



Washington, DC, USA

4–6 November 2022

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# United Nations Environment Assembly Committee Background Guide 2022

Written by Ashlee Ann Rolheiser, Tobias Willms, and Nicole Kach



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Dear Delegates,

Welcome to the 2022 National Model United Nations Conference in Washington, DC (NMUN•DC)! We are pleased to introduce you to our committee, the United Nations Environment Assembly (UNEA). This year's staff is Director Ashlee Rolheiser and Assistant Director Tobias Willms. Ashlee Ann Rolheiser (she/her) obtained a Bachelor of Commerce in Marketing and a Master's in International Affairs and Diplomacy, specializing in clean energy and SDG 5. Ashlee is the Manager of Philanthropy for Alberta and the Northwest Territories for the Canadian National Institute for the Blind. Tobias Willms (he/his) completed the First Legal Examination in Germany and thereby obtained a Magister's degree in Law from the University of Heidelberg. He currently works as a research assistant at Clifford Chance and is going to begin studying for a Master's in Law at the Trinity College Dublin in September 2022. The topics under discussion for UNEA are:

1. Protecting and Restoring Marine Habitats
2. Incorporating Nature-Based Solutions to Achieve the Sustainable Development Goals

This Background Guide serves as an introduction to the topics for this committee. However, it is not intended to replace individual research. We encourage you to conduct additional research, explore your Member State's policies in-depth, and examine the policies of other Member States to improve your ability to negotiate and reach consensus. In preparation for the conference, each delegation will use their research to draft and submit a [position paper](#). Guidelines are available in the [NMUN Position Paper Guide](#).

The [NMUN website](#) has many additional resources, including two that are essential both in preparation for the conference and as a resource during the conference. They are:

1. The [NMUN Delegate Preparation Guide](#), which explains each step in the delegate process, from pre-Conference research to the committee debate and resolution drafting processes. Please take note of the information on plagiarism, and the prohibition on pre-written working papers and resolutions. Delegates should not discuss the topics or agenda with other members of their committee until the first committee session.
2. The [NMUN Rules of Procedure](#), which includes the long and short form of the rules as well as an explanatory narrative and example script of the flow of procedure.

In addition, please review the mandatory [NMUN Conduct Expectations](#) on the NMUN website. They include the conference dress code and other expectations of all attendees. We want to emphasize that any instances of sexual harassment or discrimination based on race, gender, sexual orientation, national origin, religion, age, or disability will not be tolerated. If you have any questions concerning your preparation for the committee or the conference itself, please contact the Under-Secretary-General Ana Williamson at [usgana.dc@nmun.org](mailto:usgana.dc@nmun.org) or Secretary-General Adam Wolf at [secgen.dc@nmun.org](mailto:secgen.dc@nmun.org).

We wish you all the best in your preparations and look forward to seeing you at the conference!

Sincerely,  
Ashlee Rolheiser, Director  
Tobias Willms, Assistant Director



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## Committee Overview

### Introduction

Twenty years after the adoption of the *Rio Declaration on Environment and Development* (1992), the United Nations Conference on Sustainable Development called for the strengthening and updating of the United Nations Environment Programme (UNEP) so that it could better execute its mandate.<sup>1</sup> In 2013, the 58-member Governing Council of UNEP adopted resolution 27/2, which expanded the Governing Council to universal membership and requested the General Assembly change its designation to the United Nations Environment Assembly (UNEA), which was done with General Assembly resolution 67/251 of the same year.<sup>2</sup> UNEA now serves as the governing body of UNEP and is the international community's highest-level decision-making body on environmental matters.<sup>3</sup> UNEA's universal membership strengthens its own role and the role of UNEP in international affairs, and is designed to increase the responsiveness of Member States in developing environmental policy.<sup>4</sup> UNEA meets biennially and has held five regular sessions, the most recent of which was held in February 2021 with the theme "Strengthening Actions for Nature to Achieve the Sustainable Development Goals."<sup>5</sup> As a result of the COVID-19 pandemic, the Fifth Session of UNEA was split into two separate sessions, with the first held in February 2021 and the most recent held in person in March of 2022.<sup>6</sup>

UNEP was originally a result of a concerted effort made during the 1972 UN Conference on Human Environment in Stockholm, Sweden.<sup>7</sup> Subsequently, the General Assembly established UNEP as the official body concerned with environmental issues within the United Nations (UN).<sup>8</sup> Since 1972, UNEP has played a significant role in coordinating environmental policy across the UN system.<sup>9</sup> UNEA governs and sets policy for UNEP, whose mission is to "provide leadership and encourage partnership in caring for the environment" in order to develop environmental-friendly practices and policies in the UN system.<sup>10</sup> UNEP encourages international, regional, and local coordination for environmental issues, while also ensuring various other UN entities take environmental impacts into account when executing their missions.<sup>11</sup> UNEP reports both to the General Assembly and the Economic and Social Council (ECOSOC).<sup>12</sup>

UNEP served as the secretariat and was a main contributor for the planning and execution of the UN Conference on Environment and Development (UNCED) in 1992, the outcomes of which included the *Rio Declaration on Environment and Development* (1992) and *Agenda 21* (1992).<sup>13</sup> UNCED marked a turning point for international collaboration to preserve biodiversity and the climate with the *Convention on Biological Diversity* (1992) and the *UN Framework Convention on Climate Change* (1992), both opening for signature at the summit.<sup>14</sup> The *Convention to Combat Desertification* (1994), another major agreement, was adopted two years later.<sup>15</sup>

### Governance, Structure, and Membership

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<sup>1</sup> UN General Assembly, *The Future We Want*, (A/RES/66/288), 2012, p. 18.

<sup>2</sup> UNEP, *About the United Nations Environment Assembly*.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> UNEP, *Fourth Session of the United Nations Environment Assembly*.

<sup>6</sup> UNEP, *Fifth session of the United Nations Environment Assembly*, 2022.

<sup>7</sup> UN Conference on the Human Environment, *Report of the United Nations Conference on the Human Environment* (A/CONF.48/14/Rev.1), 1972.

<sup>8</sup> UN General Assembly, *Institutional and financial arrangements for international environmental cooperation* (A/RES/2997(XXVII)), 1972.

<sup>9</sup> New Zealand Ministry of Foreign Affairs and Trade, *United Nations Handbook, 2021-22*, 2021, pp. 263.

<sup>10</sup> UNEP, *About UN Environment Programme*.

<sup>11</sup> New Zealand Ministry of Foreign Affairs and Trade, *United Nations Handbook, 2021-22*, 2021, pp. 263.

<sup>12</sup> Ibid.

<sup>13</sup> Johnson, *UNEP The First 40 Years: A Narrative*, 2012, pp. 127-128.

<sup>14</sup> Convention on Biological Diversity, *The Rio Conventions*.

<sup>15</sup> Ibid.

In 2013, UNEA became the designated-policy-making body of UNEP, superseding the original 58-member Governing Council.<sup>16</sup> UNEA has universal membership, meaning that all 193 UN Member States are represented in the Assembly.<sup>17</sup> UNEA meets every two years to set priorities for global environmental policy, discuss developments for environmental legislation, and assist in the implementation of the *2030 Agenda for Sustainable Development* (2015).<sup>18</sup> In 2022, the meeting for UNEA-5.2 took place in Nairobi, Kenya.<sup>19</sup> The mandate of UNEA Secretariat is to organize and prepare the meetings for the governing bodies and to assure transparency with civil society.<sup>20</sup> The President of the fifth UNEA Session is H.E. Sveinung Rotevatn of Norway.<sup>21</sup>

The Committee of Permanent Representatives (CPR) was first established as a subsidiary inter-sessional organ to UNEA and meets at least four times a year.<sup>22</sup> The CPR was then strengthened by Governing Council decision 27/2, and now contributes to the preparation of UNEA agenda as well as holding advisory role in policy matters, and monitoring the implementation of decisions.<sup>23</sup> The CPR also holds discussion on key issues, promotes the inclusion of non-resident members of the Committee, and performs other tasks given by UNEA.<sup>24</sup> The CPR consists of all accredited Permanent Representatives to UNEP and is led by a five-member bureau that is elected for two years.<sup>25</sup>

UNEP relies on three main financial sources to facilitate its agenda: earmarked funds, the Environment Fund, and the UN Regular Budget.<sup>26</sup> Earmarked funds, also known as earmarked contributions, are funds appropriated for specific projects, themes, or countries.<sup>27</sup> These funds aim to expand and/or replicate the results of UN Environment's work in more countries and with more partners.<sup>28</sup> The Environment Fund aids in maintaining the capacity, balance, and efficiency needed for UNEP to function.<sup>29</sup> When contributing to the Environment Fund, Member States are encouraged to make financial contributions to the fund based on the Voluntary Indicative Scale of Contributions (VIS), which considers their respective socio-economic background to determine the predictability of a continued financial contribution.<sup>30</sup> The UN Regular Budget supports the functions of the Secretariat and its respective governing bodies, as well as the coordination of UNEP with the UN system and cooperation with global scientific communities.<sup>31</sup> In order to assist in the action plan of UNEP, UNEA approved an appropriation for the Environment Fund of \$200 million for the years 2022-2025.<sup>32</sup> In addition, the budget allocated funding of \$200,000 for program initiatives for 2022-2023 with \$164,000 of that being for UNEP's program of work.<sup>33</sup> Earmarked contributions and the Environment Fund are comprised of voluntary contributions, hence 95% of UNEP's income is received on a voluntary basis from Member States.<sup>34</sup>

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<sup>16</sup> UN General Assembly, *Institutional and financial arrangements for international environmental cooperation (A/RES/29979XXVII)*, 1972.

<sup>17</sup> UNEP, About the United Nations Environment Assembly.

<sup>18</sup> Ibid.

<sup>19</sup> UN, Department of Economic and Social Affairs, *Fifth Session of the United Nations Environment Assembly*.

<sup>20</sup> UNEP, *Secretariat of Governing Bodies and Stakeholders*.

<sup>21</sup> UNEP, *UNEA 5 Presidency and Bureau*.

<sup>22</sup> UNEP, *Committee of Permanent Representatives*.

<sup>23</sup> Ibid.

<sup>24</sup> Ibid.

<sup>25</sup> Ibid.

<sup>26</sup> UNEP, *How is UNEP funded*.

<sup>27</sup> UNEP, *How is UNEP funded*; UNEP, *Earmarked Contributions*.

<sup>28</sup> Ibid.

<sup>29</sup> UNEP, *How is UNEP funded*.

<sup>30</sup> UNEP, *Environment Fund*.

<sup>31</sup> UNEP, *How is UNEP funded*.

<sup>32</sup> UNEA, *Medium-term strategy for the period 2022-2025 and programme of work and budget for the biennium 2022-2023 (UNEP/EA.5/L.3)*, 2021, p. 2.

<sup>33</sup> Ibid.

<sup>34</sup> UNEP, *How is UNEP funded*.

## **Mandate, Functions, and Powers**

With the adoption of General Assembly resolution 27/2997 (XXVII) of 1972 on *Institutional and financial arrangements for international environmental cooperation*, UN Environment was created with a mandate to “promote international and regional environmental cooperation, develop environmental policy, highlight global and regional problems, facilitate the transfer of scientific knowledge, assist developing Member States in environmental matters, review reports of the Executive Director, and approve the annual program on the allocation of the Environment Fund.”<sup>35</sup> The first expansion of UN Environment’s mandate came after the *Rio Declaration on Environment and Development* (1992) via *Agenda 21* (1992), which outlined a list of priority areas for UN Environment’s future work and called for the program to gain “access to greater expertise and [...] adequate financial resources,” as well as closer collaboration with the rest of the UN system to fulfil these new tasks.<sup>36</sup>

United Nations Environment Assembly is mandated to “ensure the active participation of all relevant stakeholders in the governance of UNEP and to promote a strong science-policy interface.”<sup>37</sup> UNEA is also tasked with making major strategic and policy decisions at the international level, which UNEP then works to promote and implement.<sup>38</sup> UNEA works with Member States, regional bodies, UN entities, and civil society organizations in order to achieve these goals.<sup>39</sup>

In 1997, during its 19th regular session, the Governing Council of UNEP discussed the future role of UNEP, which resulted in the adoption of the *Nairobi Declaration on the Role and Mandate of the United Nations Environment Programme (Nairobi Declaration)* (1997).<sup>40</sup> As the 19th special session of the General Assembly was scheduled to address the implementation of *Agenda 21* later that year, the *Nairobi Declaration* represented a call to the UN system and its Member States to acknowledge UNEP’s role in sustainable development.<sup>41</sup> The General Assembly endorsed the *Nairobi Declaration*, which reaffirmed UNEP as the “leading global environmental authority.”<sup>42</sup>

UNEP’s authority was further affirmed by former UN Secretary-General Kofi Annan, who advocated for the reform and strengthening of its role as “the focal point for harmonization and coordination of environment-related activities.”<sup>43</sup> In October 1998, the Secretary-General provided recommendations to the General Assembly that further modified UNEP’s mandate, based on the recommendations by the UN Task Force on Environment and Human Settlements.<sup>44</sup> As a result of one of the recommendations, the UN Environment Management Group (EMG) was created with the Executive Director of UNEP serving as its chairperson.<sup>45</sup> The EMG mainly coordinates information-sharing and facilitate discussion on essential priorities in order to ensure the most efficient and cost-effective allocation of resources.<sup>46</sup> In 2017, current Secretary-General António Guterres has made reformation proposals in three major areas; development, management, and peace and security.<sup>47</sup> In an address made to the Peacebuilding Commission in 2021, Guterres stated that “an expanded role for the Peacebuilding Commission would enable us to work in

<sup>35</sup> UN General Assembly, *Institutional and financial arrangements for international environmental cooperation (A/RES/2997(XXVII))*, 1972.

<sup>36</sup> UN Conference on Environment and Development, *Agenda 21*, 1992, para. 38.21-38.23.

<sup>37</sup> UNEP, *United Nations Environment Assembly of the UNEP (UNEA)*, 2014.

<sup>38</sup> UNEP, *Engaging with UN Environment Assembly and Member States*.

<sup>39</sup> *Ibid.*

<sup>40</sup> Governing Council of UNEP, *Proceedings of the Governing Council at its nineteenth session (UNEP/GC.19/34)*, 1997, pp. 52-56.

<sup>41</sup> Governing Council of UNEP, *Proceedings of the Governing Council at its nineteenth session (UNEP/GC.19/34)*, 1997, pp. 52.

<sup>42</sup> UN General Assembly, *Programme for the Further Implementation of Agenda 21 (A/RES/S-19/2)*, 1997, p. 47; Governing Council of UNEP, *Proceedings of the Governing Council at its Nineteenth Session (UNEP/GC.19/34)*, 1997, pp. 52-56.

<sup>43</sup> UN General Assembly, *Renewing the United Nations: A Programme for Reform (A/51/950)*, p. 58.

<sup>44</sup> UN General Assembly, *Environment and human settlements: Report of the Secretary-General (A/53/463)*, 1998.

<sup>45</sup> *Ibid.*

<sup>46</sup> *Ibid.*

<sup>47</sup> UN, *United to Reform*.

more locations, supporting preventive measures related to climate change, health, [...] and more.”<sup>48</sup> This theme of building peace was seen in UNEA-5.2 through the resolutions that were presented through a draft treaty to end plastic pollution by 2024, and to research and prevent the use of dangerous chemicals.<sup>49</sup>

As the governing body of UNEP, UNEA develops international environmental law and policy that serves as a catalyst for intergovernmental action through the practice of multilateral agreement.<sup>50</sup> Under UNEA’s guidance, UNEP assesses the environment on a global, regional, and national scale and uses that information to hold relevant stakeholders accountable in developing proper action.<sup>51</sup> As the UN recognizes climate change as a predominant issue in its global efforts, UNEP continues to partner with various stakeholders to highlight the complexity of environmental issues in terms of conflict, disaster, security, and education.<sup>52</sup> UNEA also has the ability to create ad hoc committees and subsidiary bodies to implement specific environmental objectives when necessary.<sup>53</sup>

### **Recent Sessions and Current Priorities**

The theme of the second half of the current session (UNEA 5.2) was centered on “Strengthening Actions for Nature to Achieve the Sustainable Development Goals,” which called for action to protect nature and look for more sustainable practices to help achieve the Sustainable Development Goals (SDGs).<sup>54</sup> The main themes of the second session focused on nature for climate; nature for human and ecosystem health; nature for poverty eradication, jobs, and economic prosperity; and nature for sustainable food systems.<sup>55</sup> The Assembly accepted 14 resolutions aimed at achieving sustainable development growth, along with recovering after the COVID-19 Pandemic.<sup>56</sup> UNEA also held a special session on March 3 to 4 of March in 2022 to commemorate the 50<sup>th</sup> anniversary of the formation of the UNEP in 1972.<sup>57</sup> The special session was held in Nairobi, Kenya alongside the continuation of the fifth session and led by the Bureau and President of the sixth session of UNEA.<sup>58</sup> The outcome of the special session is outlined in UNEP/EA.SS.1/4, “Political declaration of the United Nations Environment Assembly to commemorate the fiftieth anniversary of the establishment of the United Nations Environment Programme.”<sup>59</sup> The document affirmed the previous work that has been done by UNEP and UNEA, aimed to strengthen sustainable development and environmental policy in accordance with the *2030 Agenda*, and discusses recovering from the effects of the pandemic.<sup>60</sup>

UNEA-5.2 took place on 28 February through 2 March 2022 in Nairobi, Kenya in an in-person meeting.<sup>61</sup> With the same theme from the first half of the conference, the agenda items included topics paramount to the Assembly’s agenda, including international environmental policy and governance issues; program of

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<sup>48</sup> UN DGC, *Secretary-General, Addressing Peacebuilding Commission, Says New Agenda for Peace ‘Is Our Platform to Update Promise’ of Saving Future Generations from War*, 2021.

<sup>49</sup> IISD, *UNEA Launches Negotiation of Plastic Pollution treaty, Science Body on Chemicals*, 2022.

<sup>50</sup> UNEP, *About the United Nations Environment Assembly*.

<sup>51</sup> UNEP, *Programme Performance Report 2016*, 2016, p. 57.

<sup>52</sup> UNEP, *Programme Performance Report 2016*, 2016, p. 32.

<sup>53</sup> UNEA, *Ministerial declaration of the United Nations Environment Assembly at its fourth session: Innovative solutions for environmental challenges and sustainable consumption and production (UNEP/EA.4/HLS.1)*, 2019.

<sup>54</sup> UNEP, *Fifth Session of the United Nations Environment Assembly*, 2022.

<sup>55</sup> Ibid.

<sup>56</sup> UNEP, *UN Environment Assembly concludes with 14 resolutions to curb pollution, protect and restore nature worldwide*, 2022.

<sup>57</sup> UNEP, *Fifth Session of the United Nations Environment Assembly*, 2022.

<sup>58</sup> UNEA, *Adjournment and resumption of the fifth session of the United Nations Environment Assembly (UNEP/EA.5/L.4)*, 2021.

<sup>59</sup> UNEP, *Political declaration of the special session of the United Nations environment Assembly to commemorate the fifth anniversary of the establishment of the United Nations Environment Programme (UNEP/EA.SS.1/4)*, 2022.

<sup>60</sup> Ibid.

<sup>61</sup> IISD, *UNEA Launches Negotiation of Plastic Pollution treaty, Science Body on Chemicals*, 2022.

work and budget and other administrative and budgetary issues; contributions to the meetings of the High-Level Political Forum on Sustainable Development and implementation of the environmental dimension of the *2030 Agenda for Sustainable Development*; and commemoration of the creation of UNEP by the UN conference on the Human Environment.<sup>62</sup> With plastic pollutants outlined as being a consistent and growing problem, UNEP adopted the resolution UNEP/EA.5/Res.14 on “End plastic pollution: Towards an international legally binding instrument.”<sup>63</sup> UNEP is requesting for an intergovernmental committee panel to be created in the middle of 2022 to find solutions to eliminate all plastics by 2024 and, by the end of 2024, to have a legally-binding agreement in place with regard to mitigating single-use plastics and their usage.<sup>64</sup> Other notable resolutions included UNEP/EA.5/Res.5 on “Nature-based solutions for supporting sustainable development,” which discussed the need for sustainable and environmental solutions through doing research and creating new guidelines for nature-based solutions.<sup>65</sup> Some other resolutions included “Environmental dimension of a sustainable, resilient and inclusive post COVID-19 recovery,” “Sustainable and resilient infrastructure,” and “Biodiversity and health.”<sup>66</sup>

In response to the present environmental crisis, UNEA adopted its decision 5/2, “For people and planet: the United Nations Environment Programme strategy for 2022–2025” to tackle climate change, loss of nature, and pollution.<sup>67</sup> A major issue emphasized was the increase of human activity and its relation to the contribution of the climate crisis, land degradation, and pollution.<sup>68</sup> In the last 50 years, the human population has doubled, and as such has vastly increased its activity and consumption.<sup>69</sup> Through the combined efforts of the 2022-2025 Strategy, UNEP will deliver an approach that will consist of applying scientific advances in data collection and utilization, multilateral cooperation ranging from stakeholders to indigenous communities, and will also collaborate with local and regional governments and organizations for greater environmental governance.<sup>70</sup> UNEA Preparatory meetings took place on 21-25 February 2022 with the CPR to prepare for the UNEA-5.2.<sup>71</sup> These meetings took place in a hybrid format in Nairobi, Kenya.<sup>72</sup>

According to UNEP’s *Adaptation Gap Report 2020*, a major shift of funds traditionally allocated for environmental action plans were diverted to medical needs as the COVID-19 pandemic affected the international community.<sup>73</sup> With climate adaptation becoming increasingly important, the redirection of funds back into environment programs will be crucial in advancing towards the targets set by the SDGs.<sup>74</sup> In this context, on World Environment Day 2021, UNEP launched a youth activism campaign called #GenerationRestoration, which focused on youth participation in the preserving of ecosystems and calls for governments to preserve ecosystems.<sup>75</sup> On World Environment Day 2021, UNEP also launched the UN Decade on Ecosystem Restoration together with the Food and Agriculture Organization of the United Nations (FAO).<sup>76</sup> This was launched to support the decade of restoration adopted in General Assembly

<sup>62</sup> UNEA, *UN Environment Assembly concludes with 14 resolutions to curb pollution, protect and restore nature worldwide*, 2022.

<sup>63</sup> UNEA, *UN Environment Assembly concludes with 14 resolutions to curb pollution, protect and restore nature worldwide, 2022*; UNEA, *Fifth Session, End Plastic Pollution: Towards an international legally binding instrument*, (UNEP/EA.5/L.23/ Rev.1), 2022.

<sup>64</sup> UNEA, *Fifth Session, End Plastic Pollution: Towards an international legally binding instrument*, (UNEP/EA.5/L.23/Rev.1), 2022.

<sup>65</sup> UNEP, *Nature-based solutions for supporting sustainable development*, (UNEP/EA.5/Res.5), 2022.

<sup>66</sup> UNEP, *Proceedings, Report, Ministerial Declaration, Resolutions and Decisions UNEA 5.2*, 2022.

<sup>67</sup> UNEA, *For people and planet: the United Nations Environment Programme strategy for 2022-2025 to tackle climate change, loss of nature and pollution* (UNEP/EA.5/3Rev.1), 2021, p. 7.

<sup>68</sup> *Ibid.*

<sup>69</sup> *Ibid.*

<sup>70</sup> UNEA, *For people and planet: the United Nations Environment Programme strategy for 2022-2025 to tackle climate change, loss of nature and pollution* (UNEP/EA.5/Rev.1), 2021, p. 14.

<sup>71</sup> UNEA, *Resumed In-Person Fifth Session of the United Nations Environment Assembly*.

<sup>72</sup> *Ibid.*

<sup>73</sup> UNEP, *Adaptation Gap Report 202: Executive Summary*, 2021, p. 6.

<sup>74</sup> *Ibid.*

<sup>75</sup> UNEP, *#GenerationRestoration-A You Call to Action*, 2021.

<sup>76</sup> UNEP, *World Environment Day 2021*, 2021.



resolution 73/284 on the “United Nations Decade on Ecosystem Restoration (2021–2030),” with the goal to encourage global citizens to become more active in ecosystem preservation and green community initiatives.<sup>77</sup> However, according to the UNEP Adaptation Report 2021, environmental funding has started decreasing and the gap in donating appropriate funding is widening in several countries.<sup>78</sup> For World Environment Day 2022, the theme is #OnlyOneEarth, with the message focusing on the promotion of environmental change for a sustainable planet to promote action from all individuals.<sup>79</sup> From 27 June 2022 through 1 July 2022, the UN Ocean Conference in Lisbon, Portugal discussed Sustainable Development Goal 14 (life below water).<sup>80</sup> The aims of the conference is to draft creative solutions to reduce and eliminate pollution under water, implement sustainable solutions, and create new maritime technologies, under the theme, “scaling up ocean action based on science and innovation for the implantation of Goal 14: stocktaking, partnerships and solutions.”<sup>81</sup>

## Conclusion

UNEA’s inception represents a key step in UNEP’s mission to ensure the work of all UN entities, its Member States, and respective stakeholders aim to be environmentally sustainable and align with international law and policies concerning the environment.<sup>82</sup> The establishment of an international authority for environmental issues with a universal membership reflects the need for an integrated and comprehensive approach for environmental protection.<sup>83</sup>

## Annotated Bibliography

United Nations Environment Assembly, Fifth session. (2021). *For people and planet: the United Nations Environment Programme strategy for 2022–2025 to tackle climate change, loss of nature and pollution (UNEP/EA.5/3/Rev.1)*. Retrieved 13 April 2022 from: <https://undocs.org/en/UNEP/EA.5/3/Rev.1>

*This document serves as the action plan for UNEP that was approved at the first part of UNEA 5 for the years 2022-2025. It outlines the plan and programs established by UNEP in efforts to address the three planetary crises. The document also provides details on the usage and collaboration efforts of the UNEA to create a successful initiative for achieving the SDGs. Delegates will have access to the information on UNEP’s programmes and initiatives that help drive forward action towards the 2030 Agenda.*

United Nations Environment Programme. (2022). *Proceedings, Report, Ministerial Declaration, Resolutions and Decisions UNEA 5.2*. Retrieved 5 May 2022 from:

<https://www.unep.org/environmentassembly/unea-5.2/proceedings-report-ministerial-declaration-resolutions-and-decisions-unea-5.2>

*This source serves as the main page for the review of all the reports, resolutions, decisions and declarations made during UNEA 5.2. Here there are all the documents and decisions that have been uploaded from the United Nations Environment Assembly from March 2022. Delegates can refer back to the resolutions created on this page to help further their understanding about the work that was done at the second session of UNEA 5.2. This helps delegates further their understanding of what happened at the assembly and which particular solutions delegates want to focus on.*

United Nations Environment Programme. (2021). *Making Peace with Nature A scientific blueprint to tackle the climate, biodiversity and pollution emergencies*. Retrieved 8 April 2022 from:

<https://wedocs.unep.org/xmlui/bitstream/handle/20.500.11822/34948/MPN.pdf>

<sup>77</sup> UN General Assembly, *UN Decade on Ecosystem Restoration (2021-2030) (A/RES/73/284(2019))*, 2019.

<sup>78</sup> UNEP, *Adaptation Gap Report: Gathering the Storm*, 2021. p. 37.

<sup>79</sup> UNEP, *Theme, Only One Earth*.

<sup>80</sup> UN DGC, *About the United Nations 2022 Ocean Conference*.

<sup>81</sup> Ibid.

<sup>82</sup> World Summit on Sustainable Development, *Report of the World Summit on Sustainable Development (A/CONF.199/20)*, 2002.

<sup>83</sup> UNEA, *Delivering on the environmental dimensions of the 230 Agenda: Information note of the Executive Director (UNEP/EA.2?INF/4)*, 2016.

*This report serves as the basis for the scientific and governance-based understanding of the main environmental crisis that are affecting the sustainable development goals and human well-being. The report discusses the details of the degradation of ecosystems and biodiversity as well as the practices of Sustainable Consumption and Production that need to be implemented to reduce land degradation. The document also provides an in-depth explanation of the economic and social aspects of the environmental impact and how it affects the well-being of the economy, people, and the environment. Delegates will be able to understand from a technical perspective the causes of the climate crisis, land degradation, and the pollution crisis that UNEA has set as priorities for UNEA 5.*

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## 1. Protecting and Restoring Marine Habitats

*“By now you would all have heard the mantra, there can be no healthy planet without a healthy Ocean, and the Ocean’s health has been measurably in decline for some time now. We need to take to heart that all of us have been party to driving the decline in the Ocean’s health. Thus, we all have a role to play in developing and implementing the solutions.”<sup>84</sup>*

### **Introduction**

The livelihoods of more than three billion people are based on the biodiversity in marine and coastal areas.<sup>85</sup> Biodiversity refers to the number of types of plants and animals that live in a particular ecosystem.<sup>86</sup> It is influenced by evolution, as well as the increasing impact of human activities on the environment, which are expediting extinction rates.<sup>87</sup> Marine habitats that support biodiversity are characterized by their physical features and populations of plants or animals, which provide shelter and nourishment to marine species.<sup>88</sup> Approximately 70% of the earth’s surface is covered by water, and as a result, marine resources constitute a large portion of the global economy, with the present value of goods and services that are based on marine resources being estimated at \$2.5 trillion.<sup>89</sup> As 80% of all life on earth dwells in the oceans, and these waters account for half of the oxygen that humans need to survive, the preservation of marine ecosystems also plays an essential role in sustaining life on earth.<sup>90</sup> Additionally, the oceans act as natural carbon sinks by storing almost one third of the carbon dioxide generated by humans.<sup>91</sup> Oceans further help to impede climate change by absorbing more than 90% of the excess heat in the atmosphere.<sup>92</sup>

However, water pollution, marine litter, and microplastics affect many marine habitats and have already led to a significant reduction in biodiversity.<sup>93</sup> Microplastics are extremely small pieces of plastic which have detached from waste in the oceans and measure less than five millimeters in diameter.<sup>94</sup> These small pieces of plastic are ingested by various species, that could later be consumed by humans in seafood.<sup>95</sup> An analysis of existing studies conducted by the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection has shown that extremely small pieces of plastic are capable of passing through cell membranes and can cause cell damage.<sup>96</sup> Other dangers to marine habitats include acidification, which occurs when large amounts of greenhouse gases (GHG) are absorbed by the oceans, over-fishing, and eutrophication.<sup>97</sup> Eutrophication happens when excessive amounts of nitrogen

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<sup>84</sup> Thomson, Ride the Rising Wave to the 2022 UN Ocean Conference, *UN DESA SDG Blog*, 2022.

<sup>85</sup> UNCTAD, *UN oceans forum to chart course for 'Blue Deal' on economic recovery and sustainable growth*, 2022.

<sup>86</sup> UNEP, *UNEP and Biodiversity*, 2020.

<sup>87</sup> Ibid.

<sup>88</sup> New Zealand Government, Department of Conservation, *Understanding marine habitats*, 2022.

<sup>89</sup> UN Ocean Conference, *About the 2022 UN Ocean Conference*, 2022; UNCTAD, *UN oceans forum to chart course for 'Blue Deal' on economic recovery and sustainable growth*, 2022.

<sup>90</sup> UN Ocean Conference, *About the 2022 UN Ocean Conference*, 2022; UN DGC, *Goal 14: Conserve and sustainably use the oceans, seas and marine resources*, 2022.

<sup>91</sup> Ibid.

<sup>92</sup> UN DGC, *Goal 14: Conserve and sustainably use the oceans, seas and marine resources*, 2022.

<sup>93</sup> Secretariat of the Convention on Biological Diversity et al., *Impacts of Marine Debris on Biodiversity: Current Status and Potential Solutions*, *CBD Technical Series No. 67*, 2012, pp. 8.

<sup>94</sup> UNEP, *Microplastics*, 2022, p. 2; Secretariat of the Convention on Biological Diversity et al., *Impacts of Marine Debris on Biodiversity: Current Status and Potential Solutions*, *CBD Technical Series No. 67*, 2012, p. 9.

<sup>95</sup> UNEP, *Marine plastic debris and microplastics: Global lessons and research to inspire action and guide policy change*, 2016, pp. x-2.

<sup>96</sup> GESAMP, *Sources, fate and effects of microplastics in the marine environment: part two of a global assessment*, 2015, p. 78; UNEP, *Marine plastic debris and microplastics: Global lessons and research to inspire action and guide policy change*, 2016, p. 105.

<sup>97</sup> UN General Assembly, *The First Global Integrated Marine Assessment: World Ocean Assessment I*, 2016, pp. 52-68; UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015, pp. 5-23.

and phosphorus in the water promote the growth of certain algae that make the area uninhabitable for other species by consuming most of the oxygen.<sup>98</sup>

A notable example for the deterioration of marine habitats is the Great Barrier Reef in Australia, which has been severely affected by climate change.<sup>99</sup> Increasing water temperatures and water pollution have led to the loss of corals, thus destroying the habitats of many different species.<sup>100</sup> Although reefs constitute less than 0.1% of the surface area of all oceans, they provide habitats to almost one third of all named marine species.<sup>101</sup> As they can be found in more than 100 different territories, combatting the effects of their deterioration on biodiversity requires action on national, regional, and global levels.<sup>102</sup>

The protection of the oceans is therefore included in several international instruments, such as the *United Nations (UN) Convention on the Law of the Sea (UNCLOS)* (1982), the *Paris Agreement* (2015) and Sustainable Development Goal (SDG) 14 (life below water) of the *2030 Agenda for Sustainable Development* (2015).<sup>103</sup> As the highest-level decision-making body on the environment, the UN Environment Assembly (UNEA) has addressed the protection of marine ecosystems since its first session in 2014.<sup>104</sup>

### ***International and Regional Framework***

In order to meet a growing demand for a convention addressing water pollution and disputes between states over the right to use marine resources, UNCLOS was adopted in 1982.<sup>105</sup> According to its preamble, UNCLOS provides a fundamental framework to address any issues relating to the law of the sea and is further intended to promote the protection of marine environments and their living resources without unduly restricting state sovereignty.<sup>106</sup> UNCLOS establishes exclusive economic zones and contains provisions for the conservation and management of living resources in the oceans, as well as for the protection and preservation of the marine environment.<sup>107</sup> Member States are further required to cooperate in taking measures to prevent adverse effects of over-fishing and changes in populations that result from fishing.<sup>108</sup> Additionally, Part XII of UNCLOS addresses the protection and preservation of marine environments, with Article 192 establishing a corresponding duty for all Member States that are parties to the convention.<sup>109</sup>

In addition to this foundational document, the preamble of the *Paris Agreement* underlines the importance of conserving and enhancing carbon dioxide sinks and directly addresses the need to ensure the integrity of the oceans and their biodiversity.<sup>110</sup> As the example of the Great Barrier Reef illustrates, halting and reversing the effects of climate change has a direct impact on the protection of marine habitats.<sup>111</sup> Living

<sup>98</sup> UNEP, *Eutrophication*, 2022; UN General Assembly, *The First Global Integrated Marine Assessment: World Ocean Assessment I*, 2016, p. 52.

<sup>99</sup> Australian Government, Great Barrier Reef Marine Park Authority, *Great Barrier Reef Outlook Report 2019*, 2019, p. v.

<sup>100</sup> *Ibid.*

<sup>101</sup> UNEP, *Why protecting coral reefs matters*, 2022.

<sup>102</sup> Australian Government, Great Barrier Reef Marine Park Authority, *Great Barrier Reef Outlook Report 2019*, 2019, p. vi; UNEP, *Why protecting coral reefs matters*, 2022.

<sup>103</sup> COP 21, *Paris Agreement*, 2015; UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015, p. 23; UNCLOS III, *United Nations Convention on the Law of the Sea*, 1982.

<sup>104</sup> UNEA, *Marine plastic debris and microplastics (UNEP/EA.1/Res.6)*, 2014; UNEP, *About the United Nations Environment Assembly*, 2022.

<sup>105</sup> UN-OLA DOALOS, *The United Nations Convention on the Law of the Sea: (A historical perspective)*, 1998; UNCLOS III, *United Nations Convention on the Law of the Sea*, 1982, p. 25.

<sup>106</sup> UNCLOS III, *United Nations Convention on the Law of the Sea*, 1982, p. 25.

<sup>107</sup> *Ibid.*, p. 43, 65, 100.

<sup>108</sup> *Ibid.*, p. 65.

<sup>109</sup> *Ibid.*, p. 100.

<sup>110</sup> COP 21, *Paris Agreement*, 2015, p. 2.

<sup>111</sup> Australian Government, Great Barrier Reef Marine Park Authority, *Great Barrier Reef Outlook Report 2019*, 2019, p. v.

corals on the reefs provide habitats to a great number of species.<sup>112</sup> However, rising water temperatures and ocean acidification cause corals to release their micro-algae, which leads to coral bleaching and eventual death.<sup>113</sup> The report *Impacts of 1.5°C Global Warming on Natural and Human Systems* (2018) of the Intergovernmental Panel on Climate Change found that limiting global warming to 1.5°C instead of 2°C would have a significant impact on their survival.<sup>114</sup> The protection and sustainable use of biodiversity is also addressed by the *Convention on Biological Diversity* (CBD) (1992); Article 2 of which explicitly includes marine ecosystems in its scope.<sup>115</sup> It provides a framework for the conservation and sustainable use of biodiversity, as well as for the fair and equitable sharing of the benefits derived from the use of genetic resources.<sup>116</sup> The convention also requires contracting parties to monitor biodiversity and its impacts in their areas, and includes provisions on education and financial resources.<sup>117</sup> In order to implement the CBD, the *Strategic Plan for Biodiversity 2011–2020* was developed.<sup>118</sup> It outlines five strategic goals for the protection of biodiversity, which are split into the 20 Aichi Biodiversity Targets.<sup>119</sup> Target 11 calls for the introduction of marine protected areas and has been addressed in UNEA resolution EA.2/Res.10 (2016) on “Oceans and seas.”<sup>120</sup>

Furthermore, several conventions have been adopted within the International Maritime Organization.<sup>121</sup> Among these, the *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter* (London Convention) (1972) with its corresponding protocol focuses on the prevention of water pollution.<sup>122</sup> The London Convention establishes a “black-” and grey-list” approach by defining waste products that can never be dumped into the oceans, categorized onto the black list, and other products that require a special permit before they can be discarded into the water, categorized onto the grey list.<sup>123</sup> Any other waste requires a general permit from a designated national authority.<sup>124</sup> The protocol makes this system more restrictive by banning all waste disposal at sea that has not been explicitly permitted.<sup>125</sup>

The importance of preserving the oceans and their resources within the framework of UNCLOS is reiterated by the *Addis Ababa Action Agenda* (2015).<sup>126</sup> This document underlines the role of the oceans in combatting poverty, ensuring food security, and enabling sustainable economic growth.<sup>127</sup> By providing edible marine resources and a basis for the livelihoods of people living in coastal areas, healthy oceans play an important role in achieving several SDGs, such as SDGs 1 (no poverty), 2 (zero hunger), 8

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<sup>112</sup> UNEP, *Why protecting coral reefs matters*, 2022; UN DGC, *Decade of climate breakdown saw 14 per cent of coral reefs vanish*, 2021.

<sup>113</sup> Manfrino, *Can We Save Coral Reefs?*, *UN Chronicle*, 2017; UN DGC, *Decade of climate breakdown saw 14 per cent of coral reefs vanish*, 2021.

<sup>114</sup> IPCC, *Global Warming of 1.5°C*, 2018, p. 282.

<sup>115</sup> UNCEP, *Convention on Biological Diversity*, 1992, Article 1.

<sup>116</sup> *Ibid.*

<sup>117</sup> *Ibid.*, Articles 7, 12, 20.

<sup>118</sup> CBD Secretariat, *Strategic Plan for Biodiversity 2011–2020 and the Aichi Targets: “Living in Harmony with Nature”*, 2020.

<sup>119</sup> *Ibid.*

<sup>120</sup> *Ibid.*, *Oceans and seas (UNEP/EA.2/Res.10)*, 2016.

<sup>121</sup> IMO, *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention)*, 1972; IMO, *International Convention for the Prevention of Pollution from Ships*, 1973; IMO, *International Convention on Civil Liability for Oil Pollution Damage*, 1969; IMO, *1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter*, 1972, 1996.

<sup>122</sup> IMO, *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention)*, 1972; IMO, *1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter*, 1972, 1996.

<sup>123</sup> IMO, *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter*, 2019.

<sup>124</sup> *Ibid.*

<sup>125</sup> *Ibid.*

<sup>126</sup> UN General Assembly, *Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda) (A/RES/69/313)*, 2015, p. 19.

<sup>127</sup> *Ibid.*



(decent work and economic growth), and most notably, 14.<sup>128</sup> The targets of SDG 14 range from the prevention of marine pollution and acidification to the regulation of fishing, the sustainable management of marine ecosystems, and the implementation of UNCLOS.<sup>129</sup> Nevertheless, The SDGs Report 2021 found that the number of dead zones, which are areas within the oceans where oxygen levels are too low for marine life to exist, had increased from 400 to 700 between 2008 and 2019.<sup>130</sup> Dead zones are a consequence of extreme eutrophication, which is mainly caused by fertilizer, livestock waste, sewage discharge, and other nitrogen emissions into the oceans.<sup>131</sup>

At a regional level, the African Union has developed its own concept for a blue economy, a term which refers to the sustainable use of the oceans for economic purposes.<sup>132</sup> In addition to this, the decade from 2015 to 2025 was declared as the Decade of African Seas and Oceans to highlight the importance of the oceans in achieving the SDGs in Africa.<sup>133</sup> One of the goals of this campaign is the implementation of educational programs that enhance respect for the oceans and their resources.<sup>134</sup> Another approach aims at the reduction of marine waste by preventing and monitoring illegal disposals.<sup>135</sup> Additionally, the Association of Southeast Asian Nations (ASEAN) issued a declaration through its leaders in 2021, acknowledging the importance of sustainable use of the oceans, confirming its intention to establish a Blue Economy, and re-affirming its commitment to UNCLOS.<sup>136</sup> In order to achieve these goals, ASEAN leaders will establish regional collaboration as well as partnerships with other stakeholders in the private sector.<sup>137</sup> These partnerships through cooperation and their outcomes will be based on the legal frameworks outlined in UNCLOS.<sup>138</sup>

### **Role of the International System**

UNEA began addressing the protection of the oceans during its first session in 2014, when resolution EA.1/Res.6 on “Marine plastic debris and microplastics” was passed.<sup>139</sup> It established that the increasing use of plastic in combination with ineffective strategies for plastic waste disposal had led to higher amounts of plastic debris in the oceans.<sup>140</sup> UNEA also requested the Executive Director of the United Nations Environment Programme (UNEP) to provide assistance to Member States in introducing national or regional action plans on the issue.<sup>141</sup> With regard to this, the Coordinating Body on the Seas of East Asia (COBSEA) has developed an action plan that encompasses the monitoring, prevention, and reduction of marine litter from land- and sea-based sources.<sup>142</sup> Participating states are encouraged to develop national legal frameworks with support and coordination being provided by the COBSEA

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<sup>128</sup> UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015, pp. 15, 19, 23; UNCTAD, *UN oceans forum to chart course for 'Blue Deal' on economic recovery and sustainable growth*, 2022.

<sup>129</sup> UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015, p. 23.

<sup>130</sup> UNSD, *The Sustainable Development Goals Report 2021: Conserve and sustainably use the oceans, seas and marine resources for sustainable development*, 2021; UNSD, *The Sustainable Development Goals Report 2021: Extended Report – Goal 14*, 2021.

<sup>131</sup> UNSD, *The Sustainable Development Goals Report 2021: Conserve and sustainably use the oceans, seas and marine resources for sustainable development*, 2021.

<sup>132</sup> AU Directorate of Information & Communication, *African Union Commemorates the African Day of Seas and Oceans*, 2021.

<sup>133</sup> AU Assembly, *Decision on the Adoption and Implementation of the 2050 Africa's Integrated Maritime Strategy (2050 AIM Strategy): Doc. Assembly/AU/16(XXII) Add.1 (Assembly/AU/Dec.496(XXII))*, 2014; AU Directorate of Information & Communication, *African Union Commemorates the African Day of Seas and Oceans*, 2021.

<sup>134</sup> AU Directorate of Information & Communication, *African Union Commemorates the African Day of Seas and Oceans*, 2021.

<sup>135</sup> Ibid.

<sup>136</sup> ASEAN, *ASEAN Leader's Declaration on the Blue Economy*, 2021.

<sup>137</sup> Ibid.

<sup>138</sup> Ibid.

<sup>139</sup> UNEA, *Marine plastic debris and microplastics (UNEP/EA.1/Res.6)*, 2014.

<sup>140</sup> Ibid., p. 21.

<sup>141</sup> Ibid., p. 22.

<sup>142</sup> COBSEA Secretariat, *COBSEA Regional Action Plan on Marine Litter 2019*, 2019, p. 5.

Secretariat.<sup>143</sup> A similar action plan based on the implementation of international conventions and European Union (EU) directives has been developed and will be updated in 2022 by the OSPAR mechanism, a cooperation between 15 governments and the EU.<sup>144</sup>

In 2017, UNEA convened an open-ended ad hoc expert group on marine litter and microplastics.<sup>145</sup> They identified a lack of cooperation between international mechanisms and local efforts as one of the core challenges in combatting plastic litter, and many of the experts concurred that a new global agreement would be required to address the issue.<sup>146</sup> As a result, UNEA discussed and then adopted a resolution calling for the development of an international and legally binding document concerning the end of plastic pollution at its recent fifth session (UNEA-5.2).<sup>147</sup> In order to achieve this, an Intergovernmental Negotiating Committee (INC) was established with the aim of preparing a draft agreement by the end of 2024.<sup>148</sup> To support its work, UNEP will convene a forum to share best practices among all relevant stakeholders by the end of 2022.<sup>149</sup> Once the work of the INC is completed, a diplomatic conference will be held to adopt the new agreement which, according to UNEP, is expected to cover the full lifecycle of plastic from its production to its disposal.<sup>150</sup>

The committee has additionally addressed the effects of climate change and ocean acidification on marine habitats in its resolutions EA.2/Res.12 (2016) and EA.4/Res.13 (2019) on “Sustainable coral reefs management.”<sup>151</sup> UNEA has recommended educational programs on the importance of coral reefs and encourages cooperation between Member States, the private sector and global partnerships such as the International Coral Reef Initiative (ICRI), which consists of several nations, international organizations, and non-government organizations, and intends to preserve coral reefs and their related ecosystems.<sup>152</sup> In addition to this, UNEA has invited Member States to establish technical collaboration and an exchange of best practices on the protection of the oceans from land-based activities.<sup>153</sup>

The General Assembly adopted resolution 61/105 (2006), which called for the implementation of UNCLOS in establishing sustainable fisheries.<sup>154</sup> Furthermore, it convened a high-level UN conference, the Ocean Conference, in 2017.<sup>155</sup> This event resulted in a declaration called “Our Ocean, Our Future: Call for Action” that was endorsed by the General Assembly.<sup>156</sup> Additionally, Member States, the private sector, and other stakeholders made more than 1,300 voluntary commitments for the implementation of

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<sup>143</sup> Ibid., p. 10.

<sup>144</sup> OSPAR Commission, *About OSPAR*, 2022; OSPAR Commission, *Action Plan for Marine Litter*, 2022; OSPAR Commission, *Marine Litter Regional Action Plan*, 2014.

<sup>145</sup> UNEA, *Marine litter and microplastics (UNEP/EA.3/Res.7)*, 2017, p. 3.

<sup>146</sup> UNEA, *Marine plastic litter and microplastics (UNEP/EA.4/Res.6)*, 2019, p. 2; UNEA, *Report on the work of the ad hoc open-ended expert group on marine litter and microplastics at its fourth meeting (UNEP/AHEG/4/7)*, 2020, p. 33.

<sup>147</sup> UNEA, *End plastic pollution: Draft resolution – Towards an international legally binding instrument (UNEP/EA.5/L.23/Rev.1)*, 2022; UNEP, *Historic day in the campaign to beat plastic pollution: Nations commit to develop a legally binding agreement*, 2022.

<sup>148</sup> UNEP, *Historic day in the campaign to beat plastic pollution: Nations commit to develop a legally binding agreement*, 2022.

<sup>149</sup> Ibid.

<sup>150</sup> Ibid.

<sup>151</sup> UNEA, *Sustainable coral reefs management (UNEP/EA.2/Res.12)*, 2016; UNEA, *Sustainable coral reefs management (UNEP/EA.4/Res.13)*, 2019.

<sup>152</sup> Ibid., p. 2; UNEA, *Sustainable coral reefs management (UNEP/EA.4/Res.13)*, 2019, p. 3; ICRI, *About us*, 2021.

<sup>153</sup> UNEA, *Protection of the marine environment from land-based activities (UNEP/EA.4/Res.11)*, 2019, p. 2.

<sup>154</sup> UN General Assembly, *Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments (A/RES/61/105)*, 2006.

<sup>155</sup> UN General Assembly, *United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development (A/RES/70/226)*, 2015.

<sup>156</sup> UN DESA, *Outcomes*, 2022; UN General Assembly, *Our ocean, our future: call for action (A/RES/71/312)*, 2017.

SDG 14.<sup>157</sup> These range from the development of artificial reef materials to the implementation of festivals promoting awareness for the current state of the oceans.<sup>158</sup> In order to ensure the analysis and implementation of these outcomes, UN Secretary-General António Guterres appointed The Honorable Peter Thomson of Fiji as the Special Envoy for the Ocean.<sup>159</sup> The Special Envoy leads the UN efforts to advocate for the protection and restoration of marine ecosystems.<sup>160</sup> In addition, the impacts of the voluntary commitments have been analyzed by the United Nations Department of Economic and Social Affairs (UN DESA) in 2021.<sup>161</sup> UN DESA concluded that the unprecedented number of voluntary commitments had a meaningful impact, and shows that the deterioration of marine ecosystems can be reversed, although there is still much to do.<sup>162</sup>

To provide an opportunity for extensive dialogue to implement lasting changes, the General Assembly proclaimed the *UN Decade of Ocean Science for Sustainable Development 2021-2030* (Ocean Decade).<sup>163</sup> This campaign focusses on the promotion of clean, healthy, productive, and safe oceans.<sup>164</sup>

A second Oceans Conference was planned for 2020 but was postponed until 2022 due to the COVID-19 pandemic.<sup>165</sup> It took place in Lisbon, Portugal from June 27 to July 1, 2022.<sup>166</sup> The theme of the conference will be: “Scaling up ocean action based on science and innovation for the implementation of Goal 14: Stocktaking, partnerships and solutions.”<sup>167</sup> Interactive dialogues at the 2022 Ocean Conference will address topics such as the strengthening of ocean-based economies, with a particular focus on Small Island Developing States, the acidification and pollution of the oceans, the protection and restoration of marine ecosystems, sustainable fisheries, as well as the further implementation of international instruments.<sup>168</sup>

Other stakeholders include the ICRI, which monitors the deterioration of coral reefs and establishes best practices for their protection and restoration.<sup>169</sup> It does this by asking its members to submit reports on their ongoing activities at least every two to three years.<sup>170</sup> Additionally, the Global Partnership for Oceans (GPO) was launched in 2012 and hosted by the World Bank until 2015.<sup>171</sup> It addresses the protection and restoration of marine habitats by using its network to raise finance and gather knowledge on relevant issues.<sup>172</sup>

### ***Identifying and Addressing Dangers to Marine Ecosystems***

As the amount of GHG increases in the atmosphere, oceans absorb some of it, which changes the composition of seawater and has led to a 26% increase in acidity since pre-industrial times – a

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<sup>157</sup> UN DESA, *Outcomes*, 2022.

<sup>158</sup> UN DESA, *UN Ocean Conference*, 2022.

<sup>159</sup> UN Secretariat, *Mr. Peter Thomson of Fiji - Special Envoy for the Ocean*, 2017.

<sup>160</sup> *Ibid.*

<sup>161</sup> UN DESA, *Assessment of the Impacts of the United Nations Ocean Conference Voluntary Commitments*, 2021.

<sup>162</sup> *Ibid.*, p. iii.

<sup>163</sup> UN IOC, *Implementation Plan: Summary*, 2021, p. 6.

<sup>164</sup> *Ibid.*, p. 8.

<sup>165</sup> UN General Assembly, *2020 United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development (A/RES/73/292)*, 2019; UN General Assembly, *2022 United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development (A/75/49 (Vol. III))*, 2021; UN General Assembly, *Draft decision submitted by the President of the General Assembly – 2020 United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development (A/74/L.48)*, 2020.

<sup>166</sup> UN DESA, *2022 UN Ocean Conference*, 2022.

<sup>167</sup> *Ibid.*

<sup>168</sup> *Ibid.*

<sup>169</sup> ICRI, *About us*, 2021.

<sup>170</sup> ICRI, *Organisation and Management Procedures for the International Coral Reef Initiative (ICRI)*, 2018, pp. 2, 4.

<sup>171</sup> WBG, *Global Partnership for Oceans (GPO)*, 2015.

<sup>172</sup> *Ibid.*

development that is particularly harmful for corals.<sup>173</sup> Another effect of climate change on marine ecosystems is global warming.<sup>174</sup> This effect is three times as strong in colder biomes, such as the Arctic, where some cold-water species have to find new habitats further north as a consequence of increased water temperatures, whilst marine ecosystems in the Arctic are starting to be populated by species that generally dwell in warmer waters.<sup>175</sup> However, the implications of thawing are not limited to the Arctic.<sup>176</sup> As permafrost thaws, plant and animal material that was frozen is uncovered, resulting in the release of GHG into the atmosphere and an exacerbation of climate change.<sup>177</sup> Consequently, several of the voluntary commitments made after the 2017 Ocean Conference address the protection of the Arctic.<sup>178</sup> For example, the Government of Canada reserved part of its 2017 budget for the protection of the so-called Last Ice Area in the arctic, which is expected to be the only region in the Arctic to retain ice throughout the year by 2050.<sup>179</sup> In addition to this, the governments of Sweden, Finland, and Canada have collaborated with the Arctic Council to develop area based management tools for the protection of the Arctic through workshops.<sup>180</sup>

According to the 2021 UNEP report *From Pollution to Solution: a global assessment of marine litter and plastic pollution*, the number of plastics that can be found in the oceans today is estimated to be as high as 75-199 million tons, which constitutes 85% of all marine waste.<sup>181</sup> Most of this litter is the result of mismanaged plastic disposal on land.<sup>182</sup> If no further action is taken, there may be more plastic than fish in the oceans by 2050.<sup>183</sup> This situation is further exacerbated by the ongoing COVID-19 pandemic because personal protective equipment and its packaging constitutes a large amount of additional waste.<sup>184</sup> The impact of plastic on life in the oceans is extreme – presenting itself as a multifaceted issue.<sup>185</sup> Large pieces of plastic may cause animals to starve, suffocate, or be strangled, and synthetic and cellulosic microfibers, as well as toxins, are released into the water as the litter dissolves.<sup>186</sup>

There have already been several proposals as to how these issues may be addressed.<sup>187</sup> On a national or regional policy level, UNEP has recommended that Member States pass legislation which prohibits or disincentivizes the production or use of unnecessary single-use plastic.<sup>188</sup> In this context, Member States that are parties to UNCLOS are already obligated to take all feasible measures to prevent and reduce water pollution.<sup>189</sup> The Environmental Law Institute suggests the introduction of laws and monitoring systems regarding the recycling and disposal of plastic waste in order to decrease the amount of new marine litter.<sup>190</sup> These can be supplemented by additional laws determining who is responsible for the removal of existing or future waste from the oceans.<sup>191</sup> One such strategy has been devised by Adidas, which has started using recycled fibers from marine waste for production.<sup>192</sup>

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<sup>173</sup> UN DESA, *Assessment of the Impacts of the United Nations Ocean Conference Voluntary Commitments*, 2021, p. 20.

<sup>174</sup> UN DGC, *If you're not thinking about the climate impacts of thawing permafrost, (here's why) you should be*, 2022.

<sup>175</sup> *Ibid.*

<sup>176</sup> *Ibid.*

<sup>177</sup> *Ibid.*

<sup>178</sup> UN DESA, *UN Ocean Conference*, 2022.

<sup>179</sup> UN DESA, *Management options for protection of the Last Ice Area*, 2022.

<sup>180</sup> UN DESA, *Arctic Marine Protected Area Network Toolbox Project (2017-2019)*, 2022.

<sup>181</sup> UNEP, *From Pollution to Solution: a global assessment of marine litter and plastic pollution*, 2021, p. 14.

<sup>182</sup> *Ibid.*, p. 15.

<sup>183</sup> UN DGC, *FEATURE: UN's mission to keep plastics out of oceans and marine life*, 2017.

<sup>184</sup> UNEP, *From Pollution to Solution: a global assessment of marine litter and plastic pollution*, 2021, p. 14.

<sup>185</sup> *Ibid.*

<sup>186</sup> *Ibid.*

<sup>187</sup> UN DESA, *Assessment of the Impacts of the United Nations Ocean Conference Voluntary Commitments*, 2021, pp. iii, 13; UNEP, *Blue Economy: Sharing Success Stories to Inspire Change*, 2015; UNEP, *Marine Litter Legislation: A Toolkit for Policymakers*, 2016, pp. 20, 38, 56.

<sup>188</sup> UNEP, *Marine Litter Legislation: A Toolkit for Policymakers*, 2016, p. 20.

<sup>189</sup> UN General Assembly, *Addressing marine pollution: Concept paper prepared by the secretariat (A/CONF.230/4)*, 2017, p. 5.

<sup>190</sup> UNEP, *Marine Litter Legislation: A Toolkit for Policymakers*, 2016, p. 38.

<sup>191</sup> *Ibid.*, p. 56.

<sup>192</sup> Thomasson, Adidas to use marine plastic waste in products from 2016, *Reuters*, 2015.

In addition to combatting climate change itself, it is also possible to strengthen the resistance of marine habitats such as coral reefs against its effects and to reverse some of the damage that has already been done.<sup>193</sup> The protection of biodiversity can further be achieved through the establishment of regional blue economy systems.<sup>194</sup>

### **Overcoming Challenges in Marine Habitat Restoration**

When implementing measures to protect and restore marine habitats, the entire international community and individual Member States have to overcome several obstacles.<sup>195</sup> Firstly, the demand of plastic products is still continuing to grow, whereas it is estimated that only 10% of the plastic produced has ever been recycled.<sup>196</sup> An attempt to address this situation is currently being made within the UN through efforts to create a new and legally-binding instrument with regard to plastic pollution by 2024.<sup>197</sup> On a regional level, it is also possible to reduce waste and prevent pollution by establishing mechanisms for the enforcement of waste disposal laws and introducing or increasing prices for the disposal of waste that cannot be recycled.<sup>198</sup>

Another aspect of overcoming challenges regarding the protection and restoration of marine habitats is increasing awareness for the consequences of failing marine ecosystems and building capacities to address them through education.<sup>199</sup> Target 4.7 of SDG 4 underlines the role of education in enabling civil society to promote sustainable development.<sup>200</sup> The UN Educational, Scientific, and Cultural Organization (UNESCO) acts as the leading UN agency on education for sustainable development (ESD).<sup>201</sup> Through its ESD program, UNESCO monitors and supports the empowerment of people with the knowledge and skills required to combat global issues, such as climate change.<sup>202</sup>

Although there are many promising and effective regional programmes to protect and restore marine habitats, they are often underfunded and lack the resources to fulfill their purposes.<sup>203</sup> One possibility for overcoming these challenges is increased participation in global partnerships such as the GPO, which aims to raise funding for the protection of the oceans within its network.<sup>204</sup> According to the UNEP report *Regional Oceans Governance: Making Regional Seas Programmes, Regional Fishery Bodies and Large Marine Ecosystem Mechanisms Work Better Together* (2016), cooperation and collaboration between regional and international mechanisms should aim at the strengthening and improvement of local programs, rather than at their replacement.<sup>205</sup> To this end, the report advises Member States to take

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<sup>193</sup> UN DESA, *Assessment of the Impacts of the United Nations Ocean Conference Voluntary Commitments*, 2021, pp. iii, 13.

<sup>194</sup> UNEP, *Blue Economy: Sharing Success Stories to Inspire Change*, 2015.

<sup>195</sup> UNEP, *From Pollution to Solution: a global assessment of marine litter and plastic pollution*, 2021, p. 84; UNEP, *Regional Oceans Governance: Making Regional Seas Programmes, Regional Fishery Bodies and Large Marine Ecosystem Mechanisms Work Better Together*, 2016, p. xii.

<sup>196</sup> UNEP, *From Pollution to Solution: a global assessment of marine litter and plastic pollution*, 2021, p. 84.

<sup>197</sup> UNEA, *End plastic pollution: Draft resolution – Towards an international legally binding instrument (UNEP/EA.5/L.23/Rev.1)*, 2022; UNEP, *Historic day in the campaign to beat plastic pollution: Nations commit to develop a legally binding agreement*, 2022.

<sup>198</sup> UNEP, *From Pollution to Solution: a global assessment of marine litter and plastic pollution*, 2021, p. 93.

<sup>199</sup> UN DESA, *Assessment of the Impacts of the United Nations Ocean Conference Voluntary Commitments*, 2021, p. 24.

<sup>200</sup> UN DESA, 4 – *Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*, 2022; UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015, p. 17.

<sup>201</sup> UNESCO, *What you need to know about education for sustainable development*, 2022.

<sup>202</sup> Ibid.

<sup>203</sup> UNEP, *Regional Oceans Governance: Making Regional Seas Programmes, Regional Fishery Bodies and Large Marine Ecosystem Mechanisms Work Better Together*, 2016, p. xii.

<sup>204</sup> UN General Assembly, *Addressing marine pollution: Concept paper prepared by the secretariat (A/CONF.230/4)*, 2017, p. 6; WBG, *Global Partnership for Oceans (GPO)*, 2015.

<sup>205</sup> UNEP, *Regional Oceans Governance: Making Regional Seas Programmes, Regional Fishery Bodies and Large Marine Ecosystem Mechanisms Work Better Together*, 2016, p. xv.

implementation and funding into account when developing action plans and recommends the establishment of strong regional governance mechanisms.<sup>206</sup>

Possible methods for overcoming challenges regarding the protection and restoration of marine habitats will also be addressed at the upcoming 2022 Ocean Conference.<sup>207</sup> In addition to discussions on the causes of ocean degradation, participants of the conference will hold an interactive dialogue on the management, protection, conservation, and restoration of marine and coastal ecosystems.<sup>208</sup>

### **Conclusion**

The protection and restoration of marine habitats requires cooperation and collaboration on an international, regional, and national level.<sup>209</sup> Over the year, the 2022 Ocean Conference and the drafting of a binding international instrument on plastic pollution will likely dominate discussions on this topic.<sup>210</sup> During this process, the findings of the expert group established by UNEA, the Special Envoy for the Oceans, and UNEP provide a factual basis for new policy suggestions.<sup>211</sup> UNEP's assessment of the effectiveness of voluntary measures taken after the 2017 Ocean Conference will likely serve as a basis for the open dialogues at the upcoming conference.<sup>212</sup>

### **Further Research**

Which measures are necessary to further implement UNCLOS and SDG 14? How can UNEA contribute to the process of drafting a binding agreement on the prevention of plastic pollution? What can UNEA and UNEP do to improve cooperation and collaboration between Member States and other stakeholders regarding this topic? How can Member States promote the reduction of litter and water pollution at the level of the consumers of plastic products?

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*This report highlights voluntary commitments undertaken by Member States regarding SDG 14 after the 2017 Ocean Conference. Additionally, it analyzes the effectiveness of individual measures and describes further action that is required to protect and restore marine habitats. As it differentiates between the individual targets of SDG 14, this report can help delegates develop new policy suggestions for the implementation of this goal.*

United Nations Environment Assembly, Second session. (2016). *Oceans and seas (UNEP/EA.2/Res.10)*. Retrieved 29 May 2022 from: <http://undocs.org/en/UNEP/EA.2/Res.10>

*This resolution was passed at the second session of UNEA in 2016. It includes several suggestions for the implementation of SDG 14 on a national and international level. The document further references important conventions, strategies, as well as agendas. It*

<sup>206</sup> UNEP, *Regional Oceans Governance: Making Regional Seas Programmes, Regional Fishery Bodies and Large Marine Ecosystem Mechanisms Work Better Together*, 2016, p. xv.

<sup>207</sup> UN DESA, *2022 UN Ocean Conference*, 2022.

<sup>208</sup> Ibid.

<sup>209</sup> Australian Government, Great Barrier Reef Marine Park Authority, *Great Barrier Reef Outlook Report 2019*, 2019, p. vi.

<sup>210</sup> UN DESA, *2022 UN Ocean Conference*, 2022; UNEA, *End plastic pollution: Draft resolution – Towards an international legally binding instrument (UNEP/EA.5/L.23/Rev.1)*, 2022; UNEP, *Historic day in the campaign to beat plastic pollution: Nations commit to develop a legally binding agreement*, 2022.

<sup>211</sup> UN Secretariat, *Mr. Peter Thomson of Fiji - Special Envoy for the Ocean*, 2017; UNEA, *Marine litter and microplastics (UNEP/EA.3/Res.7)*, 2017; UNEP, *From Pollution to Solution: a global assessment of marine litter and plastic pollution*, 2021; UNEP, *Regional Oceans Governance: Making Regional Seas Programmes, Regional Fishery Bodies and Large Marine Ecosystem Mechanisms Work Better Together*, 2016.

<sup>212</sup> UN DESA, *Assessment of the Impacts of the United Nations Ocean Conference Voluntary Commitments*, 2021.

*discusses relevant issues for the protection and restoration of marine habitats. Delegates can therefore use it as a starting point in their research.*

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*This report is a comprehensive overview of the concept of the blue economy. It was published by UNEP in 2015 in order to show existing best practices. Therefore, delegates can refer to it when researching methods for sustainable use of the oceans. Nevertheless, it is important to note that best practices may vary between different regions, which is why delegates should verify if a certain recommendation can be applied to their Member State or not.*

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*This document is both an analysis of existing policies used by Member States to combat marine pollution and a compilation of best practices for the introduction of new policies. In addition, the report outlines the relevant aspects of the international legal framework. Delegates can refer to it when researching possible ways of implementing SDG 14.*

United Nations Environment Programme. (2021). *From Pollution to Solution: a global assessment of marine litter and plastic pollution*. Retrieved 1 May 2022 from: <https://wedocs.unep.org/bitstream/handle/20.500.11822/36963/POLSOL.pdf>

*This report was requested by UNEA and discusses the sources of pollution in the oceans and the resulting risks to the environment. It also suggests possible ways of addressing the problem and monitoring marine litter in the future. Furthermore, the report identifies which measures are most urgent and which areas require additional scientific research. Delegates will find this useful in their assessment of possible solutions for their Member State.*

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## 2. Incorporating Nature-Based Solutions to Achieve the Sustainable Development Goals

### *Introduction*

The United Nations Environment Assembly (UNEA) discusses global issues regarding the environment and current challenges.<sup>213</sup> Two of the world's current and most complex challenges include climate change and nature loss; therefore, nature-based solutions (NBS) can be utilized as global resolutions.<sup>214</sup> NBS are "actions which are inspired by, supported by or copied from using nature."<sup>215</sup> NBS often support the achievement of desired societal and sustainable outcomes, including disaster risk reduction, overall well-being for all, and green and blue growth.<sup>216</sup> UNEP has developed an integrated approach for sustainable development through NBS, by simultaneously focusing on environmental protection, social development, and sustainable and inclusive economic growth.<sup>217</sup> The integrated approach allows for multi-dimensional causes and drivers, various benefits and greater impacts, unified cooperation and partnerships for resources, the management of trade-offs, direct and coherent policies, and efficient resource usage.<sup>218</sup>

The 2019 United Nations (UN) Climate Action Summit identified the dire need for NBS, and established that UNEP would lead the global effort for NBS to successfully contribute to the United Nations Decade of Ecosystem Restoration 2021-2030.<sup>219</sup> The 2019 session of the General Assembly determined that 2021-2030 would serve as the UN Decade on Ecosystem Restoration, aiming to restore degraded and destroyed ecosystems, in order to challenge the climate crisis, meet the Sustainable Development Goals (SDGs), and various climate agreements.<sup>220</sup> Part two of the Fifth Session of UNEA resumed virtually in Nairobi between February 28 and March 2, 2022; the theme for UNEA-5 was "Strengthening Actions for Nature to Achieve the SDGs."<sup>221</sup> NBS for restoration and protection are a vital strategy for tackling climate change, as conserving and restoring ecosystems will reestablish planetary stability for the long-term.<sup>222</sup> If the post-COVID-19 pandemic recovery is strategized with the prioritization of green solutions, UNEA predicts that up to 25% of predicted 2030 greenhouse gas emissions (GHG) would be removed.<sup>223</sup> UNEP identifies that the most effective way to reduce emissions and build climate resilience is through self-healing, used interchangeably with NBS.<sup>224</sup> Mass extinction is an imminent threat with the current rates of climate change; since 1850, the global temperature has risen roughly 1° Celsius due to the heavy use of fossil fuels.<sup>225</sup> If climate change trends remain the same, the global temperature will rise by more than 5° Celsius by 2100, exceeding the climate threshold for mass extinction, which could have catastrophic impacts on all ecosystems on Earth.<sup>226</sup>

### *International and Regional Framework*

After concluding UNEA-5.2, the Assembly opened a Special Session to commemorate the 50<sup>th</sup> anniversary of the UNEP (UNEP@50), in which the Assembly adopted General Assembly resolution 73/333 (2019) to follow-up with the work of General Assembly resolution 72/277 (2018), calling for a "Global Pact for the Environment."<sup>227</sup> The most significant multilateral deal since the *Paris Climate*

<sup>213</sup> UNEP, *Fifth session of the United Nations Environment Assembly – UNEA-5*, 2022.

<sup>214</sup> WWF, *WWF statement: Nature-based Solutions Definition Agreed at UNEA*, 2022.

<sup>215</sup> European Parliament, *Nature-based solutions: Concept, opportunities and challenges*, 2017.

<sup>216</sup> Ibid.

<sup>217</sup> UNEP, *Nature-based Solutions and the 2030 agenda*, p. 17, 2018.

<sup>218</sup> Ibid., p. 18.

<sup>219</sup> UNEP, *UNEP and nature-based solutions*, 2022.

<sup>220</sup> UNEP, *Environmental Moments: A UN75 timeline*, 2022.

<sup>221</sup> UNEP, *Fifth session of the United Nations Environment Assembly – UNEA-5*, 2022.

<sup>222</sup> UNEA, *Nature for Climate*, 2022.

<sup>223</sup> Ibid.

<sup>224</sup> UNEP, *UNEP and nature-based solutions*, 2022.

<sup>225</sup> Song, *Mass extinctions correlate with the extent of climate change*, 2021.

<sup>226</sup> Ibid.

<sup>227</sup> UNEP, *UNEP@50: Special Session of the UN Environment Assembly*, 2022.

*Agreement* was established during UNEA-5.2, through drafting resolution UNEP/EA.5/L.23/Rev.1 (2022), instituting an Intergovernmental Negotiating Committee to sponsor a legally binding agreement to end plastic pollution.<sup>228</sup> UNEP@50 provided an opportunity to the international community to address the crises of climate change, nature and biodiversity loss, and pollution and waste.<sup>229</sup> Resolution UNEP/EA.SS.1/4 (2022) reaffirms the principles of the *Rio Declaration* (1992), and calls for renewed efforts of international environmental governance and support.<sup>230</sup> Ecosystem restoration through NBS is fundamental to the progress of SDGs and various climate agreements such as the *Ramsar Convention on Wetlands* (1971), *UN Framework Convention on Climate Change* (UNFCCC) (1992), *Rio Conventions on Biodiversity, Desertification and Climate Change* (1993), *Kyoto Protocol* (1997), *Paris Agreement* (2015).<sup>231</sup>

The UN Climate Action Summit, created in September 2019 by UN Secretary-General António Guterres, highlighted the importance of NBS for sustainable development.<sup>232</sup> After its establishment, the NBS Coalition organized the *NBS for Climate Manifesto*, a comprehensive plan to involve over 70 governments, the private sector, civil society organizations, and international organizations, to identify and utilize nearly 200 best practices for NBS.<sup>233</sup> Although the UN Climate Action Summit planned for 2020 to be a “Nature Super Year,” COVID-19 presented a unique opportunity to determine a new course for policy, planning, and implementation of ambitious action for NBS for the coming decade.<sup>234</sup> The UN Decade on Ecosystem Restoration focuses on the prevention and reversal of the degradation of ecosystems on the planet.<sup>235</sup> Building upon the successes and learning from the challenges of the 2011-2020 UN Decade on Biodiversity, the UN Decade of Ecosystem Restoration established an ambitious international goal to catalyze a movement of NBS that will extend past 2030.<sup>236</sup> Although many outcomes were discussed before the declaration of the UN Decade on Ecosystem Restoration, a large emphasis is put on improving and the plans to restore degraded and destroyed ecosystems in order to combat climate change, and enhance global food security, water supply, and biodiversity.<sup>237</sup> UNEP and the Food and Agriculture Organization of the United Nations (FAO) will lead the implementation of the restoration.<sup>238</sup>

### ***Role of the International System***

Since its inception in 2012, UNEA has met to create resolutions from Member States that support and define the role of UNEP.<sup>239</sup> In February 2021, UNEA-5.1 met to identify actions to protect and restore nature by utilizing NBS for the successful achievement of the SDGs.<sup>240</sup> In February 2022, UNEA-5.2 resumed to host a significant discussion on the possible creation of a legally-binding international agreement to address plastic pollution.<sup>241</sup> The discussion of SDGs revolved around SDGs 12 (responsible consumption and production), 15 (life on land), and 17 (partnerships for the goals).<sup>242</sup> Although many discussions revolved around international environmental policies and governance, SDGs 12, 15, and 17 were addressed in detail, due to their direct importance to the overall theme of “Strengthening Actions for Nature to Achieve the Sustainable Development Goals.”<sup>243</sup> During UNEA-5, 14 resolutions on various topics, one Ministerial Declaration, one Political Declaration, and one decision for the date and venue for

<sup>228</sup> UNEP, *UN Environment Assembly concludes with 14 resolutions to curb pollution, protect and restore nature worldwide, 2022.*

<sup>229</sup> UNEP, *UNEP@50: Special Session of the UN Environment Assembly, 2022.*

<sup>230</sup> UNEP, *Political declaration of the special session of the United Nations Environment Assembly to commemorate the fiftieth anniversary of the establishment of the United Nations Environment Programme, 2022.*

<sup>231</sup> UNEP, *New UN Decade on Ecosystem Restoration to inspire bold UN Environment Assembly decisions, 2019.*

<sup>232</sup> UNEP, *Nature-Based Solutions for Climate, 2022.*

<sup>233</sup> *Ibid.*

<sup>234</sup> *Ibid.*

<sup>235</sup> UNEP & FAO, *Preventing, Halting and Reversing the Degradation of Ecosystems Worldwide, 2022.*

<sup>236</sup> UNEP, *New UN Decade on Ecosystem Restoration to inspire bold UN Environment Assembly decisions, 2019.*

<sup>237</sup> *Ibid.*

<sup>238</sup> *Ibid.*

<sup>239</sup> UNEP, *What you need to know about the UN Environment Assembly, 2022.*

<sup>240</sup> IISD, *Online Session of the Fifth Session of the UN Environment Assembly (UNEA-5), 2021.*

<sup>241</sup> UNEP, *What you need to know about the UN Environment Assembly, 2022.*

<sup>242</sup> IISD, *Online Session of the Fifth Session of the UN Environment Assembly (UNEA-5), 2021.*

<sup>243</sup> *Ibid.*

the next session was adopted by the UNEA.<sup>244</sup> UNEA-5 adopted a multilaterally-agreed definition of NBS as global actions that will be taken to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively.<sup>245</sup> One of the 14 resolutions also calls on UNEP to assist with the implementation of NBS, focusing on safeguarding the rights of marginalized communities and indigenous peoples.<sup>246</sup>

The Group of Twenty (G20) is an intergovernmental forum, comprising of multiple global leaders to address various issues, including climate change and sustainable development, and experts on NBS are suggesting that the G20 control climate change by mobilizing solutions for clean cities.<sup>247</sup> The G20 accounts for 80% of GHG emissions, 80% of global agriculture trade, and 60% of the global agricultural land share.<sup>248</sup> With these large shares, it is alarming to note that all G20 Member States are not within their target range to meet the goals of the *Paris Agreement*.<sup>249</sup> Although this presents a global challenge, G20 Member States have deliberated NBS for climate change on multiple occasions, including at the Seoul Summit (2010), Los Cabos Summit (2012), Hamburg Summit (2017), and Osaka Summit (2019), discussing the importance of ecosystem and community-based approaches, disaster risk reduction for vulnerable communities, resilient infrastructure, and indigenous knowledge.<sup>250</sup> The G20 often faces global criticism, as language used is often ambiguous and lacking in foundation; for example, documents from the Osaka Summit recommend that the G20 “look into” NBS to respond to the climate crisis.<sup>251</sup> With the G20 ratifying 347 politically-binding commitments, only one of them references NBS.<sup>252</sup>

The United Nations Climate Change Conference (COP) is the legislative body for UNFCCC.<sup>253</sup> UNFCCC comprises of 197 nations and territories, labelled as “Parties”.<sup>254</sup> COP has met annually since 1995 to discuss pressing global issues of climate change and its legislation.<sup>255</sup> The 2021 *United Nations Climate Change Conference* (COP26) discussed the role in achieving the global temperature target set out at the Paris Agreement in 2015.<sup>256</sup> COP26 was organized into two sections: The Blue Zone, managed by the UN, whom simultaneously held the role of mediating negotiations; and the Green Zone, managed by the government of the United Kingdom of Great Britain and Northern Ireland, since the conference took place in Glasgow, Scotland.<sup>257</sup> The Green Zone ran an open platform for the general public and multiple civil society groups, so that public opinions were heard.<sup>258</sup> COP26 discussed the importance of NBS, however, the concept of NBS was removed from the final text.<sup>259</sup>

The *Ecosystem Restoration Playbook*, co-authored by UNEP and FAO, identifies various ways for society to restore the ecosystem.<sup>260</sup> The report outlines three methods of involvement: taking action by starting or supporting a restoration project, making sustainable choices in daily living, and advocating for ecosystem conservation and restoration.<sup>261</sup> The report also identifies ways to protect and restore the eight key ecosystems: forests, farmlands, grassland and savannahs, rivers and lakes, oceans and coasts, towns

<sup>244</sup> UNEP, *UN Environment Assembly concludes with 14 resolutions to curb pollution, protect and restore nature worldwide*, 2022.

<sup>245</sup> Nature-based Solutions Initiative, *United Nations Environment Assembly agree Nature-based Solutions definition*, 2022.

<sup>246</sup> Ibid.

<sup>247</sup> UN DESA, *Goal 11*, 2022.

<sup>248</sup> Global Solutions Initiative, *G20 governance of climate change through nature-based solutions*, 2022.

<sup>249</sup> Ibid.

<sup>250</sup> Ibid.

<sup>251</sup> Ibid.

<sup>252</sup> Ibid.

<sup>253</sup> Nature-based Solutions Initiative, *Nature-based Solutions at COP26*, 2021.

<sup>254</sup> Ibid.

<sup>255</sup> Ibid.

<sup>256</sup> WWF, *WWF statement: Nature-based Solutions Definition Agreed at UNEA*, 2022.

<sup>257</sup> Nature-based Solutions Initiative, *Nature-based Solutions at COP26*, 2021.

<sup>258</sup> Ibid.

<sup>259</sup> WWF, *WWF statement: Nature-based Solutions Definition Agreed at UNEA*, 2022.

<sup>260</sup> UNEP & FAO, *Ecosystem Restoration Playbook*, 2021.

<sup>261</sup> Ibid..



and cities, peatlands, and mountains.<sup>262</sup> The report encourages the international community to take action by turning restoration practices viral, being innovative with NBS, identifying and committing to greener practices, and speaking up to all levels of policymakers.<sup>263</sup> SDG 15 commits to “protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss,” and the report identifies a multitude of ways to achieve this.<sup>264</sup> The report further identifies how individuals, communities, businesses, and governments are crucial in #GenerationRestoration, and how every part of society must contribute to restoration efforts for the good of all.<sup>265</sup>

Global restoration efforts are exemplified by initiatives, such as the Bonn Challenge, which has committed to restoring nearly 210 million hectares of degraded ecosystems by the end of the decade, from the help of 61 Member States, and 74 pledges.<sup>266</sup> The Bonn Challenge is a global effort led by the government of Germany in partnership with the International Union for Conservation of Nature (IUCN) to empower Member States and individuals to be stewards of nature, and to halt and reverse the impacts of land degradation through restoration efforts.<sup>267</sup> The global initiative follows many successful regional efforts, such as Initiative 20x20, a country-led regional effort aiming to change the dynamics of land degradation in Latin America and the Caribbean; and AFR100 African Forest Landscape Restoration Initiative, a country-led regional effort to bring 100 million hectares of African land to restoration by 2030.<sup>268</sup>

### ***Nature-Based Solutions for More Sustainable Cities and Urbanization***

Six G20 Member States are within the top ten for citizens that die prematurely due to urban pollution, as determined by the Global Alliance on Health and Pollution (GAHP) in 2019.<sup>269</sup> Pollution kills nine million people annually, costs over 2% of the global gross domestic product (GDP), and accounts for at least 7% of global healthcare costs.<sup>270</sup> 91% of humans breathe unhealthy air, as determined by the World Health Organization in 2021.<sup>271</sup>

SDG 11 (sustainable cities and communities) aims to ensure inclusive, safe, resilient, and sustainable settlements for all, and while 56 Member States have adopted policies to develop national urbanization, only half are in the implementation stage.<sup>272</sup> Solutions for city pollution include the reduction of the burning of fossil fuels for urban uses, such as heating and electricity.<sup>273</sup> Other resolutions include the promotion of public transportation and sustainable transportation methods, vehicle restrictions, and green walls for urban infrastructure with NBS.<sup>274</sup> Solving for pollution issues, contributed to directly via fossil fuel burning, can include the reduction of Sulphur content in fuel, the use of low or zero-emission vehicles, and the recycling of acid batteries.<sup>275</sup>

By focusing on NBS for urbanization and sustainability, rather than grey infrastructure, society benefits in a multitude of ways, including public health, socialization, biodiversity, addressing climate change, and proposing long-lasting solutions for society, the environment, and the economy.<sup>276</sup> The multi-functionality of NBS is one of the most appealing factors of the solution, as it can be used in urban regeneration and for urban resilience.<sup>277</sup> Cities are developing at an alarming pace, and are increasing the impact of

<sup>262</sup> UNEP & FAO, *Ecosystem Restoration Playbook*, 2021.

<sup>263</sup> Ibid.

<sup>264</sup> UN DESA, *Biodiversity and ecosystems*, 2022.

<sup>265</sup> UNEP & FAO, *Ecosystem Restoration Playbook*, 2021.

<sup>266</sup> UNEP, *New UN Decade on Ecosystem Restoration to inspire bold UN Environment Assembly decisions*, 2019.

<sup>267</sup> Bonn Challenge, *The Bonn Challenge*, 2022.

<sup>268</sup> UNEP, *New UN Decade on Ecosystem Restoration to inspire bold UN Environment Assembly decisions*, 2019.

<sup>269</sup> Crowther et al., *Nature-based solutions for climate change, clean energy & health*, 2021, p. 6.

<sup>270</sup> Ibid.

<sup>271</sup> Ibid.

<sup>272</sup> UN DESA, *Goal 11*, 2022.

<sup>273</sup> Crowther et al., *Nature-based solutions for climate change, clean energy & health*, 2021, p. 7.

<sup>274</sup> Ibid.

<sup>275</sup> Ibid.

<sup>276</sup> ICLEI, *Nature-based solutions for sustainable urban development*, 2008, p. 1.

<sup>277</sup> Ibid.

urbanization on climate change.<sup>278</sup> IUCN reiterates the importance for ensuring the integrity and stability of nature, which cannot occur if short-term financial or political gain are prioritized.<sup>279</sup> UNEP and IUCN offer three policy solutions for leveraging investments for urbanization, including collaborative planning, engaging in public-private partnerships, and integrating with state fiscal systems.<sup>280</sup> Examples of NBS for urban resilience include permeable surfaces, green roofs, rain gardens, afforestation, green infrastructure, and restoration of wetlands.<sup>281</sup> Urban regeneration through NBS can include: making space for greenways by reducing inner-city lanes, restoring polluted bodies of water, utilizing former factory sites and disused infrastructure using bioremediation, and turning abandoned land into community gardens or urban farms.<sup>282</sup> Each of these solutions either maintain or enhance biodiversity, and reduce the impacts of climate change through NBS.<sup>283</sup>

### ***Phasing Out Fossil Fuels for a Sustainable Future***

As the global population is expected to grow to at least 9.6 billion people by 2050, current lifestyles of overconsumption and overproduction are unsustainable.<sup>284</sup> NBS are often promoted as methods for offsetting emissions; however, with the increasing use of fossil fuels, this promotion has the opposite effect.<sup>285</sup> NBS are often misused by large fossil fuel organizations for ‘greenwashing,’ a term that encouraged, and even increased, fossil fuel usage and can distract from systemic change and a sustainable energy transition.<sup>286</sup> NBS can play a fundamental role in reaching net-zero emissions, but only when paired strategically with a dramatic decrease in GHG, exemplified by burning less fossil fuels.<sup>287</sup> Resource extraction has expanded threefold since 1970, including an alarming 45% increase in fossil fuel usage.<sup>288</sup> This extraction process contributes to over half of GHG emissions, and over 90% of biodiversity loss and stress on vital ecosystems, especially water.<sup>289</sup>

While the need to reduce GHG emissions is significant, it requires international participation and a patient, but urgent, transition.<sup>290</sup> Fossil fuels comprise 80% of global energy demand, and creates an estimated 2/3 of global CO<sub>2</sub> emissions.<sup>291</sup> While global energy supply is crucial to the well-being of all, it is also fundamental to work towards a transition away from fossil fuel usage for sustainability.<sup>292</sup> Controlling climate change from GHG emissions requires NBS, and can include fostering forests to regrow trees, preserving peatlands and wetlands as naturally protected areas, creating cleaner cities by lessening air and lead pollution and reducing heat sinks, creating green coasts especially for small islands, raising renewable energy share by doubling nature-intensive geothermal, tidal, and wave power, and lowering land-use stress by switching to plant-based agriculture methods, rather than animal-based agriculture.<sup>293</sup> Fossil fuel usage and burning, specifically through transportation and urban usage, is one of the largest sources of emissions that create unhealthy air and carbon emissions, contributing directly to climate change.<sup>294</sup> Over the past several decades, calls for environmental reconsiderations of fossil fuels, specifically with the use of oil and gas have loomed over global oil production, due to its harmful effects on several ecosystems.<sup>295</sup> For example, oil sand extractions result in leftover toxic waste, which is stored in large liquid pools, and eventually hardens into mud and is invariable, as well as extraction measures,

<sup>278</sup> UNEP, *Nature-Based Solutions for Urban Challenges*, 2021, p. 1.

<sup>279</sup> *Ibid.*, p. 8.

<sup>280</sup> UNEP, *Nature-Based Solutions for Urban Challenges*, 2021, pp. 8-9.

<sup>281</sup> ICLEI, *Nature-based solutions for sustainable urban development*, 2008, p. 2.

<sup>282</sup> *Ibid.*, p. 4.

<sup>283</sup> UNEP, *Nature-Based Solutions for Urban Challenges*, 2021, p. 3.

<sup>284</sup> UN DGC, *Facts and Figures*, 2022.

<sup>285</sup> Seddon et al., *Getting the message right on nature-based solutions to climate change*, 2021, pp. 1518-1546.

<sup>286</sup> *Ibid.*

<sup>287</sup> *Ibid.*

<sup>288</sup> UN DGC, *Facts and Figures*, 2022.

<sup>289</sup> *Ibid.*

<sup>290</sup> Foster & Elzinga, *The Role of Fossil Fuels in a Sustainable Energy System*, 2015.

<sup>291</sup> *Ibid.*

<sup>292</sup> *Ibid.*

<sup>293</sup> Crowther et al., *Nature-based solutions for climate change, clean energy & health*, 2021, p. 6.

<sup>294</sup> *Ibid.*

<sup>295</sup> Government of Canada, *Energy Fact Book 2021-2022*, 2022.

which use an average of seven to ten times the amount of water to extract it.<sup>296</sup> With this overuse of water and electricity required to heat the water, the expansion of oil projects are creating a grim reality for water resources, leading to a multitude of environmental and ecological complications, such as pollution impacting communities, dangerous emission levels, disruption of wildlife habitat, and irreversible effects on ecosystems.<sup>297</sup> Due to the significant amount of energy required to operate oil projects, the fossil fuel industry unquestionably contributes to global CO<sub>2</sub> emissions.<sup>298</sup> In 2020, 18.47 billion tons of CO<sub>2</sub> was emitted from global oil and gas usage.<sup>299</sup> Fossil fuel usage often exploits and overuses global and national resources, leading to an array of environmental damages, including inner-city flooding, water scarcity, landslides and avalanches, heatwaves, coastal flooding and erosion, and increased toxicity of the land and water.<sup>300</sup>

While the COVID-19 pandemic demonstrated the need for energy, there are many examples of reinvention from fossil fuel-driven economies and societies, to green spaces by using NBS.<sup>301</sup> Gradual ecological restoration and the conversion of fossil fuel sites can enhance post-industrial societies and boomtowns to regeneration and sustainable solutions.<sup>302</sup> The COVID-19 pandemic resulted in a rapid decline of GHG emissions, simultaneously driving down fossil fuel consumption.<sup>303</sup> A decline of nearly 2,000 million tons of CO<sub>2</sub> emissions is comparable to removing all of the emissions from the European Union from the global total, and is the total number of CO<sub>2</sub> not emitted in 2020.<sup>304</sup> Global primary energy demand dropped 4%, and energy-related CO<sub>2</sub> decreased by 5.8% – the largest decline since World War II.<sup>305</sup>

The *2021 Production Gap Report*, co-authored by leading research institutes and UNEP, have uncovered that although many Member States have committed to climate goals outlined in the *2030 Agenda* and the *Paris Agreement*, governments are on track to produce more than double the number of agreed-upon levels of fossil fuels by 2030.<sup>306</sup> The 2021 report compares targets between the report conducted in 2019, and concludes that the fossil fuel production between the two years is largely unchanged.<sup>307</sup> COP26 hosted many high-level discussions regarding a just and equitable transition away from fossil fuel production and usage, labelling this transition as “climate ambition.”<sup>308</sup> In addition to government’s production projections needing to decline, fossil fuel usage can also decline by verifiable and comparable information from all Member States to promote transparency.<sup>309</sup> Fossil fuel producing nations are encouraged by the international community to recognize their roles and responsibilities in the direction towards a safe climate future, and their contribution towards the achievement of the SDGs.<sup>310</sup>

With a multilateral conversation and growing concern for the planet and its transition away from fossil fuel usage, the UN is calling for a year of accelerated action, which will include the High-Level Dialogue on Energy – the first UN global energy summit in more than 40 years.<sup>311</sup>

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<sup>296</sup> Government of Canada, *Energy Fact Book 2021-2022*, 2022

<sup>297</sup> *Ibid.*

<sup>298</sup> *Ibid.*

<sup>299</sup> Ritchie & Roser, *CO<sub>2</sub> emissions by fuel*, 2020.

<sup>300</sup> ICLEI, *Nature-based solutions for sustainable urban development*, 2008, p. 2.

<sup>301</sup> *Ibid.*, p. 4.

<sup>302</sup> *Ibid.*, p. 4.

<sup>303</sup> IEA, *Global Energy Review: CO<sub>2</sub> Emissions in 2020*, 2021.

<sup>304</sup> *Ibid.*

<sup>305</sup> *Ibid.*

<sup>306</sup> UNEP, *Governments’ fossil fuel production plans dangerously out of sync with Paris limits*, 2021.

<sup>307</sup> *Ibid.*

<sup>308</sup> UNEP, *Governments’ fossil fuel production plans dangerously out of sync with Paris limits*, 2021.

<sup>309</sup> *Ibid.*

<sup>310</sup> *Ibid.*

<sup>311</sup> UNDP, *Breaking up with fossil fuels*, 2021.

## Conclusion

As UNEA hosts meaningful and intentional discussions regarding global environmental policies and the development of international law, it is often regarded to as “the world’s parliament on the environment.”<sup>312</sup> While Member States and the international community develop plans to achieve the SDGs, NBS provide a multitude of approaches to sustainability.<sup>313</sup> In consideration of the UN Decade for Ecosystem Restoration, UNEA has decided to focus on NBS to “protect, conserve, restore, sustainably use and manage ecosystems.”<sup>314</sup> A universally understood definition of NBS is crucial to Member States’ understanding of the importance of adaptation and assessment of societal change for sustainability and climate change.<sup>315</sup> SDG 11 demonstrates the need for a transition away from fossil fuel usage with a simultaneous increase of NBS efforts.<sup>316</sup> The Ministerial Declaration from UNEA-5 urged the necessity to halt the decline of biodiversity, often induced by human impacts from land and sea usage, and unsustainable consumption and production.<sup>317</sup> UNEA-6 will convene in early 2024 in Nairobi and will continue with the progress from UNEA-5.<sup>318</sup>

## Further Research

When considering the environmental implications of fossil fuel usage, how can Member States ensure an effective and transition to NBS for energy? What are some methods that regional groups can utilize to develop sustainable urbanization through NBS? How can the rights of indigenous and marginalized groups be protected while providing action in their communities through NBS? How can the international community try to execute more “Nature Super Years” while society is building back from the implications of the COVID-19 pandemic?

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*In 2021, Nature-based solutions for climate change, clean energy & health, was published to challenge the G20 to control climate change through various means of mobilizing NBS. This detailed overview of suggestions outlines that NBS can be used to: foster forests, preserve peatlands, clean cities, support green coasts, raise renewable energy shares, and lower land-use stress. Delegates will find this resource useful in their research of NBS to achieve the SDGs.*

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*This publication outlines the methods for FLR and FLRM and indicates what the FLRM has achieved on global and regional levels. Delegates will find this website useful as they research the goals of the Paris Climate Agreement, and what is being done around the globe to meet them. Additionally, delegates will note the different ventures between a regional and global scale, identifying the differences between the two.*

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<sup>312</sup> UNEP, *What you need to know about the UN Environment Assembly, 2022*.

<sup>313</sup> ICLEI, *Nature-based solutions for sustainable urban development*, 2008, p. 1.

<sup>314</sup> UNEP, *UN Environment Assembly concludes with 14 resolutions to curb pollution, protect and restore nature worldwide, 2022*.

<sup>315</sup> Ibid.

<sup>316</sup> UN DESA, *Goal 11, 2022*.

<sup>317</sup> UNEP, *UN Environment Assembly concludes with 14 resolutions to curb pollution, protect and restore nature worldwide, 2022*.

<sup>318</sup> Ibid.

*In 2021, UNEP hosted the first part of the fifth session of UNEA. In February 2022, the second part of the session (5-2) commenced virtually, hosted in Nairobi. This website will be helpful for delegates to familiarize themselves with session agenda items, discussion, and resolutions, as well as prepare for UNEA-6 in 2024.*

United Nations Environment Programme. (2022). *UNEP at 75<sup>th</sup> session of the UN General Assembly*. Retrieved February 12 2022 from: <https://www.unep.org/unga/2020>

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*This report outlines the ways in which individuals, communities, governments, and organizations can become involved with restoration and NBS to achieve the SDGs. The Ecosystem Restoration Playbook outlines three methods of involvement: taking action by starting or supporting a restoration project, making sustainable choices in daily living, and advocating for ecosystem conservation and restoration. Delegates will find this report helpful for their understanding of action plans, as proposed by UNEP and FAO.*

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