and disaster preparedness efforts have been undertaken. 98 Additionally, even if anthropogenic global warming is found to have made an event worse or more likely to happen, this does not mean the event would not have happened anyway. 99 Anthropogenic global warming can make a difference in an event's marginal likelihood or impact, but it is also often not the underlying or main cause of the event and its effects. 100 Thus, even when event attribution science provides a basis for linking the increased likelihood and/or severity of a particular climate or weather event to anthropogenic global

<sup>92</sup> NASEM REPORT, 39.

<sup>&</sup>lt;sup>93</sup> *Id.* at 39, 44.

<sup>94</sup> Id. at 45-46; IPCC WGIII AR6 2-SM, 2SM-9-2SM-11.

<sup>&</sup>lt;sup>95</sup> IPCC WGI AR6, 92.

<sup>&</sup>lt;sup>96</sup> See id.

<sup>&</sup>lt;sup>97</sup> *Id.* at 1429, 1523.

<sup>&</sup>lt;sup>98</sup> *Id.* at 1521, 1536.

<sup>&</sup>lt;sup>99</sup> See id. at 1540 (explaining that attribution studies most often use a "'probability-based approach' [that] produces statements such as 'anthropogenic climate change made this event type twice as likely' or 'anthropogenic climate change made this event 15% more intense"").

<sup>&</sup>lt;sup>100</sup> See, e.g., id. at 1569 (discussing low confidence in attributing flood events to anthropogenic climate change and noting that other factors like land use changes and river management are primary drivers of flood risk).

warming, it does not follow that the impacts of the event are attributable—much less entirely attributable—to anthropogenic global warming. <sup>101</sup>

## B. States' Collective Efforts to Address the Risks Posed by Anthropogenic Greenhouse Gas Emissions

- 2.27 The climate change problem is one of the most complex and difficult problems the international community has ever faced. A wide variety of human activities emit GHGs, including energy production, agriculture and other land use, transportation, and various industrial processes fundamental to modern economies. In turn, climate change has a huge variety of impacts, not only for humans, but also for ecosystems and biodiversity. Because of its multitudinous causes and effects, climate change implicates virtually every aspect of States' economies and domestic policies.
- 2.28 Although climate change raises huge issues of domestic policy, it is also a quintessential collective action problem, which can be effectively addressed only through global action. An individual State alone cannot prevent climate change even if it were to reach net-zero GHG emissions tomorrow because the global average temperature will continue to rise if other States continue to emit.
- 2.29 In recognition of its global nature, climate change has been the subject of continuous international negotiations for more than 30 years. The international regime to address it has developed over many years of trial and error, in an effort to identify an approach that would garner widespread participation of States while also generating the necessary ambition to address climate change. The culmination of this effort—the 2015 Paris Agreement—draws on experience gained from preceding climate change instruments in developing such an approach.
- 2.30 As discussed *supra*, in 1988, the UN General Assembly first addressed climate change in a resolution that expressed its conviction "that climate change affects humanity as a whole and should be confronted within a global framework so as to take into account the vital interests of all mankind." The resolution endorsed the establishment of the IPCC and requested that

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<sup>&</sup>lt;sup>101</sup> *Id.* at 1540.

<sup>&</sup>lt;sup>102</sup> G.A. Res. 43/53, pmbl.

the IPCC not only provide an assessment of the state of knowledge of climate science but also propose "[e]lements for inclusion in a possible future international convention on climate." <sup>103</sup>

- 2.31 Two years later, following completion of the IPCC's First Assessment Report, the UN General Assembly initiated an intergovernmental process to negotiate "an effective framework convention on climate change, containing appropriate commitments." <sup>104</sup> The UN Framework Convention on Climate Change (UNFCCC or the "Convention") was negotiated in only seventeen months, from January 1991 to May 1992, in six sessions of the Intergovernmental Negotiating Committee. It was opened for signature at the UN Conference on Environment and Development in June 1992 (colloquially known as the Rio Earth Summit) and entered into force on March 21, 1994. <sup>105</sup>
- 2.32 With near-universal adherence today, <sup>106</sup> the UNFCCC was designed as a high-level framework agreement to address climate change. <sup>107</sup> Its ultimate objective is the "stabilization of [GHG] concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." <sup>108</sup> The Convention recognizes that the climate change problem requires *each* country, regardless of its national circumstances—including its development status—to help address climate change. The Convention's preamble acknowledges "that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response." <sup>109</sup>
- 2.33 Accordingly, the Convention provides for general commitments from all Parties relating to limiting GHG emissions ("mitigation"), adapting to climate impacts, and reporting.
- 2.34 The UNFCCC also provides for more specific commitments for so-called "Annex I" Parties, which included the members of the Organization for Economic Co-operation and

 $<sup>^{103}</sup>$  Id. at ¶¶ 5, 10. The possible elements suggested by the IPCC can be found in the IPCC's First Assessment Report. IPCC FAR, 143-48.

<sup>&</sup>lt;sup>104</sup> G.A. Res. 45/212, ¶¶ 1, 4, U.N. Doc. A/RES/45/212 (Dec. 21, 1990), <a href="https://perma.cc/5G2X-J57Z">https://perma.cc/5G2X-J57Z</a> [Dossier No. 106].

<sup>&</sup>lt;sup>105</sup> UN, *Multilateral Treaties Deposited with the Secretary-General*, ch. XXVII, no. 7, <a href="https://perma.cc/4XQZ-P5EC">https://perma.cc/4XQZ-P5EC</a>.

<sup>&</sup>lt;sup>106</sup> The UN *Treaty Series* lists 198 Parties to the UNFCCC, including one regional economic integration organization (the European Union). UN, *Multilateral Treaties Deposited with the Secretary-General*, ch. XXVII, no. 7, <a href="https://perma.cc/4XQZ-P5EC">https://perma.cc/4XQZ-P5EC</a>.

<sup>&</sup>lt;sup>107</sup> A more detailed description of the UNFCCC's provisions is in Chapter III.A *infra*.

<sup>&</sup>lt;sup>108</sup> UNFCCC, art. 2.

<sup>&</sup>lt;sup>109</sup> *Id.* pmbl.

Development (OECD) as of 1992, as well as Russia and Eastern European countries that, at the time, were transitioning to market economies. Under the UNFCCC, Annex I Parties have incrementally greater commitments, which included a non-legally-binding emissions "aim" that expired in 2000, 110 as well as heightened reporting obligations. So-called "Annex II" Parties—the Annex I Parties minus the countries then experiencing an economic transition—have unquantified obligations to provide certain financial and technological support to developing country Parties. 111 The Convention also includes a set of "principles," 112 including that Parties should protect the climate system "in accordance with their common but differentiated responsibilities and respective capabilities" (the so-called "CBDR/RC" principle). 113

2.35 Pursuant to article 4.2(d) of the UNFCCC, the first Conference of the Parties (COP)—held in Berlin in 1995—reviewed the adequacy of the mitigation-related commitments in UNFCCC articles 4.2(a) and (b), including the non-legally-binding emissions "aim," and concluded they were inadequate, and that an additional legal instrument was necessary. 114 Some Parties viewed them as inadequate because they did not entail legally binding emissions targets, some viewed them as inadequate because they only covered Annex I Parties, and nearly all viewed the emissions aim as inadequate because it stopped in the year 2000. 115 The negotiating mandate adopted in Berlin for the additional legal instrument provided that it would pertain to the period beyond 2000, left open the legal nature of the emissions targets to be negotiated (stating that the new instrument would "set quantified limitation and reduction objectives"), and provided that only Annex I Parties would be expected to take on emissions targets, while non-Annex I Parties would have no new commitments but only "continue to

<sup>&</sup>lt;sup>110</sup> *Id.* art. 4.2(b) (establishing "the aim of returning individually or jointly to their 1990 levels these anthropogenic emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol").

<sup>&</sup>lt;sup>111</sup> See infra Chapter III.A.

<sup>&</sup>lt;sup>112</sup> The Convention expressly states that "[t]itles of articles are included solely to assist the reader." UNFCCC, art. 1, n.\*. The inclusion of particular material in the Convention's article 3, which is entitled "Principles," therefore cannot be taken, for example, as evidence that any particular provision in that article is accepted to constitute an international legal principle or even a policy principle.

<sup>&</sup>lt;sup>113</sup> UNFCCC, art. 3.1.

<sup>&</sup>lt;sup>114</sup> Conf. of the Parties to the UNFCCC ("COP") Dec. 1/CP.1, pmbl., U.N. Doc. FCCC/CP/1995/7/Add.1 (Apr. 7, 1995), <a href="https://perma.cc/8YDP-K42P">https://perma.cc/8YDP-K42P</a> ("COP Dec. 1/CP.1"); UNFCCC, art. 4.2(d) ("The [COP] shall, at its first session, review the adequacy of subparagraphs (a) and (b) above. Such review shall be carried out in the light of the best available scientific information and assessment on climate change and its impacts, as well as relevant technical, social and economic information. Based on this review, the [COP] shall take appropriate action . . . . ").

<sup>&</sup>lt;sup>115</sup> See, e.g., UNFCCC Interim Secretariat, Matters Relating to Commitments: Review of the Adequacy of Article 4, Paragraph 2(a) and (b) – Comments from Parties and Other Member States, U.N. Doc. FCCC/CP/1995/Misc.1-EN (Mar. 9, 1995), https://perma.cc/H886-N67E.

advance the implementation" of their existing mitigation-related commitments under article 4.1 of the UNFCCC. 116

2.36 During the negotiation pursuant to the Berlin mandate, it was decided that the emissions "objectives" for Annex I Parties would be legally binding. The result was the 1997 Kyoto Protocol. The Kyoto Protocol reflected a highly regulatory model for addressing GHG emissions, including internationally agreed, legally binding quantitative emissions targets and a wide range of non-discretionary rules for implementation. At the same time, it did not end up covering most of the world's GHG emissions. As noted, only Annex I Parties had emissions targets in its first commitment period (2008-2012). As a result, China, the world's second-largest emitter at the time, had no new mitigation commitments. And among Annex I Parties, the Kyoto Protocol did not attract the participation of the United States, the largest emitter at the time. The Kyoto Protocol thus proved unable to generate the action from all major emitters that was needed to achieve the UNFCCC's objective of avoiding dangerous anthropogenic interference with the climate system.

2.37 The United States signed the Kyoto Protocol but ultimately did not take any steps to pursue ratification, citing the lack of "meaningful participation by key developing countries in addressing climate change." In rejecting the Kyoto model, the United States rejected any notion that the categorical bifurcation of Kyoto was a reflection of how Parties should be "differentiated" per the "common but differentiated responsibilities and respective capabilities" principle. <sup>120</sup>

<sup>&</sup>lt;sup>116</sup> COP Dec. 1/CP.1, pmbl., ¶ 2 (emphasis added).

<sup>&</sup>lt;sup>117</sup> Kyoto Protocol to the UN Framework Convention on Climate Change, Dec. 10, 1997, 2303 U.N.T.S. 162, <a href="https://perma.cc/7JKQ-XVJV">https://perma.cc/7JKQ-XVJV</a> [Dossier Nos. 11-15] ("Kyoto Protocol").

<sup>&</sup>lt;sup>118</sup> See id. arts. 3, 5, 7, 8.

<sup>119</sup> See, e.g., U.S. Dep't of State, Fact Sheet: United States Signs the Kyoto Protocol (Nov. 12, 1998), https://perma.cc/F8NY-H9UH ("President Clinton has made clear that he will not submit the Protocol to the Senate until there is meaningful participation by key developing countries in addressing climate change."); U.S. White House, Press Release: "President Bush Discusses Global Climate Change" (June 11, 2001), https://perma.cc/7H5Q-QJAA. Although the United States effectively ceased participation in negotiations aimed at completing the Kyoto package, it pursued instead other initiatives to address global warming. See U.S. White House, Council on Env't Quality, Clean Energy and Climate Change, https://perma.cc/YNA4-3LMY (archived website from President George W. Bush's administration outlining U.S. actions to address global warming in the years following 2001, including through executive action and legislation such as the Energy Policy Act of 2005).

<sup>&</sup>lt;sup>120</sup> See, e.g., UN Climate Talks and Power Politics: It's Not About the Temperature: Hearing Before the Subcomm. on Oversight and Investigations of the House Comm. on Foreign Affairs, 112th Cong. (2011) (statement of Todd Stern, U.S. Special Envoy for Climate Change), <a href="https://perma.cc/PB8C-47JA">https://perma.cc/PB8C-47JA</a> (rejecting the view that the principle of CBDR/RC provides a foundation for the "Kyoto paradigm" of annex-based bifurcation of mitigation obligations and noting, among other things, that the UNFCCC "did initially give heightened commitments to a

- 2.38 In the end, the Kyoto Protocol's first commitment period emissions targets for 2008-2012 covered only about 18 percent of global GHG emissions. A second commitment period—which covered an even smaller percentage of global emissions (14 percent) period—through 2013 through 2020. There has been no decision to negotiate a third commitment period, and the Kyoto Protocol, although it remains in force, has effectively been superseded.
- 2.39 As it became increasingly apparent that the Kyoto Protocol, given its limited coverage of emissions, could not effectively address the climate challenge, UNFCCC Parties began to explore the development of an instrument that would attract global participation and thereby address the bulk of GHG emissions.
- 2.40 The 2007 Bali Action Plan set forth a mandate for the negotiation of a new instrument that would cover all Parties. 124 To do so, the mandate moved away from the Kyoto paradigm in several respects. First, it called for the development of "an agreed outcome," rather than a legal instrument. 125 Second, it called for "nationally appropriate" commitments/actions, 126 hinting at a "bottom-up," non-negotiated approach to mitigation. Third, on the issue of differentiation, while the Bali Action Plan maintained certain distinctions between "developed" and "developing" countries, it created the common expectation of mitigation contributions from all Parties that were not only "nationally appropriate" but "measurable, reportable, and verifiable." 127
- 2.41 The negotiation of what became the non-legally-binding 2009 "Copenhagen Accord" subsequently elaborated and formally adopted as the 2010 "Cancun

category of countries, but did not freeze that category for all time or create a firewall between those countries and all others").

<sup>&</sup>lt;sup>121</sup> See European Comm'n, Kyoto 1st Commitment Period (2008–12), https://perma.cc/48LX-43S2.

<sup>&</sup>lt;sup>122</sup> Center for American Progress, *Here's What We Should Focus on in Warsaw* (Nov. 19, 2013), https://perma.cc/7TF5-9YRL.

<sup>&</sup>lt;sup>123</sup> See Doha Amendment to the Kyoto Protocol (Dec. 8, 2012), <a href="https://perma.cc/E4NY-U8P6">https://perma.cc/E4NY-U8P6</a> [Dossier Nos. 14-15].

<sup>&</sup>lt;sup>124</sup> COP Dec. 1/CP.13, U.N. Doc. FCCC/CP/2007/6/Add.1 (Dec. 15, 2007), <a href="https://perma.cc/28HQ-APG9">https://perma.cc/28HQ-APG9</a> ("Bali Action Plan").

<sup>&</sup>lt;sup>125</sup> *Id*. ¶ 1.

 $<sup>^{126}</sup>$  *Id.* ¶ 1(b)(i).

<sup>&</sup>lt;sup>127</sup> *Id.* ¶¶ 1(b)(i)-(ii).

 $<sup>^{128}</sup>$  COP Dec. 2/CP.15, annex, U.N. Doc. FCCC/CP/2009/11/Add.1 (Dec. 19, 2009),  $\underline{\text{https://perma.cc/ZC9J-2MFW}}$  ("Copenhagen Accord").

agreements"<sup>129</sup>—faced an impasse on the issue of the legal character of emissions commitments. As noted, the Bali mandate had left open the legal nature of the instrument, thereby also leaving open the legal nature of the emissions commitments. Many Parties, including the United States, supported adoption of a legal instrument, with legally binding emissions commitments that applied not only to developed countries but also to the developing countries with growing emissions.<sup>130</sup> However, some developing countries pushed back against binding commitments for developing or non-Annex I Parties.<sup>131</sup> Denmark, as host of the Copenhagen COP in 2009, sought to reconcile these opposing views through the development of a political instrument—thus satisfying both those Parties that sought legal parallelism (by establishing no legally binding commitments for anyone) and those that would accept political commitments only.<sup>132</sup>

- 2.42 In order to garner the participation of the key countries necessary to address emissions, the instrument also afforded them substantial national flexibility. A main feature of the Copenhagen Accord was the establishment of a pledging process that allowed UNFCCC Parties to nationally determine their emissions mitigation targets and actions, allowing all Parties to take into account their national circumstances and capacities.<sup>133</sup>
- 2.43 In terms of differentiation, in the spirit of the Bali mandate, the instrument reflected certain common features applicable to all Parties (e.g., non-legally-binding, nationally determined mitigation efforts, subject to transparency procedures) and certain differentiated

<sup>&</sup>lt;sup>129</sup> COP Dec. 1/CP.16, U.N. Doc. FCCC/CP/2010/7/Add.1 (Dec. 11, 2010), <a href="https://perma.cc/3EXN-TK44">https://perma.cc/3EXN-TK44</a> [Dossier No. 156] ("Cancun agreements").

<sup>&</sup>lt;sup>130</sup> Todd Stern, U.S. Special Envoy for Climate Change, A New Paradigm: Climate Change Negotiations in the Post-Copenhagen Era (Oct. 8, 2010), <a href="https://perma.cc/FJD4-F8GN">https://perma.cc/FJD4-F8GN</a> (noting that the United States supported development of a legally binding instrument so long as it would be legally binding "for major developing countries as well").

<sup>&</sup>lt;sup>131</sup> See, e.g., Earth Negotiations Bulletin, Summary Report, 7-19 December 2009 (Copenhagen Climate Change Conference – December 2009), <a href="https://perma.cc/3SCD-JLZA">https://perma.cc/3SCD-JLZA</a>; UN Climate Talks and Power Politics: It's Not About the Temperature: Hearing Before the Subcomm. on Oversight and Investigations of the House Comm. on Foreign Affairs, 112th Cong. (2011) (statement of Todd Stern, U.S. Special Envoy for Climate Change), <a href="https://perma.cc/62HX-EC3U">https://perma.cc/62HX-EC3U</a> (noting that the "prevailing paradigm in the climate negotiations" in the lead-up to Copenhagen "that came to be accepted by many[,] although not by all and certainly not by the United States," was that the principle of CBDR/RC "is and should continue to be a firewall between developed and developing countries . . . with all specific obligations to address climate change assigned to developed countries").

<sup>&</sup>lt;sup>132</sup> See, e.g., Earth Negotiations Bulletin, Summary Report, 7-19 December 2009 (Copenhagen Climate Change Conference – December 2009), <a href="https://perma.cc/3SCD-JLZA">https://perma.cc/3SCD-JLZA</a>; UN Climate Talks and Power Politics: It's Not About the Temperature: Hearing Before the Subcomm. on Oversight and Investigations of the House Comm. on Foreign Affairs, 112th Cong. (2011) (statement of Todd Stern, U.S. Special Envoy for Climate Change), <a href="https://perma.cc/62HX-EC3U">https://perma.cc/62HX-EC3U</a>.

<sup>&</sup>lt;sup>133</sup> Copenhagen Accord, ¶¶ 4-5.

features (*e.g.*, Annex I Parties submitted economy-wide 2020 targets, while non-Annex I Parties submitted "mitigation actions" they would implement). <sup>134</sup>

2.44 The 2009 Copenhagen Accord also notably defined for the first time a quantitative long-term global temperature goal of limiting temperature rise to below 2°C above preindustrial levels. <sup>135</sup> It also set forth a collective political commitment by developed countries to a goal of jointly "mobilizing" \$100 billion per year in climate finance support for developing countries by 2020 from both public and private sources "[i]n the context of meaningful mitigation actions and transparency on implementation." <sup>136</sup>

2.45 The Copenhagen COP (COP15) "[took] note of" the Accord, <sup>137</sup> and the Parties adopted the essential elements of the Accord the following year at COP16 in the non-legally-binding "Cancun agreements." <sup>138</sup> The Copenhagen/Cancun approach proved broadly acceptable to States and secured for the first time emissions reduction targets or mitigation actions from all the major economies. <sup>139</sup>

2.46 The Copenhagen/Cancun approach demonstrated that, in order to attract the participation of the countries needed to tackle the climate challenge effectively, the instrument needed to move away from the Kyoto model in terms of its approach to legal character, prescriptiveness, and differentiation.

2.47 In essence, the Copenhagen/Cancun approach went in the opposite direction. The Kyoto Protocol was a legal instrument, with legally binding emissions commitments and a compliance committee with an "enforcement" branch, while Copenhagen/Cancun were political instruments. Kyoto targets were negotiated and subject to a highly developed set of rules, while Copenhagen/Cancun pledges were nationally determined and subject to few disciplines. Additionally, while Kyoto targets applied only to Annex I Parties, Copenhagen/Cancun applied broadly to all Parties.

<sup>&</sup>lt;sup>134</sup> *Id*.

<sup>&</sup>lt;sup>135</sup> *Id.* ¶¶ 1, 2.

 $<sup>^{136}</sup>$  *Id.* ¶ 8.

<sup>&</sup>lt;sup>137</sup> COP Dec. 2/CP.15 (Dec. 19, 2009), U.N. Doc. FCCC/CP/2009/11/Add.1 (Dec. 19, 2009), https://perma.cc/ZC9J-2MFW.

<sup>&</sup>lt;sup>138</sup> Cancun agreements.

<sup>&</sup>lt;sup>139</sup> U.S. Congressional Research Service, *Greenhouse Gas Pledges by Parties to the United Nations Framework Convention on Climate Change* (Oct. 19, 2015), CRS REPORTS, <a href="https://perma.cc/A5WM-WMH7">https://perma.cc/A5WM-WMH7</a>.

- 2.48 The Copenhagen/Cancun outcome, which catalyzed targets/actions largely in the 2020 timeframe, left unclear what was expected after 2020. In addition, some Parties were not satisfied with its non-legally-binding, "bottom-up" nature and sought an instrument with greater legal rigor and more multilaterally agreed rules. As such, at the 2011 COP in Durban, South Africa, the Parties decided to take the next step in the development of the UN climate change regime by adopting the Durban Platform for Enhanced Action. Drawing on, as well as rejecting, features of both Kyoto and Copenhagen/Cancun, the Durban mandate called for an instrument with some kind of "legal force" that would be "applicable to all Parties." It provided that the negotiations should be concluded no later than 2015 and that the new instrument should come into force and be implemented from 2020. 143
- 2.49 In conformity with the Durban mandate, the Paris Agreement was adopted at COP21 on December 12, 2015, 144 and entered into force on November 4, 2016. In order to achieve the broadest possible participation while still promoting ambitious mitigation measures, it strikes a balance between the Kyoto and Copenhagen/Cancun approaches to legal character and national flexibility:
  - It is a legal instrument with legally binding provisions, but key features—including emissions targets themselves—are not legally binding.<sup>145</sup>
  - It provides for Parties to determine their emissions targets nationally (so-called "nationally determined contributions" or NDCs) but overlays national flexibility with various goals, rules, and guidelines. 146
- 2.50 The Paris Agreement takes a highly nuanced approach to differentiation among Parties. In general, the Agreement is designed to be implemented in a highly differentiated

<sup>&</sup>lt;sup>140</sup> See, e.g., Earth Negotiations Bulletin, Summary Report, 28 November – 11 December 2011 (Durban Climate Change Conference – November 2011), <a href="https://perma.cc/P5J2-ZLV3">https://perma.cc/P5J2-ZLV3</a>.

<sup>&</sup>lt;sup>141</sup> COP Dec. 1/CP.17, U.N. Doc. FCCC/CP/2011/9/Add.1 (Dec. 11, 2011), <a href="https://perma.cc/ENM2-3ABY">https://perma.cc/ENM2-3ABY</a> [Dossier No. 148] ("Durban Platform").

<sup>&</sup>lt;sup>142</sup> *Id.* ¶ 2. Echoing the UNFCCC's preamble, Parties specifically acknowledged that "the *global* nature of climate change calls for *the widest possible cooperation* by *all* countries . . . with a view to accelerating the reduction of *global* [GHG] emissions." *Id.* pmbl. (emphasis added). The Durban Platform notably does not reference CBDR/RC.

<sup>&</sup>lt;sup>143</sup> Durban Platform, ¶ 4.

<sup>&</sup>lt;sup>144</sup> COP Dec. 1/CP.21, ¶ 1, U.N. Doc. FCCC/CP/2015/10/Add. 1 (Dec. 12, 2015), <a href="https://perma.cc/KZL5-RHLR">https://perma.cc/KZL5-RHLR</a> [Dossier No. 155] ("COP Dec. 1/CP.21").

<sup>&</sup>lt;sup>145</sup> See infra Chapter III.B.

<sup>&</sup>lt;sup>146</sup> See infra Chapter III.B.

manner, but not in the bifurcated Kyoto sense. The Paris Agreement includes an updated formulation of the CBDR/RC principle, adding language ("in the light of different national circumstances") that recognizes a spectrum of national situations. It has no references to the Convention's annexes, and commitments other than certain ones related to finance and other forms of assistance apply to all Parties. Additionally, each aspect of the Agreement (e.g., mitigation, adaptation, finance, transparency) addresses differentiation in a distinct manner. Regarding the core issue of mitigation, by providing for each Party's efforts to be "nationally determined" based on national circumstances, the Agreement in effect provides for self-differentiation—a design that moved the UN climate change regime beyond a bifurcated approach. Iso

2.51 The Paris Agreement represents a significant diplomatic achievement, and it has achieved almost universal participation<sup>151</sup> through its carefully calibrated provisions.<sup>152</sup> Despite the contentiousness and complexity of the climate change issue, and the need to find consensus among almost 200 countries with widely varying interests, the Agreement not only found a way to strike a balance on the issues of legal character and national flexibility and evolve the regime's approach to differentiation, but also aimed high in terms of ambition.

<sup>&</sup>lt;sup>147</sup> See infra Chapter III.C.

<sup>&</sup>lt;sup>148</sup> See infra Chapters III.B and III.C.

<sup>&</sup>lt;sup>149</sup> As explained *infra* in Chapters III.B and III.C, aspects of the Agreement, such as the transparency framework, are not bifurcated between developed and developing countries, but have common guidelines, with flexibility accorded to "those" developing country Parties that need it in light of their capacity. Additionally, although there are some soft distinctions reflected in the Agreement between "developed" and "developing" country Parties (terms that are not defined in the Paris Agreement), those do not affect the actual obligations of the Parties with respect to mitigation (*e.g.*, all must communicate NDCs and submit biennial reports), and they generally are in the context of urging increasing ambition over time (*e.g.*, developing country Parties should move to economywide absolute targets), as opposed to providing an exemption from commitments (as was the case with the Kyoto Protocol, under which non-Annex I Parties undertook no new commitments).

<sup>&</sup>lt;sup>150</sup> See infra Chapters III.B and III.C. The only category-based flexibility provided in connection with mitigation obligations under article 4 of the Paris Agreement is based not on a developed-developing bifurcation but rather on other categories (least developed countries, small island developing States). Paris Agreement, art. 4.6 ("The least developed countries and small island developing States may prepare and communicate strategies, plans and actions for low greenhouse gas emissions development reflecting their special circumstances.").

<sup>&</sup>lt;sup>151</sup> The UN *Treaty Series* lists 195 Parties to the Paris Agreement—all the listed UNFCCC Parties except for Iran, Libya, and Yemen. UN, *Multilateral Treaties Deposited with the Secretary-General*, ch. XXVII, no. 7.d, <a href="https://perma.cc/76J8-XTDU">https://perma.cc/76J8-XTDU</a>.

<sup>&</sup>lt;sup>152</sup> Chapter III.B *infra* provides a more detailed description of the Paris Agreement's provisions.

- 2.52 Specifically, article 2 of the Agreement lays out three main goals:
  - In response to the latest science, it strengthens the regime's previous global temperature goal by stating the goal of holding the increase to "well below" 2°C, as well as "pursuing efforts to limit the temperature increase to 1.5°C." <sup>153</sup>
  - It sets a first-time goal on adaptation, *i.e.*, "[i]ncreasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low [GHG] emissions development, in a manner that does not threaten food production." <sup>154</sup>
  - It establishes a goal with respect to finance, namely "[m]aking finance flows consistent with a pathway towards low [GHG] emissions and climate-resilient development." 155
- 2.53 The Paris Agreement also takes an innovative, long-term approach to the achievement of the global temperature goal. The Parties themselves recognized that the initial set of nationally determined contributions was insufficient to achieve the temperature goal. Thus, the Agreement establishes an "ambition cycle" that includes a collective assessment of overall progress every five years (the "global stocktake"), followed by Parties' submission of their next round of NDCs—"informed by" the stocktaking. In addition, the Agreement reflects an expectation that each successive NDC will be more ambitious than the last.
- 2.54 This nationally determined approach recognizes that a Party's mitigation contribution will be effective only if it grows out of the Party's domestic policy process and reflects the Party's national circumstances and capacities. The approach was widely embraced in the runup to Paris, with more than 180 States putting forward their "intended NDCs" in advance of the Agreement's adoption. 159
- 2.55 As noted, the Agreement provides that NDCs themselves are not legally binding. At the same time, the Agreement sets up a robust transparency framework to promote their implementation and achievement. It requires all Parties to report biennially on their GHG

<sup>&</sup>lt;sup>153</sup> Paris Agreement, art. 2.1(a).

<sup>&</sup>lt;sup>154</sup> *Id.* art. 2.1(b).

<sup>&</sup>lt;sup>155</sup> *Id.* art. 2.1(c).

<sup>&</sup>lt;sup>156</sup> COP Dec. 1/CP.21, ¶ 17.

<sup>&</sup>lt;sup>157</sup> Paris Agreement, arts. 4.9, 14. See also infra Chapter III.E.

<sup>&</sup>lt;sup>158</sup> Paris Agreement, art. 4.3.

<sup>&</sup>lt;sup>159</sup> U.S. White House, *Remarks by President Obama at the First Session of COP21* (Nov. 30, 2015), https://perma.cc/PF6C-QV6R.

emissions and to provide the information necessary to track progress toward achievement of their NDCs, and establishes both a comprehensive technical expert review (to analyze whether national reports are in line with the standards adopted by the Parties) and multilateral review process (to share experiences and lessons learned). As another example of the Agreement's variable approach to differentiation, this framework is implemented through common reporting guidelines, with limited flexibilities provided with respect to certain reporting elements for those developing country Parties that need flexibility due to limited capacity. The Paris Agreement also establishes a committee to facilitate implementation and promote compliance.

2.56 In addition to taking a self-differentiated approach to mitigation and adaptation, the Paris Agreement also purposely leaves several terms for self-definition. Consistent with the Agreement, rather than seeking to define these terms (*e.g.*, "equity" and "progression"), <sup>163</sup> the Paris Agreement "rulebook"—decisions adopted by the Parties to set out more detailed guidance on the implementation of the Agreement, including, *inter alia*, reporting obligations—allows Parties flexibility in applying them, but requires each Party to provide information on how it considers that its NDC is "fair and ambitious" (including reflecting on "equity" considerations) in light of its national circumstances, so that its approach is transparent and can be critiqued by others. <sup>164</sup>

<sup>160</sup> See infra Chapter III.B.

<sup>&</sup>lt;sup>161</sup> See infra ¶ 3.22 and n.209.

<sup>&</sup>lt;sup>162</sup> Paris Agreement, art. 15.

<sup>&</sup>lt;sup>163</sup> See, e.g., Paris Agreement, pmbl. and arts. 2.2, 3, 4.1, 4.3, 14.1.

<sup>&</sup>lt;sup>164</sup> Conf. of the Parties Serving as the meeting of the Parties to the Paris Agreement ("CMA") Dec. 4/CMA.1, annex I, ¶ 6, U.N. Doc. FCCC/PA/CMA/2018/3/Add. 1 (Dec. 15, 2018), https://perma.cc/TTP4-DEME [Dossier No. 170] ("CMA Dec. 4/CMA.1"). In the United States' view, "equity" is already reflected throughout the articles of the Paris Agreement and refers to "fairness" on a range of dimensions. For example, urgent efforts to keep a limit of 1.5°C of global warming within reach are essential for minimizing the adverse effects of climate change especially for poor and vulnerable populations, which is core to equity. In this respect, all Parties to the Paris Agreement, particularly those whose emissions are most consequential for keeping 1.5°C within reach, should have NDCs that genuinely reflect efforts to limit the global average temperature to 1.5°C. Parties that have not substantially strengthened their NDCs since 2015 to take advantage of the considerable reduction in cost and expansion in availability of no- or low-emissions technologies should do so to achieve real-world results that are both ambitious and equitable. Additionally, some Parties have taken on stretch targets in their NDCs that are aligned with the pursuit of efforts to limit the temperature increase to 1.5°C, as set out in the Paris Agreement's global temperature goal, while others have taken on targets they expect to significantly overachieve and that do not reflect the level of ambition expected in the Paris Agreement. Although these dimensions of "equity" do not reflect legal requirements for Parties' NDCs, this creates an inequitable, unfair outcome that is appropriately addressed through diplomatic and political processes. (The "equity" or "fairness" of the current U.S. NDC is reflected in the facts that it (i) exceeds a straight-line path to achieving net-zero emissions, economy-wide, by no later than 2050 and (ii) promotes the goal of keeping within reach a 1.5°C limit on global average temperature

- 2.57 The Paris Agreement entered into force on November 4, 2016, much earlier than expected (2020). Since then, the UN climate change regime has continued to substantially evolve across all its dimensions, including through:
  - the adoption of the Paris "rulebook" decisions;
  - the Parties' decision in Glasgow (2021) to focus their efforts squarely on limiting global warming to 1.5°C; 166 and
  - the linking in December 2023—for the first time—of NDCs to the goal of limiting global warming to 1.5°C. 167
- 2.58 In addition to inspiring action in other international treaty bodies and institutions, as described *infra* in Chapter III.F, the Paris Agreement has catalyzed many pollutant- and sector-specific initiatives among States, as well as other stakeholders, to reduce GHG emissions, such

increase.) Furthermore, the most capable Parties, including the United States and other Parties with considerable capability, should help advance the overall global effort through various actions, including support for developing countries that need it. The number of Parties that are capable of such support has expanded considerably since the Paris Agreement's adoption in 2015—and even more dramatically since the UNFCCC's adoption in 1992—and Parties' actions in the 2020s and beyond should reflect this reality.

<sup>&</sup>lt;sup>165</sup> The United States joined the Paris Agreement in September 2016. Following its withdrawal from the Paris Agreement on November 4, 2020, the United States became a Party to the Agreement again on February 19, 2021.

<sup>&</sup>lt;sup>166</sup> As described *supra*, the Paris Agreement itself sets a more precise target for addressing climate change holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the increase to 1.5°C—than the UNFCCC's objective of avoiding "dangerous anthropogenic interference with the climate system." Paris Agreement, art. 2.1(a); UNFCCC, art. 2. In the 2015 decision adopting the Paris Agreement, UNFCCC Parties invited the IPCC "to provide a special report in 2018 on the impacts of global warming of 1.5°C above pre-industrial levels and related global [GHG] emission pathways." COP Dec. 1/CP.21, ¶21. The IPCC's high-confidence conclusion in its 2018 special report that "[c]limate-related risks for natural and human systems are higher for global warming of 1.5°C than at present, but lower than at 2°C," led Parties in the COP26 outcome, known as the "Glasgow Climate Pact," to resolve to pursue efforts to limit the temperature increase to 1.5°C, while recognizing that achieving that goal "requires rapid, deep and sustained reductions in global [GHG] emissions, including reducing global carbon dioxide emissions by 45 per cent by 2030 relative to the 2010 level and to net zero around mid-century as well as deep reductions in other [GHGs]." IPCC, GLOBAL WARMING OF 1.5°C: AN IPCC SPECIAL REPORT ON THE IMPACTS OF GLOBAL WARMING OF 1.5°C ABOVE PRE-INDUSTRIAL LEVELS AND RELATED GLOBAL GREENHOUSE GAS EMISSION PATHWAYS, IN THE CONTEXT OF STRENGTHENING THE GLOBAL RESPONSE TO THE THREAT OF CLIMATE CHANGE 5, ¶ A.3 (2018), https://perma.cc/3FXF-BWTU [Dossier No. 72]; CMA Dec. 1/CMA.3, ¶ 21-23, U.N. Doc. FCCC/PA/CMA/2021/10/Add.1 (Nov. 13, 2021), https://perma.cc/R3SF-KNBE [Dossier No. 173] ("Glasgow Climate Pact"). The evolution from the Convention's objective to the Paris Agreement's global temperature goal and now to the UN climate change regime's current focus on keeping a limit on warming of 1.5°C within reach is one example of the dynamic nature of the regime.

<sup>&</sup>lt;sup>167</sup> CMA Dec. 1/CMA.5, ¶ 39, U.N. Doc. FCCC/PA/CMA/2023/16/Add.1 (Dec. 13, 2023), <a href="https://perma.cc/5CLE-M8RJ">https://perma.cc/5CLE-M8RJ</a> ("CMA5 Global Stocktake Decision") (encouraging all Parties "to come forward in their next [NDCs] with ambitious, economy-wide emission reduction targets, covering all [GHGs], sectors and categories and aligned with limiting global warming to 1.5°C, as informed by the latest science, in the light of different national circumstances").

as the Global Methane Pledge,<sup>168</sup> the Green Shipping Challenge,<sup>169</sup> the Forest and Climate Leaders' Partnership,<sup>170</sup> the Global Offshore Wind Alliance,<sup>171</sup> the Global Renewables and Energy Efficiency Pledge,<sup>172</sup> and the Declaration to Triple Nuclear Energy.<sup>173</sup> Many initiatives like these have been announced or launched at the annual UN Climate Change Conference, which is not only a forum for decision-making within the UN climate change regime but also an action-forcing event that helps drive ambitious climate action.

2.59 As this history makes clear, the UN climate change regime has not been static: from its inception, it was designed to evolve, and the Paris Agreement is itself designed to drive over time increasingly ambitious action by Parties to mitigate GHG emissions. As described further *infra* in Chapter III.E, Parties' implementation of the Paris Agreement already has led to increasingly ambitious climate action, with the expectation that the iterative aspect of the Agreement's ambition mechanism will result in the continued evolution and strengthening of broad-based climate action. <sup>174</sup>

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<sup>&</sup>lt;sup>168</sup> Global Methane Pledge (Nov. 2021) (recognizing that significant methane emissions reductions must be achieved globally by 2030 to meet the Paris Agreement's temperature goal, and politically committing participants "to work together in order to collectively reduce global anthropogenic methane emissions across all sectors by at least 30 percent below 2020 levels by 2030"), https://perma.cc/6ZUU-2R9K.

<sup>&</sup>lt;sup>169</sup> GREEN SHIPPING CHALLENGE, <a href="https://perma.cc/5UXA-C597">https://perma.cc/5UXA-C597</a>. Launched in November 2022, the Green Shipping Challenge states that emissions from the shipping sector are on a trajectory that is incompatible with the goals of the Paris Agreement, and sets the objective of encouraging "countries, ports, companies, and other actors in the shipping value chain to come forward with concrete announcements . . . to help put the shipping sector on a pathway this decade that is aligned with the goal of limiting global temperature rise to 1.5 degrees Celsius." *Id.* 

<sup>&</sup>lt;sup>170</sup> FOREST AND CLIMATE LEADERS' PARTNERSHIP (FCLP), <a href="https://perma.cc/TD8D-W6RQ">https://perma.cc/TD8D-W6RQ</a>. Launched in November 2022 after the issuance of the Glasgow Leaders' Declaration on Forests and Land Use (2021), the FCLP recognizes that sustainable land use is essential to meeting the Paris Agreement's goals, with participants politically committing to work collectively to halt and reverse forest loss and land degradation by 2030. *Id*.

<sup>&</sup>lt;sup>171</sup> GLOBAL OFFSHORE WIND ALLIANCE (GOWA), <a href="https://perma.cc/FLV9-56UL">https://perma.cc/FLV9-56UL</a>. The GOWA's 2022 "Call to Action" notes that offshore wind is critical to "limiting the global temperature consistent with the Paris Agreement and the Glasgow Climate Pact," and sets the objective of driving "ambitious uptake of offshore wind and contribut[ing] to achieving a total offshore wind capacity of a minimum of 380 [gigawatts] by 2030 and an installed capacity increase of at least 70 [gigawatts] per year from 2030." GOWA, Global Offshore Wind Alliance Call to Action (2022), <a href="https://perma.cc/2EMT-VNHU">https://perma.cc/2EMT-VNHU</a>.

<sup>&</sup>lt;sup>172</sup> Global Renewables and Energy Efficiency Pledge (2023), <a href="https://perma.cc/C2FV-7U7C">https://perma.cc/C2FV-7U7C</a> (recognizing that "the pace and scale of deployment of renewables and energy efficiency must increase significantly between now and 2030" to meet the Paris Agreement's temperature goal, and setting forth a number of non-legally-binding commitments toward that end).

<sup>&</sup>lt;sup>173</sup> Declaration to Triple Nuclear Energy (Dec. 1, 2023), <a href="https://perma.cc/LP4F-HXWH">https://perma.cc/LP4F-HXWH</a> (recognizing "the key role of nuclear energy in achieving net-zero [GHG] emissions . . . by or around mid-century and in keeping a 1.5°C limit on temperature rise within reach," and setting a global goal of tripling nuclear energy capacity from 2020 by 2050).

<sup>&</sup>lt;sup>174</sup> States' other collective, treaty-based efforts to address anthropogenic GHG emissions are addressed *infra* in Chapter III.F.

2.60 This history of the UN climate change regime—and especially what led States to adopt the carefully calibrated approach of the Paris Agreement—provides important context for the discussion in Chapter III of the obligations Parties have under the regime and the Paris Agreement in particular.

#### **CHAPTER III**

# STATES' INTERNATIONAL LEGAL OBLIGATIONS IN RESPECT OF CLIMATE CHANGE ARE FOUND PRIMARILY IN THE TREATY LAW OF THE UN CLIMATE CHANGE REGIME, AND PARTICULARLY THE PARIS AGREEMENT

- 3.1 As described *supra* in Chapter II.B, States have pursued international cooperation to address human-induced climate change primarily through the UN climate change regime. The Paris Agreement is at the regime's core. It articulates an ambitious, quantitative global temperature goal and sets out a long-term framework for addressing mitigation of and adaptation to climate change, elaborating various provisions of the UNFCCC. The UN General Assembly has affirmed repeatedly that the Paris Agreement and the UNFCCC "are the primary international, intergovernmental forums for negotiating the global response to climate change." <sup>175</sup>
- 3.2 Before examining the provisions of the Paris Agreement and the UNFCCC, it is important to discuss the relationship between them. The Paris Agreement is a distinct international agreement from, but is related to, the UNFCCC. The Paris Agreement was adopted by the Conference of the Parties to the UNFCCC<sup>176</sup> and, by its terms, is intended to "enhanc[e] the implementation of the Convention," and therefore is an international agreement that is related to the UNFCCC. The Convention contains three provisions that pertain to any "related legal instrument," but beyond those three provisions, the Convention

<sup>&</sup>lt;sup>175</sup> Supra n.9.

<sup>&</sup>lt;sup>176</sup> COP Dec. 1/CP.21, ¶ 1 ("Decides to adopt the Paris Agreement under the [UNFCCC] . . . .").

<sup>&</sup>lt;sup>177</sup> Paris Agreement, art. 2.1 ("The Agreement, *in enhancing* the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty...." (emphasis added)). Notably, article 2.1 of the Paris Agreement does not state that the Agreement is intended "to implement the Convention."

<sup>&</sup>lt;sup>178</sup> Unlike the Kyoto Protocol, the full title of which is "Kyoto Protocol to the United Nations Framework Convention on Climate Change," the Paris Agreement intentionally was not labeled a "protocol," and its title is simply the "Paris Agreement," reflecting the intention of the negotiating States for the Agreement to have a different relationship with the Convention. *Cf.* UNFCCC, art. 17 (addressing protocols). The COP's authority to adopt the Paris Agreement as something other than a protocol to the UNFCCC is provided in article 7.2(m) of the Convention. *See id.* art. 7.2(m) (providing that the COP "shall . . . [e]xercise such other functions as are required for the achievement of the objective of the Convention as well as all other functions assigned to it under the Convention").

<sup>&</sup>lt;sup>179</sup> UNFCCC, arts. 2 (describing the ultimate objective of the Convention and any "related legal instrument[]" the COP may adopt), 7.2 (providing that the COP is to "keep under regular review" the implementation of "any related legal instruments [it] may adopt"), 14.8 (providing that the Convention's provisions on settlement of disputes "apply to any related legal instrument" that the COP may adopt, unless that instrument provides otherwise).

does not address the terms of any related legal instrument adopted under it. Thus, the Paris Agreement is not subject to or governed by the provisions of the Convention as such. 180

- 3.3 Although the Paris Agreement is not subsidiary to the UNFCCC, in pursuing its shared ultimate objective, it elaborates provisions in many areas addressed under the Convention. It does so, however, in ways that depart from the Convention, such as not referencing the UNFCCC's annexes and using a different formulation of the principle of "common but differentiated responsibilities and respective capabilities." Because the Paris Agreement is a distinct international agreement from the UNFCCC, the relationship between the Paris Agreement and the Convention is one of *lex posterior* and *lex anterior*, respectively. Thus, to the extent the provisions of the Paris Agreement could be considered to conflict with those of the UNFCCC, the Paris Agreement, as *lex posterior*, would prevail as among States that are party to both agreements. An examination of States' obligations in respect of climate change under the UN climate change regime therefore is properly focused primarily on an analysis of the Paris Agreement's provisions, particularly given that adherence to the instruments is near-universal and they have almost identical Parties.
- 3.4 The Paris Agreement and the UNFCCC must be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the respective treaty in their context and in the light of the treaty's object and purpose. 183 Parts A and B of this chapter describe the

<sup>&</sup>lt;sup>180</sup> Certain provisions of the Paris Agreement, however, incorporate provisions of the UNFCCC by reference. Paris Agreement, arts. 1 ("For the purpose of this Agreement, the definitions contained in Article 1 of the Convention shall apply."), 17.2 ("Article 8, paragraph 2, of the Convention on the functions of the secretariat, and Article 8, paragraph 3, of the Convention, on the arrangements made for the functioning of the secretariat, shall apply *mutatis mutandis* to this Agreement."), 18.1 ("The provisions of the Convention relating to the function of [the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation] shall apply *mutatis mutandis* to this Agreement."), 22 ("The provisions of Article 15 of the Convention on the adoption of amendments to the Convention shall apply *mutatis mutandis* to this Agreement."), 24 ("The provisions of Article 14 of the Convention on settlement of disputes shall apply *mutatis mutandis* to this Agreement."), 24 ("The provisions of Article 14 of the Convention on settlement of disputes shall apply *mutatis mutandis* to this Agreement."). In other words, in the limited cases where the negotiating States intended UNFCCC provisions to apply to the Paris Agreement, they stated so expressly in the Paris Agreement's text. *See id.* Although States could have referred back to the UNFCCC's annexes (as they did in the Kyoto Protocol), for example, they chose not to do so in the Paris Agreement.

<sup>&</sup>lt;sup>181</sup> See infra Chapter III.C.

<sup>&</sup>lt;sup>182</sup> See Vienna Convention on the Law of Treaties, art. 30(3), May 23, 1969, 1155 U.N.T.S. 331, <a href="https://perma.cc/Y4MB-Q9MK">https://perma.cc/Y4MB-Q9MK</a> ("VCLT").

<sup>&</sup>lt;sup>183</sup> See id. arts. 31, 32; Oil Platforms (Iran v. United States), 1996 I.C.J. 803, 812, ¶ 23 (Dec. 12), <a href="https://perma.cc/UC9A-UFZW">https://perma.cc/UC9A-UFZW</a>; see also Certain Iranian Assets (Iran v. United States), 2019 I.C.J. 7, 32, ¶ 70 (Feb. 13), <a href="https://perma.cc/PY59-7GYW">https://perma.cc/PY59-7GYW</a>; Immunities and Criminal Proceedings (Equatorial Guinea v. France), 2018 I.C.J. 292, 320-321, ¶ 91 (June 6), <a href="https://perma.cc/Z3FX-ET9D">https://perma.cc/Z3FX-ET9D</a>; Legality of Use of Force (Serbia and Montenegro v. Belgium), 2004 I.C.J. 279, 318, ¶ 100 (Dec. 15), <a href="https://perma.cc/5DVG-FV79">https://perma.cc/5DVG-FV79</a>. Although the United States is not a party to the Vienna Convention, it has recognized since at least 1971 that the Convention is

provisions of the UNFCCC and the Paris Agreement, respectively, with a focus on the Paris Agreement as the cornerstone of the UN climate change regime.

- 3.5 **Part** C describes how the principle of "common but differentiated responsibilities and respective capabilities" is incorporated into the UNFCCC and the Paris Agreement, including how the principle's formulation in the Paris Agreement is different from that in the Convention and how it is applied differently in the two agreements' provisions.
- 3.6 An explanation of the concept of "loss and damage" as it has developed in the context of the UN climate change regime follows in **Part D**, reflecting an area of cooperation among Parties in recognition that mitigation and adaptation efforts will not avoid all adverse consequences of climate change. Parties have cooperated on loss and damage with both (*i*) the express understanding that collective efforts to address loss and damage are undertaken on "a cooperative and facilitative basis" and (*ii*) explicit agreement that such efforts do "not involve or provide a basis for any liability or compensation." <sup>185</sup>
- 3.7 **Part E** describes how the Paris Agreement works in practice, including where things stand in the important first cycle of the Agreement's "ambition mechanism," a process that offers the best hope for protecting the climate system for the benefit of present and future generations, and one that should be allowed to unfold without disruption to give it the greatest chance of success.
- 3.8 **Part F** concludes this chapter with a description of how the UN climate change regime is supplemented by international efforts of States under other treaty-based regimes.

#### A. The Provisions of the UNFCCC

3.9 As a framework convention, the UNFCCC reflects Parties' recognition that there is a global problem that needs to be addressed—*i.e.*, the adverse effects of climate change caused by global warming due to anthropogenic GHG emissions<sup>186</sup>—but contains only limited measures to address it. As noted *supra*, the Convention establishes a qualitative ultimate objective of achieving the "stabilization of greenhouse gas concentrations in the atmosphere at

an "authoritative guide" to treaty law and practice. *See* Letter of Submittal from Secretary of State Rogers to President Nixon transmitting the Vienna Convention on the Law of Treaties (Oct. 18, 1971), S. Ex. L. 92d Cong., 1st Sess., *reprinted in* 65 DEP'T. St. Bull. No. 1694, 684, 685 (Dec. 13, 1971), https://perma.cc/CY7K-K8ZX.

<sup>&</sup>lt;sup>184</sup> Paris Agreement, art. 8.3.

<sup>&</sup>lt;sup>185</sup> COP Dec. 1/CP.21, ¶ 51.

<sup>&</sup>lt;sup>186</sup> See UNFCCC, pmbl. ("Acknowledging that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response . . . .").

a level that would prevent dangerous anthropogenic interference with the climate system." <sup>187</sup> To this end, the UNFCCC sets forth general commitments relating to mitigating and adapting to the adverse effects of climate change and establishes several core institutions as well as mechanisms and decision-making procedures for Parties to use in further developing the regime. <sup>188</sup>

## 3.10 All Parties to the UNFCCC are obligated:

- under article 4.1(a) to develop, periodically update, publish, and make available national inventories of anthropogenic GHG emissions by sources and removals by sinks;
- under article 4.1(b) to formulate, implement, publish, and regularly update national programs containing measures to mitigate and facilitate adaptation to climate change (while not prescribing any particular measures Parties must implement);
- under article 4.1(c) to promote and cooperate in the development, application, and diffusion of emissions reduction technologies;
- under article 4.1(d) to promote sustainable management and enhancement of sinks and reservoirs of GHGs;
- under article 4.1(e) to cooperate in preparing for adaptation to the impacts of climate change;
- under article 4.1(f) to take climate change considerations into account in their policies and actions;
- under article 12.1 to report certain information related to their implementation of obligations under the UNFCCC;
- under article 4.1(h) to promote and cooperate in the exchange of climate change-related information; and

<sup>&</sup>lt;sup>187</sup> *Id.* art. 2.

<sup>&</sup>lt;sup>188</sup> See, e.g., id. arts. 7 (establishing a conference of the Parties), 8 (establishing a secretariat), 9 (establishing a subsidiary body for scientific and technological advice), 10 (establishing a subsidiary body for implementation). The UNFCCC also defines a financial mechanism for the provision of financial resources on a grant or concessional basis, including resources for the transfer of technology. *Id.* art. 11.

- under articles 4.1(g), 4.1(i), 5, and 6 to promote and cooperate on scientific research, education, training, and public awareness related to climate change.
- 3.11 As explained *supra*, the Convention establishes two categories of Parties with additional obligations: (*i*) those listed in Annex I; and (*ii*) those listed in Annex II (a subset of Annex I). Although the Convention sets forth differentiated obligations based on these categories of Parties, its annexes are relevant only to certain provisions of the UNFCCC, not generally. Additional provisions apply to Parties listed in Annex I, including more detailed reporting commitments and a non-legally-binding emissions aim in relation to the year 2000. Parties listed in Annex II have obligations to provide certain financial assistance to developing country Parties. Regardless of the category of party, the Convention does not impose any legally binding emissions limitation or reduction targets. Although the Convention also refers in places to "developed country" and "developing country" Parties, <sup>191</sup> those terms are neither defined on equated to any of the annexes.
- 3.12 The Parties listed in Annex I to the UNFCCC have:
  - an obligation under article 4.2(a) to adopt policies and take corresponding measures to mitigate climate change through both limitation of anthropogenic GHG emissions and protection and enhancement of GHG sinks and reservoirs;

<sup>&</sup>lt;sup>189</sup> See supra ¶ 2.34.

<sup>&</sup>lt;sup>190</sup> The Convention's annex-based provisions are found in articles 4.2-4.6, 12.2-12.3, and 12.5.

<sup>191</sup> For example, the Convention states, in article 4.7, that "[t]he extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties." Developing countries sought, but did not achieve, a legal discharge of obligation if adequate funding and technology were not forthcoming. Daniel Bodansky, *The United Nations Framework Convention on Climate Change: A Commentary*, 18 YALE J. INT'L L. 451, 511 (1993) ("[A]lthough developing countries had sought to make their commitments legally *contingent* on the provision of adequate financial resources and technology, the Convention adopts a more neutral formulation, which makes the factual observation that developing country performance 'will depend' on the fulfillment of developed country commitments." (emphasis in original; internal citations omitted)), <a href="https://perma.cc/YS7V-3YKP">https://perma.cc/YS7V-3YKP</a>.

<sup>&</sup>lt;sup>192</sup> In addition to not being defined in the Paris Agreement or the UNFCCC, the terms "developed" and "developing" also are not defined in the UN system. This is in contrast to "least developed countries," which is defined in the UN system. *See* UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States, *Least Developed Countries Category*, <a href="https://perma.cc/PH4U-STFB">https://perma.cc/PH4U-STFB</a>; G.A. Res. 2768(XXVI), U.N. Doc. A/RES/2768(XXVI) (Nov. 18, 1971), <a href="https://perma.cc/4R4Y-2DXT">https://perma.cc/4R4Y-2DXT</a>. The terms "developed country" and "developing country" do not refer to categories that have fixed constituents, but rather to categories whose constituents can change as the facts change.

- enhanced reporting obligations under articles 4.2(b) and 12.2 (for example, requiring them to provide detailed information on the projected effect of their policies/measures on their GHG emissions); and
- a non-legally-binding "aim" under article 4.2(b) of returning their net anthropogenic GHG emissions to 1990 levels by the year 2000.
- 3.13 Additionally, the UNFCCC imposes finance-related obligations on the Parties listed in Annex II to the Convention, obligating them to provide financial resources to assist developing country Parties in meeting their reporting requirements under the Convention<sup>193</sup> and otherwise to meet certain costs of implementing mitigation- and adaptation-related measures agreed under the Convention's financial mechanism, as specified in article 4.3.<sup>194</sup> The Convention also obligates Annex II Parties under article 4.4 to "assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects," and under article 4.5 to promote, facilitate, and finance, "as appropriate," the transfer of, or access to, environmentally sound technologies, particularly to developing country Parties. Under article 12.3, Annex II Parties also must incorporate into their reporting details on measures taken in accordance with these support-related obligations.

### B. The Provisions of the Paris Agreement

- 3.14 The Paris Agreement's approach to the legal character of various commitments is nuanced. The Agreement's legal design largely flows from the history of the UN climate change regime, described *supra* in Chapter II.B, in which the highly regulatory approach of the Kyoto Protocol, which centered upon binding emissions targets, proved unable to generate the action needed from all major emitters, and the much more flexible, non-legally-binding approach of Copenhagen/Cancun was universally accepted but perceived as insufficiently robust.
- 3.15 The Paris Agreement takes a hybrid approach of legally binding and non-legallybinding provisions, and relies heavily on the establishment of a process underpinned by

<sup>&</sup>lt;sup>193</sup> UNFCCC, art. 4.3 ("The developed country Parties and other developed Parties included in Annex II shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1 [pertaining to reporting].").

<sup>&</sup>lt;sup>194</sup> The collective, unquantified obligation of Annex II Parties to provide funding to meet certain costs of developing country Party obligations other than those related to reporting requirements is substantially qualified: Annex II Parties are to meet the "agreed full *incremental* costs" of implementing measures that are both (*i*) covered by article 4.1 (pertaining to mitigation and adaptation) and (*ii*) "agreed" between a developing country Party and the international entity(-ies) referred to in article 11 (the operating entity(-ies) of the Convention's financial mechanism). UNFCCC, art. 4.3 (emphasis added).

procedural obligations to promote climate ambition and implementation of ambitious climate action, with frequent meetings of the Parties, annual decisions of the Parties, a robust transparency framework, and the "ambition cycle." Thus, the fact that the Paris Agreement does not include a legally binding obligation to achieve climate change mitigation targets, for example, should not be understood as the absence of seriousness or lack of intention on the part of States to dramatically drive climate action to meet the Agreement's goals. This carefully-crafted balance has been critical to the Agreement's success to date, and it remains critical to its continued success going forward.

- 3.16 Throughout the Paris Agreement, "shall" denotes legally binding obligations. The obligations relating to the mitigation of GHG emissions are central to the Agreement's design and relate largely to reporting and the provision of information. These include the obligation of each Party:
  - under article 4.2 to prepare, communicate, and maintain successive nationally determined contributions (NDCs) (*i.e.*, emissions targets) over the course of the Agreement;
  - under article 4.8 to provide the information necessary for clarity, transparency, and understanding, when communicating its NDC;
  - under article 4.9 to communicate an NDC every five years;
  - under article 13.7 to regularly provide a GHG inventory and the information necessary to track its progress in implementing and achieving its NDC; <sup>195</sup> and
  - under article 13.11 to participate in a facilitative, multilateral consideration of, *inter alia*, the information submitted under article 13.7 on the implementation/achievement of its NDC.
- 3.17 Although Parties have an obligation to formulate, communicate, and maintain successive NDCs, the Paris Agreement deliberately does not require Parties to achieve their NDCs. The text of article 4.2 makes this clear, both by the reference to mitigation contributions that the Party "*intends* to achieve" (rather than contributions the Party "shall" achieve), as well

<sup>&</sup>lt;sup>195</sup> Parties have a related obligation to "account" for their NDCs so as to promote environmental integrity and avoid double counting. Paris Agreement, art. 4.13.

as by the obligation of Parties to "pursue domestic mitigation measures, with the *aim* of achieving *the objectives* of such contributions." This obligation of effort—to "pursue" such measures "with the aim of achieving the objectives of such contributions"—provides Parties with a wide margin of appreciation with respect to what measures to pursue domestically, and by its terms does not require Parties to have in place a set of domestic measures that the Party assesses will achieve its NDC.

- 3.18 Complementing the obligations described *supra*, article 4 includes several provisions on mitigation that articulate relevant expectations but do not establish legal obligations. In particular:
  - Article 4.3 establishes the expectation that each Party will raise its mitigation ambition with each successive NDC, but a Party is not legally obligated to do so (each such NDC "will [vice 'shall'] represent a progression beyond the Party's then current [NDC] and reflect its highest possible ambition"). 197 There was a concern that, if the provision were legally binding, it might create a disincentive for Parties to put forward ambitious NDCs—that is, a Party might lower the ambition of its NDC target in order to avoid being legally bound to exceed a particular level in its subsequent NDC. 198 Additionally, the Paris Agreement does not define "progression," in recognition of the fact that Parties would interpret this term differently and that agreement on a single definition would have been impossible, leaving it to the Parties to work out in practice, through political processes, how to carry out this expectation. 199

<sup>196</sup> See id. art. 4.2 ("Each Party shall prepare, communicate and maintain successive [NDCs] that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.") (emphasis added in main text).

<sup>&</sup>lt;sup>197</sup> See id. art. 4.3 ("Each Party's successive [NDC] will represent a progression beyond the Party's then current [NDC] and reflect its highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.") (emphasis added in main text). Article 3 of the Paris Agreement contains a similar, non-legally-binding statement regarding the "progression" of Parties' efforts over time: "The efforts of all Parties will [vice 'shall'] represent a progression over time, while recognizing the need to support developing country Parties for the effective implementation of this Agreement." The consistent use of "shall" throughout the Agreement for legally binding obligations makes clear that the limited uses of "will" in the Agreement are not intended to be legally binding.

<sup>&</sup>lt;sup>198</sup> See, e.g., John Schwartz, Debate Over Paris Climate Deal Could Turn on a Single Phrase, N.Y. TIMES (May 2, 2017), <a href="https://perma.cc/E4D4-4622">https://perma.cc/E4D4-4622</a> (reporting former U.S. Special Envoy for Climate Change Todd Stern as stating that the issue was discussed intensely in Paris, and that there had been concern that including legally binding provisions in the Paris Agreement that would prohibit downward adjustments of NDCs would lead Parties to "lowball their commitments").

<sup>&</sup>lt;sup>199</sup> Given the range of potential content in Parties' NDCs, "progression" did not lend itself to definition or a legally binding obligation. While it would be evident that a 50 percent reduction target was a "progression" beyond a 40 percent target using the same baseline and covering the same scope of emissions, it would be less clear if a Party, for example, switched from a cap-and-trade approach to a carbon tax.

- Article 4.11 allows a Party to adjust its NDC at any point, with such a change encouraged, but not required, to be in a more ambitious direction ("with a view to enhancing its level of ambition").<sup>200</sup>
- 3.19 The Paris Agreement's provisions relating to the impacts of climate change—that is, to adaptation and "loss and damage"—are largely not legally binding. Nearly all the provisions in articles 7 and 8 are hortatory in nature or constitute a mandatory direction to an institution rather than to Parties, <sup>201</sup> with the exception of article 7.9, which requires each Party, "as appropriate," to engage in adaptation planning processes and the implementation of adaptation actions. <sup>202</sup> Similarly, many other provisions of the Agreement use language—such as "should"—indicative of a non-legally-binding character.
- 3.20 Certain obligations under the Paris Agreement are directed at a subset of Parties. These include the obligation of "[d]eveloped country Parties" under article 9.1 to "provide financial resources to assist developing country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the [UNFCCC]," as well as the general obligations of Parties under articles 10.2 and 12 to strengthen cooperative action on technology development and transfer and to cooperate in taking measures to enhance climate change education, training, public awareness, public participation, and public access to information, respectively. "Developed country Parties" have related obligations under articles 9.5, 9.7, and 13.9 to communicate various types of information concerning financial, technology transfer, and capacity-building support, and all Parties have an obligation under article 11.4 to regularly report on any actions or measures they take to enhance the capacity of "developing country Parties" to implement the Agreement.
- 3.21 Finally, certain obligations of Parties to the Paris Agreement are implemented in accordance with decisions taken by the Parties at the time of adoption of the Agreement or subsequently—for example, as part of the Paris "rulebook" decisions adopted by the Parties in

<sup>&</sup>lt;sup>200</sup> See Paris Agreement, art. 4.11 ("A Party may at any time adjust its existing [NDC] with a view to enhancing its level of ambition, in accordance with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to this Agreement."); see also CTR. FOR CLIMATE AND ENERGY SOLS. (C2ES), LEGAL ISSUES RELATED TO THE PARIS AGREEMENT: ADJUSTING A PARTY'S NATIONALLY DETERMINED CONTRIBUTION (NDC) (2017), <a href="https://perma.cc/SZ2Q-3L69">https://perma.cc/SZ2Q-3L69</a> (stating that article 4.11 "makes clear that, if a party chooses to revise its existing target, it is encouraged to do so in a more ambitious direction," but "higher ambition is not a legal requirement, and [a]rticle 4.11 does not legally prohibit a party from adjusting its NDC in another direction").

<sup>&</sup>lt;sup>201</sup> See Paris Agreement, arts. 8.2 (directed at the Warsaw International Mechanism for Loss and Damage), 8.5 (same).

<sup>&</sup>lt;sup>202</sup> *Id.* arts. 7, 8.

2018 at their meeting in Katowice, Poland.<sup>203</sup> Decisions of the Parties have legally binding effect, however, only where the Paris Agreement expressly provides that they are to have such effect. For example, article 4.8 provides that Parties "shall," when communicating their NDCs, provide the information necessary for clarity, transparency, and understanding "in accordance with decision 1/CP.21 [the 2015 decision by which the Paris Agreement was adopted] and any relevant decisions of the Conference of the Parties serving as the meeting of the Parties to this Agreement [the CMA]." As a result, certain aspects of the decision adopted by the Parties in 2018 as part of the Paris "rulebook" elaborating what information about NDCs is necessary for clarity, transparency, and understanding, pursuant to article 4.8, are legally binding. <sup>204</sup> Beyond such cases, the Paris Agreement's governing body (the CMA)—like the Convention's governing body (the COP)—does not have any general authority to establish obligations binding on Parties.

3.22 With the sole exceptions of certain support-related obligations,<sup>205</sup> the Paris Agreement's obligations are not differentiated between developed and developing country Parties. Consistent with its provisions, the implementation of the Paris Agreement, however, is highly differentiated. As explained in more detail *infra* in Part C of this chapter, the Paris Agreement acknowledges a spectrum of national circumstances among its Parties, with different aspects of the Agreement differentiated in different ways. The Paris Agreement provides, for example, that mitigation contributions are to be "nationally determined," allowing Parties to self-differentiate based on their different national circumstances.<sup>206</sup> The

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 $<sup>^{203}</sup>$  See supra ¶ 2.56.

<sup>&</sup>lt;sup>204</sup> See, e.g., CMA Dec. 4/CMA.1, ¶ 7 ("Decides that, in communicating their second and subsequent nationally determined contributions, Parties shall provide the information necessary for clarity, transparency and understanding contained in annex I as applicable to their [NDCs], and *strongly encourages* Parties to provide this information in relation to their first [NDC], including when communicating or updating it by 2020." (emphasis in original)); *id.* annex I.

<sup>&</sup>lt;sup>205</sup> Paris Agreement, arts. 9.1, 9.5, 9.7, 13.9 (setting forth obligations of "developed country Parties"). However, even with respect to climate finance, the Paris Agreement encourages other (non-developed country) Parties to provide or continue to provide financial resources voluntarily to assist developing country Parties with both mitigation and adaptation, and further notes that the mobilization of climate finance is to be a "global effort" with finance mobilized "from a wide variety of sources, instruments and channels." *Id.* arts. 9.2, 9.3. That is, while developed country Parties should continue to take the lead in mobilizing climate finance, that is to be in the context of broadened engagement by other Parties on climate finance. *Id.* art. 9.3. Additionally, while the Agreement obligates developed country Parties to report on support provided to and mobilized for developing country Parties, it encourages other Parties to do so as well. *Id.* art. 9.7.

<sup>&</sup>lt;sup>206</sup> *Id.* art. 4.2. Although article 4.4 establishes the expectation that developed country Parties "should continue taking the lead by undertaking economy-wide absolute emission reduction targets," it indicates a clear expectation that developing country Parties are to "continue enhancing their mitigation efforts," and that, over time, developing country Parties also are expected to move toward economy-wide emission reduction or limitation targets. *Id.* art. 4.4.

Paris Agreement also establishes a single enhanced transparency framework (on reporting and review),<sup>207</sup> in contrast to the bifurcated transparency regime under the UNFCCC, but with flexibility in its implementation provided "to those developing country Parties that need it in the light of their capacities"<sup>208</sup>—that is, flexibility is provided only to certain developing country Parties, not all of them, and only for the purpose of addressing capacity constraints.<sup>209</sup> It is in these and other ways that the Paris Agreement reflects—and therefore, as noted in article 2.2 of the Agreement, will be implemented to reflect—equity<sup>210</sup> and the principle of "common but differentiated responsibilities and respective capabilities, in the light of different national circumstances," which is addressed further in the next section.<sup>211</sup>

#### C. Differentiation in the UN Climate Change Regime

3.23 As described *supra* in Chapters II.B and III.B, the Paris Agreement departs in significant ways from the UNFCCC, with one of the key differences concerning whether—and if so, how—the agreements treat Parties differently. The Paris Agreement contains no references to the UNFCCC's annexes and, with the exceptions noted *supra* in paragraph 3.22, does not establish obligations based on categories of Parties. The contrasting approaches to differentiation in the UNFCCC and the Paris Agreement are fundamental to understanding the Paris Agreement and the evolution of the UN climate change regime.

3.24 The phrase "common but differentiated responsibilities" (CBDR) first appeared in Principle 7 of the 1992 Rio Declaration on Environment and Development in connection with conservation and protection of the Earth's ecosystems and global environmental

<sup>&</sup>lt;sup>207</sup> *Id.* art. 13.1.

<sup>&</sup>lt;sup>208</sup> *Id.* art. 13.2.

<sup>&</sup>lt;sup>209</sup> As reflected in the modalities, procedures, and guidelines for the Paris Agreement's enhanced transparency framework, the flexibility provided is not a general one that allows for broad differential application of the reporting guidelines; rather, flexibility is provided only with respect to specified reporting elements of the transparency framework, most of which relate to reporting on GHG inventories. CMA Dec. 18/CMA.1, annex, ¶¶ 25, 29, 32, 34-35, 38, 48, 57, 58, 85, 92, 95, 102, 159, 162(c)-(d), 162(f), 192(c), U.N. Doc. FCCC/PA/CMA/2018/3/Add.2 (Dec. 15, 2018), <a href="https://perma.cc/U84D-6TSK">https://perma.cc/U84D-6TSK</a> [Dossier No. 171]. Moreover, a developing country Party that has determined it needs flexibility in light of its capacity with respect to one of the specified reporting elements is to "clearly indicate the provision to which flexibility is applied, concisely clarify [its] capacity constraints" relating to the particular flexibility, and "provide self-determined estimated time frames for improvements in relation to those capacity constraints." *Id.* annex, ¶¶ 5-6.

<sup>&</sup>lt;sup>210</sup> As explained *supra* in paragraph 2.56 and footnote 164, "equity" is not defined in the Paris Agreement or the UNFCCC. Parties have a range of understandings about its meaning, and the Court does not need—and should not seek—to resolve those different views, which should be left to Parties to work out in practice through political processes. *Consider supra* n.164 (setting out U.S. views on the meaning of "equity").

<sup>&</sup>lt;sup>211</sup> Paris Agreement, art. 2.2 ("This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.").

degradation.<sup>212</sup> In the UN climate change regime, although CBDR is referenced in the UNFCCC, the Kyoto Protocol, and the Paris Agreement, its precise formulation and the way it is reflected in the instruments have evolved over time.

- 3.25 The UNFCCC formulation of CBDR differs from that in Rio Principle 7 by including the phrase "and respective capabilities" (referred to, in shorthand, as CBDR/RC).<sup>213</sup> This additional reference to "respective capabilities" makes clear that the concept as stated in the UNFCCC is not just about relative responsibilities but also, importantly, about the capabilities of different States, indicating a spectrum of effort among States. Significantly, the UNFCCC states in a hortatory provision that developed country Parties "should take the lead in combating climate change," which they have done—*not* that they are the only countries responsible for taking action to mitigate global warming.<sup>214</sup>
- 3.26 Neither the Paris Agreement nor the UNFCCC specifies or otherwise explains why Parties have "common but differentiated responsibilities and respective capabilities." In particular, neither agreement refers to "historical responsibility," and neither bases any obligations on historical emissions. This is intentional. Furthermore, CBDR/RC is not equated with or linked in the text to the Convention's annexes or any annex-based differentiation of obligations. Nor is CBDR/RC linked in the text with any differentiation of obligations for any

<sup>212</sup> UN Conference on Environment and Development, *Rio Declaration on Environment and Development*, principle 7, U.N. Doc. A/CONF.151/26 (vol. I), annex I (June 14, 1992), <a href="https://perma.cc/S4VB-DM28">https://perma.cc/S4VB-DM28</a> [Dossier No. 137] ("Rio Declaration") ("States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command."). The United States made clear in a 1992 written statement on the Rio Declaration that it "understands and accepts that *principle 7 highlights the special leadership role of the developed countries, based on our industrial development, our experience with environmental protection policies and actions, and our wealth, technical expertise and capabilities," but that it "does not accept any interpretation of principle 7 that would imply a recognition or acceptance by the United States of any international obligations or liabilities, or any diminution in the responsibilities of developing countries." UN Conference on Environment and Development, Report of the United Nations Conference on Environment and Development, 17-18, ¶ 16, U.N. Doc. A/CONF.151/26 (vol. IV) (Sept. 28, 1992) (emphasis added), <a href="https://perma.cc/C5R8-AMGF">https://perma.cc/C5R8-AMGF</a>.* 

<sup>&</sup>lt;sup>213</sup> UNFCCC, pmbl. and art. 3.1. A slightly different formulation is used in article 4.1's chapeau. *Id.* art. 4.1 ("All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall . . . ."). The UNFCCC includes CBDR/RC among the "principles" that guide Parties' implementation of the Convention's provisions. *Id.* art. 3.1 ("The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof."); *see also supra* n.112.

<sup>&</sup>lt;sup>214</sup> See UNFCCC, art. 3.1.

other group(s) of Parties, such as "least developed countries," which are not listed in any annex. Indeed, the only reference to CBDR/RC in the Convention's articles other than the one in article 3.1 is found in article 4.1, whose obligations apply, by its terms, to "[a]ll Parties." Even there, CBDR/RC is something that the Convention simply provides for Parties to "tak[e] into account" along with "specific national and regional development priorities, objectives and circumstances" in implementing their obligations. This further demonstrates that CBDR/RC is to be understood as reflecting a spectrum of effort due to the spectrum of Parties' national circumstances, rather than any categorical differentiation among groups of Parties.

As described supra, the UNFCCC differentiates certain obligations based on its annexes, 218 while the Kyoto Protocol adopted a categorical, annex-based bifurcation of obligations.<sup>219</sup> In the almost quarter century that passed between the adoption of the UNFCCC and the Paris Agreement, however, the world economy grew and changed dramatically, while the UNFCCC annexes remained largely frozen in time. Regardless of how the Annex I-non-Annex I division corresponded to different conceptions of "developed" and "developing" countries as a factual matter in 1992, by 2015, those categories no longer aligned with any objective understanding of "developed" versus "developing." By the time the Paris Agreement was adopted, some non-Annex I countries had a larger share of historical emissions and/or a higher per capita income than many countries listed in Annex I, rendering the lists in the UNFCCC annexes obsolete for purposes of understanding countries' respective contributions to global warming and their capacities to take measures to address it and help others do so too. This was already apparent in 2011, when the Parties adopted the mandate for the Paris 3.28 Agreement negotiations—the Durban Platform for Enhanced Action.<sup>220</sup> In contrast to the Berlin mandate for the Kyoto Protocol negotiations, which was based on the UNFCCC

<sup>&</sup>lt;sup>215</sup> See id. art. 12.5 (providing flexibility to least developed countries, allowing them to make their initial communications regarding implementation at their discretion).

<sup>&</sup>lt;sup>216</sup> *Id.* art. 4.1 ("All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall . . . .").

<sup>&</sup>lt;sup>217</sup> *Id*.

<sup>&</sup>lt;sup>218</sup> Supra ¶¶ 3.11-3.13.

<sup>&</sup>lt;sup>219</sup> As explained *supra* in Chapter II.B, the Kyoto Protocol was the ultimate legal instantiation of a bifurcated, annex-based differentiation of key obligations, establishing legally binding emissions targets for Annex I Parties but no new commitments for non-Annex I Parties. The Kyoto Protocol refers to CBDR/RC only once in its text. *See* Kyoto Protocol, art. 10 ("All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, without introducing any new commitments for Parties not included in Annex I, but reaffirming existing commitments under Article 4, paragraph 1, of the Convention, . . . shall . . . .").

<sup>&</sup>lt;sup>220</sup> Durban Platform.

annexes,<sup>221</sup> the Durban Platform made no reference to the annexes or even to the categories of "developed" and "developing" countries.<sup>222</sup>

3.29 In abandoning the UNFCCC annexes, the Durban Platform laid the groundwork for the Paris Agreement, which takes a very different approach to differentiation from the Convention. The Paris Agreement adds a third element to CBDR/RC, in addition to responsibility and capacity, namely "different national circumstances." As used in the Paris Agreement, the principle is now "the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances" (CBDR/RC/ILODNC),<sup>223</sup> which derives from the U.S.-China Joint Announcement of November 2014<sup>224</sup> and was repeated verbatim in the COP20 "Lima Call for Climate Action" a month later.<sup>225</sup> The phrase "in the light of different national circumstances" more clearly connotes a spectrum of differentiation as opposed to a bifurcation between developed and developing countries.<sup>226</sup>

3.30 This spectrum approach to differentiation is manifest in the Paris Agreement's provisions.<sup>227</sup> As reflected in article 2.2, it was designed, and its provisions constructed, to reflect equity and the principle of CBDR/RC/ILODNC, without those elements serving as an overarching gloss or guide to the interpretation or application of the Paris Agreement.

#### D. "Loss and Damage" and the UN Climate Change Regime

3.31 The UN climate change regime takes a cooperative, facilitative, and serious approach to "loss and damage" associated with the adverse effects of climate change. Neither the UNFCCC nor the Paris Agreement contains legally binding obligations relating to loss and damage or establishes or otherwise contains rules regarding State liability for adverse effects of human-induced climate change. Rather, the regime makes clear that financial support for

<sup>&</sup>lt;sup>221</sup> COP Dec. 1/CP.1, ¶¶ 2, 4.

<sup>&</sup>lt;sup>222</sup> Durban Platform.

<sup>&</sup>lt;sup>223</sup> Paris Agreement, pmbl. and arts. 2.2, 4.3, 4.19.

<sup>&</sup>lt;sup>224</sup> See U.S. White House Press Release, *U.S.-China Joint Announcement on Climate Change* (Nov. 11, 2014), ¶ 2 ("They are committed to reaching an ambitious 2015 agreement that reflects the principle of common but differentiated responsibilities and respective capabilities, in light of different national circumstances."), https://perma.cc/AJM8-NRFT.

<sup>&</sup>lt;sup>225</sup> COP Dec. 1/CP.20, ¶ 3, U.N. Doc. FCCC/CP/2014/10/Add.1 (Dec. 14, 2014), <a href="https://perma.cc/4CX6-Q4CX">https://perma.cc/4CX6-Q4CX</a> [Dossier No. 150].

<sup>&</sup>lt;sup>226</sup> This is buttressed by the language in article 4.3 of the Paris Agreement, which sets forth the expectation that successive NDCs will progress beyond existing ones and reflect a Party's highest possible ambition, reflecting "its" CBDR/RC/ILODNC. Use of "its" in this article in relation to CBDR/RC/ILODNC reinforces that CBDR/RC/ILODNC is a spectrum, rather than two categories.

<sup>&</sup>lt;sup>227</sup> See supra Chapter III.B.

addressing loss and damage is voluntary, focusing on the important tasks of enhancing understanding and building capacity. <sup>228</sup>

- 3.32 The UN climate change regime has progressively elaborated its facilitative approach to avoiding, minimizing, and addressing loss and damage, and now deals extensively with the subject. The term "loss and damage" (L&D) is not mentioned in the UNFCCC. It first appeared in the 2007 Bali Action Plan, adopted by UNFCCC Parties at COP13, in connection with enhancing action under the Convention on adaptation to climate change. A decision taken at COP16 (2010) established a work program "to consider . . . approaches to address [L&D] associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change." This led to the establishment in 2013 of the Warsaw International Mechanism for Loss and Damage (WIM). The WIM's functions include: enhancing knowledge and understanding of comprehensive risk management approaches to addressing L&D; strengthening dialogue, coordination, coherence, and synergies among relevant stakeholders; and enhancing action and support, including finance, technology, and capacity-building, to address L&D. 232
- 3.33 In contrast to the UNFCCC, the Paris Agreement explicitly addresses L&D in article 8, which recognizes "the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and

<sup>&</sup>lt;sup>228</sup> Paris Agreement, art. 8.3 ("Parties should enhance understanding, action and support, including through the Warsaw International Mechanism, as appropriate, on a cooperative and facilitative basis with respect to loss and damage associated with the adverse effects of climate change.").

<sup>&</sup>lt;sup>229</sup> Bali Action Plan, ¶ 1(c)(iii) ("Decides to launch a comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012, in order to reach an agreed outcome and adopt a decision at its fifteenth session, by addressing, inter alia . . . [e]nhancing action on adaptation, including, inter alia, consideration of . . . [d]isaster reduction strategies and means to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change.").

<sup>&</sup>lt;sup>230</sup> Cancun agreements, ¶ 26. See also id. ¶¶ 25 ("Recognizes the need to strengthen international cooperation and expertise in order to understand and reduce loss and damage associated with the adverse effects of climate change, including impacts relating to extreme weather events and slow onset events," with the following description of "slow onset events" in an accompanying footnote: "Including sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity and desertification."), 27-29. The UNFCCC defines "adverse effects" to mean "changes in the physical environment or biota resulting from climate change which have significant deleterious effects on the composition, resilience or productivity of natural and managed ecosystems or on the operation of socio-economic systems or on human health and welfare." UNFCCC, art. 1.1.

<sup>&</sup>lt;sup>231</sup> COP Dec. 2/CP.19, ¶¶ 1-2, U.N. Doc. FCCC/CP/2013/10/Add.1 (Nov. 23, 2013), <a href="https://perma.cc/WH4E-FN9Z">https://perma.cc/WH4E-FN9Z</a> [Dossier No. 159] ("COP Dec. 2/CP.19"); see also COP Decs. 7/CP.17, U.N. Doc. FCCC/CP/2011/9/Add.2 (Dec. 9, 2011), <a href="https://perma.cc/ZSV3-9GEW">https://perma.cc/ZSV3-9GEW</a> [Dossier No. 157], and 3/CP.18, U.N. Doc. FCCC/CP/2012/8/Add.1 (Dec. 8, 2012), <a href="https://perma.cc/JDA7-TQTS">https://perma.cc/JDA7-TQTS</a> [Dossier No. 158].

<sup>&</sup>lt;sup>232</sup> COP Dec. 2/CP.19, ¶ 5.

slow onset events, and the role of sustainable development in reducing the risk of loss and damage."<sup>233</sup> Although article 8 provides that "Parties should enhance understanding, action and support... on a cooperative and facilitative basis with respect to [L&D]"<sup>234</sup> and sets forth an illustrative list of areas of cooperation that may be pursued,<sup>235</sup> it does not establish or identify any legally binding obligations on Parties. Moreover, the 2015 COP decision that adopted the Paris Agreement states clearly that the COP "[a]grees that Article 8 of the Agreement does not involve or provide a basis for any liability or compensation."<sup>236</sup>

- 3.34 Since the entry into force of the Paris Agreement, the Parties have taken steps to advance collective efforts to avert, minimize, and address L&D, including technical assistance<sup>237</sup> and the establishment of voluntary funding arrangements, including a new fund, for responding to L&D.<sup>238</sup>
- 3.35 The progressive and ongoing efforts to elaborate mechanisms under the Paris Agreement to address L&D reflect the seriousness with which Parties take this issue, demonstrated by the Parties' decisions in 2022 to establish new funding arrangements, including a fund, and, most recently, in 2023 at the 28<sup>th</sup> UN Climate Change Conference in

<sup>&</sup>lt;sup>233</sup> Paris Agreement, art. 8.1.

<sup>&</sup>lt;sup>234</sup> *Id.* art. 8.3.

<sup>&</sup>lt;sup>235</sup> *Id.* art. 8.4 ("Accordingly, areas of cooperation and facilitation to enhance understanding, action and support may include . . . .").

<sup>&</sup>lt;sup>236</sup> COP Dec. 1/CP.21, ¶ 51.

<sup>&</sup>lt;sup>237</sup> In 2019, the Parties established the Santiago Network "to catalyse the technical assistance of relevant organizations, bodies, networks and experts for the implementation of relevant approaches at the local, national and regional level in developing countries that are particularly vulnerable to the adverse effects of climate change." CMA Dec. 2/CMA.2, ¶¶ 43-45, U.N. Doc. FCCC/PA/CMA/2019/6/Add.1 (Dec. 15, 2019), <a href="https://perma.cc/TZ75-FEG5">https://perma.cc/TZ75-FEG5</a> [Dossier No. 172]; see also CMA Dec. 19/CMA.3, ¶ 9, U.N. Doc. FCCC/PA/CMA/2021/10/Add.3 (Nov. 12, 2021), <a href="https://perma.cc/WV7Y-ALRJ">https://perma.cc/WV7Y-ALRJ</a> (setting out the functions of the Santiago Network).

<sup>&</sup>lt;sup>238</sup> In 2022, the Parties decided to establish "new funding arrangements for assisting developing countries that are particularly vulnerable to the adverse effects of climate change, in responding to loss and damage, including with a focus on addressing loss and damage," and, in that context, to establish a voluntary fund for responding to L&D. CMA Dec. 2/CMA.4, ¶¶ 2-3, U.N. Doc. FCCC/PA/CMA/2022/10/Add.1 (Nov. 20, 2022), <a href="https://perma.cc/9FFL-WDXC">https://perma.cc/9FFL-WDXC</a> [Dossier No. 175] ("CMA Dec. 2/CMA.4"); COP Dec. 2/CP.27, ¶¶ 2-3, U.N. Doc. FCCC/CP/2022/10/Add.1 (Nov. 20, 2022), <a href="https://perma.cc/GKS7-ZRH4">https://perma.cc/GKS7-ZRH4</a> [Dossier No. 168] ("COP Dec. 2/CP.27").

Dubai to operationalize those new funding arrangements, including a new fund for climate impacts response.<sup>239</sup> Parties have pledged more than \$650 million to that new fund.<sup>240</sup>

## E. The Paris Agreement in Practice

3.36 As described *supra* in Chapter II.B, the Paris Agreement reflects States' efforts to identify the most effective, broad-based mechanism for achieving the UNFCCC's objective of avoiding dangerous anthropogenic interference with the climate system, with its provisions carefully crafted to attract broad participation while also delivering increasingly ambitious climate action over time. The 2015 adoption and 2016 entry into force of the Paris Agreement, however, did not end the regime's development. The Agreement is dynamic and provides, by design, for the UN climate change regime's continued progressive development in practice through the political and diplomatic action of Parties.

3.37 The Paris Agreement's success to date in addressing global warming can be judged, in part, by comparing the projected global warming trajectory pre-Paris and that of today. Before the adoption of the Paris Agreement, estimated global warming under a "business-as-usual" scenario was around 3.5°C by 2100.<sup>241</sup> Recent estimates now indicate that current policies and trajectories, taking into account Parties' NDCs under the Paris Agreement, could lead to closer to 2.4°C of warming by 2100.<sup>242</sup> As assessed by the International Energy Agency (IEA), new policies and technological progress since adoption of the Paris Agreement have reduced

<sup>&</sup>lt;sup>239</sup> CMA Dec. 5/CMA.5, U.N. Doc. FCCC/PA/CMA/2023/16/Add.1 (Dec. 6, 2023), <a href="https://perma.cc/5CLE-M8RJ">https://perma.cc/5CLE-M8RJ</a> ("CMA5 L&D Decision"); COP Dec. 1/CP.28, U.N. Doc. FCCC/CP/2023/11/Add.1 (Dec. 6, 2023), <a href="https://perma.cc/D7AF-6BXY">https://perma.cc/D7AF-6BXY</a> ("COP28 L&D Decision"); CMA Dec. 2/CMA.4; COP Dec. 2/CP.27.

<sup>&</sup>lt;sup>240</sup> UN Climate Change Secretariat, *Pledges to the Loss and Damage Fund*, <a href="https://perma.cc/9WYU-MS5E">https://perma.cc/9WYU-MS5E</a>. Parties have yet to reach consensus on the name of the new fund for climate impacts response. *See* CMA L&D Decision, ¶ 1 (defining the new fund simply as "the Fund" for purposes of the decision); COP28 L&D Decision, ¶ 1 (same). The ongoing work by Parties on these new funding arrangements, including a new fund, has proceeded on the understanding that it would be "based on cooperation and facilitation and would not involve liability or compensation." Report of the Conference of Parties on its twenty-seventh session, held in Sharm el-Sheikh from 6 to 20 November 2022, ¶ 7(b), U.N. Doc. FCCC/CP/2022/10 (Mar. 17, 2023), <a href="https://perma.cc/QUU4-C347">https://perma.cc/QUU4-C347</a>; Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on its fourth session, held in Sharm el-Sheikh from 6 to 20 November 2022, ¶ 71 n.50, U.N. Doc. FCCC/PA/CMA/2022/10 (Mar. 17, 2023), <a href="https://perma.cc/V7L7-3FK2">https://perma.cc/V7L7-3FK2</a> (stating that the understanding reached among Parties with regard to including this matter on the agendas is outlined in paragraph 7(b) of FCCC/CP/2022/10). The preambles of the CMA and COP decisions establishing and operationalizing the new funding arrangements "recall" the paragraphs of these two reports in relation to the adoption of the agenda item noted in the main text. CMA L&D Decision, pmbl.; COP28 L&D Decision, pmbl.; CMA Dec. 2/CMA.4, pmbl.; COP Dec. 2/CP.27, pmbl.

International Energy Agency (IEA), Net Zero Roadmap: A Global Pathway to Keep the 1.5°C Goal in Reach -2023 Update 23 (2023), <a href="https://perma.cc/Y7G8-HBWF">https://perma.cc/Y7G8-HBWF</a>.

<sup>&</sup>lt;sup>242</sup> *Id*.

expected warming by around 1°C from the pre-Paris baseline.<sup>243</sup> Moreover, if all current climate commitments are met in full and on time, the IEA estimates that warming would stabilize at 1.7°C by 2100.<sup>244</sup> In other words, implementation of the Paris Agreement has helped substantially reduce projected warming. Although there is still a long way to go to achieve the Agreement's global temperature goal—and Parties' achievement of their current NDCs and other emissions reduction pledges is not assured—the fact that limiting global warming to 1.5°C remains within reach<sup>245</sup> is a testament to the Agreement's impact so far.

- 3.38 Moreover, the Agreement is designed to regularly strengthen the global response to climate change and bring the world progressively closer to the achievement of its goals. Specific components of the Agreement—often referred to collectively as its "ambition mechanism"—work together toward this end.
- 3.39 <u>First</u>, as noted *supra*, the Agreement provides for Parties to engage in a collective stocktake of their overall progress every five years.<sup>246</sup> The first "global stocktake" just concluded at the 28<sup>th</sup> UN Climate Change Conference in December 2023—one of the most significant UN Climate Change Conferences since Paris—with Parties adopting their first-ever decision assessing collective progress toward achieving the purpose of the Paris Agreement and its long-term goals.<sup>247</sup> In the global stocktake decision, Parties:
  - reinforced the imperative of keeping a 1.5°C limit on warming within reach;<sup>248</sup>
  - adopted a series of ambitious global goals for this decade that will become a rallying point for global climate efforts through the 2020s and beyond, including:
    - o tripling renewable energy capacity;

<sup>&</sup>lt;sup>243</sup> IEA, CREDIBLE PATHWAYS TO 1.5°C: FOUR PILLARS FOR ACTION IN THE 2020S 3 (2023), https://perma.cc/GV58-ZJS9 ("Declining costs for clean energy technologies and new policies have shaved around 1°C from projected 2100 warming compared to the pre-Paris baseline. The ambitions that countries have put on the table go a significant way to meeting the 1.5°C goal.").

<sup>&</sup>lt;sup>244</sup> *Id.* at 3-4.

<sup>&</sup>lt;sup>245</sup> See generally id.

<sup>&</sup>lt;sup>246</sup> Paris Agreement, art. 14 (providing that the CMA "shall periodically take stock of the implementation of this Agreement to assess the collective progress towards achieving the purpose of this Agreement and its long-term goals (referred to as the 'global stocktake')").

<sup>&</sup>lt;sup>247</sup> CMA5 Global Stocktake Decision.

 $<sup>^{248}</sup>$  Id. ¶¶ 4, 5, 27, 28, 39.

- o doubling the annual rate of energy efficiency improvements;
- o halting and reversing deforestation;
- substantially reducing emissions of methane and other super-polluting non-CO<sub>2</sub>
   gases; and
- transitioning away from fossil fuels in energy systems, so as to achieve net zero by 2050;<sup>249</sup> and
- established the expectation that all Parties' next NDCs will be economy-wide, cover all GHGs, and be aligned with limiting warming to 1.5°C.<sup>250</sup>
- 3.40 <u>Second</u>, the Agreement provides for Parties to make communications (NDCs) concerning their mitigation targets every five years, having been informed by the global stocktake.<sup>251</sup> NDCs must be submitted nine to twelve months in advance of the relevant session of the CMA,<sup>252</sup> providing an opportunity for other Parties and civil society to review them, seek clarifications, and provide comments.
- 3.41 <u>Third</u>, the Agreement sets forth a normative expectation that Parties will communicate progressively more ambitious NDCs over time.<sup>253</sup>
- 3.42 <u>Fourth</u>, the Agreement's "enhanced transparency framework"<sup>254</sup> reinforces the ambition mechanism described *supra* and improves on the UNFCCC's transparency provisions in at least two ways. First, it establishes a common approach that applies to all Parties, as opposed to the UNFCCC's bifurcated approach that imposed fewer requirements on non-Annex I Parties as compared to Annex I Parties. Second, it is substantively more rigorous in terms of reporting on GHG inventories, reporting on implementation, and review. All Parties are required to report national inventories of GHG emissions by source,<sup>255</sup> which will provide unprecedented clarity to the public's understanding of emissions in countries across the world.

<sup>&</sup>lt;sup>249</sup> *Id.* ¶¶ 28, 33.

 $<sup>^{250}</sup>$  *Id.* ¶ 39.

<sup>&</sup>lt;sup>251</sup> Paris Agreement, art. 4.9.

<sup>&</sup>lt;sup>252</sup> *Id.* art. 4.9; COP Dec. 1/CP.21, ¶ 25.

<sup>&</sup>lt;sup>253</sup> Paris Agreement, art. 4.3 ("Each Party's successive [NDC] will represent a progression beyond the Party's then current [NDC] and reflect its highest possible ambition . . . .").

<sup>&</sup>lt;sup>254</sup> *Id.* art. 13.

<sup>&</sup>lt;sup>255</sup> *Id.* art. 13.7(a).

Additionally, for the first time, all Parties are required to report on information necessary to track progress made in implementing and achieving the emissions contributions they have put forward. Finally, Parties' reporting will be subject to a comprehensive technical expert review process, to analyze whether the reporting is in conformity with the standards adopted. Parties also will need to participate in a multilateral review with their peers to share their experiences and lessons learned. Although a Party's emissions targets in its NDC are not legally binding, the Paris Agreement's transparency framework, including its mandatory review processes, provides a critical means for the political review and critique of a Party's NDC and progress toward achieving it.

- 3.43 The evolution of expectations regarding Parties' NDCs is one example of the continued progressive development of the UN climate change regime:
  - Article 4.4 of the Paris Agreement provides that "[d]eveloped country Parties should continue taking the lead by undertaking economy-wide absolute emission reduction targets" and that "[d]eveloping country Parties should continue enhancing their mitigation efforts," encouraging them "to move over time towards economy-wide emission reduction or limitation targets in the light of different national circumstances."
  - At the 26<sup>th</sup> UN Climate Change Conference in Glasgow (2021), Parties adopted a decision—known as the "Glasgow Climate Pact"—that "requests Parties to revisit and strengthen the 2030 targets in their [NDCs] as necessary to align with the Paris Agreement temperature goal by the end of 2022, taking into account different national circumstances," thereby linking NDCs to the Paris Agreement's temperature goal for the first time.
  - In 2023, the "Group of Twenty" (G20) climate ministerial outcome commended those Parties that already have economy-wide NDCs and encouraged others to move to such

<sup>&</sup>lt;sup>256</sup> *Id.* art. 13.7(b).

<sup>&</sup>lt;sup>257</sup> *Id.* arts. 13.11, 13.12 (stating, *inter alia*, that information provided by each Party under articles 13.7 (on mitigation action) and 13.9 (on support provided) shall be subject to a "technical expert review").

<sup>&</sup>lt;sup>258</sup> *Id.* art. 13.11 (stating that each Party must participation in a facilitative, multilateral consideration of progress with respect to "efforts" under article 9 (regarding finance) and its respective "implementation and achievement" of its NDC).

<sup>&</sup>lt;sup>259</sup> *Id.* art. 4.4.

<sup>&</sup>lt;sup>260</sup> Glasgow Climate Pact, ¶ 29.

NDCs in the upcoming NDC cycle(s),<sup>261</sup> thereby indicating that the "over time" expectation in article 4.4 of the Paris Agreement means sooner rather than later.

- The 2023 G20 leaders' statement that followed provided further encouragement to Parties to submit NDCs in the upcoming cycle(s) that are not only economy-wide but also cover all GHGs.<sup>262</sup>
- Most recently, in December 2023, the "global stocktake" decision encouraged all Parties "to come forward in their next [NDCs] with ambitious, economy-wide emission reduction targets, covering all [GHGs], sectors and categories and aligned with limiting global warming to 1.5°C, as informed by the latest science, in the light of different national circumstances."<sup>263</sup>
- 3.44 Although not stated in the Paris Agreement itself, there is now a clear expectation that all Parties' next NDCs under the Agreement should have economy-wide emission reduction targets covering all GHGs, and that such NDCs should be 1.5°C-aligned.
- 3.45 Overall, the Paris Agreement's ambition mechanism is working. Indeed, even prior to the above-described developments, and although the first full cycle of the ambition mechanism has not yet been completed, the regime has already seen more than 150 Parties increase the ambition of their NDCs before the 28<sup>th</sup> UN Climate Change Conference in Dubai (2023).<sup>264</sup> The next round of NDCs under article 4.9 of the Paris Agreement is due in February 2025.

#### F. Other Treaty-Based Efforts to Address Climate Change

3.46 Although the UN climate change regime—and particularly the Paris Agreement—is the primary mechanism through which States have decided to address human-induced global warming, it is supplemented by international efforts of States under other treaty-based regimes, with a number of those efforts inspired by the Paris Agreement. These fall into two primary categories: (*i*) efforts addressing emissions of GHGs that are ozone-depleting substances (ODS) or alternatives to ODS that have a high global warming potential; and (*ii*) efforts

<sup>&</sup>lt;sup>261</sup> G20 Environment and Climate Ministers' Meeting: Outcome Document and Chair's Summary, ¶ 12 (July 28, 2023), <a href="https://perma.cc/MG37-J8DE">https://perma.cc/MG37-J8DE</a>.

<sup>&</sup>lt;sup>262</sup> G20 New Delhi Leaders' Declaration, ¶ 34 (Sept. 9-10, 2023), https://perma.cc/BT9E-JVB6.

<sup>&</sup>lt;sup>263</sup> CMA5 Global Stocktake Decision, ¶ 39 (emphasis added).

<sup>&</sup>lt;sup>264</sup> UN Climate Change Secretariat, *Nationally Determined Contributions Under the Paris Agreement: Synthesis Report by the Secretariat*, ¶ 1, UN Doc. FCCC/PA/CMA/2023/12 (Nov. 14, 2023), <a href="https://perma.cc/K2KG-UA9X">https://perma.cc/K2KG-UA9X</a>.

covering GHGs emitted from sectoral activities that are better addressed at the sectoral level, through the relevant sectoral institution, than through the UN climate change regime. Additionally, still other treaty-based regimes take climate change into account, such as those relating to the protection and conservation of biodiversity.<sup>265</sup>

3.47 The primary instrument underpinning States' efforts in the first category is the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer, as amended, including by the 2016 Kigali Amendment relating to the phase-down of production and consumption of hydrofluorocarbons, or HFCs. <sup>266</sup> Designed to protect the stratospheric ozone layer by phasing out the production and consumption of ODS, the Montreal Protocol, as amended, covers certain ODS that are also potent GHGs—namely, chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs)—as well as certain non-ODS alternatives that are also potent GHGs (HFCs). <sup>267</sup> The Montreal Protocol contains legally binding targets for gradually phasing out or phasing down the production and consumption of these substances. <sup>268</sup>

3.48 States' treaty-based efforts in the second category relate to fuels used in two sectors of international transport: international civil aviation and international shipping. States are undertaking efforts to reduce GHG emissions from the consumption of such fuels through the relevant sectoral organizations, the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO), established by the 1944 Convention on

<sup>&</sup>lt;sup>265</sup> For example, in June 2023, States adopted the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction (the "BBNJ Agreement"). BBNJ Agreement, U.N. Doc. A/CONF.232/2023/4 (as adopted June 19,

<sup>2023),</sup> https://perma.cc/N9HH-TSN3 [Dossier No. 48]. Recognizing that the adverse impacts of climate change are a driver of marine biodiversity loss, the BBNJ Agreement provides that Parties shall be guided by "[a]n approach that builds ecosystem resilience, including to adverse effects of climate change and ocean acidification, and also maintains and restores ecosystem integrity, including the carbon cycling services that underpin the role of the ocean in climate." Id. pmbl., art. 7(h). It also includes, as one of the objectives of area-based management tools, the "[p]rotect[ion], preserv[ation], restor[ation] and maintain[ance] [of] biological diversity and ecosystems, including with a view to enhancing their productivity and health, and strengthen[ing] [of] resilience to stressors, including those related to climate change, ocean acidification and marine pollution." Id. art. 17(c). Additionally, in 2022, States Parties to the 1992 Convention on Biological Diversity adopted the non-legally-binding Kunming-Montreal Global Biodiversity Framework, which includes targets on "[m]inimiz[ing] the impact of climate change and ocean acidification on biodiversity and increas[ing] [biodiversity's] resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solutions and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity"; and on "[o]ptimizing co-benefits and synergies of finance targeting the biodiversity and climate crises." Conf. of the Parties to the Convention on Biological Diversity Dec. 15/4, 10, 12, U.N. Doc. CBD/COP/DEC/15/4 (Dec. 19, 2022), https://perma.cc/P4NU-KASS [Dossier No. 183].

<sup>&</sup>lt;sup>266</sup> Montreal Protocol on Substances That Deplete the Ozone Layer, Sept. 16, 1987, S. Treaty Doc. No. 100-10, 1522 U.N.T.S. 29 (as amended) ("Montreal Protocol"), <a href="https://perma.cc/38L7-CYPF">https://perma.cc/38L7-CYPF</a> [Dossier Nos. 26-44]. The United States ratified the Montreal Protocol in 1988 and has joined all five of the Protocol's subsequent amendments, including the 2016 Kigali Amendment.

<sup>&</sup>lt;sup>267</sup> Montreal Protocol (as amended), arts. 2, 2A-2J.

<sup>&</sup>lt;sup>268</sup> *Id.* arts. 2, 2A-2J, 3.

International Civil Aviation (the "Chicago Convention") and the 1948 Convention Establishing the Inter-Governmental Maritime Consultative Organization (later renamed the IMO), respectively.<sup>269</sup>

3.49 With respect to international civil aviation, ICAO has adopted both non-legally-binding and legally binding measures relevant to GHG emissions. These include two "global aspirational goals": an aspirational global fuel efficiency improvement rate of two percent per year from 2021 to 2050, and a long-term global aspirational goal for international aviation of net-zero carbon emissions by 2050, "in support of the Paris Agreement's temperature goal."<sup>270</sup> The ICAO Assembly also has adopted a "global market-based measure" called the Carbon Offsetting and Reduction Scheme for Civil Aviation (CORSIA), which is designed to offset CO<sub>2</sub> emissions from international aviation in order to stabilize the level of such emissions, with the offsetting to be achieved through the acquisition and cancelation by airplane operators of eligible emissions units from the global carbon market.<sup>271</sup> In June 2018, the ICAO Council adopted Standards and Recommended Practices to implement CORSIA in the form of annex 16, volume IV to the Chicago Convention, and the Council adopted certain amendments to annex 16 in March 2023, following the 2022 CORSIA periodic review.<sup>272</sup>

3.50 With respect to international shipping, since the late 1990s, the IMO, through its Marine Environment Protection Committee (MEPC), has worked to develop a series of

<sup>&</sup>lt;sup>269</sup> ICAO and the IMO have 193 and 175 Member States, respectively. ICAO, *Member States*, <a href="https://perma.cc/M33A-NHJV">https://perma.cc/M33A-NHJV</a>; IMO, *Member States*, <a href="https://perma.cc/J2HN-DVTX">https://perma.cc/M33A-NHJV</a>; IMO, *Member States*, <a href="https://perma.cc/J2HN-DVTX">https://perma.cc/J2HN-DVTX</a>.

<sup>&</sup>lt;sup>270</sup> ICAO Assembly Res. A41-21, Consolidated statement of continuing ICAO policies and practices related to environmental protection – Climate change,  $\P$  7, 4 (Oct. 7, 2022), <a href="https://perma.cc/548U-GCMP">https://perma.cc/548U-GCMP</a>.

<sup>&</sup>lt;sup>271</sup> See ICAO Assembly Res. A41-22, Consolidated statement of continuing ICAO policies and practices related to environmental protection – Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) (Oct. 7, 2022), <a href="https://perma.cc/8GRX-3AB8">https://perma.cc/8GRX-3AB8</a>. CORSIA has two voluntary phases—a 2021-2023 "Pilot Phase" and a 2024-2026 "First Phase"—and a mandatory phase (the 2027-2035 "Second Phase"). *Id.* The United States has volunteered to participate in the first two phases of CORSIA.

<sup>&</sup>lt;sup>272</sup> Annex 16 to the Convention on International Civil Aviation, Vol. IV, Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), 1st ed. (2018), <a href="https://perma.cc/F4XH-85CU">https://perma.cc/F4XH-85CU</a>; Annex 16 to the Convention on International Civil Aviation, Vol. IV, CORSIA, 2d ed. (2023), <a href="https://perma.cc/VZ55-HJFP">https://perma.cc/VZ55-HJFP</a>. The mandatory functions of the ICAO Council include adopting international standards and recommended practices that are, for convenience, designated as annexes to the Chicago Convention. Convention on International Civil Aviation, art. 54(1), Dec. 7, 1944, 61 Stat. 1180, 15 U.N.T.S. 295, <a href="https://perma.cc/W6AQ-FLN6">https://perma.cc/W6AQ-FLN6</a> ("Chicago Convention"). Although annexes to the Chicago Convention do not form an integral part of the text of the Convention, States Parties "undertake[] to collaborate in securing the highest practicable degree of uniformity" with respect to such standards. Chicago Convention, art. 37. Further, a State Party is required to give immediate notification to ICAO if it finds it impracticable to comply with a standard in all respects, or to bring its regulations or practices into full accord with any standard, or deems it necessary to adopt regulations or practices differing in any particular respect from the standard. Chicago Convention, art. 38. ICAO has described international standards in annexes as having "a conditional binding force, to the extent that the State or States concerned have not notified any difference thereto under Article 38 of the Convention." ICAO State Letter AN 1/17.14 – 18/78, Adoption of the First Edition of Annex 16, Vol. IV, ¶ 6 (July 20, 2018), <a href="https://perma.cc/AP9X-KLP6">https://perma.cc/AP9X-KLP6</a>.

measures that enhance energy efficiency and reduce GHG emissions from ships engaged in international trade. This effort has seen the adoption of a number of amendments to Annex VI (Regulations for the Prevention of Pollution from Ships) of the International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL),<sup>273</sup> including in 2011 to create an obligation for Parties to require that new ships under their jurisdiction meet progressively more stringent design efficiency standards, a step that is already reducing emissions through better ship design.<sup>274</sup>

3.51 The IMO subsequently has approved iteratively more comprehensive and ambitious efforts to curb GHG emissions from the global shipping sector. The Initial IMO Strategy on Reduction of GHG Emissions from Ships, adopted in 2018, included a goal for GHG emissions from international shipping to peak as soon as possible and to reduce total annual GHG emissions by at least 50 percent by 2050 compared to 2008.<sup>275</sup> Under this framework, IMO Member States adopted and have brought into force further amendments to MARPOL's Annex VI that require ships to calculate their energy efficiency and to report their annual carbon intensity (a value that links a vessel's GHG emissions to the amount of cargo it carries and the distance it travels). <sup>276</sup> In 2023, the IMO, again recalling the Paris Agreement's global temperature goal, adopted a revised strategy that, inter alia, builds on the initial strategy by replacing the mid-century, 50 percent emissions reduction goal with a new goal of reaching net-zero GHG emissions "by or around, i.e., close to," 2050, with an "indicative checkpoint" of reducing international shipping's total annual GHG emissions "by at least 70 [percent], striving for 80 [percent], by 2040, compared to 2008."277 To deliver on those targets, the revised strategy calls for the adoption of further legally binding emissions reduction measures

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<sup>&</sup>lt;sup>273</sup> Protocol of 1997 to Amend the International Convention for the Prevention of Pollution from Ships, 1973, as Modified by the Protocol of 1978 Relating Thereto, Sept. 26, 1997, T.I.A.S. 09-108. The United States is party to MARPOL, including its Annex VI.

<sup>&</sup>lt;sup>274</sup> IMO Res. MEPC.203(62), Amendments to the Annex of the Protocol of 1997 to Amend the International Convention for the Prevention of Pollution from Ships, as Modified by the Protocol of 1978 relating thereto (July 15, 2011), <a href="https://perma.cc/GC9D-YSFL">https://perma.cc/GC9D-YSFL</a>. The amendments entered into force January 1, 2013.

<sup>&</sup>lt;sup>275</sup> IMO Res. MEPC.304(72), *Initial IMO Strategy on Reduction of GHG Emissions from Ships* (Apr. 13, 2018), https://perma.cc/X25L-9PWH.

<sup>&</sup>lt;sup>276</sup> IMO Res. MEPC.328(76), 2021 Amendments to the Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, <a href="https://perma.cc/DCR6-HJTE">https://perma.cc/DCR6-HJTE</a>. See generally IMO, EEXI and CII – ship carbon intensity and rating system (2023), <a href="https://perma.cc/4QN8-N98K">https://perma.cc/4QN8-N98K</a>.

<sup>&</sup>lt;sup>277</sup> IMO, *MEPC.377(80) 2023 IMO Strategy on Reduction of GHG Emissions from Ships Resolution*,  $\P$  3.3.4, 3.4.2 (July 7, 2023), <a href="https://perma.cc/BD5Y-T4TW">https://perma.cc/BD5Y-T4TW</a>.

by autumn 2025 and further review and revision of the IMO strategy by the MEPC in 2027-2028 and beyond.  $^{278}$ 

3.52 All of these other treaty-based efforts—whether legally binding or not—supplement and reinforce those being made by States under the UN climate change regime.

<sup>&</sup>lt;sup>278</sup> *Id*. ¶ 6.2.

#### **CHAPTER IV**

# OTHER SOURCES OF INTERNATIONAL LAW DO NOT ESTABLISH ADDITIONAL OBLIGATIONS OF STATES IN RESPECT OF CLIMATE CHANGE

- 4.1 In the implementation of their respective obligations under the UN climate change regime, there is no indication of any widely held belief of Parties that they are subject to non-treaty-based international obligations to mitigate the risks posed by climate change. To the extent other sources of international law, such as customary international law, <sup>279</sup> might establish obligations in respect of climate change, these obligations would be, at most, quite general. Any such obligations would be satisfied in the climate change context by States' implementation of their obligations under the climate change-specific treaties they have negotiated and joined, which embody the clearest, most specific, and most recent expression of their consent to be bound by international law in respect of climate change.
- 4.2 In examining the questions presented, participants might encourage the Court to look toward its and other international tribunals' decisions on transboundary environmental harm and consider their application to anthropogenic GHG emissions and the global harm caused by climate change. **Part A.i** of this chapter examines these decisions, particularly regarding an obligation of due diligence. The decisions concern activities and transboundary harms that are markedly different from the universal nature of GHG emissions and the global harm caused by the consequent warming, as explained in **Part A.ii**.

The Court has additionally clarified that State practice should include that of "States whose interests are specially affected," and should have been "both *extensive and virtually uniform* . . . [and] have occurred in such a way as to show general recognition that a rule of law or legal obligation is involved." *North Sea Continental Shelf*, 43, ¶ 74 (emphasis added). The Court must therefore determine whether any purported international legal principle or obligation has crystallized into a rule of customary international law through the requisite State practice and *opinio juris*.

<sup>&</sup>lt;sup>279</sup> The Court's long-standing approach to the identification of rules of customary international law requires the fulfillment of two conditions: "Not only must the acts [of State practice] concerned amount to a settled practice, but they must also be such, or be carried out in such a way, as to be evidence of a belief that this practice is rendered obligatory by the existence of a rule of law requiring it. The need for such a belief, i.e., the existence of a subjective element, is implicit in the very notion of the opinio juris sive necessitatis. The States concerned must therefore feel that they are conforming to what amounts to a legal obligation. The frequency, or even habitual character of the acts is not in itself enough." North Sea Continental Shelf Cases (Germany/Denmark; Germany/Netherlands), 1969 I.C.J. 3, 44, ¶ 77 (Feb. 20), https://perma.cc/CCE4-DZUP ("North Sea Continental Shelf"). See also, e.g., Continental Shelf (Libyan Arab Jamahiriya/Malta), 1985 I.C.J. 13, 29-30, ¶ 27 (June 3), https://perma.cc/U4MK-9CUN ("It is of course axiomatic that the material of customary international law is to be looked for primarily in the actual practice and opinio juris of States, even though multilateral conventions may have an important role to play in recording and defining rules deriving from custom, or indeed in developing them."); Jurisdictional Immunities of the State (Germany v. Italy; Greece intervening), 2012 I.C.J. 99, 122, ¶ 55 (Feb. 3), https://perma.cc/FAR4-FM7N ("[i]n particular . . . the existence of a rule of customary international law requires that there be 'a settled practice' together with opinio juris" (internal citations omitted)).

- 4.3 **Part A.iii** describes how even if an obligation of due diligence were found to apply to anthropogenic GHG emissions, it would be satisfied by a State's implementation of its obligations under the UN climate change regime, including the Paris Agreement.<sup>280</sup>
- 4.4 **Parts B** and C consider any obligations in respect of climate change that might exist under the law of the sea and international human rights law, respectively.

# A. The Responsibility of States to Address Significant Transboundary Environmental Harm

- i. The Court Has Identified a Context-Specific Standard of "Due Diligence" for Compliance with an Obligation to Prevent or at Least Minimize Significant Transboundary Environmental Harm, with Its Content to Be Determined in Light of the Particular Facts and Circumstances of the Activity in Question
- 4.5 In the small number of decisions that consider this issue, the Court has found that States have a customary international law obligation of "due diligence" to prevent or at least minimize significant transboundary harm. Those decisions and similar ones of other tribunals have arisen in the context of alleged harm that, in contrast to climate change caused by GHG emissions, is circumscribed and traceable to specific, identifiable "point" sources, as explained in the next section. In any case, the obligation identified is a general one of effort, not result, and needs to be evaluated in the context of the specific activity in question.
- 4.6 The 1941 award in the *Trail Smelter* arbitration between the United States and Canada<sup>281</sup> is often cited as the first articulation of a customary international law rule on transboundary environmental harm. In that case, involving damage to agricultural lands and forests in the United States due to sulfur dioxide pollution emitted from a lead and zinc smelter across the border in Trail, Canada, the arbitral tribunal found, based almost exclusively on an examination of U.S. law,<sup>282</sup> "that, under the principles of international law, as well as of the law of the United States, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons

<sup>&</sup>lt;sup>280</sup> Cf. infra n.327 (explaining how that would not be the only way to satisfy such a due diligence obligation).

<sup>&</sup>lt;sup>281</sup> Trail Smelter Arbitration (U.S./Can.), 3 R.I.A.A. 1938 (Decision of Mar. 11, 1941), <a href="https://perma.cc/6WKS-RWDD">https://perma.cc/6WKS-RWDD</a> ("Trail Smelter").

<sup>&</sup>lt;sup>282</sup> *Id.* at 1963-65 (relying largely on U.S. Supreme Court jurisprudence). In reaching its holding, the tribunal did not conduct a survey of State practice and *opinio juris* as the foundation for its ruling, nor did it need to do so, as the special agreement by which the parties submitted their dispute to the tribunal expressly stated that the applicable law shall be U.S. law as well as international law. *See* Convention for Settlement of Difficulties Arising from Operation of Smelter at Trail, B.C., art. IV, Apr. 15, 1935, 49 Stat. 3245, 3 R.I.A.A. 1907, 1908, https://perma.cc/6WKS-RWDD.

therein, when the case is of serious consequence and the injury is established by clear and convincing evidence." <sup>283</sup>

4.7 Three decades later, States gave expression to the *Trail Smelter* principle in a non-legally-binding declaration adopted by the 1972 UN Conference on the Human Environment in Stockholm.<sup>284</sup> Although the "responsibility" articulated in Principle 21 of the Stockholm Declaration differs from the finding in *Trail Smelter*, it is generally regarded as a reformulation of the *Trail Smelter* finding, albeit in a political rather than judicial context. Principle 21 asserts:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.<sup>285</sup>

4.8 Stockholm Principle 21 juxtaposes the statement of responsibility to protect the environment with a recognition of States' sovereign right to use their territory to pursue their chosen ends, thereby making clear that the responsibility noted in its second clause is intended to balance the statement of sovereign right in the first. Principle 21, however, provides no guidance on how that balance is to be struck.<sup>286</sup> Twenty years later, Principle 2 of the non-legally-binding 1992 Rio Declaration on Environment and Development reiterated Stockholm Principle 21 verbatim, except for the addition of the italicized words in the phrase "the sovereign right to exploit their own resources pursuant to their own environmental *and developmental* policies."<sup>287</sup>

<sup>&</sup>lt;sup>283</sup> *Trail Smelter*, 1965.

<sup>&</sup>lt;sup>284</sup> UN Conference on the Human Environment, *Declaration of the UN Conference on the Human Environment*, principle 21, U.N. Doc. A/CONF.48/14/Rev.1 (June 16, 1972), <a href="https://perma.cc/D6EY-QVY7">https://perma.cc/D6EY-QVY7</a> [Dossier No. 136] ("Stockholm Declaration").

<sup>&</sup>lt;sup>285</sup> *Id.* Principle 21 is shorn of two legalistic aspects of *Trail Smelter*'s articulation: the threshold at which external harm implicates the noted responsibility ("when the case is of serious consequence") and the burden of proof for showing injury ("clear and convincing evidence").

<sup>&</sup>lt;sup>286</sup> Additionally, as others have noted, the "responsibility" stated in Principle 21 does not, on its own terms, reflect State practice. *See, e.g.*, John H. Knox, *The Myth and Reality of Transboundary Environmental Impact Assessment*, 96 A.J.I.L. 291, 293 (2002) (quoting Oscar Schacter as observing, "To say that a state has no right to injure the environment of another seems quixotic in the face of the great variety of transborder environmental harms that occur every day" (internal footnote omitted)) (U.S. Annex 1).

<sup>&</sup>lt;sup>287</sup> Rio Declaration, principle 2 ("States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction

- 4.9 The three Rio Conventions—the 1992 UNFCCC, the 1992 Convention on Biological Diversity, and the 1994 UN Convention to Combat Desertification—refer to Rio Principle 2 or Stockholm Principle 21, with the UNFCCC "recalling" the language of Rio Principle 2 in its eighth preambular paragraph.<sup>288</sup>
- 4.10 This is the background to the Court's finding, in its 1996 Advisory Opinion on *Legality* of the Threat or Use of Nuclear Weapons, that a "general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment." The Court's Advisory Opinion did not address, however, what might be necessary for a State to "ensure" that activities "respect" the environment of other States and of areas beyond national control. The following year, the UN Secretary-General acknowledged the indeterminate nature of Rio Principle 2 in his 1997 report to the UN General Assembly on the Rio Declaration, stating that "[t]he exact scope and implications of principle 2 are not clearly determined yet," and further noting that "[c]ertainly not all instances of

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or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.").

<sup>&</sup>lt;sup>288</sup> UNFCCC, pmbl. ("*Recalling also* that States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction"). The 1992 Convention on Biological Diversity (CBD) includes the principle but in its Stockholm form, without the addition of "and developmental" before "policies," and, in contrast to the UNFCCC, the CBD makes it *the* "principle" (singular) of the agreement itself, in its article 3, rather than simply "recalling" the principle in its preamble. Convention on Biological Diversity, art. 3, June 5, 1992, 1760 U.N.T.S. 79, <a href="https://perma.cc/NBY5-RANS">https://perma.cc/NBY5-RANS</a> [Dossier No. 19]. The 1994 UN Convention to Combat Desertification (UNCCD), in its fifteenth preambular paragraph, "reaffirms" the Rio Declaration and repeats verbatim Rio Principle 2, but Principle 2 is not included among the UNCCD's "principles" set forth in its article 3. UN Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, pmbl., Oct. 14, 1994, 1954 U.N.T.S. 3, <a href="https://perma.cc/S2AV-PK5M">https://perma.cc/S2AV-PK5M</a> [Dossier No. 17].

<sup>289</sup> Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. 226, 242, ¶ 29 (Advisory Opinion of July 8), https://perma.cc/4GVU-M5PA ("Legality of the Threat or Use of Nuclear Weapons"). The Court quoted its conclusion in Legality of the Threat or Use of Nuclear Weapons in its 1997 Judgment in Gabčíkovo-Nagymaros Project involving the construction of a dam and related rights and obligations under international agreements, but it did not have occasion to apply the transboundary environmental harm obligation in that Judgment. Gabčíkovo-Nagymaros Project (Hungary/Slovakia), 1997 I.C.J. 7, 41, ¶ 53 (Sept. 25), https://perma.cc/SQ2J-T22U ("Gabčíkovo-Nagymaros Project"). An arbitral tribunal similarly quoted without analysis the Court's conclusion in Legality of the Threat or Use of Nuclear Weapons in a 2005 award in Iron Rhine, involving the reactivation of a dormant railroad pursuant to treaty rights. In the Arbitration Regarding the Iron Rhine ("Ijzeren Rijn") Railway (Belgium v. Netherlands), 27 R.I.A.A. 35, 90, ¶ 222 (Perm. Ct. Arb. 2005), https://perma.cc/K9G5-KYUP ("Iron Rhine"). The Iron Rhine tribunal "observe[d] that it [was] faced, in the instant case, not with a situation of a transboundary effect of the economic activity in the territory of one state on the territory of another state, but with the exercise of a treaty-guaranteed right of one state in the territory of another state and a possible impact of such exercise on the territory of the latter state." Id. at 90, ¶ 223.

transboundary damage resulting from activities within a State's territory can be prevented or are unlawful."<sup>290</sup>

- 4.11 It was only in 2010, in its Judgment in *Pulp Mills on the River Uruguay*, that the Court identified the obligation articulated in its 1996 *Nuclear Weapons* Advisory Opinion as one of customary international law.<sup>291</sup> In doing so, the Court, citing its 1949 Judgment in *Corfu Channel*, interpreted the obligation as one of "due diligence," making clear that it is one of effort, not result.<sup>292</sup>
- 4.12 Most recently, in its 2015 Judgment in *Certain Activities and Construction of a Road*, the Court reaffirmed its conclusion in *Pulp Mills* that the obligation to prevent or at least minimize significant transboundary environmental harm is an obligation of due diligence.<sup>293</sup>
- 4.13 The Court had occasion to consider the application of due diligence to specific activities in *Pulp Mills* and *Certain Activities and Construction of a Road*.<sup>294</sup> In *Pulp Mills*, involving the construction of wood pulp mills on a river forming part of the boundary between Argentina and Uruguay, the Court examined due diligence in the context of treaty law,<sup>295</sup> and in the combined cases of *Certain Activities and Construction of a Road*, the Court examined, *inter*

<sup>&</sup>lt;sup>290</sup> Report of the UN Secretary-General, *Rio Declaration on Environment and Development: Application and Implementation*, ¶ 23, U.N. Doc. E/CN.17/1997/8 (Feb. 10, 1997), <a href="https://perma.cc/5MLJ-KS9X">https://perma.cc/5MLJ-KS9X</a> (nonetheless stating that the Court's Advisory Opinion in *Legality of the Threat or Use of Nuclear Weapons* "confirms that principle 2 restates a rule of customary law").

<sup>&</sup>lt;sup>291</sup> Pulp Mills on the River Uruguay (Argentina v. Uruguay), 2010 I.C.J. 14, 55, ¶ 101 (Apr. 20) (stating that "the principle of prevention, as a customary rule, has its origins in the due diligence that is required of a State in its territory" (emphasis added)), <a href="https://perma.cc/6UPG-X7MP">https://perma.cc/6UPG-X7MP</a> ("Pulp Mills").

<sup>&</sup>lt;sup>292</sup> Id. Compare Int'l Law Comm'n (ILC), Draft Articles on Prevention of Transboundary Harm from Hazardous Activities, with Commentaries, art. 3, cmt. ¶ 7, U.N. Doc. A/56/10, reprinted in [2001] Y.B. INT'L L. COMM'N 148, A/CN.4/SER.A/2001/Add.1 (Part 2), <a href="https://perma.cc/5AQX-ZGWB">https://perma.cc/5AQX-ZGWB</a> ("ILC Draft Articles on Prevention of Transboundary Harm") ("The obligation of the State of origin to take [all appropriate measures to prevent significant transboundary harm or at any event to minimize the risk thereof] is one of due diligence. It is the conduct of the State of origin that will determine whether the State has complied with its obligation under the present articles. The duty of due diligence involved, however, is not intended to guarantee that significant harm be totally prevented, if it is not possible to do so. In that eventuality, the State of origin is required, as noted above, to exert its best possible efforts to minimize the risk. In this sense, it does not guarantee that the harm would not occur.").

<sup>&</sup>lt;sup>293</sup> Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua) and Construction of a Road in Costa Rica Along the San Juan River (Nicaragua v. Costa Rica), 2015 I.C.J. 665, 711, ¶ 118 (Dec. 16), <a href="https://perma.cc/N2V8-SV29">https://perma.cc/N2V8-SV29</a> ("Certain Activities and Construction of a Road"); see also id. at 706, ¶ 104 and 724, ¶ 168.

<sup>&</sup>lt;sup>294</sup> Additionally, in *Dispute over the Status and Use of the Waters of the Silala*, the parties (Chile and Bolivia) agreed that they were bound by a customary international law obligation to prevent significant transboundary harm, and that such an obligation is one of conduct and not result. *Dispute over the Status and Use of the Waters of the Silala (Chile v. Bolivia)*, 2022 I.C.J. 614, 644-45, ¶¶ 83-86 (Dec. 1), <a href="https://perma.cc/TM5D-2UFG">https://perma.cc/TM5D-2UFG</a>. The Court, however, did not apply such an obligation, finding that the parties' agreement on the substance of Chile's claim in that respect meant the claim "no longer has any object and that, therefore, the Court is not called upon to give a decision thereon." *Id.* at 645, ¶ 86.

<sup>&</sup>lt;sup>295</sup> Pulp Mills, 2010 I.C.J. at 77, ¶ 187; 79-80, ¶ 197; 82-83, ¶ 204; 88-89, ¶ 223; 101, ¶ 265.

alia, claims by Costa Rica that Nicaragua had caused environmental damage as a result of dredging activities carried out by Nicaragua on the San Juan River, as well as claims by Nicaragua that Costa Rica had caused transboundary harm resulting from the construction of a road. Although the Court identified specific procedural requirements of due diligence in those cases, neither of its judgments addressed how to determine whether the measures a State has taken are sufficient to satisfy the substantive core of the due diligence obligation articulated by the Court—that is, a requirement to take appropriate measures to prevent or mitigate the risk of significant transboundary harm. The Court's discussion of due diligence in both cases indicates the context- and fact-specific nature of the due diligence inquiry. As one member of the Court stated, what due diligence requires, in terms of both procedure and

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In its 2015 Judgment in Certain Activities and Construction of a Road, the Court found that "to fulfil its obligation to exercise due diligence in preventing significant transboundary environmental harm, a State must, before embarking on an activity having the potential adversely to affect the environment of another State, ascertain if there is a risk of significant transboundary harm, which would trigger the requirement to carry out an [EIA]," further finding that "[i]f the [EIA] confirms that there is a risk of significant transboundary harm, the State planning to undertake the activity is required, in conformity with its due diligence obligation, to notify and consult in good faith with the potentially affected State, where that is necessary to determine the appropriate measures to prevent or mitigate that risk." Certain Activities and Construction of a Road, 2015 I.C.J. at 706-07, ¶ 104; see also id. at 720, ¶ 153 and 724, ¶ 168. But see id. at 787-88, ¶¶ 17, 20 (Sep. Op. J. Donoghue), <a href="https://perma.cc/Y23E-45X3">https://perma.cc/Y23E-45X3</a> (noting, with respect to the Judgment's asserted obligations of notification and consultation in relation to significant transboundary environmental harm, that "[t]he Court does not provide reasons for its particular formulation of [those] obligations . . . , which does not emerge obviously from the positions of the Parties or from State practice and opinio juris," and further stating that "[o]ne must also be cautious about drawing broad conclusions regarding the content of customary international law from the text of a treaty or from judicial decisions that interpret a particular treaty (such as the Judgment in Pulp Mills)").

<sup>&</sup>lt;sup>296</sup> Certain Activities and Construction of a Road, 2015 I.C.J. at 710, ¶ 113; 719, ¶ 146.

<sup>&</sup>lt;sup>297</sup> In *Pulp Mills*, the Court found that the treaty provision in question required "undertak[ing] an environmental impact assessment [EIA] where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource." *Pulp Mills*, 2010 I.C.J. at 83, ¶ 204. It further stated that "due diligence, and the duty of vigilance and prevention which it implies, would not be considered to have been exercised, if a party planning works liable to affect the régime of the river or the quality of its waters did not undertake an [EIA] on the potential effects of such works." *Id.* In doing so, the Court asserted that undertaking EIAs in such circumstances "ha[d] gained so much acceptance among States that it may now be considered a requirement under general international law," *id.*, reaching that conclusion with minimal assessment of State practice and without any assessment of *opinio juris*. The Court did not address, for example, the fact that much of the State practice of undertaking EIAs in relation to potential transboundary environmental harm has been pursuant to States' treaty obligations. The United States does not agree that there has been established either a "general" or customary international legal obligation to carry out an EIA in all instances where there is a risk of significant transboundary harm.

<sup>&</sup>lt;sup>298</sup> Pulp Mills, 2010 I.C.J. at 82-101, ¶¶ 203-65; Certain Activities and Construction of a Road, 2015 I.C.J. at 710-12, ¶¶ 113-20 (not addressing the substantive content of a customary international law rule on significant transboundary harm because the Court found that Costa Rica failed to prove Nicaragua caused harm to Costa Rica's territory).

<sup>&</sup>lt;sup>299</sup> See Pulp Mills, 2010 I.C.J. at 82-101, ¶¶ 203-65 (examining what due diligence requires); Certain Activities and Construction of a Road, 2015 I.C.J. at 705-10, ¶¶ 100-12 (same with respect to Costa Rica's claims against Nicaragua); id. at 720-21, ¶¶ 153-56 and 724, ¶¶ 166-68 (same with respect to Nicaragua's claims against Costa Rica).

substance, "should be evaluated in light of particular circumstances" of the activity in question.<sup>300</sup>

- 4.14 The International Tribunal for the Law of the Sea (ITLOS) has similarly characterized the due diligence standard as contextual and fact-dependent, albeit in a different context (in relation to a responsibility "to ensure" under the UN Convention on the Law of the Sea). 301 In its 2011 Advisory Opinion in *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area*, ITLOS stated that "[t]he content of 'due diligence' obligations may not easily be described in precise terms," in part because due diligence is a "variable concept," with requirements that "may change over time as measures considered sufficiently diligent at a certain moment may become not diligent enough in light, for instance, of new scientific or technological knowledge." 302 ITLOS noted further that what due diligence requires "may also change in relation to the risks involved in the activity." 303
  - ii. GHG Emissions and Consequent Global Climate Change Are Different from the Kinds of Activities and Harms to Which the Duty of Due Diligence Previously Has Been Applied
- 4.15 Past instances in which the Court or other international tribunals have identified a customary international law obligation to use due diligence to prevent or at least minimize significant transboundary environmental harm have involved transboundary environmental harm (hypothetical or alleged) that could be traced to specific, identifiable "point" sources: a smelter,<sup>304</sup> a nuclear weapon detonation,<sup>305</sup> construction of a dam,<sup>306</sup> the operation of a railway,<sup>307</sup> two pulp mills on a river,<sup>308</sup> construction and operation of a hydroelectric plant,<sup>309</sup>

<sup>&</sup>lt;sup>300</sup> Certain Activities and Construction of a Road, 2015 I.C.J. at 789, ¶ 24 (Sep. Op. J. Donoghue), https://perma.cc/Y23E-45X3.

<sup>&</sup>lt;sup>301</sup> See Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area, 2011 ITLOS Rep. 10, 43-44, ¶¶ 117-20 (Advisory Opinion of Feb. 1, 2011), <a href="https://perma.cc/3ZH9-8UUK">https://perma.cc/3ZH9-8UUK</a> ("Activities in the Area"); Request for Advisory Opinion Submitted by the Sub-Regional Fisheries Commission (SFRC), 2015 ITLOS Rep. 4, 38-42, ¶¶ 125, 128-33; 44-45, ¶¶ 146, 148-50; 63-64, ¶¶ 219(3)-(4) (Advisory Opinion of Apr. 2, 2015), <a href="https://perma.cc/Z2E3-77LD">https://perma.cc/Z2E3-77LD</a>.

 $<sup>^{302}</sup>$  Activities in the Area, 2011 ITLOS Rep. at 43, ¶ 117.

<sup>&</sup>lt;sup>303</sup> *Id*.

<sup>&</sup>lt;sup>304</sup> Trail Smelter.

<sup>&</sup>lt;sup>305</sup> Legality of the Threat or Use of Nuclear Weapons.

<sup>&</sup>lt;sup>306</sup> Gabčíkovo-Nagymaros Project.

<sup>&</sup>lt;sup>307</sup> Iron Rhine.

<sup>308</sup> Pulp Mills.

<sup>&</sup>lt;sup>309</sup> *In re Indus Waters Kishenganga Arbitration (Pakistan v. India)*, Partial Award, 31 R.I.A.A. 55 (Perm. Ct. Arb. 2013), <a href="https://perma.cc/ANQ9-6Z6A">https://perma.cc/ANQ9-6Z6A</a>.

the dredging of a river, 310 and construction of a road. 311 These examples are unlike the challenge posed by anthropogenic global warming, which results from the varied and diffuse activities that emit GHGs over a long period of time.

- The circumstances of activities that emit GHGs differ in at least three ways from those 4.16 of the point source activities or pollution at issue in the Court's and other international tribunals' decisions to date.
- 4.17 First, in contrast to the specific, identifiable sources of transboundary harm at issue in those proceedings, the emission of GHGs is a diffuse, universal activity, with countless sources in every country and every part of the world, and with emissions coming from an extremely wide range of activities that include the combustion of fossil fuels; certain industrial processes; and human-induced land use, land-use change, and deforestation. 312
- 4.18 Second, in contrast to the transboundary harms at issue in those proceedings, which primarily involved harms in neighboring or nearby States, the harm caused by anthropogenic climate change is more than just transboundary: it is truly global in its impact.
- 4.19 Third, in past proceedings, the link between the complained-of activity and the alleged harm was relatively direct in time and space. In contrast, the link between GHG emissions and harms to human health and the environment is very long and complex. As explained *supra* in Chapter II.A.i, global warming is primarily the result of cumulative GHG emissions, which increase the concentration of GHGs in the atmosphere over relatively long periods of time. Because GHGs from every particular source mix in the atmosphere with emissions from innumerable other sources, global effects cannot be linked to the location of any particular source of emissions. Additionally, as explained *supra* in Chapter II.A.ii, resulting harm due to global-warming-fueled extreme weather events (like drought, extreme heat, extreme precipitation, and hurricanes) and slow-onset events (like ice melt and sea-level rise) therefore manifests over the long term and is extremely difficult—if not impossible—to attribute to any specific quantum of GHG emissions, much less to an identifiable point source.

<sup>&</sup>lt;sup>310</sup> Certain Activities and Construction of a Road.

<sup>&</sup>lt;sup>311</sup> *Id*.

<sup>&</sup>lt;sup>312</sup> "Traditional," non-GHG air pollutants, such as black carbon, also contribute to anthropogenic global warming.

- 4.20 Notably, the International Law Commission (ILC), in its 2021 Draft Guidelines on the Protection of the Atmosphere,<sup>313</sup> drew a distinction between "transboundary air pollution," which it called "atmospheric pollution," and "global atmospheric problems," which it called "atmospheric degradation."<sup>314</sup> The Draft Guidelines use the former term, "transboundary air pollution," to denote traditional transboundary pollution that impacts a specific area outside the State of origin, whereas the latter term, "atmospheric degradation," "covers the alteration of the global atmospheric conditions caused by humans" and encompasses the "problems of ozone depletion and climate change."<sup>315</sup>
- 4.21 This distinction is relevant to an "obligation to protect the atmosphere" proposed in Draft Guideline 3, which, as drafted, covers both atmospheric pollution and atmospheric degradation.<sup>316</sup> The commentary to Draft Guideline 3 asserts that "the obligation of States to prevent significant adverse effects is firmly established as customary international law," but it notes, in contrast, that "the existence of this obligation in customary international law is still

<sup>&</sup>lt;sup>313</sup> ILC, Draft Guidelines on the Protection of the Atmosphere, with Commentaries, U.N. Doc. A/76/10 (2021), https://perma.cc/J8PY-BMTV [Dossier No. 89] ("ILC Draft Guidelines on Protection of the Atmosphere"). The United States has expressed concern about the Draft Guidelines and their accompanying commentaries, stating that "[a]t a time when clarity and action in this area are vitally important, the Draft Guidelines have the potential to inhibit progress in international environmental law by creating confusion about its content, including through statements suggestive of new and unfounded international legal obligations." Richard Visek, U.S. Dep't of State Acting Legal Adviser, U.S. Statement at the 76th Session of the General Assembly on Sixth Committee Agenda Item 82: Report of the International Law Commission on the Work of its 72nd Session (Oct. 26, 2021), https://perma.cc/4P44-DMFG ("2021 U.S. Statement on ILC's Work"). More generally, the United States has expressed concerns about the suitability of the ILC's consideration of the topic "Protection of the Atmosphere" because: (i) "various long-standing instruments already provide not only general guidance to States in their development, refinement, and implementation of treaty regimes, but in many instances very specific guidance tailored to discrete problems relating to atmospheric protection," raising concerns "that any exercise to extract broad legal rules from environmental agreements concluded in particularized areas would be infeasible and unwarranted, and potentially quite harmful if doing so undermined carefully-negotiated differentiation among regimes"; and (ii) "such an exercise, and the topic more generally, was likely to complicate rather than facilitate future negotiations and thus to inhibit State progress in the environmental area." U.S. Mission to the UN, U.S. Statement at the 69th Session of the General Assembly on Sixth Committee Agenda Item 78: Report of the International Law Commission on the Work of its 66th Session (Nov. 3, 2014), https://perma.cc/NV44-3GEH.

<sup>&</sup>lt;sup>314</sup> *ILC Draft Guidelines on Protection of the Atmosphere*, General Commentary, ¶ 40, and Guideline 1, cmt. ¶¶ 4-6.

<sup>&</sup>lt;sup>315</sup> *Id.* Guideline 1, cmt. ¶¶ 6-12.

<sup>&</sup>lt;sup>316</sup> *Id.* Guideline 3 ("States have the obligation to protect the atmosphere by exercising due diligence in taking appropriate measures, in accordance with applicable rules of international law, to prevent, reduce or control atmospheric pollution and atmospheric degradation."). In reference to the purported obligation stated in Draft Guideline 3, the United States has noted the ILC's acknowledgement that it "does not desire . . . to impose on current treaty regimes rules or principles not already contained therein," observing that it is "not clear what Draft Guideline 3 adds beyond serving to remind States to comply with their existing legal obligations." 2021 U.S. Statement on ILC's Work.

somewhat unsettled for global atmospheric degradation"—that is, with respect to anthropogenic GHG emissions and consequent global warming.<sup>317</sup>

- iii. Assuming Arguendo that a Customary Obligation to Mitigate Significant Transboundary Environmental Harm Applies to Anthropogenic GHG Emissions and Consequent Global Warming, the Obligations Established by the UN Climate Change Regime Would Define the Relevant Standard of Due Diligence with Respect to Climate Change for Parties
- 4.22 Assuming *arguendo* that a customary international law obligation to prevent or at least minimize significant transboundary environmental harm exists with respect to anthropogenic GHG emissions and consequent global warming, there remain the questions of how such an obligation would operate and what its implications would be in the context of a collective action problem like climate change that involves a universal human activity (the emission of GHGs) that causes global harm.
- 4.23 At the core of what the Court has found to be a customary obligation of due diligence is the requirement to take "appropriate measures to prevent or minimize" the risk of significant transboundary harm. <sup>318</sup> As explained *supra* in Part IV.A.i, "due diligence" is an obligation of conduct that is context-specific, since what effort is "appropriate" or "reasonable" depends on the particular circumstances. <sup>319</sup> As such, the due diligence standard can be viewed as striking a balance between the sovereign right of each State to exploit its own resources and the interests of other States in avoiding significant transboundary environmental harm—a balance that had been implicit in the structure of Stockholm Principle 21 and Rio Principle 2. Relevant factors in determining what constitutes "appropriate" measures might include the nature of the activity in question, the nature and degree of risk of the transboundary harm (the assessment of which could change over time based on advancements in scientific knowledge), the socio-economic costs of possible steps to prevent or minimize the transboundary harm, and the availability and feasibility of methods to mitigate the risk of such harm.
- 4.24 A determination of what measures are "appropriate" necessarily should be informed by what actions States have taken to address a particular problem. Where States have decided almost universally on a particular approach to addressing a problem—which is the case with

<sup>&</sup>lt;sup>317</sup> ILC Draft Guidelines on Protection of the Atmosphere, Guideline 3, cmt. ¶ 8.

<sup>&</sup>lt;sup>318</sup> Certain Activities and Construction of a Road, 2015 I.C.J. at 706-07, ¶ 104 and 724, ¶ 168.

<sup>&</sup>lt;sup>319</sup> See, e.g., ILC Draft Articles on Prevention of Transboundary Harm, art. 3, cmt. ¶ 7; id. art. 3, cmt. ¶ 10 ("In the context of the present articles, due diligence is manifested in reasonable efforts by a State to inform itself of factual and legal components that relate foreseeably to a contemplated procedure and to take appropriate measures, in timely fashion, to address them.").

respect to the Paris Agreement's nationally determined approach to mitigation of anthropogenic GHG emissions—that approach should be considered a reasonable or appropriate approach.

4.25 Giving priority in this fashion to the Paris Agreement's approach to mitigating GHG emissions would not displace a customary rule of due diligence. Instead, the Paris Agreement's "ambition mechanism" and Parties' treaty obligations under the Agreement should be understood as satisfying any general standard of due diligence in the particular context of anthropogenic GHG emissions. 320

4.26 The Paris Agreement sets out a specific approach and specific measures that States have agreed are appropriate for addressing anthropogenic climate change. The Agreement reflects a balance between national discretion and ambition and is calibrated to achieve its global temperature goal through an iterative and progressive process in which Parties must: communicate NDCs; pursue domestic mitigation measures, with the aim of achieving the objectives of their NDCs; engage in enhanced transparency regarding GHG emissions and their progress in implementing and achieving their NDCs; undertake periodic global stocktakes to assess collective progress toward meeting the Paris Agreement's goals; and then, informed by each stocktake, communicate another NDC with the expectation that each Party will raise its ambition with each successive NDC, with annual conferences of the Parties providing a regular diplomatic and political forum to further drive collective ambition to address climate change. The Parties providing a regular diplomatic and political forum to further drive collective ambition to address climate change.

4.27 In addition to being compatible with the substantive core of any customary due diligence obligation, participation in the UN climate change regime aligns with the procedural duties the Court has indicated are, at least in some circumstances, elements of such an obligation. With respect to assessment of an activity's risk of significant transboundary harm, the IPCC has completed six major assessments of the risks posed by anthropogenic GHG emissions. It issued its first assessment report in 1990 at the UN General Assembly's request

 $<sup>^{320}</sup>$  In a similar manner, in considering what would constitute an "arbitrary" deprivation of life under the International Covenant on Civil and Political Rights in a situation of armed conflict, the Court looked to "the applicable *lex specialis*, namely, the law applicable in armed conflict which is designed to regulate the conduct of hostilities." *Legality of the Threat or Use of Nuclear Weapons*, 1996 I.C.J. at 240, ¶ 25.

<sup>&</sup>lt;sup>321</sup> Additionally, as noted *supra* in paragraph 1.9, the UN General Assembly has repeatedly acknowledged that the UN climate change regime, including the Paris Agreement, is the primary process for States to negotiate the global response to climate change. *See supra* n.9.

<sup>&</sup>lt;sup>322</sup> See supra Chapters III.B and III.E.

 $<sup>^{323}</sup>$  See supra ¶ 4.13 and n.297.

and has periodically reassessed the risks through its successive assessment cycles.<sup>324</sup> Similarly, any requirement to notify and consult with potentially affected States under a duty of due diligence is satisfied through participation in the UN climate change regime.<sup>325</sup> Likewise, participation in the UN climate change regime reflects the kind of cooperation in good faith to prevent or at least minimize significant transboundary harm that might be implied by a duty of due diligence.

4.28 Thus, the specific regime of the Paris Agreement is compatible with<sup>326</sup> a context-specific due diligence standard and reflects the approach that States have collectively agreed is the appropriate response to the global challenge presented by climate change. Any customary obligation of due diligence that the Court might find applies to anthropogenic GHG emissions should be considered fulfilled by a State's implementation of its obligations under the Paris Agreement.<sup>327</sup>

#### B. The Law of the Sea and Anthropogenic GHG Emissions

4.29 The 1982 UN Convention on the Law of the Sea (the "LOS Convention")<sup>328</sup> requires States Parties to protect and preserve the marine environment, and to take measures to prevent, reduce, and control pollution of the marine environment. The United States, which is not party to the LOS Convention, views the Convention's provisions with respect to traditional uses of

<sup>&</sup>lt;sup>324</sup> See supra ¶¶ 2.13-2.17. Certain national actions also would entail such an assessment, including the preparation of NDCs and biennial transparency reports under the Paris Agreement.

<sup>&</sup>lt;sup>325</sup> Such a duty would be fulfilled through, among other things, national communications and national GHG inventory reports submitted under the UNFCCC; reporting under the Paris Agreement; and participation in the annual UN Climate Change Conference.

<sup>&</sup>lt;sup>326</sup> In addition to the reasons explained *supra* for how the UN climate change regime, and particularly the Paris Agreement, is compatible with a customary due diligence obligation, the fact that a State Party's NDC under the Paris Agreement is "nationally determined" and takes into account the Party's national circumstances and capacities is consistent with a due diligence standard that looks to what is appropriate or reasonable under the circumstances, including taking into account the socio-economic costs and the availability and feasibility of possible steps to mitigate the risk of significant transboundary harm.

<sup>&</sup>lt;sup>327</sup> A State not party to the Paris Agreement could satisfy any requirements of due diligence through other measures. This Statement does not take a position on what measures by such a State would be "appropriate" and therefore sufficient to satisfy any requirements of due diligence. Moreover, the conclusion that a State's implementation of its obligations under the Paris Agreement would satisfy any requirements of due diligence would not imply that a State's breach of one of its obligations under the Paris Agreement would constitute a *per se* violation of a customary obligation to prevent or at least minimize significant transboundary environmental harm. Any alleged breach of such a customary due diligence obligation by a Paris Agreement Party would have to be assessed on a case-by-case basis in light of the specific facts and circumstances.

<sup>&</sup>lt;sup>328</sup> United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 397, <a href="https://perma.cc/ZE7Z-QANM">https://perma.cc/ZE7Z-QANM</a> [Dossier No. 45] ("LOS Convention").

the ocean as reflective of customary international law.<sup>329</sup> These obligations do not require States to adopt particular measures, although States Parties must take into account internationally agreed rules, standards, and recommended practices and procedures in formulating such measures. Any obligations under the LOS Convention relating to climate change should be understood in the context of the UN climate change regime, which is the primary source of international legal obligations relating to anthropogenic GHG emissions.<sup>330</sup>

## i. Relevant General Provisions of the LOS Convention

- 4.30 Article 192 of the LOS Convention sets forth a general obligation of States Parties to protect and preserve the marine environment.<sup>331</sup> This general obligation exists alongside the sovereign right of States Parties, as set forth in article 193, to exploit their natural resources "pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment." The applicability of the general obligation in article 192 to anthropogenic GHG emissions is determined by the specific obligations in the LOS Convention relating to pollution of the marine environment, including article 194 and other relevant provisions in part XII, section 5.
  - ii. LOS Convention Obligations on Pollution of the Marine Environment Do Not Require States Parties to Adopt Particular Measures or Achieve Any Specific Result, and Are Informed by Relevant International Rules, Standards, and Recommended Practices and Procedures
- 4.31 Article 194 of the LOS Convention obligates States Parties to take measures "to prevent, reduce and control pollution of the marine environment from any source."<sup>332</sup> This obligation does not mandate the adoption of any particular measure or achievement of any specific result.

<sup>&</sup>lt;sup>329</sup> See Statement on United States Ocean Policy by President Ronald Reagan (Mar. 10, 1983), <a href="https://perma.cc/7GWL-MFVG">https://perma.cc/7GWL-MFVG</a>. The United States has domestic authorities in place necessary to meet the requirements of part XII of the LOS Convention, and acts consistently with the standards articulated in part XII regarding preservation and protection of the marine environment and monitoring and assessment of its activities.

<sup>&</sup>lt;sup>330</sup> This U.S. Statement assumes *arguendo* that anthropogenic GHG emissions can result in "pollution of the marine environment" for purposes of the LOS Convention by introducing substances (carbon dioxide) and energy (heat) into the marine environment that result in deleterious effects. *See* LOS Convention, art. 1(1)(4) (defining "pollution of the marine environment" to mean "the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities").

<sup>331</sup> LOS Convention, art. 192 ("States have the obligation to protect and preserve the marine environment.").

<sup>332</sup> Id. art. 194(1).

4.32 The obligation in article 194 is bounded by language recognizing the importance of international cooperation in this area: States Parties must take measures "individually or jointly as appropriate," and "shall endeavor to harmonize their policies." This is reinforced by the obligation in article 197 of the LOS Convention to "co-operate . . . in formulating and elaborating international rules, standards and recommended practices and procedures . . . for the protection and preservation of the marine environment." Measures taken by States Parties to fulfill their article 194 obligations must take into consideration both the measures taken by other States Parties and the state of international environmental law, including any obligations applicable to States taking measures. With respect to anthropogenic GHG emissions, the content of the article 194 obligation would need to be evaluated with reference to international rules, standards, and recommended practices and procedures that apply to such emissions.

4.33 The content of the obligation in article 194 is further refined in part XII, section 5, of the LOS Convention, which contains obligations relating to specific types of pollution, including from land-based sources in article 207 and pollution from or through the atmosphere in article 212. Articles 207 and 212 both require States Parties to "adopt laws and regulations to prevent, reduce and control pollution of the marine environment . . . taking into account internationally agreed rules, standards and recommended practices and procedures" with respect to pollution from land-based sources and from or through the atmosphere, respectively. 335

4.34 The United States notes that the status of development of internationally agreed rules, standards, and recommended practices and procedures varies based on context, including the specific type of pollution being addressed. For example, the United States views the Montreal Guidelines for the Protection of the Marine Environment Against Pollution from Land-Based Sources<sup>336</sup> as internationally agreed guidelines adopted with a view to assisting governments in developing international agreements and national legislation relating to land-based sources

<sup>&</sup>lt;sup>333</sup> *Id*.

<sup>&</sup>lt;sup>334</sup> *Id.* art. 197.

<sup>&</sup>lt;sup>335</sup> *Id.* arts. 207(1), 212(1).

<sup>&</sup>lt;sup>336</sup> U.N. Env't Programme (UNEP) Gov. Council Dec. 13/18/11, Montreal Guidelines for the Protection of the Marine Environment Against Pollution from Land-Based Sources, U.N. Doc. UNEP(092)/E5 (May 24, 1985), <a href="https://perma.cc/FB4X-YND3">https://perma.cc/FB4X-YND3</a>.

of pollution.<sup>337</sup> The United States also views MARPOL Annex VI<sup>338</sup> as a global agreement directly governing marine pollution from or through the atmosphere.<sup>339</sup> With respect to GHG emissions, the Paris Agreement and the UNFCCC address such emissions, including as a potential source of pollution of the marine environment.

- 4.35 The obligations in the LOS Convention give deference to a State to adopt laws and regulations applicable to its specific context.<sup>340</sup> In the context of pollution originating in a State's sovereign territory, such as, *arguendo*, anthropogenic GHG emissions, significant deference is given to the State to determine how it will carry out its obligations. "Being landbased, the sovereignty of the territorial State is dominant . . . . [T]he balance drawn in [article 207] paragraph 1 [of the LOS Convention] is one that favors national measures, and thus enables States to adopt measures which are either more or less stringent than those developed internationally."<sup>341</sup>
- 4.36 Although the LOS Convention does not require the enactment of specific laws and regulations with respect to pollution of the marine environment, States do have an obligation, pursuant to article 300 of the LOS Convention, to "fulfil in good faith the obligations assumed under [the] Convention." Section 6 of part XII also imposes an affirmative duty on States to enforce such laws and regulations once adopted.<sup>342</sup>
- 4.37 To fulfill the obligation in article 194 to take measures to prevent, reduce, and control pollution of the marine environment, States Parties are to use "the best practicable means at

<sup>&</sup>lt;sup>337</sup> See Message from the President of the United States Transmitting United Nations Convention on the Law of the Sea, with Annexes, done at Montego Bay, December 10, 1982 (the "Convention"), and the Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, with Annex, adopted at New York, July 28, 1994 (the "Agreement"), and signed by the United States, subject to ratification, on July 29, 1994, Treaty Doc. 103-39, 103rd Cong. (Oct. 7, 1994), <a href="https://perma.cc/F5D2-RGC5">https://perma.cc/F5D2-RGC5</a> ("Transmittal Message").

<sup>&</sup>lt;sup>338</sup> See supra n.273.

<sup>&</sup>lt;sup>339</sup> See Transmittal Message, 36.

<sup>&</sup>lt;sup>340</sup> See 4 United Nations Convention on the Law of the Sea 1982: A Commentary 132 (Myron H. Nordquist et al. eds., 1991) (noting that while States must take into account relevant internationally agreed rules, standards, and recommended practices and procedures to the extent they exist, the "phrase 'taking into account internationally agreed' rules, etc., is the weakest of the qualifications used to indicate the obligations of States in respect of internationally agreed measures, and it gives expression to the sovereignty of the States concerned") (U.S. Annex 2).

<sup>&</sup>lt;sup>341</sup> *Id*.

<sup>&</sup>lt;sup>342</sup> LOS Convention, arts. 213 (providing that "States shall enforce their laws and regulations adopted in accordance with article 207"), 222 (providing that "States shall enforce, within the air space under their sovereignty or with regard to vessels flying their flag or vessels or aircraft of their registry, their laws and regulations adopted in accordance with article 212, paragraph 1").

their disposal and in accordance with their capabilities."<sup>343</sup> This language makes clear that the obligation is one of effort, not of result, and that the standard of conduct required does not obligate a State to undertake measures when there are not practicable means available to do so. This reading is consistent with the treatment of similarly worded obligations described by the ITLOS Seabed Disputes Chamber: "The sponsoring State's obligation 'to ensure' is not an obligation to achieve, in each and every case, the result . . . . Rather, it is an obligation to deploy adequate means, to exercise best possible efforts, to do the utmost, to obtain this result. To utilize the terminology current in international law, this obligation may be characterized as an obligation 'of conduct' and not 'of result', and as an obligation of 'due diligence'."<sup>344</sup>

#### C. International Human Rights Law and Climate Change

4.38 The United States has long recognized that a healthy environment supports the well-being and dignity of people around the world, as well as the enjoyment of human rights. The United States also recognizes the important relationship between human rights and environmental protection—and, in particular, that the prioritization of national and international climate action must go hand-in-hand with respect for and protection of human rights, including the protection of the human rights of climate activists. Measures taken by a State to mitigate or adapt to the adverse effects of climate change must be in accordance with its international human rights obligations.<sup>345</sup>

4.39 A recognition that anthropogenic climate change can adversely affect the enjoyment of human rights, however, does not mean that States have international human rights obligations to mitigate anthropogenic GHG emissions. States Parties to the International Covenant on Civil and Political Rights (ICCPR)<sup>346</sup> and the International Covenant on Economic, Social,

<sup>343</sup> *Id.* art. 194(1).

<sup>&</sup>lt;sup>344</sup> Activities in the Area, ¶ 110.

<sup>&</sup>lt;sup>345</sup> The preamble of the Paris Agreement acknowledges as much, stating that "Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on [, inter alia,] human rights . . . . ." Paris Agreement, pmbl. Notably, the phrase "their respective obligations" makes clear that the paragraph does not create any new legal obligations or modify or expand existing obligations, and it also indicates that not all States have the same international obligations in respect of the issues that follow that phrase, including with respect to human rights. For some of the issues noted, such as a purported "right to development"—which is not recognized in any of the core UN human rights conventions, does not have an agreed international meaning, and, unlike with human rights, is not recognized as a universal right held and enjoyed by individuals and which every individual may demand from his or her own government—States might not have any international legal obligations at all.

International Covenant on Civil and Political Rights, Dec. 16, 1966, S. Treaty Doc. No. 95-20, 999 U.N.T.S. 171, <a href="https://perma.cc/4BAA-DFJG">https://perma.cc/4BAA-DFJG</a> ("ICCPR") [Dossier No. 49].

and Cultural Rights (ICESCR)<sup>347</sup> have obligations under those treaties that are relevant to the problem of climate change, including the protection of those individuals exercising their human rights while working on environmental issues, including climate change. However, neither the ICCPR nor the ICESCR creates legal obligations requiring States Parties to ensure protection of the climate system from anthropogenic GHG emissions. Additionally, although the UN General Assembly and the Human Rights Council have "recognized" "a right to a clean, healthy and sustainable environment,"<sup>348</sup> this does not have the status of international law and does not impose international legal obligations on States. Such a right is not included in a treaty of global application, nor is it supported by the extensive and virtually uniform State practice and *opinio juris* necessary for the creation of a rule of customary international law. Thus, it is at most *lex ferenda* rather than *lex lata* for States. There are mechanisms available, in the absence of the necessary State practice and *opinio juris*, to develop rights as part of international law; to date, however, such mechanisms (*e.g.*, through the negotiation of provisions of a treaty) have not been engaged.

- i. States Must Comply with Their International Human Rights Obligations, Including When Taking Climate Action, and They Must Protect the Human Rights of Climate Activists
- 4.40 States Parties to the ICCPR have an obligation under international law to respect and ensure the rights recognized in that Covenant to all individuals within their territory and subject to their jurisdiction, including the rights of peaceful assembly, to freedom of association, and to freedom of expression, which includes the freedom to seek, receive, and impart information, both online and offline.<sup>349</sup> These rights protect the ability of individuals to organize and engage in environmental advocacy. The exercise of these rights facilitates public awareness of environmental information, including with respect to climate change, and contributes to sound—and ambitious—environmental policymaking.
- 4.41 The United States has a long history of welcoming efforts to increase protection and security for those who take lawful actions to foster a safe, healthy, and sustainable

International Covenant on Economic, Social and Cultural Rights, Dec. 16, 1966, S. Treaty Doc. No. 95-19, 993 U.N.T.S. 3, <a href="https://perma.cc/3G9M-Q4TX">https://perma.cc/3G9M-Q4TX</a> ("ICESCR") [Dossier No. 52].

<sup>&</sup>lt;sup>348</sup> See G.A. Res. 76/300, ¶ 1, U.N. Doc. A/RES/76/300 (Aug. 1, 2022), <a href="https://perma.cc/N8YW-2W78">https://perma.cc/N8YW-2W78</a> [Dossier No. 260] ("G.A. Res. 76/300"); Human Rights Council Res. 48/13, ¶ 1, U.N. Doc. A/HRC/RES/48/13 (Oct. 18, 2021), <a href="https://perma.cc/VQP9-W9QS">https://perma.cc/VQP9-W9QS</a> [Dossier No. 279] ("Human Rights Council Res. 48/13").

<sup>&</sup>lt;sup>349</sup> See ICCPR, arts. 2(1), 19(2), 21, 22(1).

environment.<sup>350</sup> To promote such protection, the United States has, among other things, taken on leadership roles in coordinating support among States for environmental defenders and funded programs to advance the rights of environmental defenders in countries where they are at particular risk.<sup>351</sup> The United States welcomes engagement from partners in the international community to increase access to information, opportunities for public participation, and access to justice in environmental matters, as well as initiatives that build countries' capacity to protect their own environmental defenders.

ii. Neither the ICCPR Nor the ICESCR Obligates States Parties To Ensure the Protection of the Climate System from Anthropogenic GHG Emissions

4.42 Any examination of whether the ICCPR or the ICESCR imposes obligations on States Parties to take action to address anthropogenic climate change must be conducted in accordance with the customary international law of treaty interpretation as reflected in articles 31 and 32 of the 1969 Vienna Convention on the Law of Treaties (VCLT)—through interpretation in good faith, in accordance with the ordinary meaning of the particular agreement's terms in their context, and in light of the agreement's object and purpose, with recourse to supplementary means of interpretation as appropriate. There is no support under such an analysis of the ICCPR or the ICESCR for a conclusion that either of those agreements obligates States Parties to ensure the protection of the climate system from anthropogenic GHG emissions. 

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<sup>&</sup>lt;sup>350</sup> See, e.g., U.S. Mission to Int'l Orgs. in Geneva, HRC-52 Right to Environment Resolution: Explanation of Position (Apr. 6, 2023), <a href="https://perma.cc/E5KX-762V">https://perma.cc/E5KX-762V</a> ("The United States strongly believes in the importance of preserving the ability of those who exercise their human rights while working on environmental matters, referenced in the resolution as environmental human rights defenders, to do their work."); U.S. Dep't of State, Office of the Spokesperson, Strengthening Protection of Environmental Defenders in the Americas (Jan. 24, 2023), <a href="https://perma.cc/64YH-AJNR">https://perma.cc/64YH-AJNR</a> ("The United States advocates for increasing protections for environmental defenders who use the fundamental tools of democracy peacefully to support a clean, healthy, and sustainable environment and reduce the impacts of climate change. We must all work to prevent threats and violence against environmental defenders and to increase accountability for that violence."); U.S. Dep't of State, Bureau of Oceans and Int'l Env't and Sci. Aff., Advancing a Right to a Healthy Environment Globally (Aug. 12, 2022), <a href="https://perma.cc/VZJ5-7EC6">https://perma.cc/VZJ5-7EC6</a> (stating that the vote on UN General Assembly resolution 76/300 "is a key step in promoting and protecting the rights of environmental defenders and all environmental advocates around the world").

<sup>&</sup>lt;sup>351</sup> See, e.g., U.S. Dep't of State, Bureau of Democracy, Hum. Rts., and Lab., DRL Supporting Environmental Defenders in Latin America (Feb. 24, 2022), <a href="https://perma.cc/86BR-DPH3">https://perma.cc/86BR-DPH3</a>; U.S. Dep't of State, Bureau of Democracy, Hum. Rts., and Lab., DRL Notice of Funding Opportunity (NOFO): Protecting the Rights of Environmental Defenders in Africa (Jan. 14, 2022), <a href="https://perma.cc/DW6U-4FFM">https://perma.cc/DW6U-4FFM</a>; U.S. Dep't of State, Bureau of Democracy, Hum. Rts., and Lab., Freedom of Expression for Women Environmental Defenders in the Indo-Pacific Region (Feb. 11, 2021), <a href="https://perma.cc/P94A-EF5U">https://perma.cc/P94A-EF5U</a>.

<sup>&</sup>lt;sup>352</sup> See VCLT, arts. 31, 32; see also supra n.183.

<sup>&</sup>lt;sup>353</sup> To the extent it might be argued that the views of the treaty bodies or the Special Procedures reflect an attempt to fill what they might consider to be gaps in the reach and coverage of the Covenants, the proper approach to fill

- a. <u>The ICCPR does not impose obligations on States to take measures to mitigate GHG emissions</u>
- 4.43 The ICCPR does not contain any express or implied requirement on States Parties to mitigate GHG emissions, and there is no basis to derive any such obligation from the ICCPR's provisions, including under the right to life as enshrined in ICCPR article 6.
- 4.44 As reflected in the VCLT, an interpretation of ICCPR article 6(1) must start with its text, which provides that all persons have an "inherent right to life" and that "[n]o one shall be arbitrarily deprived of his life."<sup>354</sup> This text focuses on persons being "deprived" of their life and makes no mention of a right to be protected against policies that indirectly affect mortality rates or harms that might impact the everyday experience of persons or their health more generally.<sup>355</sup>
- 4.45 The ICCPR's *travaux préparatoires* confirm that the right to life under article 6 is limited to the actual taking of life. During the ICCPR's negotiation, States discussed the scope of the right at length, including broader formulations of the right as well as the various exceptions they believed would be needed to permit, in limited situations, the taking of a life. In doing so, States considered whether to address in article 6 not only the actual taking of a life but also the conditions and quality of life, as well as bodily integrity harms falling short of actual death. Ultimately, however, they decided not to expand the ambit of article 6 in these

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such perceived gaps is to rely on the mechanisms for change in the instruments, namely by proposing amendments to the treaty and seeking the Parties' consent to be bound by any new obligations. *See* ICCPR, art. 51; ICESCR, art. 29. Special Procedures are mechanisms established by the UN Human Rights Council to report and advise on human rights from a thematic and country-specific perspective. Special Procedures mandate-holders are either an individual (called a Special Rapporteur or Independent Expert) or a Working Group.

<sup>&</sup>lt;sup>354</sup> ICCPR, art. 6(1). Article 6(1) elaborated upon, and made legally binding, the right to life as recognized in the Universal Declaration on Human Rights, which provides that "[e]veryone has the right to life . . . ." Universal Declaration of Human Rights, G.A. Res. 217 (III) A, art. 3, U.N. Doc. A/RES/217(III) (Dec. 10, 1948), <a href="https://perma.cc/HR5H-BRDM">https://perma.cc/HR5H-BRDM</a> [Dossier No. 257] ("Universal Declaration of Human Rights").

<sup>355</sup> ICCPR, art. 6; see also Yoram Dinstein, The Right to Life, Physical Integrity, and Liberty, in THE INTERNATIONAL BILL OF RIGHTS: THE COVENANT ON CIVIL AND POLITICAL RIGHTS 114, 115 (L. Henkin ed., 1981) ("The right to life is not freedom to live as one wishes. It is not a right to an appropriate standard of living. . . . The right to life, in effect, is the right to be safeguarded against (arbitrary) killing.") (U.S. Annex 3); U.S. Dep't of State, Observations of the United States of America on the Human Rights Committee's General Comment 36: On Article 6 - Right to Life, ¶¶ 7-8, 31-38 (Oct. 6, 2017), https://perma.cc/G8Z7-RK8D ("U.S. Observations on HRC General Comment 36").

ways.<sup>356</sup> Several States explicitly noted that the exceptions and purposes for the right concerned only the actual killing of persons, and nothing more.<sup>357</sup>

4.46 Notwithstanding the text of article 6 and its negotiating history, some have asserted that ICCPR article 6's "right to life" requires States Parties to protect against all "foreseeable and preventable life-terminating harm or injury, caused by an act or omission," such as "general conditions in society" that threaten life, including those involving degradation of the environment, pollution, or climate change. As discussed *supra*, such assertions are not supported by the text of article 6, as confirmed by the ICCPR's *travaux préparatoires*.

4.47 This understanding of the ICCPR's right to life—and particularly that it does not entail obligations on States Parties to mitigate GHG emissions—is reinforced by public statements

<sup>&</sup>lt;sup>356</sup> See UN Comm'n on Human Rights, Drafting Comm. on an Int'l Bill of Rts., 1st Sess., Rep. of the Drafting Comm. to the Comm'n on Hum. Rts., 53, U.N. Doc. E/CN.4/21 (July 1, 1947), https://perma.cc/8L9J-UGKD (proposing under then-article 7 text as follows: "Every human being has the right to life and to the respect of his physical inviolability."); see also UN Comm'n on Human Rights, Drafting Comm. on an Int'l Bill of Rts., 1st Sess., 8th Mtg. at 3-4, U.N. Doc. E/CN.4/AC.1/SR.8 (June 20, 1947), https://perma.cc/W6TR-QXHF (noting proposals by different negotiators to group the right to life with issues of physical inviolability, human dignity, and personal security); UN Comm'n on Human Rights, Drafting Comm. on an Int'l Bill of Rts., 1st Sess., 12th Mtg. at 6-7, U.N. Doc. E/CN.4/AC.1/SR.12 (July 3, 1947), https://perma.cc/PA64-Q8VE (proposing that language covering the "conditions of life" be included within the right to life provision); id. at 7-8 (proposing that language covering the "conditions of life" be included within the right to life provision and noting that supporters of this change argued this would address "affirm[ing] the economic and social rights" of individuals); UN Comm'n on Human Rights, Rep. on the 2d Sess., 38, U.N. Doc. E/600 (Dec. 17, 1947), https://perma.cc/YG2M-3U76 (proposing language to be included in the right to life provision that would recognize that "[t]he State is obliged to ensure minimum conditions enabling all persons to live a dignified and worthy life"); UN Comm'n on Human Rights, 2d Sess., 35th Mtg. at 13-14, U.N. Doc. E/CN.4/SR/35 (Dec. 12, 1947), https://perma.cc/VE5V-5SE9 (proposing language to be included in the right to life provision that would recognize that the right includes "the right of obtaining from the State minimum standards for a dignified and worthy life," which was rejected by negotiators).

<sup>&</sup>lt;sup>357</sup> In discussing proposed amendments to the text, several negotiators were clear that they were concerned only with identifying possible exceptions that would permit situations where a death might actually occur and that they viewed the first paragraph of article 6 as critical to covering cases involving the "taking [of] human life" in situations other than the death penalty. *See* UN Comm'n on Human Rights, 6th Sess., 140th Mtg. at 5-15, U.N. Doc. E/CN.4/SR.140 (Apr. 7, 1950), <a href="https://perma.cc/EVW6-C8T6">https://perma.cc/EVW6-C8T6</a>. In response to a question about the scope of the term "life" and whether it was limited to "mere physical existence" or meant "something more than that," one negotiator replied that the term was considered to refer "only to physical life" and to respond to recent instances where others had sought to destroy life. UN Comm'n on Human Rights, 1st Sess., 3d Mtg. at 12, U.N. Doc. E/CN.4/AC.1/SR.3 (June 13, 1947), <a href="https://perma.cc/R3ZP-PXDP">https://perma.cc/R3ZP-PXDP</a>.

<sup>358</sup> See, e.g., Human Rights Committee, General Comment 36, ¶¶ 3, 6-7, 26, 62, U.N. Doc. CCPR/C/GC/36 (Sept. 3, 2019), <a href="https://perma.cc/Q5DN-MK9W">https://perma.cc/Q5DN-MK9W</a> [Dossier No. 299]. These arguments have likewise been relied upon by the Special Rapporteur on Human Rights and the Environment. Special Rapporteur on Human Rights and the Environment, Report on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, Summary, ¶¶ 2, 12-13, 15, 28, 35, 44-45, 48, 51-53, 57, 60, U.N. Doc. A/HRC/40/55 (Jan. 8, 2019), <a href="https://perma.cc/PMW7-G3AN">https://perma.cc/PMW7-G3AN</a> [Dossier No. 311]. As a general matter, under international law, parties to a treaty could through provisions in the treaty agree to allow another entity to interpret or otherwise resolve questions relating to their obligations. In the case of the ICCPR, the United States has not given authority to another entity to fashion or otherwise determine its treaty obligations. The obligations that are binding on the United States are those set forth in the ICCPR, interpreted pursuant to the canons of treaty interpretation set forth in international law.

of States Parties in the years since the treaty's adoption. For example, the United States repeatedly has noted its position on the scope of the right to life under ICCPR article 6, both during the treaty's negotiation as well as in the years since through its observations to general comments of the Human Rights Committee as well as in periodic reports.<sup>359</sup> Other States Parties likewise have stated their views on the limited scope of the right to life.<sup>360</sup>

Additionally, although there is no legal basis to conclude that the ICCPR obligates States Parties to mitigate GHG emissions, any conclusion to that effect necessarily would be limited by applicable treaty-based restrictions. Notably, article 2 of the ICCPR is clear about the territorial and jurisdictional limits of obligations under the treaty, stating that "[e]ach State Party . . . undertakes to respect and to ensure to all individuals within its territory and subject to its jurisdiction the rights recognized in the present Covenant." This text makes clear that States Parties have an obligation to respect and ensure ICCPR rights only with respect to persons that are both within their territory and under their jurisdiction. This is also supported by the negotiating history of the treaty, which shows that States specifically introduced "within its territory" to address concerns that the text otherwise would impose obligations on a State Party relating to individuals outside of its territory where its jurisdiction was deemed to exist. 362 Consequently, even if States Parties were to have an obligation under the ICCPR to

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<sup>359</sup> U.S. Observations on HRC General Comment 36, ¶¶ 7-8, 31-38; Fifth Periodic Report by the United States of America to the United Nations Committee on Human Rights Concerning the International Covenant on Civil and Political Rights, ¶¶ 6, 9, U.N. Doc. CCPR/C/USA/5 (Nov. 11, 2021), https://perma.cc/P7RL-87BT ("State party obligations with respect to health-related rights and to the right to an adequate standard of living are set forth in the [ICESCR] . . . [T]here is no basis to infer that the negotiators would have considered such measures to be required or necessary to also give effect to the Covenant's Article 6 right to life or other rights enshrined in the [ICCPR]. The United States does not believe that a State's obligation under Article 6 of the [ICCPR] to protect the right to life by law would extend to addressing general conditions in society or nature that may or may not eventually threaten life or prevent individuals from enjoying an adequate standard of living or the highest attainable standard of mental and physical health. . . . Finally, the United States rejects any suggestion that the rights enshrined in the [ICCPR] encompass the enjoyment of particular environmental conditions, including those related to climate change and its effects, or that the [ICCPR] implies obligations on States Parties to take steps to address environmental conditions. Such an interpretation would be beyond the text of the [ICCPR] and the intent of the negotiators that created the [ICCPR].").

<sup>&</sup>lt;sup>360</sup> For example, Paraguay has made clear its view that there is no connection between environmental degradation and the right to life obligations States Parties owe under the ICCPR. Human Rights Committee, *Views Adopted by the Committee under Article 5(4) of the Optional Protocol, Concerning Communication No. 2751/2016 (Portillo Cáceres and Others v. Paraguay)*, ¶ 4.1, U.N. Doc. CCPR/C/126/D/2751/2016 (July 25, 2019), <a href="https://perma.cc/8KF4-8ZNK">https://perma.cc/8KF4-8ZNK</a>. Additionally, Australia has stated that the right to life "does not require States to protect . . . persons from the general effects of climate change." Human Rights Committee, *Views Adopted by the Committee under Article 5(4) of the Optional Protocol, Concerning Communication No. 3624/2019*, ¶¶ 4.7-4.8, U.N. Doc. CCPR/C/135/D/3624/2019 (July 21, 2022), <a href="https://perma.cc/T2G2-MPGY">https://perma.cc/T2G2-MPGY</a>.

<sup>&</sup>lt;sup>361</sup> ICCPR, art. 2(1) (emphasis added).

<sup>&</sup>lt;sup>362</sup> U.S. Dep't of State, *Observations by the United States of America on Human Rights Committee General Comment 31: Nature of the General Legal Obligation Imposed on States Parties to the Covenant*, ¶¶ 6-7 (Dec. 27, 2007), <a href="https://perma.cc/Y8CM-2A9D">https://perma.cc/Y8CM-2A9D</a>.

mitigate GHG emissions, it would apply only as to persons that are both within their territory and under their jurisdiction.<sup>363</sup>

4.49 Another limitation on application of the right to life in the climate change context would be that the right to life only extends to the protection of individuals from State actions, not from private actions. Human rights treaties may contain provisions that clearly and specifically impose obligations upon States Parties to prevent, in limited circumstances, particular kinds of misconduct by private parties or non-State actors. However, neither ICCPR article 2 nor article 6 contains any express language requiring States Parties to regulate private, non-governmental conduct of non-State actors in relation to the deprivation of life. Government enforcement in these areas has been and will remain a matter of criminal law in the fulfillment of a State's general responsibilities incident to ordered government, rather than as a requirement derived from a State Party's obligations under the ICCPR.

b. The ICESCR also does not impose obligations on States to take measures to mitigate GHG emissions

4.50 Like the ICCPR, the ICESCR does not contain any express requirement on Parties to mitigate GHG emissions, and there is no basis to derive any such obligation from the ICESCR's provisions. Proponents of such obligations have argued that certain economic, social, and cultural (ESC) rights, including "the right of everyone to the enjoyment of the highest attainable standard of physical and mental health" (ICESCR article 12) and "the right of everyone to an adequate standard of living" (ICESCR article 11), contain implied climate-and GHG mitigation-related obligations. However, even if there are ESC rights that relate to environmental issues, the text of the ICESCR makes clear—and its *travaux préparatoires* confirm—that achieving progressively the full realization of those rights would not require States Parties to adopt uniform or specific practices (for example, specific measures relating to the mitigation of anthropogenic GHG emissions or adaptation to climate change). Rather, States may determine and implement their own policies and measures in order to progressively realize the relevant rights.

4.51 ICESCR article 2(1) requires each State Party to "undertake[] to take steps, individually and through international assistance and co-operation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant by all appropriate means, including

<sup>&</sup>lt;sup>363</sup> See ICCPR, art. 2(1); see also U.S. Observations on HRC General Comment 36, ¶¶ 13-15.

particularly the adoption of legislative measures."<sup>364</sup> The Universal Declaration of Human Rights (UDHR), while non-legally-binding, likewise indicates that each State's realization of ESC rights is specific to the needs and resources of that State.<sup>365</sup>

- 4.52 The text of these instruments makes clear that States did not intend ESC rights to entail specific obligations or otherwise require that specific steps—such as specific GHG mitigation-related measures—be taken by States to achieve progressively the full realization of those rights. On the contrary, the standard of progressive realization recognizes that States have a margin of appreciation in adopting and implementing policies and measures that might be appropriate and desirable in promoting the progressive realization of ESC rights over time, consistent with resource constraints and decisions on how to allocate limited resources among competing priorities.
- 4.53 The ICESCR's negotiating history confirms that the treaty was not intended to entail specific obligations beyond those explicitly articulated. While negotiating States considered "specify[ing] in detail the steps which States parties should take to implement" each right, States ultimately decided "there should be a general article (article 2) containing what was felt to be the firmest commitment which could reasonably be undertaken in relation to all the rights treated in the covenant" but that particular articles could elaborate additional specific obligations. Nothing in the treaty's text expressly or impliedly addresses GHG emissions or climate change more generally. Therefore, although a State Party might decide that undertaking measures to mitigate or adapt to anthropogenic climate change would benefit its progressive realization within its territory of the rights contained in the ICESCR, the ICESCR does not obligate a State Party to do so (much less to adopt any specific mitigation or adaptation measures).
  - iii. There Is Currently No Human Right in International Law to a Clean, Healthy, and Sustainable Environment
- 4.54 Although States have adopted resolutions that have "recognized" a human right to a clean, healthy, and sustainable environment in various fora, <sup>367</sup> this purported right remains

<sup>&</sup>lt;sup>364</sup> ICESCR, art. 2(1).

<sup>&</sup>lt;sup>365</sup> Universal Declaration of Human Rights, art. 22 (recognizing that everyone "is entitled to realization, through national effort and international co-operation and *in accordance with the organization and resources of each State*, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality" (emphasis added)).

<sup>&</sup>lt;sup>366</sup> UN Secretary-General, *Draft International Covenants on Human Rights: Annotation*, ch. V, art. 2, ¶¶ 19, 22, U.N. Doc. A/2929 (July 1, 1955), https://perma.cc/D9FQ-LUVS.

<sup>&</sup>lt;sup>367</sup> See G.A. Res. 76/300, ¶ 1; Human Rights Council Res. 48/13, ¶ 1.

inchoate and has not attained the status of international law. The United States looks forward to working with other States to exchange views toward the development of a right to a clean, healthy, and sustainable environment, but any such right remains a matter of *lex ferenda* rather than *lex lata*.

- 4.55 First, no treaty of global application provides for a right to a clean, healthy, and sustainable environment. UN human rights instruments—including the core instruments of the UDHR, the ICESCR, and the ICCPR—do not state a right to a clean, healthy, and sustainable environment.<sup>368</sup> Although some regional agreements include environment-related rights, these apply on only a limited basis as among the parties to each agreement.
- 4.56 Second, to conclude that a right to a clean, healthy, and sustainable environment has achieved the status of customary international law would require evidence of extensive and virtually uniform State practice, accompanied by a sense of legal obligation. The United States is unaware of any such evidence.
- Assembly (UNGA) "recogniz[ing] the right to a clean, healthy and sustainable environment" neither provide evidence of a pre-existing right to a clean environment in customary international law nor create a new right. Although the resolutions reflect the growing appreciation by the international community of the importance of a clean environment for the fulfillment of human rights, they do not create rights or obligations under international law or change the current state of conventional or customary international law. Pursuant to UNGA resolution 60/251, the UNGA, which itself does not have the authority to create binding obligations, did not and could not provide the HRC with authority to create binding

<sup>&</sup>lt;sup>368</sup> Special Rapporteur on Human Rights and the Environment, *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, ¶ 37, U.N. Doc. A/73/188 (July 19, 2018), https://perma.cc/8KHH-8RFY [Dossier No. 310].

 $<sup>^{369}</sup>$  Human Rights Council Res. 48/13,  $\P$  1; G.A. Res. 76/300,  $\P$  1.

<sup>&</sup>lt;sup>370</sup> A variety of other non-legally-binding declarations and statements reference "rights" relating to a certain kind of environment using different formulations. Like HRC and UNGA resolutions, these statements do not create rights or obligations under international law. *See, e.g.*, Stockholm Declaration, ch. II, principle 1 ("Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being."); Association of Southeast Asian Nations Human Rights Declaration, ¶ 28(f) (Nov. 19, 2012), <a href="https://perma.cc/EK4D-6BMZ">https://perma.cc/EK4D-6BMZ</a> ("Every person has the right to an adequate standard of living for himself or herself and his or her family including . . . [t]he right to a safe, clean and sustainable environment."); Male' Declaration on the Human Dimension of Global Climate Change, pmbl. (Nov. 14, 2007) ("Noting that the fundamental right to an environment capable of supporting human society and the full enjoyment of human rights is recognized, in varying formulations, in the constitutions of over one hundred states and directly or indirectly in several international instruments."), <a href="https://perma.cc/R4FC-Y32R">https://perma.cc/R4FC-Y32R</a>.

obligations.<sup>371</sup> Moreover, it is clear from a number of States' explanations of vote/position issued in connection with these resolutions that they do not view these resolutions as recognizing the existence of such a right under international law.<sup>372</sup>

4.58 As the United States stated in its explanations of position on UNGA resolution 76/300 and HRC resolution 52/23, the development of a legally binding right to a clean, healthy, and sustainable environment must be carried out in a manner that is consistent with international law.<sup>373</sup>

<sup>&</sup>lt;sup>371</sup> See G.A. Res. 60/251, U.N. Doc. A/RES/60/251 (Mar. 15, 2006), <a href="https://perma.cc/M3HV-WTYR">https://perma.cc/M3HV-WTYR</a>; UN Charter, ch. 4, <a href="https://perma.cc/YN2T-Q3ZQ">https://perma.cc/YN2T-Q3ZQ</a>.

<sup>&</sup>lt;sup>372</sup> U.S. Mission to Int'l Orgs. in Geneva, End-of-Session General Statement of the United States of America (Oct. 13, 2021), https://perma.cc/35PG-VH3R (stating that "there are no universally-recognized human rights specifically related to the environment" and that "we do not believe there is a basis in international law to recognize a 'right to a clean, healthy, and sustainable environment,' either as an independent right or a right derived from existing rights"); Permanent Mission of the United Kingdom (UK) to the United Nations in Geneva, Explanation of Vote on a Right to Clean, Healthy, and Sustainable Environment (Oct. 8, 2021), https://perma.cc/87B7-KSMN (stating that "[a] human right to a clean, healthy and sustainable environment has not been agreed in any human rights treaty and it is yet to emerge as a customary right" and that "the recognition of the right in this resolution does not bind States to its terms"); U.N. GAOR, 76th Sess., 97th plen. mtg. at 6-7, U.N. Doc. A/76/PV.97 (July 28, 2022), https://perma.cc/U6C7-CQFW (representative from the Russian Federation explaining that "neither universal environmental agreements nor international human rights treaties address such concepts as a clean environment, a healthy environment and sustainable environment, or a concept similar to them" and that the Russian Federation is "convinced that the new right can be recognized only within the framework of international treaties that have been carefully prepared by competent experts and subsequently adopted by States"); id. at 7-8 (representative from Pakistan explaining that "the right to a clean, healthy and sustainable environment and the corresponding State obligations have not been legally established by the existing international human rights instruments" and, therefore, Pakistan "believe[s] that the draft resolution is a political resolution and not a legal affirmation"); id. at 11-12 (representative from the UK stating that "[t]here is no international consensus on the legal basis of the human right to a clean, healthy and sustainable environment," that the UK "do[es] not believe [such a right] has yet emerged as a customary right," and that the UK's basis for voting in favor of the resolution was because the issue is "of deep concern"); id. at 12 (representative of Canada stating that "there is currently no common or internationally agreed understanding of the content and scope of the right to a clean, healthy and sustainable environment"); id. at 13 (representative from Japan stating that "the right to a safe green, healthy and sustainable environment . . . has yet to be clearly defined" and that Japan voted for the resolution in view of, inter alia, "the aspiration . . . of sending a political message"); id. (representative from Belarus stating that "the identification and recognition of a separate category of human right can be achieved only by drawing up a universally legally binding instrument"); id. at 14 (representative from New Zealand stating that "the right to a clean, healthy and sustainable environment does not have a legally binding character," that such a right "has not been agreed in a treaty," that "this resolution does not state a role of customary international law or provide evidence of a new norm of customary international law," and that New Zealand "consider[s] that this resolution has the character of a political declaration"); id. at 15 (representative from India stating "there is no clear understanding and agreed definition of the terms 'clean,' 'healthy' and 'sustainable'" and that India voted in favor of the resolution in view of its "read[iness] to support any effort for a better environment and to further international cooperation for environmental protection"); U.S. Mission to the UN, Explanation of Position on the Right to a Clean, Healthy, and Sustainable Environment Resolution (July 28, 2022) (stating that "a right to a clean, healthy, and sustainable environment has not yet been established as a matter of customary international law; treaty law does not yet provide for such a right; and there is no legal relationship between such a right and existing international law" and that the United States "support[ed] this resolution as it sets forth . . . moral and political aspirations"), https://perma.cc/P4T9-7TCP.

<sup>&</sup>lt;sup>373</sup> U.S. Mission to the UN, *Explanation of Position on the Right to a Clean, Healthy, and Sustainable Environment Resolution* (July 28, 2022), <a href="https://perma.cc/P4T9-7TCP">https://perma.cc/P4T9-7TCP</a>; U.S. Mission to Int'l Orgs. in Geneva, *HRC-52 Right to Environment Resolution* (Apr. 6, 2023), <a href="https://perma.cc/E5KX-762V">https://perma.cc/E5KX-762V</a>. The United States has indicated its support

#### **CHAPTER V**

# THE INTERNATIONAL LEGAL FRAMEWORK FOR ASSESSING THE LEGAL CONSEQUENCES OF AN UNEXCUSED BREACH BY A STATE OF AN OBLIGATION IN RESPECT OF CLIMATE CHANGE

5.1 The preceding chapters discuss States' obligations under international law in respect of climate change. The consequences of breaching any such obligation are governed by the rules of customary international law regarding State responsibility. This chapter describes the framework for key elements of such an analysis. First, in **Part A**, it describes the conditions precedent for an internationally wrongful act, which include the requirement that the action or omission at issue must constitute an unexcused breach of an international legal obligation in force for the State at the time of its conduct. Second, this chapter sets out in **Part B** the legal consequences of a violation of an international obligation—including both a continued duty to perform the obligation that has been breached and the obligation to make full reparation for the injury caused by the internationally wrongful act.

#### A. Framework of State Responsibility

- 5.2 As a general matter, an internationally wrongful act of a State requires (*i*) conduct attributable to the State under international law that (*ii*) constitutes an unexcused breach of an international legal obligation in force for the State at the time of its conduct.<sup>374</sup>
- 5.3 Under customary international law, only an act or omission attributable to a State can give rise to State responsibility. This means that, generally, conduct is attributable to a State at the international level only if it was conducted by organs of government or others who have

for the creation of an intergovernmental working group with the goal of reaching a common understanding of the definition and nature of such a right that could be universally considered and reflected as a right under international law in an appropriate instrument. *Id*.

See ILC, Draft Articles on State Responsibility for Internationally Wrongful Acts, with Commentaries, art. 2 and cmt. 1, U.N. Doc. A/56/10, reprinted in [2001] Y.B. Int'l L. Comm'n 31, A/CN.4/SER.A/2001/Add.1 (Part 2), https://perma.cc/F5Q7-L66Z [see Dossier No. 82] ("ILC Draft Articles on State Responsibility"). The law of State responsibility recognizes several circumstances that preclude the wrongfulness of conduct that would otherwise not be in conformity with the international obligations of the State concerned, so long as such circumstances do not conflict with a peremptory norm. Such circumstances are consent, self-defense, countermeasures, force majeure, distress, and necessity. These circumstances do not terminate or suspend a State's obligation but rather provide a justification or excuse for non-performance. See, e.g., Gabčíkovo-Nagymaros Project, 1997 I.C.J. at 39, ¶ 48. The United States wishes to note that it refers herein to various aspects of the ILC Draft Articles. Since the time of their development, the United States has made clear that, while it considers most of the ILC Draft Articles to be reflective of customary international law, it views certain Draft Articles or elements thereof as proposed progressive development of the law and not necessarily reflective of customary international law.

acted on the instructions or under the direction or control of those organs (in other words, as agents of the State).<sup>375</sup> By contrast, purely private conduct is not attributable to a State.<sup>376</sup>

A State breaches an international obligation when there is nonconformity between the conduct required of the State by that obligation and the actual conduct of the State.<sup>377</sup> Moreover, a breach can occur only if an international legal obligation is in force for a State at the time of the conduct in question.<sup>378</sup> In other words, under customary international law, when a primary obligation comes into force for a State, that State incurs no responsibility retrospectively for conduct in which the State engaged before the obligation attached.<sup>379</sup> Therefore, with respect to international obligations in respect of climate change, no responsibility may attach for actions or omissions prior to the date on which an international legal obligation arose with respect to that State. This means that conduct predating the entry into force or crystallization of a primary obligation cannot give rise to State responsibility.

# B. Legal Consequences for a State That Has Violated an Obligation in Respect of Climate Change

5.5 A State's breach of an international obligation has certain consequences. Assuming no circumstances precluding wrongfulness exist, the breach has no impact on the responsible State's continued duty to perform the obligation that has been breached and to cease the

<sup>&</sup>lt;sup>375</sup> See ILC Draft Articles on State Responsibility, ch. II, cmt. 2. See also id. art. 4 ("Conduct of organs of a State"), art. 5 ("Conduct of persons or entities exercising elements of governmental authority"), art. 7 ("Excess of authority in contravention of instructions"), art. 8 ("Conduct directed or controlled by a State").

<sup>&</sup>lt;sup>376</sup> See, e.g., id. ch. II, cmt. 3.

<sup>&</sup>lt;sup>377</sup> See id. art. 12 and cmt. 2.

<sup>&</sup>lt;sup>378</sup> See Island of Palmas (Netherlands/United States of America), 2 R.I.A.A. 829, 845 (Apr. 4, 1928) ("a juridical fact must be appreciated in the light of the law contemporary with it, and not of the law in force at the time when a dispute in regard to it arises or falls to be settled"), <a href="https://perma.cc/H45V-AA8H">https://perma.cc/H45V-AA8H</a>. Accord ILC Draft Articles on State Responsibility, art. 13 and cmt. 2 (discussing, for example, cases of the U.S.-Great Britain Mixed Commission concerning the conduct of British authorities who had seized U.S. vessels engaged in the slave trade, in which the Commission had to determine whether each incident occurred before or after slavery was considered "contrary to the law of nations"). Similarly, the European Court of Human Rights has denied claims relating to periods during which the European Convention on Human Rights was not in force for the State concerned. See id. cmt. 3 (citing X v. Germany, Application No. 1151/61, Council of Europe, European Commission on Human Rights, Recueil des décisions, No. 7 (March 1962), 119 (1961), and later decisions).

<sup>&</sup>lt;sup>379</sup> See ILC Draft Articles on State Responsibility, art. 13 and cmt. 5 (noting that this is the case "even when a new peremptory norm of general international law comes into existence").

relevant internationally wrongful conduct.<sup>380</sup> The responsible State must also make full reparation for the injury caused by the internationally wrongful act.<sup>381</sup>

5.6 Consistent with the duty to make full reparation, the State must endeavor to "as far as possible, wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed."<sup>382</sup> The following sections set out principles related to the legal consequences for a State concerning its duty to make reparation following its unexcused breach of an international obligation that may apply in respect of climate change.

#### i. Causation

5.7 Under the customary international law of State responsibility, a causal link between the internationally wrongful act and any injury alleged is required. Such a link ensures that reparation is tied to "injury resulting from and ascribable to the wrongful act, rather than any and all consequences flowing from an internationally wrongful act." A determination regarding any reparation that is owed cannot be based on events or circumstances not attributable to the alleged breach. 384

<sup>&</sup>lt;sup>380</sup> See generally id. arts. 29, 30, and commentary thereto. The ILC Draft Articles on State Responsibility also refer to an obligation for the responsible State to "offer appropriate assurances and guarantees of non-repetition, if circumstances so require." *Id.* art. 30(b). This obligation does not reflect customary international law and there existed fundamental skepticism at the time of the Draft Articles' conclusion, even among Commission members, as to whether there can be any legal obligation to provide assurances and guarantees of non-repetition. *See* U.N. GAOR, 55th Sess., Supp. No. 10, at 29, ¶ 88, U.N. Doc. A/55/10 (2000), <a href="https://perma.cc/L9EZ-QYQY">https://perma.cc/L9EZ-QYQY</a>.

<sup>&</sup>lt;sup>381</sup> See generally ILC Draft Articles on State Responsibility, art. 31 and commentary thereto; see also Factory at Chorzów, 1928 P.C.I.J. (ser. A) No. 17, at 47 (Sept. 13), <a href="https://perma.cc/9FNR-VPM6">https://perma.cc/9FNR-VPM6</a>.

<sup>&</sup>lt;sup>382</sup> Factory at Chorzów, 1928 P.C.I.J. at 47.

<sup>&</sup>lt;sup>383</sup> See generally ILC Draft Articles on State Responsibility, art. 31 and cmt. 9; H.L.A. HART & TONY HONORÉ, CAUSATION IN THE LAW 422 (2d ed. 1985) (noting that it is generally the claimant's burden to "persuade the tribunal of fact of the existence of causal connection between wrongful act and harm") (U.S. Annex 4) ("HART & HONORÉ"); see also Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua), 2018 I.C.J. 15, 56-57, ¶ 147 (Feb. 2), <a href="https://perma.cc/V7Q6-4ZGZ">https://perma.cc/V7Q6-4ZGZ</a> ("Certain Activities Carried Out by Nicaragua") (concluding that impairment or loss was a "direct consequence" of Nicaragua's activities); Islamic Republic of Iran v. United States of America, AWD 601-A3/A8/A9/A14/B61-FT, ¶ 153 (July 17, 2009), 38 IRAN-U.S. CL. TRIB. REP. 197, 257 (2009), <a href="https://perma.cc/8XBX-MXPQ">https://perma.cc/8XBX-MXPQ</a> (noting that in order to succeed in its claim for compensation "Iran, as the Claimant, is required to prove[] that it has suffered losses . . . and that such losses were caused by the United States[] . . . ." (emphasis added) (internal footnote omitted)); cf. Ahmadou Sadio Diallo (Republic of Guinea v. Democratic Republic of the Congo), 2012 I.C.J. 324, 342, ¶ 49 (June 19), <a href="https://perma.cc/W3MH-DRQV">https://perma.cc/W3MH-DRQV</a> ("Ahmadou Sadio Diallo") (declining to award damages for loss of post-expulsion professional remuneration, which the Court determined to be "highly speculative").

<sup>&</sup>lt;sup>384</sup> See ILC Draft Articles on State Responsibility, art. 31 and cmt. 9.

- 5.8 To trigger a duty of reparation, the act or omission of a State that constitutes a breach must cause an outcome that would not have occurred absent the breach.<sup>385</sup> This test of "causality in fact" is not met if the same outcome would have occurred had the breaching State complied with its obligation.<sup>386</sup>
- 5.9 Additionally, in the words of the Court, a claimant must demonstrate a "sufficiently direct and certain causal nexus between the wrongful act . . . and the injury suffered." This requirement is often expressed by the idea of "proximate cause" of an injury. Proximate causation involves some additional criterion of "directness," "proximity" or "foreseeability." For example, in *Trail Smelter*, the arbitral tribunal declined to award

<sup>&</sup>lt;sup>385</sup> DAN B. DOBBS, THE LAW OF TORTS § 168 (2001) ("If the plaintiff would have suffered the same harm had the defendant not acted negligently, the defendant's conduct is not a cause in fact of the harm." (footnote omitted)) (U.S. Annex 5); HART & HONORÉ, 252-53 (U.S. Annex 4).

<sup>&</sup>lt;sup>386</sup> See, e.g., Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v. Serbia and Montenegro), 2007 I.C.J. 43, 233-34, ¶ 462 (Feb. 26), https://perma.cc/B3G6-BJRQ ("Crime of Genocide") ("[The] question is whether there is a sufficiently direct and certain causal nexus between the wrongful act, the Respondent's breach of the obligation to prevent genocide, and the injury suffered by the Applicant, consisting of all damage of any type, material or moral, caused by the acts of genocide. Such a nexus could be considered established only if the Court were able to conclude from the case as a whole and with a sufficient degree of certainty that the genocide at Srebrenica would in fact have been averted if the Respondent had acted in compliance with its legal obligations. However, the Court clearly cannot do so. As noted above, the Respondent did have significant means of influencing the Bosnian Serb military and political authorities which it could, and therefore should, have employed in an attempt to prevent the atrocities, but it has not been shown that, in the specific context of these events, those means would have sufficed to achieve the result which the Respondent should have sought." (emphasis added)); Certain Activities Carried Out by Nicaragua, 2018 I.C.J. at 26, ¶ 32; Ahmadou Sadio Diallo, 2012 I.C.J. at 332, ¶ 14; Islamic Republic of Iran v. United States of America, Award No. 602-A15(IV)/A24-FT ¶ 52 (July 2, 2014), 39 IRAN-U.S. CL. TRIB. REP. 359, 381 (2014), https://perma.cc/AJY5-CH64 (noting that if one were to reach the "conclusion that both tortious (or obligation-breaching) and nontortious (obligation-compliant) conduct of the same person would have led to the same result, one might question that the tortious (or obligation-breaching) conduct was condicio sine qua non of the loss the claimant seeks to recover").

<sup>&</sup>lt;sup>387</sup> Crime of Genocide, 2007 I.C.J. at 234, ¶ 462; see also Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda), 2022 I.C.J. 13, 48, ¶ 93 (Feb. 9), <a href="https://perma.cc/QEZ9-9T47">https://perma.cc/QEZ9-9T47</a> ("Armed Activities on the Territory of the Congo"); Certain Activities Carried Out by Nicaragua, 2018 I.C.J. at 26, ¶ 32; Ahmadou Sadio Diallo, 2012 I.C.J. at 331-332, ¶ 14.

<sup>&</sup>lt;sup>388</sup> See ILC Draft Articles on State Responsibility, art. 31 and cmt. 10. The requirement of proximate causation is reflected by many international courts and tribunals, including the U.S.-Germany Mixed Claims Commission, the General Claims Commission established between Mexico and the United States, and the Venezuelan Mixed Claims Commissions. See, e.g., Administrative Decision No. II (U.S. v. Germany), 7 R.I.A.A. 23, 29-30 (Nov. 1, 1923), <a href="https://perma.cc/2Y38-RCNQ">https://perma.cc/2Y38-RCNQ</a> (proximate cause is "a rule of general application both in private and public law"); United States Steel Products (U.S. v. Germany), 7 R.I.A.A. 44, 54-55, 63 (Nov. 1, 1923), <a href="https://perma.cc/SBT5-SL84">https://perma.cc/SBT5-SL84</a> (rejecting on proximate cause grounds a group of claims seeking reimbursement for war-risk insurance premiums); H. G. Venable (U.S. v. Mexico), 4 R.I.A.A. 219, 225 (July 8, 1927), <a href="https://perma.cc/A4CQ-HQSK">https://perma.cc/A4CQ-HQSK</a> (finding respondent Government responsible only for the damages that "can be considered as losses or damages caused by [the official] which are immediate and direct results of his [action]") (emphases added); Dix Case (U.S. v. Venezuela), 9 R.I.A.A. 119, 121 (undated), <a href="https://perma.cc/369C-CAQV">https://perma.cc/369C-CAQV</a> ("Governments like individuals are responsible only for the proximate and natural consequences of their acts. International as well as municipal law denies compensation for remote consequences, in the absence of evidence of deliberate intention to injure."). It is also applied by the Iran-U.S. Claims Tribunal, investment tribunals, and international human rights and criminal courts. See, e.g., Hoffland Honey Co. v. Natl. Iranian Oil Co., Award

damages for U.S. enterprises' claimed loss of business due to the fumes from the zinc and lead smelter in Canada because such damages were "too indirect, remote, and uncertain to be appraised." <sup>389</sup>

5.10 Although it is clear that anthropogenic GHG emissions are causing global warming,<sup>390</sup> to establish legal and factual causation giving rise to a reparation obligation, a State alleging injury would have to demonstrate that another State's violation of an international obligation led to a specific harm alleged. For example, if there were a breach of a reporting obligation under the Paris Agreement,<sup>391</sup> any reparation for alleged harm would be required to be tied to the breach of that primary obligation. Causality in fact would require proof that a particular harm would not have occurred but for the breach by the responsible State. Moreover, for legal causation, it would need to be established that the particular harm was foreseeable, and not "insufficiently direct and certain" at the time of the breach to be appraised.<sup>392</sup> Finally, any causation analysis would have to take into account that climate-related events—both extreme weather events and slow onset events—have multiple causes and are not driven solely by global warming resulting from anthropogenic GHG emissions.<sup>393</sup> Such an analysis would have

No. 22-495-2 (Jan. 26, 1983), 2 Iran-U.S.Cl.Trib. Rep. 41, 42 (1983), <a href="https://perma.cc/JAD8-DVXE">https://perma.cc/JAD8-DVXE</a>; Biwater Gauff (Tanzania) v. United Republic of Tanzania, ICSID Case No. ARB/05/22, Award, ¶¶ 785, 787, 798 (July 24, 2008), <a href="https://perma.cc/ZMY8-ZXEG">https://perma.cc/ZMY8-ZXEG</a>; Case of Paulet v. The United Kingdom (app. no. 6219/08), Judgment (ECtHR May 13, 2014), 18, ¶ 73, <a href="https://perma.cc/ZTP3-FSEM">https://perma.cc/ZTP3-FSEM</a> ("However, in the absence of a proximate causal link between the procedural violation found and financial loss sustained by the applicant by reason of the confiscation order, the Court cannot make an award to the applicant under this head."); Case of the Prosecutor v. Ahmad Al Faqi Al Mahdi, Case No. ICC-01/12-01/15, ICC Trial Chamber VIII, Reparations Order, ¶ 75 (Aug. 17, 2017), <a href="https://perma.cc/WR55-8EB2">https://perma.cc/WR55-8EB2</a>. See also BIN CHENG, GENERAL PRINCIPLES OF INTERNATIONAL LAW AS APPLIED BY INTERNATIONAL COURTS AND TRIBUNALS 244 (1953) ("[I]t is 'a rule of general application both in private and public law,' equally applicable in the international legal order, that the relation of cause and effect operative in the field of reparation is that of proximate causality in legal contemplation. In order that a loss may be regarded as a consequence of an act for purposes of reparation, either the loss has to be the proximate consequence of the act complained of, or the act has to be the proximate cause of the loss.") (U.S. Annex 6).

Trail Smelter Arbitration (U.S./Can.), 3 R.I.A.A. 1911, 1931 (Decision of Apr. 16, 1938), <a href="https://perma.cc/6WKS-RWDD">https://perma.cc/6WKS-RWDD</a>. See also M/V "Virginia G" (Panama/Guinea-Bissau), 2014, ITLOS Reports 4, 118-19 (Apr. 14), <a href="https://perma.cc/F3CB-SVJE">https://perma.cc/F3CB-SVJE</a> (limiting damages to only the "direct consequences of the illegal confiscation" and finding the alleged damage to be "too indirect and remote to be financially assessable"); "Alabama Claims," Protocol VII, Record of the proceedings of the Tribunal of Arbitration at the fifth conference held at Geneva, in Switzerland, on the 19th of June, 1872, reprinted in J. C. BANCROFT DAVIS, REPORT OF THE AGENT OF THE UNITED STATES BEFORE THE TRIBUNAL OF ARBITRATIONS AT GENEVA 21-22 (1873) (excluding "indirect" damages altogether) (U.S. Annex 7).

<sup>&</sup>lt;sup>390</sup> See supra Chapter II.A.i.

<sup>&</sup>lt;sup>391</sup> See supra Chapter III.B for a description of Parties' obligations under the Paris Agreement.

<sup>&</sup>lt;sup>392</sup> Armed Activities on the Territory of the Congo, 2022 I.C.J. at 48, ¶ 94; see also Ahmadou Sadio Diallo, 2012 I.C.J. at 342, ¶ 49 (declining to award damages for "highly speculative" losses).

<sup>&</sup>lt;sup>393</sup> See supra Chapter II.A.ii.

to find that a State's unexcused breach of an international obligation caused harm that would not otherwise have occurred.

# ii. Reparation

5.11 The law of State responsibility contemplates a variety of forms of reparation. As the Court has explained, "[f]ull reparation for the injury caused by the internationally wrongful act shall take the form of restitution, compensation and satisfaction, either singly or in combination."<sup>394</sup> While restitution most closely conforms to the general principle that the responsible State should "wip[e] out the consequences of its wrongful act," this is not always possible to achieve, in which case other forms of reparation should be considered.<sup>395</sup> Reparation under international law excludes punitive damages.<sup>396</sup>

#### iii. Other Relevant Principles

5.12 As is the case with any consideration of reparation for injury caused by an internationally wrongful act, the assessment of damages depends also on the issue of apportionment of liability among multiple responsible States, including when the harm is caused in part by the conduct of the injured State or States themselves.<sup>397</sup>

<sup>&</sup>lt;sup>394</sup> Armed Activities on the Territory of the Congo, 2022 I.C.J. at 50, ¶ 101 (quoting ILC Draft Articles on State Responsibility, art. 34). See also Rainbow Warrior (New Zealand v. France), France-New Zealand Arbitration Tribunal, 2 R.I.A.A. 272-74, ¶¶ 116-128 (Apr. 30, 1990), <a href="https://perma.cc/MV83-QG5S">https://perma.cc/MV83-QG5S</a>; Crime of Genocide, 2007 I.C.J. at 234, ¶ 463 ("It is however clear that the Applicant is entitled to reparation in the form of satisfaction, and this may take the most appropriate form . . . of a declaration in the present Judgment . . . ."); Certain Activities and Construction of a Road, 2015 I.C.J. at 739, ¶ 224 ("In the light of its reasoning above, the Court's declaration that Costa Rica violated its obligation to conduct an environmental impact assessment is the appropriate measure of satisfaction for Nicaragua.").

<sup>&</sup>lt;sup>395</sup> See ILC Draft Articles on State Responsibility, art. 34 and cmt. 2.

<sup>&</sup>lt;sup>396</sup> Armed Activities on the Territory of the Congo, 2022 I.C.J. at 50, ¶ 102 ("[T]he Court emphasizes that it is well established in international law that reparation due to a State is compensatory in nature and should not have a punitive character." (internal citation omitted)); see also ILC Draft Articles on State Responsibility, art. 36 and cmt. 4 ("[T]he function of article 36 is purely compensatory, as its title indicates. Compensation corresponds to the financially assessable damage suffered by the injured State or its nationals [and] is not concerned to punish the responsible State, nor does compensation have an expressive or exemplary character.").

<sup>&</sup>lt;sup>397</sup> See ILC Draft Articles on State Responsibility, art. 39 and commentary thereto. See, e.g., Ahmadou Sadio Diallo, 2012 I.C.J. at 337, ¶ 31 (recognizing the relevance of Diallo's own conduct in determining the loss allegedly suffered). Relatedly, the mitigation of damage, while not a freestanding legal obligation, is an additional customary international law principle and may further curtail recovery. Gabčikovo-Nagymaros Project, 1997 I.C.J. at 55, ¶ 80. See also JAMES CRAWFORD, STATE RESPONSIBILITY: THE GENERAL PART 494, § 15.4.2 (2013) ("[D]amage which occurs due to an injured state's failure to act reasonably to mitigate its loss is not 'caused' by the responsible state's wrongful conduct. This is true even for a wholly innocent victim of wrongful conduct." (footnote omitted)) (U.S. Annex 8).

# **CHAPTER VI**

## **CONCLUSION**

- 6.1 Climate change, as recognized in the UN General Assembly's resolution requesting an advisory opinion from the Court, is an "unprecedented challenge." As explained in this Statement, it is perhaps the most challenging collective action problem ever faced by humanity, and one that requires climate action by all States—and, in particular, by all the world's major greenhouse gas emitters. It is one that the United States takes with the utmost seriousness and is addressing as one of the Nation's highest priorities. 400
- 6.2 Since first becoming generally aware in the late 1980s of the risk of significant global harm that could be caused by anthropogenic GHG emissions, States have acted collectively to address climate change through the establishment and development of the UN climate change regime, which the UN General Assembly has affirmed is the primary international, intergovernmental forum for negotiating the global response to climate change.
- 6.3 It is to this regime—and the Paris Agreement in particular—that the Court should look when examining States' obligations in respect of climate change. States collectively designed that treaty regime to address the uniquely complex collective action problem posed by anthropogenic global warming, and it embodies the clearest, most specific, and most current expression of States' consent to be bound by international law in respect of climate change. Other, non-climate-change-specific obligations of States of a general nature that might be examined by the Court must be considered in light of the near-universal, climate-change-specific obligations States have undertaken in the Paris Agreement and the UNFCCC.
- 6.4 States' implementation of their obligations under the UN climate change regime and the Paris Agreement's "ambition mechanism"—together with diplomatic and cooperative efforts through the UN climate change regime and other fora and partnerships—provide the

<sup>&</sup>lt;sup>398</sup> G.A. Res. 77/276, pmbl.

 $<sup>^{399}</sup>$  Supra ¶¶ 2.1-2.2, 2.27-2.29.

<sup>&</sup>lt;sup>400</sup> Supra ¶¶ 1.9-1.14.

<sup>&</sup>lt;sup>401</sup> See Chapter II.B.

<sup>&</sup>lt;sup>402</sup> Supra n.9.

<sup>&</sup>lt;sup>403</sup> See Chapters II.B and III.

<sup>&</sup>lt;sup>404</sup> See Chapters II.B and III.

<sup>&</sup>lt;sup>405</sup> See Chapter IV.

best hope for protecting the climate system for the benefit of present and future generations. As described in this Statement, the Paris Agreement has already bent the curve on global warming and driven climate ambition and action both within the UN climate change regime and through numerous other greenhouse gas mitigation efforts, even before completing its first "ambition cycle." In providing an advisory opinion that underscores the centrality of States' obligations under the UN climate change regime, and that is mindful of the careful balance struck in the Paris Agreement to attract broad participation while also delivering increasingly ambitious climate action over time, the Court can reinforce the UN climate change regime and States' ongoing efforts as part of the Paris Agreement's ambition mechanism. 407

6.5 It is in this manner, at this important stage in the Paris Agreement's implementation, that the Court through its advisory opinion could support—and not disrupt—the vital and impactful efforts of States to address anthropogenic climate change through the UN climate change regime and particularly the Paris Agreement.

<sup>&</sup>lt;sup>406</sup> See supra ¶¶ 2.58-2.59, 3.36-3.45.

<sup>&</sup>lt;sup>407</sup> See, e.g., supra ¶¶ 2.49-2.56, 3.38-3.45.

Respectfully submitted,

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March 22, 2024

# CERTIFICATION

I, Richard C. Visek, representative of the United States of America, hereby certify that the copies of this Written Statement and all documents annexed to it are true copies of the originals.

Richard C. Visek Acting Legal Adviser

United States Department of State

March 22, 2024