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United Nations Environment Assembly Background Guide 2022

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Dear Delegates,

Welcome to the 2022 National Model United Nations New York Conference (NMUN•NY)! We are pleased to introduce you to our committee, the United Nations Environment Assembly (UNEA). This year's staff are: Directors Courtney Indart (Conference A) and Gamaliel Perez (Conference B), and Assistant Directors Kendrick King (Conference A) and Ryan Prieto (Conference B). Courtney lives in Washington DC, USA and holds a Masters in International Affairs from the George Washington University. She has been both a NMUN•NY and NMUN•DC volunteer staff member since 2015. Gamaliel has a Bachelors in Political Theory from the University of California San Diego. Kendrick King holds a Masters in Public Health from Georgia Southern University. Ryan has a Bachelors in Political Science and International Business from University of South Florida, and a Masters in Political Science from Rutgers University.

The topics under discussion for the United Nations Environment Assembly (UNEA) are:

1. Dramatically Reducing Maritime Pollution, including Plastic
2. Implementing a Circular Economy for the Sustainable Development Goals

As the governing body of the United Nations Environment Programme, the UNEA is the world's highest-level decision-making entity on matters concerning the environment. Membership of the UNEA has been universal since it was created in June 2012 during the UN Conference on Sustainable Development (RIO+20) to act as the "parliament of the environment." Member States meet biennially to provide leadership and establish priorities for environmental protection, foster intergovernmental collaboration, and build partnerships with civil society, the academic community, the private sector, among other stakeholders. At NMUN•NY 2022, we are simulating the Environment Assembly in terms of composition and size. However, in addition to making budgetary and programmatic decisions for UNEP, delegates in the 2022 UNEA may also propose global priorities, policies, and legal frameworks under the mandate of UNEP.

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 Annotated Bibliography and Bibliography to further your knowledge on these topics. In preparation for the Conference, each delegation will submit a Position Paper by 11:59 p.m. (Eastern) on 1 March 2022 in accordance with the guidelines in the [Position Paper Guide](#) and the [NMUN•NY Position Papers](#) website.

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:

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

In addition, please review the mandatory [NMUN Conduct Expectations](#) on the NMUN website. They include the Conference dress code and other expectations of all attendees. We want to emphasize that any instances of sexual harassment or discrimination based on race, gender, sexual orientation, national origin, religion, age, or disability will not be tolerated. If you have any questions concerning your preparation for the committee or the Conference itself, please contact the Under-Secretaries-General for the Development Department, Vincent Carrier (Conference A) and Martin Schunk (Conference B), at usg.dev@nmun.org

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

Sincerely,

Conference A

Courtney Indart, *Director*

Kendrick King, *Assistant Director*

Conference B

Gamaliel Perez, *Director*

Ryan Prieto, *Assistant Director*

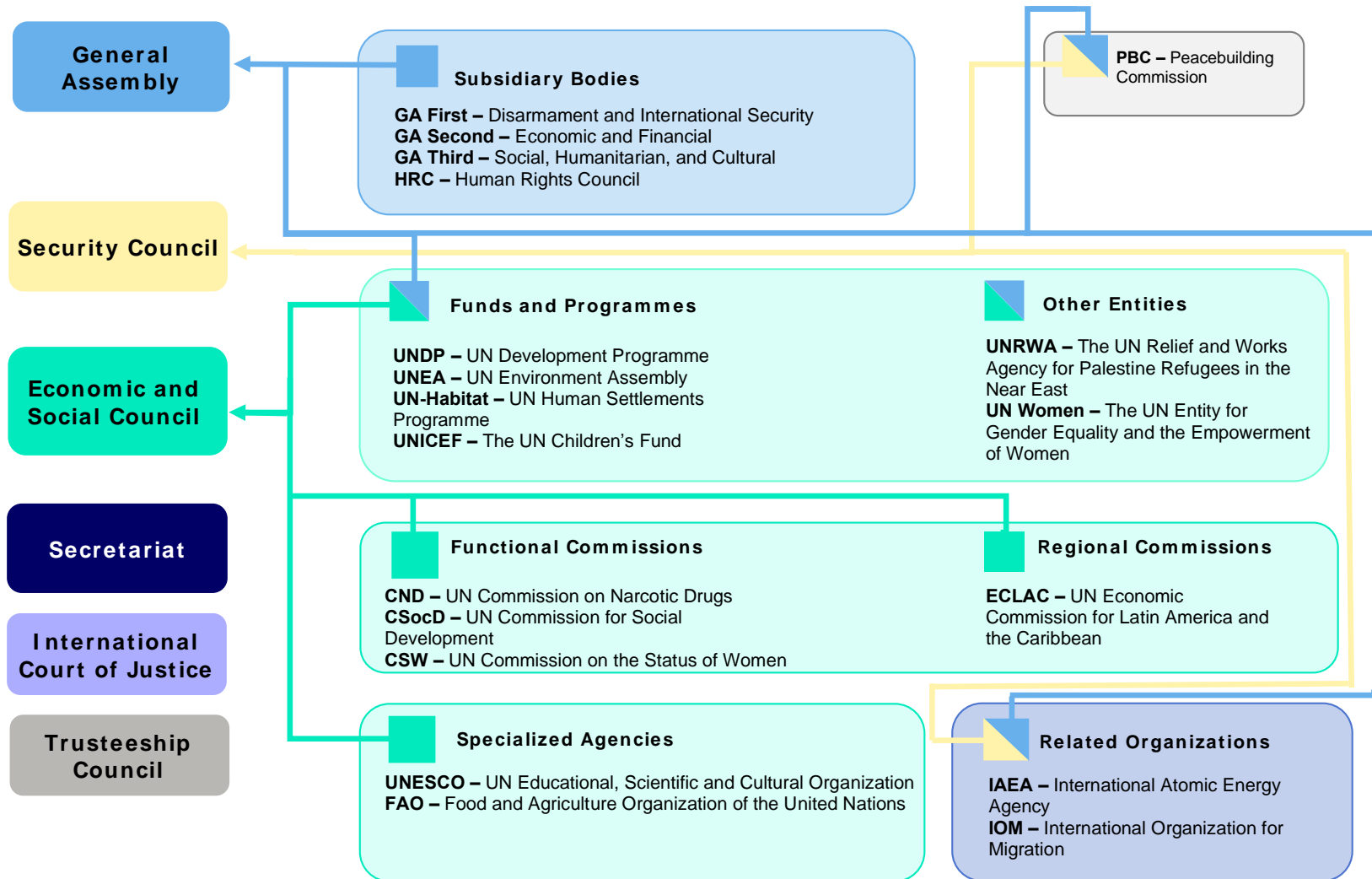


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United Nations System at NMUN•NY

This diagram illustrates the UN system simulated at NMUN•NY and demonstrates 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 UN system.



Committee Overview

Introduction

Twenty years after the adoption of the *Rio Declaration on Environment and Development* (1992), the United Nations Conference on Sustainable Development called for the strengthening and upgrading of the United Nations Environment Programme (UNEP) so that it could better execute its mandate.¹ In 2013, the 58-member Governing Council of UNEP adopted resolution 27/2, which expanded the Governing Council to universal membership and requested the General Assembly change its designation to the United Nations Environment Assembly (UNEA), which was done with General Assembly resolution 67/251 of the same year.² UNEA is now the governing body of UNEP and is the international community's highest-level decision-making body on environmental matters.³ UNEA's universal membership strengthens its own role and the role of UNEP in international affairs, and is designed to increase the responsiveness of Member States in developing environmental policy.⁴ UNEA meets biennially and has held five regular sessions, the most recent of which was held in February 2021 with the theme "Strengthening Actions for Nature to Achieve the Sustainable Development Goals."⁵ In light of the COVID-19 pandemic, the fifth session was split into two sessions, with the first part held online in February 2021 and the second session to be held in-person in March 2022.⁶

UNEA is mandated to "ensure the active participation of all relevant stakeholders in the governance of UNEP and to promote a strong science-policy interface."⁷ UNEA is also tasked with making major strategic and policy decisions at the international level, which UNEP then works to promote and implement.⁸ UNEA works with Member States, regional bodies, United Nations (UN) entities, and civil society organizations in order to achieve these goals.⁹

UNEP was originally a result of a concerted effort made during the 1972 UN Conference on Human Environment in Stockholm, Sweden.¹⁰ Subsequently, the General Assembly established UNEP as the official body concerned with environmental issues within the UN.¹¹ Since 1972, UNEP has played a significant role in coordinating environmental policy across the UN system.¹² UNEA governs and sets policy for UNEP, whose mission is to "provide leadership and encourage partnership in caring for the environment" in order to develop environmental-friendly practices and policies in the UN system.¹³ UNEP encourages international, regional, and local coordination for environmental issues, while also ensuring various other UN entities take environmental impacts into account when executing their missions.¹⁴ UNEP reports both to the General Assembly and the Economic and Social Council (ECOSOC).¹⁵

UNEP served as the secretariat and was a main contributor for the planning and execution of the UN Conference on Environment and Development (UNCED) in 1992, the outcomes of which included the *Rio*

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

² UNEP, *About the United Nations Environment Assembly*.

³ *Ibid.*

⁴ *Ibid.*

⁵ UNEP, *Fourth session of the United Nations Environment Assembly*.

⁶ UNEP, *Fifth session of the United Nations Environment Assembly*.

⁷ UNEP, *United Nations Environment Assembly of the UNEP (UNEA)*, 2014.

⁸ UNEP, *Engaging with UN Environment Assembly and Member States*.

⁹ *Ibid.*

¹⁰ United Nations Conference on the Human Environment, *Report of the United Nations Conference on the Human Environment (A/CONF.48/14/Rev.1)*, 1972.

¹¹ UN General Assembly, *Institutional and financial arrangements for international environmental cooperation (A/RES/2997(XXVII))*, 1972.

¹² New Zealand Ministry of Foreign Affairs and Trade, *United Nations Handbook 2021-22*, 2021, pp. 263.

¹³ UNEP, *About UN Environment Programme*.

¹⁴ New Zealand Ministry of Foreign Affairs and Trade, *United Nations Handbook 2021-22*, 2021, p. 263.

¹⁵ *Ibid.*, p. 263.

Declaration on Environment and Development (1992) and *Agenda 21* (1992).¹⁶ UNCED marked a turning point for international collaboration to preserve biodiversity and the climate with the *Convention on Biological Diversity* (1992) and the *UN Framework Convention on Climate Change* (1992) both opening for signature at the summit.¹⁷ The *Convention to Combat Desertification* (1994), another major agreement, was adopted two years later.¹⁸

At NMUN•NY 2022, we are simulating the Environment Assembly in terms of composition and size. However, in addition to making budgetary and programmatic decisions for UNEP, delegates in the 2022 UNEA may also propose global priorities, policies, and legal frameworks under the mandate of UNEP.

Governance, Structure, and Membership

In 2013, UNEA became the designated policy-making body of UNEP, superseding the original 58-member Governing Council.¹⁹ UNEA has universal membership, meaning that all 193 UN Member States are represented in the Assembly.²⁰ UNEA meets every two years to set priorities for global environmental policy, discuss developments for environmental legislation, and assist in the implementation of the *2030 Agenda for Sustainable Development* (2015).²¹ The mandate of the UNEA Secretariat is to organize and prepare the meetings for the governing bodies and to assure transparency with civil society.²² The President for the fifth UNEA session is H.E. Mr. Sveinung Rotevatn of Norway.²³

The Committee of Permanent Representatives (CPR) was first established as a subsidiary inter-sessional organ to UNEA and meets at least four times a year.²⁴ The CPR was then strengthened by Governing Council decision 27/2, and now contributes to the preparation of the UNEA agenda as well as holding advisory role in policy matters, and monitoring the implementation of decisions.²⁵ The CPR also holds discussion on key issues, promotes the inclusion of non-resident members of the Committee, and performs other tasks given by UNEA.²⁶ The CPR consists of all accredited Permanent Representatives to UNEP and is led by a five-member bureau that is elected for two years.²⁷

UNEP relies on three main financial sources to facilitate its agenda: earmarked funds, the Environment Fund, and the UN Regular Budget.²⁸ Earmarked funds, also known as earmarked contributions, are funds appropriated for specific projects, themes, or countries.²⁹ These funds aim to expand and/or replicate the results of UN Environment's work in more countries and with more partners.³⁰ The Environment Fund aids in maintaining the capacity, balance, and efficiency needed for UNEP to function.³¹ When contributing to the Environment Fund, Member States are encouraged to make financial contributions to the fund based upon the Voluntary Indicative Scale of Contributions (VISC), which considers their respective socio-economic background to determine the predictability of a continued financial contribution.³² The UN Regular Budget supports the functions of the Secretariat and its respective governing bodies, as well as

¹⁶ Johnson, *UNEP The First 40 Years: A Narrative*, 2012, pp. 127-128.

¹⁷ Convention on Biological Diversity, *The Rio Conventions*.

¹⁸ Ibid.

¹⁹ UN General Assembly, *Institutional and financial arrangements for international environmental cooperation (A/RES/2997(XXVII))*, 1972.

²⁰ UNEP, About the United Nations Environment Assembly.

²¹ Ibid.

²² UNEP, *Secretariat of Governing Bodies and Stakeholders*.

²³ UNEP, *UNEA 5 Presidency and Bureau*.

²⁴ UNEP, *Committee of Permanent Representatives*.

²⁵ Ibid.

²⁶ Ibid.

²⁷ Ibid.

²⁸ UNEP, *How is UNEP funded*.

²⁹ UNEP, *How is UNEP funded*; UNEP, *Earmarked Contributions*.

³⁰ UNEP, *How is UNEP funded*; UNEP, *Earmarked Contributions*.

³¹ UNEP, *How is UNEP funded*.

³² UNEP, *Environment Fund*.

the coordination of UNEP with the UN system and cooperation with global scientific communities.³³ In order to assist in the action plan of UNEP, UNEA approved an appropriation for the Environment Fund of \$200 million for the years 2022-2025.³⁴ In addition, the budget allocated funding of \$200,000 for program initiatives for 2022-2023 with \$164,000 of that being for UNEP's program of work.³⁵ 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.³⁶

Mandate, Functions, and Powers

With the adoption of General Assembly resolution 27/2997 (XXVII) of 1972 on *Institutional and financial arrangements for international environmental cooperation*, UN Environment was created with a mandate to "promote international and regional environmental cooperation, develop environmental policy, highlight global and regional problems, facilitate the transfer of scientific knowledge, assist developing Member States in environmental matters, review reports of the Executive Director, and approve the annual program on the allocation of the Environment Fund."³⁷ The first expansion of UN Environment's mandate came after the *Rio Declaration on Environment and Development* (1992) via *Agenda 21* (1992), which outlined a list of priority areas for UN Environment's future work and called for the program to gain "access to greater expertise and [...] adequate financial resources," as well as closer collaboration with the rest of the UN system to fulfil these new tasks.³⁸

In 1997, during its 19th regular session, the Governing Council of UNEP discussed the future role of UNEP, which resulted in the adoption of the *Nairobi Declaration on the Role and Mandate of the United Nations Environment Programme* (1997).³⁹ As the 19th special session of the General Assembly was scheduled to address the implementation of *Agenda 21* later that year, the *Nairobi Declaration* represented a call to the UN system and its Member States to acknowledge UNEP's role in sustainable development.⁴⁰ The General Assembly endorsed the *Nairobi Declaration* (1997), which reaffirmed UNEP "as the leading global environmental authority."⁴¹

UNEP's authority was further affirmed by former UN Secretary-General Kofi Annan, who advocated for the reform and strengthening of its role as "the focal point for harmonization and coordination of environment-related activities."⁴² In October 1998, the Secretary-General provided recommendations to the General Assembly that further modified UNEP's mandate, based on the recommendations by the UN Task Force on Environment and Human Settlements.⁴³ As a result of one of the recommendations, the UN Environment Management Group (EMG) was created with the Executive Director of UNEP serving as its chairperson.⁴⁴ The EMG mainly coordinates information-sharing and facilitate discussion on essential priorities in order to ensure the most efficient and cost-effective allocation of resources.⁴⁵

³³ UNEP, *How is UNEP funded*.

³⁴ UNEA, *Medium-term strategy for the period 2022–2025 and programme of work and budget for the biennium 2022–2023* (UNEP/EA.5/L.3), 2021, p. 2.

³⁵ *Ibid.*, p. 2.

³⁶ UNEP, *How is UNEP funded*.

³⁷ UN General Assembly, *Institutional and financial arrangements for international environmental cooperation* (A/RES/2997(XXVII)), 1972.

³⁸ UN Conference on Environment and Development, *Agenda 21*, 1992, para. 38.21-38.23.

³⁹ Governing Council of UNEP, *Proceedings of the Governing Council at its nineteenth session* (UNEP/GC.19/34), 1997, p. 52.

⁴⁰ *Ibid.*, p. 52.

⁴¹ UN General Assembly, *Programme for the Further Implementation of Agenda 21* (A/RES/S-19/2), 1997, p. 47; Governing Council of UNEP, *Proceedings of the Governing Council at its Nineteenth Session* (UNEP/GC.19/34), 1997, pp. 52-56.

⁴² UN General Assembly, *Renewing the United Nations: A Programme for Reform* (A/51/950), p. 58.

⁴³ UN General Assembly, *Environment and human settlements: Report of the Secretary-General* (A/53/463), 1998.

⁴⁴ *Ibid.*

⁴⁵ *Ibid.*

As the governing body of UNEP, UNEA develops international environmental law and policy that serves as a catalyst for intergovernmental action through the practice of multilateral agreement.⁴⁶ Under UNEA's guidance, UNEP assesses the environment on a global, regional, and national scale and uses that information to hold relevant stakeholders accountable in developing proper action.⁴⁷ As the UN recognizes climate change as a predominant issue in its global efforts, UNEP continues to partner with various stakeholders to highlight the complexity of environmental issues in terms of conflict, disaster, security, and education.⁴⁸ UNEA also has the ability to create ad hoc committees and subsidiary bodies to implement specific environmental objectives when necessary.⁴⁹

Recent Sessions and Current Priorities

The theme of the fifth session of the UNEA (UNEA 5) was centered on “Strengthening Actions for Nature to Achieve the Sustainable Development Goals,” and called for strengthened action to protect and restore nature and promote nature-based solutions to achieve the Sustainable Development Goals (SDGs).⁵⁰ The three main themes of the session were focused on the climate crisis, land degradation and loss of biodiversity, and pollution.⁵¹ The work towards solutions was highlighted in UNEP's *Making Peace With Nature Report* (2021) that noted that the international community has not met the environmental targets set to reduce the damage being afflicted to the planet by human activity.⁵² The Assembly in its session adopted three decisions aimed at achieving this work addressing the environmental funds and the program of work of UNEP.⁵³ UNEA will also hold a special session in March of 2022 to commemorate the 50th anniversary of the formation of the UNEP in 1972.⁵⁴ The special session will be held in Nairobi, Kenya alongside the continuation of the fifth session and led by the Bureau and President of the sixth session of UNEA.⁵⁵

In response to the three environmental crisis, UNEA adopted its decision 5/2 *For people and planet: the United Nations Environment Programme strategy for 2022–2025* (2021) to tackle climate change, loss of nature, and pollution.⁵⁶ A major issue emphasized was the increase of human activity and its relation to the contribution of the climate crisis, land degradation, and pollution.⁵⁷ In the last 50 years, the human population has doubled, and as such has vastly increased its activity, needs as well as its primary energy production.⁵⁸ Through the combined efforts of the 2022-2025 Strategy, UNEP will deliver a three pronged approach that will consist of applying scientific advances in data collection and utilization, multilateral cooperation ranging from stakeholders to indigenous communities, and will also collaborate with local and regional governments and organizations for greater environmental governance.⁵⁹

⁴⁶ UNEP, About the United Nations Environment Assembly.

⁴⁷ UNEP, *Programme Performance Report 2016*, 2016, p. 57.

⁴⁸ *Ibid.*, p. 32.

⁴⁹ UNEA, *Ministerial declaration of the United Nations Environment Assembly at its fourth session: Innovative solutions for environmental challenges and sustainable consumption and production (UNEP/EA.4/HLS.1)*, 2019.

⁵⁰ UNEP, *Fifth Session of the United Nations Environment Assembly*.

⁵¹ *Ibid.*

⁵² UNEP, *Making Peace with Nature A scientific blueprint to tackle the climate, biodiversity and pollution emergencies*, 2021, p. 10

⁵³ UNEA, *Proceedings of the United Nations Environment Assembly at its fifth session (UNEP/EA.5/25)*, 2021.

⁵⁴ UNEA, *Adjournment and resumption of the fifth session of the United Nations Environment Assembly (UNEP/EA.5/L.4)*, 2021.

⁵⁵ *Ibid.*

⁵⁶ UNEA, *For people and planet: the United Nations Environment Programme strategy for 2022–2025 to tackle climate change, loss of nature and pollution (UNEP/EA.5/3/Rev.1)*. 2021, p. 7.

⁵⁷ *Ibid.*, p. 7.

⁵⁸ *Ibid.*, p. 7.

⁵⁹ UNEA, *For people and planet: the United Nations Environment Programme strategy for 2022–2025 to tackle climate change, loss of nature and pollution (UNEP/EA.5/3/Rev.1)*. 2021, p. 14.

According to UNEP's Adaptation Gap Report 2020, a major shift of funds traditionally allocated for environmental action plans were diverted to medical needs as the COVID-19 pandemic affected the international community.⁶⁰ With climate adaptation becoming increasingly important, the redirection of funds back into environment programs will be crucial in advancing towards the targets set by the SDGs.⁶¹ In this context, on World Environment Day 2021, UNEP launched a youth activism campaign called #GenerationRestoration, which focused on youth participation in the preserving of ecosystems and calls for governments to preserve ecosystems.⁶² On World Environment Day 2021, UNEP also launched the UN Decade on Ecosystem Restoration together with the Food and Agriculture Organization of the UN.⁶³ This was launched to support the decade of restoration adopted in General Assembly resolution 73/284 (2019) on the "United Nations Decade on Ecosystem Restoration (2021–2030)," with the goal to encourage global citizens to become more active in ecosystem preservation and green community initiatives.⁶⁴

Conclusion

UNEA's inception represents a key step in UNEP's mission to ensure the work of all UN entities, its Member States, and respective stakeholders aim to be environmentally sustainable and align with international law and policies concerning the environment.⁶⁵ The establishment of an international authority for environmental issues with a universal membership reflects the need for an integrated and comprehensive approach for environmental protection.⁶⁶ Moreover, a retroactive assessment of nature-based solution will reaffirm the necessity of a healthy ecosystem.⁶⁷

Annotated Bibliography

United Nations Environment Assembly, Fifth session. (2021). *For people and planet: the United Nations Environment Programme strategy for 2022–2025 to tackle climate change, loss of nature and pollution (UNEP/EA.5/3/Rev.1)*. Retrieved 8 August 2021 from: <https://undocs.org/UNEP/EA.5/3/Rev.1>

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

United Nations Environment Programme. (n.d.). Fifth Session of the United Nations Environment Assembly. Retrieved 27 June 2021 from: <https://www.unep.org/environmentassembly/unea5>

This page serves as the main page for an overview of the discussions and topics of the UNEA 5. The outcome of the session discusses the major themes and the three-climate crisis discussed by UNEA in its fifth session. Member States at the first part of UNEA 5 also discussed the impact of nature on sustainable food and health systems for human beings that has caused an inequitable distribution of goods and services that have caused overproduction and inconsistent consumption rates leaving many without basic needs. This will provide delegates with a clear perspective of the issues as they relate to environmental crises and the fulfillment of the SDGs.

⁶⁰ UNEP, *Adaptation Gap Report 2020: Executive Summary*, 2021. p. 6.

⁶¹ Ibid.

⁶² UNEP, *#GenerationRestoration-A Youth Call to Action*, 2021.

⁶³ UNEP, *World Environment Day 2021*, 2021.

⁶⁴ UNGA, *UN Decade on Ecosystem Restoration (2021-2030) (A/RES/73/284(2019))*, 2019.

⁶⁵ World Summit on Sustainable Development, *Report of the World Summit on Sustainable Development (A/CONF.199/20)*, 2002.

⁶⁶ UNEA, *Delivering on the environmental dimensions of the 2030 Agenda: Information note of the Executive Director (UNEP/EA.2/INF/4)*, 2016.

⁶⁷ UNEP, *Fifth session of the United Nations Environment Assembly*.

United Nations Environment Programme. (2021). *Making Peace with Nature A scientific blueprint to tackle the climate, biodiversity and pollution emergencies*. Retrieved 8 August 2021 from: <https://wedocs.unep.org/xmlui/bitstream/handle/20.500.11822/34948/MPN.pdf>

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

Bibliography

Convention on Biological Diversity. (2021). *The Rio Conventions*. Retrieved 8 August 2021 from: <https://www.cbd.int/rio/>

Governing Council of the United Nations Environment Programme. (1997). *Proceedings of the Governing Council at its Nineteenth Session (UNEP/GC.19/34)*. Retrieved 8 August 2021 from: https://wedocs.unep.org/bitstream/handle/20.500.11822/17274/97_GC19_proceedings.pdf

Johnson, S. (2012). *UNEP The First 40 Years: A Narrative*. Retrieved 8 August 2021 from: http://wedocs.unep.org/bitstream/handle/20.500.11822/8751/-UNEP_The_first_40_years_A_narrative_by_Stanley_Johnson-2012UNEP_The_First_40_Years_A_Narative.pdf.pdf

New Zealand, Ministry of Foreign Affairs and Trade. (2021). *United Nations Handbook 2021-22*. Retrieved 8 August 2021 from: <https://mfatgovtnz2020.cwp.govt.nz/en/peace-rights-and-security/our-work-with-the-un/un-handbook/?m=720887#search:dW5pdGVklG5hdGlvbnMgaGFuZGJvb2s=>

United Nations, General Assembly, Twenty-seventh session. (1972). *Institutional and financial arrangements for international environmental cooperation (A/RES/2997(XXVII))*. Adopted on the report of the Second Committee. Retrieved 8 August 2021 from: [https://undocs.org/A/RES/2997\(XXVII\)](https://undocs.org/A/RES/2997(XXVII))

United Nations, General Assembly, Nineteenth special session. (1997). *Programme for the Further Implementation of Agenda 21 (A/RES/S-19/2)*. Adopted without reference to a Main Committee (A/S-19/29). Retrieved 8 August 2021 from: <http://undocs.org/A/RES/S-19/2>

United Nations, General Assembly, Fifty-first session. (1997). *Renewing the United Nations: A Programme for Reform (A/51/950)*. Retrieved 8 August 2021 from: <http://undocs.org/A/51/950>

United Nations, General Assembly, Fifty-third session. (1998). *Environment and human settlements: Report of the Secretary-General (A/53/463)*. Retrieved 8 August 2021 from: <http://undocs.org/A/53/463>

United Nations, General Assembly, Sixty-sixth session. (2012). *The Future We Want (A/RES/66/288)*. Retrieved 8 August 2021 from: <http://undocs.org/A/RES/66/288>

United Nations, General Assembly, Seventy-third session. (2019). *United Nations Decade on Ecosystem Restoration (2021–2030) (A/RES/73/284)*. Retrieved 9 November 2021 from: <https://undocs.org/A/RES/73/284>

United Nations Conference on Environment and Development. (1992). *Agenda 21*. Retrieved 8 August 2021 from: <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>

United Nations Conference on the Human Environment. (1972). *Report of the United Nations Conference on the Human Environment (A/CONF.48/14/Rev.1)*. Retrieved 8 August 2021 from: <https://undocs.org/A/CONF.48/14/REV.1>

United Nations Environment Assembly, Second session. (2016). *Delivering on the environmental dimensions of the 2030 Agenda: Information note of the Executive Director (UNEP/EA.2/INF/4)*. Retrieved 8 August 2021 from: <http://undocs.org/UNEP/EA.2/INF/4>

United Nations Environment Assembly, Third session. (2017). *Rules of Procedure of the United Nations Environment Assembly of the United Nations Environment Programme (UNEP/EA.3/3)*. Retrieved 9 November 2021 from: <https://undocs.org/UNEP/EA.3/3>

United Nations Environment Assembly, Fourth session. (2019). *Ministerial declaration of the United Nations Environment Assembly at its fourth session: Innovative solutions for environmental challenges and sustainable consumption and production (UNEP/EA.4/HLS.1)*. Retrieved 8 August 2021 from: <https://undocs.org/UNEP/EA.4/HLS.1>

United Nations Environment Assembly, Fifth session. (2021). *Adjournment and resumption of the fifth session of the United Nations Environment Assembly (UNEP/EA.5/L.4)*. Retrieved 8 August 2021 from: <https://undocs.org/UNEP/EA.5/L.4>

United Nations Environment Assembly, Fifth session. (2021). *For people and planet: the United Nations Environment Programme strategy for 2022–2025 to tackle climate change, loss of nature and pollution (UNEP/EA.5/3/Rev.1)*. Retrieved 8 August 2021 from: <https://undocs.org/UNEP/EA.5/3/Rev.1>

United Nations Environment Assembly, Fifth Session. (2021). *Medium-term strategy for the period 2022–2025 and programme of work and budget for the biennium 2022–2023 (UNEP/EA.5/L.3)*. Retrieved 8 August 2021 from: <https://undocs.org/UNEP/EA.5/L.3>

United Nations Environment Assembly, Fifth Session. (2021). *Proceedings of the United Nations Environment Assembly at its fifth session (UNEP/EA.5/25)*. Retrieved 9 November 2021 from: <https://undocs.org/UNEP/EA.5/25>

United Nations Environment Programme. (n.d.). *About the United Nations Environment Assembly*. Retrieved 9 November 2021 from: <https://www.unep.org/environmentassembly/about-united-nations-environment-assembly>

United Nations Environment Programme. (n.d.). *About UN Environment Programme*. Retrieved 9 November 2021 from: <https://www.unep.org/about-un-environment>

United Nations Environment Programme. (2021). *Adaptation Gap Report 2020: Executive Summary*. Retrieved 8 August 2021 from: https://wedocs.unep.org/bitstream/handle/20.500.11822/34726/AGR_en.pdf?sequence=35

United Nations Environment Programme. (n.d.). *Committee of Permanent Representatives*. Retrieved 8 August 2021 from: <https://www.unep.org/cpr>

United Nations Environment Programme. (n.d.). *Engaging with UN Environment Assembly and Member States*. Retrieved 8 August 2021 from: <https://www.unenvironment.org/civil-society-engagement/participation-and-engagement/engaging-un-environment-assembly-and-member>

United Nations Environment Programme. (n.d.). *Environment Fund*. Retrieved 8 August 2021 from: <https://www.unep.org/about-un-environment-programme/funding-and-partnerships/environment-fund>



United Nations Environment Programme. (n.d.). *Earmarked Contributions*. Retrieved 9 November 2021 from: <https://www.unep.org/about-un-environment/funding-and-partnerships/funding-facts/earmarked-contributions>

United Nations Environment Programme. (n.d.). *Fourth session of the United Nations Environment Assembly*. Retrieved 8 August 2021 from: <https://www.unep.org/environmentassembly/unea4>

United Nations Environment Programme. (n.d.). *How is UNEP funded*. Retrieved 8 August 2021 from: <https://www.unep.org/about-un-environment/funding-and-partnerships/funding-facts>

United Nations Environment Programme. (n.d.). *Secretariat of Governing Bodies and Stakeholders*. Retrieved 9 November 2021 from: <https://www.unep.org/environmentassembly/sgbs>

United Nations Environment Programme. (n.d.). *UNEA 5 Presidency and Bureau*. Retrieved 9 November 2021 from: <https://www.unep.org/environmentassembly/unea-5-presidency-and-bureau>

United Nations Environment Programme. (2014). *United Nations Environment Assembly of the UNEP (UNEA)*. Retrieved 8 August 2021 from: <https://www.unenvironment.org/events/civil-society-events/united-nations-environment-assembly-unep-unea>

United Nations Environment Programme. (2016). *Programme Performance Report 2016*. Retrieved 8 August 2021 from: https://wedocs.unep.org/bitstream/handle/20.500.11822/16792/PPR_2016.pdf

United Nations Environment Programme. (2021). *#GenerationRestoration – A Youth Call to Action*. Retrieved 8 August 2021 from: <https://www.unep.org/events/online-event/generationrestoration-youth-call-action>

United Nations Environment Programme. (2021). *Fifth Session of the United Nations Environment Assembly*. Retrieved 27 June 2021 from: <https://www.unep.org/environmentassembly/unea5>

United Nations Environment Programme. (2021). *Making Peace with Nature A scientific blueprint to tackle the climate, biodiversity and pollution emergencies*. Retrieved 8 August 2021 from: <https://wedocs.unep.org/xmlui/bitstream/handle/20.500.11822/34948/MPN.pdf>

United Nations Environment Programme. (2021). *World Environment Day 2021*. Retrieved 8 August 2021 from: <https://www.unep.org/events/un-day/world-environment-day-2021>

World Summit on Sustainable Development. (2002). *Report of the World Summit on Sustainable Development (A/CONF.199/20)*. Retrieved 8 August 2021 from: <http://undocs.org/A/CONF.199/20>

1. Drastically Reducing Maritime Pollution, including Plastic

Introduction

In 1972, the United Nations Conference on Human Environment established the *General Principles for Assessment and Control of Marine Pollution*, which defined marine pollution as the introduction of any man-made substance or energy into the marine environment that results in harmful effects towards living resources, hazards outcomes to human health, hindrance of marine life and reduction on water quality.⁶⁸ As reported at the 2017 United Nations Oceans Conference, plastics typically constitute the most significant part of marine pollution, sometimes accounting for up to 100% of floating litter, and impacting economies, ecosystems, animal welfare and human health worldwide.⁶⁹ Approximately 80% of this plastic waste begins on land, carried to the ocean by wind or drainage systems.⁷⁰ This means that around one garbage truck of plastic enters the ocean systems every minute worldwide.⁷¹ Maritime pollution has contributed to the progression of over 500 dead zones covering more than 245,000 km² globally, which is equivalent to the surface of the United Kingdom.⁷² By 2050, experts believe that 12 billion tons of plastic litter will be circulating on land and in oceans.⁷³ Hazardous contaminants like polychlorinated biphenyl (PCB) and dichlorodiphenyltrichloroethane (DDT), sewage, and agricultural runoff are also other examples of marine pollution.⁷⁴ The high input of fertilizers from agricultural activities in seawater can lead to the lowering of oxygen levels in seawater and also create dead zones.⁷⁵ In addition, waters that are fertilized can lead to blooms of harmful algae that are severe choking hazards for marine life and kill an estimated 100 million marine animals annually.⁷⁶

Through its mandate as global leading authority in environmental preservation, promoting pollution-free marine environment is a major area of focus for UNEP.⁷⁷ For example, in response to the increasing levels of pollutants and marine litter, UNEP launched the Clean Seas campaign in 2017.⁷⁸ Since the inception of that campaign, 63 Member States have committed to the campaign, which accounts for 60% of global coast lines.⁷⁹ To sustainably and holistically address marine litter, UNEP reported that significant gaps exist in knowledge on the effects of micro- and macro-plastics and impact of human behavior and consumption; in cohesive and consistent global policies to implement value chain shifts; and in innovative technological responses to address litter at all cycles.⁸⁰ The United Nations Environmental Assembly (UNEA), the governing body of UNEP, continues to address marine litter in its agenda.⁸¹

International and Regional Framework

In 1982, the *United Nations Convention on the Law of the Sea* established Member States' responsibilities to address increasing pollution in marine environments and ensuring that ships under Member States' flags adhere to environmental regulations, adopted by the International Maritime Organization (IMO).⁸² These regulations were drafted during the *International Convention for the*

⁶⁸ UN Conference on the Human Environment, *Report of the United Nations Conference on the Human Environment (A/CONF.48/14/Rev.1)*, 1972, p. 73.

⁶⁹ UN Ocean Conference, *Latest Ocean Data*.

⁷⁰ UNEP, *Why do oceans and seas matter?*.

⁷¹ Pennington, Every minute, one garbage truck of plastic is dumped into our oceans. This has to stop, *World Economic Forum*, 2016.

⁷² UNEP, *UN Report: Nature's Dangerous Decline 'Unprecedented' Species Extinction Rates 'Accelerating'*, 2019.

⁷³ UNEP, *The State of Plastics: World Environment Day Outlook*, 2018.

⁷⁴ UNEP, *UN Report: Nature's Dangerous Decline 'Unprecedented' Species Extinction Rates 'Accelerating'*, 2019.

⁷⁵ Ibid.

⁷⁶ Sea Turtle Conservancy, *Information About Sea Turtles: Threats from Marine Debris*, 2017.

⁷⁷ UNEP, *Why do oceans and seas matter?*.

⁷⁸ UNEP, *Clean Seas: About*.

⁷⁹ Ibid.

⁸⁰ UNEP, *Addressing marine plastics: A systemic approach – Recommendations for action*, 2019, p. 4.

⁸¹ Ibid., p. 4.

⁸² UNCLOS III, *United Nations Convention on the Law of the Sea*, 1982.

Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 (MARPOL 73/78), which hoped to prevent the further spread of maritime pollutants that are discharged from ships via oil, noxious liquid, sewage, garbage, and air pollutants.⁸³ In 1992, the United Nations Conference on Environment and Development adopted the *Agenda 21* that also strengthened international efforts towards reducing and addressing damages to the ocean.⁸⁴

With the 1995 *Washington Declaration on the Protection of Marine Environment from Land-Based Activities* calling for sustainable action against marine litter, Member States were encouraged to create sustainable alternative and developed programs tasked with addressing land-based litter runoff.⁸⁵ Afterward, the UNEP adopted the 1995 *Global Program of Action for the Protection of the Marine Environment from Land-Based Action* (GPA), which outlines a policy framework for identifying and prioritizing marine litter concerns at multiple levels called the *National Programme of Action* (NPA).⁸⁶ These NPAs utilized within the GPA have led to the formation of multiple regional entities that address maritime pollution within their coastal areas, such as the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea.⁸⁷ In addition, the reduction of maritime pollution has become 1 of the 3 focal issues of the GPA through the passage of the *Manila Declaration* (2012) that highlighted 3 major environmental issues that the GPA must prioritize between 2012-2016: nutrients, wastewater, and marine litter.⁸⁸

During the 2002 World Summit on Sustainable Development, Member States adopted the *Johannesburg Declaration on Sustainable Development*, which called for Member States to commit to tangible environmental change with suggested deadlines.⁸⁹ The *Johannesburg Declaration* included the establishment of Marine Protected Areas (MPA) by 2012 and the creation and implementation of national legislation protecting the marine environment from land-based activities.⁹⁰ As of 2018, MPAs make up only 3.4% of oceans and less than 1% of the high seas.⁹¹ MPAs are predominantly coastal and have the strongest legal protections in developed countries.⁹²

In 2015, the UN General Assembly adopted the *2030 Agenda for Sustainable Development* with its 17 Sustainable Development Goals (SDGs) guiding the international community's action toward creating a socially, economically, and environmentally sustainable world.⁹³ The harmful effects of marine litter and other maritime pollutants created a major challenge in achieving the SDGs, particularly SDG 13 ("climate action") and SDG 14 ("life below water").⁹⁴ SDG 3 ("good health and well-being") is also affected by the consumption of seafood and water that contains or has encountered plastic pollutants.⁹⁵ SDG 12 ("responsible production and consumption") calls for a significant reduction in global plastic production

⁸³ UNCLOS III, *United Nations Convention on the Law of the Sea*, 1982.

⁸⁴ UN Conference on the Human Environment, *Report of the United Nations Conference on the Human Environment (A/CONF.48/14/Rev.1)*, 1972, p. 73.

⁸⁵ *Ibid.*, p. 73.

⁸⁶ UNEP, *Progress in Implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA) and specifically the Manila Declaration (UNEP/WBRS.17/5)*, 2015, pp. 3-5.

⁸⁷ REMPEC, *Our History*, 2020.

⁸⁸ UNEP, *Progress in Implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA) and specifically the Manila Declaration (UNEP/WBRS.17/5)*, 2015, pp. 3-5.

⁸⁹ UN World Summit on Sustainable Development, *Report of the World Summit on Sustainable Development (A/CONF.199/20)*, 2002, p. 6.

⁹⁰ *Ibid.*

⁹¹ Marine Conservation Institute, *Atlas of Marine Protection*, 2021.

⁹² *Ibid.*

⁹³ UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.

⁹⁴ *Ibid.*

⁹⁵ *Ibid.*

and sustainable consumption practices as well as efficient and effective waste management systems to reduce the release of waste and pollutants into water systems.⁹⁶

As the outcome of the 2017 UN Oceans Conference, the General Assembly adopted resolution 71/312 on *Our Ocean, Our Future: Call for Action*, which encourages Member States to decrease or eliminate the production of single-use plastics and microplastic beads to prevent further damage to marine environments via the integration of SDGs 13 and 14 into national development plans.⁹⁷ Through the resolution, nine of the world's largest fishing companies agreed to the Seafood Business for Ocean Stewardship (SeaBOS) Initiative that aims to end unsustainable practices, like using non-biodegradable material.⁹⁸ In addition, the resolution reaffirmed the UN's commitment to achieving SDG 13 by preventing and significantly reducing marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution by 2025.⁹⁹ To achieve the goals highlighted at the 2017 Oceans Conference, UNEA adopted resolution 4/6 on *Marine Plastic Pollution and Microplastics* (2019) that took note of the recommendation by the Open-ended Working Group of the *Basel Convention the Control of Transboundary Movements of Hazardous Wastes and Their Disposal* (1989) to establish the Partnership on Plastic Waste.¹⁰⁰ The Partnership on Plastic Waste was initiated with the purpose of UNEP working in collaboration with regional sea programs to address the removal of maritime pollution and understand the transboundary migration of plastic waste.¹⁰¹

Role of the International System

In March 2011, the UNEP hosted the 5th International Marine Debris Conference (IMDC) to adopt the *Honolulu Strategy*, which outlines three strategic goals for the reduction of marine debris through collaboration with local governments and non-government organizations (NGO).¹⁰² The *Honolulu Strategy* aims to help organizations align their plan of action with other NGOs, civil societies, or local governments to reduce the ecological, human health, and economic impacts of marine debris both locally and regionally.¹⁰³ The success of the *Honolulu Strategy* led UNEP to the adoption of the *Manila Declaration* (2012) during the 3rd Intergovernmental Review Meeting on the Implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities.¹⁰⁴

The *Honolulu Strategy* also forms the basis of the Global Partnership on Marine Litter (GPML), which is made up of Member State representatives, non-governmental organizations, private businesses, and specialists, to combine resources in order to better protect marine environments.¹⁰⁵ GPML was launched in 2012 to protect human health and the global environment by the reduction and management of marine litter.¹⁰⁶ It provides a platform for the establishment of regional nodes in the Mediterranean Sea and Pacific Ocean for better regional specific interventions against marine litter.¹⁰⁷ In addition, GPML provides massive open online courses on marine litter to increase collaboration and coordination amongst these groups, to promote a collaborative dialogue, and to educate individuals on the threat of marine litter.¹⁰⁸

⁹⁶ UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.

⁹⁷ UN General Assembly, *Our Ocean, Our Future: Call for Action (A/RES/71/312)*, 2017.

⁹⁸ UN Ocean Conference, *Seafood Business for Ocean Stewardship (SeaBOS)*.

⁹⁹ Ibid.

¹⁰⁰ UNEA, *Marine plastic litter and microplastics (UNEP/EA.4/RES.6)*, 2019.

¹⁰¹ Ibid.

¹⁰² NOAA, *Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities*.

¹⁰³ Ibid.

¹⁰⁴ UNEA, *Protection of the marine environment from land-based activities (UNEP/EA.4/RES.11)*, 2019; UNEP & NOAA, *The Honolulu Strategy: A global framework for prevention and management of marine debris*.

¹⁰⁵ UNEP & NOAA, *The Honolulu Strategy: A global framework for prevention and management of marine debris*.

¹⁰⁶ UNEP, *Global Partnership on Marine Litter*.

¹⁰⁷ Global Partnership on Marine Litter, *Who we are*.

¹⁰⁸ Ibid.

Since its very first session in 2014, UNEA has addressed maritime pollution, particularly through plastic.¹⁰⁹ In 2018, UNEA in its resolution 3/7 on “Marine litter and microplastics” signaled that marine litter, especially plastic debris, is a major priority, as highlighted by the establishment of the ad-hoc open-ended expert group on marine litter and microplastics in 2017.¹¹⁰ UNEA mandated the group to explore barriers to combating marine litter; identify national and regional responses; identify environmental, social, and economic costs and benefits; examine different response options; and recommend continued work by UNEA.¹¹¹

UNEP actively seeks partnerships with civil society and gives them a platform in their Global Major Groups and Stakeholders Forum (GMGSF).¹¹² The GMGSF is meant to help NGOs and other organizations prepare their input and participation in UNEA meetings.¹¹³ Through the GMGSF, NGOs were able to collaborate with UNEP stakeholders to establish the New Plastics Economy Global Commitment.¹¹⁴ The New Plastics Economy Global Commitment is an engagement that unites businesses and other stakeholders behind a circular economy that will phase out economic and production measures that will increase output of marine pollution by 2025.¹¹⁵

Apart from UNEP, other actors within the international system also address maritime pollution.¹¹⁶ For instance, the Group of Twenty (G20) adopted the *G20 Action Plan on Marine Litter* in 2017.¹¹⁷ This action plan comprises seven areas of concern to reduce marine litter, including highlighting the socio-economic benefits of reducing marine litter, promoting waste prevention and waste management as well as engaging all relevant stakeholders.¹¹⁸ To support the implementation of the action plan, the G20 further launched a Global Network of the Committed that is linked to UNEP’s GPML.¹¹⁹

Addressing Marine Litter and Debris

In 2019, a study published in the *Marine Pollution Bulletin* highlighted how the international community spends roughly \$2.5 trillion annually on cleaning maritime pollution, especially plastic.¹²⁰ This economic burden plagues all Member States regardless if they possess oceanic territory, as pollutants negatively impact international trade and marine industries.¹²¹ According to the United States National Oceanic and Atmospheric Agency (NOAA), the accumulation of maritime pollution has led to the formation of two large garbage patches located West of Japan and East of the United States of America.¹²² Ocean currents are determined by large circulation systems, called gyres, which pull coastal plastic debris from coastlines into open water.¹²³ These ocean current patterns have collected millions of tons of plastic litter into whirlpool-like “garbage patches.”¹²⁴ These concentrated areas of marine litter often move with currents into areas densely populated by vulnerable microscopic marine life that are killed easily by plastics.¹²⁵

¹⁰⁹ UNEA, *Marine plastic debris and microplastics: Draft resolution submitted by the Committee of the Whole (UNEP/EA.1/L.8)*, 2014.

¹¹⁰ UNEA, *Marine litter and microplastics (UNEP/EA.3/RES.7)*, 2018; UNEP, *Ad hoc open-ended expert group on marine litter and microplastics*.

¹¹¹ UNEP, *Ad hoc open-ended expert group on marine litter and microplastics*.

¹¹² UNEP, *Global Major Groups and Stakeholders Forum*.

¹¹³ *Ibid.*

¹¹⁴ WWF et al., *The Business Case for A United Nations Treaty on Plastic Pollution*, 2020.

¹¹⁵ *Ibid.*

¹¹⁶ G20, *G20 Action Plan on Marine Litter*, 2017.

¹¹⁷ *Ibid.*

¹¹⁸ *Ibid.*

¹¹⁹ *Ibid.*

¹²⁰ Waste 360, *Study Puts Economic, Social Cost on Ocean Plastic Pollution*, 2019.

¹²¹ *Ibid.*

¹²² Logistic Management, *Moore on Pricing: The Cost of Ocean Pollution*.

¹²³ Pierre-Louis, *Guess How Many Giant Patches of Garbage There Are in the Ocean Now?*, *Popular Science*, 2017.

¹²⁴ *Ibid.*

¹²⁵ National Oceanic and Atmospheric Administration, *How Much Would It Cost to Clean Up the Pacific Garbage Patches*, 2018.

With the presence of maritime pollutants, shipping industries will have to continually change their routes to avoid any potential dangers, which causes delay in international trade leading to between \$10,000 to \$20,000 daily loss of revenue.¹²⁶ In addition, maritime pollutants have affected the fishing and aquaculture economy of various Member States with the industries receiving 1-5% less the typical output from excavation of marine resources.¹²⁷ Despite awareness of marine litter's hazardous effects, removal of the plastic, glass, and other solid waste is costly.¹²⁸ Scientists estimate that removing plastic debris from less than 1% of the northern Pacific Ocean could cost upwards of \$489 million per year.¹²⁹

In partnership with the International Union for Conservation of Nature (IUCN), UNEP introduced a methodology to identify plastic pollution hotspots.¹³⁰ In 2017, UNEP launched the Clean Seas platform, a global campaign including governments, civil society, the private sector, and individuals on ending marine litter.¹³¹ The gathering of plastic litter on beaches is effective in preventing some debris from entering the ocean but does little to address microplastics already in coastal areas, or in deeper waters, as well as plastics in the open ocean and in gyres.¹³² Member States are starting to address the source of these pollutants by drafting legislation that aims to eliminate plastic usage or use biodegradable matter.¹³³

The Role of Technology in Reducing Pollution in Oceans and Seas

The declining health of oceans and seas caused by maritime pollution is visible in coral reefs, which are highly diverse ecosystems that are particularly vulnerable to changes in the environment.¹³⁴ The multitude of threats highlights the need for innovative approaches to protecting oceans and seas, for which there is a wide variety of technologies that may have useful applications.¹³⁵ The *Criteria and Guidelines on the Transfer of Marine Technology* (2005) of the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (UNESCO) notes that marine technology refers to instruments, equipment, vessels, processes and methodologies required to produce and use knowledge to improve the study and understanding of the nature and resources of the ocean and coastal areas.¹³⁶

The NGO The Ocean Cleanup has recently invested in the production of artificial coastlines outside Eastern California, USA where the Pacific trash patch is located.¹³⁷ The organization proposed that this innovation will guide marine litter and debris into a retention zone for efficient future cleaning.¹³⁸ Their approach is to use technology to turn the cleaning process into a profitable endeavor for future project funding by recycling marine waste.¹³⁹ In 2020, The Ocean Cleanup organization presented the first durable and completely recycled sunglass that was created from marine plastic.¹⁴⁰ Technology development therefore presents many possibilities for marine conservation, and in recent years, innovative breakthroughs in marine technology have resulted in new ways to protect oceans and seas.¹⁴¹

¹²⁶ Moore, Moore on Pricing: The Cost of Ocean Pollution, *Logistics Management*, 2018.

¹²⁷ Hodal, Marine plastic pollution costs the world up to \$2.5tn a year, researchers find, *The Guardian*, 2019.

¹²⁸ UNEP, *Ad hoc open-ended expert group on marine litter and microplastics*.

¹²⁹ Ibid.

¹³⁰ IUCN, *As UNEA5 kicks off, ground-breaking Plastic Pollution Hotspotting Results Published for Seven Countries in Asia, Africa, and the Mediterranean*, 2021.

¹³¹ UNEP, *Clean Seas: About*.

¹³² Ibid.

¹³³ US Plastic Pact, *U.S. Plastics Pact Unveils National Strategy to Achieve 2025 Circular Economy Goals*, 2021.

¹³⁴ UN General Assembly, *The Future We Want (A/RES/66/288)*, 2012, p. 34.

¹³⁵ UNESCO IOC, *IOC Criteria and Guidelines on the Transfer of Marine Technology*, 2005, p. 9.

¹³⁶ Ibid., p. 9.

¹³⁷ The Ocean Cleanup, *Oceans*, 2021.

¹³⁸ Ibid.

¹³⁹ The Ocean Cleanup, *About the Ocean Cleanup*, 2021.

¹⁴⁰ The Ocean Cleanup, *Updates*, 2021.

¹⁴¹ UNEP, *Smart new technologies can play a vital role in addressing plastic pollution crisis in our waters – new study*, 2020.

Conclusion

Marine litter and chemicals damage marine ecosystems, impact seafood supply and quality, and harm human health and economic stability, affecting the achievement of many of the SDGs.¹⁴² Oceans, rivers, and coastal waters must be cleared of plastic litter and microplastics to protect marine biodiversity and achieve SDG 14 (“life below water”).¹⁴³ Without drastic action, ineffective plastic waste management and the continued production of microplastics will result in the seas becoming home to more plastic waste than fish by 2050.¹⁴⁴ Member States hold a shared responsibility for the planet’s oceans and the life that inhabits it, so swift and meaningful intervention on marine plastic litter and microplastics is of the utmost importance to UN Environment.¹⁴⁵

Further Research

Delegates should consider these questions to further their research: What are the major obstacles for Member States to implement strategies to protect oceans from plastic litter? What steps can Member States take to phase out single-use plastics? How can Member States minimize chemical runoff entering oceans? How can the international community protect marine biodiversity from the effects of marine plastic litter and microplastics? How can Member States contribute to the efforts to remove plastic litter from seas? How can states minimize the negative effects on human health from plastic and chemical ingestion? How can they develop a green culture among citizens? What can the international community do to support Member States’ efforts?

Annotated Bibliography

Group of Twenty. (2017). *G20 Action Plan on Marine Litter*. Retrieved 4 July 2021 from: <https://www.mofa.go.jp/mofaj/files/000272290.pdf>

The G20 Action Plan on Marine Litter identifies areas of need and gaps in evidence-based knowledge on this topic while promoting actionable policies. Delegates will find this source useful as it identifies areas of need, such as data collection and plastic litter prevention, in a concise manner. The document also describes the economic benefits of policies that reduce plastic consumption as well as suggests way to improve waste management. Delegates will find this source to be informative and succinct, as well as a launching point for research as it lists relevant resolutions in its annex.

United Nations Environment Assembly. (2018). *Marine litter and microplastics (UNEP/EA.3/RES.7)*. Retrieved 4 July 2021 from: <https://undocs.org/UNEP/EA.3/RES.7>

Adopted in Nairobi, Kenya in December 2017, this is one of the recent resolutions adopted by UNEA on “Marine Plastics and Microplastics.” This resolution prioritizes the “cleaning up” of plastic and microplastics in the world’s oceans through gathering and extracting microplastic waste. In this document, Member States commit to implementing policies that would halt the increase of plastic litter and microplastics in marine systems by 2025. This document provides outline of the direction that UNEA is heading in, in the fight against marine plastic litter and microplastics.

United Nations Environment Assembly, Fourth session. (2019). *Protection of the marine environment from land-based activities (UNEP/EA.4/RES.11)*. Retrieved 27 June 2021 from:

<https://undocs.org/UNEP/EA.4/RES.11>

This resolution is the bodies latest document on land-based pollution from its fourth session in 2019. It focuses on capacity building and knowledge transfer in order to protect the marine environment. Furthermore, multi-stakeholder partnerships on the

¹⁴² Center for Biological Diversity, *Ocean Plastics Pollution: A Global Tragedy for Our Oceans and Sea Life*.

¹⁴³ Ibid.

¹⁴⁴ Cronin, There Will Be More Plastic in the Oceans Than Fish by 2050, *One Green Planet*, 2017.

¹⁴⁵ UNEP, *Towards a Pollution-Free Planet: Report of the Executive Director United Nations Environment Programme*, 2017.

global and regional level are central to UNEA's future strategy. Delegates can again an understanding of UNEA's current position on the topic at hand.

United Nations Environment Programme. (n.d.). *Global Partnership on Marine Litter*. Retrieved 2 November 2021 from: <https://www.unep.org/explore-topics/oceans-seas/what-we-do/addressing-land-based-pollution/global-partnership-marine>

The website of the Global Partnership on Marine Litter (GPML) presents a comprehensive overview of the GPML's activities. It highlights the historical context of the GPML and details the work of the partnership across various action areas. Because of the importance of GPML in fighting marine pollution, leveraging the resources this website offers will be crucial. For delegates, this website is an ideal starting point to explore one of UNEP's successful initiatives to address maritime pollution. Delegates may use the website to access related UNEP content on the GPML's work as well as the GPML's very own website.

United Nations Environment Programme. (2017). *Towards a Pollution-Free Planet: Report of the Executive Director United Nations Environment Programme*. Retrieved 27 June 2021 from: https://wedocs.unep.org/bitstream/handle/20.500.11822/21213/Towards_a_pollution_free_planet_advance%20version.pdf?sequence=2&isAllowed=y

This report by the Executive Director of UNEP was published as basis for discussion on pollution in general during UNEA's third session in 2017. It gives an extensive overview of the pollution challenge, presents past strategies, and offers solutions to all forms of pollution. Delegates can use this document to research all aspects related to marine pollution and compare actions already in place.

Bibliography

Center for Biological Diversity. (n.d.). *Ocean Plastics Pollution: A Global Tragedy for Our Oceans and Sea Life*. Retrieved 2 November 2021 from: https://www.biologicaldiversity.org/campaigns/ocean_plastics/

Cronin, A. M. (2017). There Will Be More Plastic in the Oceans Than Fish by 2050. *One Green Planet*. Retrieved 2 November 2021 from: <https://www.onegreenplanet.org/environment/there-will-be-more-plastic-than-fish-in-the-oceans/>

Global Partnership on Marine Litter. (n.d.). *Who we are*. Retrieved 26 June 2021 from: <https://www.gpmarinelitter.org/who-we-are>

Group of Twenty. (2017). *G20 Action Plan on Marine Litter*. Retrieved 4 July 2021 from: <https://www.mofa.go.jp/mofaj/files/000272290.pdf>

Hodal, K. (2019, April 4). Marine Plastic pollution costs the world up to \$2.5tn a year, researchers find. *The Guardian*. Retrieved 2 November 2021 from: <https://www.theguardian.com/global-development/2019/apr/04/marine-plastic-pollution-costs-the-world-up-to-25bn-a-year-researchers-find>

International Union for Conservation of Nature. (2021, February 23). *As UNEA5 kicks off, ground-breaking Plastic Pollution Hotspotting Results Published for Seven Countries in Asia, Africa, and the Mediterranean*. Retrieved 25 June 2021 from: <https://www.iucn.org/news/eastern-and-southern-africa/202102/unea5-kicks-ground-breaking-plastic-pollution-hotspotting-results-published-seven-countries-asia-africa-and-mediterranean>

Moore, P. (2018, July 31). Moore on Pricing: The Cost of Ocean Pollution. *Logistics Management*. Retrieved 2 November 2021 from: https://www.logisticsmgmt.com/article/moore_on_pricing_the_cost_of_ocean_pollution

Marine Conservation Institute. (2021). *Atlas of Marine Protection*. Retrieved 5 September 2021 from: <http://www.mpatlas.org/map/mpas/>

National Oceanic and Atmospheric Administration. (n.d.). *Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities*. Retrieved 5 September 2021 from: https://www.gc.noaa.gov/gcil_global_action.html

National Oceanic and Atmospheric Administration. (2012, July 19). *How Much Would It Cost to Clean Up the Pacific Garbage Patches*. Retrieved 5 September 2021 from: <https://response.restoration.noaa.gov/about/media/how-much-would-it-cost-clean-pacific-garbage-patches.html>

Pennington, J. (2016, October 27). Every minute, one garbage truck of plastic is dumped into our oceans. This has to stop. *World Economic Forum*. Retrieved 2 November 2021 from: <https://www.weforum.org/agenda/2016/10/every-minute-one-garbage-truck-of-plastic-is-dumped-into-our-oceans/>

Pierre-Louis, K. (2017). Guess how many giant patches of garbage there are in the ocean now?. *Popular Science*. Retrieved 2 November 2021 from: <https://www.popsoci.com/south-pacific-garbage-patch/>

Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea. (2020). *Our History*. Retrieved 2 November 2021 from: <https://www.rempec.org/en/about-us/our-history>

Sea Turtle Conservancy. (2017). *Information About Sea Turtles: Threats from Marine Debris*. Retrieved 2 November 2021 from: <https://conserveturtles.org/information-sea-turtles-threats-marine-debris/>

The Ocean Cleanup. (2021). *About the Ocean Cleanup*. Retrieved 5 August 2021 from: <https://www.theoceancleanup.com/about/>

The Ocean Cleanup. (2021). *Oceans*. Retrieved 2 November 2021 from: <https://theoceancleanup.com/oceans/>

The Ocean Cleanup. (2021). *Updates*. Retrieved 2 November 2021 from: <https://theoceancleanup.com/updates/>

United Nations, General Assembly, Sixty-sixth session. (2012). *The Future We Want (A/RES/66/288)*. Retrieved 2 November 2021 from: <http://undocs.org/A/RES/66/288>

United Nations, General Assembly, Seventieth session. (2015). *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. Retrieved 2 November 2021 from: <http://undocs.org/A/RES/70/1>

United Nations, General Assembly, Seventy-first session. (2017). *Our ocean, our future: call for action (A/RES/71/312)*. Retrieved 2 November 2021 from: <https://www.undocs.org/A/RES/71/312>

United Nations, Ocean Conference. (n.d.). *Latest Ocean Data*. Retrieved 2 November 2021 from: <https://www.un.org/en/conferences/ocean2022/facts-figures>

United Nations, Ocean Conference. (n.d.). *Seafood Business for Ocean Stewardship (SeaBOS)*. Retrieved 2 November 2021 from: <https://oceanconference.un.org/commitments/?id=16954>

United Nations, World Summit on Sustainable Development. (2002). *Report of the World Summit on Sustainable Development (A/CONF.199/20)*. Retrieved 10 November 2021 from: <http://undocs.org/A/CONF.199/20>

United Nations Conference on the Human Environment. (1972). *Report of the United Nations Conference on the Human Environment (A/CONF.48/14/Rev.1)*. Retrieved 2 November 2021 from: <https://undocs.org/A/CONF.48/14/Rev.1>

United Nations Conference on the Law of the Sea, Third session. (1982). *United Nations Convention on the Law of the Sea*. Retrieved 2 November 2021 from: http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf

United Nations Educational, Scientific and Cultural Organization, Intergovernmental Oceanographic Commission. (2005). *IOC Criteria and Guidelines on the Transfer of Marine Technology*. Retrieved 2 November 2021 from: https://www.scor-int.org/SCOR_CB/CB-Bremen/IOC_Tech_Transfer.pdf

United Nations Environment Assembly, First session. (2014). *Marine plastic debris and microplastics: Draft resolution submitted by the Committee of the Whole (UNEP/EA.1/L.8)*. Retrieved 10 November 2021 from: <https://undocs.org/UNEP/EA.1/L.8>

United Nations Environment Assembly, Third session. (2018). *Marine litter and microplastics (UNEP/EA.3/RES.7)*. Retrieved 4 July 2021 from: <https://undocs.org/UNEP/ES.3/RES.7>

United Nations Environment Assembly, Fourth session. (2019). *Marine plastic litter and microplastics (UNEP/EA.4/RES.6)*. Retrieved 10 November 2021 from: <https://undocs.org/UNEP/EA.4/RES.6>

United Nations Environment Assembly, Fourth session. (2019). *Protection of the marine environment from land-based activities (UNEP/EA.4/RES.11)*. Retrieved 27 June 2021 from: <https://undocs.org/UNEP/EA.4/RES.11>

United Nations Environment Programme & National Oceanic and Atmospheric Administration. (n.d.). *The Honolulu Strategy: A global framework for prevention and management of marine debris*. Retrieved 2 November 2021 from: https://marinedebris.noaa.gov/sites/default/files/publications-files/Honolulu_Strategy.pdf

United Nations Environment Programme. (n.d.). *Ad hoc Open-ended expert group on marine litter and microplastics*. Retrieved 2 November 2021 from: <https://www.unep.org/environmentassembly/expert-group-on-marine-litter>

United Nations Environment Programme. (n.d.). *Clean Seas: About*. Retrieved 24 June 2021 from: <https://www.cleanseas.org/about>

United Nations Environment Programme. (n.d.). *Global Major Groups and Stakeholders Forum*. Retrieved 1 November 2021 from: <https://www.unep.org/civil-society-engagement/participation-and-engagement/global-major-groups-and-stakeholders-forum>

United Nations Environment Programme. (n.d.). *Global Partnership on Marine Litter*. Retrieved 2 November 2021 from: <https://www.unep.org/explore-topics/oceans-seas/what-we-do/addressing-land-based-pollution/global-partnership-marine>

United Nations Environment Programme. (n.d.). *Why do oceans and seas matter?*. Retrieved 2 November 2021 from: <https://www.unep.org/explore-topics/oceans-seas/why-do-oceans-and-seas-matter>

United Nations Environment Programme. (2015). *Progress in implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA) and specifically the Manila Declaration (UNEP/WBRS.17/5)*. Retrieved 2 November 2021 from: https://wedocs.unep.org/bitstream/handle/20.500.11822/10873/wbrs17_5_gpa.pdf?sequence=1&BisAllowed



United Nations Environment Programme. (2017). *Towards a Pollution-Free Planet*. Retrieved 27 June 2021 from: https://wedocs.unep.org/bitstream/handle/20.500.11822/21213/Towards_a_pollution_free_planet_advance%20version.pdf?sequence=2&isAllowed=y

United Nations Environment Programme. (2018). *The State of Plastics: World Environment Day Outlook*. Retrieved 1 November 2021 from: https://wedocs.unep.org/bitstream/handle/20.500.11822/25513/state_plastics_WED.pdf?sequence=1&isAllowed=y

United Nations Environment Programme. (2019). *Addressing Marine Plastics: A Systemic Approach – Recommendations for Actions*. Retrieved 1 November 2021 from: <https://www.unep.org/resources/report/addressing-marine-plastics-systemic-approach-recommendations-actions>

United Nations Environment Programme. (2019, May 6). *UN Report: Nature's Dangerous Decline 'Unprecedented' Species Extinction Rates 'Accelerating'*. Retrieved 1 November 2021 from: <https://www.unep.org/news-and-stories/press-release/natures-dangerous-decline-unprecedented-species-extinction-rates>

United Nations Environment Programme. (2020, December 17). *Smart new technologies can play a vital role in addressing plastic pollution crisis in our waters – new study*. Retrieved 2 November 2021 from: <https://www.unep.org/news-and-stories/press-release/smart-new-technologies-can-play-vital-role-addressing-plastic>

US Plastics Pact. (2021, June 15). *U.S. Plastics Pact unveils National Strategy to Achieve 2025 Circular Economy Goals*. Retrieved 2 November 2021 from: <https://usplasticspact.org/u-s-plastics-pact-unveils-national-strategy-to-achieve-2025-circular-economy-goals/>

Waste 360. (2019, April 22). *Study Puts Economic, Social Cost on Ocean Plastic Pollution*. Retrieved 2 November 2021 from: <https://www.waste360.com/plastics/study-puts-economic-social-cost-ocean-plastic-pollution>

World Wildlife Fund, et al.. (2020). *The Business Case for A United Nations Treaty on Plastic Pollution*. Retrieved 2 November 2021 from: https://wwfasia.awsassets.panda.org/downloads/un_treaty_plastic_poll_report_a4_single_pages_v15_web_prerelease_3mb.pdf

2. Implementing a Circular Economy for the Sustainable Development Goals

“Circularity and sustainable consumption and production are essential to deliver on every multilateral agreement, from the Sustainable Development Goals, to the Paris Agreement to the post-2020 global biodiversity framework that we must agree on soon.”¹⁴⁶

Introduction

According to the United Nations Environment Assembly (UNEA), a circular economy is a potential economic system whereby “products and materials are designed in such a way that they can be reused, remanufactured, recycled or recovered.”¹⁴⁷ Reusing, remanufacturing, recycling, and recovering are important, as they are the components that connect make a circular economy sustainable.¹⁴⁸ UNEA first acknowledged this concept in its resolution 4/1 (2019), *Innovative Pathways to Achieve Sustainable Consumption and Production*.¹⁴⁹

By contrast, a linear economy is where businesses, both publicly and privately owned, gather raw materials to produce products that are utilized and discarded without concern for the environment or reuse possibilities.¹⁵⁰ According to the Ellen McArthur Foundation, a charity dedicated to the creation of circular economies, 95% of all plastics are single-use plastics that are thrown away after a one-time use.¹⁵¹ This results in roughly 8 million tons of plastic in the world’s oceans each year.¹⁵² Once in water, these plastics dissolve into microplastics, which kill seabirds and marine mammals alike.¹⁵³ However, the negative impacts of microplastics are not only seen in the oceans: approximately 83% of public faucets contain microplastics and many fish species consumed by humans have been found to ingest microplastics.¹⁵⁴ To combat this problem, plastic waste is often burned.¹⁵⁵ Yet, in doing so, the toxic fumes resulting from the burning of plastics lead to reduced air quality and acidification of many bodies of water.¹⁵⁶ Instead, reusing, remanufacturing, recycling, or recovering plastic demonstrates how circular economies are better for the environment than linear economies.¹⁵⁷

UNEA can help phase-out linear economies by continuing as a forum for Member States to discuss policies behind shifting to more circular economies.¹⁵⁸ Likewise, the United Nations Environment Programme (UNEP), the agency governed by UNEA, engages with various stakeholders on the benefits of circular economies, in particular on their positive impacts on the environment.¹⁵⁹ Similarly, UNEP addresses the need for transforming trade and finance towards circularity to ensure sustainable production and consumption patterns.¹⁶⁰

¹⁴⁶ European Commission, *EU Launches Global Alliance on Circular Economy and Resource Efficiency*, 2021.

¹⁴⁷ UNEA, *Innovative Pathways to Achieve Sustainable Consumption and Production (UNEP/EA.4/Res.1)*, 2019, p. 2.

¹⁴⁸ *Ibid.* p. 1.

¹⁴⁹ UN Environment, *Innovative Pathways to Achieve Sustainable Consumption and Production (UNEP/EA.4/Res.1)*, 2019, p. 2.

¹⁵⁰ The Green Brain, *How is a Circular Economy Different from a Linear Economy*.

¹⁵¹ Ellen MacArthur Foundation, *What We Do*; UNEP, *Closing the Loop: How a Circular Economy Helps us #BeatPollution*, 2017.

¹⁵² UNEP, *Our Planet is Drowning in Plastic Pollution- it’s Time for Change*, 2018.

¹⁵³ UNESCO, *Facts and Figures on Marine Pollution*, 2017.

¹⁵⁴ UNEP, *Closing the Loop: How a Circular Economy Helps us #BeatPollution*, 2017; Global Change Biology, *Plastic Ingestion by Marine Fish is Widespread and Increasing*, 2021.

¹⁵⁵ UNEP, *Plastic Bag Bans Can Help Reduce Toxic Fumes*, 2019.

¹⁵⁶ UNEP, *Plastic Bag Bans Can Help Reduce Toxic Fumes*, 2019; UNEP, *Environmental Consequences of Ocean Acidification: A Threat to Food Security*, 2010, p. 1.

¹⁵⁷ UNEP, *Closing the Loop: How a Circular Economy Helps us #BeatPollution*, 2017.

¹⁵⁸ UNEP, *UN Environment Assembly Set to Galvanize Global Action for Nature*, 2021.

¹⁵⁹ UNEP, *About the United Nations Environment Assembly*; UNEP, *Understanding Circularity*.

¹⁶⁰ UNCTAD, *The Circular Economy in International Trade*, 2016.

International and Regional Framework

For a circular economy, sound waste management and waste reduction is key.¹⁶¹ The *Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal* (1989) is a legally-binding international treaty on waste management for the 188 governments which have ratified the agreement.¹⁶² The Basel Convention presents prerequisites and restrictions which aim to minimize the movement of waste across international borders.¹⁶³ In some cases, the regulations from the Basel Convention intend to completely prevent the movement of waste if exporting nations have the capacity to repurpose the materials, thus keeping such materials in the economic cycle.¹⁶⁴

The Basel Convention was later expanded by the *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemical and Pesticides in International Trade* (1998) and the *Stockholm Convention on Persistent Organic Pollutants* (2001).¹⁶⁵ The Rotterdam and Stockholm Conventions severely restrict or outright ban the production and movement of specific pesticides and chemicals that were flagged by a plurality of the governments which ratified the agreements.¹⁶⁶ The Basel, Rotterdam, and Stockholm Conventions work together to mutually reinforce each of their goals.¹⁶⁷ These three conventions led to a regulatory framework, which has made it difficult to dump waste using linear economic practices.¹⁶⁸ This is beneficial to circular economies because the synergies of these three conventions highlight the importance of sustainability in waste management and waste reduction, a key principle in circularity.¹⁶⁹

In the aftermath of the 1992 United Nations Conference on Environment and Development in Rio de Janeiro, Brazil, the three so-called Rio Conventions were adopted: the *United Nations Framework Convention on Climate Change* (UNFCCC) in 1992, the *Convention on Biological Diversity* (CBD) in 1992, and the *United Nations Convention to Combat Desertification in those Countries Experiencing Drought and/or Desertification, Particularly in Africa* (UNCCD) in 1994.¹⁷⁰ The UNFCCC process specifically led to further legally binding treaties on climate issues, such as the *Kyoto Protocol to the United Nations Framework Convention on Climate Change* (1997) and the *Paris Agreement* (2015).¹⁷¹ In particular, the *Paris Agreement* is crucial because of its universally agreed upon goal to reduce greenhouse gas emissions and keep global average temperature to well below 2°C over pre-industrial levels with the aim of reaching 1.5°C.¹⁷²

Similarly, *2030 Agenda for Sustainable Development* (2015) and its 17 Sustainable Development Goals (SDGs) present a crucial framework.¹⁷³ In particular, SDG 12 (“sustainable consumption and production

¹⁶¹ UNEP, *Innovative Pathways to Achieve Sustainable Consumption and Production (UNEP/EA.4/Res.1)*, 2019, p. 2.

¹⁶² UNEP, *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, 1989.

¹⁶³ *Ibid.*, pp. 20-24.

¹⁶⁴ *Ibid.*, p. 23.

¹⁶⁵ UN BRS, *About Synergies*, 2012.

¹⁶⁶ *Ibid.*

¹⁶⁷ *Ibid.*

¹⁶⁸ *Ibid.*

¹⁶⁹ UN BRS, *Brief Overview of the Synergies Process at Global Level Among the BRS Conventions in the Context of the 2030 Agenda for Sustainable Development*, 2016, p. 4-6.

¹⁷⁰ UNCED, *United Nations Framework Convention on Climate Change*, 1992; UNCED, *Convention on Biological Diversity*, 1992; Intergovernmental Negotiating Committee for the Elaboration of an International Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, *United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (A/AC.241/27)*, 1994.

¹⁷¹ Growing Climate Solutions, *Montreal, Kyoto and Paris – An Overview of International Climate Accords*, 2020.

¹⁷² *Ibid.*

¹⁷³ UN General Assembly, *Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda) (A/RES/69/313)*, 2015, p. 14.

patterns”) focuses on implementing sustainable economic models, including circular economies.¹⁷⁴ SDG 12’s progress is evaluated by several indicators, all of which are centered around efficiently utilizing resources and reducing waste.¹⁷⁵

Role of the International System

In March 2019, UNEA held its fourth regular session.¹⁷⁶ There, UNEA further explored the relationship between circularity and SDG 12.¹⁷⁷ For example, UNEA resolution 4/1 on *Innovative Pathways to Achieve Sustainable Consumption and Production* (2019) established the concept of a circular economy in a UN resolution.¹⁷⁸ Furthermore, UNEA resolution 4/4 on *Addressing Environmental Challenges Through Sustainable Business Practices* indirectly underscored the importance of the circular economic model by highlighting programs mainly designed around implementing circularity.¹⁷⁹ Another example was UNEA resolution 4/8 on *Sound Management of Chemicals and Waste*, which reaffirmed the regulatory frameworks on waste management and their association to sustainable economic models, such as the circular economy.¹⁸⁰ These are among 23 resolutions adopted during the fourth UNEA session, most of which referenced aspects of circularity.¹⁸¹ They each outlined a detailed plan for addressing current and future problems within the realm of sustainable consumption and production.¹⁸²

UNEP supports the implementation of UNEA resolutions by establishing and operating various projects and programming.¹⁸³ The 10 Year Framework of Programmes was adopted in 2012 during the Rio+20 UN Conference on Sustainable Development, focused on developing, replicating and scaling sustainable consumption and production policies and initiatives amongst local, regional, and international organizations and governments.¹⁸⁴ The 10 Year Framework of Programmes has six areas of concentration: Public Procurement, Buildings and Construction, Tourism, Food Systems, Consumer Information, and Lifestyles and Education.¹⁸⁵ The One Planet Network is responsible for overseeing the implementation of these six areas of concentration, including promoting or incorporating circularity into their sustainable consumption and production projects wherever possible.¹⁸⁶ For example, One Planet Network recently promoted circularity across the textile industry by hosting discussions, both at conferences and behind closed doors, with representatives from textile companies, governments, and other international organizations.¹⁸⁷

Other UN agencies and international organizations, such as World Trade Organization (WTO), United Nations Conference on Trade and Development (UNCTAD), United Nations Industrial Development Organization (UNIDO), and Organisation for Economic Co-Operation (OECD) have also played a role in establishing circularity, all of which are members of the United Nations Environment Management Group

¹⁷⁴ UN General Assembly, *Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda)* (A/RES/69/313), 2015, p. 14.

¹⁷⁵ UNEP, *Goal 12: Sustainable Consumption and Production*.

¹⁷⁶ UNEP, *146th meeting of the Committee of Permanent Representatives to the United Nations Environment Programme*, 2019.

¹⁷⁷ UNEP, *146th meeting of the Committee of Permanent Representatives to the United Nations Environment Programme*, 2019.

¹⁷⁸ UNEP, *Innovative Pathways to Achieve Sustainable Consumption and Production (UNEP/EA.4/Res.1)*, 2019.

¹⁷⁹ UNEP, *Addressing Environmental Challenges Through Sustainable Business Practices (UNEP/EA.4/Res.4)*, 2019.

¹⁸⁰ UNEP, *Sound Management of Chemicals and Waste (UNEP/EA.4/Res.8)*, 2019.

¹⁸¹ UNEP, *146th meeting of the Committee of Permanent Representatives to the United Nations Environment Programme*, 2019.

¹⁸² UNEP, *146th meeting of the Committee of Permanent Representatives to the United Nations Environment Programme*, 2019.

¹⁸³ UNEP, *What We Do*.

¹⁸⁴ UNEP, *One Planet Network*.

¹⁸⁵ UNEP, *One Planet Network*.

¹⁸⁶ One Planet Network, *Building Circularity in the Textile Value Chain*, 2019.

¹⁸⁷ One Planet Network, *Building Circularity in the Textile Value Chain*, 2019.

(UNEMG).¹⁸⁸ UNEMG was created by the General Assembly following the adoption of its resolution 53/242 on the “Report of the Secretary-General on Environment and Human Settlements.”¹⁸⁹ The mission of UNEMG is to increase coordination between UN agencies and international organizations on specific issues pertaining to the environment and human settlements, including sustainable production and consumption patterns.¹⁹⁰

Regional organizations have also pursued their own circularity initiatives.¹⁹¹ The EU developed the *European Green Deal* (2019), which included a section titled the *Circular Economy Action Plan*.¹⁹² This action plan helped create the Global Alliance on Circular Economy and Resource Efficiency, a partnership of 42 countries in collaboration with UNEP, UNIDO, the Ellen MacArthur Foundation, Platform for Accelerating the Circular Economy, and the World Circular Economy Forum.¹⁹³ In a similar fashion, UNEP launched a circular economy coalition for Latin America and the Caribbean in February 2021, which aims to support the transition towards a circular economy in the region within the context of COVID-19 recovery.¹⁹⁴ Likewise, the Association of South East Asian Nations (ASEAN) also recently began discussions on a draft *Framework for Circular Economy for the ASEAN Economic Community* and the African Development Bank launched the Africa Circular Economy Facility in 2019 to promote circular approaches on the African continent.¹⁹⁵

Environmental Restoration in a Circular Economy

The world is currently facing three environmental crises: climate change, loss of biodiversity, and pollution.¹⁹⁶ In the latest contribution to its Sixth Assessment Report from August 2021, the Intergovernmental Panel on Climate Change (IPCC) estimates that humanity has already increased global temperatures by 1.07°C since pre-industrial times.¹⁹⁷ The *2019 Global Assessment Report on Biodiversity and Ecosystem Services* of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) estimates that roughly 1 million animal and plant species face extinction in the coming decades.¹⁹⁸ Similarly, there are roughly 5 trillion plastic particles currently in the world’s surface water, contributing to plastic pollution.¹⁹⁹ Circularity in consumption and production can help address and prevent these problems.²⁰⁰

The circular economic model could help eliminate as much as 62% of greenhouse gas emissions from extraction and 38% of greenhouse gas emissions from transportation of materials and products that are released under a linear economic model.²⁰¹ Likewise, the circular economic model can help preserve

¹⁸⁸ UNEMG, *EMG Membership*.

¹⁸⁹ UN General Assembly, *Report of the Secretary-General on Environment and Human Settlements (A/RES/53/242)*, 1999, p. 3.

¹⁹⁰ UNEMG, *About EMG*.

¹⁹¹ EU, *EU Climate Action and the European Green Deal*, 2019.

¹⁹² *Ibid.*

¹⁹³ EU, *Global Alliance on Circular Economy and Resource Efficiency (GACERE)*, 2020.

¹⁹⁴ *Circular Economy Coalition Launched for Latin America and the Caribbean*, UNEP, 2021.

¹⁹⁵ ASEAN, *ASEAN takes on Circular Economy as part of Priority Agenda*, 2021; ADBG, *Africa Circular Economy Facility*, 2019.

¹⁹⁶ UN DPI, *Secretary-General’s Joint Press Conference with Executive Director of UNEP, Inger Anderson, to Launch UNEP Report Entitled “Making Peace with Nature: A Scientific Blueprint to Tackle the Climate, Biodiversity, and Pollution Emergencies on 8 February 2021, in New York*, 2021.

¹⁹⁷ IPCC, *Climate Change 2021: The Physical Science Basis*, 2021, p. 41.

¹⁹⁸ IPBES, *Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*, 2019, p. XVI.

¹⁹⁹ Ritchie & Roser, *Plastic Pollution*, 2018.

²⁰⁰ UN DPI, *Secretary-General’s Joint Press Conference with Executive Director of UNEP, Inger Anderson, to Launch UNEP Report Entitled “Making Peace with Nature: A Scientific Blueprint to Tackle the Climate, Biodiversity, and Pollution Emergencies on 8 February 2021, in New York*, 2021.

²⁰¹ UNFCCC, *Circular Economy Crucial for Paris Climate Goals*, 2019.

biodiversity and combat land degradation, a leading cause of desertification.²⁰² Lastly, the circular economic model can help decrease yearly volumes of plastic into our oceans by as much as 80% by 2040.²⁰³

UNEP is also addressing the three environmental crises through circular approaches.²⁰⁴ For example, UNEP's Circularity Platform presents solutions that build upon three dimensions: user-to-user, user-to-business, and business-to-business.²⁰⁵ These dimensions allow the tracking of products during their lifecycle, with the intention of repurposing or recycling once they have gone through each dimension.²⁰⁶ The business-to-business loop has been particularly successful in repurposing and recycling resources to eliminate waste.²⁰⁷ For example, Parley for the Oceans and Adidas are two businesses which have partnered to turn plastics collected from the oceans into a series of shoes.²⁰⁸ However, the 2021 UNEP report *Making Peace with Nature: A Scientific Blueprint to Tackle the Climate, Biodiversity, and Pollution Emergencies* provides that users can make a difference too by educating themselves on circularity and advocating for circularity in their local communities.²⁰⁹ The Circular Economy Club, a social media platform for circularity advocates, has allowed users to establish local circularity clubs which have then go on to organize regional circularity projects.²¹⁰ Overall, this highlights how a circular economy contributes to sustainable consumption and production patterns while reducing waste and also minimizing greenhouse gas emissions.²¹¹

Private Sector, Trade, and Finance in a Circular Economy

There are two problems with the linear economic model: open access to limited resources and the resulting price instability.²¹² The vast majority of manmade products are from natural resources that are non-renewable.²¹³ Consequentially, as these natural resources become less available, their prices and the cost for the resulting products increase.²¹⁴ The circular economic model makes non-renewable resources sustainable by consistently reusing what has already been extracted, thereby keeping the materials in an economic cycle.²¹⁵ The circular economic model achieves this by creating secondary markets that sell and repurpose used products containing those non-renewable resources.²¹⁶ In doing so, these non-renewable resources remain available, and their value remains unchanged.²¹⁷

Some items already have well-established secondary markets, such as glass, paper, and plastics.²¹⁸ For example, in the EU glass, paper, and plastics are recycled 73%, 72%, and 26% of the time respectively.²¹⁹ However, this same example also saw the EU produce \$98.4 billion in waste from

²⁰² UNCED, *Convention on Biological Diversity*, 1992; UNCCD, *The Great Green Wall Initiative*, 2020; Halbac-Cotoara-Zamfir et al., *From Historical Narratives to Circular Economy: De-Complexifying the "Desertification" Debate*, 2020.

²⁰³ Ellen MacArthur Foundation, *Designing Out Plastic Pollution*.

²⁰⁴ UNEP, *Understanding Circularity*.

²⁰⁵ Ibid.

²⁰⁶ Ibid.

²⁰⁷ Ibid.

²⁰⁸ Morgan, *How Adidas is Turning Plastic Ocean Waste into Sneakers and Sportswear*, 2020.

²⁰⁹ UNEP, *Making Peace with Nature: A Scientific Blueprint to Tackle the Climate, Biodiversity, and Pollution Emergencies*, 2021, p. 103.

²¹⁰ Circular Economy Club, *Bringing the Circular Economy to Every Corner of the World: The CEC*.

²¹¹ UN Environment, *Innovative Pathways to Achieve Sustainable Consumption and Production (UNEP/EA.4/Res.1)*, 2019, p. 2.

²¹² WTO, *Trade Theory and Natural Resources*, 2010, p. 73.

²¹³ Ibid., p. 75.

²¹⁴ Ibid., pp. 97-107.

²¹⁵ UNEP, *Understanding Circularity*.

²¹⁶ UNCTAD, *The Circular Economy in International Trade*, 2016.

²¹⁷ Ellen MacArthur Foundation, *New Research Shows that the Circular Economy has a De-Risking Effect and Drives Superior Risk-Adjusted Returns*.

²¹⁸ UNCTAD, *The Circular Economy in International Trade*, 2016.

²¹⁹ Ibid.

unrecycled resources over the course of ten years.²²⁰ This shows that companies can continue incorporating circularity into their practices, which in turn should increase their potential to recapture the expenses incurred from wasted materials.²²¹ In addition to strengthening secondary markets, the private sector can also contribute by creating company cultures, from the top on down, that strives to design solutions around sustainability.²²² This, in combination with a healthy secondary market, will also help the average person by creating about 700,000 new jobs by 2040.²²³

UNEP has provided various tools to foster green initiatives in international trade through circular approaches.²²⁴ For example, UNEP funded an environment and trade hub, a platform where various stakeholders share research and collaborate to make trade environmentally sustainable.²²⁵ In this context, UNEP worked with the International Resource Panel on a report on *Sustainable Trade in Resources: Global Material Flows, Circularity and Trade* (2020), which provides recommendations on transitioning trade towards a circular economy.²²⁶ UNEP has also developed and shared some metrics to evaluate the environment impact of potential economic and trade policies after implementation.²²⁷ UNEP has moreover sought to evaluate Member States' policies by drafting policy reviews that assess existing economic and trade policies against their outcomes for the environment.²²⁸

Another proposal by UNEP has suggested through those assessments has been the need for finance to help promote circularity through investments.²²⁹ For example, Italy has created a sustainability bond to fund sustainable solutions, such as businesses looking to increase the durability of their products or improving resource efficiency in their manufacturing process.²³⁰ Another potential solution could involve more widespread use of taxes that penalize businesses which develop products or services without considering circularity.²³¹ For example, carbon taxes are another example, having successfully reduced the dependence on fossil fuels for the 45 countries where such measures have been adopted.²³²

Conclusion

Circular economies are sustainable because they seek to recycle or repurpose products made from non-renewable natural resources, which is essential to preventing further environmental degradation caused by mining under linear economies.²³³ In this context, UNEA outlines the circular economy as a core concept in this transition, such as in its resolution 4/1 on *Innovative Pathways to Achieve Sustainable Consumption and Production*.²³⁴ Likewise, UNEP continues to promote circularity throughout its program of work.²³⁵ Moreover, circular economies can help restore the environment by reducing waste in our oceans and landfills.²³⁶ Circular economies can also improve trade and finance by reducing costs by wasting materials.²³⁷ In order to achieve the SDGs and the 2030 Agenda and address the planetary

²²⁰ UNCTAD, *The Circular Economy in International Trade*, 2016.

²²¹ Ellen MacArthur Foundation, *Designing Out Plastic Pollution*.

²²² UNEP, *Innovative Pathways to Achieve Sustainable Consumption and Production (UNEP/EA.4/Res.1)*, 2019, p. 6.

²²³ Ellen MacArthur Foundation, *Designing Out Plastic Pollution*; WTO, *Trade Theory and Natural Resources*, 2010, pp. 97-107.

²²⁴ UNEP, *Environment and Trade Hub*.

²²⁵ UNCTAD, *The Circular Economy in International Trade*, 2016.

²²⁶ UNEP & IRP, *Sustainable Trade in Resources: Global Material Flows, Circularity and Trade*, 2020.

²²⁷ UNEP, *Metrics and Measurements Frameworks*.

²²⁸ UNEP, *Green Economy Policy Review*.

²²⁹ UNEP, *New UNEP Report Lights the Way for Financial Institutions to Shift to More Sustainable Circular Economies*, 2020.

²³⁰ Ibid.

²³¹ Earth, *What Countries Have a Carbon Tax*, 2021.

²³² Ibid.

²³³ UNEP, *Understanding Circularity*.

²³⁴ UNEP, *Innovative Pathways to Achieve Sustainable Consumption and Production (UNEP/EA.4/Res.1)*, 2019.

²³⁵ UNEP, *Understanding Circularity*; UNEP, *One Planet Network*.

²³⁶ UNEP, *Understanding Circularity*.

²³⁷ UNCTAD, *The Circular Economy in International Trade*, 2016.

crises, more sustainable consumption and production patterns are necessary, and the circular economy will be crucial in this progress.²³⁸

Further Research

In their research, delegates can consider the following guiding questions: what other topics pertaining to the circular economy have not been addressed so far? What can UNEA and UNEP do to further address and promote circular economic models? What is the role of the private sector in promoting circular economic models? What are the challenges and obstacles in transitioning towards a circular economy? How can Member States implement circular economic models through trade and finance policies?

Annotated Bibliography

United Nations Institute for Training and Research. (n.d.). *Basel, Rotterdam, Stockholm Conventions*. Retrieved 6 September 2021 from: https://www.informea.org/sites/default/files/imported-documents/UNEP-FAO-CHW-RC-POPS-WSSynergies.16-PRESEN-03.Synergies_process_and_SDGs_June2016.English.pdf

This report was published by the Secretariat of the Basel, Stockholm, and Rotterdam Conventions. It provides an overview on what each of these conventions have collectively achieved by working together. These conventions helped lay the groundwork for conversations on circularity. Therefore, it is crucial to familiarize oneself with what each convention seeks to accomplish.

United Nations, General Assembly, Sixty-ninth Session. (2015). *Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda) (A/RES/69/313)*. Adopted without reference to a Main Committee (A/69/L.82). Retrieved 11 October 2021 from: <http://undocs.org/A/RES/69/313>

This outcome document was adopted by Member States at the General Assembly's 69th Session. The 2030 Agenda essentially greatly expanded upon everything the MDGs sought to accomplish. Every single discussion that the UN has on Sustainability ties back to the 2030 Agenda, so delegates should begin prepping for the conference by reviewing the 2030 Agenda and its 16 SDGs. Delegates should also reference any relevant SDGs in their draft resolutions.

United Nations Environment Programme. (n.d.). *Understanding Circularity*. Retrieved 1 August 2021 from: <https://buildingcircularity.org/>.

The UNEP circularity platform is a website containing comprehensive information on circular economic models. It provides an overview on the guiding principle and core processes of circularity and serves as a repository for crucial resources on advancing circularity. Delegates will find this website useful as it can help them visualize circular approaches at various stages of a product cycle. The website can further guide delegates towards implement circularity in various sectors, such as plastics, textiles, or electronics.

United Nations Environment Programme, Fourth Session. (2019). *Innovative Pathways to Achieve Sustainable Consumption and Production (UNEP/EA.4/Res.1)*. Retrieved 1 August 2021 from: <https://undocs.org/UNEP/EA.4/Res.1>.

This resolution was agreed upon by Member States during the UNEA-4. The resolution goes in detail about the problems and solutions for implementing sustainability in products and services developed by the public and private sectors. It is a useful resolution because of how informative each clause is, but also because it was the first resolution passed at a UNEA session that for the first time focused heavily on sustainable

²³⁸ UNEP, *Understanding Circularity*.

patterns of consumption and production. Delegates should reference this in almost any potential draft resolution, as resolution 4.1 addresses many issues.

United Nations Environment Programme. (2021). *Making Peace with Nature: A Scientific Blueprint to Tackle the Climate, Biodiversity, and Pollution Emergencies*. Retrieved 11 October 2021 from: <https://wedocs.unep.org/xmlui/bitstream/handle/20.500.11822/34948/MPN.pdf>

This report was published by UNEP ahead of UNEA-5. This report is one of many signature reports that delegates should do research on, but this one is made special by the fact that it provides insight into how humanity is doing in achieving sustainability thus preventing climate change, loss of biodiversity, and pollution emergencies. The conclusions found in the report are bleak, but they do give a detailed roadmap for how Member States can still achieve sustainability before irreversible damage is done to the planet. Delegates should review and echo recommendations this report in potential draft resolutions.

Bibliography

African Development Bank Group. (2019). *Africa Circular Economy Facility (ACEF)*. Retrieved 23 September 2021 from: <https://www.afdb.org/en/topics-and-sectors/topics/circular-economy/africa-circular-economy-facility-acef>

Association of Southeast Asian Nations. (2021). *ASEAN takes on Circular Economy as Part of Priority Agenda*. Retrieved 23 September 2021 from: <https://asean.org/asean-takes-on-circular-economy-as-part-of-priority-agenda/>

Circular Economy Club. (n.d.). *Bringing the Circular Economy to Every Corner of the World: The CEC*. Retrieved 11 October 2021 from: <https://www.circulareconomyclub.com/about/>

Circular Economy Club. (2021). *Circular Cities Week Report*. Retrieved 12 October 2021 from: <https://drive.google.com/file/d/1XcB4y6kfBdPbNNFmSA1kfLdFTVbOthPI/view>

Earth Organization. (2021). *What Countries Have a Carbon Tax?* Retrieved 17 October 2021 from: <https://earth.org/what-countries-have-a-carbon-tax/>

Ellen Macarthur Foundation. (n.d.). *What We Do*. Retrieved 29 August 2021 from: <https://ellenmacarthurfoundation.org/about-us/what-we-do>

Ellen Macarthur Foundation. (n.d.). *Designing Out Plastic Pollution*. Retrieved 11 October 2021 from: <https://ellenmacarthurfoundation.org/topics/plastics/overview>

Ellen Macarthur Foundation. (n.d.). *New Research Shows that the Circular Economy has a De-Risking Effect and Drives Superior Risk-Adjusted Returns*. Retrieved 16 October 2021 from: <https://ellenmacarthurfoundation.org/news/new-research-shows-that-the-circular-economy-has-a-de-risking-effect-and>

European Commission. (2021). *EU Launches Global Alliance on Circular Economy and Resource Efficiency*. Retrieved 24 August 2021 from: https://ec.europa.eu/environment/news/eu-launches-global-alliance-circular-economy-and-resource-efficiency-2021-02-22_en

European Union. (n.d.). *Global Alliance on Circular Economy and Resource Efficiency (GACERE)*. Retrieved 9 August 2021 from: https://ec.europa.eu/environment/international_issues/gacere.html

European Union. (2019). *EU Climate Action and the European Green Deal*. Retrieved 4 August 2021 from: https://ec.europa.eu/clima/policies/eu-climate-action_en

Global Change Biology. (2021). *Plastic Ingestion by Marine Fish is Widespread and Increasing*. Retrieved 1 August 2021 from: <https://onlinelibrary.wiley.com/doi/10.1111/gcb.15533>

Growing Climate Solutions. (2020). *Montreal, Kyoto and Paris – An Overview of International Climate Accords*. Retrieved 18 September 2021 from: <https://growingclimatesolutions.org/2020/05/21/montreal-kyoto-and-paris-an-overview-of-international-climate-accords/>

Halbac-Cotoara-Zamfir, R., et al. (2020, August 17). From Historical Narratives to Circular Economy: De-Complexifying the “Desertification” Debate. *International Journal of Environmental Research and Public Health*. Retrieved 11 October 2021 from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7432495/>

Intergovernmental Negotiating Committee for the Elaboration of an International Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa. (1994). *United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (A/AC.241/27)*. Retrieved Day Month Year from: <http://undocs.org/A/AC.241/27>

Intergovernmental Panel on Climate Change. (2021). *Climate Change 2021: The Physical Science Basis*. Retrieved 11 October 2021 from: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. (2019). *Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*. Retrieved 11 October 2021 from: <https://zenodo.org/record/5517154>

Morgan, C. (2020). *How Adidas is Turning Plastic Ocean Waste into Sneakers and Sportswear*. Business Insider. Retrieved 12 October 2021 from: <https://www.businessinsider.com/adidas-sneakers-plastic-bottles-ocean-waste-recycle-pollution-2019-8>

One Planet Network. (2019). *Building Circularity in the Textile Value Chain*. Retrieved 21 September 2021 from: <https://www.oneplanetnetwork.org/unep-textile-value-chain>

Ritchie, A., & M. Roser. (2018). *Plastic Pollution*. Our World in Data. Retrieved 11 October 2021 from: <https://ourworldindata.org/plastic-pollution>

United Nations Convention to Combat Desertification. (2020). *The Great Green Wall Initiative*. Retrieved 18 September 2021 from: <https://www.unccd.int/actions/great-green-wall-initiative>

United Nations Conference on Trade and Development. (2016). *The Circular Economy in International Trade*. Retrieved 5 September 2021 from: <https://unctad.org/es/node/1478>

United Nations Conference on Environment and Development. (1992). *United Nations Framework Convention on Climate Change*. Retrieved 11 October 2021 from: http://unfccc.int/key_documents/the_convention/items/2853.php

United Nations Conference on Environment and Development. (1992). *Convention on Biological Diversity*. Retrieved 11 October 2021 from: <https://www.cbd.int/doc/legal/cbd-en.pdf>

United Nations Environment Programme. (1989). *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*. Retrieved 2 August 2021 from: <http://www.basel.int/Portals/4/download.aspx?d=UNEP-CHW-IMPL-CONVTEXT.English.pdf>

United Nations, Secretariat of the Basel, Rotterdam and Stockholm Conventions. (2016). *Brief Overview of the Synergies Process at Global Level Among the BRS Conventions in the Context of the 2030*

Agenda for Sustainable Development. Retrieved 6 September 2021 from:

https://www.informea.org/sites/default/files/imported-documents/UNEP-FAO-CHW-RC-POPS-WSSynergies.16-PRESEN-03.Synergies_process_and_SDGs_June2016.English.pdf

United Nations Department of Public Information, (2021, February 1). *Secretary-General's Joint Press Conference with Executive Director of UNEP, Inger Anderson, to Launch UNEP Report Entitled "Making Peace with Nature: A Scientific Blueprint to Tackle the Climate, Biodiversity, and Pollution Emergencies on 8 February 2021, in New York*. Retrieved 11 October 2021 from:

<https://www.un.org/sg/en/content/sg/press-encounter/2021-02-18/secretary-generals-joint-press-conference-executive-director-of-unep-inger-andersen-launch-unep-report-entitled-%E2%80%9Cmaking-peace-nature-scientific-blueprint-tackle>

United Nations Education, Science, and Cultural Organization. (2017). *Facts and Figures on Marine Pollution*. Retrieved 1 August 2021 from: <http://www.unesco.org/new/en/natural-sciences/ioc-oceans/focus-areas/rio-20-ocean/blueprint-for-the-future-we-want/marine-pollution/facts-and-figures-on-marine-pollution/>

United Nations Environment Management Group. (n.d.). *EMG Membership*. Retrieved 22 September 2021 from: <https://unemg.org/about-emg/emg-members/>

United Nations Environment Management Group. (n.d.). *About EMG*. Retrieved 22 September 2021 from: <https://unemg.org/about-emg/senior-officials-meeting-som/>

United Nations Environment Programme. (n.d.). *About UN Environment Programme*. Retrieved 11 October 2021 from: <https://www.unep.org/about-un-environment>

United Nations Environment Programme. (n.d.). *About the United Nations Environment Assembly*. Retrieved 1 August 2021 from: <https://www.unep.org/environmentassembly/about-united-nations-environment-assembly>

United Nations Environment Programme. (n.d.). *Environment and Trade Hub*. Retrieved 11 October 2021 from: <https://www.unep.org/explore-topics/green-economy/what-we-do/environment-and-trade-hub>.

United Nations Environment Programme. (n.d.). *Goal 12: Sustainable Consumption and Production*. Retrieved 11 October 2021 from: <https://www.unep.org/explore-topics/sustainable-development-goals/why-do-sustainable-development-goals-matter/goal-12>

United Nations Environment Programme. (n.d.). *Green Economy Policy Review*. Retrieved 17 October 2021 from: <https://www.unep.org/explore-topics/green-economy/what-we-do/economic-and-trade-policy/green-economy-policy-review>

United Nations Environment Programme. (n.d.). *Metrics and Measurements Frameworks*. Retrieved 16 October 2021 from: <https://www.unep.org/explore-topics/green-economy/what-we-do/economic-and-trade-policy/metrics-and-measurements>

United Nations Environment Programme. (n.d.). *One Planet Network*. Retrieved 21 September 2021 from: <https://www.unep.org/explore-topics/resource-efficiency/what-we-do/one-planet-network>

United Nations Environment Programme. (n.d.). *Proceedings, Report, Ministerial Declaration, Resolutions and Decisions UNEA 4*. Retrieved 11 October 2021 from: <https://www.unep.org/environmentassembly/proceedings-report-ministerial-declaration-resolutions-and-decisions-unea-4>

United Nations Environment Programme. (n.d.). *Understanding Circularity*. Retrieved 1 August 2021 from: <https://buildingcircularity.org/>

United Nations Environment Programme. (n.d.). *What We Do*. Retrieved 20 September 2021 from: <https://www.unep.org/explore-topics/resource-efficiency/what-we-do>

United Nations Environment Programme. (2017). *Closing the Loop: How a Circular Economy Helps us #BeatPollution*. Retrieved 1 August 2021 from: <https://www.unep.org/news-and-stories/story/closing-loop-how-circular-economy-helps-us-beatpollution>

United Nations Environment Programme. (2018). *Our Planet is Drowning in Plastic Pollution- It's Time for Change*. Retrieved 1 August 2021 from: <https://www.unep.org/interactive/beat-plastic-pollution/>

United Nations Environment Programme. (2019). *146th Meeting of the Committee of Permanent Representatives to the United Nations Environment Programme*. Retrieved 18 September 2021 from: <https://wedocs.unep.org/bitstream/handle/20.500.11822/28387/146%20CPR%20note%20on%20implem%20of%20UNEA%204%20resolutions.pdf?sequence=12&isAllowed=y>

United Nations Environment Programme. (2019). *Plastic Bag Bans can Help Reduce Toxic Fumes*. Retrieved 1 August 2021 from: <https://www.unep.org/news-and-stories/story/plastic-bag-bans-can-help-reduce-toxic-fumes>

United Nations Environment Programme. (2010). *Environmental Consequences of Ocean Acidification: A Threat to Food Security*. Retrieved 1 August 2021 from: https://wedocs.unep.org/bitstream/handle/20.500.11822/25399/ocean_acidification.pdf?sequence=1&isAllowed=y

United Nations Environment Programme. (2020, October 13). *New UNEP Report Lights the Way for Financial Institutions to Shift to More Sustainable Circular Economies*. Retrieved 17 October 2021 from: <https://www.unep.org/news-and-stories/press-release/new-unep-report-lights-way-financial-institutions-shift-more>

United Nations Environment Programme. (2020). *Sustainable Trade in Resources: Global Material Flows, Circularity and Trade*. Retrieved 16 October 2021 from: <https://wedocs.unep.org/bitstream/handle/20.500.11822/34344/STR.pdf>

United Nations Environment Programme. (2021, February 1). *Circular Economy Coalition Launched for Latin America and the Caribbean*. Retrieved 11 October 2021 from: <https://www.unep.org/news-and-stories/press-release/circular-economy-coalition-launched-latin-america-and-caribbean>

United Nations Environment Programme. (2021). *Making Peace with Nature: A Scientific Blueprint to Tackle the Climate, Biodiversity, and Pollution Emergencies*. Retrieved 11 October 2021 from: <https://wedocs.unep.org/xmlui/bitstream/handle/20.500.11822/34948/MPN.pdf>

United Nations Environment Programme. (2021). *UN Environmental Assembly Set to Galvanize Global Action for Nature*. Retrieved 29 August 2021 from: <https://www.unep.org/news-and-stories/story/un-environment-assembly-set-galvanize-global-action-nature>

United Nations Environment Programme, Fourth Session. (2019). *Addressing Environmental Challenges Through Sustainable Business Practices*. (UNEP/EA.4/Res.4). Retrieved 1 August 2021 from: <https://wedocs.unep.org/bitstream/handle/20.500.11822/28500/English.pdf?sequence=3&isAllowed=y>

United Nations Environment Programme, Fourth Session. (2019). *Innovative Pathways to Achieve Sustainable Consumption and Production*. (UNEP/EA.4/Res.1). Retrieved 1 August 2021 from: <https://undocs.org/UNEP/EA.4/Res.1>.

United Nations Environment Programme, Fourth Session. (2019). *Sound Management of Chemicals and Waste* (UNEP/EA.4/Res.8). Retrieved 1 August 2021 from: <https://wedocs.unep.org/bitstream/handle/20.500.11822/28518/English.pdf?sequence=3&isAllowed=y>

United Nations Framework Convention on Climate Change. (2019). *Circular Economy Crucial for Paris Climate Goals*. Retrieved 1 August 2021 from <https://unfccc.int/news/circular-economy-crucial-for-paris-climate-goals>

United Nations Framework Convention on Climate Change. (2019). *Circular Economy is Crucial for Climate Protection – Patricia Espinosa*. Retrieved 18 September 2021 from: <https://unfccc.int/news/circular-economy-is-crucial-for-climate-protection-patricia-espinosa>

United Nations, General Assembly, Sixty-ninth session. (2015). *Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda) (A/RES/69/313)*. Retrieved 11 October 2021 from: <http://undocs.org/A/RES/69/313>

United Nations, General Assembly, Fifty-third session. (1999). *Report of the Secretary-General on Environment and Human Settlements (A/RES/53/242)*. Retrieved 11 October 2021 from: <https://undocs.org/en/A/RES/53/242>

United Nations, General Assembly, Seventy-Third Session. (n.d.). *Circular Economy for the SDGs: From Concept to Practice*. Retrieved 17 October 2021 from: https://www.un.org/en/ga/second/73/jm_conceptnote.pdf

United Nations Millennium Development Goals and Beyond 2015. (n.d.). *Background*. Retrieved 11 October 2021 from: <https://www.un.org/millenniumgoals/bkgd.shtml>

United Nations, Secretariat of the Basel, Rotterdam and Stockholm Conventions. (2012). *About Synergies*. Retrieved 6 September 2021 from: <http://www.brsmeas.org/Decisionmaking/Overview/AboutSynergies/tabid/2614/language/en-US/Default.aspx>

The Green Brain. (n.d.). *How is a Circular Economy Different from a Linear Economy*. Retrieved 1 August 2021 from: <https://kenniskaarten.hetgroenebrein.nl/en/knowledge-map-circular-economy/how-is-a-circular-economy-different-from-a-linear-economy/>

World Trade Organization. (2010). *Trade Theory and Natural Resources*. Retrieved 11 October 2021 from: https://www.wto.org/english/res_e/booksp_e/anrep_e/wtr10-2c_e.pdf