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# United Nations Environment Assembly Background Guide 2026

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## NATIONAL MODEL UNITED NATIONS



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Dear Delegates,

Welcome to the 2026 National Model United Nations New York Conference (NMUN•NY)! We are pleased to introduce you to our committee, the United Nations Environment Assembly (UNEA). Your committee's work is facilitated by volunteer staffers. This year's committee staff are: Director Jost Giesing (Conference A), and Director Pauline Bischoff and Assistant Director Ariana Adele Isidoro (Conference B). Jost holds an LL.M. degree in business law and works in the steel industry. His responsibilities include analyzing legal frameworks, deriving and implementing necessary strategic adjustments, and representing the company's interests with relevant stakeholders. Pauline graduated with a bachelor's degree in social sciences, is a conductor for choirs and ensembles, and works as a musical theater performer. Ariana studied Political Science and Geographic Information Systems at California State Polytechnic University Pomona and has a background in Nuclear Nonproliferation. The preparation of these materials was supported by Under-Secretaries-General Alliyah Edwards (Conference A) and Mariana G. Marañón Laguna (Conference B).

The topics on the agenda for this committee are:

- 1. Effective and Inclusive Water Policy Solutions in the Context of the Triple Planetary Crisis
- 2. Promoting Science and Evidence-Based Policymaking for a Pollution-Free Planet

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 explore your Member State's policies in depth and use the bibliography to further your knowledge on these topics. In preparation for the conference, each delegation should submit a Position Paper by 11:59 PM ET on 1 March 2026 in accordance with the guidelines in the <a href="Position Paper Guide">Position Paper Guide</a> and the <a href="MUNNY Position Papers website">NMUNNY Position Papers website</a>.

Two resources, available to download from the NMUN website, serve as essential instruments in preparing for the Conference and as a reference during committee sessions:

- The <u>NMUN Delegate Preparation Guide</u>, 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
- The <u>NMUN Rules of Procedure</u>, 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 <u>NMUN Conduct Expectations</u> 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 this committee, please contact the Deputy Secretaries-General at <u>dsg.ny@nmun.org</u>.

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

Jost Giesing, Director Conference A

Pauline Bischoff, Director Ariana Adele Isidoro, Assistant Director Conference B



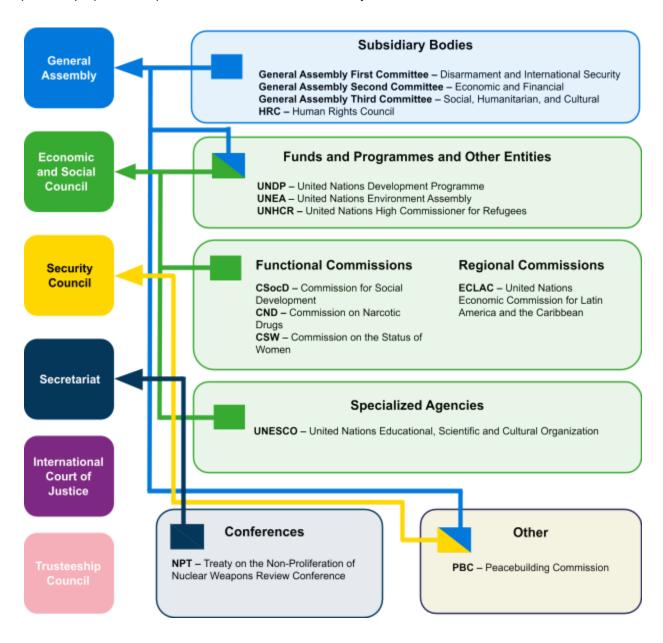
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#### **United Nations System at NMUN•NY**

This diagram illustrates the United Nations system simulated at NMUN•NY. It shows where each committee "sits" within the system to demonstrate the reportage and relationships between entities. Examine the diagram alongside the Committee Overview to gain a clear picture of the committee's position, purpose, and powers within the United Nations system.





#### Introduction

The United Nations Environment Assembly (UNEA) is the primary governing body of the United Nations Environment Programme (UNEP) and is the international community's highest-level decision-making body on environmental matters. In partnership with other United Nations institutions, it outlines the international environmental agenda and sets priorities for the international community. Although its resolutions are not binding, UNEA brings together relevant international actors to address global environmental issues and shape environmental governance.

#### Mandate, Function, and Powers

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 upgrading of UNEP so it could better execute its mandate.<sup>4</sup> UNEA was created in 2012 as the successor to UNEP's Governing Council.<sup>5</sup> Whereas the Governing Council was composed of 58 Member States and sat within UNEP, UNEA is structured as a distinct entity and enjoys universal membership with 193 Member States.<sup>6</sup> As a high-level governance body, UNEA reviews and coordinates the work of the international community on environmental matters while serving as a forum for and initiator of debates to be continued by other, more specialized bodies.<sup>7</sup>

While the following list is not exhaustive, the mandate of UNEA can be summarized as:

- UNEA will generally: set broad priorities for global environmental policy; identify emerging
  themes in environmental governance; progressively develop international environment law
  and begin negotiations on environmental treaties; define the work and priorities of UNEP;
  create ad-hoc committees and subsidiary bodies to further discussions on specific areas of
  environmental concern when necessary; make recommendations to Member States and
  other international organizations.<sup>8</sup>
- UNEA will not generally: engage in operational projects; complete negotiations on environmental treaties, but rather identify emerging issues and promote an architecture for future environmental governance.<sup>9</sup>

<sup>&</sup>lt;sup>1</sup> United Nations Environment Assembly. About the United Nations Environment Assembly. N.d.

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> United Nations Environment Programme. Q&A: UN Environment Assembly. 2024.

<sup>&</sup>lt;sup>4</sup> United Nations, General Assembly. The future we want (A/RES/66/288). 2012. p. 18.

<sup>&</sup>lt;sup>5</sup> United Nations Environment Assembly. About the United Nations Environment Assembly. N.d.

<sup>&</sup>lt;sup>6</sup> Ibid; United Nations Environment Programme, Governing Council. *Proceedings of the Governing Council at its Nineteenth Session (UNEP/GC.19/34)*. 1997.

<sup>&</sup>lt;sup>7</sup> International Institute for Sustainable Development. *The United Nations Environment Assembly's Role as a Governance Architect*. 2022.

<sup>&</sup>lt;sup>8</sup> United Nations Environment Programme. What you need to know about the United Nations Environment Assembly. 2024.

<sup>&</sup>lt;sup>9</sup> Ibid; International Institute for Sustainable Development. *The United Nations Environment Assembly's Role as a Governance Architect.* 2022.



UNEA and UNEP are distinct entities. UNEA is the primary governing body and priority-setting mechanism of UNEP and does not operationalize these priorities itself.<sup>10</sup> In contrast, UNEP undertakes programs, projects, and awareness campaigns and provides support to national governments to achieve environmental obligations in line with the priorities set out by UNEA.<sup>11</sup>

#### Governance, Funding, and Structure

All 193 United Nations Member States are represented in UNEA.<sup>12</sup> The Assembly meets every two years to set priorities for global environmental policy, discuss developments in the area of environmental legislation, and assist in the implementation of the *2030 Agenda for Sustainable Development* (2030 Agenda) (2015).<sup>13</sup>

Consisting of ten Ministers who each serve a two-year term and are selected based on geographical rotations, UNEA's Bureau is responsible for the general conduct of business. <sup>14</sup> UNEA also has a Committee of Permanent Representatives (CPR), a subsidiary inter-sessional organ of UNEA that meets at least four times a year. <sup>15</sup> The CPR contributes to the preparation of the UNEA agenda, holds an advisory role in policy matters, and monitors the implementation of decisions. <sup>16</sup> The CPR also holds discussions on key issues, promotes the inclusion of non-resident members of the Committee, and performs other tasks given by UNEA. <sup>17</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>18</sup>

UNEP relies on three main financial sources: earmarked funds, the Environment Fund, and the United Nations's regular budget. <sup>19</sup> Earmarked funds, also known as earmarked or ring-fenced contributions, are funds appropriated for specific projects, themes, or countries. <sup>20</sup> These funds aim to expand and/or replicate the results of United Nations Environment's work in more countries and in cooperation with more partners. <sup>21</sup> The Environment Fund aids in maintaining the capacity, balance, and efficiency needed for UNEP to function. <sup>22</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>23</sup> The United Nations' regular budget supports the regular work of UNEA and the UNEP Secretariat. <sup>24</sup>

<sup>&</sup>lt;sup>10</sup> Office of the United Nations Secretary-General's Envoy on Youth. *UNEP: United Nations Environment Programme*. N.d.

<sup>&</sup>lt;sup>11</sup> Ihid

<sup>&</sup>lt;sup>12</sup> United Nations Environment Assembly. About the United Nations Environment Assembly. N.d.

<sup>&</sup>lt;sup>13</sup> Ibid.

<sup>&</sup>lt;sup>14</sup> Ibid.

<sup>&</sup>lt;sup>15</sup> United Nations Environment Programme. *Committee of Permanent Representatives*. 2024.

<sup>&</sup>lt;sup>16</sup> Ibid.

<sup>&</sup>lt;sup>17</sup> Ibid.

<sup>&</sup>lt;sup>18</sup> Ibid.

<sup>&</sup>lt;sup>19</sup> United Nations Environment Programme. How is UNEP funded. 2024.

<sup>&</sup>lt;sup>20</sup> Ibid.; United Nations Environment Programme. *Earmarked Contributions*. 2024.

<sup>&</sup>lt;sup>21</sup> Ibid.

<sup>&</sup>lt;sup>22</sup> United Nations Environment Programme. How is UNEP funded. 2024.

<sup>&</sup>lt;sup>23</sup> Ibid.

<sup>&</sup>lt;sup>24</sup> Ibid.



International Institute for Sustainable Development. *The United Nations Environment Assembly's Role as a Governance Architect.* 2022. Retrieved 24 October 2025 from:

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United Nations, General Assembly. *The future we want (A/RES/66/288)*. 2012. Retrieved 24 October 2025 from: http://docs.un.org/en/A/RES/66/288



# 1. Effective and Inclusive Water Policy Solutions in the Context of Triple Planetary Crisis

"Water is not just a victim of climate change, but it is also a vital solution. Water must be integrated into full aspects of the global climate agenda."<sup>25</sup>

#### Introduction

Climate change, biodiversity loss, and pollution are major threats to water security worldwide.<sup>26</sup> The term "triple planetary crisis" describes the links between these three global crises, to better understand their interaction and consequences for people and the environment, and to develop targeted responses.<sup>27</sup> Regarding water, the triple planetary crisis is reducing availability and quality as climate change disrupts hydrological cycles and pollution contaminates freshwater, leading to growing scarcity.<sup>28</sup> As extreme weather events and environmental destruction become more common, water systems are under increasing stress.<sup>29</sup> Every year, about 21.5 million people are displaced from their homes by climate-related disasters, with 90% of major natural disasters being linked to water.<sup>30</sup> Moreover, human pollution accelerates marine degradation as the United Nations Environment Programme (UNEP) estimates that ocean plastics will reach about 53 million tons annually by 2030, twice the 2019 level.<sup>31</sup> The resulting microplastics pose a threat to living beings because they accumulate in food chains and carry toxic pollutants.<sup>32</sup> In terms of biodiversity, the destruction of ecosystems such as wetlands and forests weakens nature's ability to regulate water flow and maintain water guality.<sup>33</sup> Without countermeasures, over one million animal and plant species are likely to become extinct in the coming decades.34 A recent emissions report published by UNEP determines that the global greenhouse gas emissions set new highs, and that existing policies and Nationally Determined Contributions (NDCs) will not be enough to limit global warming to below 2°C.35 As these pressures intensify, water systems are

<sup>25</sup> World Meteorological Organization. *Water is an integral part of the global climate agenda*. 2024.

<sup>&</sup>lt;sup>26</sup> United Nations Framework Convention on Climate Change. *What is the Triple Planetary Crisis?*. 2022; United Nations Environment Programme. *Making Peace With Nature*. 2021, pp. 24, 51, 134-135.

<sup>&</sup>lt;sup>27</sup> United Nations Environment Programme. *Making Peace With Nature*. 2021. pp. 6, 13, 14, 120.

<sup>&</sup>lt;sup>28</sup> United Nations Environment Programme. *Global Environment Outlook 6: Healthy Planet, Healthy People*. 2019. p. 24.

<sup>&</sup>lt;sup>29</sup> United Nations Environment Programme. *Fresh Water*. 2025; United Nations Environment Programme. *UNEP and Biodiversitv*. 2020.

<sup>&</sup>lt;sup>30</sup> Office of the United Nations High Commissioner for Refugees. *Data reveals impacts of climate emergency on displacement*. 2021; United Nations Office for Disaster Risk Reduction. United Nations, Department of Economic and Social Affairs. *Better data for water-related disasters*. N.d.

<sup>&</sup>lt;sup>31</sup> United Nations Environment Programme. *From Pollution to Solution: A global assessment of marine litter and plastic pollution.* 2021. p. 14.

<sup>&</sup>lt;sup>32</sup> Ibid.; United Nations Environment Programme. A pollution-free planet. 2023.

<sup>&</sup>lt;sup>33</sup> United Nations Educational, Scientific and Cultural Organization. *The United Nations World Water Development Report 2024: Water for prosperity and peace*. 2024. pp. 23, 91.

<sup>&</sup>lt;sup>34</sup> Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. *Global assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*. 2019. pp. 18-19.

<sup>&</sup>lt;sup>35</sup> United Nations Environment Programme. *Emissions Gap Report 2024: No more hot air ... please! With a massive gap between rhetoric and reality, countries draft new climate commitments.* 2024. pp. 12, 16.



increasingly disrupted, posing a direct threat to human health, sustainable development, and political stability.<sup>36</sup>

Effective and inclusive water policies are essential to address the triple planetary crisis.<sup>37</sup> Inclusive water policies aim to ensure that all stakeholders, especially minorities and vulnerable groups, have safe access to water and sanitation and can take part in shaping water-related decisions.<sup>38</sup> However, around two billion people still do not have access to safe drinking water, and over three billion lack even basic sanitation services, affecting most in rural and low-income regions.<sup>39</sup> Inclusive water policies promote locally appropriate solutions and reduce the risk of inequality and exclusion in both water access and water governance.<sup>40</sup> Without them, existing inequalities may worsen, and competition over scarce water resources could intensify.<sup>41</sup> Since water resources often cross national borders, inclusive water policies require alignment of local needs with broader environmental goals and coordination between countries, called transboundary water agreements.<sup>42</sup>

Governments increasingly promote integrated and nature-based approaches to water management.<sup>43</sup> Endorsed at the Dublin Conference on Water and the Environment (1992), Integrated Water Resources Management (IWRM) involves the coordinated management of water, land, and related resources.<sup>44</sup> IWRM aims to maximize social and economic benefits, like improved agricultural productivity, without harming the long-term sustainability of ecosystems.<sup>45</sup> Conceptualized by the International Union for Conservation of Nature and Natural Resources, nature-based Solutions (NbS), such as restoring wetlands or forests, offer additional ways to address water-related challenges while also contributing to climate and biodiversity goals.<sup>46</sup> Integrated actions support water availability, reduce pollution, and improve resilience to both floods and droughts, often in cost-effective and locally tailored ways.<sup>47</sup> Natural events intensified by climate change show how vulnerable water-ecosystems are to growing

<sup>&</sup>lt;sup>36</sup> United Nations Environment Assembly. Effective and inclusive solutions for strengthening water policies to achieve sustainable development in the context of climate change, biodiversity loss and pollution (UNEP/EA.6/Res.13). 2024. pp. 1-2.

<sup>&</sup>lt;sup>37</sup> United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1).* 2015. p. 18.

<sup>&</sup>lt;sup>38</sup> Ibid. p. 15; United Nations, Department of Global Communications. *Goal 6: Ensure access to water and sanitation for all.* 2025; United Nations Environment Programme. *Making Peace With Nature*. 2021. p. 13; Organization for Economic Cooperation and Development. *Biodiversity, water and ecosystems*. N.d. <sup>39</sup> United Nations Educational, Scientific and Cultural Organization. *The United Nations World Water* 

Development Report 2024: Water for prosperity and peace. 2024. p. 18.

<sup>&</sup>lt;sup>40</sup> United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2015. p. 15; United Nations, Department of Global Communications. *Goal 6: Ensure access to water and sanitation for all*. 2025.

<sup>&</sup>lt;sup>41</sup> United Nations Environment Programme. *Making Peace With Nature*. 2021. pp. 13, 14, 134-135.

<sup>&</sup>lt;sup>42</sup> United Nations Office for Disaster Risk Reduction. *Ecosystem-Based Disaster Risk Reduction: Implementing Nature-based Solutions for Resilience*. 2020. p. 8; United Nations Environment Programme. *Climate Information and Early Warning Systems*. 2025.

<sup>&</sup>lt;sup>43</sup> UN-Water. Progress on Integrated Water Resources Management. 2018. pp. 42, 45.

<sup>&</sup>lt;sup>44</sup> World Meteorological Organization. *International Conference on Water and the Environment: Development issues for the 21st Century.* 1992. p. 25.

<sup>&</sup>lt;sup>45</sup> United Nations Environment Programme. What is Integrated Water Resources Management?. 2020.

<sup>&</sup>lt;sup>46</sup> International Union for Conservation of Nature and Natural Resources. *Nature-based Solutions*. N.d.; United Nations Environment Assembly. *Nature-based solutions for supporting sustainable development (UNEP/EA.5/Res.5)*. 2022. p. 2.

<sup>&</sup>lt;sup>47</sup> United Nations Educational, Scientific and Cultural Organization. *The United Nations World Water Development Report 2018: Nature-based Solutions for Water.* 2018. pp. 16, 35, 78, 94.



environmental stress.<sup>48</sup> Taken together, the triple planetary crisis highlights the urgent need for water policies that are inclusive, integrated, and nature-based, ensuring that responses to water insecurity advance climate resilience, protect biodiversity, and safeguard human well-being.<sup>49</sup>

#### International and Regional Framework

The *United Nations Framework Convention on Climate Change* (UNFCCC) (1992) is the foundational international agreement directing worldwide efforts to combat climate change.<sup>50</sup> The Convention highlights the susceptibility of water resources to climate-related consequences such as extreme weather-related events.<sup>51</sup> It also acknowledges the close links between climate change and other environmental systems, like oceans, land, and ecosystems, reflecting the Convention's broader aim to confront the interconnected drivers of the triple planetary crisis of climate change, biodiversity loss, and pollution.<sup>52</sup> The necessity of comprehensive adaptation strategies is emphasized by Article 4 of UNFCCC, which requests that States parties create and implement suitable, integrated plans for agriculture, water resources, and coastal zone management.<sup>53</sup> Building upon these foundations, the *Kyoto Protocol* (1997) introduced binding commitments for developed countries to reduce greenhouse gas emissions, marking a shift toward concrete mitigation efforts. Similarly, Article 7 of the *Paris Agreement* (2015) made the global adaptation agenda stronger by setting up nationally decided contributions and better resilience frameworks.<sup>54</sup> Complementarily, targets 8 and 11 of the *Kunming-Montreal Global Biodiversity Framework* (2022) also emphasize the need to combine climate action with biodiversity protection, showing that the progress of international climate governance is moving toward a more comprehensive environmental agenda.<sup>55</sup>

With the adoption of the *2030 Agenda for Sustainable Development* (2015), the 17 Sustainable Development Goals (SDGs) set a global action plan that addresses water solutions to the triple planetary crisis. <sup>56</sup> Specifically, SDG 6 (clean water and sanitation) target 6.4 on "increasing water-use efficiency and ensuring fresh water supply" addresses climate resilience through water management by reducing vulnerability to droughts and water scarcity, as well as sustaining ecosystems that buffer climate impacts. <sup>57</sup> Furthermore, SDG target 6.5 on "implementing integrated water resource management" highlights the implementation of IWRM at all levels, including through transboundary cooperation, which ensures fair and sustainable utilization of water, mitigates disputes, and bolsters climate and ecosystem resilience among Member States. <sup>58</sup> Additionally, achieving these goals advances other interconnected SDGs, such as SDG 2 (zero hunger) through sustainable irrigation, SDG 3 (good health and well-being)

<sup>&</sup>lt;sup>48</sup> Intergovernmental Panel on Climate Change. *Climate Change 2022: Impacts, Adaptation and Vulnerability*. 2022. p. 24.

<sup>&</sup>lt;sup>49</sup> United Nations Framework Convention on Climate Change. *What is the Triple Planetary Crisis?*. 2022; United Nations Environment Programme. *Making Peace With Nature*. 2021. pp. 24, 51, 134-135.

<sup>&</sup>lt;sup>50</sup> United Nations Conference on Environment and Development. *United Nations Framework Convention on Climate Change*. 1992. p. 11.

<sup>&</sup>lt;sup>51</sup> Ibid.

<sup>&</sup>lt;sup>52</sup> Ibid.

<sup>&</sup>lt;sup>53</sup> Ibid.

<sup>&</sup>lt;sup>54</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change. *Paris Agreement*. 2015. pp. 5-8.

<sup>&</sup>lt;sup>55</sup> Conference of the Parties to the Convention on Biological Diversity. *Kunming-Montreal Global Biodiversity Framework*. 2022. p. 10.

<sup>&</sup>lt;sup>56</sup> United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015. p. 18.

<sup>&</sup>lt;sup>57</sup> Ibid.

<sup>58</sup> Ibid.



through the reduction of waterborne illnesses, and SDG 15 (life on land) through pollution management and ecosystem conservation, all of which comprehensively address climate change and biodiversity loss. <sup>59</sup> Therefore, in addition to promoting universal access to sanitary facilities and clean water, SDG 6 is essential for reducing and preparing for interconnected challenges posed by the triple planetary crisis. <sup>60</sup>

The United Nations System-wide Strategy for Water and Sanitation highlights the need for collaboration on water and sanitation strategies across the United Nations system.<sup>61</sup> A lack of sufficient coordination leads to ineffective and fragmented responses.<sup>62</sup> To mitigate this issue, the system-wide strategy encourages Member States to collaborate on water policies within the United Nations and with other Member States through joint programming at country and regional levels.<sup>63</sup> Key goals of the strategy include enhancing access to safe drinking water and sanitation, promoting integrated water resources management, protecting ecosystems and water quality, and ensuring that the United Nations system collaborates to assist countries in achieving sustainable and equitable outcomes in the water and sanitation sectors.<sup>64</sup>

Regional frameworks, such as the United Nations Economic Commission for Europe (UNECE) *Water Convention* (2018), provide legally binding mechanisms for sustainable and cooperative water governance. The *Water Convention* promotes transboundary water cooperation and ecosystem protection by requiring Member States to adopt sustainable water policies that prevent, control, and reduce transboundary pollution and address key pillars of the triple planetary crisis. Since 2018, the Convention has become a legal framework for transboundary water cooperation with 58 international States parties, allowing non-UNECE countries to join as well.

#### Role of the International System

UNEP leads global efforts under the United Nations Environment Assembly (UNEA) to promote integrated, inclusive water policies that address pollution, protect ecosystems, and strengthen climate resilience through NbS and multi-stakeholder partnerships.<sup>68</sup> It promotes data collection, capacity-building, and technical guidance through initiatives like the Global Wastewater Initiative, which treats wastewater management as a cross-cutting issue for sustainability, health, and the environment, while aligning water policy with pollution control, biodiversity, and climate adaptation.<sup>69</sup> For example, UNEP works with Member States of the African Union (AU) to develop national wastewater policies and

<sup>&</sup>lt;sup>59</sup> Ibid. pp. 13-17, 24-25.

<sup>&</sup>lt;sup>60</sup> Ibid. pp. 18-19.

<sup>&</sup>lt;sup>61</sup> UN-Water. United Nations System-wide Strategy for Water and Sanitation. 2024. pp. 51-52.

<sup>62</sup> Ibid.

<sup>63</sup> Ibid.

<sup>64</sup> Ibid.

<sup>&</sup>lt;sup>65</sup> United Nations Economic Commission for Europe. *The Water Convention: responding to global water challenges*. 2018; European Commission. *Water Framework Directive*. 2023.

<sup>&</sup>lt;sup>66</sup> United Nations Economic Commission for Europe. *The Water Convention: responding to global water challenges*. 2018.

<sup>&</sup>lt;sup>67</sup> United Nations Economic Commission for Europe. *The Water Convention and the Protocol on Water and Health*. N.d.

<sup>&</sup>lt;sup>68</sup> United Nations Environment Assembly. *Nature-based solutions for supporting sustainable development* (UNEP/EA.5/Res.5). 2022. p. 2.

<sup>&</sup>lt;sup>69</sup> United Nations Environment Programme. *Global Wastewater Initiative*. 2025; United Nations Environment Programme. *Fresh Water*. 2025; United Nations Environment Programme. *Making Peace With Nature*. 2021. p. 91.



provide policy guidance that aligns with pollution reduction, health, and climate adaptation goals.<sup>70</sup> In Latin America and the Caribbean, UNEP has supported the management of watersheds to promote climate adaptation and build resilience in urban areas, by initiatives such as reforestation and restoration of upstream catchments.71

UNEP has called for the rising role of multilateral environmental agreements (MEA) (e.g., for water policies) that address the triple planetary crisis together, as part of inclusive and sustainable development.<sup>72</sup> The Ministerial Declaration of UNEA resolution 5.2 on "strengthening actions for nature to achieve the Sustainable Development Goals" specifically reiterated the necessity of increasing cooperation and collaboration among MEAs as a component of the solution to the triple planetary crisis.<sup>73</sup> An example of MEA is the African Water Vision 2025 (AWV) (2025), which promotes equitable and sustainable water management for poverty reduction, socio-economic development, and environmental protection.<sup>74</sup> The AU also adopted the African Water Vision 2063, promoting inclusive water governance by enabling community participation in water-related decisions, especially on socioeconomic development and environmental sustainability across Africa.75

UN-Water ensures coordination across the United Nations system by bringing together more than 30 United Nations agencies and 40 foreign partners to accelerate action on SDG 6 through inclusive, integrated water governance. 76 It leads the SDG 6 Global Acceleration Framework, which is responsible for advancing water and sanitation by fostering stronger partnerships and capacity development. 77 The Framework concentrates on five accelerators: enhancing data and monitoring systems, fostering innovation in practices and technology, developing workforce capacity and job creation, strengthening governance for cross-sector collaboration, and mobilizing resources for national plans.<sup>78</sup>

The United Nations Water Action Decade (2018-2028) helps Member States to adopt water policies that respond to climate threats, halt pollution, and protect ecosystems. 79 The initiative's main focus is on challenges about inclusive governance, transboundary collaboration, and water resource management that jointly address climate, pollution, and environmental threats.<sup>80</sup> Member States are implementing integrated water policies, like flood control and groundwater recharge, as part of the Water Action Decade to foster inclusive, cross-sectoral water governance and increase resilience to pollution and climate

<sup>&</sup>lt;sup>70</sup> United Nations Environment Assembly. *Information on the implementation of resolution 5/5 on* nature-based solutions for supporting sustainable development (UNEP/EA.6/INF/5). 2024. p. 38. <sup>71</sup> United Nations Environment Programme. A Watershed Approach in Ecosystem-based Adaptation: A

case study from Latin America and the Caribbean. 2024. p. 1.

<sup>&</sup>lt;sup>72</sup> United Nations Economic Commission for Europe. UN Environment Assembly highlights rising global role of UNECE Multilateral Environmental Agreements to address triple planetary crisis, 2024.

<sup>&</sup>lt;sup>73</sup> United Nations Environment Assembly. Ministerial declaration of the United Nations Environment Assembly at its fifth session (UNEP/EA.5/HLS.1). 2022. p. 4.

<sup>&</sup>lt;sup>74</sup> Economic Commission for Africa et al. The Africa Water Vision for 2025: Equitable and Sustainable Use of Water for Socioeconomic Development. 2000. p. 8.

<sup>&</sup>lt;sup>75</sup> African Ministers' Council on Water. Communique on the Adoption of the African Water Vision 2063 and Policy and Launch of its Implementation, 2025, pp. 1-4.

<sup>&</sup>lt;sup>76</sup> UN-Water. UN System-wide Strategy for Water and Sanitation. N.d.; UN-Water. The Sustainable Development Goal 6 Global Acceleration Framework. 2020. pp. 6-12.

<sup>&</sup>lt;sup>77</sup> UN-Water. UN System-wide Strategy for Water and Sanitation. N.d.

<sup>78</sup> Ibid.

<sup>&</sup>lt;sup>79</sup> United Nations, General Assembly. International Decade for Action, "Water for Sustainable Development", 2018-2028 (A/C.2/71/L.12/Rev.1). 2016. pp. 2-4. 80 Ibid.



change.<sup>81</sup> Furthermore, the 2023 UN-Water Conference called for stronger integration of water policies with national climate strategies, biodiversity action plans, and pollution prevention measures.<sup>82</sup> For example, Kenya integrates IWRM across sectors, India safeguards wetlands through its Biodiversity Action Plan, and China limits wastewater via its Water Pollution Action Plan, jointly tackling the triple planetary crisis.<sup>83</sup>

The United Nations Development Programme (UNDP) undertakes climate financing to support countries in building water governance through integrated water resource management, capacity-building, and NbS solutions. 4 UNDP's Water and Ocean Governance Programme helps states implement IWRM, strengthen policies, and improve local participation by co-leading projects with UNEP focused on ecosystem-based water solutions and pollution control in vulnerable regions by providing technical assistance, policy guidance, and financial support. 5 Furthermore, UNDP uses climate finance to support water adaptation and resilience measures. 6 Climate finance refers to local, national, or international funding, originating from public, private, or alternative sources of financing, that aims to promote climate adaptation actions and mitigation measures. 7 For example, UNDP collaborates with the Green Climate Fund (GCF), a key financing mechanism of the *Paris Agreement*. With a capital base of around \$16 billion, the GCF has mobilized over \$50 billion in climate investments worldwide, supporting developing countries in implementing their NDCs and advancing low-emission, climate-resilient development.

In response to the triple planetary crisis, the Association of South East Nations (ASEAN) and the African Union (AU) have launched several regional programs and frameworks to promote inclusive water policy solutions, which showcase the role of Intergovernmental Organizations.<sup>90</sup> The ASEAN Strategic Plan on the Environment acts as the main framework for ASEAN's environmental collaboration, including topics like pollution, water, biodiversity, and climate change.<sup>91</sup> The ASEAN Working Group on Water Resources Management (AWGWRM) supports fair, sustainable, and efficient water resource management in all ASEAN Member States through regional collaboration.<sup>92</sup> The AWGWRM helps ASEAN water resource authorities share information, experience, technology, and best practices.<sup>93</sup> Regional workshops and

<sup>&</sup>lt;sup>81</sup> United Nations Economic and Social Commission for Western Asia. *Water Action Decade 2018-2028: Water for Sustainable Development - Arab Region Engagement*. 2019. p. 12.

<sup>&</sup>lt;sup>82</sup> United Nations, General Assembly. Follow-up to the United Nations Conference on the Midterm Comprehensive Review of the Implementation of the Objectives of the International Decade for Action, "Water for Sustainable Development", 2018–2028 (A/RES/77/334). 2023. p. 2.

<sup>&</sup>lt;sup>83</sup> Ministry of Environment, Climate Change and Forestry. Republic of Kenya. *National Climate Change Action Plan (NCCAP) III 2023-2027*. 2023. p. 3; Ministry of Environment, Forest & Climate Change, Government of India. *National Biodiversity Action Plan (NBAP)*. 2014. pp. 4-6; Ministry of Ecology and Environment, The People's Republic of China. *Action Plan for Prevention and Control of Water Pollution*. 2015.

<sup>&</sup>lt;sup>84</sup> United Nations Development Programme. *Water Governance*. N.d.; United Nations Development Programme. *Ocean Governance*. N.d.

<sup>85</sup> Ibid.

<sup>86</sup> Ibid.

<sup>&</sup>lt;sup>87</sup> United Nations Framework Convention on Climate Change. *Introduction to Climate Finance: What is climate finance?*. N.d.

<sup>88</sup> Green Climate Fund. GCF Annual Report 2024. 2025. pp. 2, 21.

<sup>89</sup> Green Climate Fund. About the GCF: Overview. N.d.

<sup>&</sup>lt;sup>90</sup> Association of South East Nations. ASEAN Cooperation on Environment: At a Glance. 2018.

<sup>&</sup>lt;sup>91</sup> Ibid.

<sup>&</sup>lt;sup>92</sup> Association of South East Nations. *Integrated Water Resource Management. ASEAN Working Group on Water Resources Management (AWGWRM).* N.d.
<sup>93</sup> Ibid.



capacity-building programs like the ASEAN IWRM Country Strategy Guidelines help Member States integrate IWRM principles into national policies and improve cross-border water governance. On the other hand, the AU has also produced many major regional frameworks aimed at effective and inclusive water policy and governance. The African Ministers' Council on Water (AMCOW) is the technical arm of the AU on issues related to water policy coordination and is responsible for mobilizing resources for water projects through the African Water Facility. In addition, to ensure commitments are being met, AMCOW's African Water and Sanitation Monitoring System ensures that tracking national progress toward inclusive water targets is made easier.

#### Integrated Water Resource Management as a Tool to Address the Triple Planetary Crisis

IWRM is internationally recognized as essential to achieving SDG 6 and addressing the interconnected challenges of climate change, biodiversity loss, and pollution. As part of SDG target 6.5 on "integrating water resource management at all levels," IWRM is promoted by the United Nations to balance the social, economic, and environmental needs against rising water demands. The global implementation rate has increased from 49% in 2017 to 57% in 2023, which demonstrates steady but moderate progress as well as an increase in the number of Member States adopting IWRM into practice. In Furthermore, the Nairobi Programme of Work (NWP), a UNFCCC knowledge sharing mechanism, supports IWRM as a crucial framework for coordinating the development and management of land, water, and related resources to maximize social and economic well-being without sacrificing environmental sustainability. More specifically, NWP provides capacity-building, pilot projects, and policy support to help countries implement IWRM plans that balance natural water systems and watershed health with human development goals.

The international community recognizes IWRM as actionable, but progress is too slow to meet global water security targets. Data comparisons as early as the 2000s showcase that the annual growth rate of people getting access to basic water supply and sanitation is 1% whereas a growth rate of at least 3% is required to ensure basic water supply for everyone by 2030. Hurthermore, using tools such as UNEP's Measuring Progress report can also facilitate better water management by accurately assessing

<sup>&</sup>lt;sup>94</sup> Association of South East Nations. *Integrated Water Resource Management. AWGWRM Guidelines.* N.d.

<sup>&</sup>lt;sup>95</sup> African Union. *African water ministers adopt Dar es Salaam roadmap for achieving water security and sanitation.* 2016.

<sup>&</sup>lt;sup>96</sup> African Ministers' Council on Water. African Ministers' Council on Water (AMCOW). 2022.

<sup>&</sup>lt;sup>97</sup> African Ministers' Council on Water. *Water and Sanitation Sector Monitoring and Reporting System* (WASSMO). 2020.

<sup>&</sup>lt;sup>98</sup> United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2015. p. 18. <sup>99</sup> Ibid.

<sup>&</sup>lt;sup>100</sup> United Nations Environment Programme - DHI Centre for Water and Environment. *2023 Data Drive highlights the need for accelerated progress in IWRM*. 2024. pp. 11-12.

<sup>&</sup>lt;sup>101</sup> United Nations Framework Convention on Climate Change. Synthesis report on efforts undertaken to monitor and evaluate the implementation of adaptation projects, policies and programmes and the costs and effectiveness of completed projects, policies and programmes, and views on lessons learned, good practices, gaps and needs. 2010.

<sup>&</sup>lt;sup>102</sup> United Nations Framework Convention on Climate Change. *Activities under the Nairobi work programme on impacts, vulnerability and adaptation to climate change, by region, between 2019 and 2023.* 2024. pp. 2-3, 15.

<sup>&</sup>lt;sup>103</sup> UN-Water. *The Sustainable Development Goal 6 Global Acceleration Framework.* 2020. p. 4. <sup>104</sup> Ibid.



water risks and allocating resources more effectively to ensure a sustainable supply of basic water.<sup>105</sup> Early-warning systems and inclusive water management demonstrate strong returns by protecting vulnerable communities against climate shocks and guaranteeing a steady supply of basic water.<sup>106</sup>

General Assembly resolution 71/222 on "The Midterm review of the Water Action Decade (2018-2028)" highlights the importance of integrated, inclusive, sustainable water management to address the triple planetary crisis in the broader United Nations system.<sup>107</sup> Promoting inclusivity, it champions cross-sectoral water governance, encouraging governments to involve communities, civil society, and marginalized groups in water policy decisions through knowledge-sharing, especially in areas like wastewater reuse, water efficiency, and NbS.<sup>108</sup> In addition, the resolution also supports strategies as an essential tool for both climate adaptation for extreme weather events, like drought and flood preparedness, and ecosystem protection.<sup>109</sup> Both are key pillars in overcoming the triple planetary crisis.<sup>110</sup>

River basin and coastal area management show how IWRM can bridge climate, ecosystem, and water governance, but stronger coordination is needed.<sup>111</sup> Integrated coastal and river basin management links upstream and downstream water use with ecosystem resilience, which is the capacity of an ecosystem to return to its previous state following disturbance.<sup>112</sup> Healthy ecosystems such as wetlands, floodplains, and mangroves support biodiversity and provide vital functions like carbon storage, water purification, and natural flood control, addressing all three pillars of the triple planetary crisis.<sup>113</sup> For example, maintaining mangrove trees in estuary locations helps protect inland towns from storm surges and rising sea levels, while sustainable upstream farming practices can lessen pollution and sedimentation in downstream coastal wetlands.<sup>114</sup>

The key to closing the gap between the recognized need for IWRM and the actual level of implementation on the ground is balancing competing water demands internally and across borders while ensuring sustainability and inclusion. 115 As IWRM aims to mediate between different sectors and ecosystems, balancing the two remains difficult, especially where institutional capacity is weak and there are structural challenges. 116 For example, the Niger Basin has a cooperative framework through the Niger Basin Authority, but IWRM implementation is hampered due to overlapping mandates between water,

<sup>&</sup>lt;sup>105</sup> United Nations Environment Programme. Measuring Progress: Water-related ecosystems and the SDGs. 2023. pp. 21, 59-60.

<sup>&</sup>lt;sup>106</sup> World Meteorological Organization. *UN El Niño debate emphasizes need for integrated action*. 2024; World Meteorological Organization. *State of Global Water Resources*. 2024. pp. 6-9.

<sup>&</sup>lt;sup>107</sup> United Nations, General Assembly. *Midterm review of the Water Action Decade (2018–2028)* (A/RES/75/212). 2020. p. 4.

<sup>&</sup>lt;sup>108</sup> Ibid. p. 4-5.

<sup>&</sup>lt;sup>109</sup> Ibid. p. 2.

<sup>&</sup>lt;sup>110</sup> United Nations Environment Programme. For People and Planet. 2021. pp. 10-11.

<sup>&</sup>lt;sup>111</sup> United Nations Environment Programme. *Integrated coastal and river basin management*. N.d. <sup>112</sup> Ibid.

<sup>&</sup>lt;sup>113</sup> United Nations Environment Programme. *Facing climate storm, one town turns to mangroves for protection.* 2025.

<sup>&</sup>lt;sup>114</sup> Ibid.

United Nations World Water Assessment Programme. United Nations Educational, Scientific, and Cultural Organization. *Integrated Water Resources Management (IWRM) in Action*. 2009. pp. 3-4.
 United Nations Environment Programme - DHI Centre for Water and Environment. *New Technical Note Benchmarking Africa's Progress on IWRM*. 2025.



agriculture, and energy ministries.<sup>117</sup> From an international perspective, transboundary competition over water resources can exacerbate tensions without inclusive, equitable governance frameworks, as seen in South Asia between India and Pakistan over the Indus Water Treaty.<sup>118</sup>

Transboundary water cooperation is a critical, yet underutilized, dimension of IWRM needed to promote peace, trust, and sustainable development. Even though 153 Member States are divided by transboundary rivers and lake basins, only 24 of them have established transboundary contracts in line with the *Water Convention*. Successful regulation of water usage across state borders has contributed to building trust and sustaining peace historically, as demonstrated by the Member States in the Mekong River Commission and the River Basin agreement. Even in regions with formal cooperation frameworks, gaps remain, as many basin treaties rely on outdated flow data, ignoring current and future climate extremes.

#### Nature-based Solutions for Water and Ecosystem Resilience

NbS are a vital tool of effective and inclusive water policy as they help states to provide integrated benefits for climate risks, reduce water pollution, and protect biodiversity as part of a single, integrated approach. NbS uses and manages ecosystems in ways that address key environmental and societal challenges, such as threats to health, food and water security, while also supporting biodiversity and human well-being. These solutions include restoring wetlands, forests, and river systems to help store water, reduce floods and droughts, and build resilience to climate change. Furthermore, natural ecosystems filter pollutants and improve water quality, providing cost-effective alternatives complementary to traditional water infrastructure. Thus, NbS directly contributes to the mitigation of the triple planetary crisis of climate change, biodiversity loss, and pollution by employing a holistic approach to strengthen both environmental and human systems.

Despite their potential, NbS face gaps in financing, monitoring, and mainstreaming into national water governance frameworks. 128 The lack of standardized indicators and data makes it difficult to track NbS in

<sup>&</sup>lt;sup>117</sup> United Nations, Department of Global Communications. *Transboundary Water Management Crucial for Sustainable Development, Peace, Security, Speakers Stress at Conference's Fourth Interactive Dialogue.* 2023

<sup>&</sup>lt;sup>118</sup> The Economist. Why are India and Pakistan fighting over water?. 2025.

<sup>&</sup>lt;sup>119</sup> United Nations Economic Commission for Europe. *Practical Guide for the Development of Agreements or Other Arrangements for Transboundary Water Cooperation*. 2021. p. 4; United Nations Educational, Scientific and Cultural Organization. *The United Nations World Water Development Report 2024: Water for prosperity and peace*. 2024. pp. 88-89.

<sup>&</sup>lt;sup>120</sup> United Nations Economic Commission for Europe. *Practical Guide for the Development of Agreements or Other Arrangements for Transboundary Water Cooperation*. 2021. p. 4.

<sup>&</sup>lt;sup>121</sup> United Nations Educational, Scientific and Cultural Organization. *The United Nations World Water Development Report 2024: Water for prosperity and peace*. 2024. pp. 88-89.

<sup>&</sup>lt;sup>122</sup> United Nations Institute for Training and Research. *Introduction to Water Diplomacy*. 2017. p. 1.

<sup>&</sup>lt;sup>123</sup> United Nations Environment Assembly. *Nature-based solutions for supporting sustainable development (UNEP/EA.5/Res.5)*. 2022. p. 2.

<sup>&</sup>lt;sup>124</sup> Ibid.

<sup>125</sup> Ibid.

<sup>&</sup>lt;sup>126</sup> United Nations Environment Assembly. *Addressing water pollution to protect and restore water-related ecosystems (UNEP/EA.3/Res.10*). 2018. pp. 1-2.

<sup>&</sup>lt;sup>128</sup> United Nations Environment Programme. *State of Finance for Nature: Tripling investments in nature-based solutions by 2030.* 2021. pp. 6, 32, 41.



water management, while institutional barriers like limited cross-sector coordination mechanisms hinder the scaling of NbS at national and regional levels.<sup>129</sup> Furthermore, a lack of technical expertise in the areas of watershed management, climate adaptation planning, and biodiversity conservation is an obstacle to mainstreaming NbS into national planning.<sup>130</sup>

Developing countries appear to place more emphasis on NbS, as they are viewed as cost-effective and locally adaptable, in comparison to developed countries. Member States in Africa, South America, and the Caribbean use NbS by far more than a majority of developed Member States. This is because NbS helps delegates promote low-cost, locally adapted water policies that strengthen climate and ecosystem resilience, such as reforestation of catchment areas, mangrove protection for coastal defense, rainfall harvesting systems, and wetland restoration for flood control, especially in developing regions. Developed Member States tend to focus more on hybrid approaches combining NbS with engineered infrastructure and advanced monitoring technologies. This divergence reflects differences in financial resources, technical capacity, and institutional preferences. In 2020, spending on NbS was only about 23% (\$133 billion) of total climate finance (\$579 billion), highlighting the need to scale up NbS investments across all regions to address the triple planetary crisis.

NbS are increasingly integrated into national climate and water strategies, with support from international frameworks and actors.<sup>137</sup> In 2022, UNEA resolution 5/5 on "nature-based solutions for sustainable development" specifically calls Member States to integrate NbS into water policies like promoting resilient ecosystems, improved water security, and disaster risk reduction through sustainable groundwater recharge.<sup>138</sup> The incorporation of these efforts is also seen in Member States' NDCs, which further demonstrate the importance of NbS in tackling the challenges of the triple planetary crisis.<sup>139</sup>

#### **Conclusion**

Water security is increasingly shaped by the combined effects of the triple planetary crisis.<sup>140</sup> These overlapping pressures disrupt natural water cycles, degrade water quality, and strain both ecosystems and communities.<sup>141</sup> Key concepts such as IWRM and NbS have been introduced as entry points to

<sup>&</sup>lt;sup>129</sup> Ibid. p. 42.

<sup>&</sup>lt;sup>130</sup> Ibid.

<sup>&</sup>lt;sup>131</sup> Seddon et. al. International Union for Conservation of Nature and Natural Resources and the University of Oxford. *Nature-based Solutions in Nationally Determined Contributions*. 2019. p. 28. <sup>132</sup> Ibid.

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<sup>&</sup>lt;sup>134</sup> European Environment Agency. *Urban green and blue infrastructure planning*. 2024.

<sup>&</sup>lt;sup>135</sup> United Nations Environment Assembly. *Nature-based solutions for supporting sustainable development (UNEP/EA.5/Res.5)*. 2022. p. 2.

<sup>&</sup>lt;sup>136</sup> United Nations Environment Programme. *State of Finance for Nature: Tripling investments in nature-based solutions by 2030.* 2021. pp. 6, 32, 41.

<sup>&</sup>lt;sup>137</sup> United Nations Environment Assembly. *Nature-based solutions for supporting sustainable development (UNEP/EA.5/Res.5)*. 2022. p. 2. <sup>138</sup> Ibid.

<sup>&</sup>lt;sup>139</sup> United Nations Environment Programme. *Kenya's wetlands: a financing challenge*. 2021; United Nations Environment Programme. *To counter climate change, Colombian cities weave nature back into their urban fabric*. 2024.

<sup>&</sup>lt;sup>140</sup> United Nations Framework Convention on Climate Change. *What is the Triple Planetary Crisis?*. 2022.

<sup>&</sup>lt;sup>141</sup> United Nations Environment Programme. *Making Peace With Nature*. 2021. p. 6.



address the complexity of these interlinked challenges. <sup>142</sup> Simultaneously, large parts of the global population continue to face limited access to safe water and sanitation, often in contexts where institutional capacity is weak or fragmented. <sup>143</sup> Inclusive governance approaches, where all relevant actors are actively involved in decision-making and implementation, remain central to building legitimacy and effectiveness in water policy. <sup>144</sup> While many frameworks recognize these needs, implementation remains inconsistent across countries and regions. <sup>145</sup>

#### Further Research

As delegates conduct further research and consider how to address this topic, they should consider: How can inclusive governance guarantee the participation of vulnerable groups in decision-making and oversight? How can financial mechanisms, such as climate funds or blended finance, be scaled up to support NbS in countries with limited domestic resources? Can existing agreements between countries that share rivers, lakes, or aquifers handle the growing challenges of the triple planetary crisis, or do they need to be updated to remain effective? What best practices in standardized reporting can help countries track and compare progress on implementing IWRM and NbS? How can cooperation between UNEA, UN-Water, UNDP, and other multilateral actors be strengthened to support Member States in aligning water policy with biodiversity, pollution, and climate strategies?

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<sup>&</sup>lt;sup>142</sup> United Nations Environment Assembly. *Effective and inclusive solutions for strengthening water policies to achieve sustainable development in the context of climate change, biodiversity loss and pollution (UNEP/EA.6/Res.13)*. 2024. pp. 1-2.

<sup>&</sup>lt;sup>143</sup> United Nations Educational, Scientific and Cultural Organization. *The United Nations World Water Development Report 2024: Water for prosperity and peace*. 2024. pp. 61-62.

<sup>&</sup>lt;sup>144</sup> United Nations, General Assembly. Report of the United Nations Conference on the Midterm Comprehensive Review of the Implementation of the Objectives of the International Decade for Action, "Water for Sustainable Development", 2018–2028 (A/CONF.240/2023/10). 2023. p. 59.

<sup>&</sup>lt;sup>145</sup> UN-Water. *Progress on Integrated Water Resources Management*. 2018. pp. 12-15.



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#### 2. Advancing Science and Evidence-Based Policy for a Pollution-Free Planet

#### Introduction

Pollution is an existential challenge for the planet. The United Nations Environment Programme (UNEP) identifies pollution, climate change, and biodiversity loss as the three interconnected pillars of the "triple planetary crisis". Pollution fuels climate change, accelerates biodiversity loss, and harms humans, animals, and the planet by contaminating food, water, and the environment, leading to health risks, lethal diseases, increased antibiotic resistance, and ecosystem damage. 148

According to UNEP, pollution results from the unsustainable use of natural resources. <sup>149</sup> Fossil fuel combustion, industrial emissions, indoor air pollution, transportation, waste production, open burning of waste, construction and demolition, and the use of chemical and synthetic products are significant environmental pollutants. <sup>150</sup> Although there are natural sources of pollution, such as volcanic eruptions, animal digestion, and wildfires, the primary source of pollution is anthropogenic, meaning human activity is driving pollution. <sup>151</sup> Fossil fuels account for 75% of the global greenhouse gas (GHG) emissions and 90% of all carbon dioxide (CO2) emissions. <sup>152</sup> Every year, 2.1 billion tons of waste are produced, and food contamination (defined as any substance unintentionally added to food) costs one trillion dollars annually. <sup>153</sup> Industrialized nations are the main drivers of pollution, causing the global North to surpass the South in GHG emissions and waste production. <sup>154</sup>

Effective science- and evidence-based policymaking (SEBP) can combat pollution.<sup>155</sup> The United Nations Environment Assembly (UNEA) and UNEP define SEBP as the use of the most recent scientific assessments, data, and evidence to guide policymaking on pollution prevention, environmental protection, and waste.<sup>156</sup> UNEP refers to this approach as the science-policy interface (SPI).<sup>157</sup> UNEA recognized the opportunities of SPI in its first session in 2014, requesting UNEP's report on *Strengthening the Science-Policy Interface: A gap analysis* (2017), which identifies three key elements for an effective

<sup>&</sup>lt;sup>146</sup> United Nations Office for Disaster and Risk Reduction. *Pollution*. N.d.

<sup>&</sup>lt;sup>147</sup> United Nations Framework Convention on Climate Change. What is the Triple Planetary Crisis? 2022.

<sup>&</sup>lt;sup>148</sup> United Nations Environment Programme. *Pollution*. N.d; United Nations Framework Convention on Climate Change. *What is the Triple Planetary Crisis?*. 2022.

<sup>&</sup>lt;sup>149</sup> United Nations Environment Programme. *Pollution and Circular Economy*. N.d.

<sup>&</sup>lt;sup>150</sup> Air Quality Index India. *Here are the 10 Main Causes of Air Pollution*. 2019.

<sup>&</sup>lt;sup>151</sup> Airly Quality Monitoring. What are the Sources of Air Pollution? 8 Causes of Pollution. 2025.

<sup>&</sup>lt;sup>152</sup> United Nations Framework Convention on Climate Change. *Food loss and waste account for 8-10% of annual global greenhouse gas emissions; cost USD 1 trillion annually*. 2024; United Nations, Department of Global Communications. *Causes and Effects of Climate Change*. N.d; United Nations Environment Programme. *Beat Pollution*. N.d; United Nations Environment Programme. *Pollution and health*. 2025.

<sup>153</sup> United Nations, Department of Global Communications. *Causes and Effects of Climate Change*. N.d; United Nations Environment Programme. *Beat Pollution*. N.d; United Nations Framework Convention on Climate Change. Food loss and waste account for 8,10% of annual global greenhouse gas emissions:

Climate Change. Food loss and waste account for 8-10% of annual global greenhouse gas emissions; cost USD 1 trillion annually. 2024.

154 Hickel. Quantifying national responsibility for climate breakdown; an equality-based attribution

<sup>&</sup>lt;sup>154</sup> Hickel. Quantifying national responsibility for climate breakdown: an equality-based attribution approach for carbon dioxide emissions in excess of the planetary boundary. 2020.

<sup>&</sup>lt;sup>155</sup> United Nations Environment Programme. *Science-policy interface*. 2025.

<sup>&</sup>lt;sup>156</sup> United Nations Environment Programme. *UNEP/EA.6/2*. 2024; United Nations Environment Programme. *SPP OEWG Sessions*. 2025; Zhang et al. Circular Economy. *From science-policy interface to science-policy panel: The United Nations' strengthening of the sustainable life cycle management of chemicals*. 2024.

<sup>&</sup>lt;sup>157</sup> United Nations Environment Programme. Science-policy interface. 2025.



SPI: links in the chain (capable individuals sharing knowledge), evidence (available and appropriate data), and exchange (effective dialogue between science and policymaking).<sup>158</sup>

#### International and Regional Framework

The international community recognizes a healthy environment as a human right. <sup>159</sup> The *Universal* Declaration of Human Rights (1948) affirms that every individual has the right to live in conditions that ensure health and well-being. 160 Growing international concern regarding the environment led to the United Nations Conference on the Human Environment (UNCHE) in 1972. 161 UNCHE concluded with two defining outcomes for environmental policy. 162 First, the Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration) (1972), which established the environment as a global concern and initiated dialogue between developing and industrialized nations on the relationship between economic growth and pollution.<sup>163</sup> Second, establishing UNEP as the leading authority on international environmental law. 164 Said efforts resulted in the adoption of UNEP's Regional Seas Programme (1974), the Northwest Pacific Action Plan (NOWPAP) (1974), and the Mediterranean Action Plan (1975). 165 Building on growing scientific evidence, the United Nations Economic Commission for Europe adopted the 1979 Convention on Long-Range Transboundary Air Pollution (CLRTAP), which entered into force in 1983 and is aimed at reducing cross-border pollution. 166 In 1992, the United Nations Conference on Environment and Development adopted the United Nations Framework Convention on Climate Change (UNFCCC), intending to stabilize GHG concentrations. 167 The Kyoto Protocol (1997) later strengthened the UNFCCC, binding industrialized Member States to reduction goals. 168 Also recognizing the effects of cross-border pollution, the Association of Southeast Asian Nations (ASEAN) adopted the Agreement on Transboundary Haze Pollution (2002). 169 Through the adoption of General Assembly resolution 66/288, "The Future We Want," the 2012 United Nations Conference on Sustainable Development established UNEA as the governing body for global environmental policy. 170

Recognizing the harmful impacts of anthropogenic pollution, the *2030 Agenda for Sustainable Development* (2030 Agenda) (2015) and the *Paris Agreement* (2015) establish global strategies for advancing sustainable development and environmental protection. <sup>171</sup> UNEA's commitment to addressing

<sup>&</sup>lt;sup>158</sup> United Nations Environment Programme. *Strengthening the Science-Policy Interface: A gap analysis*. 2017. p. 2.

<sup>&</sup>lt;sup>159</sup> United Nations, General Assembly. *Universal Declaration of Human Rights* (A/RES/217(III)). 1948.

<sup>&</sup>lt;sup>161</sup> United Nations, Department of Global Communications. *United Nations Conference on the Human Environment, 5-16 June 1972, Stockholm.* N.d.

<sup>&</sup>lt;sup>162</sup> Ibid.

<sup>163</sup> Ibid.

<sup>164</sup> Ibid.

<sup>&</sup>lt;sup>165</sup> United Nations Environment Programme. *Northwest Pacific Action Plan (NOWPAP): What We Do.* N.d; United Nations Environment Programme. *UNEP Regional Seas Program*. N.d; United Nations Environment Programme. *Mediterranean Action Plan (MAP)*. N.d.

<sup>&</sup>lt;sup>166</sup> United Nations Economic Commission for Europe. *1979 Convention on Long-Range Transboundary Air Pollution*. 2021.

<sup>&</sup>lt;sup>167</sup> United Nations Framework Convention on Climate Change. *United Nations Framework Convention on Climate Change (UNFCCC) and Climate, Peace and Security.* N.d.

<sup>&</sup>lt;sup>168</sup> United Nations Framework Convention on Climate Change. *The Kyoto Protocol*. N.d.

<sup>&</sup>lt;sup>169</sup> Association of Southeast Asian Nations. ASEAN Agreement on Transboundary Haze Pollution. 2021.

<sup>&</sup>lt;sup>170</sup> United Nations, General Assembly. *The future we want (A/RES/66/288)*. 2012.

<sup>&</sup>lt;sup>171</sup> United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2015.



pollution aligns with and supports the implementation of the 2030 Agenda, which pursues the achievement of 17 Sustainable Development Goals (SDGs), including SDG 3 (good health and well being), SDG 6 (clean water and sanitation), SDG 7 (affordable and clean energy), SDG 11 (sustainable cities and communities), SDG 12 (responsible consumption and production), SDG 13 (climate action), SDG 14 (life below water), and SDG 15 (life on land), all aimed at combatting harmful environmental effects. Following this endeavor, the Conference of the Parties (COP) at its 21st session adopted the legally-binding *Paris Agreement*, which aims to protect the environment, focuses on long-term solutions, and invites Member States to exchange strategies on GHG emissions development. Table 13.

The international community affirms the right to a healthy environment through capacity building.<sup>174</sup> In 2017, UNEA adopted the Ministerial Declaration Towards a Pollution-Free Planet, recognizing pollution reduction as a key contributor to sustainability, and highlighting the importance of SEBP and international cooperation.<sup>175</sup> In 2022, UNEA adopted resolution 5/8 on "Science-policy panel to contribute further to the sound management of chemicals and waste and to prevent pollution," aiming for the creation of an intergovernmental panel that provides a platform for Member States to exchange best practices and solutions regarding the management of chemicals and waste. 176 The General Assembly further adopted resolution 76/300 on "The human right to a clean, healthy, and sustainable environment" (2022), affirming the right to a healthy environment as fundamental and emphasizing global cooperation in the areas of information sharing, technology, and capacity building. 177 Understanding that chemical pollution and waste pose a threat to safe living conditions, the Fifth United Nations International Conference on Chemicals Management adopted the Global Framework on Chemicals - For a Planet Free of Harm from Chemicals and Waste (GFC) (2023), a comprehensive strategy that emphasizes partnerships between Member States and stakeholders in jointly managing the life cycle of chemicals. 178 The GFC created the Open-Ended Working Group for the Global Framework on Chemicals (OEWG), gathering trade unions, non-governmental organizations, state governments, youth, and science professionals, who contribute to cross-sector initiatives and technical exchanges. <sup>179</sup> In June 2025, the first meeting of OEWG resulted in the intersectional collaboration on the implementation of environmental programs, including the Gender Action Plan and the Global Alliance on Pesticides. 180

#### Role of the International System

UNEA acts as the highest decision-making body in environmental affairs.<sup>181</sup> As UNEP's governing body, UNEA holds biannual sessions with all Member States to discuss the global environmental agenda, provide policy guidance, and draft resolutions that define UNEP's work.<sup>182</sup> UNEA, building on the 2017

<sup>172</sup> Ibid.

<sup>&</sup>lt;sup>173</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change. *Paris Agreement*. 2015.

<sup>&</sup>lt;sup>174</sup> United Nations Environment Programme. *Global Framework on Chemicals*. 2025.

<sup>&</sup>lt;sup>175</sup> United Nations Environment Programme. *Ministerial declaration of the United Nations Environment Assembly at its third session (UNEP/EA.3/HLS.1)*. 2018.

<sup>&</sup>lt;sup>176</sup> United Nations Environment Programme. *Intergovernmental Science-Policy Panel on Chemicals, Waste and Pollution*. 2025.

<sup>&</sup>lt;sup>177</sup> United Nations Environment Programme. *Global Framework on Chemicals*. 2025.

<sup>178</sup> Ibid.

<sup>&</sup>lt;sup>179</sup> United Nations Environment Programme. *Ad hoc open-ended working group on a science-policy panel on chemicals, waste and pollution prevention*. 2025.

<sup>&</sup>lt;sup>181</sup> United Nations Environment Programme. *United Nations Environment Assembly*. N.d.

<sup>&</sup>lt;sup>182</sup> United Nations Environment Programme. *Global Framework on Chemicals*. 2025.



Ministerial Declaration *Towards a Pollution-Free Planet* and acting in accordance with resolution 5/8, established the Intergovernmental Science-Policy Panel on Chemicals, Waste, and Pollution (ISP-CWP) on 20 June 2025 to provide policymakers with scientific advice on chemical waste management. <sup>183</sup> The ISP-CWP recognizes respective national circumstances, aiming to close the gap in global environmental governance effectively and thus supporting the implementation of the GFC. <sup>184</sup> Furthermore, UNEA resolution 5/14, "End plastic pollution: towards an international legally binding instrument," initiated the creation of an international legally-binding tool to combat plastic pollution. <sup>185</sup> UNEA then established the Intergovernmental Negotiating Committee (INC) to develop the proposed instrument, leading to the INC currently drafting a legally-binding Marine Plastic Pollution Treaty (MPPT), also known as the Global Plastics Treaty, considering the entire lifecycle of plastic, including its production, design, and disposal. <sup>186</sup> INC-5.2, the second half of the committee's latest session, took place in August 2025 in Geneva, Switzerland, and it attempted to finalize negotiations on the MPPT but concluded without consensus. <sup>187</sup>

UNEA collaborates with several United Nations bodies and international organizations to combat pollution while bridging the gap between science and environmental policy. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), established in 2012, operates as an independent intergovernmental body that strengthens SEBP on sustainable development, sustainable use, and the conservation of biological diversity. UNEA and IPBES collaborate in overlapping work, with IPBES having provided policymakers with the *Nexus Assessment* in 2024, a report highlighting the connection between food, water, health, and biodiversity. Moreover, as a co-founder, UNEA works closely alongside the Intergovernmental Panel on Climate Change (IPCC), a United Nations body assessing the science related to climate change. The IPCC provides UNEA with scientific assessments on the current impacts and future risks of climate change, as well as potential mitigation and adaptation strategies, directly affecting UNEA's agenda.

Multilateral efforts combat pollution most effectively.<sup>193</sup> The UNFCCC's governing body, COP, ensures that policymaking is informed by scientific evidence and commitments turn into action.<sup>194</sup> COP provided a multilateral platform for the adoption of the Kyoto Protocol and the Paris Agreement.<sup>195</sup> Further, in 2021, the European Commission designed the action plan, "Towards Zero Pollution for Air, Water and Soil," a strategy aiming to reduce pollution levels to amounts that are safe for human health and ecosystems by

<sup>&</sup>lt;sup>183</sup> United Nations Environment Programme. *Intergovernmental Science-Policy Panel on Chemicals, Waste and Pollution*. 2025.

<sup>&</sup>lt;sup>184</sup> Ibid; United Nations Environment Programme. *Ad hoc open-ended working group on a science-policy panel on chemicals, waste and pollution prevention,* 2025.

<sup>&</sup>lt;sup>185</sup> United Nations Environment Assembly. *End plastic pollution: towards an international legally binding instrument (UNEA 5/14)*. 2022.

<sup>&</sup>lt;sup>186</sup> United Nations Environment Programme. *Intergovernmental Negotiating Committee on Plastic Pollution*. 2025; United Nations Environment Programme. *United Nations Environment Assembly*. N.d; United Nations Environment Assembly. *End plastic pollution: towards an international legally binding instrument (UNEA 5/14)*. 2022.

<sup>&</sup>lt;sup>187</sup> United Nations Environment Programme. *United Nations Environment Assembly*. N.d.

<sup>&</sup>lt;sup>188</sup> Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. *About*. N.d. <sup>189</sup> Ihid

<sup>&</sup>lt;sup>190</sup> Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). *Nexus Assessment*. 2025.

<sup>&</sup>lt;sup>191</sup> Intergovernmental Panel on Climate Change. *The Intergovernmental Panel on Climate Change*. 2025. <sup>192</sup> Ihid

<sup>&</sup>lt;sup>193</sup> European Commission. *Zero Pollution Action Plan.* N.d.

<sup>&</sup>lt;sup>194</sup> United Nations Framework Convention on Climate Change. Conference of the Parties (COP). N.d. <sup>195</sup> Ibid.



2050. 196 Specific goals include a 55% reduction in premature deaths from air pollution and a 50% reduction in marine plastic litter by 2030. 197 Through strengthening digital and economic leadership, the EC's action plan aims to guide Member States of the European Union and identify policy gaps. 198 In 2024, UNEA held its sixth session under the theme "Effective, inclusive, and sustainable multilateral actions to tackle climate change, biodiversity loss, and pollution" and adopted fifteen resolutions, including UNEA resolution 6/10 on "Promoting Regional Cooperation on Air Pollution to Improve Air Quality Globally." 199 Furthermore, UNEP celebrated World Environment Day on 5 June 2025, driving momentum to address rising global plastic pollution levels and work towards a sustainable future. 200 Only days later, from 9 to 13 June 2025, the third United Nations Ocean Conference took place, concluding with the Nice Ocean Action Plan, calling for increased global action in minimizing climate change's adverse effects by utilizing scientific as well as Indigenous Peoples' knowledge. 201 In September 2025, during the high-level week of the 80th session of the General Assembly, 100 Member States declared commitments to implement their respective climate targets on reducing GHG emissions and fossil fuel combustion before the next COP session, which will take place in Belém, Brazil, in November 2025. 202

#### Air Pollution and Its Threat to Life and Health

According to the World Health Organization (WHO), air pollution is the leading global environmental health risk.<sup>203</sup> Air pollution worldwide impacts 99% of the global population, exceeding WHO's safe guideline level for fine particulate matter.<sup>204</sup> Further, air pollution causes seven million premature deaths worldwide and remains one of the leading causes of chronic illness, including cancer, as well as severe cardiovascular and respiratory diseases.<sup>205</sup>

UNEP recognizes air pollution as a critical barrier to achieving the 2030 Agenda and several SDGs.<sup>206</sup> Human activities, particularly fossil fuel combustion and indoor pollution from harmful household energy sources, are significant contributors to diseases, undermining SDG 3 and SDG 7.<sup>207</sup> Anthropogenic emissions also jeopardize SDG 13, as they exacerbate climate change via unsustainable use of coal, oil, and gas that drive GHG accumulation, subsequently trapping the sun's heat and raising the planet's surface temperature.<sup>208</sup> Additionally, such impacts on global climate contribute to rising sea levels, increased frequency of extreme weather events, and fuel biodiversity loss, further impeding progress toward SDG 14 and SDG 15.<sup>209</sup> Such extreme climate-related events threaten the planet's health and decimate the quality of life globally, endangering humans, animals, and ecosystems, and inhibiting the

<sup>&</sup>lt;sup>196</sup> European Commission. Zero Pollution Action Plan. 2021.

<sup>&</sup>lt;sup>197</sup> Ibid.

<sup>&</sup>lt;sup>198</sup> Ihid

<sup>&</sup>lt;sup>199</sup> United Nations Environment Programme. *Outcomes of UNEA-6*. N.d.

<sup>&</sup>lt;sup>200</sup> United Nations, Department of Global Communications. World Environment Day 5 June. N.d.

<sup>&</sup>lt;sup>201</sup> United Nations, Departmen of Global Communications, UN 2025 Ocean Conference, 2025.

<sup>&</sup>lt;sup>202</sup> United Nations, Department of Global Communications. *Momentum gathers towards COP30 as close to 100 countries signal new climate targets*. 2025.

<sup>&</sup>lt;sup>203</sup> World Health Organization. *Air pollution*. 2025.

<sup>&</sup>lt;sup>204</sup> Ibid.

<sup>&</sup>lt;sup>205</sup> Ibid.

<sup>&</sup>lt;sup>206</sup> United Nations, Department of Economic and Social Affairs. *United Nations Environment Programme* (UNEP). 2024; World Health Organization. *Household air pollution*. 2024.

<sup>&</sup>lt;sup>207</sup> World Health Organization. *Household air pollution*. 2024.

<sup>&</sup>lt;sup>208</sup> United Nations, Department of Global Communications. *What Is Climate Change?*. N.d. <sup>209</sup> Ibid.



fulfillment of SDG 3 and SDG 11.<sup>210</sup> Air pollution-induced diseases can also exacerbate displacement of communities, financial instability, barriers to education, gender equality issues, and, consequently, fragile infrastructure.<sup>211</sup> The unsustainable management of energy and the air pollution it produces also compromises responsible consumption and production globally.<sup>212</sup> The International Renewable Energy Agency advises an end to the reliance on fossil fuels and transitioning to renewable energy sources like sunlight, wind, water, organic waste, and thermal heat, which science has demonstrated to be sustainable and reliable.<sup>213</sup>

Regional and multilateral partnerships, as seen in the CLRTAP and its monitoring programs, are building towards SEBP and a pollution-free planet.<sup>214</sup> As the first multilateral agreement between North America, Europe, Russia, and the former Eastern Bloc, CLRTAP reinforces that combating transboundary air pollution can be achieved by stronger scientific knowledge through a framework that applies to all regions involved.<sup>215</sup> CLRTAP is particularly notable, as it is credited with the establishment of the Cooperative Programme for Monitoring and Evaluation of the Long-Range Transmission of Air Pollutants (EMEP) in Europe, and the Working Group on Effects (WGE).<sup>216</sup> EMEP and WGE function as an SPI in the field of environmental affairs and pollution, ensuring SEBP among Member States.<sup>217</sup> At a regional level, and in response to land and forest fires, ASEAN adopted the *Agreement on Transboundary Haze Pollution* in 2002.<sup>218</sup> The agreement is designed to address the causes of air pollution, promoting cross-border cooperation to prevent, monitor, and mitigate such fires and reduce their harmful effects.<sup>219</sup> To achieve enhanced regional partnerships that foster the most effective mitigation and adaptation tactics, as seen in the *Agreement on Transboundary Haze Pollution*, Member States are encouraged to share knowledge and technologies, develop relationships, reduce GHG emissions through innovative policies, and prioritize their air quality management.<sup>220</sup>

Low and middle-income Member States are at a higher risk of severe health effects from air pollution, despite industrialized regions releasing the highest concentrations of air pollution.<sup>221</sup> Almost 60% of GHG emissions are produced by only ten Member States, while 100 Member States with the lowest emissions contribute less than 3%.<sup>222</sup> Despite a minimal contribution to global GHG emissions, these low-emitting countries often suffer the most severe repercussions of air pollution.<sup>223</sup> Nevertheless, developing regions

<sup>&</sup>lt;sup>210</sup> Almubarak. International Journal of Life Sciences Research. *The Impact of Climate Change on Quality of Life: A Comprehensive Analysis*. 2024; Ellerbeck. World Economic Forum. *Climate change is already altering everything, from fertility choices to insuring our homes*. 2022; World Health Organization. *Climate Change*. 2025.

<sup>&</sup>lt;sup>211</sup> Guo et al. Air pollution and education investment. 2024; Persico. Can Pollution Cause Poverty? The Effects of Pollution on Educational, Health and Economic Outcomes. 2024.

<sup>&</sup>lt;sup>212</sup> Stanford Report. Less air pollution leads to higher crop yields, Stanford-led study shows. 2022.

<sup>&</sup>lt;sup>213</sup> United Nations, Department of Global Communications. *Renewable energy - powering a safer and prosperous future*. N.d.

<sup>&</sup>lt;sup>214</sup> United Nations Economic Commission for Europe. *1979 Convention on Long-Range Transboundary Air Pollution*. 2021.

<sup>&</sup>lt;sup>215</sup> Ibid.

<sup>&</sup>lt;sup>216</sup> Ibid.

<sup>&</sup>lt;sup>217</sup> Ibid.

<sup>&</sup>lt;sup>218</sup> Ibid.

<sup>&</sup>lt;sup>219</sup> Association of Southeast Asian Nations. ASEAN Agreement on Transboundary Haze Pollution. 2021.

<sup>&</sup>lt;sup>220</sup> Climate and Clean Air Coalition. *Unpacking the newly adoped UNEA-6 Resolution on Promoting regional Cooperation on Air Pollution to Improve Air Quality Globally*. 2024.

<sup>&</sup>lt;sup>221</sup> Climate Watch. *Historical GHG Emissions*. 2025.

<sup>&</sup>lt;sup>222</sup> Ibid.

<sup>&</sup>lt;sup>223</sup> Ibid.



often rely on less efficient technology, such as older vehicles, or the burning of wood and coal as fuel sources, releasing higher concentrations of GHG emissions.<sup>224</sup> Poverty and weaker infrastructure in these cases are linked to such reliance on such technology and resources, in turn, presenting a higher level of health risk due to household pollution.<sup>225</sup> With 2.1 billion people cooking with open fires and 49% of the rural population relying on unsafe fuel sources, like inefficient stoves that run on kerosene, biomass, and coal, higher levels of air pollution are notably present in such regions.<sup>226</sup> Examples of this can be seen in Southeast Asia, sub-Saharan Africa, and the Western Pacific, as high rates of indoor pollution-related illness stem from limited access to clean fuels.<sup>227</sup> Further, UNEP's report on Strengthening Air Quality Management Guidance (2022) highlights that regions such as Latin America and Asia face the most significant challenge in air quality management due to a shortage of technical capacity, primarily stemming from inadequate funding.<sup>228</sup> In an effort to address risk relating to air pollution, UNEA resolution 6/10 on "Promoting regional cooperation on air pollution to improve air quality globally" resulted in the establishment of the Global Air Quality Cooperation Network (GAQCN), aimed at enhancing air quality management capacities and improving access to support and funding.<sup>229</sup> GAQCN also looks to empower stakeholders and governments by building technical capability, facilitating access to financing, promoting collaboration, and strengthening SEBP through shared data and expertise.<sup>230</sup> As part of the GAQCN, the Air Quality Management Exchange Platform also acts as the hub for information-sharing, including supplying easily accessible clean air strategies to governments via the service BreatheLife, a campaign connecting governments through a platform for air quality managers in regions that demonstrate the most progress in tackling air pollution.<sup>231</sup>

#### Counteracting Marine Plastic Pollution through Science-and Evidence-Based Policy

Ocean plastic pollution poses a significant danger to marine life and ocean health.<sup>232</sup> Not only does plastic pollution account for 80% of all marine pollution, but up to 23 million tons of plastic waste enter the world's oceans each year, predominantly from mismanaged waste disposal, sanitation systems, ships, and fishing operations.<sup>233</sup> At this rate, the Center for Biological Diversity projects that plastic will outweigh all fish in the ocean by 2050.<sup>234</sup> Setting aside mismanagement and improper disposal, plastic material presents an additional pollutant risk due to its durability.<sup>235</sup> Plastic material can take anywhere from 100 to 1000 years to decompose, often degrading into minuscule pieces of plastic, called microplastics.<sup>236</sup>

<sup>&</sup>lt;sup>224</sup> World Health Organization. *Household air pollution*. 2024.

<sup>&</sup>lt;sup>225</sup> World Health Organization. *Equity impacts of air pollution*. 2025; World Health Organization. *Household air pollution*. 2024.

<sup>&</sup>lt;sup>226</sup> Ibid.

<sup>&</sup>lt;sup>227</sup> World Health Organization. *Equity impacts of air pollution*. 2025.

<sup>&</sup>lt;sup>228</sup> AQMX. Air Quality Monitoring and Data Exchange Platform. N.d.

<sup>&</sup>lt;sup>229</sup> Achieng et al. African Centre for Technology Studies (ACTS). *The Future of Global Environmental Policy: Key Takeaways from UNEA-6*. 2024; Climate and Clean Air Coalition. *Unpacking the newly adopted UNEA-6 Resolution on Promoting Regional Cooperation on Air Pollution to Improve Air Quality Globally*. 2024; United Nations Environment Programme. *Global Air Quality Cooperation Network*. 2024; United Nations Environment Programme. *UNEA Efforts to Implement UNEA 6/10 Resolution*. 2024. <sup>230</sup> United Nations Environment Programme. *Global Air Quality Cooperation Network*. 2025; United Nations Environment Programme. *UNEA Efforts to Implement UNEA 6/10 Resolution*. 2024.

<sup>&</sup>lt;sup>231</sup> United Nations Environment Programme. Global Air Quality, Cooperation Network. 2025.

<sup>&</sup>lt;sup>232</sup> United Nations Environment Programme. *Plastic Pollution*. 2025.

<sup>&</sup>lt;sup>233</sup> Ibid.

<sup>&</sup>lt;sup>234</sup> Center for Biological Diversity. Ocean Plastics: A Global Tragedy for Our Oceans and Sea Life. N.d.

<sup>&</sup>lt;sup>235</sup> United States Environmental Protection Agency. *Impacts of Plastic Pollution*. 2025.

<sup>&</sup>lt;sup>236</sup> Ibid.



Microplastics in the ocean can lead to a variety of health consequences to humans, including inflammation, digestive and vascular health issues, and even severe conditions like respiratory diseases, cancer, and dementia.<sup>237</sup>

As non-biodegradable material, microplastics pose a risk to marine ecosystems and lead to an increase in biodiversity loss.<sup>238</sup> Marine life suffers the most harm when contacting or ingesting ocean plastics, suffering lacerations, suffocation, entanglement, internal disease, and death.<sup>239</sup> Plastic material may also transport invasive species, taking them from their original habitats and allowing them to thrive in new ecosystems, potentially disrupting the ecological balance in some regions.<sup>240</sup> At current rates of plastic pollution, the ocean's marine life and biodiversity cannot heal as quickly.<sup>241</sup> Scientific assessments indicate that some of the Earth's natural ecosystems are already being irreversibly destroyed.<sup>242</sup>

Marine plastic pollution further exacerbates climate change.<sup>243</sup> Climate change and plastic pollution are interconnected, as plastic materials are chemical in nature and often derived from fossil fuel combustion.<sup>244</sup> The ocean itself is a carbon sink, meaning it serves as a natural absorber of carbon dioxide from the atmosphere, and regulates Earth's climate through absorbing 25% of anthropogenic CO2 emissions.<sup>245</sup> Fish, plankton, and other marine organisms transport CO2 into deeper waters through their processes of photosynthesis and decomposition, but when these organisms ingest plastic, their functionality is compromised, cutting the ocean's CO2 absorption and lending more to the atmosphere.<sup>246</sup> Despite such natural regulation of CO2, continued marine plastic pollution inhibits the world's oceans from acting as a natural filter.<sup>247</sup> Furthermore, plastic pollution contributes to the ocean's acidity by changing the chemical composition of seawater, also negatively impacting marine ecosystems that are responsible for carbon absorption, like shellfish and coral reefs.<sup>248</sup>

Addressing ocean pollution requires increased international and regional cooperation.<sup>249</sup> The *Mediterranean Action Plan* serves as a regional framework for Member States in the Mediterranean to engage in joint research, monitor plastic accumulation, and turn scientific findings into actionable environmental policy.<sup>250</sup> As an asset under UNEP's Regional Seas Program, which has joined various stakeholders to address marine pollution since 1974, NOWPAP was created to manage environmental

<sup>&</sup>lt;sup>237</sup> Emenike et al. Science Direct. From oceans to dinner plates: The impact of microplastics on human health. 2023; Lee et al. Health Effects of Microplastic Exposures: Current Issues and Perspectives in South Korea. 2023; Winiarska et al. The potential impact of nano- and microplastics on human health: Understanding human health risks. 2023.

<sup>&</sup>lt;sup>238</sup> The Ocean Cleanup. *Ocean plastic pollution explained*. 2025.

<sup>&</sup>lt;sup>239</sup> Ibid.

<sup>&</sup>lt;sup>240</sup> Ibid.

<sup>&</sup>lt;sup>241</sup> Donnelly. Ocean Pollution Facts: Statistics & Rankings (2025). 2025.

<sup>&</sup>lt;sup>242</sup> United Nations, Department of Global Communications. *Goal 14: Conserve and sustainably use the oceans, seas and marine resources.* N.d.

<sup>&</sup>lt;sup>243</sup> United Nations, Department of Global Communications. *Plastics – fueling oil demand, climate change and pollution*. N.d.

<sup>&</sup>lt;sup>244</sup> Ibid.

<sup>&</sup>lt;sup>245</sup> National Geographic. *Carbon Sources and Sinks*. N.d; Interreg Baltic Sea Region. *How Plastic Pollution and Climate Change Are Connected: Why We Need to Act Now*. 2024.

<sup>&</sup>lt;sup>246</sup> Ibid.

<sup>&</sup>lt;sup>247</sup> Ibid.

<sup>&</sup>lt;sup>248</sup> Ibid.

<sup>&</sup>lt;sup>249</sup> United Nations Environment Programme. *Mediterranean Action Plan (MAP)*. N.d.

<sup>&</sup>lt;sup>250</sup> Ibid.



threats.<sup>251</sup> Member States in NOWPAP developed quality objectives and integrated ecosystem assessments, which are applied using scientific monitoring to inform SEBP recommendations.<sup>252</sup> Most recently, the third United Nations Ocean Conference 2025 provided a multistakeholder platform to strategize on the most efficient plastic pollution combat and mitigation tactics, also ratifying the *United Nations High Seas Treaty* by 19 Member States and expanding marine protected areas.<sup>253</sup> However, progress on the negotiations of the legally-binding MPPT has been slowed by the economic interests of countries reliant on oil, gas, and plastic production, while Small Island Developing States (SIDS), most affected by plastic pollution, request a rapid agreement.<sup>254</sup> Conversely, Jamaica, alongside the United States' Environmental Protection Agency, launched a program in the Whitehouse-Bluefields community that focused on establishing a system for waste collection and separation.<sup>255</sup> Collection points consisting of strategically-placed waste bins have been designed to promote recycling and raise awareness.<sup>256</sup> The project resulted in 200 recycling bins being successfully labelled, 34 collection sites being established, and 20 outreach events being held.<sup>257</sup>

#### **Conclusion**

Pollution remains one of the most pressing and current challenges, as it causes irreparable harm to humans, animals, and our ecosystems.<sup>258</sup> As one of the pillars of the triple planetary crisis, alongside climate change and biodiversity loss, pollution has far-reaching consequences, posing a significant challenge for the global community.<sup>259</sup> UNEA, as the world's highest-level decision-making body regarding environmental affairs, aims to address pollution through specific frameworks, action plans, and programs.<sup>260</sup> SPI is at the core of UNEA's work, recognizing that evidence-based strategies offer sustainable solutions.<sup>261</sup> In recognition of the interconnection between pollution and other global challenges, Member States have established multilateral agreements that aim to provide transboundary and transregional solutions and aid.<sup>262</sup> According to science- and evidence-based data, collaborative efforts and capacity-building initiatives must be strengthened to ensure that knowledge on renewable and more sustainable resources, as well as funds, are shared sufficiently between Member States.<sup>263</sup>

<sup>251</sup> United Nations Environment Programme. Northwest Pacific Action Plan (NOWPAP): What We Do. N.d.

<sup>258</sup> United Nations Office for Disaster and Risk Reduction. *Pollution*. N.d; United Nations Environment Programme. *Pollution and health*. 2025.

<sup>&</sup>lt;sup>252</sup> United Nations Environment Programme. *Integrated Environmental Assessments*. N.d.

<sup>&</sup>lt;sup>253</sup> United Nations, Department of Global Communications. *UN 2025 Ocean Conference*. 2025; United Nations Ocean Conference Nice, France, 2025. *Third United Nations Ocean Conference Nice 2025*. 2025.

Dauvergne et al. Competing axes of power in the global plastics treaty: Understanding the politics of progress and setbacks in negotiating a high-ambition agreement. 2025; Research Institute for Sustainability. Protecting the Marine Environment: An International Treaty on Plastic Pollution. 2025; World Economic Forum. INC-5.2: The global plastics treaty talks - here's what just happened. 2025.
 United States Environmental Protection Agency. Protecting the Global Marine Environment. N.d.
 Ibid.

<sup>&</sup>lt;sup>257</sup> Ibid.

<sup>&</sup>lt;sup>259</sup> United Nations Framework Convention on Climate Change. *What is the Triple Planetary Crisis?*. 2022. <sup>260</sup> United Nations, General Assembly. *The future we want (A/RES/66/288)*. 2012.

<sup>&</sup>lt;sup>261</sup> United Nations Environment Programme. *Strengthening the Science-Policy Interface: A gap analysis*. 2017. p. 2.

<sup>&</sup>lt;sup>262</sup> United Nations, General Assembly. *The human right to a clean, healthy and sustainable environment* (A/RES/76/300). 2022.

<sup>&</sup>lt;sup>263</sup> World Health Organization. *Equity impacts of air pollution*. 2025; Climate Watch. *Historical GHG Emissions*. 2025; United Nations, General Assembly. *The human right to a clean, healthy and sustainable environment (A/RES/76/300)*. 2022; World Health Organization. *Household air pollution*. 2024.



Sustainable solutions and SEBP can happen at every level, locally, nationally, and internationally, and a unified global response, supported by scientific research, is the key to combating the pollution crisis.<sup>264</sup>

#### Further Research

As delegates conduct further research and consider how to address this topic, they should consider the following: How can SEBP mitigate the consequences to the health and well-being of humans and animals? How can UNEA strengthen the SPI through SEBP? In which ways can the collaboration between UNEA and other United Nations bodies, as well as other Member States, be further strengthened to attain a pollution-free planet? Which Member States and areas are affected mostly by air pollution, and why? How can knowledge and fund-sharing be improved for Member States and areas affected by air pollution? In what ways can renewable energy sources help mitigate pollution? How can plastic pollution be drastically reduced? In what way might sovereignty rights interfere with those proposals?

<sup>264</sup> United Nations Environment Programme. *Science-policy interface*. 2025.



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