United Nations Environment Management Group (EMG)

An overview of UN Activities and Initiatives related to Pollution

Version N4

October 2024

Note: In October 2024, the document was reviewed based on inputs gathered from EMG agencies during a consultation process. This consultation was not a thorough review but rather an incorporation of relevant feedback to update the document's findings.

Table of Contents

LIST OF FIGURES AND TABLES	5
EXECUTIVE SUMMARY	ε
BACKGROUND AND CONTEXT	
METHODOLOGY	10
Scope	
Process	
POLLUTION GOVERNANCE MANDATES, KEY INTERNATIONAL AGREEMENTS, COMMITMENTS AND PROCESSES	S 11
International agreements and conventions	12
Pollution related mandates	15
United Nations General Assembly	
United Nations Environment Assembly	16
Addressing Pollution in the context of the 2030 Agenda for Sustainable Development	
Source: How addressing pollution will help reach the SDGs (UNEP, n.d.)	26
MAPPING OF EXISTING EFFORTS	29
International Instruments and Coordination Mechanisms	
Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora	
UN Department of Operational Support	
Secretariat of the UN Convention to Combat Desertification	39
United Nations Department of Economic and Social Affairs, Division for Sustainable Development	44
UN Environment Programme – Ozone Secretariat	
Minamata Convention on Mercury	
Secretariat of the Basel, Rotterdam and Stockholm Conventions	
Secretariat of the Convention on Biological Diversity	
Secretariat of the Convention on Migratory Species	
Ramsar Convention on Wetlands Secretariat	33 43
Environment and Development	
United Nations Office for Disaster Risk Reduction	
Office for the Coordination of Humanitarian Affairs	
United Nations Educational Scientific and Cultural Organization	
United Nations High Commissioner for Refugees	
United Nations Entity for Gender Equality and Empowerment of Women	
United Nations Environment Programme	
International Maritime Organization	
United Nations Development Programme	
Economic and Social Commission for Western Asia	
International Organization for Migration	46

Office of the High Commissioner for Human Rights	56
Economic and Social Commission for Africa	51
United Nations Economic Commission for Europe	52
Economic and Social Commission for Latin America and the Caribbean	
Economic and Social Commission for Asia and the Pacific	52
Agriculture and Labour	58
Food and Agriculture Organization	
International Labour Organization	
World Food Programme	
Business, Trade and Life-cycle	67
International Civil Aviation Organization	
International Telecommunications Union	
Universal Postal Union	
World Intellectual Property Organization	
United Nations Human Settlements Programme	
United Nations Industrial Development Organization	
World Trade Organization	
United Nations Conference on Trade and Development	
International Trade Centre	
World Tourism Organization	
United Nations Office for Project Services	
Health and Sanitation	69
World Health Organization	
United Nations Children's Fund	
United Nations Office on Drugs and Crime	
Research and Training	73
United Nations Institute for Training and Research	
United Nations University	
International Atomic Energy Agency	
World Meteorological Organization	
United Nations Office for Outer Space Affairs	74
Funding and Financial Mechanisms	76
International Monetary Fund	
United Nations Population Fund	
The Global Environment Facility	
International Fund for Agricultural Development	
The World Bank -The World Bank Group	
Partnerships	81
CAPACITY GAPS, OPPORTUNITIES FOR FURTHER COLLABORATION AN	D CONCLUDING REMARKS 83
Knowledge	
Knowledge	
Implementation	85
Infrastructure	87

Awareness	87
Leadership	88
Concluding remarks	89
ANNEXES	91
Annex I: Members of the EMG Consultative Process to prepare a UN system-wide Planet	
Annex II: Questions included in the online mapping of efforts survey	92
Annex III: Efforts towards tackling pollution identified within the UN System	Error! Bookmark not defined.
Annex IV: Figure 6 elaboration methodology	Error! Bookmark not defined.
BIBLIOGRAPHY	

List of figures and tables

Figure 1 Dimensions of pollution frameworkSource: Own elaboration based on da	ita from Towards a Pollution-Free
Planet Background Report (UNEP, 2017)	1:
Figure 2 Sustainable Development Goals related in relation to pollution and envir	onmental media 25
Figure 3 Partnerships addressing pollution with UN participation	8:
Figure 4 Action Lines (as suggested by the Implementation Plan (UNEP, 2019) add mandates	ressed by UNEA resolution
Figure 5 UNEA Monitoring and Reporting Portal's progress monitoring variables	8!
Figure 6 UN efforts in the Implementation Plan's dimensions of pollution according	ng to their area of focus 86
Figure 8 Reporting completeness per environmental area of the Strategy for susta United Nations system, 2020–2030	ainability management in the
Table 1 Conventions and agreements that directly address pollution	1
Table 2 United Nations General Assembly resolution elements related pollution a	nd action areas to address it 15
Table 3 United Nations Environment Assembly resolution elements related pollut	ion and action areas to address it
	17
Table 4 Sustainable Development Goals and their relationship with pollution	26
Table 5 Classification of UN System entities	Error! Bookmark not defined
Table 6 Efforts towards tackling pollution identified within the UN System	Error! Bookmark not defined

Executive Summary

Pollution is one of the major crises faced by our planet. Environmental risk factors, such as air, water and soil pollution, chemical exposures, and ultraviolet radiation, contribute to more than 100 diseases and injuries. The World Health Organization (WHO) estimated that 24% of all estimated global deaths are linked to the environment. The effects of pollution strike developing countries and vulnerable populations harder. Over 90% of premature deaths occur in low- and middle-income countries, making pollution the largest cause of death within these territories. This constitutes a serious impediment to achieving the objective of the 2030 Agenda for Sustainable Development of "leaving no one behind". Therefore, tackling pollution is vital to reduce the burden of disease and improve life quality, especially for women and children.

The UN Environment Assembly (UNEA) placed pollution high on the global agenda with the adoption in 2019 of the global Implementation Plan "Towards a Pollution Free Planet" (UNEP, 2019). Achieving the Implementation Plan and other recently approved mandates from UNEA and other relevant entities requires a UN system common approach that targets the root causes and drivers of pollution and deliver deeper, broader impacts.

A Consultative Process was established within the Environment Management Group (EMG) to prepare the UN system common approach to provide a framework for collective action in support of the Implementation Plan to accelerate the sustainable, inclusive and just transition towards a pollution-free planet. To achieve this objective, the process needs to begin the task by mapping the existing efforts to tackle pollution within the UN System: identifying roles, mandates and opportunities in the UN system for strengthened efforts towards a pollution-free planet.

In order to understand how pollution is to be addressed within the UN system, the report initially identifies international treaties such as conventions and multilateral agreements; resolutions and mandates; and other policy instruments that provide the governance framework for specific, time-bound actions, as well as monitoring and reporting schemes.

Additionally, the report provides a mapping of efforts related to pollution from over 50 UN agencies, programmes, initiatives and other sources of expertise. Some UN entities have explicit mandates in this area and/or conduct major activities that directly address pollution while others have more indirect remits that derive from their work on the green economy, climate change, international trade or humanitarian issues. For each of the UN entities assessed, the mapping includes a brief mention to the core mandate of action, a description of the agency's efforts towards tackling the different dimensions of pollution and a chart summarizing the agency's impact on pollution dimensions: air; water; soil; marine & coastal; and chemicals & waste.

The assessment also reviewed how over thirty partnerships are addressing at least one of the five pollution dimensions. While this evidences that stakeholders have a strong intention to collaborate among each other, the analysis also revealed there is an unbalanced distribution of efforts among pollution dimensions in favour of chemicals & waste (13 identified partnerships) as well as air (9 identified partnerships).

Finally, the report identifies potential opportunities for further collaboration and leveraging the potential of UN entities:

1. DEVELOP AN INTEGRATED AND COORDINATED APPROACH TO POLLUTION: While many UN entities are currently addressing pollution through their mandates, expertise and operations, efforts are not covering all aspects of pollution and might benefit from improved coordination and coherence. There is a need for greater collaboration and coordination between UN entities to ensure that efforts are not duplicated and that resources are used efficiently. UN entities have been developing a large set of knowledge, expertise, and operations to tackle pollution. However, efforts are uneven, and a shared goal is lacking. Addressing pollution requires deep multi-level and multi-actor involvement, coordination, and policy coherence across global, regional, national, subnational and local levels. UN entities can strengthen their collaborations and partnerships among each other and with other stakeholders such as governments, civil society

organizations, and the private sector to enhance their efforts towards tackling pollution. This can help to leverage expertise, resources and knowledge across different sectors. Additionally, a limited focus on pollution prevention was identified, and instead, emphasis is given on mitigation and remediation efforts. For example, more focus could be given to the root causes of pollution, including unsustainable consumption and production patterns and the linkages between pollution and human rights violations, particularly of marginalized and vulnerable populations.

- There is an unbalanced use of resources, with most activities aiming at chemicals & waste and air pollution dimensions; which impacts all environmental media, including soil. This focus, while addressing critical areas, often results in the underrepresentation of soil-specific needs.
- The latest report of the Strategy for sustainability management in the United Nations system revealed that over 80% of UN Entities completed their reporting commitments and up to an 18% opted not to report.
- The UN Global Compact strategy that works to mobilize a global movement of sustainable companies and stakeholders, has a strong potential to work as a joint platform to enhances efforts in prevention of pollution.
- A cohesive and integrated approach to pollution is essential. Frameworks like the United Nations
 Framework Classification for Resources (UNFC) and the United Nations Resource Management
 System (UNRMS) support structured resource management that considers environmental impacts,
 promoting transparency in reporting and sustainable governance.

Note from review in October 2024: <u>The UN System Common Approach to transitioning towards a pollution-free planet</u> (hereafter referred to as the UN Common Approach to Pollution) was developed by the Environment Management Group (EMG) and endorsed by its senior officials on October 10, 2023. This initiative responds to the implementation plan "Towards a Pollution-Free Planet," which was endorsed by the Fourth United Nations Environment Assembly (UNEA4) and requested by the UN Secretary-General's Senior Management Group.

The Common Approach to Pollution reflects the UN system's shared recognition of the urgent need for action and a commitment to integrating pollution prevention and reduction into its programmes and operations. Building on existing efforts, this approach aims to align the UN system's actions with its core values, foster collaboration, and enhance coordination for mobilizing, accelerating, and scaling up a sustainable, inclusive, and equitable transition towards a pollution-free planet.

Furthermore, it provides a framework to leverage and enhance existing interagency arrangements that address pollution-related challenges. Achieving a pollution-free planet demands ambition, system-wide transformation, and strengthened capacities at all levels, from global to subnational.

- 2. AGREE ON A COMMON DEFINITION OF POLLUTION: The breadth of the term and the lack of an agreed categorization of the various types of pollution that should be addressed by UN entities make it difficult to systematize and classify activities. A harmonized categorization of the several types of pollution would allow comparison among the initiatives in order to provide a more holistic analysis of what is being covered.
 - Most UN entities organize their websites by grouping their work in topics or categories. The term "pollution" is rarely among these main topics.

Note from review in October 2024: For the purposes of the UN Common Approach to Pollution, pollution is understood as the presence or introduction into the environment of substances or energy that cause adverse effects on human health, the environment or living organisms; or exceed the quality or quantity criteria established for certain environmental media.

3. SHARE AVAILABLE KNOWLEDGE: Although many initiatives towards building knowledge related to pollution were identified, the lack of systematization of forms and mechanisms for sharing knowledge makes their visibility difficult. There is a need to share available knowledge about pollution for a better

understanding of the problem and its possible solutions, and the interlinkages and opportunities that can be identified among UN entities.

- Almost 40% of UNEA's resolutions related to pollution include at least one mandate towards improving knowledge on pollution management .
- There are 26 UN entities implementing programmes that tackle directly at least one pollution dimension.
- Existing knowledge sharing portals within the UN System could be used as basis for a centralized database on pollution, for example, InforMEA.
- 4. INCREASE ACTIONS TOWARDS INFRASTRUCTURE AND MONITORING OF POLLUTION LEVELS: Despite the efforts of UN agencies and partners, there are still significant capacity gaps in infrastructure for pollution control and management. Investing in pollution information systems, such as Pollutant Release and Transfer Registers (PRTRs) is investing in the infrastructure necessary to prevent and reduce pollution. With only some 50 countries having functioning PRTR systems in place, one of the biggest capacity gaps is the lack of data and information on releases of pollution to land, air and water, let alone information on actual pollution levels in many parts of the world. The lack of collected and easily accessible data makes it difficult to identify pollution hotspots and to develop effective strategies for pollution control and management. Considering that efforts towards building and strengthening infrastructure tend to be mid- to long term investments, entities within the Funding and Financial Mechanisms group, such as the GEF or the World Bank, become vital to ensure the provision of pollution prevention and mitigation infrastructure globally.
 - Information infrastructure is one of the least mentioned action lines in UNEA resolutions and their mandates.
 - UN Entities could address this capacity gap by providing training and technical assistance to member states to help them develop monitoring and reporting systems for pollution, such as PRTRs.
 - Another area of opportunity is the use of technology to improve pollution monitoring and control.
- 5. INCREASE AWARENESS AND COMMUNICATION OF PROGRESS: In order to reach all audiences and achieve effective mainstreaming of the issue of pollution, awareness and recognition of the importance of addressing pollution should be raised among UN entities and stakeholders. The design of UN system-wide coordinated awareness campaigns aimed at growing recognition of the importance of addressing pollution in achieving a just and equitable transition to a sustainable future such as the Beat Pollution campaign would favour the engagement and participation of UN entities, Members States, civil society and the private sector. Effective communication strategies, education campaigns and community mobilization can help to increase public support for policies and initiatives aimed at tackling pollution and encourage behavior change. Additionally, developing a mechanism for progress monitoring of UN efforts and sharing results with all audiences could increase the engagement and participation of other UN entities in addressing pollution. An approach in this direction is being implemented by:
 - UNEP through the UNEA Monitoring and Reporting Portal,
 - UNECE through supporting implementation of the Aarhus Convention and its Protocol on PRTRs
 requiring establishing pollutant release and transfer registers and to promote effective access to
 environmental information, including on pollutants.

The mapping of efforts process left no doubts of UN system's will to tackle pollution. However, it remained equally evident that a short and medium-term roadmap to agree upon and sensibilize next steps would be highly advantageous. UN, as well as other stakeholders are investing a substantial amount of economic, human and time resources against pollution; it is only sensible to develop an integrated and cohesive approach to guide and capitalize these efforts towards a pollution free planet. This report will help to enhance the understanding of efforts on tackling pollution across the UN System. It should help to pave the way for designing a UN system wide common approach to expand collaboration, coordination, and expertise on pollution through a more integrated and systematic interagency approach.

1. Background and context

Pollution is one of the three major crises faced by our planet, together with climate change and biodiversity loss. Environmental risk factors, such as air, water and soil pollution, chemical and hazardous waste exposures, climate change, and ultraviolet radiation, contribute to more than 100 diseases and injuries. The World Health Organization estimated that 24% of all estimated global deaths are linked to the environment and that in children under 5 years, up to 26% of all deaths could be prevented if environmental risks were removed (World Health Organization, n.d.). In 2019, 99% of the world population was living in places where the WHO air quality guidelines levels were not met. Ambient (outdoor air pollution) in both cities and rural areas was estimated to cause 4.2 million premature deaths worldwide in 2016. In 2020, 45% of the household wastewater generated globally was discharged without safe treatment. At least 10% of the world's population is thought to consume food irrigated by wastewater. Poor sanitation reduces human well-being, social and economic development due to impacts such as anxiety, risk of sexual assault, and lost opportunities for education and work. Some 829,000 people die each year from diarrhoea as a result of unsafe drinking-water, sanitation, and hand hygiene.

The effects of pollution strike developing countries and vulnerable populations harder. Over 90% of premature deaths occur in low- and middle-income countries, making pollution the largest cause of death within these territories. This constitutes a serious impediment to achieving the objective of the 2030 Agenda for Sustainable Development of "leaving no one behind". Therefore, tackling pollution is vital to reduce the burden of disease and improve life quality, especially for women and children.

The UN Environment Assembly placed pollution high on the global agenda with the adoption in 2019 of the global Implementation Plan "Towards a Pollution Free Planet" (UNEP, 2019), from now onwards, the Implementation Plan. Achieving the Implementation Plan and other recently approved mandates from UNEA and other relevant entities requires a UN system common approach that targets the root causes and drivers of pollution and deliver deeper, broader impacts.

Many UN entities¹ are currently addressing pollution through their mandates, expertise and operations. These existing efforts could benefit from stronger synergies, common narratives, and more coordinated action for increased impact.

The Environment Management Group (EMG)² Senior Officials decided, at their 27th meeting in October 2021, to establish a Consultative Process³ to prepare the UN system common approach to provide a framework for collective action in support of the Implementation Plan to accelerate the sustainable, inclusive and just transition towards a pollution-free planet, building on existing efforts undertaken by various UN and related entities. A common approach would help the UN align its efforts and mobilize the entirety of its relevant mandates.

According to its Terms of Reference, the Consultative Process is tasked to prepare a UN common approach in order to contribute to enhanced implementation and coherence through UN agencies action to transition "Towards a Pollution-Free Planet". To achieve this objective, the Consultative Process needs to begin the task by mapping the existing efforts to tackle pollution within the UN System: identifying roles, mandates and opportunities in the UN system for strengthened efforts towards a pollution-free planet.

9

¹ The term entities is used to group all UN agencies, programs, initiatives, and other sources of expertise such as alliances, partnerships.

² The United Nations established the EMG in 2001, following the reform agenda of the Secretary-General of the United Nations to improve interagency coordination in the field of the environment and human settlements. Today, the EMG works to convene all of the UN system to foster system-wide coherence and effectiveness on the environment, curating the collective wisdom and expertise from 51 UN agencies around specific environmental issues and fostering system-wide efficiency through collaboration to achieve the Sustainable Development Goals.

³ See Annex I for the members of the Consultative Process on a Pollution-Free Planet.

2. Methodology

Scope

The report identifies pollution-related efforts led by the UN System entities. Due to the considerable extent of the task, the following decisions were made:

- Pollution is to be understood as the presence of substances and heat, including chemicals and waste, in environmental media (air, water, land/soil, marine and coastal) whose nature, location, or quantity produces undesirable environmental effects.
- The main body of the report describes major efforts identified through the desk research and an online survey. It does not include a detailed list of resolutions, reports or other types of publications reviewed.
- The report considers the most recent mandates and decisions, with a particular focus on UNEA 5 outcomes.
- The mapping includes strategies, plans and programmes related to fighting pollution. Projects are only included as relevant examples to illustrate such initiatives, an exhaustive list of all pollution-related projects is not included.
- Climate change related efforts are included when the focus includes mitigation, understanding that GHG emissions are being reduced and therefore air pollution is being addressed. Efforts described as aimed at building resilience are not included.
- In order to avoid the overlap with other ongoing initiatives within the UN system, plastic pollution and marine litter are addressed in a broad manner within the dimensions Chemicals & Waste and Marine & Coastal. For an in-depth review please refer to the 2022 EMG report "Addressing marine litter and microplastics: UN system-wide contributions".

Process

The identification of existing pollution-related efforts was conducted using a desktop-based scoping study over a two-month period, building on the efforts identified in the report Addressing marine litter and microplastics: UN system-wide contributions United Nations Environment Management Group, 2022), from now onwards, the EMG Marine Litter and Microplastics report, as well as in the Implementation Plan. The research consisted of:

- analysing landing pages and main sections of official UN websites of each entity member of the EMG. A search of the term "pollution" was done under each website to identify strategies, plans and programmes⁴ related to fighting pollution.
- reviewing relevant online reports and UN resolutions; and
- conducting an online survey among EMG members aimed to identify further initiatives underway. The
 questions included in the survey can be consulted in Annex II. The objective of the survey was to gather
 first hand data on the direct and indirect mandates and activities of each entity; examples of relevant
 initiatives carried out by the entity; existing partnerships and collaborations; and ambitions and emerging
 actions of the entity. Seven responses from six UN entities were obtained.

Note from review in October 2024: The document was reviewed based on inputs gathered from EMG agencies during a consultation process. This consultation was not a thorough review but rather an incorporation of relevant feedback to update the document's findings.

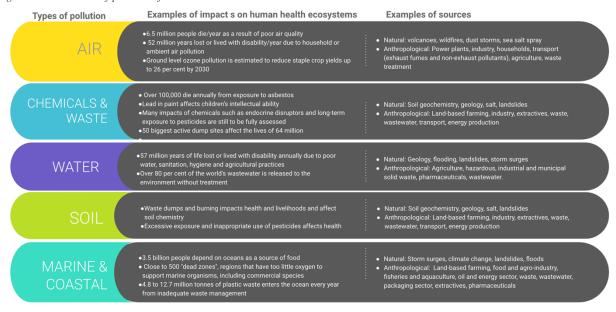
To ensure efficiency and alignment with activities conducted previously by the EMG and the Consultative Process, the mapping follows the structure of the EMG Marine Litter and Microplastics report, grouping UN entities according to broad thematic areas and sectors based on the main focus of their activities in the topic of pollution: 1) International Instruments and Coordination Mechanisms, 2) Environment and Development; 3) Agriculture and Labour; 4) Business, Trade and Life-cycle; 5) Health and Sanitation; 6) Research and Training; 7) Funding and Financial Mechanisms.

⁴ Projects, news, or articles were not evaluated exhaustively; projects are only included as relevant examples to illustrate initiatives.

In section 4, a total of 54 UN entities have been reviewed for the purposes of this report. The mapping for each entity includes:

- A brief mention to the core mandate of action.
- A description of the agency's efforts towards tackling the different dimensions of pollution.
- A chart summarizing the agency's impact on pollution dimensions: air; water; soil; marine & coastal; and chemicals and waste. ⁵ These dimensions have been previously worked in UN pollution related documents such as EMG Marine Litter and Microplastics report and the Towards a Pollution-Free Planet Background Report (UNEP, 2017). Figure 1 briefly describes the conceptual framework of each dimension.

Figure 1 Dimensions of pollution framework



Source: Own elaboration based on data from Towards a Pollution-Free Planet Background Report (UNEP, 2017)

Lastly, capacity gaps and opportunities for further collaboration and leveraging the potential of UN agencies and their initiatives are identified vis-à-vis the areas of action defined in the Implementation Plan: knowledge, implementation, infrastructure, awareness and leadership. Again, the findings from the EMG Marine Litter and Microplastics were used as an input since gaps identified in the report are relevant to pollution.

3. Pollution governance mandates, key international agreements, commitments and processes

This chapter reviews the numerous efforts that have been developed towards minimizing and preventing the different dimensions of pollution. These include international treaties such as conventions and multilateral agreements; resolutions and mandates; and other policy instruments. These institutional tools offer a governance framework for specific, time-bound actions, as well as monitoring and reporting schemes.

They encourage knowledge sharing and international collaboration to address pollution. Different forms of pollution are covered by a number of multilateral environmental agreements.

11

⁵ See Annex II for the complete chart.

International agreements and conventions

Legally binding approaches such as the multilateral environmental agreements are essential to addressing the most critical and complex pollution challenges. Several of the multilateral environmental agreements enjoy universal or near universal ratification.

Pollution related conventions are presented in Table 1. These include key international instruments, processes, commitments and treaties that are directly or indirectly address pollution. Table 1 builds on the analysis of available and provided information, particularly the Implementation Plan (UNEP, 2019) and the Marine Litter and Microplastics EMG report (United Nations Environment Management Group, 2022). It provides a brief synopsis of the most relevant binding and non-binding instruments and processes on the topic.

Table 1 Conventions and agreements that directly address pollution

	CROSS-CUTTING	
Stockholm Declaration	Signed in 1972, it describes the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality	
Rio Declaration	Declares that humans are entitled to a healthy and productive life in harmony with nature	
Convention on Environmental Impact Assessment in a transboundary context (Espoo Convention) and its Protocol on Strategic Environmental Assessment	The Espoo Convention and the Protocol (serviced by UNECE) enshrine the precautionary principle requiring Parties to prevent or to reduce adverse significant impact to environment and human health - including air, water, soil, radioactive and noise pollution – from across the economic sectors and national borders. The treaties provide for transparent and participatory procedures for identifying sustainable measures and alternatives.	
Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention)	The Aarhus Convention and the Protocol on PRTRs, open for accession to all UN Member States, contribute to the protection of the right to a clean, healthy and sustainable environment. The Convention details important obligations related to public access to environmental information, participation in decision-making and access to justice related to pollution matters. The Convention is also facilitating countries' transition to a circular and more sustainable economy by addressing the need for information systems that include information, from economic activities, such as on releases (to land, air, water) and transfers (to treatment and disposal sites) of substances and products, water, energy and resource use. ⁶	
Protocol on Pollutant Release and Transfer Registers (Protocol on PRTRs)	The Protocol on PRTRs defines the required elements to build the information infrastructure that makes data collection from different sources of pollution cost-effective and that provides user-friendly access to the collected and other data. The Protocol defines pollutants as substances or a group of substances that may be harmful to the environment or to human health on account of its properties and of its introduction into the environment. Its scope is therefore to provide a comprehensive overview of pollutant releases not limited to a specific group of pollutants or sources of pollutants. ⁷	
Sendai Framework for Disaster Risk Reduction	The Sendai Framework (2015-2030) promotes a multi-hazard and systemic risk approach to prevent the creation of new risks, reduce existing risks and increase resilience. Pollution is one of the hazards identified in the Terminology on Disaster Risk Reduction (UNDRR, n.d.)	
United Nations Framework Classification for Resources (UNFC) and United Nations Resource Management System (UNRMS)	UNFC and UNRMS align with the SDGs by providing a comprehensive system to classify and manage resources, reducing pollution at the source through better planning and life cycle management. Their focus on circularity also results in reduced pollution and waste generation. ⁸	
Chemicals and waste conventions	(See Chemicals & Waste)	
AIR		
Instrument United Nations Framework Convention on Climate Change	Approach towards tackling pollution In order to combat dangerous human interference with the climate system the United Nations Framework Convention on Climate Change (UNFCCC) established a global environmental treaty that included stabilizing GHG concentrations in the atmosphere.	
Convention on Long-Range Transboundary Air Pollution	The UNECE Convention on Long-range Transboundary Air Pollution was established in 1979 and created a regional framework for reducing transboundary air pollution and	

⁶ https://unece.org/environmental-policy-1/public-participation

https://unece.org/env/pp/protocol-on-prtrs-introduction

 $^{^{8}\} https://unece.org/sustainable-energy/sustainable-resource-management$

Convention on International Civil Aviation (also known as Chicago Convention)	better scientific understanding of air pollution and its effects on environment and health. The emission reduction commitments and pollution abatement measures agreed in the framework of the Convention have contributed to a significant decline in air pollution emissions in the region, particularly for sulphur, and economic growth and air pollution trends have been progressively decoupled. The Convention has 51 Parties and eight protocols, most of which address specific pollutants. ⁹ The Chicago Convention led to the creation of the specialized agency which has overseen it ever since — the International Civil Aviation Organization (ICAO). The International Standards and Recommended Practices (SARPS) contained in the nineteen Technical Annexes to the Chicago Convention are applied universally and produce a high degree of technical uniformity, which has enabled international civil aviation to sustainably develop in a safe, orderly and efficient manner. Annex 16 Volumes I, II, III, and IV contain SARPS for aircraft noise and emissions.
Instrument	WATER Approach towards tackling pollution
Ramsar Convention on Wetlands of International Importance especially	Under the Convention on Wetlands, a wide variety of natural and human-made habitat types can be classified as wetlands, including swamps, marshes, lakes, salt marshes, mudflats, coral reefs, or bodies of water - whether natural or artificial, permanent or temporary. Water within these areas can be static or flowing; fresh, brackish or saline; and can include inland rivers and coastal or marine water to a depth of six meters at low tide. The Convention's broad aims are to halt the worldwide loss of wetlands and to conserve, through wise use and management, those that remain.
Convention on the Protection and Use of Transboundary Watercourses and International Lakes and its Protocol on Water and Health	The Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) is a unique global legal instrument and intergovernmental platform which aims to ensure the sustainable use of transboundary water resources by facilitating cooperation. Initially negotiated as a regional instrument, it has been opened up for accession to all UN Member States in 2016. Between 2016 and October 2024, 14 new Parties from outside the pan-European region acceded to the Water Convention. Regarding pollution, the Water Convention notably supports countries in improving water quality in transboundary basins on the basis of assessment of pressures from sectoral activities and impacts from climate change. The Protocol on Water and Health, jointly serviced by UNECE and WHO-Europe, is a unique legally binding instrument aiming to protect human health by better water management and by reducing water-related diseases. The Protocol provides a practical framework to translate into practice the human rights to water and sanitation and to implement SDG 6.
The Convention on the Transboundary Effects of Industrial Accidents.	The Convention (serviced by UNECE) aims to prevent accidents from occurring or reducing their frequency and severity and mitigating their effects if required. It promotes active international cooperation between countries, before, during and after an industrial accident. It includes a Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters
Convention on the Law of the Non-navigational Uses of International Watercourses	International treaty pertaining to the uses and conservation of all waters that cross international boundaries, including both surface and groundwater. Its aim is to help conserve and manage water resources for present and future generations. With less than 50 signatories, the majority of countries remain outside its scope. The convention, however, is regarded as an important step in establishing international law governing water. ¹¹
	SOIL
Instrument United Nations Convention to Combat	Approach towards tackling pollution The Convention understands "land degradation" as the reduction or loss, in arid, semi-
Desertification in Those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa (1994)	arid and dry sub-humid areas, of the biological or economic productivity and complexity of rainfed cropland, irrigated cropland, or range, pasture, forest and woodlands resulting from land uses or from a process or combination of processes, including processes arising from human activities and habitation patterns, such as soil erosion caused by wind and water deterioration of the physical, chemical and biological or economic properties of soil; and long term loss of natural vegetation. Pollution and waste are the major causes of chemical property change of the soil. Annex IV on Regional Implementation Annex for the Northern Mediterranean and Annex V on Regional implementation Annex for Central and Eastern Europe both

⁹ https://unece.org/environmental-policy-1/air
10 https://unece.org/environment-policy/water

11 https://en.wikipedia.org/wiki/Convention on the Law of the Non-Navigational Uses of International Watercourses

Kunming-Montreal Global Biodiversity Framework (December 2022)	include in its Article 2: "The particular conditions of the region referred to in article 1 of the convention, which apply in varying degrees to the affected country Parties of the region include: (d) unsustainable exploitation of water resources leading to serious environmental damage, including chemical pollution, salinisation and exhaustion of aquifers." Target 7 of the convention aims to reduce pollution risks and the negative impact of pollution from all sources, by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: reducing
	excess nutrients lost to the environment by at least half including through more efficient nutrient cycling and use; reducing the overall risk from pesticides and highly hazardous chemicals by at least half including through integrated pest management, based on science, taking into account food security and livelihoods; and also preventing, reducing, and working towards eliminating plastic pollution.
	MARINE & COASTAL
Instrument	Approach towards tackling pollution
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter	The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (also known as the London Convention), is one of the first global conventions to protect the marine environment from human activities. Its objective is to promote the effective control of all sources of marine pollution and to take all practicable steps to prevent pollution of the sea by dumping of wastes and other matter.
International Convention for the Prevention of Pollution from Ships	Also known as MARPOL, this is the main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes.
United Nations Convention on the Law of the Sea	Also called the Law of the Sea Convention or the Law of the Sea Treaty, this is an international agreement that establishes a legal framework for all marine and maritime activities. Its objectives include facilitating the equitable and efficient utilization of their resources, the conservation of their living resources, and the study, protection and preservation of the marine environment.
International Convention on Oil Pollution Preparedness, Response and Co-operation	Also known as OPRC 90, this is the international instrument that provides a framework designed to facilitate international co-operation and mutual assistance in preparing for and responding to major oil pollution incidents.
Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (not legally binding)	The Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) is a not legally binding intergovernmental mechanism created to counter the issue of land-based pollution.
	CHEMICALS & WASTE
Instrument	Approach towards tackling pollution
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal	The overarching objective of the Basel Convention is to protect human health and the environment against the adverse effects of hazardous wastes. Its scope of application covers a wide range of wastes defined as hazardous waste based on their origin and/or composition and their characteristics, as well as two types of wastes defined as "other wastes" - household waste and incinerator ash. In 2019 it broadened its scopes with the adoption of amendments to Annexes II, VIII and IX to the Convention with the objectives of enhancing the control of the trans-boundary movements of plastic waste.
Stockholm Convention on Persistent Organic Pollutants	This convention was designed to protect human health and the environment from persistent organic pollutants (POPs)—chemical substances that are persistent and toxic, that bioaccumulate in fatty tissue (achieving higher concentrations as they move up a particular food chain), and that are prone to long-range environmental transport. Among other things, the convention contains obligations to eliminate or severely restrict the production and use of a number of POP pesticides and industrial chemicals, to take strong measures to prevent or control the release of certain POPs that are formed as by-products of various combustion activities, and to ensure the safe and proper disposal or destruction of such substances when they become wastes.
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	This treaty was designed to facilitate informed decision-making by countries with regard to trade in hazardous chemicals. It establishes a list of covered chemicals and requires parties seeking to export a chemical on that list to first establish that the intended importing country has consented to the import. It also requires that a party seeking to export a chemical that is not listed under the Convention but that is subject to a ban or severe restriction in its own territory must provide notice to the importing country of the proposed export.
Minamata Convention on Mercury	The Minamata Convention on Mercury is a global treaty to protect human health and the environment from the adverse effects of mercury. It establishes legally binding obligations with respect to the supply, trade, use, emissions, releases, storage, and waste management of mercury and mercury compounds.
Global Framework on Chemicals	Also known as GFC (former SAICM - Strategic Approach to International Chemicals Management) , this multi-stakeholder policy framework aims to promote chemical safety around the world. GFC's overall vision is a planet free of harm from chemicals

Vienna Convention for the Protection of the Ozone Layer	and waste for a safe, healthy and sustainable future. The scope of the Framework covers the life cycle of chemicals, including products and waste. The Framework promotes initiatives to enhance the sound management of chemicals and waste, takes due account of other chemicals and waste instruments that have been developed to date, and is flexible enough to take account of new instruments. The Framework is multi-stakeholder and multisectoral in nature. It encompasses the involvement of all relevant sectors, including environment, health, agriculture, and labour, and stakeholders across the life cycle of chemicals at the local, national, regional, and global levels, as well as consideration of environmental and social aspects that are critical to the sound management of chemicals and waste. The treaty's provisions include the international sharing of climate and atmospheric research to promote knowledge of the effects on the ozone layer. It calls for the adoption of international agencies to assess the harmful effects of depleted ozone and the promotion of policies that regulate the production of harmful
Montreal Protocol on Substances that Deplete the Ozone Layer and the Kigali Amendment to the Montreal Protocol	substances that influence the ozone layer. The Montreal Protocol was designed to protect the ozone layer by phasing out the production of numerous substances that are responsible for ozone depletion. Most of these ozone-depleting substances are also powerful greenhouse gases. The Kigali Amendment calls for a gradual phase down of the consumption and production of hydrofluorocarbons (HFCs), substances that are not ozone-depleting but potent greenhouse gases.

Source: Adapted from the Implementation Plan (UNEP, 2019) including data gathered during the mapping of efforts process.

Pollution related mandates

United Nations General Assembly

The UN General Assembly (UNGA) is the main policy-making organ of the Organization. Comprising all Member States, it provides a unique forum for multilateral discussion of the full spectrum of international issues covered by the Charter of the United Nations. Each of the 193 Member States of the United Nations has an equal vote. The Assembly meets in regular sessions from September to December each year, and thereafter as required. It discusses specific issues through dedicated agenda items or sub-items, which lead to the adoption of resolutions. Table 2 shows key UNGA resolutions in terms of efforts addressing pollution within the UN System.

Table 2 United Nations General Assembly resolution elements related pollution and action areas to address it

UNGA resolution	Main dimension of pollution addressed	Mandates
A/RES/27/2997	Cross-cutting	Institutional and Financial Arrangements for International Environmental Cooperation
A/RES/70/1	Cross-cutting	Transforming our world: the 2030 Agenda for Sustainable Development. See section Addressing Pollution in the context of the 2030 Agenda for Sustainable Development for an overview of the nexus between SGS and pollution.
A/RES/47/188	Soil	Establishment of a convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa.
A/RES/ 76/300	Cross-cutting	Recognizing the right to a clean, healthy and sustainable environment as an independent human right. This resolution was decades in the making: from a foothold in the 1972 Stockholm Declaration, the right has been integrated into over 156 constitutions, national laws and regional agreements to date, and was recognized by the UN Human Rights Council in October 2021. To make the right a reality for all, UNEP's Law Division is working with States and other stakeholders to develop strategies and tools for implementation of the right to address the triple planetary crisis: climate change, biodiversity loss and pollution.
A/RES/ 69/313.	Cross-cutting	Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda). A global framework for financing development post-2015: States that UNGA will invest in promoting inclusive and sustainable industrial development to effectively address major challenges such as growth and jobs, resources and energy efficiency, pollution and climate change, knowledge-sharing, innovation and social inclusion. In this regard, we welcome relevant cooperation within the United Nations system, including the United Nations Industrial Development Organization (UNIDO), to advance the linkages between infrastructure development, inclusive and sustainable industrialization and innovation.

		It commits to coherent policy, financing, trade and technology frameworks to protect, manage and restore our ecosystems, including marine and terrestrial ecosystems, and to promote their sustainable use, build resilience, reduce pollution and combat climate change, desertification and land degradation.
Resolution 74/212	Air	International Day of Clean Air for blue skies. UNGA invited the United Nations Environment Programme (UNEP) to facilitate the observance of the International Day, in collaboration with other relevant organizations. The Day aims to: i) Raise public awareness at all levels—individual, community, corporate and government—that clean air is important for health, productivity, the economy and the environment; ii) Demonstrate the close link of air quality to other environmental/developmental challenges such as — most and foremost — climate change and the global Sustainable Development Goals; iii) Promote and facilitate solutions that improve air quality by sharing actionable knowledge best practices, innovations, and success stories; and iv) Bring together diverse international actors working on this topic to form a strategic alliance to gain momentum for concerted national, regional and international approaches for effective air quality management.
A/76/L.75	Cross-cutting	Establishes the human right to a clean, healthy and sustainable environment. Notes that the right to a clean, healthy, and sustainable environment is "related to other rights and existing international law," and affirms that its promotion "requires the full implementation" of the multilateral environmental agreements (MEAs) "under the principles of international environmental law."
A/76/72.	Marine & Coastal	Resolution on Sustainable Fisheries, Underscoring Threats of Sea-Level Rise, Loss of Marine Biodiversity, Marine Debris. It delegates Laud Intergovernmental Committee drawing up a legally binding agreement to end plastic pollution, including in Marine Environment.
A/73/292.	Marine & Coastal	Requested the Secretary-General of the 2022 United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development to prepare concept papers on each of the themes of the interactive dialogues, taking into account the relevant ocean-related processes of the Assembly and other possible contributions.
Resolution /71/313	Cross-cutting	Cape Town Global Action Plan for Sustainable Development Data Prepared by the High- level Group for Partnership, Coordination and Capacity-Building for Statistics for the 2030 Agenda for Sustainable Development
A/61/63/Add.1	Marine & Coastal	Oceans and the law of the sea. Provides an overview of developments relating to the implementation of the United Nations Convention on the Law of the Sea and the work of the Organization.
A/RES/70/299	Cross-cutting	Establishes UN Division for Sustainable Development Goals as the Secretariat for SDGs.
A/RES/64/292	Water	Recognizes the human right to safe drinking water as part of binding international law in 2010
A/C.2/77/L.19/Rev.1)	Waste	Promotes zero-waste discussions and initiatives and proclaims 30 March as International Day of Zero Waste.

Source: Own elaboration based on the Implementation Plan (UNEP, 2017) and data gathered through the mapping of efforts process.

United Nations Environment Assembly

The United Nations Environment Assembly (UNEA) is the world's highest-level decision-making body on the environment, with a universal membership of all 193 Member States. The Assembly meets biennially in Nairobi, Kenya, to set priorities for global environmental policies and develop international environmental law. Through its ministerial declaration and resolutions, the Assembly provides leadership, catalyses intergovernmental action on the environment, and contributes to the implementation of the UN 2030 Agenda for Sustainable Development. The UN Environment Assembly is also the governing body of the UN Environment Programme. It has had five sessions starting in 2014 and was preceded by the Governing Council of the UN Environment Programme, which was composed of 58 member States.

Table 3 presents UNEA resolutions, and their elements related to the environment, health and pollution, organized under the Implementation Plan action areas to address challenges, as follows:

- i) Knowledge: Science for evidence-based policy and action;
- ii) Implementation: capacity, incentives and integrated policies;
- iii) **Infrastructure:** technologies, innovation and circularity (sustainable consumption and production/resource efficiency);
- iv) Awareness: outreach, communication, education and consumer information; and
- v) Leadership: mobilization of stakeholders, leaders and partners to address different forms of pollution.

Table 3 United Nations Environment Assembly resolution elements related pollution and action areas to address it

UNEA resolution	Main dimension of pollution addressed	Mandates
		indates relevant to action area 1: Knowledge
3/4 on Environment & Health	Chemicals & Waste	 Requests UNEP with other UN entities to: Report on the environmental and health impacts of pesticides and fertilizers; Encourage research institutions to share the results of studies on the impacts of pesticides on human and environmental health and peer-reviewed epidemiological studies; Requests UNEP to Assess and report on the health co-benefits of current UNEP climate-change-related projects;
3/7 on Marine litter and microplastics	Marine & Coastal	 Requests UNEP with other UN entities to: Support countries in closing data gaps and improving the availability of accessible data on the sources and extent of marine litter and microplastics in the environment.
3/8 on Preventing and reducing air pollution to improve air quality globally	Air	Requests UNEP to: Continue to support countries in putting in place affordable air quality networks to raise awareness about pollution levels, and produce regional assessments of capacity needs; Support member States in identifying, prioritizing and addressing key sources of air pollution; Assess progress made by member States to adopt and implement key actions to improve air quality.
3/6 on Managing soil pollution to achieve sustainable development	Soil	Requests UNEP with other UN entities to: • Report on the extent and future trends of soil pollution and risks and impacts of soil pollution on health, the environment and food security;
3/10 on Addressing water pollution to protect and restore water- related ecosystems	Water	Requests UNEP with other UN entities to: • Develop a World Water Quality Assessment. Requests UNEP to: • Support countries in data collection, analysis and sharing; • Build upon the GEMS/Water Trust Fund to assist developing countries in water quality monitoring; • Compile and share analytical and technical requirements for water quality testing for contaminants; • Provide technical support to facilitate monitoring and reporting on SDG 6.
2/7 on Sound management of chemicals and waste	Chemicals & Waste	 Requests UNEP with other UN entities to: Work with other United Nations entities on the development of relevant data, including supplementary indicators in support of the indicators developed by the United Nations Statistical Commission. Request UNEP to: Issue an overview for policymakers, by the end of 2017, on policies and actions that could be adopted; Consider how updates of the Global Waste Management Outlook and the Global Chemicals Outlook could be accorded in timing and approach; Issue an update of the Global Waste Management Outlook by the end of 2019; Prepare regional waste management outlooks to enhance the availability of information; Provide access to available information on best available techniques and technologies; Develop work in the field of technology assessment through tools such as a methodology for sustainability assessment of technologies to enable decision makers to select the most appropriate technologies for achieving the environmentally sound management of waste; Prepare a report to assist SAICM in considering the opportunities presented by Sustainable Chemistry; Submit an update of the Global Chemicals Outlook by the end of 2018.
2/8 on Sustainable consumption and production	Chemicals & Waste	 Requests UNEP to: Establish implementing measures for the 10-year framework of programmes on sustainable consumption and production patterns; Monitor and evaluate progress towards implementing the 10-year framework of programmes on sustainable consumption and production patterns through the indicator framework; Support statistical capacity-building in developing countries for adequate measurement, follow-up and review of the 10-year framework of programmes on sustainable consumption and production patterns;

		 Facilitate sharing of information and best practices within and between UNEP programmes and activities; Requests UNEP with other UN entities to: Continue to provide scientific and expert support through the 10-year framework of programmes on sustainable consumption and production patterns;
		 Invite the International Resource Panel to make available reports relevant to this resolution to a future meeting of the Environment Assembly, but no later than 2019.
2/9 on Prevention, reduction and reduce of food waste	Chemicals & Waste	Requests UNEP with other UN entities to: • Explore opportunities to collaborate with UNIDO to expand use of the products of food loss and waste as feedstock for biogas generation and composting.
2/11 on Marine plastic litter and microplastics	Marine & Coastal	Requests UNEP with other UN entities to: • Undertake an assessment of the effectiveness of international, regional and subregional governance strategies and approaches to combat marine plastic litter and microplastics. Requests UNEP to: • Establish harmonized international definitions and terminology, compatible standards and methods and cost-effective monitoring and assessment of marine plastic debris and microplastics.
1/5 on Chemicals & Waste	Chemicals & Waste	Request UNEP to: • Provide compilation of information on techniques for lead and cadmium emission abatement; • Consider the interlinkages between chemicals and waste policies in the global outlook on waste prevention, minimization and management.
1/6 on Marine plastic debris and microplastics	Marine & Coastal	 Requests UNEP with other UN entities to: Undertake a study on marine plastic debris and marine microplastics, focusing on identification of the key sources of marine plastic debris and microplastics, possible preventing measures, recommendations for the most urgent actions and specification of areas in need of more research; Contribute to the study above (with the secretariats of the Stockholm Convention, the Basel Convention, the Convention on Biological Diversity, the Convention on Migratory Species and the regional seas conventions and action plans). Requests UNEP to: Present the study on microplastics for consideration by the Environment Assembly at its second session.
1/7 on Strengthening the role of UNEP in promoting ai quality	Air	Requests UNEP to: • Facilitate the operation of existing UNEP-supported intergovernmental programmes on the assessment of air quality issues. Requests UNEP with other UN entities to: • Undertake global, regional and subregional assessments focused on identifying gaps in capacity to address air quality issues.
1/9 on the Global Environment Monitoring System Water programme	Water	Requests UNEP to: Collaborate closely with member States to identify additional key elements of the GEMS/Water and ensure the necessary resources for GEMS/Water to operate efficiently; Initiate discussions on building a consistent database in GEMStat, supporting UNEP Live and informing sustainable development policies.
4/2 on Promoting sustainable practices and innovative solutions for curbing food loss and waste	Chemicals & Waste	Requests UNEP to: • Foster regional and global cooperation and facilitate the exchange of experience and knowledge, research and best practice between Member States and other food-system stakeholders; • Continue to participate in ongoing international initiatives to support the transfer of innovative solutions and practices that can curb food loss and waste.
4/4 on Addressing environmental challenges through sustainable business practices	Cross-cutting	Requests UNEP to: • Continue to support the development of skills, especially for micro-, small and medium-sized enterprises, to promote sustainable production patterns, including cleaner production and industrial symbiosis, in order to enhance their profitability, resource efficiency and productivity; Requests UNEP with other UN entities to: • in the collection and dissemination of evidence and information about good practice to enable informed decision-making, awareness, networking and knowledge-sharing concerning green business development.

4/6 on Marine plastic litter and	Marine & coastal	Requests UNEP to: • To strengthen scientific and technological knowledge with regard to marine litter, including
microplastics		 marine plastic litter and microplastics; To Compile available scientific and other relevant data and information to prepare an assessment on sources, pathways and hazards of litter, including plastic litter and microplastics pollution, and its presence in rivers and oceans; scientific knowledge about adverse effects on ecosystems and potential adverse effects on human health; and environmentally sound technological innovations.
4/7 on Environmentally sound management of waste	Chemicals & Waste	Requests UNEP to: • Strengthen the United Nations Environment Programme's International Environment Technology Centre and its role in the provision of technological advice and capacity-building concerning environmentally sound waste management and enhance cooperation with the regional centres of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal and the Stockholm Convention on Persistent Organic Pollutants; • Maintain inventories of environmentally sound waste management technologies and practices, including those introduced in the global and regional waste management outlooks, and share those inventories and practices with Member States; • Assist Member States in the use of best available techniques and best environmental practices in solid waste management; • Continue to foster the sharing of experience, lessons learned and success stories among Member States and key stakeholders through existing regional and global platforms.
4/9 on Addressing single-use plastic products pollution	Chemicals & Waste	Requests UNEP with other UN entities to: • Make available information on action already taken by Member States to address plastic pollution and the full life-cycle environmental impact of plastic products in comparison with the full life-cycle environmental impact of alternative materials.
4/11 on Protection of the marine environment from land-based activities	Marine & Coastal	Requests UNEP to: • Requests the Executive Director of the United Nations Environment Programme to provide technical assistance, subject to the availability of resources, through, inter alia, the regional seas programmes, the Global Partnership on Marine Litter, the Global Wastewater Initiative and the Global Partnership on Nutrient Management of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities.
4/14 on Sustainable nitrogen management	Chemicals & Waste	Requests UNEP to: • Support Member States by sharing existing information and knowledge in the development of an evidence-based and intersectoral coherent approach to domestic decision-making to promote sustainable nitrogen management, where appropriate.
4/16 on Conservation and sustainable management of peatlands	Soil	Requests UNEP to: • In consultation with the secretariat of the Convention on Wetlands, to coordinate efforts to create a comprehensive and accurate inventory of global peatlands, which will be crucial as a basis for identifying the extent of peatlands globally, determining appropriate interventions, understanding the value and potential of carbon sequestration and planning for sustainable peatlands management.
4/23 on Keeping the world environment under review: enhancing the United Nations Environment Programme science-policy interface and endorsement of the Global Environment Outlook	Cross-cutting	Requests UNEP to: • Assist Member States in developing their national environmental data management capacities and their environmental monitoring systems with regard to air and water quality, deforestation, marine litter and environmental security, and their ability to use data analysis to support evidence-based decision-making;
5/3 on Future of the Global Environment Outlook:	Cross-cutting	Requests UNEP to: • Establish an ad hoc intergovernmental and multi-stakeholder advisory group, governed by the rules of procedure of the Environment Assembly, effectiveness of the global policy response, evaluates future perspectives for all five environmental themes (air, biodiversity, oceans, land, fresh water) addressed in previous Global Environment Outlook assessments, and evaluates the drivers of environmental change and the interactions across these environmental themes, while benefitting from but not duplicating existing assessments, and supplemented, as needed, by Global Environment Outlook thematic assessments at the request of the Environment Assembly, to fill knowledge gaps.

5/8 on science- policy panel to contribute further to the sound management of chemicals and waste and to prevent pollution	Chemicals & Waste	 Requests UNEP to: Cooperate closely with the secretariats of relevant multilateral environmental agreements and relevant international organizations and bodies, as appropriate; Convene the meetings of the ad hoc open-ended working group and invite the World Health Organization to play a role, as appropriate; Upon completion of proposals prepared by the ad hoc open-ended working group, to convene an intergovernmental meeting for the purpose of considering the establishment of a science-policy panel; Report on the outcomes of the ad hoc open-ended working group to the United Nations Environment Assembly and to relevant multilateral agreements, other international instruments and intergovernmental bodies. Requests UNEP with other UN entities to: Facilitate collaboration among Member States and members of specialized agencies in research, capacity-building, knowledge management and the sharing of best practices for the promotion of innovative pathways for sustainable consumption and production, including the circular economy, and to facilitate a conversation on natural resources and materials in the context of the circular economy. 				
5/11 on Enhancing circular economy as a contribution to achieving sustainable consumption and production	Chemicals & Waste					
		Mandates relevant to action area 2: Implementation				
3/7 on Marine litter and microplastics	Marine & Coastal	Requests UNEP to: • Facilitate the establishment and implementation of regional and national action plans to prevent and reduce litter and microplastics in the marine environment; • Provide advice on the most environmentally sound and cost-effective measures to prevent and reduce litter and microplastics; • Convene meetings of and provide secretariat support for an ad hoc open-ended expert group to (i) examine the barriers to combating marine plastic litter and microplastics; (ii) identify response options; (iii) identify their costs and benefits; (iv) identify their feasibility and effectiveness; (v) identify potential options for continued work, with at least one meeting of the Ad Hoc Open-ended Expert Group to be convened before the fourth session of the Environment Assembly.				
3/9 on Eliminating exposure to lead paint and promoting environmentally sound management of waste lead-acid batteries	Chemicals & Waste	 Requests UNEP with other UN entities to: Continue assisting countries in strengthening and enhancing national, subregional and regional implementation of environmentally sound management of waste, including by providing capacity building, in close cooperation with the Basel Convention Secretariat; Assist countries in eliminating the use of lead paint, in particular by providing tools and capacity building for developing national legislation and regulations. 				
3/8 on Preventing and reducing air pollution to improve air quality globally	Air	 Requests UNEP with other UN entities to: Strengthen technical support provided by global and regional networks and enhance institutional capacity to develop air pollution action plans Requests UNEP to: Support developing countries in expanding the use of cleaner fuels for cooking; Assist in the implementation of the Global Strategy to Introduce Low-Sulphur Fuels and Cleaner Diesel Vehicles; Assist in the implementation of Roadmap for Clean Fuel and Vehicle Standards in Southern and Western Africa and the African Sustainable Transport Forum Action Plan. 				
3/6 on Managing soil pollution to achieve sustainable development	Soil	Requests UNEP with other UN entities to: • Elaborate technical guidelines for the prevention and minimization of soil contamination; • Provide support to Governments' efforts to strengthen and coordinate national and regional policies and legislation to curb soil pollution; • Cooperate in efforts geared at preventing, reducing and managing soil pollution.				
3/10 on Addressing water pollution to protect and restore water related ecosystems	Water	Requests UNEP with other UN entities to: • Assist developing countries by strengthening their capacity to reach the target of halving by 2030 the amount of untreated wastewater reaching water bodies. • Address issues related to water pollution and build upon the 2016 report, A Snapshot of the World's Water Quality, and considering the recommendations made by the analytical brief "Towards a Worldwide Assessment of Freshwater Quality". Requests UNEP to: • Support member States in developing programmes that invest in the management of land and ecosystems to prevent pollution of water sources; • Develop tools to support countries in their efforts to address water pollution, implement integrated water resources management approaches and address water-related impacts of disasters.				
3/2 on Pollution mitigation by mainstreaming	Cross-cutting	Requests UNEP to: • Cooperate with the Secretariat of the Convention on Biological Diversity on the implementation of the decisions of the Conference of the Parties to the Convention on				

biodiversity into key sectors		Biological Diversity at its thirteenth meeting, especially on aspects related to pollution mitigation through mainstreaming biodiversity into relevant sectors.
2/7 on Sound management of chemicals and waste	Chemicals & Waste	Requests UNEP with other UN entities to: Coordinate with relevant international stakeholders and support member States on policies and actions for the sound management of chemicals and waste; Support the intersessional process agreed on at the fourth session of the International Conference on Chemicals Management to prepare recommendations on the sound management of chemicals and waste beyond 2020, inter alia, to foster the involvement of relevant industry stakeholders; Strengthen and enhance the work of the International Environmental Technology Centre and capacity-building for national- and municipal-level waste policies, strategies and action plans. Take measures to promote the sound management of chemicals and waste. Requests UNEP to: Support countries, particularly developing countries, in the implementation of the integrated approach to financing for the sound management of chemicals and waste; Ensure full integration of environmentally sound management of waste in UNEP strategies and policies; Facilitate capacity-building and technology demonstration projects to promote the "3R" (reduce, reuse and recycle) approach; Provide capacity-building in developing countries, in particular least developed countries, to implement regulatory frameworks and programmes for the recycling of waste lead-acid batteries; Solicit feedback from countries and other stakeholders on the proposed plan for updating the Global Chemicals Outlook; Ensure that the updated Global Chemicals Outlook addresses emerging issues.
2/11 on Marine plastic litter and microplastics	Marine & coastal	Requests UNEP to: Evaluate, and possibly implement, the Executive Director's recommendations on the Assembly's resolution 1/6 on marine plastic debris and microplastics including through strengthened national, regional and international measures, cooperation and action plans.
1/5 on Chemicals and waste	Chemicals & Waste	Requests UNEP to: • Establish and administer the Special Programme trust fund to support institutional strengthening at the national level for implementation of the Basel, Rotterdam and Stockholm Conventions, the Minamata Convention and SAICM, and to provide a secretariat to deliver administrative support to the Programme; • Continue to support SAICM, Requests UNEP with other UN entities to: • Invite the director-general of the World Health Organization to assume a leading role in SAICM and to provide resources to its secretariat; • Continue to build capacity on lead paint through possible regional workshops.
1/7 on Strengthening the role of UNEP in promoting air quality	Air	Requests UNEP to: • Undertake strengthened capacity-building activities on air quality to support Governments.
4/1 on Innovative pathways to achieve sustainable consumption and production	Chemicals & Waste	Requests UNEP to: • To undertake a study based on a life-cycle approach, profiting from the work of the International Resource Panel and the One Planet network, on the potential of current sustainable economic models for achieving sustainable consumption and production in certain sectors, such as the plastics, textiles and construction sectors, including through value retention processes, such as direct reuse, repair, refurbishment and remanufacturing. Requests UNEP with other UN entities to: • To evaluate how to promote the availability of appropriate information in the value chain to favour sound and safe recycling of waste.
4/2 on Promoting sustainable practices and innovative solutions for curbing food loss and waste	Chemicals & Waste	Requests UNEP to: • Provide technical support to assist Member States in implementing the present resolution; • Promote food loss and waste reduction and support countries in exploring opportunities to collaborate with United Nations organizations and international financial institutions in line with their existing mandates and budgets.
5/2 on Sustainable nitrogen management	Cross-cutting	Requests UNEP to: • Support Member States in the development of national action plans for sustainable nitrogen management, subject to the availability of resources.

F/42	Charataria 0	December 1 INFD 1
5/12 on Environmental aspects of minerals and metals management	Chemicals & Waste	Requests UNEP to: • Feed into a global intergovernmental meeting, with the aim of developing non-prescriptive proposals to enhance the environmental sustainability of minerals and metals along their full life cycle, in line with the 2030 Agenda for Sustainable Development.
3/1 on Pollution mitigation and control in areas affected by armed conflict or terrorism	Cross-cutting	Requests UN entities to: • Collaborate closely with the United Nations Environment Programme in providing technical assistance upon the request of States affected by pollution resulting from armed conflict or terrorism to implement international agreements on the environmentally sound management of chemicals and wastes and to help build effective environmental governance.
		Mandates relevant to action area 3: Infrastructure
3/9 on Eliminating	Chemicals &	Requests UNEP with other UN entities to:
exposure to lead paint and promoting environmentally sound management of waste lead-acid batteries	Waste	 Consider revising the "Technical Guidelines for the Environmentally Sound Management of Waste Lead-acid Batteries" regarding applying new technologies (Conference of the Parties to the Basel Convention).
3/10 on Addressing water pollution to protect and restore water related ecosystems	Water	Requests UNEP with other UN entities to: • Work with Governments in creating an enabling environment for addressing water pollution, including sustainable wastewater management, which encompasses supportive policies, legislation and regulations, tailored technologies and innovative financial mechanisms.
4/18 on Poverty- environment nexus	Air	Requests UNEP with other UN entities to: • Promote sustainable energy solutions that support poverty eradication and sustainable development, enable access to affordable, reliable and sustainable energy, take into account social and cultural factors, and empower women and youth; such solutions include integrated energy and environment policies, on-grid and off-grid investments and sustainable biomass use.
		Mandates relevant to action area 4: Awareness
3/8 on Preventing and reducing air pollution to improve air quality globally	Air	Requests UNEP to:
3/1 on Pollution mitigation and control in areas affected by armed conflict or terrorism	Cross-cutting	Requests UNEP to: • For the Executive Director of UNEP to continue undertaking field visits to affected areas, upon the invitation of the affected State.
2/9 on Prevention, reduction and reuse of food waste	Chemicals & Waste	 Requests UNEP with other UN entities to: Strengthen efforts to disseminate information on waste management, including on the technologies available to prevent food loss and enable the reuse of food waste (with FAO); Continue to raise awareness of the environmental dimensions of the problem of food waste, and of potential solutions and good practices for preventing and reducing food waste (with FAO).
1/7 on Strengthening the role of UNEP in promoting air quality	Air	Requests UNEP to: • Raise awareness of risks of air pollution and the multiple benefits of improved air quality
4/1 on Innovative pathways to achieve sustainable consumption and production	Chemicals & Waste	Requests UNEP with other UN entities to: • Consider establishing the theme for a future World Environment Day focusing on efforts to achieve sustainable consumption and production, including, but not limited to, circular economy and other sustainable economic models;

4/5 on Sustainable	Cross-cutting	Requests UNEP to:
infrastructure		 Continue its work of facilitating coordinated efforts in all regions to promote the development and use of appropriate sustainability criteria for infrastructure as a means of attaining sustainable consumption and production while maintaining an intact natural environment and implementing the goals and targets of the 2030 Agenda for Sustainable Development.
		Mandates relevant to action area 5: Leadership
3/7 on Marine litter and microplastics	Marine & coastal	Requests UNEP to: • Strengthen the contribution of UNEP to the Global Partnership n Marine Litter. Requests UNEP with other UN entities to: • Increase and coordinate action to prevent and reduce marine litter and microplastics and their harmful effects.
3/8 on Preventing and reducing air pollution to improve air quality globally	Air pollution	Requests UNEP with other UN entities to: • Support the enhancement of regional cooperation to address air pollution and organize regional communities of practice for air quality management; • Provide a platform for cooperation and information-sharing and to house capacity-building resources and online tools; Requests UNEP to: • Assess gaps in, and opportunities for, mitigation and cooperation with a view to advancing a shared response to addressing air pollution globally.
3/10 on Addressing water pollution to protect and restore water related ecosystems	Water	Requests UNEP with other UN entities to: • Work with Governments in creating an enabling environment for addressing water pollution, including sustainable wastewater management, which encompasses supportive policies, legislation and regulations, tailored technologies and innovative financial mechanisms.
3/2 on Pollution mitigation by mainstreaming biodiversity into key sectors	Cross-cutting	Requests UNEP to: • Promote close coordination, collaboration and synergies related to mainstreaming biodiversity.
2/7 on Sound management of chemicals and waste	Chemicals & Waste	Requests UNEP with other UN entities to: • Work with the director-general of the World Health Organization to enhance that organization's engagement with the emerging issue of environmentally persistent pharmaceutical pollutants. Requests UNEP with other UN entities to: • Cooperate with Governments, with the private sector, including industry, and with other non-governmental organizations to continue work on lead and cadmium.
2/9 on Prevention, reduction and reuse of food waste	Chemicals & Waste	Requests UNEP with other UN entities to: • Support the development of multi-stakeholder initiatives that focus on food waste reduction and prevention along the whole food value chain (with FAO); • Enhance cooperation with other relevant United Nations agencies to support communities of practice that focus on food loss and waste reduction (with FAO); • Continue to participate in ongoing international initiatives to improve the measurement of food loss and waste (with FAO).
2/11 on Marine plastic litter and microplastics	Marine & coastal	Requests UNEP with other UN entities to: • Coordinate work under the aegis of the Convention on Biological Diversity, the International Whaling Commission, the Convention on the Conservation of Migratory Species of Wild Animals and the Convention for the Protection of the Natural Resources and Environment of the South Pacific Region with other relevant work in the framework of the Global Partnership on Marine Litter.
1/7 on Strengthening the role of UNEP in promoting air quality	Air	Requests UNEP with other UN entities to: • Explore opportunities for strengthened cooperation on air pollution within the United Nations system
4/6 on Marine plastic litter and microplastics	Marine & coastal	Requests UNEP to: • To establish a multi-stakeholder platform within the United Nations Environment Programme to take immediate action towards the long-term elimination, through a life-cycle approach, of discharges of litter and microplastics into the oceans.
4/8 on Sound management of chemicals and waste	Chemicals & Waste	Requests UNEP to: • Strengthen cooperation and avoid duplication of action undertaken by member organizations of the Inter-Organization Programme for the Sound Management of Chemicals under their own mandates to achieve target 12.4 of the 2030 Agenda, and all other goals and targets of the 2030 Agenda that are affected by the sound management of chemicals and waste.

4/9 on addressing single-use plastic products pollution	Chemicals & Waste	 Step up technical and capacity-building assistance to Member States to meet goals and targets of the 2030 Agenda Enhance the support provided to the Strategic Approach to International Chemicals Management in preparation for the fifth meeting of the International Conference on Chemicals Management, including through the provision of sufficient staff and resources for the secretariat of the Strategic Approach. Requests UNEP with other UN entities to: Synthetize the analysis of best practice in sustainable chemistry produced by the Environment Programme into manuals on green chemistry and sustainable chemistry. Requests UNEP with other UN entities to: Support Member States in the development and implementation of national or regional action plans to address the environmental impact of single-use plastic products; Facilitate and coordinate technical and policy support to Governments, in particular those of developing countries with other stakeholders, in respect of the environmental impact of single-use plastic products and the promotion of innovative and environmentally friendly solutions
4/14 on Sustainable nitrogen management	Chemicals & Waste	Requests UNEP with other UN entities to: • Consider the options for facilitating improved coordination of policies across the global nitrogen cycle at the national, regional and global levels, including consideration of the case for establishing an intergovernmental mechanism for coordination of nitrogen policies, based primarily on existing networks and platforms, and consideration of the case for developing an integrated nitrogen policy, which could enhance recognition of the need for common action across multiple policy domains; • Support, in close collaboration with relevant United Nations bodies, including FAO, exploration of the options for better management of the global nitrogen cycle and how they could help to achieve the Sustainable Development Goals; • Coordinate existing platforms for assessment of the multiple environmental, food and health benefits of possible goals for improved nitrogen management, while ensuring coordinated management of relevant data to allow development of an integrated and sustainable nitrogen management approach and identify current information gaps, including in quantifying the net economic benefits for food and energy production; freshwater, coastal and marine environmental quality; air quality; greenhouse gas mitigation; and stratospheric ozone depletion mitigation, all underpinned by the development of reference values; • Facilitate, with relevant United Nations bodies, including FAO the provision of appropriate training and capacity for policymakers and practitioners to develop widespread understanding and awareness of nitrogen cycling and opportunities for action.
4/21 on Implementation plan "Towards a pollution-free planet"	Cross-cutting	Requests UNEP with other UN entities to: • Coordinate and monitor the delivery of the implementation plan in the context of the current and relevant future programmes of work and budget of the Environment Programme. Requests UNEP to: • Fully and effectively leverage the capacity of the regional and subregional offices of the United Nations Environment Programme and its partnerships with other relevant United Nations bodies and partners in contributing to the delivery of the implementation plan;
4/22 on Implementation and follow-up of United Nations Environment Assembly resolutions	Cross-cutting	Requests UNEP with other UN entities to: Develop a monitoring mechanism to track and assess the implementation of Environment Assembly resolutions by the Programme in the framework of the programme of work and budget that: (i) builds on and improve existing formats for reporting and monitoring; (ii) provides an inventory and a brief summary of the implementation of Environment Assembly resolutions via a dedicated website; (c) identifies linkages between each resolution and the programme of work and budget; (d) provides links to existing reports related to Environment Assembly resolutions; (e) provides the opportunity for Member States to report voluntarily on national implementation efforts; (f) summarizes specific challenges that have hindered implementation efforts, including those of Member States, using available information; Requests UNEP to: Propose to the Committee of Permanent Representatives at its 146th meeting options for an improved framework for reporting on the implementation of Environment Assembly resolutions, to be integrated with reporting on the programme of work and budget.
5/6 Biodiversity and health:	Cross-cutting	Requests UNEP with other UN entities to: • Further assist Member States and members of specialized agencies in taking measures to institute actions to enhance the availability, quality and timeliness of data for monitoring and surveillance, capacity and capability across One Health sectors, and support timely detection and responses to health risks linked to environmental factors, in accordance with national circumstances and priorities and to foster cooperation to address the impact of biodiversity loss, climate change and other related environmental crises to global health in accordance with the One Health approach.

5/14 End plastic	Chemicals &	Requests UNEP to:
pollution: towards	Waste	Convene an intergovernmental negotiating committee, to begin its work during the second half
an international		of 2022, with the ambition of completing its work by the end of 2024; Decides that the
legally binding		intergovernmental negotiating committee is to develop an international legally binding
instrument.		instrument on plastic pollution.

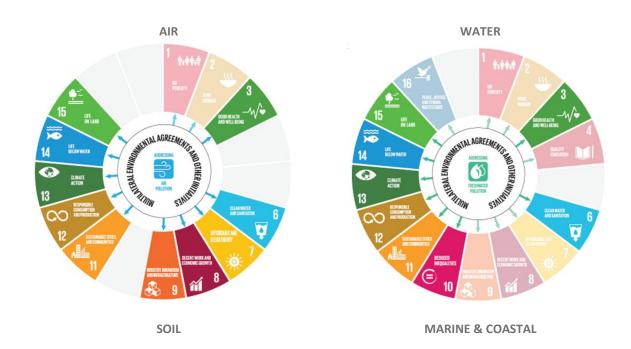
Source: Own elaboration based on the Implementation Plan (UNEP, 2017) and data gathered through the mapping of efforts process.

Addressing Pollution in the context of the 2030 Agenda for Sustainable Development

In 2015, the UN Member States adopted the 2030 Agenda for Sustainable Development with its 17 Sustainable Development Goals (SDGs). The SDGs provide an opportunity to accelerate the implementation of targeted and time-bound actions on pollution, which have been hitherto limited and inadequate. Furthermore, achieving pollution reducing goals can help meeting other SDG targets as pollution prevention, control and reduction create multiple opportunities for improving health, equality and production indicators.

Pollution is linked to all of the SDGs, whether it is in a direct or indirect manner. Figure 2 reflects goals most related to each environmental media: air, water, soil and marine & coastal. Table 4 further details the nexus between SDG and pollution, including the most related targets.

Figure 2 Sustainable Development Goals related in relation to pollution and environmental media







Source: How addressing pollution will help reach the SDGs (UNEP, n.d.) $\,$

Table 4 Sustainable Development Goals and their relationship with pollution

Goal	Relation with pollution	Related targets
1: End poverty in all its forms everywhere	Indirect: Addressing pollution helps to reduce poverty, as it improves health and worker productivity and workdays. Addressing pollution also protects the poor, as these are often most exposed to pollution for lack of options in where they work, live or how they cook or what they eat or drink.	1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance 1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.
2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Indirect: Addressing pollution in all its forms helps to fight hunger and ensure the provision of safe food year-round as it tackles the food safety issues of irrigation with untreated wastewater or sewage as well as the growing of food on contaminated soil.	2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
3: Ensure healthy lives and promote well- being for all at all ages	Indirect: Human health and the environment are compromised by the mismanagement of chemicals and waste, which form a fundamental obstacle to the achievement of sustainable development.	 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination; 3.d: Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.	Indirect: Promoting quality education allows people to acquire the knowledge and skills needed to promote sustainable development and sustainable lifestyle, including reducing pollution.	4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.
5: Achieve gender equality and empower all women and girls	Indirect: In all actions against pollution, it is also important to ensure women's equal participation,	5.a: Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws.

	decision-making and access to opportunities and resources.	
6: Ensure availability and sustainable management of water and sanitation for all	Direct: Improving water management around the world directly reduces pollution in freshwater as well as marine and coastal dimensions.	6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally; 6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes; 6.a: By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies; 6.b: Support and strengthen the participation of local communities in improving water and sanitation management.
7: Ensure access to affordable, reliable, sustainable and modern energy for all	Direct: Clean household energy and access to affordable, reliable, sustainable and modern energy can cut air pollution indoors.	7.2: By 2030, increase substantially the share of renewable energy in the global energy mix 7.a: By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.
8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Indirect: Decoupling economic and human activity from resource use can reduce pollution derived from industrial and agricultural production.	8.4: improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead; 8.9: By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.
9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	Indirect: Upgrading industries' infrastructure can minimize emission of pollutants. Pollution avoidance through the adoption of green technologies and ecosystem-based solutions fosters innovation and sustainability in the industry and infrastructure sectors.	9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
10: Reduce inequality within and among countries	Indirect: Pollution governance and actions can ensure that no country has to bear a disproportionate share of the harmful effects of pollution.	No relevant related target identified
11: Make cities and human settlements inclusive, safe, resilient and sustainable	Direct: Improving cities' transport and waste and water management has a direct impact on global pollution.	11.1: By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums; 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons 11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management 11.b: By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels
12: Ensure sustainable consumption and production patterns	Direct: Resource efficiency and circularity in materials reduce pollution and waste generation.	12.2: By 2030, achieve the sustainable management and efficient use of natural resources; 12.3: By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses;

		12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment; 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse; 12.6: Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle; 12.b: Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products; 12.c: Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities.
13: Take urgent action to combat climate change and its impacts	Direct: clean energy, low carbon and GHG mitigation policies reduce air pollution	13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning; 13.a: Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible.
14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development	Direct: Action on marine pollution reduces bioaccumulation of toxic substances and habitat destruction, and helps maintain healthy fisheries and ecosystems	14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution; 14.2: By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans; 14.5: By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information; 14.a: Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries; 14.c: Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in United Nations Convention on the Law of the Sea, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of "The future we want".
15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. 16. Promote peace,	Direct: Achieving and ideally exceeding no net loss in land-based natural capital through conservation, sustainable land management and ecological rehabilitation and restoration helps maintain healthy ecosystems. Direct: Empowerment of the public	15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements. 15.2: By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally. 15.3: By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world. 16.3. Promote the rule of law at the national and international levels and
justice and strong institutions	and communities to prevent or mitigate pollution by providing effective and inclusive access to	ensure equal access to justice for all 16.6. Develop effective, accountable and transparent institutions at all levels

	information, participation in decision- making and access to justice.	16.7. Ensure responsive, inclusive? Participatory and representative decision-making at all levels 16.10. Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements.
17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	Global partnerships to address pollution can have positive impacts on health, jobs, worker productivity the environment and well-being	17.7: Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed

Source: Own elaboration based on Sustainable Development Goals. A cross-mapping of the Common Approach to Pollution against the SDGs have been developed.

Though there is an evident link among the SDGs and pollution, an under-representation of nature and pollution actions in UN Sustainable Development Cooperation Framework (UNSDCF) was raised by a respondent of the survey, causing a limited support for circular economy and pollution prevention and reduction, including waste management and wastewater treatment in developing countries, where the population growth is expected to exacerbate the pollution crisis in coming years. The UNSDCF is a strategic, medium-term results framework that describes the collective vision and response of the UN system to national development priorities and results based on normative programming principles.

4. Mapping of Existing Efforts

The UN System addresses pollution through various instruments and processes, including programmes, strategies, conventions and resolutions, as well as specific mandates of the UN entities and related activities. This mapping covers efforts to tackle pollution in its different dimensions: air; water; soil; marine and coastal; and chemicals and waste. Relevant examples of current and past initiatives, programmes and projects of UN entities are provided.¹²

In this chapter, entities are grouped according to broad thematic areas and sectors (see Table 5), based on the main focus of their activities in the topic of pollution. This classification follows the structure used in the EMG Marine and Litter Microplastics Report (United Nations Environment Management Group, 2022).

Additionally, the mapping included a description of the impact of each UN entity's effort on the different dimensions of pollution, suggested by the Implementation Plan (UNEP, 2019): water; soil; marine & coastal; and chemicals and waste. The impact is classified as follows:

- DIRECT IMPACT: the entity implements efforts that directly and significantly impact on the environmental dimension, usually following a specific mandate in that direction.
- INDIRECT IMPACT: the entity implements efforts that have an indirect impact on the environmental dimension or implement a few specific acuities that directly impact on it.
- NO IMPACT IDENTIFIED: the entity does not implement any activity does impacts on the environmental dimension.

The classification was done based on the information gathered through official websites of each entity, the online survey¹³, and updated though a consultation to EMG Agencies in October 2024. It should be understood as an

_

¹² Relevant regional and sub-regional Conventions administered by UN Entities are not included in this Assessment, such as the Regional Sea conventions that are agreements among countries sharing a common body of water, setting rules for the management of marine resources in that region. These conventions foster cooperation and coordination among riparian states to combat pollution and ensure sustainable development by establishing strategies and regional plans for their respective regions.

¹³ See Annex II.

illustrative tool that aimed to offer a general indication of the UN System current situation regarding pollution tackling efforts. Table 6 details the evaluation o efforts, with the following reference key:

- D: Direct impact
- I: Indirect impact
- Blank field: No impact identified

 $Table\ 5\ Efforts\ towards\ tackling\ pollution\ identified\ within\ the\ UN\ System$

Area of focus	UN entity	Air	Water	Soil	Marine & Coastal	Chemicals & Waste
International Instruments and Coordination Mechanisms	Inter-Organization Programme for the Sound Management of Chemicals (IOMC)	1	ı	ı	I	D
International Instruments and Coordination Mechanisms	Ozone Secretariat		1	1	1	D
International Instruments and Coordination Mechanisms	Ramsar Convention on Wetlands Secretariat		ı		1	
International Instruments and Coordination Mechanisms	Secretariat of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters	I	ı	1	I	1
International Instruments and Coordination Mechanisms	Kyiv Protocol on Pollutant Release and Transfer Registers	1	ı	ı	1	1
International Instruments and Coordination Mechanisms	Secretariat of the Basel, Rotterdam and Stockholm Conventions	D	D	D	D	D
International Instruments and Coordination Mechanisms	Secretariat of the Convention on Biological Diversity	1	1	1	D	1
International Instruments and Coordination Mechanisms	Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora					
International Instruments and Coordination Mechanisms	Secretariat of the Convention on Long- range Transboundary Air Pollution	D	D	D	D	D
International Instruments and Coordination Mechanisms	Secretariat of the Convention on Migratory Species	1	1	ı	1	D
International Instruments and Coordination Mechanisms	Secretariat of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) and its Protocol on Water and Health		D	1	D	1
International Instruments and Coordination Mechanisms	Secretariat of the Convention on the Transboundary Effects of Industrial Accidents	D	D	D	D	D
International Instruments and Coordination Mechanisms	Secretariat of the Convention to Combat Desertification	D				

International Instruments and Coordination Mechanisms	Secretariat of the Minamata Convention on Mercury	D	1	D	1	D
International Instruments and Coordination Mechanisms	Secretariat of the UN Framework Convention on Climate Change (UNFCCC)	D	1		I	D
International Instruments and Coordination Mechanisms	United Nations Department of Economic and Social Affairs, Division for Sustainable Development	I			I	1
International Instruments and Coordination Mechanisms	United Nations Department of Operational Support	D	1	ı		D
Environment and Development	International Maritime Organization		D		D	D
Environment and Development	International Organization for Migration	1	1	ı	I	1
Environment and Development	United Nations Development Programme	D	D	D	D	D
Environment and Development	United Nations Educational Scientific and Cultural Organization	1	D		D	1
Environment and Development	United Nations Environment Programme	D	D	D	D	D
Environment and Development	United Nations Economic and Social Commission for Africa	I	ı	ı		
Environment and Development	United Nations Economic and Social Commission for Asia and the Pacific				I	1
Environment and Development	United Nations Economic and Social Commission for Latin America and the Caribbean					1
Environment and Development	United Nations Economic and Social Commission for Western Asia	I				1
Environment and Development	United Nations Economic Commission for Europe	D	D	ı	I	D
Environment and Development	United Nations Entity for Gender Equality and Empowerment of Women					
Environment and Development	United Nations Office for Disaster Risk Reduction	1	ı	ı	I	I
Environment and Development	United Nations Office for the Coordination of Humanitarian Affairs	1	ı			D
Environment and Development	United Nations Office of the High Commissioner for Human Rights	D	D	D	D	D

Environment and Development	Office for the Coordination of Humanitarian Affairs	I	I			D
Environment and Development	United Nations High Commissioner for Refugees	ı				1
Agriculture and Labour	Food and Agriculture Organization	ı		D		D
Agriculture and Labour	International Labour Organization	I				I
Agriculture and Labour	World Food Programme	I				1
Business, Trade and Life-cycle	Inland Transport Committee of the United Nations Economic Commission for Europe	D	I	1		1
Business, Trade and Life-cycle	International Civil Aviation Organization	D				1
Business, Trade and Life-cycle	International Telecommunications Union	ı				1
Business, Trade and Life-cycle	International Trade Centre	ı	I		1	I
Business, Trade and Life-cycle	United Nations Conference on Trade and Development		I		1	I
Business, Trade and Life-cycle	United Nations Industrial Development Organization	D	D	D	D	D
Business, Trade and Life-cycle	United Nations Human Settlements Programme	I	I			I
Business, Trade and Life-cycle	United Nations Office for Project Services	ı	D		D	I
Business, Trade and Life-cycle	United Nations World Tourism Organization	I	I		I	1
Business, Trade and Life-cycle	Universal Postal Union	I				I
Business, Trade and Life-cycle	World Intellectual Property Organization	I	I		I	I
Business, Trade and Life-cycle	World Trade Organization		1		1	1
Health and Sanitation	United Nations Children's Fund	D	D	D		D
Health and Sanitation	United Nations Office on Drugs and Crime		1		1	I
Health and Sanitation	World Health Organization	D	D		I	1

Research and Training	International Atomic Energy Agency	D	1	I	D	D
Research and Training	United Nations Institute for Training and Research	D	D	D	D	D
Research and Training	United Nations Office for Outer Space Affairs	1	1		1	
Research and Training	United Nations University	1	1	1	1	1
Research and Training	World Meteorological Organization	D	1	I	1	D
Funding and Financial Mechanisms	International Fund for Agricultural Development	1	1	D	1	D
Funding and Financial Mechanisms	International Monetary Fund	1	1		1	
Funding and Financial Mechanisms	The Global Environment Facility	D	D	D	D	D
Funding and Financial Mechanisms	The World Bank -The World Bank Group	1	I	I		1
Funding and Financial Mechanisms	United Nations Population Fund					

International Instruments and Coordination Mechanisms

Inter-Organization Programme for the Sound Management of Chemicals (IOMC) Identified impact on the different dimensions of pollution

AIR INDIRECT WATER INDIRECT SOIL INDIRECT GOASTAL IMPACT WASTE IMPACT WASTE

The IOMC was established in 1995 as an international coordinating group to promote sound chemical management worldwide, following recommendations of the 1992 UN Conference on Environment and Development (UNCED) and in particular those in Chapter 19 of Agenda 21 about toxic chemicals, and is currently comprised of ten organizations. FAO, ILO, UNEP, UNIDO, WHO and OECD were first to join the IOMC, followed by UNITAR in 1997, the World Bank in 2010, UNDP in 2012, and the Basel, Rotterdam, and Stockholm (BRS) Conventions in 2023. The objective of the IOMC is to strengthen international cooperation in the field of chemicals and to increase the effectiveness of the organisations' international chemicals programmes. The IOMC Internet-based Toolbox for Decision Making in Chemicals Management (IOMC Toolbox) is aimed at countries who wish to address specific national issues regarding chemicals management. The IOMC organizations have supported the implementation of SAICM (Strategic Approach to International Chemicals Management) and its new successor the Global Framework on Chemicals (GFC).

The IOMC vision is to shape a sustainable future through coordinated global action to achieve the sound lifecycle management of chemicals and waste for healthy lives and the environment. IOMC organizations collectively provide countries with scientific, technical and legislative knowledge and support, as well as standards, tools, and financing. They actively contribute to the successful transition to the sound management of chemicals and waste for sustainable development. For more information: www.iomc.info

Ozone Secretariat

Identified impact on the different dimensions of pollution

AIR DIRECT WATER INDIRECT SOIL INDIRECT COASTAL INDIRECT WASTE SOIL DIRECT COASTAL CHEMICALS & DIRECT IMPACT WASTE

The Ozone Secretariat housed within UNEP is the administrative office for two very important ozone protection agreements, the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer.

The Vienna Convention is a framework convention that lays out principles agreed upon by many parties. It does not, however, require countries to take control actions to protect the ozone layer (this came later in the form of the Montreal Protocol). It aimed to promote cooperation among nations by exchanging information on the effects of human activities on the ozone layer. Today, the Vienna Convention is still making progress, including on Research and Systematic observations as well as financial and administrative matters.

The Montreal Protocol on Substances that Deplete the Ozone Layer is a global agreement to protect the Earth's ozone layer by phasing out the chemicals that deplete it. This phase-out plan includes both the production and consumption of ozone-depleting substances (ODSs), most of which are also potent greenhouse gases. The Protocol's Kigali Amendment, adopted in 2016, called for the phase-down of the production and consumption of hydrofluorocarbons (HFCs). Although HFCs do not deplete the ozone layer, they are known to be powerful greenhouse gases. The Protocol has successfully met its objectives thus far and continues to safeguard the ozone layer and protect the climate.

The Ozone Secretariat organises conferences and meetings for the Vienna Convention and the Montreal Protocol, manages the implementation of decisions resulting from these conventions and meetings, provides stakeholders with data and information on the production and consumption of ozone depleting substances and provides governments, organizations and individuals with information on how they can protect the ozone layer as well.

The Secretariat coordinates several activities and facilitates the work of various advisory bodies that promote the protection of the ozone layer and climate, and thus protect against pollution, such as:

- The Scientific Assessment Panel (SAP), which assesses the status of the depletion of the ozone layer and relevant atmospheric science issues.
- The Environmental Effects Assessment Panel (EEAP), which assesses the various effects of ozone layer depletion.
- The Technology and Economic Assessment Panel (TEAP), which provides technical information related to
 ozone- and climate-friendly substitutes and alternative technologies that can be employed to enable the
 phase-out of Ozone Depleting Substances (such as CFCs and halons) and HFCs in order to protect the ozone
 layer and climate.
- Pursuant to Article 6 of the Montreal Protocol on Substances that Deplete the Ozone Layer, the preparation of comprehensive scientific and technical reports by the three above-mentioned Assessment Panels, consisting of hundreds of top scientists and experts from around the world, every four years to assist parties take informed decision on the protection of the ozone layer and the climate.
- The operation of the General Trust Fund for Financing Activities on Research and Systematic Observations Relevant to the Vienna Convention, which supports, through voluntary contributions, the implementation of approved projects on monitoring ozone, solar ultraviolet radiation and climatic parameters.
- Voluntary contributions to support measurements of substances controlled under the Montreal Protocol.

Ramsar Convention on Wetlands Secretariat

Identified impact on the different dimensions of pollution

AIR NO IMPACT WATER INDIRECT SOIL NO MARINE & INDIRECT CHEMICALS & NO IMPACT IMPACT COASTAL WASTE

Ramsar Convention on Wetlands is a multilateral treaty established in 1971 that deals with conservation and wise use of wetlands and water resources, through national actions and international cooperation. The Convention on Wetlands Secretariat supports Parties in addressing issues related to marshes as well as all ecosystems from upstream water catchments to downstream river systems through which the litter enters the marine environment.

The Convention on Wetlands covers water quality in these ecosystems as well as water flows, species migration, biodiversity and on-site management. The Convention on Wetlands engaged in the GPA for the Protection of the Marine Environment from Land-based Activities and is co-custodian (with UNEP) of the water-related ecosystems extent indicator SDG 6.6.1. In this role, the Convention on Wetlands encourages Parties to develop inventories regarding the quality of water in ecosystems.

The Convention adopted Recommendation 6.14 on Toxic Chemicals in March 1996 which calls on Contracting Parties to recognize that the adverse impact of toxic substances compromises the ecological character of wetlands and urges Parties to provide information on their efforts to prevent pollution in National Reports submitted to every Conference of Parties.

The Contracting Parties have the responsibility to update information on Ramsar Sites including information on water pollution level at the site. There are currently over 2,500 Ramsar Sites worldwide.

The Global Wetlands Outlook in its 2021 edition included several key messages around pollution, one of them being: Multiple sources of pollution, particularly from agriculture, continue to degrade wetland ecosystems.

The Convention on Wetlands has introduced a Wetland City Accreditation scheme to recognise cities taking exceptional steps to protect urban wetlands as major changes are needed in this sense to reduce water use and pollution and to stop wetland conversion (Courouble, 2021).

Secretariat for the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters

Identified impact on the different dimensions of pollution

AIR INDIREC WATER INDIREC SOIL INDIREC IMPACT COASTAL INDIREC CHEMICALS & INDIREC COASTAL IMPACT WASTE

The Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters¹⁴ is a global and cross-cutting treaty to protect every person's right to live in an environment adequate to his or her health and well-being. The Convention, serviced by UNECE, fulfils the fundamental right to know with regard to environmental issues, including pollution, and thereby:

- Links environmental rights and human rights
- Acknowledges that we owe an obligation to future generations
- Establishes that sustainable development can be achieved only through the involvement of all stakeholders
- Links government accountability and environmental protection
- Focuses on interactions between the public and public authorities in a democratic context.

The subject of the Convention goes to the heart of the relationship between people and governments. The Convention is not only an environmental agreement, it is also a Convention about government accountability, transparency and responsiveness. It grants the public rights and imposes on Parties and public authorities obligations regarding access to information and public participation and access to justice in environmental matters, including pollution. The Aarhus Convention is also requiring to promote effective public participation in the negotiation and implementation of international agreements relevant for pollution matters.

Kyiv Protocol on Pollutant Release and Transfer Registers

Identified impact on the different dimensions of pollution

AIR INDIREC WATER IMPACT SOIL INDIREC MARINE & INDIREC CHEMICALS & INDIREC IMPACT COASTAL WASTE IMPACT

¹⁴ https://unece.org/environmental-policy-1/public-participation

The Protocol on Pollutant Release and Transfer Registers (Protocol on PRTRs)¹⁵ is a global and cross-cutting treaty to enhance public access to information on pollution and promote the development of the relevant information infrastructure. The Protocol, serviced by UNECE, is the only example of applying detailed legally binding standards on how data from different sources of pollution must be collected and made available to the public. Today, over 70 countries, coming from all regions, have committed to develop PRTR systems. That includes legal commitments under the Protocol on PRTRs, the Aarhus Convention and the Escazu Agreement, or moral commitments stemming from OECD membership (See SAICM/IP.4/INF/39/Rev.1, page 15).¹⁶

PRTRs can bring tangible benefits to industry through the improved management of pollutants. Parties to the Protocol on PRTRs recognize the importance of developing internationally compatible national pollutant release and transfer register systems to increase the comparability of data. They also recognize the objectives of an integrated approach to minimizing pollution and the amount of waste and opportunities for using data from PRTRs, combined with health, environmental, demographic, economic or other types of relevant information, for the purpose of gaining a better understanding of potential problems, identifying 'hot spots', taking preventive and mitigating measures, and setting environmental management priorities, are plenty,

PRTRs provide added value as a cost-effective tool for encouraging improvements in environmental performance, for providing public access to information on pollutants released into and transferred in and through communities, and for use by Governments in tracking trends, demonstrating progress in pollution reduction, monitoring compliance with certain international agreements, setting priorities and evaluating progress achieved through environmental policies and programmes.¹⁷

International PRTR Coordinating Group

The secretariat services the International PRTR Coordinating Group, which has an overall objective to improve coordination between international organisations, Governments and other interested parties in their ongoing and planned efforts related to development and implementation of PRTR systems. The Coordinating Group serves to promote capacity-building for PRTR systems in developing countries and countries with economies in transition.

Secretariat of the Basel, Rotterdam and Stockholm Conventions

Identified impact on the different dimensions of pollution

AIR DIRECT WATER DIRECT SOIL DIRECT MARINE & DIRECT CHEMICALS & DIRECT IMPACT COASTAL WASTE

In 2012, pursuant to decisions adopted by the respective Conference of the Parties of each convention, a joint head was appointed for the Secretariat of the Basel Convention, the Secretariat of the Stockholm conventions, as well as the UNEP-part of the Secretariat of the Rotterdam Convention. The Secretariat's efforts towards tackling pollution are related to the objectives of these agreements as follows.

The overarching objective of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal is to protect human health and the environment against the adverse effects which may result from the generation, management, transboundary movements and disposal of hazardous and other wastes. To achieve this, the Convention is based on three pillars:

• The reduction of hazardous waste generation and the promotion of environmentally sound management of hazardous wastes, wherever the place of disposal;

¹⁵ https://unece.org/env/pp/protocol-on-prtrs-introduction

¹⁶ Available at https://www.saicm.org/Portals/12/documents/meetings/IP4 3/SAICM IP.4 INF 39 Rev.1.pdf.

¹⁷ For further information also see the following key documents: Measuring Progress: Towards Achieving the Environmental Dimension of the SDGS (see recommendations; page 10), available at

https://wedocs.unep.org/bitstream/handle/20.500.11822/27627/MeaProg2019.pdf?sequence=1&isAllowed=y; A/HRC/57/52: Pollution information portals: strengthening access to information on releases of hazardous substances, available at https://www.ohchr.org/en/documents/thematic-reports/ahrc5752-pollution-information-portals-strengthening-access-information#:~:text=The%20report%20provides%20recommendations%20for; BRS (2023). Global governance of plastics and associated chemicals. Secretariat of the Basel, Rotterdam and Stockholm Conventions, United Nations Environment Programme, Geneva. page

- The restriction of transboundary movements of hazardous wastes except where it is perceived to be in accordance with the principles of environmentally sound management; and
- A regulatory system applying to cases where transboundary movements are permissible.

The objectives of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade are:

- To promote shared responsibility and cooperative efforts among Parties in the international trade of certain hazardous chemicals in order to protect human health and the environment from potential harm;
- To contribute to the environmentally sound use of those hazardous chemicals, by facilitating information exchange about their characteristics, by providing for a national decision-making process on their import and export and by disseminating these decisions to Parties.

Therefore, Parties to the Convention take an informed decision on potential future imports of chemicals and pesticides listed under the Convention, consenting or not to an import. Exporting parties are obliged to adhere to those decisions.

The Rotterdam Convention is administered jointly by FAO and UNEP, drawing from the individual strengths of both Organizations, and with FAO focusing on pesticide risk reduction. FAO has experts at headquarters and a global network which currently covers more than 130 countries. The decentralized network includes 5 Regional Offices, 9 Subregional Offices, and 80 FAO Representations. Hence the advantage for the Rotterdam Convention to be cohosted in FAO is that there is a tight cooperation with Plant Protection Officers and their expert networks all around the world.

The objective of the Stockholm Convention on Persistent Organic Pollutants is to protect human health and the environment from chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of humans and wildlife, and have harmful impacts on human health or on the environment. This Convention requires from its Parties to:

- Prohibit and/or eliminate the production and use, as well as the trade, of the intentionally produced POPs listed in Annex A to the Convention;
- Restrict the production and use, as well as the trade, of the intentionally produced POPs listed in Annex B to the Convention;
- Reduce or eliminate releases from unintentionally produced POPs listed in Annex C to the Convention;
- Take measures to ensure that POPs wastes are managed and disposed of in an environmentally sound manner.

Pollution- related activities promoted by the Basel, Rotterdam and Stockholm conventions:

- Trade control measures and combating illegal traffic/trade of hazardous chemicals and wastes;
- National coordination, legal frameworks, institutional capacities for sound management of hazardous chemicals and wastes;
- Risk assessment and chemical management strategies;
- Technical assistance, including through a network of regional centres;
- International cooperation and partnerships;
- Information exchange, awareness-raising and education on chemicals and wastes management.

The BRS Secretariat also supports Parties in addressing plastic waste. The Basel Convention Plastic Waste Partnership (PWP) was established in 2019 to support the Basel Convention, with the goal to improve and promote the ESM of plastic waste and minimize its generation. The purpose of the PWP is to significantly reduce and in the long-term eliminate the discharge of plastic waste and microplastics into the environment, in particular the marine environment. As of February 2021, the PWP includes more than one hundred entities and over 200 representatives (United Nations Environment Management Group , 2022).

AIR INDIRECT WATER INDIRECT SOIL INDIRECT MARINE & DIRECT CHEMICALS & INDIRECT IMPACT COASTAL WASTE

The objectives of the Convention on Biological Diversity (CBD) are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. Biodiversity is essential to human health and wellbeing. Pollution is one of the five biggest direct drivers of biodiversity loss.

The Conference of the Parties (COP) to the CBD has established seven thematic programmes of work which correspond to some of the Earth's major biomes. Each programme sets out key issues for consideration, identify potential outputs, and suggest a timetable and means for achieving these. Implementation of the work programmes depends on contributions from Parties, the Secretariat, relevant intergovernmental and other organizations. Some of them are indirectly related to pollution: Agricultural Biodiversity, Inland Waters Biodiversity, and Marine and Coastal Biodiversity. These have been supplemented with further decisions and initiatives, for example to address soil biodiversity and pollinators and to address impacts of marine debris and anthropogenic underwater noise on marine and coastal biodiversity (decisions XIII/10 and 14/10). The COP has also adopted work for implementation on many cross-cutting issues, including Economics, Trade and Incentive Measures, the Ecosystem Approach, Health and Biodiversity, and Impact Assessment.

In December 2022, the fifteenth meeting of the Conference of Parties adopted the Kunming-Montreal Global Biodiversity Framework (GBF) and associated monitoring framework. The GBF includes four goals for 2050 and 23 targets to be achieved by 2030, with Target 7 specifically addressing pollution. Target 7 of the GBF is to "Reduce pollution risks and the negative impact of pollution from all sources, by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: reducing excess nutrients lost to the environment by at least half including through more efficient nutrient cycling and use; reducing the overall risk from pesticides and highly hazardous chemicals by at least half including through integrated pest management, based on science, taking into account food security and livelihoods; and also preventing, reducing, and working towards eliminating plastic pollution."

Other targets are related to the impact of pollution, including Target 4 to address species extinction through sustainable environmental management, Target 10 addressing the application of biodiversity friendly practices in areas under agriculture, aquaculture, fisheries and forestry, Target 11 aiming to restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as regulation of air, water and climate, soil health and pollination, among others, Target 14 on the integration of biodiversity and its values into policies, regulations, planning and development processes within and across all levels of government and across all sectors, Target 15 promoting legal, administrative or policy measures to encourage and enable business to progressively reduce negative impacts on biodiversity, Target 16 promoting sustainable consumption choices, and Target 18 aiming to eliminate, phase out or reform incentives, including subsidies, harmful for biodiversity.

The Convention Secretariat facilitates the development and review of policy, processes for reporting, monitoring and assessment of implementation, global communications and, through the clearing-house mechanism of the Convention, the sharing of information and knowledge.

Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora

Identified impact on the different dimensions of pollution

AIR IMPACT IDENTIFIED WATER NO IMPACT IDENTIFIED SOIL NO IMPACT IDENTIFIED SOIL NO IMPACT IDENTIFIED COASTAL CHEMICALS & NO IMPACT IDENTIFIED WASTE IDENTIFIED

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) works by subjecting international trade in specimens of selected species to certain controls. All import, export, re-export and introduction from the sea of species covered by the Convention has to be authorized through a licensing system. Each Party to the Convention must designate one or more Management Authorities in charge of administering that

licensing system and one or more Scientific Authorities to advise them on the effects of trade on the status of the species. The CITES Secretariat is administered by UNEP.

Cites Strategic Visions states that the Secretariat shall undertake a comparative analysis in order to illustrate the linkages between the adopted CITES Strategic Vision 2021-2030 and the goals within the 2030 Agenda for Sustainable Development and, once adopted, the post-2020 biodiversity framework, and present their analysis to the Standing Committee for their information (CITES Secretariat, n.d.).

From the desk research it is seen that there is a mandate to work on environmental issues, without making a special focus on pollution. A more in-depth analysis that includes interviews with members of the organization would be necessary to find out if the agency is conducting activities related to pollution and its characteristics.

Secretariat of the Convention on Long-range Transboundary Air Pollution

Identified impact on the different dimensions of pollution

AIR DIRECT WATER DIRECT SOIL DIRECT MARINE & DIRECT CHEMICALS & DIRECT IMPACT COASTAL WASTE DIRECT WASTE

The Convention on Long-range Transboundary Air Pollution (Air Convention)¹⁸ is an international treaty established under UNECE in 1979. Its primary aim is to reduce and prevent air pollution that crosses national borders and negatively impacts human health, ecosystems, and materials. The Convention was the first international treaty to address air pollution on a broad regional scale. While the Air Convention is a framework convention, it has subsequently been extended by 8 specific protocols, most of which set concrete emission reduction targets for several pollutants, such as sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia, fine particulate matter, persistent organic pollutants and heavy metals (cadmium, lead and mercury).

The results of the collective effort of the 51 Parties so far have been significant: Emission reductions by over 80 percent for sulphur, over 60 percent for nitrogen oxides, and 20 per cent for particulate matter. In particular, the decrease in sulphur emissions has led to healthier forest soils. The drop in emissions has reduced the deposition of acidifying compounds to levels below critical loads (thresholds) of acidity in large parts of Europe.

The science-policy interface under the Convention has been important for the Convention's success. It has developed a common knowledge base providing for joint monitoring, modelling and effects-based programmes. The Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP) provides information on atmospheric monitoring and modelling; emission inventories and emission projections; and integrated assessment. The Working Group on Effects provides information on the degree and geographic extent of the impacts of major air pollutants on human health, materials and terrestrial and aquatic ecosystems.

The Convention has influenced air quality policies worldwide. It has served as a model for regional cooperation on air pollution in other parts of the world. Outreach and cooperation with other regions is also fostered through the Convention's Task Force for International Cooperation on Air Pollution.

Secretariat of the Convention on Migratory Species

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER INDIRECT SOIL INDIRECT IMPACT COASTAL COASTAL CHEMICALS & DIRECT IMPACT WASTE

39

¹⁸ https://unece.org/environmental-policy-1/air

The Convention on the Conservation of Migratory Species of Wild Animals, also known as the Bonn Convention, aims to conserve terrestrial, marine and avian migratory species throughout their range. The CMS Secretariat, under the auspices of UNEP, provides administrative support to the Convention.

The secretariat works on light and noise pollution, as well as impacts of plastics and various chemicals on wildlife (lead, pesticides, etc.)¹⁹.

CoP13 in 2020 passed decisions 13.122 to 13.12574 on Impacts of Plastic Pollution on Aquatic, Terrestrial and Avian Species, requesting a compilation of relevant knowledge on the impacts of marine litter on species.

The CMS Secretariat conducts research on impact of pollution on CMS-listed species in terrestrial and freshwater ecosystems, such as the Risk assessment of plastic pollution to migratory species in the Mekong and Ganga Ricer Basins report (Schuyler QA, 2021) and the Light pollution guidelines for wildlife (Government of Australia, 2020).

The Secretariat also collaborates closely with UNEP and is a member of the Global Partnership for Marine Litter (GPML).

Secretariat of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) and its Protocol on Water and Health Identified impact on the different dimensions of pollution

AIR	NO IMPACT	\A/ATED	DIRECT	SOIL	INDIRECT	MARINE	&	DIRECT	CHEMICALS &	INDIRECT
AIK	IDENTIFIED	WATER	IMPACT	SOIL	IMPACT	COASTAL		IMPACT	WASTE	IMPACT

The Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) ²⁰ is a unique global legal instrument and intergovernmental platform, which aims to ensure the sustainable use of transboundary water resources by facilitating cooperation. Initially negotiated as a regional instrument, it has been opened up for accession to all UN Member States in 2016. Between 2016 and October 2024, 14 new Parties from outside the pan-European region acceded to the Water Convention.

Regarding pollution, the Water Convention notably supports countries in improving water quality in transboundary basins on the basis of assessment of pressures from sectoral activities and impacts from climate change. For example, workshops are organized on prevention/reduction of point and diffuse pollution, including regulatory and compliance assurance mechanisms in water management. Linkages between climate change and water quality are considered. The secretariat of the Water Convention also jointly services the Joint Expert Group on Water and Industrial Accidents together with the Industrial Accidents Convention secretariat.

The Water Convention requires integrated water resources management, which is a universally recognized best practice involving coordination among different uses and users of water from different sectors to maximize economic and social benefits without damaging ecosystems' sustainability. One concrete example of the usefulness of this approach on tackling pollution is through the support provided to countries in understanding the benefits of the source-to-sea approach in transboundary basins and in implementing such an approach to link the governance and management of transboundary freshwaters and the coastal and marine environment, notably on pollution issues.

The Protocol on Water and Health, jointly serviced by UNECE and WHO-Europe, is a unique legally binding instrument aiming to protect human health by better water management and by reducing water-related diseases. The Protocol provides a practical framework to translate into practice the human rights to water and sanitation and to implement SDG 6.

_

¹⁹ Mapping efforts survey

²⁰ https://unece.org/environment-policy/water

Secretariat of the Convention on the Transboundary Effects of Industrial Accidents

Identified impact on the different dimensions of pollution

AIR DIRECT WATER DIRECT SOIL DIRECT MARINE & DIRECT CHEMICALS & DIRECT IMPACT COASTAL WASTE DIRECT WASTE

The Industrial Accidents Convention²¹ aims to protect people and the environment against industrial accidents. It provides measures for the prevention of, preparedness for and response to industrial accidents, including those with transboundary effects and natural hazard-triggered technological disasters (or Natech events). It also has requirements for Parties to cooperate at the international and transboundary levels before, during and after an industrial accident, including to reduce risks and to prevent and control pollution and harm to people and their health. Past industrial accidents have demonstrated how devasting the effects can be on people, the environment and economies.

Under the Convention, a range of policy and technical guidelines and tools have been developed and knowledge sharing events have been carried out on key areas to address key risks of industrial accidents and Natech events, including on risk assessment, land-use planning, mine tailings safety, the safe and secure management of hazardous substances, the prevention of accidental water pollution and beyond. These are available for use worldwide and beyond Parties. The Convention's Assistance and Cooperation Programme has also supported Parties and other member States with economies in transition to improve their industrial safety and enhance environmental protection.

Parties to the Industrial Accidents and Water Conventions established the Joint Expert Group on Water and Industrial Accidents to assist countries in drawing up and implementing measures aimed at strengthening the prevention of and preparedness for accidental water pollution, especially in a transboundary context. UNECE also oversees the Industrial Accident Notification (IAN) System that serves as a mechanism for countries to notify other countries in case of an accident or imminent threat of one that could have transboundary effects and to seek for mutual assistance in case of any accident.

The Industrial Accidents Convention is a unique international legally binding instrument that aims to prevent and mitigate the effects of industrial activities, many of which involve pollutants and entail major risks. It has been recognized as a legal instrument for risk reduction under the Sendai Framework and for its contribution to the achievement of the Sustainable Development Goals. It is administered by UNECE.

Secretariat of the Convention to Combat Desertification

Identified impact on the different dimensions of pollution

AIR DIRECT WATER NO IMPACT IDENTIFIED SOIL NO MARINE & NO IMPACT IDENTIFIED COASTAL CHEMICALS & NO IMPACT IDENTIFIED WASTE DENTIFIED

The UN Convention to Combat Desertification (UNCCD) is the only legally binding framework set up to address desertification and the effects of drought. There are 197 Parties to the Convention, including 196 country Parties and the European Union. The Convention – based on the principles of participation, partnership and decentralization – is a multilateral commitment to mitigate the impact of land degradation, and protect our land so we can provide food, water, shelter and economic opportunity to all people. The Secretariat acts as an advocate for land, ensuring land-related issues, from land degradation neutrality to drought resilience are put front and centre on the development agenda. The Secretariat champions for healthy, productive and accessible land around the world (UNCCD Secretariat, n.d.).

Soil pollution and contamination are one of the factors contributing to land degradation related to deterioration of the chemical property of the soil, which is defined in the convention text in Article 1 and the Convention's Annex IV: Regional Implementation Annex for the Northern Mediterranean and Annex V: Regional Implementation Annex

41

²¹ https://unece.org/environmental-policy-1/industrial-accidents

for Central and Eastern Europe as Particular condition of the annex regions (See also page 11 the content in the table relevant to UNCCD).

Decision 20/COP14 at its OP5 requests "the secretariat to update the list of direct and indirect drivers of land degradation listed in United Nations Convention to Combat Desertification reporting templates to reflect those listed in the annex to this decision in order to reflect the influence of consumption and production patterns and flows, accounting for different levels of confidence associated with each driver". The annex to this decision listed mining related soil pollution and contamination as linked drivers to land degradation. Curation of causes of chemical priority change of the soil will contributing to reduction of soil pollution.

- UNCCD co-organized with partners at regional level the world soil day event with focus including soil pollution, such as the event hosted by Panama in 2019,
- UNCCD offers online course through its capacity marketplace on soil science and technology: land degradation and soil pollutants;
- UNCCD facilitates United Nations Coalition of Sand and Dust Storms jointly with UNEP and supports regional efforts to mitigate sources of Sand and Dust Storms (SDS) in northeast Asia through restoration of degraded land contributing to reduction of long-range air pollution which caused by SDS (see decision 31/COP.13, decision 9/COP.12 decision 3/COP.12 and decision 25/COP.14).

The Global Land Outlook in its 2022 edition included several key messages around pollution, one of them being: Efforts to reduce soil, water, and air pollution from land use will improve human and environmental health outcomes. Sustainable land and water management is critical to accelerate the transition to a circular economy that significantly reduces pollution and waste.

In addition to the activities linked to pollution tackling identified, the UNCCD has recently participated in the organization of a series of discussions with focus on the gender differentiated impacts and inequalities perpetuated by climate change; climate change and environmental degradation; impacts of pollution on human life and the environment (UNCCD Secretariat, n.d.).

Secretariat of the Minamata Convention on Mercury

Identified impact on the different dimensions of pollution

AIR DIRECT WATER DIRECT SOIL DIRECT MARINE & DIRECT CHEMICALS & DIRECT IMPACT COASTAL WASTE IMPACT

The Minamata Convention on Mercury is a global treaty to protect human health and the environment from the adverse effects of mercury. The Secretariat promotes several implementation mechanisms:

- Specific International Programme to support Capacity-Building and Technical Assistance delivers direct
 capacity-building and technical assistance to developing country Parties and Parties with economies in
 transition in implementing their obligations under the Convention, as part of the financial mechanism of
 the Convention.
- The Global Environment Facility Trust Fund (GEF) is the second component of the financial mechanism of
 the Convention, for countries and countries with economies in transition to prepare Minamata Initial
 Assessments (MIAs) and artisanal and small-scale gold mining (AGSM) National Action Plans (NAPs), and to
 undertake projects designed to support implementation of particular articles of the Convention.
- The Minamata Online series of webinars on scientific and implementation matters of interest to Parties and stakeholders, as well as numerous tools and training materials on various platforms.
- Intersessional Work: For example,
 - Advancing work of the Open-ended Scientific Group and the Effectiveness Evaluation Group towards the first effectiveness evaluation of the Convention, to be completed at COP-7;
 - Conducting a study of the global supply, production, trade and use of mercury compounds pursuant to COP Decision MC-5/3;

 Compiling submissions from parties and stakeholders and preparing a report on mercury use in cosmetics, such as skin-lightening products, pursuant to COP Decision MC-5/5.

Secretariat of the UN Framework Convention on Climate Change

Identified impact on the different dimensions of pollution

AIR DIRECT WATER INDIRECT SOIL NO MARINE & INDIRECT CHEMICALS & DIRECT IMPACT COASTAL WASTE

NO MARINE & INDIRECT IMPACT WASTE

OR OF THE PROPERTY OF THE PROP

The Climate Change Convention sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. It recognizes that the climate system is a shared resource whose stability can be affected by industrial and other emissions of carbon dioxide and other greenhouse gases. The UNFCCC mobilizes Governments to:

- · Gather and share information on greenhouse gas emissions, national policies and best practices
- Launch national strategies for addressing greenhouse emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries
- Cooperate in preparing for adaptation the impacts of climate change Environmental activities

In relation to climate change mitigation and adaptation, the Secretariat's activities are focused in four programmes:

- Methods, Inventories and Science
- Sustainable Development
- Cooperative Mechanisms
- Implementation

The Secretariat of the UNFCCC received a mandate to work on oceans in 2019 through the Nairobi Work Programme (NWP).

Parties have explicitly recognized the crucial role of the ocean and its ecosystems in both the Convention (Articles 1.3, 2, 4) and the Paris Agreement (preamble). At COP 25, in the Chile Madrid Time for Action, governments recognized the need to enhance understanding and action on ocean and climate change under the UNFCCC. At COP 26, the Glasgow Climate Pact invited relevant UNFCCC bodies to integrate ocean-based action into their work. At COP 27, the Sharm el-Sheikh Implementation Plan further encouraged Parties to consider ocean-based action in their national climate goals, including the NDCs. Additionally, Parties decided that from 2023, the annual ocean and climate change dialogue will be co-facilitated by two biennially selected co-facilitators, who will consult with Parties and observers and present a summary report at the next COP. At COP28, the outcome of the first global stocktake, welcomed the outcomes of and the informal summary report on the 2023 ocean dialogue and encouraged further strengthening of ocean-based action, as appropriate.

The mandated annual <u>ocean and climate change dialogues</u> have become a vital platform for exchanging knowledge, highlighting efforts, and enhancing collective ocean-based climate action. The 2023 ocean dialogue addressed the two topics of coastal ecosystem restoration, including blue carbon; and, fisheries and food security. The <u>2024 ocean dialogue</u> focused on the topics of marine biodiversity conservation and coastal resilience, and technology needs for ocean climate action, including finance links. The 2023-24 ocean dialogues have witnessed the participation of over 600 Parties representatives and observers; and the exchange of over 500 ocean-based mitigation and adaptation good practices and case studies. The dialogues have involved the active engagement of the UNFCCC constituted bodies and UN agencies, thereby recognizing the importance of strengthening institutional linkages. Additionally, in the 2023 <u>synthesis report</u> of the secretariat, the new or updated NDCs reflect an increased recognition of the ocean's role in strengthening climate action.

The UNFCCC secretariat has strengthened ocean-related climate action by actively collaborating with other UN agencies, including as an UN-Oceans member, and representing on the Advisory Board of the UN Decade of Ocean Science for Sustainable Development. It also contributes annually to the UN Secretary General's report on the Ocean and Law of the Sea, and is involved in preparations for the 2025 United Nations Ocean Conference.

UN Department of Economic and Social Affairs, Division for Sustainable Development

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER NO IMPACT IDENTIFIED

SOIL

NO IMPACT IDENTIFIED MARINE & COASTAL

INDIRECT

CHEMICALS & WASTE

INDIRECT

Rooted in the United Nations Charter and guided by the transformative 2030 Agenda for Sustainable Development, the UN Department of Economic and Social Affairs (UN DESA) upholds the development pillar of the United Nations.

The Division for Sustainable Development Goals, as mandated by GA resolution 70/299, acts as the Secretariat for SDGs, focusing on providing substantive support and capacity building to the 17 Sustainable Development Goals and their related thematic issues, including water, energy, climate, ocean, urbanization, transport, science and technology. The Division contributes to the intergovernmental processes on the 2030 Agenda, including those under the General Assembly, the Economic and Social Council and the High-level Political Forum, with its substantive analytical work on thematic issues of the Sustainable Development Goals. Its main activities include: Support to UN Intergovernmental Processes and the High-level Political Forum on Sustainable Development; Policy analysis; Capacity development, including supporting national voluntary reviews, Inter-Agency coordination; Stakeholder engagement, partnerships, communication and outreach, and Knowledge management.

UN DESA organizes its work in seven key topics, including Climate Action. In this line, it helps coordinate conferences like the United Nations Global Sustainable Transport Conference and UN Ocean Conference. In December 2021, the UN Department of Economic and Social Affairs (UN DESA) launched the UN DESA Climate Review which also includes efforts for a clean ocean and clean energy (United Nations, Department of Economic and Social Affairs Climate Review, 2021).

UN Department of Operational Support

Identified impact on the different dimensions of pollution:

ea impact on the amerent aimensions of poliations

AIR DIRECT WATER

INDIREC

SOIL INDIRECT

MARINE & COASTAL

NO IMPACT IDENTIFIED CHEMICALS & WASTE

DIRECT

The Department of Operational Support (DOS) assists UN field missions and other UN Secretariat entities in improving their environmental management practices and reducing their environmental footprint through various strategic initiatives and policies, as well as through technical assistance, advisory services, capacity building programmes, and knowledge sharing fora.

Responding to mandates from the UN membership that emphasise the importance of environmental management (e.g., A/RES/70/286), DOS in 2017 launched the Environment Strategy for Peace Operations 2017-2023, providing peacekeeping missions and field-based special political missions with a framework for accountability in the areas of energy, water and wastewater, solid waste, environmental management systems, and wider impact. In April 2022, DOS, together with the Department of Peace Operations (DPO) and the Department of Political and Peacebuilding Affairs, issued a revised Environmental Policy for Peace Operations which outlines specific performance standards, provides operational guidance to missions in reducing their overall environmental footprint, and aligns with the broader Environmental Policy for the UN Secretariat (ST/SGB/2019/7), which is currently under review.

Through the implementation of the Environment Strategy and the Environmental Policy, field missions significantly improved environmental risk management and remediation practices (in particular concerning wastewater and solid waste management) and improved their environmental performance. This for instance is reflected in the average environmental score of missions going from 61/100 in 2017/18 to 81/100 in 2022/23, the elimination of uncontrolled releases of wastewater, and the decline of GHG emissions from just under 1 million tonnes to just over 3/4 of a million tonnes CO2 equivalent per year, mitigating water and soil pollution. [1] Efforts were also made to enhance environmental management systems, improve energy efficiency, and transition to renewable energy.

Responding to a request from the General Assembly to ensure continuity in these efforts after the initial strategy period ended in June 2023 (A/RES/76/274), 'The Way Forward: Environment Strategy for Peace Operations 2030' was shared in February 2024 following extensive consultation with all stakeholders. Support continues across the aforementioned five operational pillars, with an enhanced focus on themes of responsibility, ambition, and legacy. A key new element of the strategy is the setting of performance targets by missions for Member State consideration as part of the budgetary process, piloted in MINUSCA and UNISFA as part of the 2024/25 budget submission and to be rolled out across other missions going forward.

To enhance environmental awareness and practices in the field, DOS, including in cooperation with DPO, continues to develop and deliver specialized training for uniformed and civilian personnel staff, e.g., on building the capacity of military and police environmental focal points. Together with the Department of Management Strategy, Policy and Compliance, DOS serves as co-chair of the 'UN Secretariat Steering Group on Environmental Sustainability Management', which aims to "provide an overarching coordination mechanism for environmental management systems across the Secretariat" (A/72/82). To support the implementation of environmental management across the Secretariat through peer-to-peer learning, following the model in peacekeeping, DOS is in the process of reinvigorating the Community of Practice for Secretariat Environmental Focal Points. In addition, DOS actively participates in bodies fostering UN system-overarching cooperation on environmental issues, such as the EMG (e.g., as a member of the 'Scope 3 Advisory Group', focused on developing a consistent methodology on scope 3 emissions for all UN entities) and the 'Greening the Blue' initiative.

Environment and Development

International Maritime Organization

Identified impact on the different dimensions of pollution

AIR NO IMPACT IDENTIFIED WATER IMPACT SOIL NO MARINE & DIRECT CHEMICALS & DIRECT IMPACT IMPACT IMPACT WASTE

The mandate of the International Maritime Organization (IMO) is to promote safe, secure, environmentally sound, efficient and sustainable shipping. This is accomplished by adopting the highest practicable standards of maritime safety and security and prevention and control of pollution from ships, as well as through consideration of the related legal matters and effective implementation of IMO's instruments with a view to their universal and uniform application.

IMO has developed and adopted a range of international instruments to address marine pollution arising from international shipping:

- International Convention for the Prevention of Pollution from Ships
- International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties
- International Convention on Oil Pollution Preparedness, Response and Co-operation
- International Convention on Civil Liability for Oil Pollution Damage
- International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage
- Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter
- International Convention on the Control of Harmful Anti-fouling Systems on Ships
- International Convention for the Control and Management of Ships' Ballast Water and Sediments

In addition, a range of mandatory and voluntary Guidelines and Codes have been developed to provide international standards for the safe transport, storage and handling of harmful substances. IMO has Secretariat responsibilities for such instruments and regulations, and regularly reviews and updates these through the Marine Environment Protection Committee which is IMO's senior technical body on marine pollution related matters. IMO's environmental activities are supported by an Integrated Technical Co-operation Programme, that specifically assists Governments which lack the technical knowledge and resources that are needed to ratify and/or implement the marine pollution related instruments.

IMO adopted an Action Plan to prevent marine plastic litter entering the oceans through ship-based activities. The International Convention for the Prevention of Pollution from Ships (MARPOL) Annex V and the London Convention and Protocol are important IMO instruments in addressing marine plastic litter.

IMO delivers training and workshops on regulation and capacity building in maritime administrations. Together with FAO, IMO has launched the GloLitter Partnerships Project, which is IMO's first global capacity building project for sea-based sources of marine litter. Within this Partnership, IMO and FAO have been developing guidance documents, training material and toolkits to help enforce existing IMO regulations, support relevant FAO instruments and guidelines, enhance regional cooperation and expand government and port management capacities. IMO also promotes inter-agency collaboration in the context of the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) for which IMO serves as the secretariat. It works with UNEP and the Basel Convention, as well as with FAO on fishing-related waste; bilaterally and through GESAMP in several working groups; and with DOALOS in fulfilling the functions of UNCLOS (United Nations Environment Management Group , 2022).

International Organization for Migration

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER INDIRECT SOIL INDIRECT COASTAL INDIRECT IMPACT COASTAL IMPACT WASTE

The International Organization for Migration (IOM) works to help ensure the orderly and humane management of migration to promote international cooperation on migration issues, to assist in the search for practical solutions to migration problems and to provide humanitarian assistance to migrants in need, including refugees and internally displaced people.

Since 2007, member states requested IOM to work on migration, environment and climate change. At the beginning of 2015, a dedicated Migration, Environment and Climate Change (MECC) Division was created to address the migration, environment and climate nexus. This institutional change has formalized IOM's engagement in this thematic area, making IOM the first international organization to have established an institutional unit fully devoted to this topic.

Through its Migration, Environment and Climate Change Division, within the Department of Migration Management, IOM oversees, supports and coordinates the development of policy guidance for activities with a migration, environment and climate change dimension.

IOM's objectives concerning migration, environment and climate change are:

- To prevent forced migration that results from environmental factors to the extent possible;
- To provide assistance and protection to affected populations when forced migration does occur in situations of environmental and climate change, and to seek durable solutions to their situation;
- To facilitate migration in the context of climate change adaptation and enhance the resilience of affected communities.

In 2021, IOM launched its 10-year Institutional Strategy on Migration, Environment and Climate Change 2021-2030. The Strategy formulates three Strategic Objectives:

- "We develop solutions for people to move" Managing migration in the context of climate change, environmental degradation, and disasters due to natural hazards.
- "We develop solutions for people on the move" Assisting and protecting migrants and displaced persons in the context of climate change, environmental degradation, and disasters due to natural hazards.
- "We develop solutions for people to stay" Making migration a choice by building resilience and addressing the adverse climatic and environmental drivers that compel people to move.

United Nations Development Programme

Identified impact on the different dimensions of pollution

AIR DIRECT WATER DIRECT SOIL DIRECT MARINE & DIRECT CHEMICALS & DIRECT COASTAL DI

The United Nations Development Programme (UNDP) is the UN's development agency, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. UNDP works in 170 countries and territories to eradicate poverty and reduce inequality, aiming to build the world envisioned by the 2030 Agenda. UNDP's country teams have in-depth understanding of the local system, economic development model and culture, which are essential in facilitating, designing, advocating, and implementing initiatives. UNDP's global policy network as well as South-South and tripartite cooperation platforms provide opportunities for collaboration and partnership.

UNDP offers an integrated approach to address pollution through its diverse portfolio that includes nature, climate, energy, health and chemicals and waste initiatives. Pollution is tackled through many entry points on enhancing waste management, including through climate mitigation and adaptation, chemicals and waste management, ocean governance, and local actions. UNDP is increasingly being requested by governments to provide support on waste management in the immediate aftermath of a disaster or conflict. UNDP SDG-finance, innovation and digital platforms can support transformative change in this area. UNDP also works to reduce pollution across sectors, working across teams. Health sector-specific initiatives include efforts to address the environmental harm caused by the manufacture, use, disposal, and logistics of medical products through their life cycle.

Nature conservation initiatives can play a significant role in addressing pollution issues through various approaches. Restoring degraded ecosystems such as wetlands and forests helps filter pollutants from water and air, improving overall environmental quality. Conserving diverse habitats supports naturally mitigate pollution, such as plants that absorb heavy metals or microorganisms that break down pollutants in soil and water. Practices such as sustainable agroforestry and permaculture reduce pesticide use and chemical runoff from agricultural activities.

Climate change portfolio addresses pollution through integrated strategies that reduce emissions and pollution in renewable energy, energy efficiency and sustainable transport. For example, UNDP is developing its corporate offers for clean cooking, addressing both ambient and household air pollution across the organization in its future work. UNDP also supports countries in their efforts to develop multisectoral governance responses to address the health impacts of pollution, such as providing governance tools to calculate the economic, health, social and environmental costs and return on investment for pollution reduction policies, as well as supporting legislative and regulatory changes.

The sound management of chemicals and waste is an important component of UNDP's efforts to achieve sustainable, inclusive, resilient human development and the Sustainable Development Goals (SDGs), while shifting to a circular economy that eliminates waste and pollution, maintains the use of products and materials for longer periods and regenerates natural systems. UNDP's interventions in the area of chemicals and waste management directly support the implementation of the Montreal Protocol; the Basel, Minamata, Rotterdam and Stockholm conventions as well as the Strategic Approach to International Chemicals Management (SAICM). In addition, UNDP is also actively promoting its vision of a zero-waste society, one which focuses on integrated waste management in developing countries, especially municipal solid waste.

UNDP's GEF Chemicals and Waste portfolio is primarily funded by the Global Environmental Facility covering a cumulative portfolio of more than \$583 million in almost 100 countries. During 2023-2024, UNDP developed several key initiatives in partnership with other organizations. Through GEF financing, UNDP is finalizing the development of a global Zero Waste Initiative with \$25 million in five countries. UNDP is working with UNEP, UNIDO and WWF to finalize the development of the Plastics Reboot Program with more than \$100 million total financing in 15 countries. UNDP is also collaborating with UNEP and UNIDO on eliminating the use of hazardous chemicals in key supply chains, including textiles and construction. Other flagship initiatives include iCOAST, which focuses on the tourism sector to reduce pollution of water, soil and air, reduce emissions of GHGs, reduce the over-consumption of natural resources, products and materials, and reverse the sector's impact on biodiversity loss, while creating equitable

livelihoods and jobs for local communities and FARM+, which seeks to unlock finance to support governments and agricultural stakeholders in transitioning from unsustainable agricultural practices to sustainable and climate resilient agricultural practices and increase the uptake of nature-based solutions to build the resilience of farming practices to climate change, protect, regenerate and improve productive landscapes and soil health and reduce soil and water pollution from harmful agrochemicals

In UNDP ocean and freshwater portfolio, worldwide, UNDP's water quality and anti-pollution projects promote sustainable, integrated water resource management to improve access to clean water and mitigate the impacts of pollution on ecosystems and human health. Initiatives to enhance water quality monitoring and restore polluted bodies of water frequently call on innovative technologies, nature-based solutions and community engagement to foster resilience to climate change and pursue SDG targets, including SDG6 on clean water and sanitation.

Between 2020-23, UNDP's Ocean Innovation Challenge provided wraparound mentoring and support to numerous innovators tackling the challenge of marine plastic pollution. Innovators' areas of focus were diverse – from the establishment in Comoros of a PET recovery and buy-back center, through to APAC efforts to reduce micro-plastics pollution from the garment industry and a Global Plastics Policy Inventory compiled by Duke University.

What each of the nine successful projects had in common was their scope for scaling up and replication elsewhere – qualities embedded in each project from their inception through to delivery. The same characteristics apply to the "best practice" in UNDP's global fresh water portfolio, where 255 projects are focused primarily on water quality, and a further 181 include counter-pollution measures.

Through the GEF Small Grants Programme (SGP), UNDP supported community-based actions on the sound management of hazardous chemicals and waste, including persistent organic pollutants (POPs) and mercury, to minimize adverse effects on human health and the global environment. There is a growing need among local communities to address issues related to waste management initiatives, including plastics and e-waste. Results of the 96 community-based chemicals and waste management projects completed during 2003-2004 include the avoided use of 12,494 kilograms of pesticides and the release or utilization of 23,414 kilograms of harmful chemicals. In addition, the capacities of 64 national coalitions and networks on chemicals and waste management have been strengthened.

With a global network of 90 social innovation labs, the UNDP Accelerator Labs provide a distributed R&D function supporting 114 countries in co-creating solutions for a range of sustainability challenges. For Instance, in India, where traditional brick kilns contribute significantly to air pollution, the Accelerator Lab used AI, geospatial analysis, and citizen science to map over 47,000 kilns, which were incorporated by UNDP into the GeoAI open data platform. This initiative enabled environmental regulators in Bihar state to identify high-risk kilns, resulting in the green transition of 1,000 kilns and a reduction of 500,000 tons of CO2 emissions annually.

Similarly, in South Africa, where coal mining is a major source of employment and energy, the UNDP Accelerator Lab is supporting the "Just Energy Transition" (JET) program of the Presidential Climate Commission. Through citizen science and micro-surveys, the Lab gathered insights from over 10,000 coal mining community members to understand their perceptions of the transition and potential impacts of different policy options. A key success factor was the recruitment and training of local data collectors, with a majority being women and youth.

UNDP supports governments, businesses, local communities and non-governmental organizations (NGOs) through the following gender-responsive interventions:

- Strengthen policy, regulatory and financial incentives to phase out chemicals of concern, design out pollution and waste generation, increase the circular use of materials, ensure compliance with waste hierarchy principles and improve residual waste management. These interventions will also facilitate the mainstreaming of chemicals and waste management into national development planning and budgeting processes.
- Support life cycle assessments and cost-benefit analyses to make a comprehensive, long-term economic case for circularity and identify chemicals and waste-related interventions to support change.

- Support the identification of "hotspot" sectors of unsustainable consumption and production and associated circular economy opportunities, which form the basis for enhanced Nationally Determined Contribution (NDC) strategies.
- Promote product innovation and redesign by building the capacity of designers, manufacturers and producers to enable them to design circular products which i) have a long lifespan (by increasing durability, reusability, repairability, refurbishment, recyclability); ii) by phasing out chemicals of concern; iii) by introducing sustainable or alternative non-plastic packaging; iv) by changing existing business models from product ownership to services (e.g. chemical leasing, product rental).
- Support process innovation and redesign by building the capacity of manufacturers and producers to introduce cleaner production principles (e.g. best available technologies, reducing resource use, improving efficiency, designing out chemicals of concern, reducing pollution and waste generation).
- Raise consumer awareness around sustainable purchasing practices by increasing consumer demand for greener, safer, healthier services and products; support green public procurement initiatives; support systems for improved product labelling and supply chain transparency and share best practices, and so on.
- Improve waste management and recycling systems by improving systems for waste segregation, recycling (including reverse logistics) and waste collection and management systems to increase re-use and recycling rates, reduce waste leaks into the environment, and minimize the release of greenhouse gases (GHG) and persistent organic pollutants (POPs). This component is not intended to minimize the importance of waste reduction and redesign, which remain priority interventions.

Please refer to UNDP's 2021 publication on Transitioning To a Circular Economy Through Chemicals and Waste Management (United Nations Development Programme, 2022) for more details on UNDP's efforts in this area.

United Nations Educational Scientific and Cultural Organization

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER DIRECT SOIL NO MARINE & DIRECT SOIL NO MARINE & DIRECT COASTAL WASTE

The United Nations Educational Scientific and Cultural Organization (UNESCO) contributes to peace and security by promoting international cooperation in education, sciences, culture, communication and information.

UNESCO's main work on tackling pollution is related to water protection. It established the World Water Assessment Programme (WWAP) (UNESCO, n.d.) in 2000 in response to a call from the UN Commission on Sustainable Development (CSD) to produce a UN system-wide periodic global overview of the status, use and management of freshwater resources.

UNESCO is also leading the implementation of the United Nations Decade of Ocean Science for Sustainable Development (2021-2030), a once-in-a-lifetime opportunity for scientists and stakeholders from diverse sectors to develop the scientific knowledge and the partnerships needed to accelerate and harness advances in ocean science to achieve a better understanding of the ocean, and deliver science-based solutions to achieve the 2030 Agenda. The Intergovernmental Oceanographic Commission of UNESCO (IOC) is the United Nations body responsible for supporting global ocean science and services.

The UNESCO Intergovernmental Hydrological Programme (IHP) is also actively working against water pollution and is currently organizing the conference Emerging pollutants: Protecting water quality for the health of people and the environment to be held in 2023.

UNESCO also aims to help mitigate to climate change and monitors the effects of climate change on UNESCO designated sites (e.g., World Heritage sites, biosphere reserves and UNESCO Global Geoparks). These sites promote low carbon economies, for instance through the sustainable use of renewable energy sources.

Additionally, the Man and the Biosphere programme (MAB) is an intergovernmental scientific programme that aims to establish a scientific basis for enhancing the relationship between people and their environments (UNESCO, n.d.).

United Nations Environment Programme

Identified impact on the different dimensions of pollution

AIR DIRECT WATER DIRECT SOIL DIRECT MARINE & DIRECT CHEMICALS & DIRECT IMPACT COASTAL WASTE

UNEP was established by the General Assembly following the Stockholm Conference by resolution 2997 (XXVII) of 15 December 1972 and has the following main functions related to pollution:

- Promote international cooperation in the field of the environment and to recommend policies to this end;
- Provide general policy guidance for the direction and coordination of environmental programmes within the United Nations system;
- Keep under review the world environmental situation in order to ensure that emerging environmental problems of wide international significance receive appropriate and adequate consideration by Governments; and
- Promote the contribution of the relevant international scientific and other professional communities to the
 acquisition, assessment and exchange of environmental knowledge and information and to the technical
 aspects of the formulation and implementation of environmental programmes within the United Nations
 system.

UNEP works in response to several UNEA mandates regarding pollution in air, freshwater, land and soil, marine and coastal as well as chemicals and waste and other cross cutting issues (please see section UNEA mandates). In consequence, it coordinates and supports several key pollution-related initiatives:

- The Special Programme (SP), also known as the Chemicals and Waste Management Programme, provides support to developing countries and countries with economies in transition to enhance their sustainable institutional capacity to develop, adopt, monitor and enforce policy, legislation and regulation for effective frameworks for the implementation the Minamata Convention. the Basel, Rotterdam and Stockholm Conventions and the Strategic Approach to International Chemicals Management (SAICM). SP focuses its programmatic intervention to: 1) eliminate pollutants that pose significant risks to the environment and health; 2) reduce the volume and toxicity of waste and wastewater that enters the environment and stop most harmful practices such as open dumping and burning, and 3) scale up the adoption of circularity policies and practices across high impact sectors and systems, namely electronics, plastics, textile and mining. At the end of October 2022, this SP covered 9 global projects (with regional and national sub-sets within) with extra budgetary funds (non-GEF) and the GEF Chemicals and Waste portfolio with 24 full-sized projects, 8 medium-sized projects and 48 enabling activities.
- UNEP shares knowledge with diverse types of audiences, including recommendations for policy-makers, massive open online courses (MOOCs).
- UNEP serves as the secretariat of the One Planet Network (which implements the 10 Year Framework of Programmes on Sustainable Consumption and Production - 10YFP) and the Strategic Approach to International Chemicals Management (SAICM).
- The New Plastics Economy Global Commitment, led by the Ellen MacArthur Foundation in collaboration with UNEP, is an example of an initiative which focuses on the uptake of circular economy across the entire plastic value chain.
- The World Environment Situation Room is a data, information and knowledge on the Environment hosted by UNEP that includes a Pollution and Waste section.
- The Beat Pollution strategy aims to build and nurture a larger narrative on a pollution-free planet that weaves interrelated aspects of climate and nature and connects different forms of pollution to the larger

issue of pollution and waste. The goal is to optimize human health and environmental outcomes through enhanced capacity and leadership in the sound management of chemicals and waste and increasing circular processes.

• InforMEA is the United Nations Information Portal on Multilateral Environmental Agreements. It is a onestop portal for information on Multilateral Environmental Agreements – or MEAs - searchable by key terms across treaty texts, COP decisions, national plans and reports, laws, court decisions and more

UNEP group its efforts in three lines of action: Nature, Climate Action and Chemicals and Pollution Action. This last one addresses pollution in all environmental media. UN Environment's work on chemicals and waste is led by the Chemicals and Health Branch.

At the third session of the United Nations Environment Assembly (UNEA3), Ministers of the Environment expressed their commitment to working towards a pollution-free planet for the health and well-being of our people and the environment (UNEA3 ministerial declaration). As a follow-up, UNEP developed an "Implementation Plan "Towards a Pollution-Free Planet" which was welcome by the Environment Assembly at its fourth session in March 2019 through resolution 4/21. UNEP is undertaking efforts towards implementation of the Plan by coordinating and monitoring its delivery with inputs from Member States and other stakeholders, and by undertaking efforts within its own programme of work.

United Nations Economic and Social Commission for Africa

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER INDIRECT SOIL INDIRECT COASTAL OPENING WASTE OPENING WASTE

The Economic and Social Commission for Africa (ECA) aims to strengthen the capacity of member States to design institutional arrangements and implement national policies and programmes that reinforce the linkages within the nexus of food security, population, environment and human settlements in order to achieve sustainable development, and to contribute to building capacity of African countries to utilize science and technology in achieving sustainable development.

Specific objectives include promoting awareness of the need to integrate concerns of the three pillars of sustainable development, namely economic development, social development and environmental protection into national development planning and poverty reduction programmes; improve stewardship of the natural resource base and the environment by strengthening the capacity of member States for sustainable exploitation, management and effective utilization of such important natural resources as mineral and energy resources, and water resources.

In response to urgent sustainable development challenges, consistent with the New Partnership for Africa framework, activities focus on the following four priorities:

- strengthening strategies and programmes for integrated water resources management;
- Improving land resources management;
- harnessing science and technology for sustainable development;
- assessing and monitoring progress on the implementation of the World Summit on Sustainable development outcomes.

ECA addresses pollution through blue and green economy projects that introduce sustainable economic models. Regional efforts include banning single-use plastics in Tanzania and Kenya, for example. It also implements projects and programmes on the green economy transition for more sustainable patterns of consumption and production, as well as the blue economy. For example, the Commission together with the Green Growth Institute and UNEP is conducting a study in Kenya, Zambia, South Africa, Côte d'Ivoire and Cameroon to scale up the potential of the private sector in moving towards green growth, considering the key sectors of agriculture, waste management, energy and forestry.

United Nations Economic and Social Commission for Asia and the Pacific

Identified impact on the different dimensions of pollution

MARINE & **CHEMICALS &** INDIRECT INDIRECT NO IMPACT NO IMPACT AIR WATER SOIL IMPACT IDENTIFIED IDENTIFIED IMPACT IDENTIFIED COASTAL WASTE

The Economic and Social Commission for Asia and the Pacific (ESCAP) supports the regional implementation of global mandates, particularly the Doha Development Agenda, the Monterrey Consensus, the Johannesburg Plan of Implementation of the World Summit on Sustainable Development, and the World Summit on the Information Society.

UNESCAP's activities in the area of environment focus primarily on coordinating and monitoring the implementation of the Regional Action Programme for Environmentally Sound and Sustainable Development, Johannesburg Plan of Implementation (JPOI), the Phnom Penh Regional Platform on Sustainable Development for Asia and the Pacific and other recommendations of the Ministerial Conference on Environment and Development in Asia and the Pacific; reviewing the regional implementation of relevant international conventions; promoting the integration of environmental considerations into economic and social planning; developing and implementing strategic environmental plans and sustainable development indicators; and promoting the increased involvement of stakeholders in achieving sustainable development goals.

The objective of UNESCAP's energy activities is to strengthen the capacity of member and associate member countries to achieve sustainable energy development. The objective is pursued through two main tiers of operation: facilitation of policy dialogues and technical assistance activities on energy for sustainable development.

It also supports regional activities on sustainable consumption and production (SCP) in collaboration with the League of Arab States. Efforts include showcasing best practices, reviewing progress and exchanging views on the needs and priorities of the region to promote a shift towards SCP, and encouraging Member States to adopt green technologies.

UNESCWA is undertaking various activities in regard to circular economy, particularly on encouraging the use of green technologies and sustainable waste management in rural areas to enhance resilience to climate change. These initiatives aim to provide policy recommendations for integrating circularity into national development and sectoral plans. The intention is to disseminate findings and regional experiences through case studies of concrete circular economy solutions and innovative green technologies relating to natural resources management. As such, in light of the need for increasing transboundary cooperation in regard to waste management, UNESCWA is currently collaborating with UNECE on a project on "Managing Food Loss and Waste".

United Nations Economic and Social Commission for Latin America and the Caribbean Identified impact on the different dimensions of pollution

CHEMICALS & MARINE NO IMPACT INDIRECT IMPACT IMPACT AIR WATER SOIL IMPACT IDENTIFIED IDENTIFIED IDENTIFIED IDENTIFIED **COASTAL** WASTE

The mission of the ECLAC in the area of environment a is to translate the vision of sustainable development in Latin America and the Caribbean in operative public policies and that consider:

- the environmental problems that exist in the countries of the region as well as the priorities expressed by the governments;
- the role and comparative advantages of ECLAC in the promotion of the sustainable development in the region of Latin America and the Caribbean;
- the role of other major actors including other agencies of the United Nations system, bilateral
 development banks and donors with a view to avoiding potential duplicities and taking advantage of
 synergies.

The work of ECLAC in the area of environment and human settlements is articulated in four areas: i) Evaluation of sustainability in Latin America and the Caribbean; ii) Public policies and pursuit of a global environmental agenda; iii) Economy and environment; and Poverty and the environment.

While no main programme directly related to pollution was identified, ECLAC has published local reports on the subject. In particular, it worked on plastics, industrial pollution and circular economy.

United Nations Economic and Social Commission for Western Asia

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER NO IMPACT SOIL NO MARINE & NO IMPACT CHEMICALS & INDIRECT IMPACT COASTAL IDENTIFIED WASTE

The Economic and Social Commission for Western Asia (ESCWA) was established in 1973 to stimulate economic activity in member countries, strengthen cooperation between them, and promote development. Among its focus areas it includes:

- Climate Change: ESCWA supports member States better predict and adapt to the impact of climate change while sustainably managing their natural resources. Initiatives in this focus area include: Arab Centre for Climate Change Policies and the Water and Energy Nexus Initiative.
- Natural resource sustainability which includes initiatives such as the Water Action Decade, REGEND
 (Regional Initiative to Promote Small–Scale Renewable Energy Applications in Rural Areas of the Arab
 Region), and Up-scaling energy-efficiency programmes and projects in the residential and services sectors.

United Nations Economic Commission for Europe

Identified impact on the different dimensions of pollution

AIR DIRECT WATER DIRECT SOIL INDIRECT MARINE & INDIRECT IMPACT CHEMICALS & DIRECT COASTAL WASTE

The United Nations Economic Commission for Europe (UNECE) ²² through its economic and environmental interface, its normative mandates and its key binding legal instruments and operational programmes has a unique and powerful role in addressing the triple planetary crisis in the pan-European Region and beyond. The broad aim of UNECE's environment activities is to safeguard the environment and human health, and to promote sustainable development in its member countries in line with Agenda 21. The practical aim is to reduce pollution so as to minimize environmental damage and avoid compromising environmental conditions for future generations also by preventing, reducing and monitoring pollution.

UNECE services the 'Environment for Europe' Ministerial process²³ (UNECE, n.d.) and the Regional Forum on Sustainable Development (UNECE, n.d.), which are two high-level platforms for stakeholders to discuss, decide and join efforts in addressing environmental priorities across the 56 countries of the UNECE region, and are regional pillars of sustainable development.

Conventions and Protocols

UNECE also hosts five environmental Conventions and 12 Protocols to them.²⁴ The Treaties are the Convention on Long-range Transboundary Air Pollution and its eight Protocols (UNECE, n.d.), Convention on Environmental Impact Assessment in a transboundary context and its Protocol on Strategic Environmental Assessment (UNECE, n.d.), Convention on the Protection and Use of Transboundary Watercourses and International Lakes and its Protocol on

²² https://unece.org/

²³ https://unece.org/environment-policy/environment-europe

²⁴ https://unece.org/about-5

Water and Health (UNECE, n.d.), Convention on the Transboundary Effects of Industrial Accidents and its Protocol on Civil Liability and Compensation for Damage²⁵, and Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters and its Protocol on Pollutant Release and Transfer Registers (UNECE, n.d.).

Sustainable Resource Management

The United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS) are integrated frameworks developed by UNECE that guide sustainable resource management, ²⁶ ensuring that natural resources are used efficiently while minimizing environmental and social impacts. They also promote circularity. UNFC provides a standardized methodology for classifying and managing resources such as minerals, energy, and anthropogenic resources, while UNRMS offers a more comprehensive system for managing resources holistically. Both frameworks emphasize the reduction of pollution across air, water, and soil, particularly in industries involving natural resource production and use. By incorporating environmental, social, and governance (ESG) criteria into resource management, UNFC and UNRMS aim to ensure that projects minimize harmful emissions, protect water resources from contamination, and avoid soil degradation. In the context of air pollution, these frameworks encourage the reduction of emissions during the extraction, refining, and processing of materials. They also support water protection by promoting practices that prevent the release of toxic substances into water bodies during resource extraction and processing. For soil health, they recommend minimizing land degradation and contamination by ensuring proper waste management and post-extraction land reclamation. These frameworks align with the recommendations of the UN Secretary-General's Panel on Critical Energy Transition Minerals (CETMs), which emphasize environmental stewardship, transparency, and social responsibility in managing critical minerals. UNFC and UNRMS respond to the CETM Panel's principles by offering mechanisms for sustainable governance of critical materials, ensuring that their extraction and use contribute to energy transitions without exacerbating environmental pollution or societal inequalities. This positions them as important tools in addressing the complex challenges of sustainable development and pollution mitigation in resource-rich regions.

Environmental Performance, Monitoring and Assessment

UNECE also helps individual countries of three sub-regions (South-Eastern Europe, Eastern Europe and the Caucasus, and Central Asia) and neighbouring sub-regions improve their environmental performance by assessing their efforts to reduce pollution and manage their natural resources, and by making targeted recommendations within the ECE Environmental Performance Review Programme.²⁷ UNECE also enables informed decision-making across all member States by supporting the enhancement of environmental monitoring and data production including on pollution within its programme on environmental monitoring and assessment.²⁸ UNECE also provides support to regular environmental assessment and reporting and through establishing a Shared Environment Information System in the region including through the intergovernmental Working Group on Environmental Monitoring and Assessment and the Joint Task Force on Environmental Statistics and Indicators.

Cross-sectoral Processes

In addition, UNECE helps enhancing synergies on environmental issues, and take a very active role in regional and several cross-sectoral processes, including in Transport, ²⁹ Sustainable Energy, ³⁰ Education for Sustainable

 $^{^{25}}$ Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters (not in force).

²⁶ https://unece.org/sustainable-energy/sustainable-resource-management

²⁷ https://unece.org/environmental-policy-1/environmental-performance-reviews

²⁸ https://unece.org/environmental-policy-1/environmental-monitoring-and-assessment

²⁹ https://unece.org/transport

³⁰ https://unece.org/sustainable-energy

Development (UNECE, n.d.);³¹ Trade³² and Environment and Health. ³³ For example, UNECE offers policy advice and capacity-building support to reduce emissions of short-lived climate pollutants, namely methane emissions from the fossil fuel sector, including coal mines and natural gas operations. ³⁴ UNECE also launched "The Sustainability Pledge" inviting governments, garment and footwear manufacturers and industry stakeholders to pledge to apply our toolkit of measures and take a positive step towards improving the environmental and ethical credentials of the sector. ³⁶

United Nations Entity for Gender Equality and Empowerment of Women

Identified impact on the different dimensions of pollution

AIR NO IMPACT IDENTIFIED WATER NO IMPACT IDENTIFIED SOIL NO MARINE & NO IMPACT IDENTIFIED COASTAL CHEMICALS & NO IMPACT IDENTIFIED WASTE IDENTIFIED WASTE

The United Nations Entity for Gender Equality and Empowerment of Women (UNWOMEN) is the UN organization dedicated to gender equality and the empowerment of women. A global champion for women and girls, UN Women was established to accelerate progress on meeting their needs worldwide.

While UN WOMEN does not have a specific programme for addressing pollution and gender issues, it has worked on the subject particularly though assessment papers and reports such as Human rights, the environment, and gender equality: Key messages (UN Human Rights; UNEP; UN WOMEN).

United Nations Office for Disaster Risk Reduction

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER IMPACT SOIL INDIRECT IMPACT COASTAL IMPACT COASTAL COASTAL MARINE & UNDIRECT IMPACT COASTAL WASTE

UNDRR (formerly UNISDR) is United Nations focal point for disaster risk reduction, created in December 1999. UNDRR oversees the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 and leads the organisation of the Global Platform for Disaster Risk Reduction. The formal mandate of UNDRR includes supporting countries to implement the Sendai Framework, monitoring and sharing what works in reducing existing risk, preventing the creation of new risk and ensuring synergies among the disaster reduction activities of the United Nations system and regional organisations and activities in socio-economic and humanitarian fields.

UNDRR addresses environmental impacts and pollution through a multi-hazard approach that aims to address the cascading and compounding impacts of systemic risks. In particular, UNDRR provides leadership and supports efforts in disaster risk reduction by (1) increasing risk knowledge and information, (2) strengthening risk governance, (3) leveraging partnerships and engaging stakeholders for increased action and investment, and (4) advocacy and knowledge sharing to advance risk-informed sustainable development. For instance, early warning systems help minimize the harm to people, assets, and livelihoods by triggering early action that is well prepared and tested. An integrated system of hazard monitoring, forecasting and prediction, disaster risk assessment, communication and preparedness activities systems and processes that enables individuals, communities, governments, businesses and others to take timely action to reduce disaster risks in advance of hazardous events, including pollution.

³¹ https://unece.org/environment-policy/education-sustainable-development

³² https://unece.org/trade

³³ https://unece.org/thepep

³⁴ https://unece.org/sustainable-energy/coal-mine-methane and

https://unece.org/media/sustainable-energy/Coal-Mine-Methane/press/389336

³⁵ https://thesustainabilitypledge.org/joinus.html

³⁶ https://unece.org/trade/traceability-sustainable-garment-and-footwear

UNDRR is the custodian of the Sendai Framework Monitor, an online tool that captures Member States' progress data against a set of 38 Sendai Framework indicators towards the seven Sendai Framework global targets, including mortality, people affected and economic losses from disasters. The Sendai Framework Monitor reporting feeds directly into the monitoring of 11 SDG disaster risk-reduction indicators, specifically under SDGs 1, 11 and 13. Member States also have the possibility to track pollution as a hazard through DesInventar. The DesInventar Disaster Loss Accounting System is supported by UNDRR. DesInventar is a conceptual and methodological tool for the generation of National Disaster Inventories and the construction of databases of damage, losses and in general the effects of disasters to support national planning and investment decisions which currently do not necessarily take into account disaster risks.

United Nations Office for the Coordination of Humanitarian Affairs

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER INDIRECT SOIL IMPACT SOIL IMPACT COASTAL CO

The Office for the Coordination of Humanitarian Affairs (OCHA) contributes to principled and effective humanitarian response through coordination, advocacy, policy, information management and humanitarian financing tools and services. OCHA's country and regional offices are responsible for delivering the core functions in the field by leveraging functional expertise throughout the organization.

The UNEP/OCHA Joint Environment Unit (JEU) responds to environmental dimensions of emergencies by coordinating international efforts and mobilizing partners to support countries that have requested assistance. In doing so, the JEU offers a wide range of services to holistically address the links between environment and emergencies.

Among other services, the JEU offers training experts to enhance readiness for deployment on UN environmental response missions, remote environmental assessment and analysis, strengthening interoperability between environmental, technical and humanitarian actors and customized tools and guidance that include for example the Disaster Waste Management guideline (Joint Environment Unit) and the Flash Environmental Assessment Tool (Joint UNEP/OCHA Environment Unit, 2016).

United Nations Office of the High Commissioner for Human Rights

Identified impact on the different dimensions of pollution

AIR DIRECT WATER DIRECT SOIL DIRECT MARINE & DIRECT CHEMICALS & DIRECT COASTAL MARINE WASTE

The Office of the High Commissioner for Human Rights (OHCHR) plays a crucial role in safeguarding the integrity of the three interconnected pillars of the United Nations – peace and security, human rights, and development. The Office collaborates with many actors on human rights and the environment, including civil society, academia, and UN entities such as UNDP, UNEP, the UNFCCC Secretariat, and interagency mechanisms such as the EMG, along with regional actors such as UNECLAC, UNESCAP and UNECE.

OHCHR aims to ensure that the protection and enjoyment of human rights is a reality in the lives of all people. In doing so, it considers the potential negative impacts of pollution on the effective enjoyment of human rights, including the rights to a healthy environment, culture, health, water, food, and life. OHCHR's work addresses the disproportionate impacts of environmental harm on persons, groups, and peoples in vulnerable situations.

OHCHR supports the implementation of international human rights standards by assisting government efforts to fulfil their human rights obligations. It also supports individuals in the exercise of their rights, monitors and reports objectively on human rights abuses and offers support, advice, and training to relevant stakeholders to make human rights a reality. OHCHR also develops guidance on the effective implementation of the human right to a clean, healthy and sustainable environment including its recently published key messages on human rights and hazardous substances (OHCHR, UNEP).

Activities by OHCHR relating to pollution include: (i) highlighting the importance of addressing the issue from a human rights perspective (including impacts on people, food security, livelihoods, culture, and health), and (ii) engaging in processes addressing pollution, such as those concerning environmental justice and the negotiations of a new legally binding instrument to end plastic pollution.

Human rights mechanisms, including special procedure mandate holders appointed by the Human Rights Council, have also engaged on human rights and pollution. OHCHR serves as the secretariat to the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, and the Special Rapporteur on the promotion and protection of human rights in the context of climate change, amongst other human rights mandates relevant to addressing the impact of pollution worldwide.

OHCHR participated in the EMG Task Team on Marine Litter and Microplastics, including contributing materials, an interview and review of the report Addressing marine litter and microplastics – UN system-wide contributions: A Synthesis Report by the United Nations Environment Management Group. At UNEA, OHCHR gave a dedicated statement to the Assembly, recalling the recognition of the right to a clean, healthy and sustainable environment in Human Rights Council resolution 48/13 (later recognized by GA Resolution 76/300) and calling for rights-based environmental action³⁷.

United Nations Office of the High Commissioner for Refugees

 $\label{lem:continuous} \mbox{Identified impact on the different dimensions of pollution} \\$

AIR INDIRECT WATER NO IMPACT SOIL NO IMPACT & IMPACT & CHEMICALS INDIRECT & WATER NO IMPACT | SOIL NO IMPACT

UNHCR the UN Refugee Agency, is a global organization dedicated to saving lives, protecting rights and building a better future for refugees, forcibly displaced communities and stateless people. UNHCR's work on pollution control and reduction is anchored across several strategies: The Strategy for Climate Action, the Operational Strategy for Climate resilience and environmental sustainability (2022-2025), and The Clean Energy Challenge is an ambitious goal that supports UNHCR's Global Strategy for Sustainable Energy (2019-2025). The relevant sections of these strategies mostly deal with air and plastic pollution.

UNHCR is on track to reducing 30 percent of its CO2 emissions by 2030, that is compared with 2010 levels. Due to its continually expanding, global energy metering platform, the agency's reporting under the Greening the Blue initiative rests on accurate CO2 emissions data. Examples of practical measures to reduce air pollution include ride sharing practices and fuel-efficient vehicles, which have been rolled out in 130 offices. Moreover, by 2025 almost 70 offices will have been solarized.

From an operational point of view, UNHCR has established a general approach for calculating emissions from its value chain in 2023. Over the past year, UNHCR has started transitioning to 100 percent recycled materials, mostly in the form of emergency blankets and sleeping mats. UNHCR has also eliminated unnecessary single-use plastic from its core relief items, adopting eco-tarpaulin for plastic sheets and tents; and started using greener specifications for eight different types of core relief items. Due to the above measures, UNHCR will achieve an increase of recycled, recyclable, or sustainably sourced core relief items, as well as a reduction of 20 percent in

-

³⁷ Mapping efforts survey.

their overall plastic content by 2025. Moreover, in terms of air pollution in situations of longer-term displacement, UNHCR has:

- solarized 50 percent of the running boreholes, and
- powered 44 percent of UNHCR-supported health centers by solar energy.

To accelerate such transitions to green energy in its operations, UNHCR has launched <u>Project Flow</u>: through innovative financing mechanisms based on a revolving fund, Project Flow will accelerate the conversion of diesel-powered systems to solar ones. The target is to solarize 100-160 boreholes over ten years, contributing to at least 180'000 tons of CO2 emissions avoided.

Looking ahead, UNHCR has launched e-waste management programs in three country operations. More broadly, UNHCR's Focus Area Strategic Plan for Climate Action (2024-2030) clarifies UNHCR's role and comparative advantage in climate action and prioritizes key areas of programmatic work where UNHCR will be seeking additional donor support, as well as areas of collaboration with others.

Agriculture and Labour

Food and Agriculture Organization

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER NO IMPACT SOIL DIRECT MARINE & NO IMPACT CHEMICALS & DIRECT IMPACT COASTAL WASTE

The Food and Agriculture Organization (FAO) is a specialized agency of the United Nations that leads international efforts to defeat hunger.

FAO's initiatives related to pollution include:

- Trade and Agribusiness Investing in sustainable value chains. This initiative aims to support countries and
 regions in the achievement of their SDG targets, with focus in achieving sustainable and inclusive economic
 growth and decent employment, through technical assistance in the development of sustainable
 agricultural and food value chains while facilitating appropriate investments.
- The hand in hand initiative that supports the implementation of nationally led, ambitious programmes to accelerate agrifood systems. One of the core concepts of this initiative is to ensure sustainable development. The Initiative relies on the most sophisticated technical tools to provide integrated analyses that identify key interactions, synergies, and trade-offs among actions to accelerate economic growth, ensure social inclusion, and promote sustainable use of biodiversity and natural resources (FAO, n.d.).
- FAO also has a long record of working on sea-based sources of marine litter such as ALDFG, which includes supporting the implementation of the Voluntary Guidelines on the Marking of Fishing Gear (VGMFG) and the FAO Global ALDFG Surveys.
- FAO develops and fosters the implementation of relevant tools and guidelines, such as the guidelines
 developed by the FAO Livestock Environmental Assessment and Performance (LEAP) Partnership on the
 assessment of nitrogen and phosphorus flows and associated environmental impacts, including air and
 water pollution. FAO will publish soon a report on sustainable nitrogen management in agrofood systems,
 highlighting the urgency to better manage nitrogen resources to enhance nitrogen use efficiency and
 reduce pollution.
- The GloLitter Partnerships Project and the Regional Litter project, executed jointly with IMO, focus on seabased sources of marine plastic litter from the maritime and fisheries sectors. FAO has a permanent seat

on the Steering Committee of the GPML, and is an observer to the IMO's Marine Environment Protection Committee (MEPC), as well as an observer to the Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution, including in the marine environment (INC) (UNEP). FAO and IMO co-host the GESAMP Working Group 43 on Sea-based Sources of Marine Litter, which reports to the MEPC and the Committee on Fisheries. FAO additionally supports a dedicated ALDFG Topic Group under the ICES FAO Working Group on Fishing Technology and Fish Behavior.

- FAO also provides the secretariat for the Global Soil Partnership (GSP). The mandate of the GSP is to improve governance of the limited soil resources of the planet in order to guarantee agriculturally productive soils for a food secure world, as well as support other essential ecosystem services, in accordance with the sovereign right of each State over its natural resources.
- FAO's Energy-Smart Agrifood Systems (ESAS) Programme works on increasing access to sustainable energy in agrifood systems through innovative, green energy solutions. The Programme aims to take advantage of opportunities for producing sustainable bioenergy from agriculture, whilst enhancing the use of renewable energy sources for agriculture and improving the efficiency and sustainability of energy in agriculture. The FAO work on ESAS addresses the energy needs in agrifood systems by supporting the implementation of national and regional strategies, action plans, and programmes to achieve SDGs and Paris Agreement objectives. Programme activities aim to reduce the reliance of the agrifood sector on fossil fuels, therefore contributing to reductions in GHG emissions from energy use in agriculture.
- FAO is hosting the Secretariat of the Global Bioenergy Partnership (GBEP), as part of the ESAS Programme. GBEP's mission is to support the promotion of sustainable bioenergy to achieve sustainable development, climate change mitigation and food security. In the context of GBEP, FAO has contributed to the development of a set of 24 voluntary indicators to evaluate and monitor the environmental, social and economic performances of bioenergy production and use.
- FAO has long record of working on environmentally sound management of legacy pesticides. Through risk-based approach dealing with obsolete pesticide and associated waste stocks considering the potential impact on both public health and the wider environment FAO develops and fosters the implementation of guidelines and tools to provide a sound technical baseline for implementation of pesticide and associated waste inventory, obsolete stock site prioritization, safeguarding and practical methods to assist countries in the formulation of strategies for the management of pesticide contaminated land.

In addition to its implementation and coordination work, FAO is active in developing and promoting research and training. Many of their publications are related to pollution with a particular focus in soil. It develops Food and Agriculture Statistics which include pollution related publications such as: Pesticides use, pesticides trade and pesticides indicators 1990-2019 (FAOSTAT) and Greenhouse gas emissions from agrifood systems. Global, regional and country trends, 2000–2020 (FAO, n.d.). In 2021 the GSP published The Global Assessment of Soil Pollution (FAO and UNEP, 2021).

In late 2021, FAO released a report assessing the use of plastics in agriculture (FAO, 2021). The report calculated that, in 2019, agricultural value chains used 12.5 million tonnes of plastic products in plant and animal production and 37.3 million tonnes in food packaging. Consequently and in response to the recommendations of the 28th Session of the Committee on Agriculture (COAG 28) in 2022, FAO carried out inclusive and geographically representative consultations with Members and stakeholders towards the development of a Voluntary Code of Conduct on the Sustainable Use and Management of Plastics in Agriculture, which was submitted for consideration to COAG 29 in October 2024. The Committee welcomed the work of FAO on this area, recommended the further development of the document for endorsement by FAO Council, and invited FAO to technically support Members on the sustainable use of plastics in agriculture.

FAO participates as an Observer to the meetings of the Intergovernmental Negotiating Committee (INC) to develop an international legally binding instrument on plastic pollution, including in the marine environment. FAO participation aims to ensure the new instrument balances benefits and trade-offs and sustainability aspects of plastics used in the food and agriculture sector and reflect upon perspectives of relevant stakeholders, including smallholder farmers.

Finally, FAO is executing the project "Strengthening investment for adoption of alternatives and sustainable management of agrochemicals and agriplastics in Africa and Latin America through pilots in Kenya and Uruguay" as part of the Financing Agrochemical Reduction and Management (FARM), funded by the Global Environment Facility (GEF). The project aims at reducing the use of harmful agrochemicals and plastics in the agricultural sector and promoting sustainable alternative products and practices by establishing a regulatory environment and catalyzing investments in Kenya and Uruguay.

International Labour Organization

Identified impact on the different dimensions of pollution

AIR	INDIRECT	WATER	NO IMPACT	SOIL	NO IMPACT	MARINE	&	NO IMPACT	CHEMICALS &	INDIRECT
AIR	IMPACT	WAIEK	IDENTIFIED	SOIL	IDENTIFIED	COASTAL		IDENTIFIED	WASTE	IMPACT

The International Labour Organization (ILO) is the only tripartite UN agency. Since 1919, the ILO brings together governments, employers and workers of 187 member States, to set international labour standards, develop policies and devise programmes which promote decent work for all women and men. The unique tripartite structure of the ILO gives an equal voice to workers, employers and governments to ensure that the views of social partners [that is, employers' and workers' organizations] are closely reflected in international labour standards and in shaping policies and programmes.

The ILO makes important efforts in research, including pollution related papers such as:

- The gendered effects of air pollution on labour supply (Montt, 2018), This paper draws on 20 years of systematic data collection on employment and air pollution to explore the link between air pollution and labour supply.
- ILO Instruments on Chemical Safety Analysis and synergies with other international frameworks on the sound management of chemicals (ILO, 2020). This comparative analysis of the ILO legal instruments on chemicals shows that the ILO instruments have a number of special characteristics that serve as key ILO contributions to the current global strategy for eliminating chemical risks around the world. This applies both to the Sustainable Development Goals (SDGs) and to the Strategic Approach to International Chemicals Management (SAICM)
- Jobs in a net-zero emissions future in Latin America and the Caribbean (Saget, Vogt-Schilb, & Luu, 2020).

Pollution-related conventions and recommendations:

- Convention N 174, on the Prevention of Major Industrial Accidents Convention states in its article 4.1 that "1. In the light of national laws and regulations, conditions and practices, and in consultation with the most representative organizations of employers and workers and with other interested parties who may be affected, each Member shall formulate, implement and periodically review a coherent national policy concerning the protection of workers, the public and the environment against the risk of major accidents."
- The Chemicals Convention, 1990 (No.170), provides for a comprehensive national framework for the safe use of chemicals at work, including the formulation, implementation and periodic review of a coherent national policy.
- The Chemicals Recommendation No.177 provides guidance on the implementation of the
 provisions of Convention No.170 and proposes a number of more advanced measures which go
 beyond the obligations of the Convention. The Recommendation contains inter alia detailed
 provisions on the classification, labelling and marking of chemicals and the preparation of chemical
 SDS. It also lists additional information on the responsibilities of employers and on the rights of
 workers.
- Major Industrial Accidents Convention, 1993 (No. 174), calls for members to formulate, implement and periodically review a national policy on the protection of workers, the public and the

- environment from major accidents. The policy shall be implemented through preventative and protective measures and shall, where practicable, promote the best available technologies.
- Major Industrial Accidents Recommendation, 1993 (No. 181) provides guidance on the implementation of some of the provisions of Convention No.174 and proposes more advanced measures which go beyond the obligations in the Convention.
- Working Environment (Air Pollution, Noise and Vibration) Convention, 1977 (No. 148) applies to all branches of economic activity (Art. 1). It covers the contamination of air by all harmful or dangerous substances, including chemicals (Art. 3).
- Working Environment (Air Pollution, Noise and Vibration) Recommendation, 1977 (No. 156) provides guidance on the implementation of some of the provisions of Convention No.148 and proposes more advanced measures which go beyond the obligations contained in the Convention.
- Asbestos Convention, 1986 (No. 162)
- Benzene Convention, 1971 (No. 136)
- Safety and Health in Agriculture Convention, 2001 (No. 184), s so far only received eighteen ratifications, of which the overwhelming majority are from Europe and Central Asia (10)
- ILO codes of practice on shipbuilding and shipbreaking
- ILO Guidelines for a just transition towards environmentally sustainable economies and societies for all.

ILO deals with waste management, e-waste management and the sound management of chemicals. The organization works with UN agencies such as IMO, ITC, FAO, UNIDO, UNDP, UNEP, and intergovernmental agencies on waste management.

Additionally, ILO's green jobs programme promotes the greening of enterprises, workplace practices and the labour market as a whole. These efforts create decent employment opportunities, enhance resource efficiency and build low-carbon sustainable societies.

World Food Programme

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER NO IMPACT IDENTIFIED SOIL NO MARINE & NO IMPACT CHEMICALS & INDIRECT IMPACT COASTAL WASTE

The World Food Programme (WFP) is the world's largest humanitarian organization saving lives in emergencies and using food assistance to build a pathway to peace, stability and prosperity, for people recovering from conflict, disasters and the impact of climate change.

WFP aims to ensure that packaging used for food products maintains food safety and quality when supplied and used as part of humanitarian assistance. As such, WFP looks at the sourcing of the material for packaging food (size, fitness, prevention from contamination et cetera) with the objective to optimize and use eco-friendly packaging. The organization works directly with food manufacturers, but not with packaging suppliers. The WFP Environmental Unit works on managing solid waste as well as packaging waste that the organization produces, aiming to ensure that packaging waste is collected and managed as part of its operations.

The StopTheWasteCampaign (FAO, n.d.) aims to fight hunger by raising awareness on food waste and its impact.

The WFP also works to make their own actions pollution free, implementing measures within the design and implementation of its programmes, for example (WFP, n.d.):

- In 2020, WFP provided 1.2 million people with innovative ways to reduce the potential health impacts of air pollution caused by cooking.
- To reduce emissions, it shifted to smaller vehicles with 30 percent less fuel consumption rates, providing nearly 5,000 UN drivers with eco-driving training and working to right size (aligning the size to our operational requirement for efficiency and effectiveness) WFP's passenger fleet. In 2018 WFP adopted award winning all-terrain amphibious vehicles to transport 403 metric tons of food and supplies in

- Sudan (that would have otherwise been airdropped). This activity alone is estimated to have resulted in 276 tons of CO2 emission savings.
- WFP Engineers are present throughout our global operations and, whenever possible, propose costeffective reductions in greenhouse gas.

Business, Trade and Life-cycle

Inland Transport Committee of the United Nations Economic Commission for Europe Identified impact on the different dimensions of pollution

AID	DIRECT	\A/ATED	INDIRECT	COII	INDIRECT	MARINE &	NO IMPACT	CHEMICALS &	INDIRECT
AIK	IMPACT	WATER	IMPACT	SOIL	IMPACT	COASTAL	IDENTIFIED	WASTF	IMPACT

The Inland Transport Committee of the United Nations Economic Commission for Europe (ITC)³⁸ hosts 61 legal instruments related to inland transport (road, rail, inland water).³⁹ 152 national governments are contracting parties to at least one legal instrument. At tis 86th session in February 2024, ITC has adopted an inland transport decarbonization strategy including a global aspirational goal for inland transport of net-zero carbon emissions by 2050.⁴⁰

One legal instrument specifically covers pollution from road vehicles, the Working Party on Pollution and Energy, hosted by The World Forum For Harmonization of Vehicle Regulations (WP.29/GRPE).

WP.29/GRPE covers several aspects of vehicle pollution, to improve air quality, climate change, soil and water, though regulating vehicle emissions on three core areas:

- Tailpipe emissions
- Non-exhaust emissions (particulate emissions from brakes and tyres)
- Lifecycle analysis and cradle to grave carbon footprint

WP.29/GRPE produces regulatory texts that include globally harmonized procedures and methodologies to measure pollution from road vehicles; tailpipe regulations include not-to-exceed limits beyond which vehicles can not be placed on the market.

International Civil Aviation Organization

Identified impact on the different dimensions of pollution

AIR	DIRECT	WATER	NO IMPACT	SOIL	NO IMPACT	MARINE &	NO IMPACT	CHEMICALS &	INDIRECT
AIN	IMPACT	WAILK	IDENTIFIED	JUIL	IDENTIFIED	COASTAL	IDENTIFIED	WASTE	IMPACT

The International Civil Aviation Organization (ICAO) is directed by 193 national governments to support their diplomacy and cooperation in air transport as signatory states to the Chicago Convention (1944). Its core function is to maintain an administrative and expert bureaucracy (the ICAO Secretariat) supporting these diplomatic interactions, and to research new air transport policy and standardization innovations.

³⁸ https://unece.org/transport/inland-transport-committee

³⁹ See https://unece.org/media/news/391376.

⁴⁰ https://unece.org/transport/documents/2024/02/draft-inland-transport-committee-strategy-reducing-greenhouse-gas

ICAO has five strategic objectives, one being Environmental Protection (ICAO, n.d.). With the implementation of this strategic objective, ICAO serves as a multilateral platform for cooperation in minimizing the adverse environmental effects of civil aviation activities.

ICAO's leadership in all aviation-related environmental activities is consistent with UN system environmental protection policies and practices and focuses on three core areas:

- Climate change and aviation emissions
- Aircraft noise
- Local air quality

ICAO Member States are pursuing these objectives through ICAO primarily via their development of new global aviation standards. They have also agreed to aspirational goals for international aviation, and have prioritized ICAO's Environmental Protection resources on:

- Airframe, propulsion, and other aeronautical and technological innovations
- Optimizing flight procedures to reduce fuel burn
- Increasing the production and deployment of sustainable aviation fuels and clean energy
- Implementing the Carbon Offsetting Reduction Scheme for International Aviation (CORSIA).

The 41st Session of the ICAO Assembly held from 27 September to 7 October 2022 notably reached a historic agreement on a global aspirational goal for international aviation of "net-zero carbon emissions by 2050" in support of the Paris Agreement's temperature goal.

International Telecommunications Union

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER IDENTIFIED SOIL NO MARINE & NO IMPACT IDENTIFIED SOIL IMPACT COASTAL CHEMICALS & INDIRECT IMPACT IDENTIFIED WASTE

The International Telecommunications Union (ITU) is the United Nations specialized agency for information and communication technologies. Founded in 1865 to facilitate international connectivity in communications networks, ITU allocates global radio spectrum and satellite orbits, develop the technical standards that ensure networks and technologies seamlessly interconnect, and strive to improve access to ICTs to underserved communities worldwide.

One of ITU's key areas of action is Environment and Climate Change. Activities within this area include:

- Helping use digital technologies for monitoring, mitigating and adapting to climate change (ITU, n.d.). ITU-T's Study Group 5 works across the ICT sector, helping it cut its CO2 emissions. Its workk helps measure the carbon footprint of ICTs, to facilitate measurement of the impact of ICTs on emissions and support meaningful reporting and comparisons. ITU-T Study Group 5 also develops standards to provide opportunities for digital technologies in mitigating as well as adapting to the effects of climate change and assisting the transition towards a circular economy.
- Protecting human health and the environment from e-waste (ITU, n.d.). It focusses on a number of priorities
 in the area of e-waste, from conducting life-cycle analysis of products and processes, helping shift current
 economic models to a green and circular economy for ICT equipment, supporting policy and regulatory
 development, producing standards, improving and collecting worldwide e-waste data and helping raise
 awareness, globally, in order to make encourage accountability.
- Facilitating digital solutions for energy efficiency by driving down emissions and reducing carbon footprint.
 ITU standards and Supplements are helping ICT companies, including operators of mobile networks, fixed networks, data centres, and ICT manufacturers, reduce their GHG emissions at the rate needed to meet their targets (ITU, n.d.).

Growing its effort to greening ITU. ITU conducts a yearly greenhouse gas inventory and has been climate
neutral in its operations since 2015. Also, through the ITU Environmental Sustainability Statement (ITU,
2020) in 2020, ITU adopted a series of guiding principles to step-up and act on internal sustainability
ambitions.

International Trade Centre

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER IMPACT SOIL NO MARINE & INDIRECT IMPACT CHEMICALS & INDIRECT IMPACT WASTE

The International Trade Centre (ITC) works with Small- and Medium-sized Enterprises (SMEs) on the international value chain and sustainability, addressing trade-related issues such as climate change, environment, e-commerce and gender. The International Trade Centre (ITC) helps countries adopt and strengthen their trade and investment legal and regulatory frameworks to best integrate green growth and harness trade as a way towards a sustainable and inclusive economy.

ITC provides small businesses with capacity building on resource use and circular production practices and links them to those in business ecosystems to innovate, access technologies, services and markets. Circularity offers an opportunity to transform economies so as to reduce waste, circulate resources and regenerate nature. A circular economy can help reduce pollution, emissions and waste as well as increase jobs and prosperity. In this line of work the ITC published the report Empowering Green Recovery in 2021 (ITC, n.d.) and The State of Sustainable Markets (ITC, n.d.). It is also leading the Green2Compete strategy aiming to place environmental sustainability at the heart of MSME competitiveness. Its goal is to enable MSMEs from developing countries to become more competitive through green production and trade.

The ITC Sustainability Gateway aims to ensure that MSMEs benefit from trade by working with all stakeholders to embed sustainability and inclusiveness in value chains. The Trade for Sustainable Development programme (T4SD) is ITC's main sustainability-related trade initiative associated to marine litter and microplastics, mainly aimed at enterprises including farmers and institutions. Most of the ITC's work focuses on the agricultural and textile sectors. ITC works with several cooperatives that are in contact with thousands of producers upstream in different sectors in the Caribbean, West Africa and Asia. ITC has collaborated with ILO and UNEP on a project proposal on waste management. The agency works on capacity building with WTO and is part of the UN E-waste Coalition where it collaborates with inter alia the BRS.

ITC addresses marine litter and microplastics through projects with developed methodologies on waste management, implementing resource efficiency strategies, and strengthening climate resilience of SMEs in different sectors of relevance to plastics. ITC has developed methodologies for resource efficiency that concern chemical and other types of waste at the source.

United Nations Conference on Trade and Development

Identified impact on the different dimensions of pollution

AIR NO IMPACT IDENTIFIED WATER INDIRECT SOIL NO MARINE & INDIRECT CHEMICALS & INDIRECT IMPACT COASTAL WASTE

The United Nations Conference on Trade and Development (UNCTAD) supports developing countries to access the benefits of a globalized economy more fairly and effectively by providing analysis, consensus-building, and technical assistance. UNCTAD technical cooperation activities are a significant element in achieving the objectives outlined in the Nairobi Maafikiano adopted by UNCTAD 14, held in Nairobi (Kenya) in July 2016. The Nairobi Maafikiano establishes that the important role of UNCTAD will be strengthened as the focal point in the United Nations for the integrated treatment of trade and development and interrelated issues in the areas of finance, technology, investment and sustainable development (TD/519/Add.2).

UNCTAD obtained a mandate on oceans and seas at the UNCTAD 14 Conference: "In cooperation with other relevant international organizations and other stakeholders, support developing countries, in particular small island developing States, in the advancement of Sustainable Development Goal 14 in the design and implementation of regional and/or national economic development strategies for the conservation and sustainable use of oceans and their resources, seeking to promote sustainable trade in ocean-based sectors (...)" (UN, 2016). In 2021, the Bridgetown Covenant further stressed the importance of ensuring "conservation and sustainable use of oceans, seas and marine resources, including addressing the discharge of plastic litter and other waste in oceans and significantly reducing marine pollution of all kinds" (TD/541/Add.2).

UNCTAD works on the circular economy by encouraging discussions and activities seeking to bring value out of waste streams, by encouraging discussions around collaborative economy sectors, by the examination of innovate business models and encouragement of consumer awareness and behavioural shifts. In partnership with other international organizations, UNCTAD's work on the circular economy at the national and multilateral level brings this important theme to the service of the international community. There is a special focus on plastics and marine litter, especially through the angle of material substitutes which can perform similar roles of plastic in global value chains, while at the same time reducing environmental footprints, fostering innovation and creating jobs where they are most needed. Additionally, in cooperation with UNECA, UNCTAD is assisting countries in Africa to identify and support green products and their related value chains in order to stimulate growth, development and pollution reduction.

UNCTAD's two main marine litter-related activities are the Sustainable Manufacturing and Environmental Pollution (SMEP) programme (Sustainable Manufacturing and Environmental Pollution Programme, 2019) and the Ocean Forum (Ocean's Forum, 2022). SMEP includes components on improving sustainable production, including project support and analysis on life-cycle impacts of exports. UNCTAD SMEP and Oceans programmes also develop research, data & dashboard tools, in-country project support and dialogues on trade instruments to prevent plastic litter and manufacturing-related pollution. UNCTAD also engages in consensus building by communicating the interests of developing countries in international fora. Within the workstream on improving sustainable production, UNCTAD commissioned three recent studies, focusing on the mapping of manufacturing pollution in Africa and Asia, looking at the connections between production and exports from pollution life-cycle perspective. It has also prepared a specific study looking at promising material substitutes which can replace single-use plastics and that can at the same time assist in addressing marine plastic pollution, as well as a variety of national case-studies in Africa and South Asia and (SMEP, 2020) (UNCTAD, 2021) (UNCTAD, 2021).

The issue of marine litter has also been raised at the 4th United Nations Ocean Forum, where specific oceans economy and trade related recommendations for the multilateral trade system and the 2022 Oceans Conference were made to address this challenge (Ocean's Forum, 2022). An Inter-Agency Plan of Action on food production between UNCTAD, FAO and UNEP include a plastics and circular economy component. UNCTAD partners with agencies involved in the Ocean Forum including FAO, UNECE and UNEP, and with DOALOS on developing Oceans Economy and Trade Strategies. The ambition is to raise the issue of marine litter and plastics at the national level to sensitize trade negotiators to UNCTAD's findings on plastics. More recently UNCTAD and WTO organised a special Workshop on sustainable and effective substitutes and alternatives for plastics to scope, stocktake, and to enable a trade facilitation exercise of potential plastics substitutes and alternatives, providing a strong technical base for intensified discussions on sustainable, tradable, and effective substitutes and alternatives for plastics. The results seek to support the UNEA process on plastic pollution and the WTO's Informal Plastic Dialogue (UNCTAD, 2022).

United Nations Human Settlements Programme

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER INDIRECT SOIL NO MARINE & NO IMPACT CHEMICALS & INDIRECT IMPACT COASTAL IDENTIFIED WASTE

United Nations Human Settlements Programme (UN-HABITAT) is mandated by the UN General Assembly to promote socially and environmentally sustainable towns and cities. UN-Habitat collaborates with partners to build inclusive, safe, resilient and sustainable cities and communities. UN-Habitat promotes urbanization as a positive transformative force for people and communities, reducing inequality, discrimination and poverty.

UN Habitat coordinates five flagship programmes, including the Sustainable Development Goals Cities that is currently developing baseline information. Through an inclusive strategic planning process, the analysis of gaps will inform interventions needed to reach targets. These can be categorised into four baskets.

- Basket 1: Enablers; e.g., plans, governance set-up, regulations, municipal financing instruments, land management systems.
- Basket 2: Capacity gaps to be addressed; e.g., revenue collection and public financial management, solid waste management, land management, urban planning.
- Basket 3: Public Infrastructure; e.g., basic services water, electricity, lighting, solid waste management, public transportation, public space, affordable housing, education and health facilities.
- Basket 4: Economic initiatives; e.g., tourism investments, business districts, industrial parks.

UN Habitat focuses greatly on slum upgrading, solid waste management and urban energy efficiency. It launched "Waste Wise Cities", to address the increasing global waste management crisis. More than two hundred cities joined the campaign. It also works with UNEP to establish monitoring methodologies for waste-related SDG targets and is the custodian agency for SDG indicator 11.6.1, which measures the proportion of municipal solid waste collected and managed in controlled facilities in cities. UN-Habitat collaborates with various partners in the waste sector and on marine litter including UNEP, UNESCAP and the Climate & Clean Air Coalition (CCAC) waste initiative.

UN Habitat also develops guidelines that promote reducing emissions from urban construction and planning. Examples are Build Green. 100 Ways to Save Money (UN Habitat, 2016) and Sustainable Urban Energy Planning (UN Habitat and ICLEI, 2009).

In 2021 UN Habitat presented the New Urban Agenda that provides UN-Habitat with a toolbox to support countries in making progress towards the attainment and localization of the 2030 Agenda for Sustainable Development. The agenda has four drivers, the third being "Decoupling urbanization from environmental pollution and strengthening resilience and adaptive capacity of communities".

United Nations Industrial Development Organization

Identified impact on the different dimensions of pollution

AIR DIRECT WATER DIRECT SOIL DIRECT MARINE & DIRECT CHEMICALS & DIRECT COASTAL DIRECT COASTAL DIRECT WASTE DIRECT COASTAL DIRE

The United Nations Industrial Development Organization (UNIDO) has a direct mandate to promote and accelerate Inclusive and Sustainable Industrial Development, primarily through supporting SDG 9 on industry, innovation and infrastructure. In addition, the Organization contributes to progress on various SDGs, including responsible consumption and production (SDG 12) and climate action (SDG 13) among others. UNIDO works with governments and industries to reduce hunger, stop climate breakdown, and support sustainable supply chains. From capacity building to technology transfer, the Organization helps countries to adopt innovative solutions for tackling pollution across the world. (UNIDO, n.d.):

- Circular economy: UNIDO actively promotes circular economy approaches in a wide range of projects and programmes as part of a viable solution to some of the most pressing global challenges, including the climate crisis, biodiversity loss, ocean pollution, and resource and ecosystem degradation. From extending product lifetimes, to ensuring the safe recycling of goods through the substitution of toxic chemicals, there are many examples of circular economy practices in UNIDO's work on Chemicals and Waste. At the request of the General Conference, in its resolution GC.18/Res.7, UNIDO brought together experts from a wide range of Member States to exchange best practices and emerging innovations in the first round of global consultations on circular economy held virtually from 10 to 12 May 2021. These consultations seek to support the promotion and adoption of circular economy principles and practices by industries of Member States.
- Clean energy access for industrial use: UNIDO supports sustainable low-carbon development by promoting the Renewable Energies Strategy, the Industrial Deep De-carbonization Initiative and the Global Programme

- for Green Hydrogen Industry. The Organization pursues a multi-dimensional approach to promote productive uses of renewable energy in developing countries, including technology demonstration, policy support, and capacity building.
- Implementation of multilateral environmental agreements: UNIDO supports countries in meeting their
 obligations under the major pollution-related multilateral environmental agreements (MEAs), such as the
 Montreal Protocol, the Stockholm Convention on Persistent Organic Pollutants (POPs), the Minamata
 Convention on Mercury, and the United Nations Framework Convention on Climate Change (UNFCCC).
 Interventions include addressing e-waste management in the Philippines and across Latin America and
 Caribbean, tackling POPs in the textiles supply chain in Africa, and reducing mercury use in the artisanal and
 small-scale gold mining sector in Mongolia.
- Resource-efficient and low-carbon industrial production: UNIDO enables countries to reduce their level of
 consumption of natural resources, greenhouse gas and other emissions and industrial wastes in industrial
 processes. UNIDO addresses various aspects of pollution:
- Marine plastic litter. UNIDO addresses issues related to the reduction of land-based sources of plastic litter.
 This work includes publishing guidelines and other technical documents, including "Addressing the
 challenge of Marine Plastic Litter using Circular Economy methods", partnering for Africa's plastic pollution
 challenge, studies on plastic value chains in Egypt, Nigeria, and Kenya, and a report on sustainable
 alternative materials, innovative packaging and recycling technology. There are also projects to promote
 circular economy practices in industry to reduce plastics leaking to the environment.
- Resource Efficient and Cleaner Production (RECP). This UNEP-UNIDO initiative addresses the three
 sustainability dimensions individually and synergistically: a) heightened economic performance through
 improved productive use of resources, b) environmental protection by conserving resources and minimizing
 industry's impact on the natural environment, and c) social enhancement by providing jobs and protecting
 the wellbeing of workers and local communities.
- Transfer of Environmentally Sound Technologies (TEST) is an integrated approach that provides industries and small and medium enterprises (SMEs) with a combined set of tools to initiate a cycle of continuous improvements within their business operations to manage the transition towards a sustainable production.
- Health and Pollution Action Plans (HPAP) developed with assistance from UNIDO in Colombia, Ghana, the
 Kyrgyz Republic, the Philippines and Tanzania brought high-level representatives and experts from
 Ministries of Environment, Health, Industry, Labour, Economy and Planning, and Environmental Protection
 Agencies together with UNIDO, WHO, UNICEF, World Bank Group, Asian Development Bank, National
 Cleaner Production Centres, private sector and NGOs.
- UNIDO's Global Chemical Leasing Programme promotes a performance-based business model that marks a paradigm shift from increasing the sales volume of chemicals towards a value-added approach.

United Nations Office for Project Services

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER DIRECT SOIL NO MARINE & DIRECT DIRECT IMPACT COASTAL OF WASTE IMPACT WASTE

The United Nations Office for Project Services (UNOPS) works to help people build better lives and countries achieve peace and sustainable development. UNOPS has a Health, Safety, Social and Environmental (HSSE) Policy in place, and all programmes, projects and facilities globally are obliged to comply with this policy.

In addition to environmental policies and guidance set at headquarters, some country offices have developed standard operating procedures at the country level to expand and enhance sustainable practices. Measures including prevention of waste generation, the use of alternatives to plastics and inclusive green jobs generation. These are mainstreamed in all activities of UNOPS, along with guidance on minimum waste management requirements in line with international standards and best practices in all projects.

UNOPS also promotes green jobs generation through a shift in recycling activities and collaborates with UN entities on environmental sustainability management. UNOPS addresses the topic of plastic pollution in their in-house management and their programmes and projects by applying best practices and innovative solutions of integrated

solid waste management. The in-house environmental management system encourages the minimization of single-used plastics, while waste management is applied in projects implemented/administered by UNOPS. The entity contributes to the reduction of plastic and other waste generation through its corporate principle to have a limited environmental footprint.

United Nations World Tourism Organization

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER IMPACT SOIL NO MARINE & INDIRECT CHEMICALS & INDIRECT IMPACT CHEMICALS & INDIRECT COASTAL IMPACT WASTE

The World Tourism Organization (UNWTO) is the United Nations agency responsible for the promotion of responsible, sustainable and universally accessible tourism. Among its priorities it includes supporting sustainable tourism policies and practices: policies which make optimal use of environmental resources, respect the sociocultural authenticity of host communities and provide socio-economic benefits for all. Examples of pollution-related activities are:

- Global Tourism Plastics Initiative. The Initiative, launched in January 2020, is led by UNWTO and UNEP in collaboration with the Ellen MacArthur Foundation. It provides a global framework for action structured around a common vision and commitments to address the root causes of plastic pollution and drive the tourism sector towards a circular economy of plastics. The initiative supports tourism stakeholders globally to eliminate problematic and unnecessary plastics, integrate reuse models and collaborate across the value chain (with suppliers and waste managers) to increase recycling content and recycling rates. The initiative is aligned with the New Plastics Economy Global Commitment and supports building readiness of tourism stakeholders vis à vis the upcoming International Treaty on plastic Pollution. As of December 2022, over 100 businesses, associations and destinations (governments) have become signatories (UNWTO, n.d.).
- Glasgow Declaration on Climate Action in Tourism: The Glasgow Declaration was launched at UNFCCC COP26 in November 2021. In support of the global goal to reach net zero emissions by 2050, it defines a consistent sector-wide approach to accelerate climate action in tourism and enhance the contribution of tourism to the implementation of the Paris Agreement. The Glasgow Declaration focuses on climate change mitigation, but it also recognizes the need to adapt to changing climatic conditions and the opportunities that integrated mitigation-adaptation approaches can deliver. The initiative is mobilizing commitments to develop climate action plans aligned with five pathways: measure, decarbonize, regenerate, collaborate and finance. As of December 20222, over 700 tourism destinations (governments, including 11 national level signatories), business and associations have become signatories.
- Global Roadmap on Food Waste Reduction in Tourism: The Roadmap aims to enhance the contribution of the tourism sector to a more sustainable food system, as well as to address food management as an entry point for circular approaches in the tourism sector which can enhance linkages with local communities, create added value for guests and curb CO2 emissions and pollution from food waste. The Roadmap provides a consistent framework for tourism stakeholders to embrace the sustainable management of food (including procurement, preparation of menus, consumption and disposal), with a special emphasis on addressing food waste through prevention, redistribution and diversion from landfill.
- These three work streams are implemented under the umbrella of the One Planet Sustainable Tourism Programme where UNWTO collaborates closely with UNEP to accelerate sustainable consumption and production in tourism as a strategy to address the challenges of climate change, biodiversity loss and pollution. The One Planet Sustainable Tourism Programme is one out of the six programmes in the One Planet network and supports the implementation of the Global Strategy on Sustainable Consumption and Production 2023-2030 which identified tourism as a high impact sector.
- Hotel Energy Solutions (HES) is a UNWTO-initiated project in collaboration with a team of United Nations and EU leading agencies in Tourism and Energy. The project delivers information, technical support & training to help Small and Medium Enterprises (SMEs) in the tourism and accommodation sector to increase their energy efficiency and renewable energy usage and therefore reduce CO2 emissions (UNWTO, n.d.).
- UNWTO INTERNATIONAL NETWORK OF SUSTAINABLE TOURISM OBSERVATORIES (INSTO) is a network of tourism observatories monitoring the economic, environmental and social impact of tourism at the

destination level. To this day 33 observatories have joined. All members must monitor 9 mandatory issues which include solid waste management, water management and. sewage management.

Universal Postal Union

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER IDENTIFIED SOIL NO MARINE & NO IMPACT IDENTIFIED COASTAL CO

Universal Postal Union (UPU) is the primary forum for cooperation between postal sector players and helps to ensure a truly universal network of up-to-date products and services. With more than 1 million vehicles and some 800,000 buildings combined, the postal operators of UPU member countries have a significant environmental impact and many postal operators have come far in implementing sustainable practices; including several aiming to tackle pollution (UPU, n.d.).

- OSCAR the Online Solution for Carbon Analysis and Reporting is a tool provided by the UPU to measure and analyse the postal sector's carbon footprint.
- Postal organizations around the world are transitioning their fleets to alternative vehicles and generating their own renewable energy
- In addition, the UPU conducts a range of activities that seek to build capacity and share best practices on climate change mitigation and natural resource management and works together with other organizations to shape the global sustainability agenda.
- The UPU provides Posts with tools to encourage more responsible consumption and production, in line with Sustainable Development Goal 12, supporting them to offer customers more sustainable delivery options, and to rethink how goods that enter the supply chain are packaged, reused and recycled.

World Intellectual Property Organization

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER INDIRECT SOIL NO MARINE & INDIRECT IMPACT COASTAL IMPACT WASTE

World Intellectual Property Organization (WIPO) is the global forum for intellectual property (IP) services, policy, information and cooperation. Its mission is to lead the development of a balanced and effective international IP system that enables innovation and creativity for the benefit of all.

WIPO GREEN is WIPO's online platform for technology exchange. It supports global efforts to address climate change by connecting providers and seekers of environmentally friendly technologies. Through its database, network and acceleration projects, it brings together key players to catalyse green technology innovation and diffusion (WIPO, n.d.).

World Trade Organization

Identified impact on the different dimensions of pollution

AIR NO IMPACT UDENTIFIED WATER INDIRECT SOIL NO MARINE & INDIRECT UDENTIFIED COASTAL CHEMICALS & INDIRECT UMPACT UDENTIFIED COASTAL WASTE

The World Trade Organization (WTO) ensures that trade flows as smoothly, predictably and freely as possible, helping countries to achieve sustainable development. The Marrakesh Agreement establishing the WTO, envisages a global trading system that protects and preserves the environment in accordance with sustainable development.

In 2020 fifty WTO members announced o their intention to intensify work on trade and environmental sustainability at the WTO by organizing the Trade and Environmental Sustainability Structured Discussions (TESSD) (Ministerial Statement, 2021). During the TESSD meetings held so far, participants have discussed topics such as sustainable supply chains, environmental goods and services, circular economy, green aid for trade, fossil fuel subsidy reform, and sustainable food and agriculture (WTO, n.d.).

There is a growing interest by WTO members to discuss the trade-related aspects of environmental sustainability and related issues such as how trade policy can help address plastic pollution and establish a global circular economy. A group of WTO members launched in November 2020 an initiative to explore how the WTO could contribute to efforts to reduce plastics pollution and promote the transition to more environmentally sustainable trade in plastics. The Informal Dialogue on Plastics Pollution and Environmentally Sustainable Plastics Trade is open to all WTO members and seeks to complement discussions in the Committee on Trade and Environment (CTE) and other fora.

The WTO's report Mainstreaming trade to attain the Sustainable Development Goals (WTO, 2018) included a chapter on Measuring progress towards achieving the trade-related SDG targets in the environmental sphere but the focus was on fisheries and life under water rather than pollution.

Health and Sanitation

United Nations Children's Fund

Identified impact on the different dimensions of pollution

AIR DIRECT WATER DIRECT SOIL DIRECT MARINE & NO IMPACT COASTAL DIRECT IMPACT COASTAL DIRECT D

The United Nations Children's Fund (UNICEF) works in the world's toughest places to reach the most disadvantaged children and adolescents – and to protect the rights of every child, everywhere. The planetary crisis of climate change, environmental pollution and biodiversity loss has created incalculable losses across the world – but none greater than to its children.

Children are uniquely vulnerable to the impact of air, water and land pollution, especially as it relates to chemicals and waste. Given children's developing physiology, immune and detoxification mechanisms, the impact of exposure to pollutants may be lifelong and irreversible.

UNICEF's Sustainability and Climate Change Action Plan (SCAP) marks a transformation of how UNICEF works. The focus of its strategies, operations and partnerships is now to help governments and communities build low-carbon, resilient essential services for children; equip young people to be champions for the planet; and accelerate a just transition to a nature-positive and carbon-neutral world through the influence of our advocacy, operations and supply chain.

The following SCAP priorities are relevant to multilateral efforts on pollution:

- 1. Healthy Environments for Healthy Children
- 2. Climate-resilient Water, Sanitation and Hygiene
- 3. Empowering every child with the developmental opportunities, education and skills to be a champion for the environment.

UNICEF's "Healthy Environments for Healthy Children" (HEHC) global programme framework identifies environmental hazards that impact on children's health such as toxic metals, toxic chemicals, hazardous waste, air pollution and other environmental risks. UNICEF country programmes promote the centrality of children's environmental health enabling jointly-led multisectoral action led by Ministries of Health and Environment. UNICEF supports evidence generation, measurement of environmental exposures, capacity development of health and environment sectors, regulatory action and industry engagement. Amongst others, the HEHC programme focuses on supporting countries take action on air pollution and lead poisoning. UNICEF, in collaboration with UNEP and the World Bank, have founded the Children's Environmental Health Collaborative. UNICEF is also the secretariat for the newly-established Partnership for a Lead-Free Future launched on 23 September 2024.

_

⁴¹ Mapping efforts survey.

Despite progress, in 2022 almost half of the world's population, 3.5 billion people, used sanitation services that leave human waste untreated, threatening human and environmental health. An estimated 419 million people practised open defecation, with rural dwellers, indigenous people and poor people much more likely to be without any sanitation services at all (World Health Organization and the United Nation Children's Fund, 2023). UNICEF is supporting governments to accelerate progress on safely managed sanitation towards maximizing the public health and environmental outcomes of sanitation interventions using the UNICEF's Game Plan to Reach Safely Managed sanitation which was launched in 2022. In addition, making the sanitation infrastructure and services climate resilient are critical to ensure sustainability, minimize environmental and water pollution from damaged infrastructure. UNICEF is leading a coalition of more than 30 partners to advocate and promote climate resilient sanitation globally.

Aside from WASH communities, UNICEF also works on WASH in Institutions as part of the overall efforts of promoting healthy and conducive environments in Health Care Facilities and schools. Indiscriminate disposal of health care wastes contributes to environmental pollution and is of major concern to UNICEF. UNICEF works with WHO on accelerating investments in WASH in Health Care Facilities (HCF), of which sanitation and health care waste management are vital to achieving the most basic services in HCF, all of which is fundamental to achievement of the Astana Deceleration. In schools to prevent open defecation and environmental pollution , UNICEF is also supporting over 60 countries with WASH in Schools programs that promote meeting basic sanitation and menstrual hygiene services in schools.

In addition to advocating for children, UNICEF empowers them with developmental opportunities, education, and skills to become environmental champions. This includes supporting youth participation in climate processes, providing climate and environmental education, and equipping them with green skills. For instance, UNICEF mobilized over 700 youth in Serbia to contribute to the Serbia Youth Declaration on Air Quality and created platforms like the Youth for Clean Air Network to facilitate communication between youth and policymakers. Through initiatives like The Green Rising, which aims to mobilize 10 million young people by 2025, UNICEF equips children with the skills needed for change. Programs such as Mongolia's Air Pollution Youth Mappers and Burkina Faso's solar energy training center provide youth with technical and advocacy skills.

UNICEF is also strongly committed to reducing its environmental impact including pollution in-line with the Procedure on Eco-Efficiency & Inclusive Access in UNICEF Premises and Operations⁴². It is part of the Greening the Blue Initiative and is currently working to accelerate the implementation of environmental and social standards across the organization. UNICEF has been carbon-neutral since 2015 by offsetting unavoidable emissions, and are driving up ambition in reducing emissions, water-use, and waste generation.

United Nations Office on Drugs and Crime

Identified impact on the different dimensions of pollution

AIR NO IMPACT WATER INDIRECT IMPACT SOIL NO MARINE & INDIRECT COASTAL SOIL IMPACT WASTE IMPACT WASTE

The United Nations Office on Drugs and Crime (UNODC) helps make the world safer from drugs, organized crime, corruption and terrorism, committed to achieving health, security and justice for all by tackling these threats and promoting peace and sustainable well-being as deterrents to them.

UNODC assists Member States in better addressing a coordinated, comprehensive response to the interrelated issues of illicit trafficking and abuse of drugs, crime prevention and criminal justice. UNODC is undertaking work of relevance to tackling pollution within its workstreams including:

The Programme by the UNODC's Laboratory and Scientific Section (LSS) on the safe handling and disposal
of chemicals, including chemical waste that is generated from drug production and is being burned or
dumped directly in the environment;

-

⁴² Mapping efforts survey.

- The Global Maritime Crime Programme (GMCP) that addresses transnational organized crime that occurs
 at sea and that supports Member States in tackling maritime environmental crime including pollution, oil
 spill and fisheries crime; and
- The UNODC-World Customs Organization (WCO) Container Control Programme (CCP) that collaborates with Member States to enhance their capacity to detect illicit goods in cargo containers at sea, land and airports, including plastic and hazardous waste; iv) the Office's Alternative Development projects support and strengthen the participation of local communities in improving water and sanitation management.
- The Unwaste project, under UNODC's Regional Programme for Southeast Asia and the Pacific and in cooperation with UNEP, that tackles trafficking in waste between the European Union and Southeast Asia by
 promoting enhanced EU-ASEAN Member States partnerships, by encouraging intra and inter-regional
 dialogues and by analysing waste flows between the regions, in support of ongoing efforts towards a
 circular economy transition.
- UNODC has developed a Legislative Guide on Waste Trafficking to support States in enacting or strengthening domestic legislation to prevent and combat waste trafficking. The Guide is a tool for Member States to amend or adopt legislation to better address the challenges posed by waste trafficking. It includes model provisions and guidance, which States can adapt to fit local conditions, constitutional principles, legal culture and structures, as well as existing enforcement arrangements. This practical tool enables countries to draw from existing international agreements and instruments whilst considering national circumstances and policies as well as the composition and structure of national sectors
- UNODC is the lead agency behind the International Classification of Crime for Statistical Purposes (ICCS), helping countries implement it through guidance and capacity-building. Based on internationally agreed concepts, definitions and principles, the ICCS provides a framework for the systematic production and comparison of statistical data across different criminal justice institutions and jurisdiction, with the objective to enhance the consistency and international comparability of crime statistics, and improve analytical capabilities at both the national and international levels. The ICCS has a classification of pollution, covering acts that cause environmental pollution or degradation and acts involving the movement or dumping of waste (Section 10 part 1)⁴³.

World Health Organization

Identified impact on the different dimensions of pollution

AIR DIRECT WATER DIRECT SOIL NO MARINE & INDIRECT CHEMICALS & INDIRECT IMPACT COASTAL WASTE

Dedicated to the well-being of all people and guided by science, the World Health Organization (WHO) leads and champions global efforts to give everyone, everywhere an equal chance to live a healthy life. In decision EB142(5) (2018), the Executive Board at its 142nd session requested the Director-General inter alia to develop a draft comprehensive global strategy on health, environment and climate change (A72/15). In consequence, WHO's activities to advance the global agenda for building healthier environments for healthier populations include:

- providing leadership on guiding important transitions such as in energy and transport, and stimulating good governance in health and environment;
- ensuring knowledge generation and dissemination for evidence-based norms and efficient solutions, steering research and monitoring change in risks to health and implementation of solutions; and
- building capacity for emergency preparedness and response in case of environment-related incidents and provide related guidance on environmental health services and occupational health and safety.

The Urban Health Initiatives is an implementation framework which aims to reduce the deaths and diseases caused by unhealthy urban environments. Moved by the Drinking-Water, Sanitation and Health from the SIXTY-FOURTH WORLD HEALTH ASSEMBLY (WHA64.24), WHO develops, updates and disseminates health-based guidance

⁴³ https://www.unodc.org/documents/data-and-analysis/statistics/crime/ICCS/ICCS_English_2016_web.pdf

documents and best practice guides, norms and standards that support standard-setting and regulations at national level, particularly for drinking-water safety, effective surveillance approaches, recreational water quality, sanitation safety, safe wastewater use, WASH in health and educational facilities, and WASH monitoring.

WHO promotes interventions and initiatives for healthy sectoral policies (including energy, transport, housing, urban development and electrification of health-care facilities), addressing key risks to health from air pollution indoors and outdoors, and contributing to achieving health co-benefits from climate change mitigation policy. Three working groups were established in this direction: Global air pollution and health - technical advisory group, Scientific advisory group on air pollution and health, SDG 11.6.2 working group.

WHO works closely with countries and partners to monitor and report on their emergency preparedness capacities for all hazards, including for chemical incidents. Surveillance of diseases of possible chemical ethology is a daily element in WHO's outbreak alert and response activities. It has also focused on environmental exposure to microplastics, with the publication of a report on microplastics in drinking water. The report provides an overview on the occurrence of microplastics in freshwater environments as well as in drinking water, the potential human health aspects of microplastics in terms of particle toxicity, chemical toxicity and biofilms, and assessed the potential risks considering exposure and toxicity.

Research and Training

International Atomic Energy Agency

Identified impact on the different dimensions of pollution

AIR DIRECT WATER INDIRECT SOIL INDIRECT MARINE & DIRECT CHEMICALS & DIRECT IMPACT COASTAL WASTE IMPACT

Many human activities release pollutants into the environment, where they become part of biological, geological and chemical cycles. The International Atomic Energy Agency (IAEA) uses nuclear science-based tools to study these processes and helps Member States to develop capacity to do such studies themselves and to deal with pollutants, radioactive waste and contaminated sites (IAEA, n.d.):

- The IAEA uses nuclear and isotopic tools to understand the world we live in and provide decision-makers with the information necessary to address modern environmental issues and adapt to future scenarios. The Agency also assists Member States in treating nuclear waste and remediating contaminated sites. The Agency elaborates guidelines and technical documents on these issues, such as Assessment of Radioactive Contamination and Effectiveness of Remedial Measures in Urban Environments (IAEA, 2022), Management of Naturally Occurring Radioactive Material (NORM) in Industry (IAEA, 2022) and Remediation Strategy and Process for Areas Affected by Past Activities or Events (IAEA, 2022).
- The Agency maintains and operates marine and terrestrial environment laboratories in Monaco and Austria
 respectively, which use nuclear and isotopic techniques to develop analytical monitoring methods, study
 pollution processes and identify pollutants' sources. These techniques are also developed further, along
 with analytical procedures and guidelines plus reference materials for quality assurance.
- Stable isotopes and nuclear techniques are used to assess freshwater resources, biological systems, atmospheric processes, marine ecosystems and resources, and to improve agricultural practices.
- The IAEA studies the natural processes that influence the pollutants' global spread and their behaviour on land and sea, to understand how they interact with climate related changes including Ocean Acidification, assess their impact on ecosystems and marine resources, and develop strategies to mitigate their effects.
- The IAEA has developed science-based tools and techniques that help decision-makers protect the marine environment and its resources.
- The IAEA plays a key role in research and development of methods, and building capacity for the monitoring of radioactive and non-radioactive contaminants and biotoxins in seafood, through for example the use of the radio-ligand receptor binding assay, an analytic procedure used for an early detection of toxins during harmful algal blooms.

- In cases of environmental radioactive contamination, the IAEA assists affected Member States in their efforts to reduce the radiological exposure to safe levels.
- The IAEA supports the development, demonstration and deployment of radiation technology to treat industrial pollutants. With its assistance, radiation technologies are used to treat nitrogen oxides (NOx) and sulphur oxides (SOx) present in flue gases (e.g., combustion exhaust gas produced at power plants), as well as water effluents, for example from the textile dye and other industries. Through a process called 'hygienization', radiation is also used to render sewage sludge fit for agricultural application. Radiation can also be used to convert contaminants of high and emerging concern, such as pharmaceuticals and hormone mimicking substances, into small innocuous molecules.
- The IAEA initiative "NUTEC Plastics", funded in particular by its Member States, is dedicated to specifically tackle the reduction of plastics pollution, and assess the impact of microplastics on the marine environment. A global marine microplastics monitoring network of laboratories is under development, through technology transfer and capacity building efforts, in view of supporting Member States in the implementation of a future UN legally binding Treaty to end Plastics pollution including in the marine environment.

United Nations Institute for Training and Research

Identified impact on the different dimensions of pollution

AIR DIRECT WATER DIRECT SOIL DIRECT MARINE & DIRECT CHEMICALS & DIRECT IMPACT COASTAL WASTE

The United Nations Institute for Training and Research (UNITAR) provides innovative learning solutions to individuals, organizations and institutions to enhance global decision-making and support country-level action for shaping a better future. In addition, UNITAR performs applied research to inform decision makers in international organisations, governments, academia, NGOs and the business sector.

UNITAR builds human capacities for green economy, climate change, chemicals and waste management and sustainable consumption and production through research and development of learning and guidance materials, statistics and policy advice, national, regional and global projects, project management and support, on-the-ground interventions, and knowledge sharing. In particular, it works in the following pollution related matters (UNITAR, n.d.):

- Mercury management, including artisanal and small-scale gold mining
- International chemicals and waste policy development
- Management of Persistent Organic Pollutants (POPs), notably polychlorinated biphenyls (PCB)
- Waste management, including plastic waste
- Production, usage and disposal of ubiquitous goods, but especially electronics, batteries, automotives etc.
- Pollutant Release and Transfer Registers (PRTRs)
- Reducing Emissions from Deforestation and Forest Degradation
- •
- Sustainable consumption and production

UNITAR also works as a Participating Organization of the IOMC, among other partnerships and collaborations.

United Nations Office for Outer Space Affairs

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER IMPACT SOIL IMPACT COASTAL CHEMICALS & NO IMPACT IMPACT COASTAL WASTE

The United Nations Office for Outer Space Affairs (UNOOSA) offers capacity building on space-based solutions for Member States, including on Earth observation, through collaboration with countries or country groups with specific

needs through long-term projects. UNOOSA helps all countries access the potential of space science and applications and integrate these tools into national policies and practices.

Projects related to pollution are mainly linked to the agency's Space4Water project. In the project *Space4Water*, UNOOSA (UNOSPA, n.d.), with support from the Prince Sultan Bin Abdulaziz International Prize for Water, provides a platform on space applications in addressing water scarcity and water quality, among other water-related issues. In the *Space4Health* project, UNOOSA works on space applications for global health including issues such as air quality and water pollution that has led to cross-sectional projects and a collaboration with WHO. UNOOSA collaborates with the Atlantic International Research Centre in Portugal, which focuses on monitoring of the Atlantic Ocean, including the problem of microplastics. UNOOSA does not work with other UN agencies on marine litter-related topics. *Space Solutions for the Pacific* is a project to support small island states in the Pacific in accessing technologies for their own priorities, such as coastal and marine management (illegal fisheries).

UNOOSA also works on light pollution. Building on the initial findings and draft recommendations from the online workshops in 2020, UNOOSA and Spain, jointly with the International Astronomical Union (IAU), organized the "Dark and Quiet Skies for Science and Society" conference from 3 to 7 October 2021The conference focused on the implementation of recommendations, including by identifying technical and political actions needed to be taken by individual stakeholders and in partnerships to achieve effective realization and satisfactory solutions for the preservation of dark and quiet skies (UN Office for Outer Space Affairs, 2022).

Space technologies can also play a key role in:

- Smart mobility, e.g., reduced fuel consumption by smarter planning and monitoring of driving behaviour;
- Smart Cities, through the application of Global Navigation Satellite Systems, Earth Observation and Satellite Telecommunications;
- Improvement of city services, such as smart waste management systems;
- Air quality monitoring; and,
- Smart Agriculture by combining Earth observation, satellite telecommunications and Global Navigation Satellite Systems.

United Nations University

Identified impact on the different dimensions of pollution

ΔIR	INDIRECT	\A/ATED	INDIRECT SOIL	INDIRECT	MARINE	&	INDIRECT	CHEMICALS &	INDIRECT	
AIK	IMPACT	WATER	IMPACT	SUIL	IMPACT	COASTAL		IMPACT	WΔSTF	IMPACT

The United Nations University (UNU)) is a global think tank and postgraduate teaching organization with the mission to contribute, through collaborative research and education, to efforts to resolve the pressing global problems of human survival, development, and welfare that are the concern of the United Nations, its Peoples, and Member States.

UNU fosters projects towards achieving SDGs related to pollution such as Responsible Production and Consumption, Clean Water and Sanitation, Climate Action and Affordable and Clean Energy (UNU, n.d.).

World Meteorological Organization

Identified impact on the different dimensions of pollution

AIR	DIRECT IMPACT	WATER	INDIRECT IMPACT	SOIL	INDIRECT IMPACT	MARINE COASTAL	&	INDIRECT IMPACT	CHEMICALS & WASTE	DIRECT IMPACT
-----	------------------	-------	--------------------	------	--------------------	-------------------	---	--------------------	-------------------	------------------

The World Meteorological Organization (WMO) is dedicated to international cooperation and coordination on the state and behaviour of the Earth's atmosphere, its interaction with the land and oceans, the weather and climate it produces, and the resulting distribution of water resources. Some of WMO's activities are directly aimed at tackling pollution:

- The Global Atmosphere Watch (GAW) programme provides reliable scientific data and information on aerosols, greenhouse gases, selected reactive gases, ozone, ultraviolet radiation and precipitation chemistry (or atmospheric deposition) (WMO, n.d.).
- The Dashboard on Hydrological Observations, Forecasting and the Governance of National Hydrological Services (NHSs) provides valuable information on operational hydrological services worldwide (WMO, n.d.).
- WMO Integrated Global Observing System (WIGOS). The immediate goal is facilitate the production of weather and climate services and products for the four initial priority areas of the Global Framework for Climate Services (GFCS) agriculture and food security, disaster risk reduction, health and water.

WMO collaborates with GESAMP WG-38 (Atmospheric Input of Chemicals to the Ocean) and WG-41 (Marine Geo-engineering) on marine litter. An assessment report published by the GESAMP WG-38 concluded that approximately 50 per cent of excessive nitrogen in the ocean comes from the atmosphere by direct deposition, suggesting that the feed of microplastics into oceans via atmospheric transport and deposition may be similar. Following the preliminary work by WG-38, WMO may become engaged in the topic of microplastics and begin to play a role in understanding transportation of microplastics by air, building on its expertise in atmospheric transport modelling.

Funding and Financial Mechanisms

International Fund for Agricultural Development

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER INDIRECT SOIL DIRECT MARINE & INDIRECT COASTAL WASTE DIRECT IMPACT WASTE

The <u>International Fund for Agricultural Development (IFAD)</u> is an international financial institution and the only United Nations agency exclusively dedicated to transforming agriculture, rural economies, and food systems⁴⁴ in rural areas of developing countries. Since 1978, it provided US\$23.2 billion in grants and low-interest loans to projects that have reached an estimated 518 million people. IFAD is committed to enhancing social, environmental and climate sustainability and resilience in the full range of its projects and programme, through the following policy, process, and initiatives:

- IFAD has an environmental and climate strategy and IFAD has adopted its first biodiversity strategy which further increase IFAD commitments and investments in biodiversity that requires also to reduce pollution. IFAD has committed to allocate at least thirty percent of its climate finance to nature-based solutions that notably include improved use of inputs, recycling inputs and restoration practices. IFAD has adopted its first ecosystem-based indicator based on the <u>ABC Map</u> tool developed by FAO. Such tool enables to identify ex ante impacts of investments on biodiversity, including through land use practices. Going further, IFAD has committed to develop ecological impact indicator which will ensure more systematic assessment of environmental impacts of projects and is preparing an integrated climate biodiversity strategy which will further enhance alignment to the Global Biodiversity Framework, including its target on pollution.
- Systematic environmental safeguards and risk management. IFAD's Social, Environmental and Climate Assessment Procedures (SECAP) include nine Environmental, Social and Climate standards. Standard 2: Resource Efficiency and Pollution Prevention aims to avoid, minimize, and manage the risks and impacts associated with hazardous substances and materials, including pesticides and agricultural waste (including from processing facilities), and avoid or minimize project-related emissions of short- and long-lived climate pollutants. In addition, two other standards are directly linked to pollution prevention: Standard 1 on Biodiversity Conservation, Standard 9 on climate change, and Standard 6 on Community Health and Safety which includes health issues related to pollution and use of pollutants (IFAD, 2022). Such aspects are scrutinized at design, integrated in dedicated environmental management plans, and reviewed yearly during implementation.

-

⁴⁴ Our Vision (ifad.org)

- Beyond identifying and mitigating risks, IFAD has an environmental and climate policy and mobilize green finance to strengthen further such aspects through dedicated programs.
 - o IFAD's <u>Adaptation for Smallholder Agriculture Programme</u>⁴⁵ channels climate and environmental finance to smallholder farmers. Through ASAP, IFAD has supported smallholder farmers adopt climate-resilient farming practices, which in turn reduce environmental degradation, soil erosion, and water pollution. The programme encourages the use of sustainable agricultural practices including organic inputs, improved waste management, agroecological practices such as agroforestry, which contribute to better air quality and of ecosystems conservation.
 - o IFAD is also an executing agency of the Global Environment Facility (GEF), of the Green Climate Fund (GCF) and the adaptation fund. IFAD partners with FAO to implement the GEF Integrated Program on Food Systems which seeks to foster adoption of more regenerative and less polluting farming practices across major value chains.
 - o IFAD also partners with EU and the Government of Belgium on initiatives that seek to foster agroecological transitions across our portfolio⁴⁶, supporting: development of extension services to support agroecology and regenerative transition recognizing that these farming practices are knowledge intensive; increase production and secure access for small-scale farmers to bio-inputs (biofertilizers, organic pesticides and adapted seeds) to improve yields in regenerative and agroecology farming; and innovations in connecting small-scale producers to markets and consumers that value sustainably produced food. In addition, this initiative is developing innovative tools to better measure the cost benefit analysis of agroecological transitions.
 - o IFAD hosts the Vision for Adapted Crops and Soils (VACS)'⁴⁷s new multi-donor trust fund supported by USA to boost agricultural productivity and improved nutrition in rural communities of developing countries by better adapting crops and soils to the changing climate. This holistic strategy will lead to more productive crops, built-in resilience against extreme weather, reduced reliance on costly inputs like fertilizers, and lower greenhouse gas emissions. As the host of the VAC's multi-donor trust fund, IFAD sees an opportunity to scale- up impacts through similar interventions throughout its programs, empowering farmers through access to proven technology and knowledge to improve crop production.
- IFAD takes part and support coalitions and initiatives that aim to foster wider transitions to regenerative, agroecological and less polluting farming practices.
 - o For instance, IFAD is also an active member of the Agroecology Coalition, one of the strongest legacies of the 2021 UN Food Systems Summit (UNFSS) where more than 50 governments and almost 250 CSO, INGO, UN, research, and farmers organisations have come together to address the fundamental challenges food systems are facing today. In June this year IFAD hosted the launch of its 2024-2030 strategy which is organising a joint effort in accelerating food system transformation in 4 action areas: co-creation and exchange of knowledge, increasing investments, amplifying supportive policies, and promoting market pathways. In terms of reaching scale for the transition to regenerative and agroecology IFAD sees the Agroecology Coalition having a strategic role as convener and facilitator, knowledge broker and catalyst can create shortcuts to fast learning among all partners and for identification of viable and effective investment instruments, policies and market approaches that can accelerate the transformation to sustainable and equitable food systems that provides affordable and healthy food for all.
 - Under the leadership of FAO, IFAD is involved as an active member of the expert group developing the indicator for target 7.2 (pesticide pollution) of Post 2020 Kunming-Montreal Global Biopesticide Framework.

⁴⁵ https://www.ifad.org/en/initiatives/enhanced-adaptation-smallholder-agriculture-programme

⁴⁶ https://www.ifad.org/en/w/news/the-eu-and-ifad-join-forces-to-support-resilient-and-sustainable-food-systems

⁴⁷ https://www.ifad.org/en/w/news/usa-contributes-us-50-million-to-a-new-multi-donor-trust-fund-addressing-climate-and-food-crises-hosted-by-ifad

IIFAD supports various interventions across the food system to reduce pollution, focusing on multiple areas such as soil, water, waste management, coastal and air pollution reduction. Sample of IFAD-funded projects representing different levers of interventions above are presented in the table below (annex).

- Sustainable agriculture: IFAD promotes sustainable farming practices that reduce input use and improve
 efficiency. Integrated pest and fertilizer management are core strategies, encouraging farmers to monitor
 pests and diseases, prioritize bio-pesticides, and use synthetic pesticides only as a last alternative.
 Integrated fertility management focuses on organic solutions and efficient resource use. Notably, twothirds of IFAD's investments are agroecological, promoting biodiversity and resource recycling (e.g.,
 composting, biodigesters).
- Waste Treatment and Bioeconomy: Investments in waste management technologies, such as biodigesters, support recycling and green alternatives to replace plastics. IFAD promotes bioeconomy approaches to minimize waste, reduce effluents, and recycle nutrients.
- Marine and Coastal Pollution: IFAD focuses on aquaculture and fisheries, addressing pollution from agricultural waste and plastic. Initiatives include upgrading fishing gear, renewable energy in fishing operations, and promoting aquatic foods like seaweed, which have low carbon footprints.
- Integrated landscape and ecosystem based approach: The organization also supports integrated landscape and seascape approach" that includes ecosystem restoration (mangrove, forest etc.) that are key to mitigate pollution risks.
- Air Pollution: IFAD works to reduce forest fires and crop burning by promoting afforestation, ecosystem restoration, and the use of renewable energy. Investments in efficient cooking stoves help reduce firewood use, improving household health by cutting indoor air pollution.
- Public-Private Partnerships: IFAD engages with the private sector to promote green practices and create
 rural green jobs. For instance, in Nepal, agrovets are trained to provide organic inputs, and in India, youth
 are becoming bio-entrepreneurs producing bio-inputs. Such partnerships support co-financing and
 incentivize sustainable agricultural practices.

International Monetary Fund

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER INDIRECT SOIL NO MARINE & INDIRECT CHEMICALS & NO IMPACT IDENTIFIED COASTAL WASTE

The International Monetary Fund (IMF) works to achieve sustainable growth and prosperity for all of its 190 member countries. It does so by supporting economic policies that promote financial stability and monetary cooperation, which are essential to increase productivity, job creation, and economic well-being. The IMF is governed by and accountable to its member countries.

Its efforts towards a pollution free planet are linked to its work in climate change and reducing CO2 and other GHG emissions. Within this line of work it also develops reports, working papers and other technical documents including From Polluting to Green Jobs: A Seamless Transition in the U.S.? (Bergant, Mano, & Shibata, 2022).

The Global Environment Facility

Identified impact on the different dimensions of pollution

AIR DIRECT WATER DIRECT SOIL DIRECT MARINE & DIRECT DIRECT MARINE & DIRECT DIMPACT WASTE

The Global Environment Facility (GEF) is the world's largest funder of biodiversity protection, nature restoration, pollution reduction, and climate change response in developing countries. It finances international environmental conventions and country-driven initiatives that generate global benefits.

It organizes its word in main topics, several of which are directly linked to pollution:

• Chemicals and waste: The GEF is charged with eliminating the most harmful chemicals, which are covered by the Stockholm Convention on Persistent Organic Pollutants, the Minamata Convention on Mercury, and

the Montreal Protocol on Substances that Deplete the Ozone Layer. The GEF also supports the achievement of broader sound management of chemicals and waste through its support to the Strategic Approach to International Chemicals Management (SAICM), the United Nation's policy framework to promote chemical safety around the world. The GEF's work on chemicals and waste focuses on four main programs in GEF-7:

- The Industrial Chemicals Programme seeks to eliminate or significantly reduce chemicals subject to international agreements.
- The Agricultural Chemicals Programme addresses the agricultural chemicals that are listed as persistent organic pollutants under the Stockholm Convention and agricultural chemicals that contain mercury or its compounds.
- The Least Developed Countries and Small Island Developing States Programme addresses the sound management of chemicals and waste through strengthening the capacity of sub- national, national, and regional institutions and strengthening the enabling policy and regulatory framework in these countries.
- The Enabling Activities Programme supports enabling activities under the Stockholm Convention and the Minamata Convention and supports global monitoring of chemicals.
- The GEF also invests in actions to reduce the use of mercury in products and processes; reduce emissions and releases of mercury from industrial processes; move toward the sound management of mercury; and address the use of mercury in artisanal and small-scale gold mining.
- Although the GEF is not formally linked to the Montreal Protocol, it actively supports its implementation. Under the terms of the Protocol, countries with economies in transition are not eligible for funding under the Multilateral Fund for the implementation of the Montreal Protocol. The GEF stepped in to fill the gap. The GEF helps the Russian Federation and nations in Eastern Europe and Central Asia to phase out their use of ozone-destroying chemicals under the terms of the Montreal Protocol. The GEF launched its own GHG accounting program in the early 2000s. Over the past 10 years, the GEF has developed GHG accounting methodologies for energy efficiency, renewable energy, and transport projects.

The World Bank -The World Bank Group

Identified impact on the different dimensions of pollution

AIR INDIRECT WATER INDIRECT SOIL INDIRECT COASTAL WATER INDIRECT COASTAL CHEMICALS & INDIRECT COASTAL WASTE

The World Bank Group consists of five organizations: the International Bank for Reconstruction and Development, The International Development Association, The International Finance Corporation, The Multilateral Investment Guarantee Agency, and the International Centre for Settlement of Investment Disputes.

The World Bank has destined more than 52 billion dollars in lending operations and technical assistance around the world targeting pollution, with over \$14 billion for air pollution, \$5 billion for solid waste management, and \$3.5 billion in toxic pollution abatement operations. The group funds projects that tackle pollution from several angles including: i) pollution management and environmental health; ii) water resource management; iii) land administration and management; and iv) environmental policies and institutions.

The World Bank Group supports developing countries and development partners in reducing pollution, implementing proper waste management, improving water and air quality, and promoting clean development and a more circular economy for healthier lives and better livelihood opportunities. This is done through lending and technical assistance at the global, regional and country level, that cover:

- improving air quality through the reduction of indoor/outdoor air pollution;
- improving water quality, both in freshwater and in oceans;
- integrating management of waste, including hazardous waste management and remediation of contaminated sites.
- mitigating short lived climate pollutants for climate change mitigation;
- · promoting environmental sustainability through cleaner production and pollution prevention; and
- strengthening environmental institutions by helping countries improve environmental governance, regulation, and enforcement.

reducing plastic pollution, including in coastal areas.

The World Bank has financed several projects aimed at reducing pollution in various countries. For example, in China, the World Bank has been supporting Hebei Province to reduce concentration of air pollutants and increase energy efficiency and clean energy use in the Beijing-Tianjin-Hebei region. As a result, the region has achieved important reductions in PM2.5, including a 39% reduction in Hebei alone. In Egypt, through investment project financing, the World Bank is providing \$200 million dollars to reduce air and climate emissions from critical sectors and increase resilience to air pollution in Greater Cairo. Another project in the country also aims to improve the management and disposal of targeted stockpiles of obsolete pesticides, including persistent organic pollutants (POPs) and Polychlorinated Biphenyl (PCBs) in an environmentally sound manner. In Peru, a World Bank project is supporting air and water quality monitoring systems to improve the country's monitoring and analytical capacity, increase public access to environmental quality information and promote informed public participation in environmental quality management In Sub-Saharan Africa, the Bank is supporting environmental health concerns by preventing the exposure of humans and the environment to harmful chemicals and waste. Similarly, in Zambia, a \$65.6 million loan has been destined to remediate mining areas and reduce health risks from lead exposure. In the East African Community, governments consider e-waste as a serious emerging problem, despite their expansion of digital technology investments to support energy efficiency. In response, the Bank is providing technical assistance in ewaste management, regulatory frameworks, and capacity building. In Lao PDR, a development policy operation of \$40 million supported the government achieve fiscal sustainability and consolidate its path towards green growth. As part of this, pollution was addressed through several actions, including strengthening pollution monitoring and management, and encouraging the importation of paint brands offering unleaded paint.

The World Bank also assist its client countries through technical assistance, with several reports on pollution published in recent years. For example, the World Bank's analytical work Recycling of Used Lead-Acid Batteries: Guidelines for Appraisal of Environmental Health Impacts aims to address information gaps by providing a pragmatic framework for data collection, environmental and biological sampling, and the analysis that should be used at ULAB sites to link environmental contamination to human exposures and health outcomes. The report Getting Down to Earth: Are Satellites Reliable for Measuring Air Pollutants that Cause Mortality in Low-and Middle-Income Countries explores the challenges faced by LMICs regarding measuring the actual numbers and impacts of PM2.5 and highlights the needs for LMICs to strengthen support for the establishment of ground-level monitoring networks to measure air pollutants that cause mortality. Throughout various reports, the World Bank has also estimated the economic burden on countries caused by pollution. For example, a World Bank report estimated the global cost of air pollution to be over 8 trillion dollars, equivalent to 6.1% of global GDP. These reports provide up-to-date monetary estimates of pollution's health damages with the goal of supporting policy makers and decision-makers prioritize pollution amid competing development challenges. The World Bank is currently undertaking a similar approach to estimate the global economic costs of lead exposure. Through country environmental analyses, the Bank helps inform dialogue with countries to raise awareness of environmental problems affecting poor people and improve understating of the linkages between environmental and growth sectors. For example, in the Lao People's Democratic Republic the Bank's analytical work identified air pollution; microbiological water pollution; and lead exposure as priority environmental management for the Government.

Throughout its work, the Bank also seeks to highlight and support client countries understand the linkages between the most pressing environmental development challenges – biodiversity loss, climate change and pollution - and provide ways to tackle them that will result in co-benefits. For example, a report on Lao PDR found climate change to be amongst the highest priority threats to the country's biodiversity values. Several other analytical works have focus on the linkages between air pollution and climate change. For example, short-lived climate pollutants, like black carbon and methane, have been identified as both powerful climate forcers and dangerous air pollutants that have harmful effects on the people and the environment. The World Bank is using this evidence base to support client countries to develop integrated air quality management and climate change mitigation strategies, recognizing that these are the most efficient approach to clean air and a safer climate future. Another report, Are All Air Pollution Particles Equal? How Constituents and Sources of Fine Air Pollution Particles (PM2.5) Affect Health, also found that PM2.5 from fossil-fuel combustion poses a larger cardiovascular disease risk per unit mass of PM2.5 than soil or biomass particles. The World Bank is similarly using the findings of this analytical work to help client countries prioritize air quality management interventions.

In 2018, the World Bank established a Multi-donor Trust Fund PROBLUE to foster the development of integrated, sustainable, and healthy marine and coastal resources. PROBLUE addresses threats posed to ocean health by marine pollution, including plastics.

To scale up pollution management investments and policy reforms, the World Bank is designing new global program on pollution management and the circular economy. This program aims to help low-and middle-income countries achieve the Sustainable Development Goals through pollution prevention and abatement interventions. Other Bank Trust Funds also work on pollution-related activities.

United Nations Population Fund

Identified impact on the different dimensions of pollution

MARINE **CHEMICALS &** NO IMPACT IMPACT NO IMPACT NO IMPACT AIR WATER SOIL IMPACT IDENTIFIED IDENTIFIED IDENTIFIED IDENTIFIED IDENTIFIED COASTAL WASTE

United Nations Population Fund (UNFPA) is the United Nations sexual and reproductive health agency, it works towards a world where every pregnancy is wanted, every childbirth is safe and every young person's potential is fulfilled (JPOSC, n.d.).

From the desk research no efforts towards tackling pollution were identified. A more in-depth analysis that includes interviews with members of the organization would be necessary to find out if the agency is conducting activities related to pollution and its characteristics.

Partnerships

Collaboration among UN entities plays a critical role in the road towards a pollution-free planet. It helps address knowledge and capacity gaps and leverage efforts and financial resources while multiplying results. Agencies currently participate in and lead UN-UN partnerships as well as multistakeholder alliances.

These partnerships have various natures and can therefore achieve different results: business and trade cooperation can help transform markets towards a more efficient use of resources within production and consumption. Knowledge based agreements can help share successful policies, technologies and strategies. Financial and economic collaboration address inequality and help address pollution as the global issue it is.

Figure 3 Partnerships addressing pollution with UN participation

Global partnerships against pollution



Source: Own elaboration based on data gathered during the mapping of existing efforts process

Figure 3 shows how partnerships that address pollution - in which UN entities are the main lead or participate actively – are distributed along the environmental dimensions of pollution⁴⁸. On one hand, the Figure shows there are several ongoing initiatives to join efforts in the battle against pollution, addressing all five dimensions of pollution. This demonstrates that stakeholders have a strong intention to collaborate among each other.

On the other hand, Figure 3 reflects an unbalanced distribution of such efforts, in favour of chemicals & waste (13 identified partnerships) as well as air (9 identified partnerships). Considering that marine & coastal (3 partnerships) dimension could be understood as a subcomponent of the water dimension (3 additional partnerships); the soil dimension stands out as the less approached one (4 identified partnerships). It's important to note that efforts to address chemicals and waste impact all environmental media: air, marine and coastal areas, water, and soil.

Because the problem of pollution is a broad and complex one, addressing it from its different dimensions is effective to reduce its scope and therefore facilitate the definition of targets and the implementation of action plans. However, in order to minimize gaps and overlaps a wholistic approach against pollution is needed. Three partnerships with a cross-cutting perspective towards pollution were identified: Beat Pollution, the Global Partnership on Nutrient Management and the Global Alliance on Health and Pollution. These platforms could be leveraged to converge the otherwise scattered efforts.

The criteria used to select relevant partnerships for this diagram was: a) to be a network; and b) that promotes global collaboration; and c) addresses pollution related issues; and d) has active UN participation". It is worth noting that there are other networks or alliances that address pollution related issues but are not included in the diagram due not fulfilling one or more of the criteria. Some examples include: the AMR awareness week, the UN Water conference as well as several regional fora.

This analysis could be further improved, assessing each partnership based on the contribution each entity can make in terms of effectiveness and the entity's comparative advantage. This mapping of efforts can help as an input for such process, by identifying activities undertaken by UN entities. Also, such an approach could promote the involvement of entities with mandates related to topics such as trade, humanitarian aid, health and sanitation, and human rights, including the human right to a healthy environment, and entities that carry out activities indirectly related to pollution, which are often not engaged in relevant collaboration or partnerships.

5. Capacity gaps, opportunities for further collaboration and concluding remarks

This section identifies capacity gaps and opportunities for further collaboration and leveraging the potential of UN agencies and their initiatives vis-à-vis the areas of action defined in the Implementation Plan (UNEP, 2019): knowledge, implementation, infrastructure, awareness and leadership.

Knowledge

The UN Environmental Assembly prioritizes strategies aimed at strengthening knowledge. As shown in Figure 4, almost 40% of UNEA's resolutions related to pollution include at least one mandate towards improving knowledge on pollution management. UN efforts are indeed showing results, as pollution related information has improved dramatically alongside advancements in information technology, availability of guidelines and monitoring platforms such as the pollutant release and transfer registers (PRTRs) that are being designed by countries throughout the world

Still, greater understanding of the sources of contamination, exposure pathways, and impacts and solutions is needed. Emerging issues and new research findings on the impacts on health and ecosystems need to be considered. The Implementation Plan (UNEP, 2019) stressed in particular the need of strengthening capacity for analysis of pollution-related information to improve pollution governance. This is an aspect where UN entities can play a very important role by designing methodologies on water quality, air quality, waste management, hazardous wastes and marine pollution and providing capacity-building support for countries to improve their ability to compile and use pollution-related statistics.

Several initiatives that advance knowledge related to pollution were identified, although the lack of systematization of forms and mechanisms for sharing knowledge makes their visibility difficult. For example, the United Nation Statistical Commission empowered the UN Statistics Division to coordinate the Intersecretariat Working Group on Environment Statistics (IWG-ENV) and develop and harmonize concepts, methods and standards, as well as coordinate data collection and capacity development in environment statistics. There is great opportunity to further enhance the IWG-ENV work towards tackling pollution, though at the moment the Environmental Statistics section does not include Pollution as a cross-cutting topic and the Environmental Glossary of the United Nation Statistical Commission does not have a definition for pollution (Department for Economic and Social Information and Analysis).

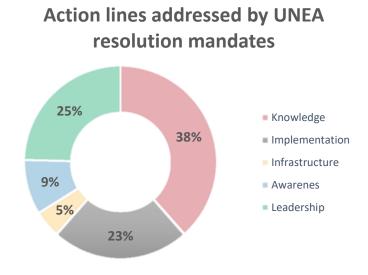
Additionally, a multidisciplinary approach could help organize and analyse data and information across sectors. Economic analysis, for example, could demonstrate the multiple benefits of action on pollution, including cost of inaction. Addressing pollution through gender inequality, occupational health and other intersectional approaches can allow further analysis of how pollution solutions can help tackle health issues. Many of these high-impact actions fall within the scope of the UNEP programme of work, but others call for partnerships, such as with WHO, ILO, UN Women and FAO.

Institutional capacity within the UN system has been identified to address these gaps: the mapping of existing efforts revealed that there are 25 UN entities implementing programmes that tackle directly at least one pollution dimension.

During the mapping of efforts process no centralized database on pollution efforts or similar mechanism was identified. This scenario increases the risk of duplication of efforts among UN entities. As a result, other entities and stakeholders, such as Member States or population in general, are not well-informed of UN entities' work on pollution. Existing knowledge sharing portals within the UN System could be used as basis for further development. For example, InforMEA: the United Nations Information Portal on Multilateral Environmental Agreements is a one-stop portal for information on Multilateral Environmental Agreements — or MEAs – searchable by key terms across treaty texts, COP decisions, national plans and reports, laws, court decisions and more. The initiative behind InforMEA is co-chaired by UNEP and CITES and brings together 22 MEA Secretariats hosted by 5 UN organizations and IUCN, in addition to observers and partners, to develop harmonized and interoperable information systems for the benefit of parties and the environment community at large. InforMEA is facilitated by UNEP and financially supported by the European Union. Another example is the DesInventar Disaster Loss Accounting System is supported by UNDRR. DesInventar is a conceptual and methodological tool for the generation of National Disaster Inventories and the construction of databases of damage, losses and in general the effects of disasters to support national planning and investment decisions which currently do not necessarily take into account disaster risks. Member States also have the possibility to track pollution as a hazard through DesInventar.

Additionally, a mechanism for progress monitoring of entities' activities on pollution could be developed. An approach in this direction is being implemented by UNEP through the UNEA Monitoring and Reporting Portal⁴⁹. In it, the progress of all UNEA Resolutions, Ministerial Declarations and Decisions is reported. The scope of this platform could be broadened to include all UN system environmental resolutions. For the sake of the systematization and standardization of the battle against pollution, the portal could include the five dimensions of pollution as monitoring variables. Figure 5 reflects the variables that are currently used; while it does include pollution in its scope it allows for overlaps, for example, between the Chemicals and Pollution Action and the Chemicals and the Waste and Air Quality outcome variables. In order to increase coherence within the UN system wide approach towards a pollution free planet, the action lines suggested by the Implementation Plan – knowledge, infrastructure, implementation, awareness and leadership - could also be considered progress monitoring variables.

Figure 4 Action Lines (as suggested by the Implementation Plan (UNEP, 2019) addressed by UNEA resolution mandates

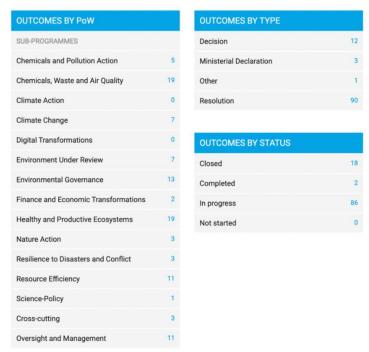


Source: Own elaboration based on UN Environmental Assemblies up to UNEA 5

-

⁴⁹ Available at: https://unea.unep.org/monitoring/

Figure 5 UNEA Monitoring and Reporting Portal's progress monitoring variables



Source: UNEA Monitoring and Reporting Portal

Implementation

The mapping process revealed the lack of a common definition of pollution, which can be recognized as a challenge to assess the scope of related activities conducted by the UN system and consequently to properly identify capacity gaps and effectively implement opportunities for collaboration. There is a great opportunity in harmonizing and standardizing pollution related terminology across the UN system.

The breadth of the term and the lack of an agreed categorization of the various types of pollution make it difficult to systematize and classify activities. Most UN entities organize their websites by grouping their work in "topics", "action lines", "focus areas" or similar categories. The term "pollution" is rarely among these main topics. With the exception of UNEP – that includes "chemicals & pollution action" as one of its three main areas of work – no UN entity includes the term pollution in their main categories of work. Several agencies do refer to their efforts towards tackling pollution indirectly, for example, under categories like chemicals and waste; circular economy; and renewable energies. Some of the websites that do not consider pollution in their main categories, will include it in secondary level categorizations. This is the case of the World Bank Group that mentions "pollution management and environmental health" as one of the categories for which they fund projects.

A large number of initiatives related to pollution have been identified through this mapping exercise. Some of them address individual pollutants (for example the Secretariat of the Minamata Convention on Mercury), some involve groups (GEF's efforts against POPs), others are directed at specific environmental media (such as the International Maritime Organization), other address the source (this is the case of the UN World Tourism Organization), and some consider all dimensions of pollution within a wider scope if environment and sustainability without specifying any further details.

A harmonized categorization of the several types of pollution would allow comparison among the initiatives in order to provide a more holistic analysis of what is being covered and would allow gaps and overlaps to be identified. In

addition, this analysis would help to better identify the entities to participate at the different initiatives and partnerships. Entities with remits for topics such as trade, humanitarian efforts, health and sanitation including the human right to a healthy environment, which are directly or indirectly related to pollution, may have ongoing activities but no collaboration or partnerships specifically on the issue.

Developing harmonized terminology and systematization, in line with the common approach to pollution, could serve to ensure that all UN entities become aware of their potential role towards pollution and advance in its implementation and would facilitate the follow-up of efforts and its communication. Figure 6 shows the amount of impact that UN entities are having in the five dimensions of pollution, according to their area of focus. A harmonized classification of efforts could result in a better understanding of these panorama.

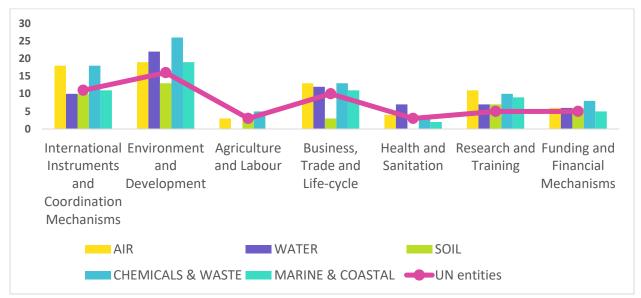


Figure 6 UN efforts in the Implementation Plan's dimensions of pollution according to their area of focus.

Source: own elaboration based on data gathered during the mapping of efforts process.

The mapping also noted restricted efforts by the UN System in the production stage: limited engagement with producers was identified, thus limiting UN-wide collaboration in preventing pollution from the cradle. Figure 6 shows level of impact on the different dimensions of pollution that UN entities with the same main area of focus are achieving. The diagram reveals that UN entities working in Business, Trade and Life-cycle and entities working in Agriculture and Labour are having impacts below average. Activities aiming at Air and Chemicals & Waste within the Business, Trade and Life-cycle focus area are an exception.

With most current efforts aimed at providing technical assistance to Member States, fewer efforts are directed towards the private sector. The main focus in this area is the preparation of guidelines for industries, for example by FAO, UNCTAD, UNDP, UNECLAC, UNEP and UNIDO. Energy efficiency is also largely included in programmes, although not necessarily focused particularly on industrial use. A stronger approach towards private sector would be necessary if a significant and measurable reduction in emissions and releases of pollutants is to be achieved by companies and industries along the value chains. The UN Global Compact strategy - that works to mobilize a global movement of sustainable companies and stakeholders - has a strong potential to work as a joint platform in this direction.

Some efforts related to upstream processes, such as product (re-)design, the use of sustainable materials and modernization of industrial technologies, were identified but remain limited. ITC for example, provides small businesses with capacity building on resource use and circular production practices, and links them to those in business ecosystems to innovate, access technologies, services and markets. Nevertheless, consumption and production practices appear to be considered a secondary option for tackling the problem; as pollutant monitoring

and waste management solutions are preferred. To effectively address the problem the UN system could to establish a holistic perspective of pollution where all stages – prevention, generation, monitoring, remediation—are considered.

Infrastructure

Infrastructure to monitor, prevent, manage, control and raise awareness on pollution is key to developing and adopting better practices, but also reduces exposure to hazards associated with pollution. Figure 4 reveals that Infrastructure is the least mentioned action line in UNEA resolutions and their mandates. Despite the efforts of UN agencies and partners, there are still significant capacity gaps in infrastructure for pollution control and management. Investing in pollution information systems, such as Pollutant Release and Transfer Registers (PRTRs) is investing in the infrastructure necessary to prevent and reduce pollution. With only some 50 countries having functioning PRTR systems in place, one of the biggest capacity gaps is the lack of data and information on releases of pollution to land, air and water, let alone information on actual pollution levels in many parts of the world. The lack of collected and easily accessible data makes it difficult to identify pollution hotspots and to develop effective strategies for pollution control and management and engage in informed decision-making processes. The institutional capacity that comes together with the development of national pollution information systems, also has positive effects for the continuity of short-term projects under action areas knowledge, leadership, implementation and awareness.

Considering that efforts towards building and strengthening infrastructure tend to be mid- to long term investments, entities within the Funding and Financial Mechanisms group, such as the GEF or the World Bank, become vital to ensure the provision of pollution prevention and mitigation infrastructure globally.

Nevertheless, other UN entities can also support this action area by identifying options and cases of innovation, for example, through UNEP's Sustainable Consumption and Production works or WFP's packaging improvement projects. Furthermore, organizations such as WTO can promote trade and improve access of environmental goods and technology to reduce pollution, for example, through the Informal Dialogue on Plastics Pollution and Environmentally Sustainable Plastics Trade. This initiative could be expanded to cover other dimensions of pollution.

Additionally, instruments such as government procurement, subsidies, tariff reductions for environmental goods and market access for environmental services can provide effective incentives for pollution-reducing technologies and actions and innovative solutions to pollution. In this aspect, UN entities, such as WTO or UNIDO, can play a significant role.

Awareness

Increased awareness of the consequences of consumption choices and sensibilization on risks, available solutions and alternative products enable consumers to make informed choices. ⁵¹ Without broader public awareness, the socio-political pressure needed to prevent and mitigate pollution will not follow. Information disclosure and greater awareness enable the development of more effective interventions, support meaningful and effective participation, and empower the public to play a role in ensuring that government institutions and the regulated community and businesses meet their legal obligations.

⁵⁰ See A/HRC/57/52: Pollution information portals: strengthening access to information on releases of hazardous substances; available at A/HRC/57/52: Pollution information portals: strengthening access to information on releases of hazardous substances - Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, Marcos Orellana | OHCHR.

⁵¹ See A/HRC/57/52: Pollution information portals: strengthening access to information on releases of hazardous substances; available at A/HRC/57/52: Pollution information portals: strengthening access to information on releases of hazardous substances - Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, Marcos Orellana | OHCHR

The mapping of efforts identified strong UN led awareness campaigns such as the Beat Pollution strategy. Because of their particular competences, some UN entities such as UNITAR and UNU could play a key role in support of these initiatives. However, in order to reach all audiences and achieve effective mainstreaming of the issue of pollution, all entities should adopt UN awareness campaigns from their own perspective. UNICEF, for example is a key player for engaging children and adolescents. As the future leaders and inhabitants of the planet, young people need to adopt more sustainable practices in their homes and future workplace. UNECE, through supporting implementation of the Aarhus Convention and its Protocol on PRTRs requiring establishing PRTR systems and to promote effective access to environmental information, including on pollutants.

Leadership

Addressing pollution requires deep multi-level and multi-actor involvement, coordination, and policy coherence across global, regional, national, subnational and local levels. The UN entities can strengthen their collaborations and partnerships among each other and with other stakeholders such as governments, civil society organizations, and the private sector to enhance their efforts towards tackling pollution. This can help to leverage expertise, resources and knowledge across different sectors.

On an inter UN system level, while there are currently many good ongoing initiatives, these are not necessarily as coherent and integrated as they could be. While all EMG members were consulted, some UN entities whose expertise could be relevant in combating pollution are not participating in this work, may be due to a lack of a direct mandate or resources. The absence of effective coordination could lead to overlaps and confusion since various UN organizations could be implementing projects at the same time. In the end, the impact is not maximized, instead there is a risk of lack of sustainability in the UN approach.

On an intra UN system level, the approach should also address pollution generated by UN entities' projects and basic functioning activities should be tackled as well. In December 2018, the Secretary-General of the United Nations asked the system to raise the level of its internal ambitions and intensify its efforts to combat climate change from within. The response to this request was the Strategy for sustainability management in the United Nations system, 2020–2030 (CEB/2021/2/Add.1). The strategy included the Greening the Blue initiative, a UNEP proposal to engage and support the UN System in the transition towards a greater environmental sustainability in the management of its facilities and operations. Phase I covered five environmental areas: i) GHG emissions; ii) Waste; iii) Water; iv) Air Pollution; and v) Biodiversity. The latest annual report (UNEP, 2022) revealed that over 80% of UN Entities completed their reporting commitments. However, as shown in Figure 8, a large part of the remaining 20% (between 5% and 18% depending on the reporting area) opted not to report at all. The mapping of efforts releveled that only a few UN entities describe their efforts to lower their own pollution footprint, and they do so without mentioning the Greening the Blue strategy or the Strategy for sustainability management. Phase II of the Strategy for Sustainability Management in the United Nations System, 2020–2030 takes septs towards leadership in environmental and social sustainability. The first pilots should take place during 2023 and could imply an opportunity to mainstream the Strategic Approach Against Pollution within the UN System.

Note from review in October 2024: <u>The UN Common Approach to Pollution</u> was developed by the Environment Management Group (EMG) and endorsed by its senior officials on October 10, 2023. This initiative responds to the implementation plan "Towards a Pollution-Free Planet," which was endorsed by the Fourth United Nations Environment Assembly (UNEA4) and requested by the UN Secretary-General's Senior Management Group.

The Common Approach to Pollution reflects the UN system's shared recognition of the urgent need for action and a commitment to integrating pollution prevention and reduction into its programmes and operations. Building on existing efforts, this approach aims to align the UN system's actions with its core values, foster collaboration, and enhance coordination for mobilizing, accelerating, and scaling up a sustainable, inclusive, and equitable transition towards a pollution-free planet.

Furthermore, it provides a framework to leverage and enhance existing interagency arrangements that address pollution-related challenges. Achieving a pollution-free planet demands ambition, system-wide transformation, and strengthened capacities at all levels, from global to subnational.

Finally, addressing pollution also requires greater multi-level and multi-actor involvement, coordination and policy coherence across global, regional, national, subnational and local levels. In this sense, making use of other UN entities network could serve to bring new private sector actors on board. The UN could also benefit from better coordination at a country level to become more efficient and effective in finding local solutions, sharing best practices and facilitating knowledge exchange. In this light, there is a need for clearly defined roles for each entity in relation to pollution to avoid competition and duplication of efforts

2021 UN SYSTEM RESULTS GREENHOUSE GAS EMISSIONS WASTE **Complete:** Entity reported quantitative data for some or all its waste for the reporting year. Complete: Entity reported on Complete 84% Complete 85% greenhouse gas emissions for all personnel with the defined Partial 11% Partial 2% boundaries for the reporting year Partial: Entity reported qualitative data for the reporting Did not report 5% Did not report 13% Partial: Entity reported or greenhouse gas emissions for a year or reported quantitative percentage of total personnel for data from previous years. the reporting year or reported on emissions from the previous year. Did not report: Entity did not report waste data. Did not report: Entity did not report on greenhouse gas er Note, the published statistics on Air Pollution data are calculated from the Greenhouse Gas Emissions data submitted by entities. Hence, Air Pollution is not its own reporting area and lacks specific criteria for reporting completeness WATER ENVIRONMENTAL GOVERNANCE AND HUMAN RESOURCES Complete: Entity reported Environmental Governance and Complete 87% Complete 82% Human Resources are grouped because data on these two areas were submitted jointly via a survey. quantitative data for some or all its water for the reporting year. Partial 0% No response 18% Partial: Entity reported qualitative data for the reporting year or reported quantitative Did not report 13% Entities had to complete the entire survey to submit any data, which is why partial is not a category for data from previous years. these areas. Did not report: Entity did not report water data.

Figure 7 Reporting completeness per environmental area of the Strategy for sustainability management in the United Nations system, 2020–2030

Source: Greening the Blue Report 2022 (UNEP, 2022)

Concluding remarks – Updated from the review 2024

Diverse efforts dedicated towards tackling pollution exist within the UN system. However, a cohesive and integrated approach is necessary if tangible, ambitious goals are to be achieved. The mapping of efforts showed that efforts are currently uneven. There is an unbalanced use of resources, with most activities aiming at chemicals & waste and air pollution dimensions; in detriment of soil, infrastructure and cross-cutting activities, though it's important to note that efforts to address chemicals and waste impact all environmental media: air, marine and coastal areas, water, and soil. (see Figure 3: Partnerships addressing pollution with UN participation and Figure 6: UN efforts in the Implementation Plan's dimensions of pollution according to their area of focus).

In terms of the line of action undertaken, knowledge and capacity building activities are the most implemented, overwhelmingly exceeding infrastructure and awareness actions (see Figure 4: Action Lines (as suggested by the Implementation Plan (UNEP, 2019) addressed by UNEA resolution mandates).

Although it is expectable that different UN entities will approach the problem from different angles in response to their particular mandates; the communication of their activities, targets and results should be harmonized. To succeed in the battle against pollution, the UN system will have to implement cross-sectoral activities such as the UN Common Approach to Pollution and raise awareness of stakeholders about instruments and solutions that have been tested and developed under other organizations – with the aim to deliver as one.

There is a pressing need for common definition of pollution as well as for a standardized classification of the dimensions of pollution. For the purposes of the UN Common Approach to Pollution, pollution is understood as the presence or introduction into the environment of substances or energy that cause adverse effects on human health, the environment or living organisms; or exceed the quality or quantity criteria established for certain environmental media.

In addition to the UN Common Approach to Pollution, the work on this up-date to the mapping of pollution related activities in UN organizations showed a need to further improve our common institutional capacity to respond to the pollution crisis. To make the most out of the available resources, cross-cutting and infrastructure related efforts and project components could become the priority for promotion by UN entities. They have specific value for ensuring consistent and lasting progress in reaching the goal to prevent and reduce pollution.

The following steps can be implemented by Organizations, jointly as well as individually:

- Further improve the comprehensiveness of this report, making it a living online document to more easily identify colleagues that work on similar issues for better cooperation across the UN system;
- Better train UN staff on pollution related topics and develop and make available [mandatory] capacity building courses for staff to learn about existing work by UN organizations on pollution;
- Mutually promote each other's work in our respective expert communities;
- Share important reports for comments with colleagues from other UN organizations for their possible input;
- Prioritize projects that include development of information infrastructure for cost-effective and fact-based decision-making structures, applying the relevant international standards. The existence of information infrastructure is also key for ensuring continuity of the results gained through development projects and related capacity building efforts;
- Foster the use of existing international standards and do more to scale national and regional good practices, as appropriate.

Annexes

Annex I: Members of the EMG Consultative Process to prepare a UN system-wide approach on a Pollution-Free Planet

Organization
CBD
DESA
FAO
IAEA
ILO
IOM
ITC
ITU
OHCHR
Secretariat of the Convention on Wetlands
Secretariat of the Minamata Convention on Mercury
UNCTAD
UNDP
UNDRR
UNECE
UNESCO
UN-Habitat
UNICEF
UNIDO
UNODC
UNODC
UNOPS
UNU
UNWTO
UPU
WFP
WIPO
World Bank
WTO

Annex II: Questions included in the online mapping of efforts survey

In order to have a greater coverage of UN initiatives related to pollution, members of the EMG were invited to participate in an online survey. The objective of the survey was to gather first hand data on the direct and indirect mandates and activities of each entity; examples of relevant initiatives carried out by the entity; existing partnerships and collaborations; and ambitions and emerging actions of the entity. The questions included in the survey were the following:

- 1. Organization:
- 2. Position/role:
- 3. What type of contaminants are you primarily targeting?
- 4. How would you categorize your organization's involvement in pollution:
 - a. Direct (e.g., organization has a direct mandate and has significant activities)
 - b. Partial (e.g., organization has some activities within a broader role)
 - c. Related (e.g., organization has activities in areas that may be linked to pollution)
 - d. None
- 5. What type of pollutants are you primarily targeting?
 - a. Chemicals or specific chemicals
 - b. Particulate matter
 - c. Waste or specific streams of waste
 - d. Nutrients
 - e. Plastics
 - f. My organization does not target any particular type of pollutant
- 6. What environmental media or forms of pollution, if any, do you target?
 - a. Air pollution
 - b. Water pollution
 - c. Marine and coastal pollution
 - d. Soil pollution
 - e. My organization does not target an environmental media in particular
- 7. Please indicate your primary mandate
 - a. Human rights
 - b. International Instruments and Coordination Mechanisms
 - c. Environment and Development
 - d. Agriculture and Labour
 - e. Business, Trade and Lifecycle
 - f. Health and Sanitation
 - g. Research and Training
 - h. Funding and financial mechanisms
- 8. Please indicate any relevant resolutions or decisions of governing bodies related to the topic of pollution that the mapping should take into consideration, besides UNEA resolutions. Please include links and files with all relevant information.
- 9. What action areas to accelerate progress towards a pollution-free planet does your organization focus on? (You may select more than one option)
 - a. Knowledge: Science for evidence-based policy and action;
 - b. Implementation: capacity, incentives and integrated policies;
 - c. Infrastructure: technologies, innovation and Infrastructure: technologies, innovation and circularity
 - d. Awareness: outreach, communication, education and consumer information
- 10. Leadership: mobilization of stakeholders, leaders and partners to address different forms of pollution
- 11. Please further elaborate on the specific focus of your work.
- 12. What are key pollution- relevant projects, programmes and initiatives carried out/funded by your organization? Please include links and files with all relevant information.
- 13. Which is the specific approach addressed by these projects and initiatives: e.g., which geographical regions, which specific pollutant or environmental compartment are they targeting, which action, sector/field?

- 14. What is the geographical focus of these projects and initiatives. For example, global / specific regions, subregions, (please specify) / particular group of countries (please specify) / other
- 15. Are these projects targeting a specific demographic, sector, or field? If so, please briefly describe it.
- 16. Are you involved in partnership(s) with other organizations pollution-related issues? Please specify UN and non-UN agencies with which you partner.
- 17. What guidance/expertise/approaches/methodologies does your organization have that could uniquely inform collective UN efforts towards a pollution free planet?
- 18. What areas of your work could benefit from further collaboration with other UN entities?
- 19. What specific gaps/action areas/issues require concerted action among UN entities in your view?
- 20. Please provide any other information or views regarding how to achieve additional synergies between different agencies, funds and programmes of the UN System with activities and initiatives and overall better alignment and more impactful efforts.

Bibliography

- UNEP. (2019). Implementation plan "Towards a Pollution-Free Planet".
- United Nations Environment Management Group . (2022). Addressing marine litter and microplastics: UN system-wide contributions.
- CITES Secretariat. (n.d.). Convention on International Trade in Endangered Species of Wild Fauna and Flora. Retrieved from The CITES Secretariat: https://cites.org/eng/dec/index.php/42023
- Welcome to the United Nations. (n.d.). Retrieved from DEPARTMENT OF OPERATIONAL SUPPORT: https://operationalsupport.un.org/en/environment
- United Nations. (n.d.). *DEPARTMENT OF OPERATIONAL SUPPORT*. Retrieved from Our Approach: https://operationalsupport.un.org/en/our-approach
- UNCCD Secretariat. (n.d.). *UNCCD*. Retrieved from The Secretariat: https://www.unccd.int/convention/secretariat#:~:text=It%20aims%20to%20restore%20th e,is%20located%20in%20Bonn%2C%20Germany.
- UNCCD Secretariat. (n.d.). *UNCCD Events*. Retrieved from Gender transformative approaches to address climate change, biodiversity loss and pollution: https://www.unccd.int/events/other/gender-transformative-approaches-address-climate-change-biodiversity-loss-and
- United Nations, Department of Economic and Social Affairs Climate Review. (2021). *Climate Review*. New York: United Nations, Department of Economic and Social Affairs.
- Schuyler QA, R. L. (2021). Assessment of plastic hotspots in the Lower Mekong and Ganga River Basins. Priority intervention areas for preventing, combating and removal of plastic in areas important for migratory species. A methodology and risk analysis. Australia: (CSIRO),.
- Government of Australia. (2020). LIGHT POLLUTION GUIDELINES FOR WILDLIFE INCLUDING MARINE TURTLES, SEABIRDS AND MIGRATORY SHOREBIRDS. Gandhinagar,: CONVENTION ON MIGRATORY SPECIES.
- Courouble, M. (2021). *Global Wetland Outlook: Special Edition*. Gland,: CSecretariat of the Convention on Wetlands.
- Joint Environment Unit. (n.d.). Disaster Waste Management. UN Environment OCHA.
- Joint UNEP/OCHA Environment Unit. (2016). Flash Environmental Assessment Tool (FEAT) Pocket Guide. Geneva.
- UNESCO. (n.d.). *UNESCO*. Retrieved from World Water Assessment Programme: https://www.unesco.org/en/wwap
- UNESCO. (n.d.). *UNESCO*. Retrieved from Man and the Biosphere programme (MAB): https://www.unesco.org/en/man-and-biosphere
- Division of Resilience and Solutions (DRS). (2019). *GLOBAL STRATEGY FOR SUSTAINABLE ENERGY 2019-2025*. Geneva: United Nations High Commissioner for Refugees. Retrieved from https://www.unhcr.org/5db16a4a4
- UNHCR. (n.d.). *UNHCR*. Retrieved from Clean Energy Challenge: https://www.unhcr.org/clean-energy-challenge.html
- UNHCR. (n.d.). *UNHCR*. Retrieved from Sustainable Environmental Management: https://www.unhcr.org/sustainable-environmental-management.html
- UNHCR. (n.d.). *UNHCR*. Retrieved from Green Financing Facility: https://www.unhcr.org/green-financing-facility.html
- UN Human Rights; UNEP; UN WOMEN. (n.d.). HUMAN RIGHTS, THE ENVIRONMENT AND GENDER EQUALITY Key Messages.

- Global Toxics and. Human Rights project. (2021). The stages of the plastics cycle and their impacts on human rights Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, Marcos Orellana. OHCHR.
- UNHR; UNEP. (n.d.). *HUMAN RIGHTS AND HAZARDOUS SUBSTANCES Key Messages*. FAOSTAT. (n.d.). *Pesticides use, pesticides trade and pesticides indicators 1990-2019*. 2020:
- FAO.
 FAO. 2021. Assessment of agricultural plastics and their sustainability
- FAO. 2021. Assessment of agricultural plastics and their sustainability A call for action. Rome. https://doi.org/10.4060/cb7856en
- FAO. (n.d.). *Hand in Hand*. Retrieved from https://www.fao.org/hand-in-hand/en/
- FAO. (n.d.). Retrieved from Food and Agriculture Statistics: https://www.fao.org/food-agriculture-statistics/data-release/data-release-detail/en/c/1616127/
- FAO and UNEP. (2021). *GLOBAL ASSESSMENT OF SOIL POLLUTION Summary for policy makers*. Rome: the Food and Agriculture Organization of the United Nations and the United Nations Environment Programme.
- FAO and IWMI. (2018). *More people, more food, worse water? a global review of water pollution from agriculture*. Rome: the Food and Agriculture Organization of the United Nations and the International Water Management Institute on behalf of the Water Land and Ecosystems research program of the CGIAR.
- Montt, G. (2018). The gendered effects of air pollution on labour supply. ILO.
- ILO. (2020). *ILO INSTRUMENTS ON CHEMICAL SAFETY Analysis and synergies with other international frameworks on the sound management of chemicals* . Geneva: ILO.
- Saget, C., Vogt-Schilb, A., & Luu, T. (2020). *Jobs in a net-zero emissions future in Latin America and the Caribbean*. Geneva: IDB and ILO.
- FAO. (n.d.). Stop the Waste. Retrieved from https://www.wfp.org/foodwaste
- WFP. (n.d.). *How WFP is helping keep the air clean and the skies blue*. Retrieved from https://www.wfp.org/stories/how-wfp-helping-keep-air-clean-and-skies-blue
- ICAO. (n.d.). *Environment*. Retrieved from Sustainable aviation fuels: https://www.icao.int/environmental-protection/Pages/default.aspx
- ITU. (n.d.). *Climate Change*. Retrieved from ITUs work on Climate Change: https://www.itu.int/en/action/environment-and-climate-change/Pages/climate-change.aspx
- ITU. (n.d.). *E-waste*. Retrieved from ITUs work on E waste: https://www.itu.int/en/action/environment-and-climate-change/Pages/ewaste.aspx
- ITU. (n.d.). *Energy efficiency*. Retrieved from ITUs work on energy efficiency: https://www.itu.int/en/action/environment-and-climate-change/Pages/energy-efficiency.aspx
- ITU . (2020). ITU ENVIRONMENTAL SUSTAINABILITY STATEMENT. Geneva.
- UPU. (n.d.). *Sustainable development*. Retrieved from https://www.upu.int/en/Universal-Postal-Union/Activities/Sustainable-Development#environmental-sustainability
- WIPO. (n.d.). *WIPO GREEN* . Retrieved from The Marketplace for Sustainable Technology: https://www3.wipo.int/wipogreen/en/
- UN Habitat. (2016). Build Green: 100 ways to save money and the environment. Kenya: UN Habitat.
- UN Habitat and ICLEI. (2009). Sustainable Urban Energy Planning A handbook for cities and towns in developing countries. UN Habitat, ICLEI and UNEP.
- UNIDO. (n.d.). *Our Focus*. Retrieved from Safeguarding the environment: https://www.unido.org/our-focus/safeguarding-environment

- Ministerial Statement. (2021). TRADE AND ENVIRONMENTAL SUSTAINABILITY

 STRUCTURED DISCUSSIONS (TESSD) MINISTERIAL STATEMENT ON TRADE AND
 ENVIRONMENTAL SUSTAINABILITY. WTO.
- WTO. (n.d.). *Trade and environmental sustainability*. Retrieved from https://www.wto.org/english/tratop_e/tessd_e/tessd_e.htm
- WTO. (2018). Mainstreaming trade to attain the Sustainable Development Goals. Genveva: WTO.
- UN. (2016). *UNCTAD XIV OUTCOME Nairobi Maafikiano and Nairobi Azimio*. New York and Geneva.
- ITC. (n.d.). *Green competitiveness*. Retrieved from https://intracen.org/our-work/topics/sustainability/green-competitiveness
- ITC. (n.d.). Sustainable Trade and Investments. Retrieved from https://intracen.org/our-work/topics/sustainability/sustainable-trade-and-investment
- UNICEF. (n.d.). A Liveable Planet for Every Child UNICEF's Strategy-at-a-Glance for Climate, Environment, Energy and Disaster Risk Reduction CEED (2022-2030). UNICEF.
- UNITAR. (n.d.). *Planet portfolio*. Retrieved from https://unitar.org/sustainable-development-goals/planet/our-portfolio
- IAEA. (n.d.). *Polltion*. Retrieved from https://www.iaea.org/topics/pollution
- IAEA. (2022). Assessment of Radioactive Contamination and Effectiveness of Remedial Measures in Urban Environments. Vienna: IAEA.
- IAEA. (2022). Management of Naturally Occurring Radioactive Material (NORM) in Industry. Vienna.
- IAEA. (2022). Remediation Strategy and Process for Areas Affected by Past Activities or Events. Vienna.
- WMO. (n.d.). *Environment*. Retrieved from https://public.wmo.int/en/our-mandate/focus-areas/environment
- WMO. (n.d.). *Dashboard on Hydrological observations*. Retrieved from https://app.powerbi.com/view?r=eyJrIjoiMGJmMzI2MmQtZTQ2OC00NDFlLWJlNDUt Zjc5NmY5OGYwNjI5IiwidCI6ImVhYTZiZTU0LTQ2ODctNDBjNC05ODI3LWMwN DRiZDhlOGQzYyIsImMiOjl9
- UNOSPA. (n.d.). *Space for Water*. Retrieved from https://www.unoosa.org/oosa/en/ourwork/topics/space-for-water.html
- UN Office for Outer Space Affairs. (2022). ANNUAL REPORT 2021. Vienna.
- Bergant, K., Mano, R. C., & Shibata, I. (2022). From Polluting to Green Jobs: A Seamless Transition in the U.S.? . IMF.
- JPOSC. (n.d.). *About the JPOSC*. Retrieved from https://www.undp.org/jposc/unfpa?utm_source=EN&utm_medium=GSR&utm_content= US_UNDP_PaidSearch_Brand_English&utm_campaign=CENTRAL&c_src=CENTRAL&c_src2=GSR&gclid=Cj0KCQiA7bucBhCeARIsAIOwr-9HUHasdStFPSFhI_bscBji0J8xtfEFuTus5KSWY0k5eE7GqcSAyIgaAr69EALw_wcB
- UNEP. (2017). *Towards a Pollution-Free Planet. Background report*. Nairobi: United Nations Environment Programme.
- United Nations Environment Programme. (2017). *Towards a Pollution-Free Planet. Background report*. Nairobi: United Nations Environment Programme.
- Department for Economic and Social Information and Analysis. (n.d.). 1997: United Nations.
- Strategic Approach to International Chemicals Management. (2022). Addressing Industry Involvement in the Funding of Sound Management of Chemicals and Waste. Bucharets: SAICM.

- UNEP. (2022). Greening the Blue Report 2022 2021 Data Highlights: Overview Greenhouse Gas Emissions Environmental Governance The 2022 edition of the Greening the Blue Report provides United Nations (UN) system-wide 2021 data on the environmental impact areas and manage. UNEP.
- UNEP. (n.d.). *How addressing pollution will help reach the SDGs*. Retrieved from https://wesr.unep.org/relatedsdgs
- Cambridge University. (n.d.). STERN REVIEW: The Economics of Climate Change. Edinburgh.
- United Nations Development Programme. (2022). *Transitioning to a Circular Economy Through Chemical and Waste Management*. NEW YORK: UNDP.
- Sustainable Manufacturing and Environmental Pollution Programme. (2019). Sustainable Manufacturing and Environmental Pollution Programme. SMEP.
- Ocean's Forum. (2022). 4th Oceans Forum on trade-related aspects of Sustainable Development Goal 14. Retrieved from UNCTAD: https://unctad.org/meeting/4th-oceans-forum-trade-related-aspects-sustainable-development-goal-14
- SMEP. (2020). *Manufactiring Pollution in Sub-Saharan Africa and South Asia*. New York: UNCTAD.
- UNCTAD. (2021). The role of exports in manufacturing pollution in Sub Saharan Africa and South Asia.
- UNCTAD. (2021). Substitutes for single-use plastics in sub-Saharan Africa and south Asia. UNCTAD.
- UNCTAD. (2022). Workshop on sustainable and effective substitutes and alternatives for plastics. Geneva.
- World Health Organization. (n.d.). *Children's Environmental Health*. Retrieved from WHO: Children's environmental health
- World Health Organization and the United Nation Children's Fund. (2021). *Progress on household drinking water, sanitation and hygiene 2000–2020: Five years into the SDGs.* Geneva: WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP).
- Agudo, P. A. (2022). Human rights to safe drinking water and sanitation of indigenous peoples: state of affairs and lessons from ancestral cultures Report of the Special Rapporteur on the human rights to safe drinking water and sanitation,. United Nations General Assembly.
- UNDRR. (n.d.). *Hazard definition and classification review*. Retrieved from Sendai Framework: https://www.preventionweb.net/hazard-information-profiles#:~:text=The% 20Hazard% 20definition% 20and% 20classification% 20review% 20provides% 20a,revolution% 2C% 20rigorous% 20accountability% 20mechanisms% 20and% 20renewed% 20global% 20partnerships% E2% 80% 9D.
- UNWTO. (n.d.). *Global Tourism Plasticas Iniciative*. Retrieved from https://www.unwto.org/sustainable-development/global-tourism-plastics-initiative
- UNU. (n.d.). *Sustainable Development Explorer UNU*. Retrieved from https://unu.edu/explore/sustainable-development-goal-7
- UNWTO. (n.d.). *The Hotel Energy Solution*. Retrieved from https://www.unwto.org/hotelenergy-solution
- UNECE. (n.d.). *Environment for Europe*. Retrieved from UNECE Environment Policy: https://unece.org/environment-policy/environment-europe
- UNECE. (n.d.). *UNECE and the SDGs*. Retrieved from Regional Forum on Sustainable Development: https://unece.org/unece-and-sdgs/regional-forum-sustainable-development

- UNECE. (n.d.). *Regional Forum on Sustainable Development*. Retrieved from UNECE and the SDGs: https://unece.org/environment-policy/air
- UNECE. (n.d.). *Environmental assessment*. Retrieved from UNECE Environmental Policy: https://unece.org/environment-policy/environmental-assessment
- UNECE. (n.d.). *The Water Convention and the Protocol on Water and Health* . Retrieved from UNECE Environment Policy: https://unece.org/environment-policy/water
- UNECE. (n.d.). *Public participation*. Retrieved from Environment Policy: https://unece.org/environment-policy/public-participation
- UNECE. (n.d.). *Education for Sustainable Development*. Retrieved from Environment Policy: https://unece.org/environment-policy/education-sustainable-development
- UNECE. (n.d.). About the PEP. Retrieved from The PEP: https://thepep.unece.org/
- UNECE. (n.d.). Retrieved from Feed UP UN: https://feedup.unece.org/
- IFAD. (2021, October). *The Biodiversity Advantage: Thriving with nature biodiversity for sustainable livelihoods and food systems*. Retrieved from IFAD investing in rural people: https://www.ifad.org/en/web/knowledge/-/biodiversity-advantage-report
- IFAD. (2022, September). *Hungry caterpillars threaten Kenya's crops. Can plants provide a natural pest control solution?* Retrieved from IFAD investing in rural people: https://www.ifad.org/en/web/latest/-/hungry-caterpillars-threaten-kenya-crops-can-plants-provide-natural-pest-control?p_l_back_url=%2Fen%2Fweb%2Flatest%2Fblogs%3Fstent%3D5%26delta%3D 9%26start%3D3
- IFAD. (2018, March). *The Water Advantage: Seeking sustainable solutions for water stress*. Retrieved from IFAD Knowledge Library: https://www.ifad.org/en/web/knowledge/publication/the-water-advantage-seeking-sustainable-solutions-for-water-stress
- IFAD. (2019, December). *IFAD, together with ASEAN invests in reducing transboundary haze pollution in Southeast Asia*. Retrieved from IFAD News: https://www.ifad.org/en/web/latest/-/news/ifad-together-with-asean-invests-in-reducing-transboundary-haze-pollution-in-southeast-asia
- IFAD. (2020). *Could avocados save Nairobi's water?* Retrieved from IFAD investing in rural peple: https://www.ifad.org/zh-TW/web/latest/-/story/could-avocados-save-nairobi-swater-