Subcommittee Meeting of the Committee of Permanent Representatives 8 November 2018, 9:30 a.m. to 12:30 p.m. United Nations Office at Nairobi Gigiri Conference Room 1

Background Document for Agenda Item 2: Consideration of a draft Implementation Plan "Towards A Pollution-Free Planet"

This note serves as a background document for discussions under Agenda Item 2: Consideration of a draft Implementation Plan "Towards A Pollution-Free Planet".

UN Environment Assembly 3 Implementation Plan "Towards a Pollution-Free planet"

FIRST DRAFT

FIRST DRAFT OF THE UNEA3 IMPLEMENTATION PLAN "TOWARDS A POLLUTION-FREE PLANET"

as of 1 November 2018

Table of Contents

INTRODUCTI	ON AND SUMMARY5
PART 1- CO	NTRIBUTING TO ACHIEVING THE SUSTAINABLE DEVELOPMENT GOALS BY FOCUSING ON POLLUTION7
1.1	The Implementation Plan on Pollution
1.2	UN Environment Assembly outcomes: mandates from the resolutions
1.3	Building momentum: #BeatPollution voluntary commitments and pledges9
1.3	A living document: Linking with UNEA4 and future UNEAs10
1.4	Delivering on the Sustainable Development Goals
PART 2- THE	ADDED VALUE OF THE IMPLEMENTATION PLAN
2.1	Bringing together UN Environment's work to address pollution
2.2	Improved coordination and communication: The "glue" across pollution dimensions 13
2.2.1	A Platform: Sharing knowledge of good and innovative practices14
2.2.2	A Report: Tracking progress towards a cleaner planet15
2.3	Mobilizing partners and stakeholders to address challenges and provide solutions16
2.3.1	Building on the strengths of multilateral environmental agreements to tackle pollution. 16
2.3.2	Catalyzing existing partnerships and initiatives addressing pollution18
2.4	Responding to needs: Assessing regional differences and adapting to national capacities 18
PART 3- KEY	ACTION AREAS TO ADDRESS POLLUTION CHALLENGES
3.1	Action Area 1: Knowledge - Science for Evidence-based Policy
3.2 Policie	Action Area 2: Implementation – Rules, Enforcement capacity, Incentives and Integrated
3.3	Action Area 3: Infrastructure – Technologies, Innovation, Circularity, support systems 25
3.4	Action Area 4: Awareness - Communication, Education and Consumer Information27
3.5	Action Area 5: Leadership – Mobilizing Leaders and Partners
	PORTING THE DELIVERY OF THE IMPLEMENTATION PLAN30
4.1	Coordination functions
4.2	Resources and budget
4.2.1	Indicative budget for coordination
4.2.2	Estimates of the resources dedicated to pollution in the POW32
	Error! Bookmark not defined.

INTRODUCTION AND SUMMARY

The World Health Organization (WHO) estimates that 23 per cent of all deaths worldwide – amounting to 12.6 million people in 2012 – were due to environmental risks. Low income and middle-income countries bear the brunt of pollution-related illnesses, with a disproportionate impact on children, women and the most vulnerable. Addressing pollution helps the environment, improves quality of lives, reduces the impacts on human health and human capital and avoids income losses. Member States adopted a Ministerial Declaration as a key outcome of the 3rd UN Environment Assembly which gathered in Nairobi (Kenya) from 4-6 December 2017 under the overarching topic "Towards a Pollution-Free Planet". Paragraph 14 of the Ministerial Declaration calls for the "Executive Director of the United Nations Environment Programme to submit a plan for implementation in consultation with the Committee of Permanent Representatives, for [Member States] consideration by no later than the next United Nations Environment Assembly", "building on the outcomes of the Third Session of the United Nations Environment Assembly". As pointed out by the UNEA-3 Ministerial Declaration, 'we cannot overstate the need for rapid, large scale and coordinated action against pollution' (para 11) and that moving to a pollution free planet is a long term endeavor. (Para 14). The sixth edition of the Global Environment Outlook, with its theme "Healthy Planet, Healthy People" also highlights how pollution is a key issue requiring urgent and coherent action, through innovative and systemic environmental policy approaches (GEO-6, in prep.).

The Implementation Plan (i) builds on the UNEA outcomes and (ii) proposes action areas based on opportunities and solutions to address the capacity gaps and challenges related to pollution and (iii) contributes to achieving the Sustainable Development Goals. It builds on existing UN Environment work and initiatives and harnesses synergies across pollution dimensions - air, water, land/soil, marine and coastal, chemicals and waste. It aims at enhancing a "capacity to act" across the pollution dimensions and at reflecting inclusiveness and collective responsibility towards a cleaner world. Recognizing the different circumstances of regions, countries and cities, the Implementation Plan, through activities under the action areas, will create the enabling environment or conditions to overcome the gaps or challenges to addressing pollution as per needs and asks of countries.

The approach to the Implementation Plan summarized in Box 1 is both normative and operational. It connects with the Agenda 2030 Framework and the multilateral environmental agreements that relate to pollution. It highlights that good experiences/knowledge already exist and need to be shared. The Implementation Plan includes preventive and remedial aspects, for both the near and longer terms. It seeks to build coherence and coordination across the various partnerships that already exist.

Box 1: Key elements of the approach taken in the development of the Implementation Plan on Pollution

- Based on the UNEA-3 Ministerial Declaration and UNEA Resolutions related to pollution
- · Contributes to achieving the sustainable development goals
- Links with Fourth Session of the UN Environment Assembly
 - √ Share good experiences/knowledge on pollution, innovative solutions and technologies
 - ✓ Central role of sustainable consumption and production
 - ✓ Emphasises the need to open access to pollution data and information
- Country-driven and needs-based, recognising different capabilities to address pollution
 - ✓ To be assessed, for example through survey using indicators
- Builds coherence

- ✓ In UN Environment's programme of work on pollution dimensions across subprogrammes, and implementation of resolutions
- ✓ Across the Multilateral environmental agreements that relate to pollution
- Adds value through a focus on high impact solutions and measures
- · Works with key partners to mobilise actions and funding

The vision, main objectives, action areas, expected outcomes, timeframe, target audience and monitoring of the progress of the Implementation Plan are summarized in Table 1 below.

Table 1: Implementation Plan on Pollution summary

Vision	Towards a Pollution-Free Planet
Objectives	 ✓ To facilitate the implementation of UN Environment Assembly's Ministerial Declaration and resolutions addressing pollution ✓ To accelerate and upscale actions addressing pollution, by raising the capacity to act on all forms of pollution – air, water, marine, land, chemicals and waste ✓ To help countries at different levels of development to leapfrog by learning from each other on successful experiences in dealing with pollution ✓ To sustain and increase global awareness of pollution and its consequences on ecosystems and human health and well-being ✓ To monitor and report on progress towards a cleaner planet
Scope and target audience	✓ The Plan covers all the pollution dimensions: air, water, land/soil, marine and coastal, and also considers chemicals and waste in a cross-cutting manner. The Implementation Plan targets ministers, official, policy makers and relevant stakeholders that can influence decisions and action towards a pollution free planet, and aims at reflecting inclusiveness and collective responsibility.
Action Areas	 ✓ Knowledge: Science for evidence-based policy ✓ Implementation: Strengthening of implementation, design of incentives, integrated policy assessments, regulatory innovations, enhanced capacity building ✓ Infrastructure: technologies and innovation, circularity ✓ Awareness: Communication, education and consumer information ✓ Leadership: Mobilizing stakeholders, leaders and partners to address different forms of pollution
Main expected outcomes	 ✓ Leaders from national and local governments, business and financial sectors, international community and NGOs act to make pollution prevention and management a priority ✓ Stakeholders demonstrate greater knowledge on pollution, environment and health linkages and solutions to address these linkages ✓ Countries strengthen regulatory and policy frameworks to prevent and control pollution ✓ Countries share good practices, technologies and innovative solutions to avoid pollution and manage pollution when it happens ✓ Countries address environment and health linkages through the use of locally suitable solutions, technologies, innovations and infrastructure ✓ Sectoral capacities on pollution are enhanced through coordinated action and partnerships at the global, regional, national and local levels

	✓ Greater awareness of pollution impacts on environment, health and the economy and of available solutions drives behavioural change from all					
	✓ A cleaner world over time					
Timeframe	To be fully in line and contribute to the 2030 Agenda for Sustainable Development, the Implementation Plan's horizon is 2030. However, activities are articulated initially for a 3-year period (by 2021) to enable concrete results and adjustments to be made through guidance from an Advisory Board.					
Monitoring	✓ Synthesizing pollution data from existing monitoring and reporting mechanisms (e.g.					
and	Sustainable Development Goals, Multilateral Environmental Agreements)					
reporting	✓ Capacity and policy indicators to track actions in preventing and managing pollution and					
on	identify areas for more support					
progress	✓ Tracking of voluntary commitments by Member States and stakeholders based on self-					
	reporting and Voluntary National Reviews;					

PART 1- CONTRIBUTING TO ACHIEVING THE SUSTAINABLE DEVELOPMENT GOALS BY FOCUSING ON POLLUTION

1.1 The Implementation Plan on Pollution

The Implementation Plan "Towards a Pollution-Free Planet" aims to accelerate and upscale action to reduce pollution in all its forms as a contribution to achieving the Sustainable Development Goals.

The Implementation Plan consists of three main components:

- 1. Follow-up on UNEA resolutions
 - a. Implementation of pollution-related mandates provided by UNEA through the Programme of Work
 - b. Tracking the implementation of resolutions implemented by Member States and others through voluntary self-reporting
- 2. Increased coordination and sharing of knowledge, good practices and innovative solutions to pollution
 - a. Pollution knowledge sharing and solutions platform
 - b. Enhancing the opportunity of global, regional and city level cooperation on actions
- 3. Action areas to enhance capacity through targeting key gaps and challenges
 - a. Country-driven identification of needs and responses possible through partnerships/ resources
 - b. Building the capacity to act on pollution
 - c. Developing high impact solutions/ accelerators/measures

1.2 UN Environment Assembly outcomes: mandates from the resolutions

"Towards a Pollution-Free Planet" was the overarching theme of the 3rd session of the UN Environment Assembly and saw the adoption of 9 resolutions which were related to this topic. Yet, already at UNEA1 and UNEA2, some resolutions were adopted which contribute to deliver on the environment, health and pollution nexus (Figure 1). Chemicals and waste was the topic of resolutions adopted at UNEA1 and

UNEA2, and is also part of the Environment and Health resolution adopted at UNEA3. Marine litter and microplastics was the topic of resolutions of the 3 Assemblies, while air quality was the topic of resolutions at UNEA1 and UNEA3. Future UNEAs will most likely adopt futher resolutions related to pollution.

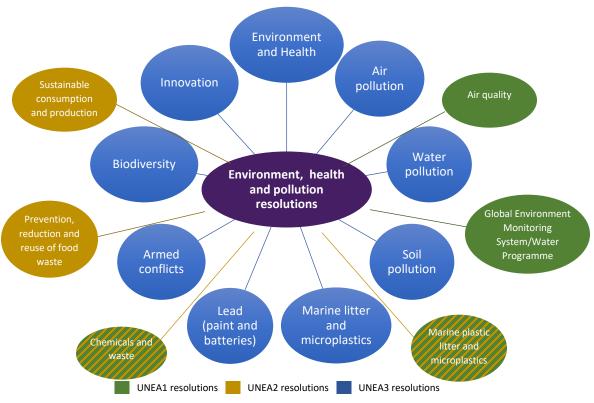


Figure 1: Environment, health and pollution-relevant resolutions adopted by Member States at the UN Environment Assembly

Annex 1 provides a detailed analysis and some key building blocks of these resolutions. These key activities also align well with the messages that came out of the leadership and the multistakeholder dialogues held at UNEA 3 and form the foundation of the Implementation Plan.

The main types of activities covered by the operational paragraphs in the pollution-related resolutions are shown in Figure 2. The many UNEA resolutions on chemicals, waste and pollution, including on environment and health have deepened the need for integration and nexus and synergistic thinking on chemicals, waste and pollutants given the cross-cutting issues in them. This implementation plan is designed to serve this purpose.

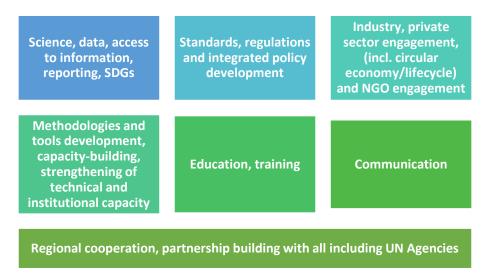


Figure 2: Main types of activities to address pollution in the UNEA resolutions

1.3 Building momentum: #BeatPollution voluntary commitments and pledges

The #BeatPollution campaign raised awareness of the many forms of pollution and encouraged individuals, governments, businesses and civil society to commit to act and save lives around the world in the run-up to the 3rd UN Environment Assembly. Almost 2.5 million pledges by citizens were made on web and social media.

Over 400 Voluntary Commitments were submitted by the end of December 2017 from governments, civil society and business as part of UN Environment's #BeatPollution. A total of 69 governments, 97 civil society organization and 23 businesses provided details of their current and future actions for tackling pollution. The majority of government commitments include policies and actions for directly controlling pollution at source, building resource efficient, circular economics and raising public awareness. Overall, commitments fall into four broad categories:

- a. Expanding existing pollution reduction and control activities and policies
- b. Removing barriers to depolluting activities;
- c. Increasing awareness through education and targeted, public awareness campaigns;
- d. Investing in research and development

Tackling pollution through Voluntary Commitments cuts across all environmental areas: air pollution, chemicals and waste represent nearly 60% of the commitments; 17 percent are about tackling marine and coastal pollution, especially marine litter and plastics; 8% target freshwater pollution and 7% land and soil (Figure 3).

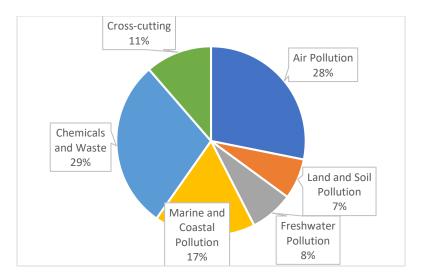


Figure 3: Number of commitments per pollution dimension (from governments, civil society and business)

Examples of voluntary commitments include: adopting WHO air quality guidelines, providing effective and affordable public transport, controlling use of antimicrobials in the livestock sector to avoid releases into the environment, protecting and restoring wetlands and other natural systems contributing to water purification, extending product lifespan through sustainable design, removal of lead in paints, among others.

The Implementation Plan will sustain the momentum by encouraging others to submit Voluntary Commitments as well as by following-up on the planned actions through self-reporting and sharing of best practices.

1.3 A living document: Linking with UNEA4 and future UNEAs

This Implementation Plan is a "living document" linking past UNEAs to future UNEAs. On the one hand, it builds coherence across and facilitates the implementation of the outcomes of past UNEAs. On the other hand, it will be capable of integrating the outcomes of future UNEAs, which are expected to adopt resolutions that can address remaining challenges (cf. box 2) to act on pollution in an impactful manner. It needs continuous leadership and stakeholder engagement to ensure progress towards a world free of pollution.

Box 2: Key challenges and gaps to addressing pollution identified in the Executive Director's report to UNEA3 and through stakeholder consultations

Knowledge: There is a need for much greater awareness of information on the sources of pollution, the pathways of exposure, the impacts and solutions and alternatives for improved choices, regulation and decisions and awareness raising.

Implementation: Strengthened regulatory and institutional functioning combined with enhanced technical and institutional capacity, knowledge and experience sharing on what has worked or not worked are essential to accelerate and upscale action to prevent and address pollution

Infrastructure: Infrastructure to prevent, manage and control pollution is key for developing and adopting better practices but also reduces exposure to hazards associated with pollution, such as waste dump collapses or flooding of sewage water that leads to mobilization of dangerous chemicals from storage.

Awareness: Lack of awareness that consumption choices have pollution consequences, limited information on the risks and available solutions, and insufficient product information for consumers to make informed choices.

Leadership: Right signals from leadership on actions to curb pollution are key to positive change. These include not just political, but also industry, faith based groups, youth and finance leadership. For example, policies on pollution information disclosure, internalization of pollution costs into product pricing, investments in green technology, green financing, and consumer labeling. These are important levers for pollution prevention and control and for market transformations towards greener products, in particular to incentivize consumers to make more informed choices and create pressure through demand on producers to reduce their pollution footprint and adopt better and innovative practices.

Figure 4 shows how pollution related resolutions in UNEAs 1, 2 and 3 can address the gaps and challenges identified and contribute to actions. It also shows how future UNEA resolutions can target the gaps to reduce the differences in the capacity to act on pollution in a similar fashion.

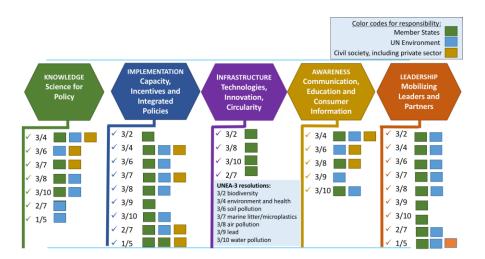


Figure 4: Example of mapping the contribution of the UNEA resolutions to address the main pollution challenges

The overview in Figure 4 will be updated based on the outcomes of each future UNEA and can guide Member States in developing future UNEA resolutions seeking to address remaining pollution-related challenges for future UNEAs.

It is expected that UNEA 4 under the theme "Innovative solutions to environmental challenges and sustainable consumption and production" will make an outstanding contribution in this regard. After all, implementing high impact solutions to combat pollution (see. Part 4) at scale hinges on innovation, as well as the reduction of the environmental footprint of production activities and, behaviors and consumption patterns.

High impact solutions involve social and policy innovations and new business models that are gender and poverty sensitive, as pollution disproportionally affects the poor and tackling pollution contributes to sustainable development by fighting poverty, improving health, creating decent jobs, improving life

below water and on land, and reducing greenhouse gas emissions. They will also draw from digital technologies to both deepen actions but also to scale them up.

1.4 Delivering on the Sustainable Development Goals

The 2030 Agenda for Sustainable Development provides an opportunity to enhance and accelerate action on pollution and thus help to achieve the Sustainable Development Goals. By taking action to prevent, better manage and reduce pollution at regional, national and local levels, governments and stakeholders put themselves on a path to meeting the Goals.

While addressing pollution supports the delivery of all Sustainable Development Goals (Figure 5) some targets are more directly connected to the pollution agenda and the delivery of the Implementation Plan (Annex 2). The Implementation Plan aims at accelerating action to meet these targets, while also integrating progress on the pollution-related targets in the Implementation Plan reporting framework.

To be fully in line and contribute to the 2030 Agenda for Sustainable Development, the Implementation Plan's horizon is 2030. However, activities are articulated initially for a 3-year period (by 2021) to enable concrete results and adjustments/ adaptive management during the Medium-Term Strategy period 2018-2021, based on lesson learnt and progress made.

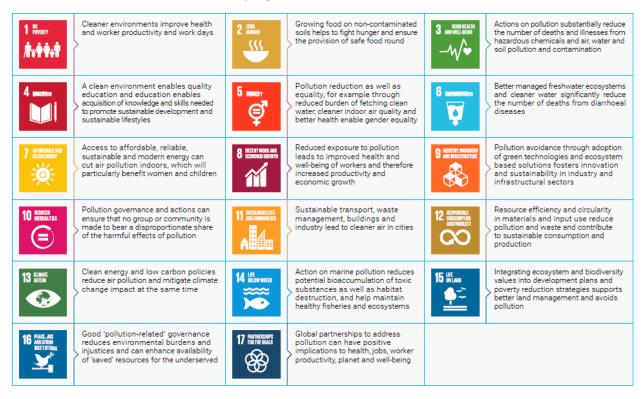


Figure 5: Sustainable Development Goals and linkages to the pollution, environment and health nexus

PART 2- THE ADDED VALUE OF THE IMPLEMENTATION PLAN

2.1 Bringing together UN Environment's work to address pollution

All of the seven sub-programmes of UN Environment contain aspects that can support actions on pollution (Annex 3).

For example:

- 1. The chemicals, waste and air quality sub-programme works on sound chemicals and waste management, and improving air quality. The programme addresses air, water and marine pollution through various initiatives, as well as waste prevention and management through strategy planning, value retention measures and use of circular approaches. It also includes work on specific pollutants, such as on lead, pharmacueticals including antimicrobials, Persistent Organic Pollutants and mercury, and institutional strengthening at the national level to support Implementation of the Basel, Rotterdam and Stockholm convention, the Minamata Convention and SAICM.
- 2. The climate change sub-programme works on carbon dioxide and short-lived climate pollutants, like black carbon, methane and other ozone precursors. Actions to reduce them can have positive climate change mitigation impacts but also support a reduction in ozone depleting substances and other air pollutants that affect health and productivity.
- 3. The various International Resource Panel reports, the Global Chemicals Outlook and the upcoming sixth Global Environment Outlook (GEO-6), show repeatedly that resource efficiency is one of the most effective strategies to decouple growth from environmental footprints, detoxify through reduction of waste and pollution, and decarbonize by delinking growth from carbon. It is thus a key response to climate mitigation and pollution avoidance and can be used to raise the ambition on climate and pollution actions
- 4. Environment under review is able to support the pollution effort through ad-hoc thematic assessments, the periodic Global Environment Outlook but also through Environment Live and the associated indicator reporting platform for the Sustainable Development Goals and the Agenda 2030
- 5. Environmental governance supports work on pollution through gaps and trend analysis on regulatory approaches, through development of model legislation, as well as technical assistance to develop and strengthen legislation in countries
- 6. Disasters and conflicts have emergency deployments to address pollution caused by natural disasters, industrial accident and/or armed conflict. It also builds capacity to increase resilience to the same.
- 7. Healthy ecosystems, through actions on pollution, protect biodiversity and builds resilience in ecosystems, including freshwater ecosystems, by for example enhancing water quality by restoring wetland areas.

This Plan will take stock of the findings of various International Resource Panel reports, the Global Chemicals Outlook and the upcoming sixth Global Environment Outlook (GEO-6). It will build synergies across the pollution aspects of UN Environment's Programme of Work to increase their effectiveness and enhance visibility through a coherent narrative that speaks to the environment and human health as well as the human security nexus. Pillars of the Implementation Plan already embedded in the subprogrammes include pollution prevention, end-of-pipe treatment, life cycle management and system wide economic transformations for a cleaner and healthier planet.

2.2 Improved coordination and communication: The "glue" across pollution dimensions

The Implementation Plan builds coherence and improved coordination across resolutions, within UN Environment's Programme of Work, and with the work of the Multilateral Environmental Agreements that relate to pollution. To create such coherence and enhance coordination, two cross-cutting flagship activities are proposed: 1) a knowledge-sharing, best practices and innovation platform and 2) a regular synthesis report on pollution-related trends and challenges, innovative solutions adopted, and progress made in taking action.

2.2.1 A Platform: Sharing tools and knowledge of good and innovative practices

While pollution is a global issue, the priorities and capacities to act on pollution vary by region, country or locality. In order to provide better enabling conditions for Member States and all stakeholders to (i) prioritize issues and (ii) take action relevant to the particular issues they face, the Implementation Plan provides a platform to harness synergies across pollution areas and information on pollution trends and available actions, understand the drivers and impacts of pollution, pollution exposure and related health risks, and sharing of good practices. Such a platform will provide decision-makers with the various technology and policy options available in different parts of the world, on what works and what does not, costs and benefits, and the potential to use local solutions based on local knowledge. The platform, using a pollution lens, will build on several relevant knowledge platforms, such as the green growth knowledge platform, the sustainable consumption and production clearing house, and the knowledge websites and data bases of the OECD, the World Bank, the Convention on Biological Diversity, the Climate Technology Centre and Network, among others. It will pull together tools that exist to address pollution for example in case of Air quality: BenMAPS, Filling the gaps Report on air quality, the recently launched report on the 25 science based solutions for air pollution in Asia and the pacific, etc. It will help stimulate exchanges of innovative solutions to pollution issues, which can also be cross media in nature.

-	e-sharing and innovation platform: stimulating exchanges of good practices and innovative es and solutions
Deliverable:	 Knowledge and innovation online platform 1) to provide data on environmental degradation, pollution exposure and human health risks and impacts; 2) to facilitate exchange of best practices and facilitate collaboration with companies from relevant sectors to share information on new, alternative and existing technologies, and 3) to share tools and maps and stimulate innovative solutions. ✓ Share information on existing projects that are preventing or contributing to reduce pollution and exposure to pollution by country and by pollution dimension when relevant, gathering information and linking with existing platforms. ✓ Share information on technologies that are preventing or contributing to reduce pollution and exposure to pollution, and where they are used. ✓ Share information on existing policies to prevent and better manage pollution in countries and across sectors ✓ Disseminate information on existing standards, Best Available Technologies and Best Environmental Practices to reduce industrial emissions, and ✓ Support adoption and enforcement of legislation on national emissions from industrial sources
Key milestones	 ✓ Mapping of existing projects and activities from various partners and countries which are preventing and contributing to reduce pollution and make them available on an existing platform to be selected (by end 2019) ✓ Develop of a fully operational knowledge platform (by 2021)

Key initiatives to build up on: The	Lead (tentative): UN Environment	Key partners (tentative): tbd
Green Growth Knowledge Platform		
(World Bank, OECD, GGGI and UN		
Environment); InforMEA; One		
Planet Network Clearinghouse; UN		
Environment Live; Biobridge.		

2.2.2 A Report: Tracking progress of actions towards a cleaner planet

Being able to track activities and highlight progress is indispensable to accelerate action to reverse or mitigate environmental degradation and pollution leading to reduced well being and ill health. As the Implementation Plan's focus is on enabling countries to take measures towards a pollution-free planet, it is therefore proposed to develop a framework for tracking progress made on capacity and institutional strengthening to tackle pollution-related issues, as well as identify, on a regular basis, key measures and innovations that governments or stakeholders can adopt to improve on prevention and management of pollution (including air, water, marine/coastal, and soil pollution).

A report will be produced highlighting change: how many countries have adopted/are on the way to adopting/have yet to adopt pollution actions. This overview will be based on data provided by governments through existing reporting and surveys, together with publicly available materials on pollution, as well as country progress updates on actions towards reducing and avoiding pollution made as a result of the voluntary commitments made at the Third Session of the UN Environment Assembly or beyond.

Through this report, Member States and all stakeholders will be regularly provided with information on how measures and actions to address pollution are evolving. By providing reliable information on trends and progress made, and offering a platform for openaccess to information on pollution – pointing the user to existing initiatives and partnerships relevant to the various forms of pollution they cover – the Implementation Plan effectively adds value in providing (i) a bridge across different pollution areas, (ii) a one-stop-shop on pollution, environment and health information, and (iii) effective follow-up and reporting on action and progress made.

2) "Pollution report"- Tracking progress: where is the world in taking action to address pollution?							
Deliverable:	Deliverable: A first report "tracking progress: where is the world in taking action to address pollution" by						
	2021						
Initiatives: asso pollutions thro Example: UN E (2016) Actions Quality; report collected by gland partnershi pollution, mult environmental SDG Reporting UN Environme SDG scorecard (and subseque voluntary nation	ugh a survey. Environment on Air as and data obal initiatives ps addressing cilateral agreements; platform in nt live; the s of the GEO-6 nt editions);	Lead (tentative): UN Environment	Key partners (tentative): Global initiatives and partnerships addressing pollution, multilateral environmental agreements, Member States				

countries can provide voluntary reports on their national actions towards pollution prevention and reduction.		
Key milestones		
	d activities from various partners and countries which are e available on an existing platform to be selected	Q4 2019
Report "tracking progress: when	Q1 2021	
Pollution, environment and hea	Q4 2021	

2.3 Working with partners and stakeholders to address challenges and provide solutions

UN Environment cannot effectively act on its own. Delivering on the UNEA Resolutions already goes beyond UN Environment-driven activities, as resolutions also invite Member States, UN Agencies, multilateral environmental agreements and stakeholders, including local governments, non-governmental organizations and the private sector, to take action. The Implementation Plan aims at reflecting that inclusiveness and collective responsibility. Beyond UNEA resolutions, the Ministerial Declaration offers a unique opportunity for the international community to address the main challenges to address pollution and get results. It also catalyzes efforts of Member States and key global, regional, national and city authorities and institutions and partners, as well as development banks to accelerate change and increase impact to prevent, better manage and control pollution.

In order to upscale action, it is essential to build on already existing processes, multilateral environmental agreements, initiatives, campaigns and partnerships that are addressing pollution, catalyzing action and harnessing synergies. Assistance with joint resource mobilization could also be extended under the Implementation Plan, based on country-driven needs assessments and partnership analyses.

2.3.1 Building on the strengths of multilateral environmental agreements to tackle pollution

A number of multilateral environmental agreements and related frameworks provide a key opportunity to prevent and reduce pollution (Table 2). These agreements are an essential component of the pollution governance framework, providing targeted and time-bound actions, while some also include compliance-related actions, monitoring and reporting. They also enable the exchange of resources and information as well as the sharing of technologies, guidelines and best practices for their implementation, through for example control measures and controlled international trade.

The Implementation Plan aims to build synergies across pollution-related global and regional environmental agreements and enhance delivery in tackling pollution while avoiding socio-economic and environmental trade offs. While some multilateral environment agreements were not designed initially to address pollution, pollution mitigation is a cobenefit resulting from their implementation. This is the case for example from the Paris Agreement on Climate Change which implementation brings tremendous co-benefit for cleaner air. Some other multilateral environmental agreements directly

contribute to the pollution control agenda, such as the chemicals and wastes-related MEAs. These are covering pollutants whose toxicity on the environment and on human health have been established by the scientific community, and which Member States have committed to act upon.

However, there are other pollutants which may not be covered by such agreements even though they are evolving instruments, but warrant further action considering their impact on human health and the environment. Some warrant additional scientific research in order to precisely assess their environmental and health impacts and need to be treated using a precautionary approach. In this context, partnerships can provide the integrating, catalytic, and scaling up power needed to drive layered actions and next steps, and to complement and strengthen compliance with global and regional environmental agreements.

Table 2: Key multilateral environmental agreements addressing pollution

Air	WATER	Soil	MARINE AND COASTAL					
The United Nations Framework Convention on Climate Change (1992), including Paris Agreement on climate change Convention on Long-Range Transboundary Air Pollution	Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat (1971) The UN Economic Commission for Europe Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) (1992) The Protocol on Water and Health (1999) The Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters (2003) Convention on the Law of the Non-navigational Uses of International Watercourses (1997) NB: Freshwater pollution is also addressed by regional agreements looking at specific	Land and soil pollution is indirectly addressed by the United Nations Convention to Combat Desertification and chemicals and waste-related conventions and processes.	Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Dumping Convention) (1971) International Convention for the Prevention of Pollution from Ships (MARPOL) (1973) Convention on the Prevention of Marine Pollution from Land-Based Sources (1974) Barcelona Convention for the Protection of the Mediterranean Sea against Pollution (1976) and its Protocols International Convention for the Safety of Life at Sea (SOLAS) (1980) United Nations Convention on the Law of the Sea (UNCLOS) (1982) Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC) (1990) International Convention on Civil Liability for Oil Pollution Damage (CLC) (1992) NB: The global conventions are complemented by regional agreements and conventions on specific regional seas.					
transboundary water basins								

CHEMICALS AND WASTE

- ✓ Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (1989)
- ✓ Stockholm Convention on Persistent Organic Pollutants (2001)
- ✓ Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (1998)
- ✓ Minamata Convention on Mercury (2017)
- ✓ Vienna Convention for the Protection of the Ozone Layer (1985), the Montreal Protocol on Substances that Deplete the Ozone Layer (1987) and Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer (2016)
- ✓ International Labour Organization Chemicals Convention (1990) (No. 170)
- ✓ Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (1997)

2.3.2 Catalyzing existing partnerships and initiatives addressing pollution

Voluntary coalitions, partnerships and alliances, including with the business community, international organizations and civil society, are key for implementation and scaling up successful approaches (Table 3) The Implementation Plan builds on relevant voluntary coalitions, partnerships and alliances and focuses on the added value of such synergies, while aiming to emphasizing the link between pollution, environment and health in the priorities of potentially related initiatives which have not yet prioritized pollution. It provides a platform for these initiatives to work better together and to provide more visibility for their work, from a pollution, environment and health angle. The ability to mobilize and catalyze existing networks of stakeholders, such as the city and local authorities' network or the business associations, which can have a multiplier effect and be a key success factor for the Implementation Plan.

Table 3: Examples of global partnerships and initiatives directly addressing pollution

	Air		WATER		SOIL	N	ARINE AND COASTAL
✓	Climate and Clean Air Coalition	✓	✓ Global Programme of Action for			r the Protection of the	
✓	Partnership for Clean Fuels and Vehicles		Marine I	Enviro	onment from Land	-Base	ed Activities
✓	Global Fuel Economy Initiative (GFEI)	✓	Sustaina	ble R	ice Platform	✓	Global Partnership
✓	Global Alliance for Clean Cookstoves	✓	Global P	artne	rship on		on Marine Litter
✓	United for Efficiency-en.lighten initiative		Nutrient	Man	agement	✓	The Ocean Plastic
✓	Every Breath Counts	✓	✓ Global ✓ Global Soil		✓ Global Soil		Working Group
✓	Integrated Global Greenhouse Gas Information	Wastewate		ater	Partnership	✓	World Aquariums
	System (IG3IS)	Initiative		è			against Marine Litter
✓	Global Platform on Air Quality and Health						
✓	Global Bioenergy Partnership (GBEP)						
	Снемісл	ALS AN	ND WASTE				
✓	✓ Strategic Approach to International Chemicals Management			✓	Global Mercury Partnership		
✓	✓ RECPnet - Global Network for Resource Efficient and Cleaner		\checkmark	Global Alliance on Health and Pollution			
	Production		✓	Lead Paint Alliance			
✓ Global Alliance towards alternatives to DDT			✓ Global Partnership on Waste Management				

2.4 Responding to needs: Assessing regional differences and adapting to national capacities

The level of pollution and the capacity to act differs across regions, between countries and even within countries. The Implementation Plan enables the prioritization of actions in order to respond to local, national or regional specificities, through:

✓ The provision of key information on pollution and ongoing actions to address pollution, selecting key indicators with Member States, relevant stakeholders and experts. Key quantitative indicators that are globally available will be considered, complemented by a survey on existing policies, regulations, infrastructure or actions to prevent or manage pollution An example of implementation capacity (in terms of existing air quality laws and standards) is provided below (Figure 6).

Example (to address implementations gaps)

✓ Partnering and collaborating with UN Environment and other UN agencies, World Health Organization, Climate and Clean Air Coalition, partners and stakeholders as relevant to provide technical expertise and build the capacity of countries to identify and address the key pollution



challenges, upon request from countries.

Figure 6: Differences in air quality standards and laws

PART 3- KEY ACTION AREAS TO ADDRESS POLLUTION CHALLENGES

Despite the ongoing work of various organizations including UN Environment and the multilateral environment agreements, pollution persists in most countries although the nature and scale and the exposure varies. This persistence of pollution may be due to key challenges faced by a country and the stakeholders to act on pollution, as highlighted previously and summarized in Figure 7: **knowledge**, **implementation**, **infrastructure**, **awareness** and **leadership**.

For each of these 5 gaps/challenges where there is need to focus our attention and when countries so demand the Implementation Plan developed key Action Areas.

Capacity to Act on pollution through addressing gaps/challenges across pollution dimensions

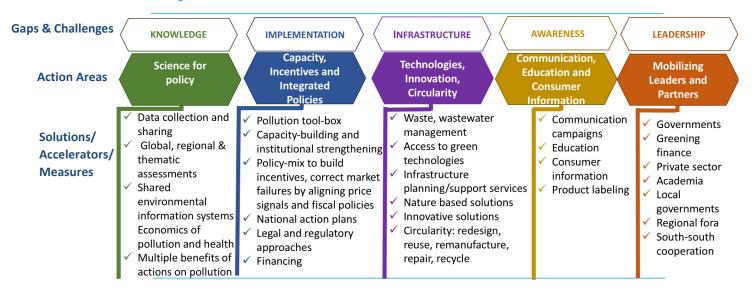


Figure 7: Key action areas in related to the Implementation Plan

The 5 action areas are respectively (i) science for policy; (ii) capacity, incentives and integrated policies; (iii) technologies, innovation and circularity; (iv) communication, education and consumer awareness, and (v) mobilizing leaders and partners.

For each action area, *a number of high impact solutions/accelerators have been identified*. These high impact solutions/accelerators aim at leveraging and accelerating action across pollution dimensions (air, water, soil/land, marine and coastal, chemicals and waste) rather than addressing individual focus on pollution. To ensure impact on the ground, objective and actions will need to be scaled down towards national and sub-national levels.

The UN Environment Programme will contribute to each action area through the ambitious implementation of the Programme of Work and relevant resolutions. As described above, however, the full implementation requires partnership. Therefore, each action area will be led/co-led by an international organization or development cooperation or other entity, who has a comparative edge in the respective area, and who are responsible for fundraising and strategic planning supported by the Secretariat.

Action Area 1: Knowledge – World Health Organization/UN Environment /OECD/others

Action Area 2: Implementation – Development Cooperation Agencies/ UN agencies

Action Area 3: Infrastructure – World Bank/ Regional Development Banks

Action Area 4: Awareness - World Wildlife Fund/Global alliance on pollution and health/others

Action Area 5: Mobilizing Leaders and Partners – UN Environment / World Health Organization

3.1 Action Area 1: Knowledge - Science for Evidence-based Policy

Access to pollution-related information has improved dramatically alongside advancements in information technology. There is a need, however, for much greater awareness of information on the sources of pollution, the pathways of exposure, and the impacts and solutions. In addition, even if the already existing evidence of the physical and economic cost of pollution already provides a clear-cut case for immediate action, in order to bring on board relevant ministerial departments, there is a need for a more comprehensive picture to inform evidence-based decision-making, identify a manageable number of cost-effective measures - from an environmental perspective, but also from a health and economic perspective- to help prioritize, as well as make a better case for their adoption and enforcement (e.g. as is the case for example on short-lived climate pollutants, through the Climate and Clean Air Coalition identification of the 16 most effective measures).

Enhanced information disclosure and greater use of knowledge in decision-making will enable the development of more effective interventions, support meaningful and effective participation, and empower the public to play a role in ensuring that governments strengthen implementation and that businesses meet their legal obligations. Geographical information systems mapping tools can provide new insights into opportunities for enhancing both human and natural capital through the layering of bio-physical data sets with socio-economic data sets. This can contribute to addressing the knowledge gap that some countries -in particular developing countries - may face while providing comprehensive and open information on pollution.

Key partners/partnerships:

UN Environment's "Environment Live" provides a platform for sharing data and information. The GEO process, the Global Chemicals Outlook are opportunities to collect data and share information. The Global Environment Outlook also offers a periodic analysis of high-level interactions across all environmental issues, with i.e. pollution clearly emerging a key issue requiring attention as part of systemic approaches, in the upcoming sixth edition of the Global Environment Outlook (GEO-6, in prep.). Given the environment-health nexus, however, a multidisciplinary approach is required to organize and analyze data and information across sectors. Economic analysis, for example, is required to demonstrate multiple benefits of actions on pollution whereas linking environment and health data allows for further analysis how addressing pollution may help tackling health issues.

The gaps in the action area of knowledge can be addressed through the existing partnership between UN Environment and the World Health Organization, and UN Environment and chemical conventions. Organizations such as the World Bank and the OECD can provide significant expertise to make the economic case for preventing and addressing pollution. Other global networks include the One Planet Network which is the leading multi-stakeholder platform focused on sustainable consumption and production implementation.

Proposed high impact solutions/accelerators

Prioritize measures to address pollution based on the assessment of their environmental, health and economic benefits

There are many measures that can be taken to address pollution. The objective is to select the key measures that can bring most benefits across pollution dimensions (i.e. air, water, soil/land, marine and coastal) and across sectors (e.g. agriculture/food security, industry, transportation, residential, extractive), using a life-cycle approach. The identification of a manageable number of cost-effective measures can help prioritize, as well as make a better case for their adoption and enforcement (e.g. as is the case for example on short-lived climate pollutants, through the Climate and Clean Air Coalition identification of the 16 most effective measures).

Deliverable:

A report highlighting the most effective measures to address pollution across pollution dimensions,, looking at environmental, health and economic benefits

2) Using geo spatial data to inform decision-making and map pollution hot-spots

Some forms of pollution are highly localized whereas others are diffuse and transboundary. Geographical information systems mapping tools can provide new insights into opportunities for targeted interventions through the layering of bio-physical data sets with socio-economic data sets to map pollution "hot spots". Open access to such information in relation to existing pollution sources or pollutants and (vulnerable) populations would contribute to address the knowledge gap that some countries -in particular developing countries – may face when identifying hotspots and prioritizing action, while providing comprehensive and open information on pollution in a transparent and science-based manner.

Deliverable:

Open source maps using geo-spatial data showing maps of pollution, dynamics of dispersion combined with population density, protected areas or other bio-physical or socio-economic datasets.

3) Economics of pollution

Pollution has significant economic costs resulting from impacts on human health, human capital, productivity losses, health-care costs and ecosystem damages. Even if the already existing evidence of the physical, social and economic cost of pollution already provides a clear-cut case for immediate action, in order to bring on board relevant ministerial departments, there is a need for a more comprehensive picture to inform evidence-based decision-making and support more effective policies.

Deliverable:

✓ Report on economics of pollution, human capital and implications for poverty reduction; costs of action: control and prevention of pollution, pollution related disease avoidance and human capacity development

4) Strengthening quality and analysis of harmonized data, and identifying long term trends.

There is a need to build capacity in countries to collect high-quality, timely comparable data on pollution, including geospatial data. The availability of national systems which collect data and use data to produce statistics underlines the ability to conduct assessments, create geospatial maps and evaluate the economics of pollution (in 1, 2 and 3). Building statistical capacity requires the availability of globally agreed methodologies, training and guidance materials and investment in national statistical systems. Additionally, in order for this information to become more discoverable at the global level there is a need for improved global reporting mechanisms (building upon the MEAs, the Global Air Quality Platform, GEMS Water the SDG reporting process, and other existing mechanisms).

Deliverable:

- ✓ Propose a key set of pollution related statistics which can be used to assess the status and impacts of pollution
- ✓ Data standards and methodologies developed and available across pollution areas, including on water quality, air quality, waste management, hazardous wastes and marine pollution
- Capacity building support to countries to improve the ability national statistical systems to compile and use pollution related statistics

Key milestones for action area 1

Data standards and methodologies developed and available across pollution areas, including on water quality, air quality, waste management, hazardous wastes and marine pollution	Q4 2019
Economics of pollution: report on control and prevention of pollution, pollution related diseases and human capacity development	Q2 2020
Develop guidance on using new data sources, including citizen science data, in monitoring pollution	Q4 2020
Most effective measures to address pollution identified, looking at environmental, health and economic benefits	Q1 2021
Open data platform using geo-spatial data showing maps of pollution and dynamics of dispersion	Q1 2021 (if use of existing platform)
Report on economics of pollution and human capital	Q4 2021

3.2 Action Area 2: Implementation – Rules, Enforcement capacity, Incentives and Integrated Policies

The ability to implement actions on pollution relate to having policy instruments in place – regulatory, market or voluntary and enforcement capacity. While many relevant policy tools and capacity building efforts exist, the challenge is in tailoring them to specific issues on the ground and use digital technologies and pollution disclosure information to assist enforcement and monitoring. A particular means of implementation has to do with trade policies. In the context of the rising scale and scope of global value chains, trade policies and agreements can help internalize the environmental and social costs of pollution while facilitating the development and diffusion of publicly available pollution-abatement technologies, goods and services. Instruments such as government procurement, subsidies, tariff reductions for environmental goods, and market access for environmental services can foster innovative solutions to pollution. The Environmental Database of the World Trade Organization, for example, shows that from 2014 to 2017, members' notifications of trade measures related to pollution increased by 88%.

Key partners/partnerships:

Given UN Environment's non-resident status, partnership is again essential. Existing mechanisms such as the Partnership for Action on Green Economy and the Environment and Trade Hub could be vehicles for delivering this action area. Also important is working with cities and national focal points through regional and country offices and the resident coordinator's system in partnership with development cooperation agencies.

Proposed high impact solutions/accelerators

1) Developing a pollution solutions tool-box

Rationale and key elements: There are some existing and new methodologies and tools to support integrated policy and decision-making on pollution, environment and health. Integrated environment and health Situation Analysis and Needs Assessment (SANA) were conducted in a large number of African countries as a result of the operationalization of the Libreville Declaration. The development of integrated environment and health risk and impact assessment has been requested in the UNEA3 'Environment and Health' resolution. Using the pollution knowledge sharing platform, the various methodologies, solutions, capacity-building programmes and legal tools will be made available on the Pollution-Knowledge Platform, as well as the results of the assessment conducted when available.

Deliverable:

Mapping of existing methodologies and tools on pollution, environment and health

✓ Methodologies and tools on pollution, environment and health, and the results of assessment conducted (when publicly available) are available on the pollution knowledge platform.

2) Stimulating good practices through fiscal policies

Rationale and key elements: Fiscal policy through revenue generating measures such as taxes and charges as well as government expenditures could provide incentives to discourage polluting activities or the use of polluting products in a cost-effective way. At the same time, by removing existing price distortions that generate perverse incentives such as environmentally harmful subsidies, fiscal policy reforms could reduce pollution and improve associated health impacts.

In practice, the use of fiscal instruments in reducing pollution and associated health impacts is limited, particularly in the developing world and there is still a knowledge gap on how to optimize the use of such instruments due to a lack of empirical evidence, data, and assessments based on existing data.

Deliverable:

- ✓ Collection of good practices on effective use of fiscal instruments for pollution reduction
- ✓ Evaluation of the performance of fiscal policy instruments through a few country specific studies to shed light on much needed empirical evidence on various factors that are needed for an effective use of fiscal policy for pollution reduction

3) Integrated cross-sectoral capacity building on pollution, environment and health

Rationale and key elements: Siloes between the environment and health communities and with other sectors results in lack of preventive action on pollution that could save lives, reduce burden on the health system and health costs and enhance worker productivity. In addition, as indicated in the World Bank evaluation report on pollution, countries frequently struggle to identify pollution priorities

Deliverable:

A capacity building programme on pollution, environment and health in countries/cities targeting mid-level decision-makers, industry managers, and officials across relevant sectors to

- ✓ build a common ownership of problems and potential solutions across sectors
- ✓ support countries and cities to prioritize pollution concerns in countries and a range of policy and regulatory options, based on an environment, health and pollution country/city assessment. This will also pave the way for more demand for infrastructure that prevent or reduce environmental degradation
- ✓ Build a network of partners to provide sustained policy and technical assistance for implementation of solutions locally which demonstrate highest economic, environment and health cobenefits.
- 4) Prioritize and address pollution issues at the national level, based on economic valuation and assessment of multiple benefits (economic, environmental and health-related

Rationale and key elements:. In order to support integrated policy decisions at country level, acquiring clear understanding of the most impactful actions requires to assess the multiple benefits-economic, environmental and health-related-of such policy actions in the key economic sectors. Economic analysis helps decision makers measure efficiency; either by reaching a defined health and environment goals with the lowest financial cost or by obtaining the greatest level of benefits from a defined level of resources helping to choose the most efficient of alternative options. Innovative methods of simple economic valuation, undertaken in consultation with stakeholders can provide extremely useful inputs to decision makers. The economic valuation will be linked directly to implementation plans, i.e. infrastructure investment, regulations, tax and economic instruments.

Deliverable:

- ✓ Identification of country-specific policies and actionable technology and financial options to reduce the causative of environment and health challenges in a selected number of countries
- ✓ Methodology and guidelines to calculate the economic cost of "no action" and multiple benefits of addressing environment and health linkages at national level.

Key milestones for action area 2	
Collection of good practices on effective use of fiscal instruments for pollution reduction.	Q2 2019
Mapping of existing methodologies and tools on pollution, environment and health and of key elements of pollution laws.	Q 4 2019
Capacity building programme and training materials on pollution, environment and health in countries/cities are available for being run in countries and cities	Q4 2019
Evaluation of the performance of fiscal policy instruments through a few country specific studies to shed light on much needed empirical evidence on various factors that are needed for an effective use of fiscal policy for pollution reduction.	Q2 2020
Methodology and guidelines to calculate the economic cost of "no action" and multiple benefits of addressing environment and health linkages at national level.	Q1 2021
Methodologies and tools for integrated action on pollution, environment and health, and the results of assessment conducted (when publiclly available) are available on the pollution knowledge platform.	Q4 2021
Capacity-building programme on pollution, environment and health has been run in a selected number of countries/cities	Q4 2021

3.3 Action Area 3: Infrastructure – Technologies, Innovation, Circularity, green finance, support systems

Limited infrastructure for pollution management and prevention is a key reason why, for example, garbage is found strewn in places, plastic litter gets into the sea, or wastewater is not treated before discharged. Good waste collection, segregation, and disposal systems along with support to service and maintain infrastructure are key to pollution management and for the adoption of circular approaches. While digital inroads are expanding across the globe, many developing countries still have limited access to the technologies of clean energy, e-mobility, water-saving irrigation systems, waste recycling, wastewater treatment, and ecosystem restoration. The maintenance and renovation of existing infrastructure or the role (or value) of nature-based solutions (e.g. wetlands for water purification), for example, is often ignored when assessing the economics of new projects. Further awareness raising is thus necessary. Climate Technology Centre and Network, the International Environmental Technology Center, and other entities, can facilitate choices of, and access to appropriate, publicly available technologies. UN Environment's Environment and Trade Hub supports trade in clean technology and innovative solutions to pollution.

Much greater efforts, however, are required to engage the private sector, where most of the technological innovations come from. Given the public-goods nature of research and development and the typical commercial risks involved in rolling out new technologies, public-private partnerships are essential for deploying innovative solutions. Such partnerships should also address issues of affordability, local production, and skilled labour in connection to the uptake of clean technologies.

The deployment of clean technologies underpinning the action areas requires green financing. To make infrastructure climate compatible globally (with co-benefits for reducing pollution), for example, an

additional USD 0.6 trillion is required per year from 2016 till 2030, on top of the USD 6.3 trillion for infrastructure to meet global development needs. Given the public goods nature of some infrastructure, and in particular much of the infrastructure related to pollution and health, public finances and policy steers will be essential. For example, global public procurement alone is estimated to be on the order of USD 10 trillion, implying governments' ability to shape domestic demand and leverage private investment in pollution management. In this regard, UN Environment has three green finance policy work streams::

1) Inquiry - engaging regulators to direct financing towards sustainability; 2) Finance Initiative, engaging private financiers; and 3) Green Fiscal Policy Network, gearing taxes and public spending towards sustainability.

In addition, UN Environment's partnerships with Multilateral Development Banks can be developed further to support their leadership in financing related infrastructure and upholding environmental and social safeguards. The financing required for new infrastructure is growing, but new research from the World Bank suggests that spending efficiencies and right policies are key to such investments. Having funds for operating and maintenance and the supportive skills sets is another key aspect of financing pollution solutions.

Key partners/partnerships:

In addition to the organizations already mentioned, UN Environment's partnerships with Multilateral Development Banks can be developed further to support their leadership in financing related infrastructure and upholding environmental and social safeguards.

Proposed high-impact solutions/accelerators

1) Promoting planning for supporitve infrastructure

A pollution-free planet requires clean infrastructure, which in turn requires integrated planning that takes into account the pollution performance and other social and environmental impacts of all infrastructure projects from a system perspective. Apart from using clean technologies, energy, and materials for individual projects, planning that seeks synergies across infrastructure systems can contribute to reduced use of energy and resources, thereby reducing waste and pollution.

Few countries, however, have institutions in place to plan the overall infrastructure investment across subsectors. Even where planning exists, there is little integration of the economic, social and environmental dimensions of sustainability. Existing tools for integrated infrastructure planning exist, but they need to be more widely communicated and applied.

Deliverable:

- ✓ An international forum for sustainable infrastructure by 2020
- ✓ A collection of 20 case studies of good practices on green infrastructure by 2020
- An introduction to major tools for integrated, sustainable infrastructure planning by 2020.
- 2) Making the case for innovative technologies and ecological infrastructure/nature-based solutions for pollution management and control and sharing lessons learns

Innovative technologies and nature-based solutions can play an important role in preventing and better managing pollution. The latest UN World Water shows how nature-based solutions are key to improving the supply and quality of water and that reservoirs, irrigation canals and water treatment plants are not the only water management instruments available.

There are many other nature-based solutions which are often not utilized because of lack of knowledge of their existence, their maturity such as phytoremediation which uses plants to restore soils contaminated by heavy metals, such as those found in mine dumps and polluted industrial sites. There is a need to bring these innovative technologies and nature-based solutions to the forefront of the attention for them to be more widely used. Renewable energy technologies, such as photovoltaic or wind technologies were once considered innovative or niche markets before being widely used.

Deliverable: Identification of innovative technologies, including nature-based solutions that address pollution, and conditions of use, and collection of case studies of their use

3) Facilitating pollution control infrastructure projects and innovative finance

To be further developed.

Milestones to be further developed.

3.4 Action Area 4: Awareness - Communication, Education and Consumer Information

A movement towards a pollution-free planet from the consumption side will require changes in collective and individual mindsets, values and behaviours, alongside changes in policies and regulations. Campaigns on risks and available solutions, pollution prevention and management teaching materials in education curricula as well as improved consumer and product information play a strong role in enhancing awareness and enabling behavioural change at all levels. Greater pollution disclosure information through, for example, the Pollutant Release and Transfer Register, or in short, emission inventories, are mechanisms that track the amount of priority pollutants emitted to air, water and land at the national, local or ecosystem level. PRTRs address the interest and needs of local communities, the broader public and decision-makers to better understand which chemicals are emitted from specific facilities and in what amounts and help improve awareness but also enforcement capacity.

Key partners/partnerships:

Partnership with people is key to delivering on this action area. Existing tools include the following campaigns, which could be extended and enhanced: Beat Pollution, Beat Plastic Pollution, Clean Seas, BreatheLife, Clean Air Week, and Lead Paint Week. UN Environment's work on "consumer information and eco-labeling" is in essence a partnership with consumers to encourage and enable sustainable consumption behaviors. OECD and UNITAR can assist interested countries in designing national PRTR systems through a multi-stakeholder process that covers local and national priority pollutants.

1) Promote consumer information (e.g. product information, chemicals in product)

Consumer information tools are critical to help citizens understand the composition of the products they are buying, incentivize producers to make such information available by consumer. In particular, labelling and sharing information on chemicals in products in a manner that is adapted and understandable by users and increasing information sharing on chemicals-related exposure and risks can play a major role to drive behavioural change along supply chains. The Guidelines for Providing Product Sustainability Information developed under the One Planet Consumer Information Programme and the Chemicals in Products programme of the Strategic Approach to International Chemicals Management provide 2 key platforms to make progress, in addition and in complementarity to national labelling and certification initiatives. Their use of the life-cycle approach makes it very strong to ensure reliability of information and minimize trade-offs. A set of key recommendations to be implemented for national governments in particular include: i) the provision of reliable and effective consumer information on the impacts of consumer products throughout their life cycles ii) the introduction and/or harmonization of eco-labelling schemes iii) the introduction of producer responsibility schemes to collect, treat and safely recycle waste from production and consumption iv) improvement of knowledge related to chemicals in products throughout their life cycle (production, use, consumption and disposal) v) extend product lives

Deliverable: to be further defined

2) Run global campaigns on pollution, environment and health

Public advocacy is indispensable to raise awareness of the pollution issues and risks for human health linked to exposure. However, for the campaigns to drive behavior change, they need to present available solutions, with identification of the benefits for the health, the economics, focusing on win-win options, and bring about

lifestyles change, suggesting alternatives to citizens. These campaigns are important elements to incentivize or support decision-makers and to place emphasis on the responsibility of producers to provide greener and more sustainable products and services.

Deliverable:

Within UN Environment: to capitalize on the success and momentum of the #BeatPollution campaign, a scale up of the campaign is proposed so that it can act as a rallying point for citizens, government, business and private sector to join forces, and exercise peer pressure to address pollution, also serving as an umbrella campaign for #CleanSeas, #BreatheLife and #BanLeadPaint.

Campaigns should however be broader than UN Environment. In addition to inviting more partners to join the UN Environment campaigns, a set of key messages will be defined, for all partners of the UNEA3 Implementation Plan to use, and materials will be developed to support countries, cities and stakeholders' efforts to raise awareness on pollution.

3) Education programmes on the dynamics of pollution (i.e. causes of pollution, life-cycle of pollutants) and youth mobilization for behavior change

In order to change the behavior of young people towards more sustainable practices in their home, but also in their future workplace, a modular education programme (adapted to the age and the environment young people live in) will be developed – available on an online platform- on the links between pollution, environment and health. This will be an educational tool that will help raise awareness among students and share knowledge on pollution, including linkages with climate change, biodiversity and lifestyles and on the available solutions.

Deliverable:

- ✓ A teacher's modular manual concentrating on the links between air pollution, climate change and health
- ✓ An online learning platform which will 1) serve as an exchange platform between teachers to adapt the education pack through its intranet function 2) raise awareness amongst a wider audience. Key elements/modules of the education will be put on line, to serve as a basis for further adaptations in other countries and for other age groups

Milestones to be further developed.

3.5 Action Area 5: Leadership – mobilizing commitment to act on pollution

To accelerate and upscale pollution action and enhance the level of ambition, strong leadership is needed, including from the private and finance sector. Engaging with the financial sector aiming at gearing finance towards the pollution agenda is critical for the success of the plan. Championing pollution issues, voluntary reporting on national actions and cooperation between countries, cities and groups can help bring to the fore success stories and opportunities to share knowledge, experiences of what did and did not work in countries, key sectors, and regions. It can reduce asymmetries of information and capacity, leverage actors and actions where they are most needed, highlight the multiple benefits of actions and shift focus from the global to the local, or vice versa. Partnerships also connect businesses and other stakeholder groups in different parts of the world. It will take vision and commitment, and above all leadership, to raise the bar on industry standards, come up with innovative solutions and set the policies in place to unlock private finance.

Key partners/partnerships:

The Inquiry's partnership with regulators can encourage their leadership to build pollution performance into the criteria for financial transactions. Finance Initiative's partnership with the financial sector can motivate investors' leadership in demanding clean business practices. UN Environment can raise awareness with the private sector internally through the Finance Initiative (through the newly established Principles for Sustainable Insurance "Life & Health" Work Stream for instance) and through partnerships with Multilateral Development Banks and networks such as the Principles for Responsible Investment and UN Global Compact. The Fiscal Policy Network can influence finance ministries to take

the lead in pricing polluting activities and mobilizing domestic resources for financing clean infrastructure. BreatheLife campaign can build an alliance of cities who commit to clean air. Health practitioners can commit to support cleaner planet for healthy people.

1) Mobilize stakeholders to further address pollution through voluntary commitments

Following up on the 405 Voluntary Commitments which were submitted by the end of December 2017 from governments, civil society and business as part of UN Environment's #BeatPollution, new stakeholders will be invited to make commitments while existing commitment makes will be invited to further their commitments. Voluntary commitments enable the tracking of progress towards a "pollution-free planet", while enabling the identification of champions from national governments, industry and civil society, while stimulating others to commit.

Deliverable: voluntary commitment process available on line with regular self-reporting by commitment makers and sharing of progress

2) Incentivizing and redirecting finance and investments to less polluting economic activities.

Financial regulators and institutions have an important role to play in preventing and mitigating pollution and reducing its negative impacts. They can do this for example by internalizing the costs of pollution in financial decisions. Pollution impacts that were previously considered by financial institutions to be externalities are becoming more material. A range of environmental risk analysis tools and techniques are already being developed, including the use of "environmental scenario risk analysis", which then influence financial flows. They can also create incentives for reorienting financing away from companies and activities that pollute and towards greener technologies from any further investment or lending to companies or activities identified as highly polluting. Banks and investors can also provide preferential financing to solutions and projects that contribute to preventing and reducing pollution/environmental degradation.

A new "Life and Health" insurance work stream is being created under the Principles for Sustainable Insurance (which secretariat is headed by UN Environment) to mobilize life insurers around key topics e.g. air pollution and resistance to antibiotics.

Deliverable: To be further defined

3) Harmonize and support efforts from industry to reduce industrial emissions

Reduction of industrial emissions is key for pollution control. There is a need to incentivize and support industries in their efforts through the creation of a level-playing field within and across countries through permits for pollution industries based on Best Available Technologies and Best Existing Practices, defined by industry or sectors. Some already exist in certain countries and for certain substances or sectors (i.e. waste, POPs, mercury). Supporting activities include:

- i. Identification and assessment of existing BAT and BEP (e.g. waste, POPs and mercury) by industry or sector, at regional, national and international levels (e.g. under MEAs)
- ii. Collection of BATS and BEPS through existing fora
- iii. Dissemination across regions and at international level
- iv. Forum to speed up the dissemination and replication and funding resources to support the implementation
- v. Adoption and enforcement of legislation on national emissions from industrial sources, through BATs and BEPs

Deliverable: Identification and assessment of existing BAT and BEP (e.g. waste, POPs and mercury) by industry or sector, at regional, national and international levels (e.g. under MEAs) by Q4 2020

4) Mobilize regional meetings of ministers of environment and environment and health fora and initiatives

¹ Financial institutions have been addressing environmental sources of risk for many years through compliance with regulation, voluntary industry policies and products such as environmental pollution liability insurance (also known as environmental impairment liability insurance). But these impacts have always previously been considered externalities.

Regional meetings of ministers of environment are key leverage points to act on pollution and to reach out to other ministerial departments, and sectors. Actions to intensify collaboration between health and environment ministries, including to identify joint priority areas, implement national environment and health action plans, and agree on mutually supportive and specific activities, are also a feature of a number of regional health and environment initiatives. They are closely connected with the pollution agenda, as pollution has significant impacts on human health and well-being².

Deliverable: To be further defined Milestones to be further developed.

PART 4-SUPPORTING THE DELIVERY OF THE IMPLEMENTATION PLAN

Delivery of the Implementation Plan will need to be done through partnerships – facilitated and coordinated by the UN Environment Programme. The United Nations Environment Assembly provides oversight of the Implementation Plan through its Committee of Permanent Representatives. These national focal points are nominated by countries and can be the same as those who now support sustainable consumption and production or the national designated entities (NDEs) of the CTCN or the national officers that support MEAs to ensure efficiency and coordination

4.1 Coordination functions

In addition to contributing to the delivery of the Implementation Plan through its Programme of Work, the UN Environment Programme will fulfill coordination functions, which are key for the Plan to succeed.

Coordination

- ✓ Build synergies across activities on the various pollution areas (air, water, marine and coastal, land/soil, chemicals and waste) across UN Environment
- ✓ Coordination of additional activities that can facilitate synergies, progress sharing
- ✓ Coordinate capacity needs assessment and responses to needs
- ✓ Providing visibility to actions

Partnerships

- ✓ Work with partners to support high impact solutions under each of the 5 main action areas
- √ Harness synergies across existing partnerships/initiatives already addressing pollution

Resource Mobilization

- ✓ Develop and implement a funding strategy to support countries
 - o Develop proposals to support countries, targeting Global funds, Foundations, others
 - Work with finance institutions to develop commitments to bankable projects as in Tropical Finance Facility
 - Work with Multilateral Development Banks and other public institutions to finance pollution management infrastructure.
 - Work with the private sector to support clean up of legacy sites
- Knowledge Management Exchange of best practices on pollution and innovative solutions

² Several regions are fostering sectoral coordination between the environment and health sector through regional environment and health fora, including the African Inter-ministerial Conference on Environment and Health, Asia Pacific Forum on Environment and Health, European Environment and Health Ministerial Process and League of Arab regional states on Environment and Health.

https://www.unenvironment.org/explore-topics/chemicals-waste/what-we-do/environment-health-and-pollution.

- ✓ Solutions and knowledge sharing platform
- · Tracking progress and report
 - ✓ On capacities to act on pollution
 - ✓ Pollution Status Report (2021, 2031)

To enable this functioning, a coordination unit, focal point or centre is required.

Figure 9 below captures the main elements of the institutional structure proposed to deliver the UNEA implementation Plan:

- UNEA oversight
- An Advisory Board
- A Coordination Unit
- Partnerships
- National focal points

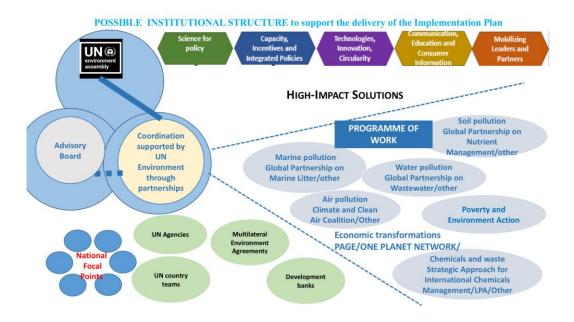


Figure 9: Possible institutional structure to support the delivery of the Implementation Plan

4.2 Resources and budget

The Implementation plan is ambitious. It will need to mobilize domestic resources, private sector engagement, global funds, support from Foundations and development finance. Funding for pollution exists. For example the world Bank has a multi partner trust fund to support pollution management and environment health. More recently, it has funding to support the reduction of plastic pollution. These are funds that can be mobilized to support low income countries in various ways to build capacity on pollution actions. Some pollutions actions are already supported by UN Environment's programme of work. (NB.The estimates of this support are being worked out and will be presented shortly).

4.2.1 Indicative budget for coordination of the Plan

The coordination functions required by the Plan supported by the UN Environment Programme will need additional resources to ensure a proper delivery of the Plan. Below is an indicative budget proposing three scenarios – low, medium and high that reflect the differences in staffing and the level of effort on resource mobilization to support the Implementation Plan. The medium scenario has a staff member in the following regions: Asia and the Pacific, Africa, Latin America and the Caribbean, and West Asia. The high scenario includes also Europe and North America.

Indicative Budget (annual in USD) for coordination

Non staff \$1,433,448 \$1,587,189 \$1,924,397 and resource mobilisation, administrative support) • Operations: \$64,400 \$104,890 \$166,890 • Travel: \$200,000 \$220,000 \$240,000 • Activities: \$896,410 \$898,795 \$1,076,382 • PSC \$272,638 \$363,504 \$441,125 • \$2,369,848 \$3,159,689 \$3,834,397 NB. Calculations are	Staff	\$936,400	Medium \$1,572,500	High \$1,910,000	Staff (coordinator, knowledge management & monitoring, partnerships
• Travel: \$200,000 \$220,000 \$240,000 • Activities: \$896,410 \$898,795 \$1,076,382 major differences between the low and the high scenarios are: regional presence and resource mobilization efforts • PSC \$272,638 \$363,504 \$441,125	Non staff	\$1,433,448	\$1,587,189	\$1,924,397	,
• Activities: \$200,000 \$220,000 scenarios are: regional presence and resource mobilization efforts • PSC \$272,638 \$363,504 \$441,125	Operations:	\$64,400	\$104,890	\$166,890	,
 Activities: \$896,410 \$898,795 \$1,076,382 mobilization efforts PSC \$272,638 \$363,504 \$441,125 \$2,369,848 \$3,159,689 \$3,834,397 	• Travel:	\$200,000	\$220,000	\$240,000	scenarios are: regional
\$2,369,848 \$3,159,689 \$3,834,397	Activities:	\$896,410	\$898,795	\$1,076,382	
\$2,369,848 \$3,159,689 \$3,834,397 NB. Calculations are	• PSC	\$272,638	\$363,504	\$441,125	
based on Nairobi costs		\$2,369,848	\$3,159,689	\$3,834,397	

4.2.2 Estimates of the resources dedicated to pollution in the POW

To be completed

ANNEXES

TO THE FIRST DRAFT OF THE UNEA-3 IMPLEMENTATION PLAN "TOWARDS A POLLUTION-FREE PLANET"

Annex 1: Analysis of environment, health and pollution related resolutions

Annex 2: Sustainable Development Goals and the pollution, environment and health nexus

Annex 3: Elements in the Medium-Term Strategy 2018-2021 that contribute to the pollution plan

Annex 1: Analysis of environment, health and pollution related resolutions

NB: the analysis of the UNEA3 resolutions will be complemented by the analysis of relevant UNEA2 and UNEA1 resolutions in the next draft.

	Mandates to UN Environment (in blue) with partners (in purple)	Mandates/Calls for action to Member States (in green) with partners (in yellow)
Environment and Health	 ✓ Report on the environment and health impacts of pesticides and fertilizers; ✓ Share studies on the impacts of pesticides on human and environmental health and peer reviewed epidemiological studies; ✓ Support Member States to identify and characterize the human and animal health risk, and risk to biodiversity and ecosystems, arising from anthropogenic sources antimicrobial resistance in the environment; ✓ Report on environmental impacts of antimicrobial resistance and the causes for development and spread of resistances in the environment; ✓ Assess and report on the health co-benefits of UN Environment current climate change related projects; ✓ Include human health factors in UN Environment projects on ecosystem valuation and accounting and assess the health co-benefits of its current biodiversity-related projects; ✓ Inclusion of an indicator on health and well-being impacts in the Indicators of Success Framework for the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns 	Facilitate dialogue across all level governments to consider health and biodiversity linkages and strengthen national research, monitoring capacity-building capacities; (science)
Marine litter µplastics	✓ Support countries in closing data gaps and improving data availability on sources and extent of marine litter and microplastics in the environment;	 Establish common definitions and harmonized standards and methodologies for measurement and monitoring of marine litter and microplastic
Air pollution	 ✓ Continue to support countries in putting in place affordable air quality networks to raise awareness on 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 	 Establish systems to monitor air pollution to support improved air quality management; Strengthen capacities to develop national and subnational emissions inventories;
Soil	Report on the extent and future trends of soil pollution and risks and impacts of soil pollution on health, the environment and food security;	 ✓ Promote research and development that contribute to controlling and managing soil pollution; ✓ Promote coherent and coordinated data collection and management, and information sharing on soil pollution ✓ Develop information systems of polluted sites and programmes that invest in the sustainable land management and research aimed at preventing, reducing and managing soil pollution
Water	 ✓ Develop a World Water Quality Assessment ✓ 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; 	 ✓ Improve water quality data collection and data sharing on a voluntary basis; ✓ Establish and improve water quality monitoring networks, promote streamlined national standardized monitoring and reporting mechanisms ✓ Continue to improve integration and coordination of the UN on water-related goals and targets;

		/ Enhance multiple conserts information on water quality		
		Finance public access to information on water quality		
		status and requirements for different water uses;		
Armed conflict		✓ Collect data to identify health outcomes and integrate them into		
		health registries and risk education programmes;		
Mandates from t	he UNEA3 resolutions relevant to Action Area 2			
	Mandates to UN Environment (in blue) with partners (in purple)	Mandates/Calls for action to Member States (in green) with partners (in yellow)		
	✓ Develop methods, tools and guidelines to promote integrated environmental and health risk	✓ Develop, adopt and implement effective measures, and national		
	assessments;	regulations to minimize the risks posed by chemicals;		
	 ✓ Support countries in developing integrated environment and health policies and measures; ✓ Preventive and integrated approach on the increased risks of vector borne diseases due to 	 Join and/or implement the Basel, Minamata, Rotterdam and Stockholm Conventions; 		
Environment	climate change;	✓ Implement the sound management of chemicals		
and Health		throughout their life-cycle;		
		✓ Consider measures to effectively manage waste and wastewater		
		to minimize their contribution to antimicrobial resistance		
		through environmental contamination;		
	Develop methods, tools and guidelines to promote integrated environmental and health risk	 Develop, adopt and implement effective measures, and national regulations to minimize the risks posed by chemicals; 		
	assessments; ✓ Support countries in developing integrated environment and health policies and measures;	Join and/or implement the Basel, Minamata, Rotterdam and		
Environment	Support countries in developing integrated criviloriment and nearth policies and incasures,	Stockholm Conventions;		
and Health		✓ Consider measures to effectively manage waste and wastewater		
		to minimize their contribution to antimicrobial resistance		
		through environmental contamination;		
	✓ Facilitate establishment and implementation of regional and national action plans to prevent	✓ Prioritize policies and measures to avoid marine litter and		
	and reduce litter and microplastics in the marine environment;	microplastics entering the marine environment;		
	✓ Advise on the most environmentally sound and cost-effective measures to prevent and reduce	✓ Implement the recommendations and actions in the UNEA		
	litter and microplastics in the marine environment; ✓ Convene an Ad Hoc Open-Ended Expert Group to (1) examine the barriers to and options	1/6 and 2/11 resolutions; ✓ Develop and implement action plans for preventing marine		
	(including costs, benefits and feasibility) for combating marine plastic litter and microplastics;	litter and microplastics encouraging resource efficiency;		
	(2) identify response options; (3) identify their costs and benefits; (4) identify their feasibility	✓ Include marine litter and microplastics in regional and		
	and effectiveness; (5) identify potential options for continued work;	national waste management plans and in wastewater		
Marine litter	✓ UN Environment to provide secretariat support to the Ad Hoc Open-Ended Expert Group;	treatment;		
and	✓ At least one meeting of the Ad Hoc Open-Ended Expert Group to be convened before UNEA 4;	✓ Develop integrated and source-to-sea approaches to combat		
microplastics		marine litter and microplastics; ✓ Measures to prevent marine litter and microplastics from sea-		
		based sources to prevent and reduce damage from natural		
		disasters;		
		✓ Include measures to prevent marine litter and microplastics in		
		plans to prevent and reduce damage from natural disasters		
		and increasingly severe weather events;		
		✓ Prioritize clean-up in the marine environment in areas where		
		marine litter poses a significant threat to human health,		

		biodiversity, wildlife or sustainable use and can be conducted cost-effectively and without harm to the ecosystems; ✓ Encourage innovative approaches such as the use of extended producer responsibility schemes, container deposit schemes;
Lead	 ✓ Continue assisting countries to strengthen and enhance national, sub-regional and regional implementation of environmentally sound management of waste, including capacity building – in close cooperation with the Basel Convention Secretariat; ✓ Assist countries to eliminate the use of lead paint, in particular providing tools and capacity-building for developing national legislation and regulations; 	 ✓ Develop, adopt and implement legislation/regulations to eliminate lead paint; ✓ Undertake actions throughout the value chain, including disposal, to remove the risks such paints pose; ✓ Develop national strategies to manage the collection of waste lead-acid batteries and address the issue of remediation of contaminated sites; ✓ Address releases, emissions and exposures from waste lead-acid batteries, including recycling, and utilizing appropriate standards and criteria;
Air pollution	 ✓ Strengthen technical support provided by global and regional networks and enhance institutional capacity to develop air pollution action plans; ✓ Support developing countries in expanding the use of cleaner fuels for cooking; ✓ Assist in the implementation of the Global Strategy to Introduce Low-Sulfur 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; 	 ✓ Integrate and strengthen air pollution management aspects in the national development agenda, and to internalize pollution costs; ✓ Consider using available tools, including BACA (Batumi Action for Cleaner Air), to inspire national action to improve air quality and protect public health and ecosystems; ✓ Set ambitious ambient air quality standards; ✓ Policies and measures to prevent and reduce air pollution from their significant sources; ✓ Include air pollutants that are also short-lived climate pollutants in national action programmes to prevent and reduce air pollution; ✓ Develop and implement national methane reductions strategies that could target key methane-emitting sectors; ✓ Prioritize measures to reduce particulate matter that also reduce black carbon emissions; ✓ Pursue synergies and co-benefits between national clean air policies and policies to take advantage of synergistic effects of efficient nitrogen management on reducing air, marine and water pollution;
Soil	 ✓ Technical guidelines for the prevention and minimization of soil contamination; ✓ Support governments to strengthen and coordinate national and regional policies and legislation to curb soil pollution; ✓ Cooperate on efforts geared at preventing, reducing and managing soil pollution; 	 ✓ Formulate new and strengthen existing strategic interventions, policies and legislation, aimed at setting norms and standards to prevent, reduce and manage soil pollution; ✓ Integrated response through preventive approaches and risk management using available science;
Water	 ✓ Assist developing countries by strengthening their capacity to reach the target of halving by 2030 the amount of untreated wastewater reaching water bodies; ✓ Support Member States to develop programmes for the management of land and ecosystems to prevent pollution of water sources; 	✓ Use the "Framework for freshwater ecosystem management" to protect and restore water-related ecosystems, create effective governance structures, develop national standards for water quality and set up water quality monitoring;

	 ✓ Develop tools to support countries to address water pollution, implement integrated water resources management approaches and address impacts of disasters; ✓ Address issues related to water pollution and build upon the 2016 Snapshot of the World's Water Quality and recommendations made by the Analytical Brief "Towards a Worldwide Assessment of Freshwater Quality"; 	 ✓ Policy development and implementation for integrated water resources management and investment in the protection and restoration of water-related ecosystems; ✓ Improve capacity to tackle accidental pollution risk; ✓ Strengthen preparedness to address waterborne disease issues, after diseases and during disease outbreaks; ✓ Strengthen cooperation to exchange knowledge, know-how and best practices; ✓ Collaborate and share best practices on data collection and monitoring for reporting on water quality and quantity purposes;
Biodiversity	Cooperate with the Secretariat of the Convention on Biological Diversity on the implementation of decisions of CBD COP 13 on aspects related to pollution mitigation through mainstreaming biodiversity into relevant sectors;	 ✓ Adopt practices for sustainable infrastructure, conservation of landscapes and ecosystems, sustainable use of land and marine spatial planning, and raise awareness of the multiple values of biodiversity; ✓ Establish, strengthen or foster institutional, legislative and regulatory frameworks; ✓ Support sustainable consumption and production, the application of clean technologies, the elimination, phasing out or reform of incentives harmful to biodiversity, and strengthening of positive incentives; ✓ Promote the creation of standards and good practice guidelines;
Innovative solutions		 ✓ Adopt, measures for preventing, reducing and reversing ecosystems degradation and loss; ✓ Promote environmentally sound innovative policies for sustainable industrialization, agriculture, urban development, transport, tourism and trade, and sustainable consumption and production in these key sectors;
Armed conflict		 Take measures to minimize and control pollution in situations of armed conflict or terrorism; Encourage all actors at the national level to participate in the preparation of the national plans and strategies aiming at setting priorities for environmental assessment and remediation projects; Provide technical assistance to implement international agreements on the environmentally sound management of chemicals and wastes and help build effective environmental governance;
		∀
		✓

Marine litter and microplastics		√	Encourage innovative approaches such as the use of extended producer responsibility schemes, container deposit schemes;
Lead	✓ Consider revising the "Technical Guidelines for the Environmentally Sound Management of Waste Lead-acid Batteries" regarding applying new technologies (Conference of the Parties of the Basel Convention);		
Air pollution		√	Engage in regional cooperation on science, technology, policy, measures and best practices;
Water	✓ Support Member States to create an enabling environment to address water pollution, including wastewater, through policies, laws and regulations, technologies and innovative finance;		
Biodiversity		✓	Support sustainable consumption and production, the application of clean technologies, the elimination, phasing out or reform of incentives harmful to biodiversity, and strengthening of positive incentives; Adopt practices for sustainable infrastructure, conservation of landscapes and ecosystems, sustainable use of land and marine spatial planning, and raise awareness of the multiple values of biodiversity;
Innovative solutions	Facilitate the strengthening of international cooperation by supporting countries in the promotion of innovative environmental solutions;	✓ ✓ ✓	Promote and invest in innovative environmental policy interventions and actions to accelerate the implementation of the 2030 Agenda; Promote and facilitate measures to strengthen innovative environmentally sound technologies;

Environment and Health	Promote sustainable lifestyles and sustainable consumption and production patterns that would benefit the environment and human health, including through the promotion of public health campaigns;	 ✓ Raise awareness on the negative impacts and risks of chemical pollutants (including in agro-chemicals, animal drugs and lead ammunition) on wildlife and encourage research on alternatives; ✓ Strengthen efforts in the areas of education and public awareness on linkages between health and environment, also noting the newly launched Guidelines for Providing Product Sustainability Information. ✓ Develop and implement communication strategies on the risks caused by chemical products and waste; ✓ Increase the awareness of the risks to human, animal and environmental health from the improper use of fertilizers and pesticides and promote measures to address them.
Marine litter and microplastics		✓ Cooperation for knowledge sharing and awareness raising, including through the Global Partnership on Marine Litter;
Air pollution	✓ Support developing countries on education and public awareness; ✓ Deliver information to stakeholders on the CCAC;	 ✓ Create awareness, including within the private sector, on the environmental, health and socio-economic negative impacts of pollution and on the economic benefits of taking action; ✓ Encourage cities and local governments to consider participating in the BreatheLife campaign;
Water		 ✓ Participate in the 8th session of the World Water Forum, to be held in Brasilia from 19 to 23 March 2018; ✓ Education and training to promote a shift to SCP;
Biodiversity		✓ Adopt practices for sustainable infrastructure, conservation of landscapes and ecosystems, sustainable use of land and marine spatial planning, and raise awareness of the multiple values of biodiversity;
Armed conflict	For the Executive Director of UN Environment to continue undertaking field visits to affected areas upon the invitation of the affected State;	
Mandates from t	he UNEA3 resolutions relevant to Action Area 5	

	✓	Partnership with relevant organizations to avoid duplication and improve effectiveness on	✓	Engage in on-going intergovernmental regional processes
Environment		the environment and health nexus;		addressing the health and environment nexus;
and Health	✓	Report to the CPR on the ongoing consultations between UN agencies on joint activities		
		on climate change, environment and health, including on the preparation of a joint plan;		

Marine litter and microplastics	 ✓ Strengthen the contribution of UN Environment to the Global Partnership on Marine Litter; ✓ Increase and coordinate actions to prevent and reduce marine litter and microplastics and their harmful effects; 	 ✓ Engage in intersessional process considering the Strategic Approach and the sound management of chemicals and waste beyond 2020; ✓ Follow up on the issues addressed in the Marrakech Ministerial Declaration on Health, Environment and Climate Change; ✓ Strategies to enhance resource efficiency along the full life-cycle of products; ✓ Encourages cooperation, including through the Global Partnership on Marine Litter and its regional nodes;
Lead		 ✓ Support the development of private sector strategies to eliminate lead paint; ✓ Cooperate in collecting waste lead-acid batteries for environmentally sound processing at regional or national recycling facilities; ✓ Become a partner of the Lead Paint Alliance; ✓ Continue to support the Global Partnership on Waste Management;
Air pollution	 ✓ Support the enhancement of regional cooperation to address air pollution and organize regional communities of practice for air quality; ✓ Platform for cooperation and information-sharing and capacity-building resources and online tools; ✓ Assess gaps in, and opportunities for, mitigation; and cooperation to advance a shared response; 	 ✓ Consider joining or cooperating with relevant global initiatives such as the Climate and Clean Air Coalition and the Global Methane Initiative; ✓ Engage in regional cooperation on science, technology, policy, measures and best practices; ✓ Knowledge sharing among existing and any future regional cooperation fora; ✓ Promote increased cooperation between UNEP and relevant international organisations on air quality; ✓ Maximize efficiencies and synergies between contributions of partners, International Financing Institutions and other funding organizations; ✓ Strengthening inter-governmental cooperation; ✓ Contribute to technical and financial support towards regional and national initiatives;

Water	 ✓ Support Member States to create an enabling environment to address water pollution, including wastewater, through policies, laws and regulations, technologies and innovative finance; Water 		 ✓ Prevent and mitigate water pollution and protect and restore water-related ecosystems, including through platforms for wastewater and management of nutrients; ✓ Increase transboundary water cooperation; ✓ Continue to work through the Global Wastewater Initiative and other UN-Water Members and the private sector to halve by 2030 the amount of untreated wastewater reaching waterbodies; 		
Biodiversity	✓	Promote close coordination, collaboration and synergies related to mainstreaming biodiversity;			
Innovative solutions	√	Facilitate the strengthening of international cooperation by supporting countries in the promotion of innovative environmental solutions;	√	Develop and strengthen partnerships to promote and enhance investment in innovative environmental solutions;	
Armed conflict	✓	Continue interaction with the International Law Commission inter alia by providing information in support of its work pertaining to pollution resulting from armed conflict or terrorism;	√	Cooperate on preventing, minimizing and mitigating, the negative impacts of armed conflict or terrorism on the environment;	

Annex 2: Sustainable Development Goals and the pollution, environment and health nexus

CHEMICALS AND WASTE	AIR WATER SOIL			Marine and Coastal					
3.9 By 2030, substantially reduce the num	ber of deaths and illnesses from hazardous	chemicals and air, water and soil pollution a							
12.4 By 2020, achieve the environmentall	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									
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 develope	d countries taking the lead	_						
9.1 Develop quality, reliable, sustainable a	nd resilient infrastructure, including regional	and transborder infrastructure, to support e	conomic development and human well-being	g, with a focus on affordable and equitable					
access for all									
9.4 By 2030, upgrade infrastructure and re	trofit industries to make them sustainable, w	vith increased resource-use efficiency and gre	eater adoption of clean and environmentally	sound technologies and industrial					
processes, with all countries taking action	in accordance with their respective capabiliti	es							
12.6 Encourage companies, especially large	e and transnational companies, to adopt sust	ainable practices and to integrate sustainabi	lity information into their reporting cycle						
12.c Rationalize inefficient fossil-fuel subsi	dies that encourage wasteful consumption b	y removing market distortions, in accordance	with national circumstances, including by re	estructuring taxation and phasing out those					
harmful subsidies, where they exist, to refl	ect their environmental impacts, taking fully	into account the specific needs and conditio	ns of developing countries and minimizing th	e possible adverse impacts on their					
development in a manner that protects the	e poor and the affected communities								
11.6 By 2030, reduce the adverse per capit	ta environmental impact of cities, including	14.1 By 2025, prevent and significantly re-	duce marine pollution of all kinds, in particu	lar from land-based activities, including					
by paying special attention to air quality ar	nd municipal and other waste management	marine debris and nutrient pollution							
12.3 By 2030, halve per capita global	7.1 By 2030, ensure universal access to	15.1 By 2020, ensure the conservation, res	toration and sustainable use of terrestrial	14.2 By 2020, sustainably manage and					
food waste at the retail and consumer	affordable, reliable and modern energy	and inland freshwater ecosystems and the	ir services, in particular forests, wetlands,	protect marine and coastal ecosystems					
levels and reduce food losses along	services	mountains and drylands, in line with obliga	ations under international agreements	to avoid significant adverse impacts,					
production and supply chains, including	7.2 By 2030, increase substantially the	6.2 By 2030, achieve access to adequate	2.4 By 2030, ensure sustainable food	including by strengthening their					
post-harvest losses	share of renewable energy in the global	and equitable sanitation and hygiene for	production systems and implement	resilience, and take action for their					
12.5 By 2030, substantially reduce waste	energy mix	all and end open defecation, paying	resilient agricultural practices that	restoration in order to achieve healthy					
generation through prevention,	7.3 By 2030, double the global rate of	special attention to the needs of women	increase productivity and production,	and productive oceans					
reduction, recycling and reuse	improvement in energy efficiency	and girls and those in vulnerable	that help maintain ecosystems, that	14.5 By 2020, conserve at least 10 per					
	11.2 By 2030, provide access to safe,	situations	strengthen capacity for adaptation to	cent of coastal and marine areas,					
	affordable, accessible and sustainable	6.3 By 2030, improve water quality by	climate change, extreme weather,	consistent with national and					
	transport systems for all, improving road	reducing pollution, eliminating dumping	drought, flooding and other disasters	international law and based on the best					
	safety, notably by expanding public	and minimizing release of hazardous	and that progressively improve land and	available scientific information					
	transport, with special attention to the	chemicals and materials, halving the	soil quality						
	needs of those in vulnerable situations,	proportion of untreated wastewater and	Soli quality						
	women, children, persons with	substantially increasing recycling and							
	disabilities and older persons	safe reuse globally							
		6.5 By 2030, implement integrated							
		water resources management at all							
		levels, including through transboundary							
		cooperation as appropriate							
		6.6 By 2020, protect and restore water-							
		related ecosystems, including							
		mountains, forests, wetlands, rivers,							
		aguifers and lakes							
		6.b By 2030, implement integrated							
		water resources management at all							
		levels, including through transboundary							
		cooperation as appropriate							

Annex 3: Elements in the Medium-Term Strategy 2018-2021 that contribute to the pollution plan

Climate Change:

Short Lived Climate
Pollutants
Cooling efficiency
District energy
Renewable energy
Low emission transport
Climate technology

Environmental Governance:

Gaps/trend analysis on legal measures and regulatory approaches to address pollution Model legislation or other guidance to develop relevant legislation Technical support to review, strengthen and develop legislation/ regulation to address pollution Contribution to the pollution agenda through MEA implementation

Disasters & Conflict:

Risk reduction
Environmental management in fragile states
Awareness, preparedness and prevention for technological accidents
Assistance to environmental emergencies
Environmental assessment of toxic waste dumping

Environment under Review:

UN Environment Live/ World situation Room pollution-related data and information Regional and Global Environment Outlooks Pollution-related thematic assessment Support to environmental networking and reporting Identification of emerging pollution issues

Chemicals, waste and air quality:

Strategic Approach to International Chemicals Management Environment, health and pollution Support to the implementation of chemicals and wastesrelated MEAs Global Partnership on marine litter Wastewater and nutrient pollution Global Chemicals Outlook Global Waste Management Outlook Sustainable chemistry Ozone depleting substances Building capacity for air quality monitoring and management

Sand and dust storms

Resource Efficiency:

Green growth knowledge platform Knowledge and capacity for inclusive green ecnomies Mainstreaming resource efficiency in development planning Pollution aspects of trade Sustainable consumption and production Sustainable food systems Life cycle approach Design of sustainable financial system ('Inquiry') Aligning private finance with sustainable development

Ecosystems:

Planning, monitoring and managing water quality Sustainable management of marine and coastal ecosystems Education for sustainability