

# UN Environment's Project Portfolio for

## *Programme 5*

# *Chemicals, Waste and Air Quality*

### MTS 2018-2021

6 April 2017 (final)

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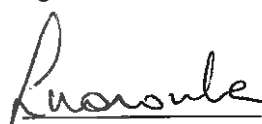
APPROVED BY THE PROGRAMME APPROVAL GROUP ON 11 APRIL 2017 IN NAIROBI, AND  
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# 1. Portfolio Overview

UN Environment's work in this area aims to improve human health and environmental quality by supporting governments, the private sector, and civil society in their efforts to reduce pollution, ensure sound management of chemicals and waste, and improve the quality of the air, water and land.

## a) What is new?

- **Halting pollution** is considered one of the key drivers of success towards improved human health and a detoxified environment; **air and water quality** are added to the portfolio, ensuring a *higher profile* at UN Environment;
- The whole **Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA)** which includes the **Global Partnership on Nutrient Management (GPNM)**, the **Global Partnership on Marine Litter (GPML)**, and the **Global Wastewater Initiative (GW2I)** will be included in this Subprogramme; while the GPNM was already part of the Chemicals and Waste Subprogramme (2014-2017), the GPML and GW2I will now both move from the Ecosystems Management Subprogramme (2014-2017) to the Chemicals, Waste and Air Quality Subprogramme (2018-2021);
- An **innovative initiative** on **Air Pollution and Health** has been included to ensure scaled-up delivery that is strategic, integrated, time-bound and issue-based, while providing social, economic and health benefits.
- UN Environment's work on the **Environment and Health nexus** is significantly scaled up, integrated and accelerated by maximizing synergies and offering a menu of services to relevant countries and stakeholders;
- **Cross-cutting and integrated approach** towards chemicals and waste **SDGs and MEAs**. This is done by achieving sound management of chemicals and waste throughout their **life cycle** by 2020, and include specific **targets** under several SDGs related to chemicals and waste and protection of **human health**;
- **Innovative approach** to chemicals management by promoting **Sustainable Chemistry** as a novel tool;
- Enhanced **regional delivery** through applying a stronger, *targeted country approach*.

## a) What is the same?

- The provision of secretariat services to: (I) the **Strategic Approach to International Chemicals Management (SAICM)**; (II) the **Special Programme** to support institutional strengthening at the national level for implementation of the Multilateral Environmental Agreements (MEAs) and SAICM; and (III) the **Global Partnership on Waste Management (GPWM)**;
- Continuation of UN Environment work on the environmentally-sound collection, management and destruction of banks of **Ozone Depleting Substances (ODS)** in developing countries;
- Continuation of UN Environment work on the **Global Chemicals Outlook (GCO) and Global Waste Management Outlook (GWMO)**, though in a *more integrated* manner, in agreement with UNEA2 resolutions;
- Continuation of UN Environment work on **delivering integrated waste solutions** at the national and local level.

## b) What has been dropped?

- Work on **single chemicals in an isolated manner**, as a more integrated approach has been adopted;
- Work on **schemes for progress reporting** on specific harmful substances, as this is done by MEA secretariats;
- Work on **tools for assessing radioactive impact** of substances, as this is done by UNSCEAR;
- Work as **Interim Secretariat** of the Intergovernmental Negotiating Committee (INC) for the **Minamata Convention** on Mercury, as this role will finalize at the end of 2017 once the first COP has taken place;
- Work on developing **guidance for waste management techniques**, since this work has been completed;

## c) What has been moved to other subprogrammes, or stays in other subprogrammes?

- Work on partnerships for **Small and Medium-sized Enterprises (SMEs)** has been moved to the Subprogramme on **Resource Efficiency** where it fits better; results can still be reported under this subprogramme, SP5;
- Work on **data visualization** is now under the Subprogramme **Environment Under Review** (Environment Live);
- Work on **disaster waste** (e.g. from earthquakes or migration crises) has been moved to the Subprogramme on **Resilience to Disasters and Conflicts**;

- Work on **food waste** continues in the Subprogramme on *Resource Efficiency*.

**d) Incorporating UN Environment’s work on the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA)**

- The whole Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) which includes the Global Partnership on Nutrient Management (GPNM), the Global Partnership on Marine Litter (GPML), and the Global Wastewater Initiative (GW2I) will be included in this Subprogramme. While the GPNM was already part of the Chemicals and Waste Subprogramme (2014-2017), the GPML and GW2I will now both move from the Ecosystems Management Subprogramme portfolio (2014-2017) to the Chemicals, Waste and Air Quality Subprogramme portfolio (2018-2021).

**e) UN Environment Resolutions**

- For each proposed project concept it has been indicated to which UN Environment resolution’s implementation it will contribute; references are made to chemicals, waste and air quality resolutions adopted at the first and second session of the UN Environment Assembly; this includes resolutions on marine litter and sand and dust storms. An overview of all UN Environment resolutions being addressed by the projects is provided in the detailed descriptions of the projects concepts in this document.

**f) Addressing social concerns highlighted in the MOPAN review**

- Project 5.I. on marine pollution will support countries in preparing and implementing policies, strategies and action plans that recognize the importance of economic and social benefits.
- Project 5.II. on generating and sharing knowledge for sound chemicals management will focus on Sustainable Development Goal Target 4.7 which aims promoting education for sustainable development and sustainable lifestyles, human rights, and gender equality. Emphasis will be on awareness and education around toxic chemicals like endocrine disruptors which highly affect the health of pregnant women and their unborn children.
- Project 5.III. on implementation of the chemicals and waste Multilateral Environmental Agreements and achieving the Sustainable Development Goals will provide technical and policy assistance to address social concerns related to the management of chemicals in the artisanal and small-scale mining sector which contributes to poverty eradication and an improved quality of life of local communities.
- Project 5.IV. on advancing Sustainable Chemistry will address the economic and social dimensions, taking into account the negative effect of harmful chemicals on vulnerable populations, including woman and children.
- Project 5.V. on environmentally sound waste management technologies will deploy social surveys including gender analysis to understand and address challenges faced by local communities, particularly women who are the primary users of waste management services in developing countries. Special attention will be paid to poorer communities who suffer disproportionately from unsound waste management in areas where wastes are often dumped on lands adjacent to their neighborhoods and slums. This leads to the creation of an informal waste management sector with poor people working as waste pickers. Many waste pickers belong to vulnerable groups such as recent migrants, unemployed, disabled, or elderly persons, women and children.
- Project 5.VI. on air pollution and health will scale up delivery on multiple environmental, social, economic and health benefits, including through promoting sustainable mobility that reduced the detrimental effects on the health of women, men and children, taking into account gender perspectives. In developing countries where solid fuel is widely used in homes for cooking or heating, air pollution levels can be high, meaning a high attributable fraction of this source, with higher values for women than for men. This source of air pollution disproportionately impacts women and children, and also causes increased levels of ambient air pollution in developing country cities. This project will be tailored as far as possible to evidence the gender perspective in terms of population exposure to different kinds of pollution. Negative impacts of air pollution upon the poor and most vulnerable groups in terms of livelihoods will be

highlighted as well, along with recommendations for appropriate air quality management with an aim of improving population health, particularly of the most vulnerable people.

**g) Upscaling our work with the private sector**

- UN Environment will work closely with the International Council of Chemical Associations (ICCA) which is composed of national associations of the chemicals industry around the world. This Council brings together innovators, visionaries, solutions providers and product stewardship pioneers who address global chemicals issues that involve the chemical industry private sector. By working closely with the ICCA, and for instance the Lead Paint Alliance (GAELP), UN Environment will be able to influence game changing global private enterprises involved in the design, production and distribution of chemical substances.
- Project 5.II. on generating and sharing knowledge for sound chemicals management will strongly engage with the private sector to ensure that novel research findings and approaches drive knowledge management in the business sector and industries, providing science-based sustainable solutions for a successful transition to sound management of chemicals and waste.
- Project 5.III. on implementation of the chemicals and waste Multilateral Environmental Agreements and achieving the Sustainable Development Goals will scale up involvement of the private sector such as by voluntary pledges to reduce or replace mercury, lead and other hazardous substances, and country projects involving companies that provide technology for an impactful transition towards sound management of chemicals and waste.
- Project 5.IV. on advancing Sustainable Chemistry will engage the private sector by identifying and sharing information on alternatives on chemicals in products and production in the chemicals business sector and industries, and by developing market incentives, as well as supporting policies, guidance, best practices, and relevant standards for the business sector. Partnerships with specific chemical companies committed to introduce safe chemical alternatives will be promoted.
- Project 5.V. on environmentally sound waste management technologies will engage the private sector, local entrepreneurs and workers to help them adopt a waste-to-resource approach, and provide waste prevention guidance and advice to the private sector entities. The private sector will play a major role in a demonstration project as technology provider. The project will enable the private sector to upscale demonstration projects in other cities and countries around the world.
- Project 5.VI. on air pollution and health will apply a clear partnership approach with the private sector to contribute to a move to a low and no emission transport sector. Private companies and industries are considered game changing actors in the transition to cleaner vehicles and fuels. Their engagement will imply a scaling up of results expected in this project.

**h) Integrating green finance for financing change in the chemicals, waste and air quality sectors**

- Project 5.III. on implementation of the chemicals and waste Multilateral Environmental Agreements and achieving the Sustainable Development Goals will finance change in the chemicals and waste sector, particularly through in-country financing of institutional capacity building, for instance through the special programme and other mechanisms, working with the UN Environment Finance Initiative, among others.
- Project 5.IV. on advancing Sustainable Chemistry will promote the identification of green investment opportunities to fund safe chemical alternatives.
- Project 5.V. on environmentally sound waste management technologies will embrace green financing as an integral part of a waste management demonstration project to be set up as it will showcase financial sustainability of sound waste management systems. This project will promote business cases for investors and develop mechanisms for designing green financing options.
- Project 5.VI. on air pollution and health will support finance investments in green technologies that contribute to a detoxified economy and society (e.g., to improve air quality) in a number of sectors including transport, waste, chemicals and building materials. This project will mobilize powerful finance game changers, including business, industry and finance stakeholders globally and regionally. The project managers will work closely with the United Nations Environment Finance Initiative and Principles for Sustainable Insurance.

- Project 5.VIII. on sand and dust storms will focus on strengthen the capacity of countries to combat sand and dust storms by showcasing green finance and technology alternatives for effective and efficient prevention and mitigation measures.

**i) Better engaging with civil society**

- Project 5.I. on marine pollution will work with civil society organizations to raise awareness among citizens about the impacts and cost of inaction related to the pollution and degradation of the world's oceans and coastal areas. The reduction of plastic debris and micro-plastics ending up in the oceans and seas will be promoted through campaigns working closely with civil society and citizens' groups. The Clean Seas Campaign is a good example of this successful approach.
- Project 5.III. on implementation of the chemicals and waste Multilateral Environmental Agreements and achieving the Sustainable Development Goals will engage with civil society groups to raise awareness about the negative health impacts of leaded paint and the use of mercury in artisanal small scale gold mining, medical devices, and dental amalgam.
- Project 5.IV. on advancing Sustainable Chemistry will engage civil society organizations like ChemSec and Greenpeace to raise awareness around the need to phase out harmful chemicals by introducing non-harmful alternatives that do not have negative health impacts. Consumer product standards and labelling will be promoted.
- Project 5.V. on environmentally sound waste management technologies will work closely with civil society organizations to ensure successful outreach and educational programmes around sound waste management.
- Project 5.VI. on air pollution and health will engage civil society organizations to develop jointly policies, strategies, standards and practices to address environment-health linkages, and reduce air pollution. A good example is the global public campaign #BreatheLife in which UN Environment is working with civil society stakeholders and engaging citizens, showcasing success stories and mobilizing powerful game changers that can catalyze change. In the campaigns, citizens will be urged to use clean technologies and public transport, and stop burning waste.

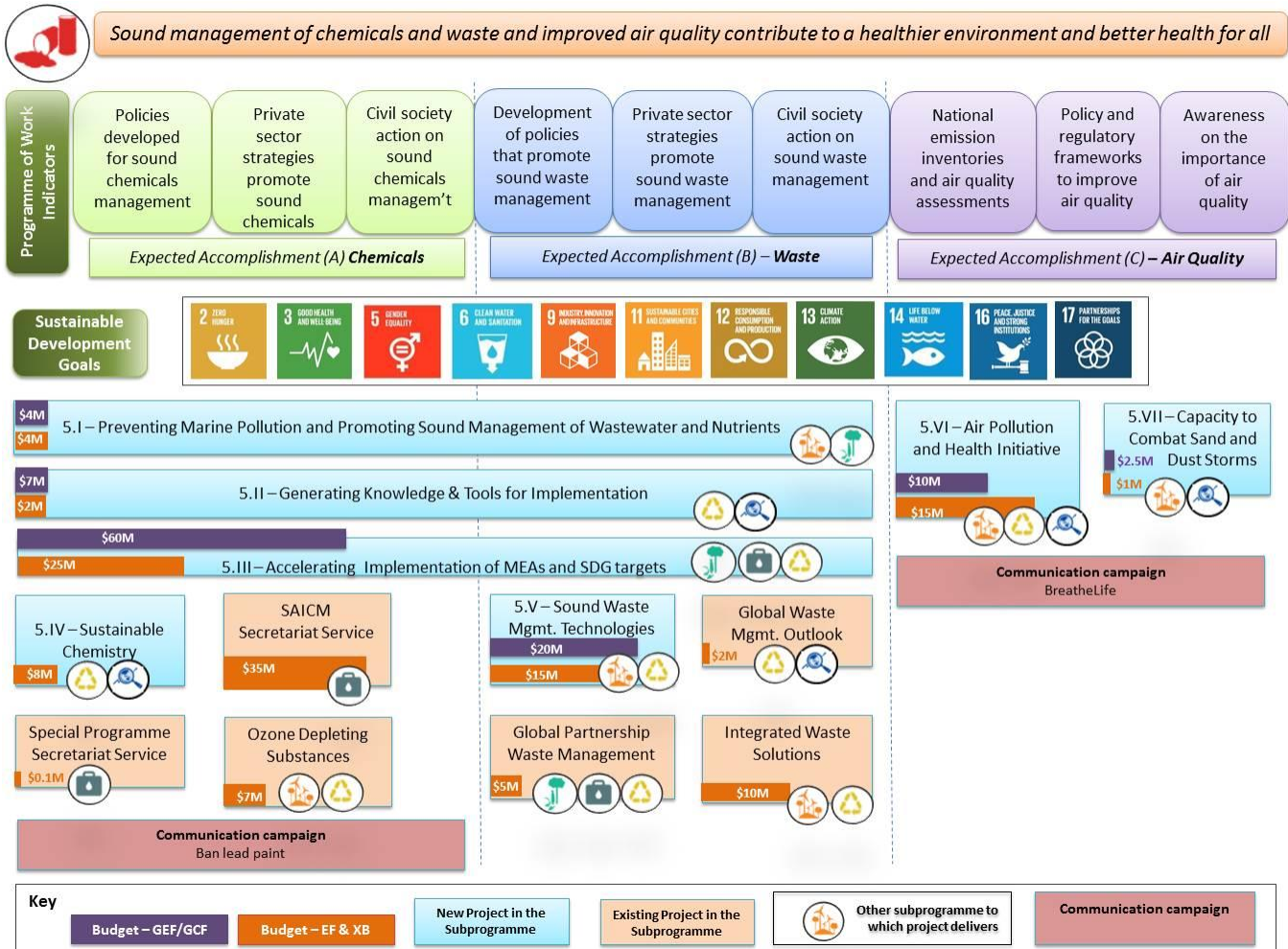
**j) Addressing anti-microbial resistance**

- Project 5.I. on generating and sharing knowledge for sound chemicals management will address the issue of anti-microbial resistance. This is essential since new evidence is showing that anti-microbial resistance is potentially threatening our ability to effectively prevent or treat infections. By tackling anti-microbial resistance we ensure that achieving the Sustainable Development Goals is not jeopardized by reduced health of women, men and children as a result of inaction.

**k) Revision of very ambitious budgets**

- All proposed project budgets are more realistic. This is in particular the case for the Project 5.III. on implementation of the chemicals and waste Multilateral Environmental Agreements and achieving the Sustainable Development Goals, for which the project budget has been reduced to around half of the originally overly ambitious figure.

## 2. Portfolio Diagram



### **3. Problem Analysis**

As the world's population approaches 8 billion, the sound management of chemicals and waste and the improvement of air quality are becoming ever more important. The world is coming to recognize that the human health impacts of unsound management of chemicals and waste, and the low quality of the air in many places is taking its toll among large parts of the global human population. For instance, it is estimated that fifty-one million years of life are annually lost or lived with disability due to lower respiratory infections caused by household and ambient air pollution. In fact, air pollution leads to 7 million deaths every year. Furthermore, recent studies on harmful chemicals estimate that reduced cognitive potential (loss of IQ points) due to preventable childhood lead exposure, for example, represents a cost of nearly \$US 1 trillion annually in low- and middle-income countries. Hence, although hazardous substances and waste are integral to our everyday life, they do have major impacts on the environment and human health.

It is well-known, though, that the global transition towards sound management of chemicals, prevention and sound management of waste, and cleaner air for all is not happening today at the pace that would allow for a swift positive impact on human health and the environment. Governments, private enterprises and civil society organizations -in particular in developing regions and countries- often lack appropriate policies, good legal and institutional frameworks, or adequate fiscal or sector-based strategies that accelerate this global transition. In many cases, the existing scientific basis is insufficient, as shown by the absence of reliable data, monitoring information or thorough assessments necessary to provide a solid foundation for targeted policy decisions and strategic action. In-country capacity to develop and implement environmentally sound technologies and solutions is often below standard in many parts of the world.

UN Environment is aware of these issues and constraints. It received a mandate to address these matters adequately from Member States during the second session of the United Nations Environmental Assembly held in May 2015 through the adoption of the 2018-2021 Mid Term Strategy, the 2018-2019 Programme of Work, and the chemicals, waste, and air pollution related resolutions of the Assembly. This mandate includes promoting a transition towards the sound management of chemicals and waste, increased waste prevention and improved air quality, and contributing to achieving the chemicals, waste and air quality dimension of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals and Targets.

To help achieve the global transition towards sound management of chemicals, prevention and sound management of waste and cleaner air for all, UN Environment will work with governments, businesses and civil society to help key stakeholders reduce global levels of harmful chemicals and hazardous waste released into the air, waters and land, increase the reuse, reduction, recycling and recovery of waste, and expand the use of non-harmful, non-polluting chemicals. In this regard UN Environment will strongly advocate the design of safe products and processes that minimize the generation, use, and exposure to hazardous substances and wastes.

UN Environment aims to achieve this transition by enabling countries to integrate the environmentally sound management of chemicals and waste and improvement of air quality into laws, regulations, policies, budgets, strategies and fiscal reforms; by increasing their knowledge of the risks posed by polluted air –including from sand and dust storms-, harmful chemicals and waste; and by promoting sustainable chemistry.

UN Environment will leverage impact through its work with key funding partners such as Global Environmental Facility, the Green Climate Fund, and the Multilateral Fund for the Implementation of the Montreal Protocol, among other game-changing stakeholders with whom UN Environment will collaborate closely.



## **4. Gender Analysis**

UN Environment recognizes that the human health impacts of unsound chemicals and waste management and reduced air quality are often gender-differentiated and socially determined, with the greatest burdens carried by women, children and members of poor and disadvantaged communities. The Chemicals, Waste and Air Quality Subprogramme will ensure that gender perspectives are addressed in its project design and implementation while ensuring that risk assessments incorporate gender-specific tools and sex-disaggregated data. This subprogramme will also encourage gender aspects to be mainstreamed into the sound management of chemicals and waste and in improving air quality. Such an approach is also embodied in the objectives of the chemicals and waste related Multilateral Environmental Agreements (MEAs) and the Strategic Approach to International Chemicals Management (SAICM) which this subprogramme will continue to support through project action, particularly with regards to their implementation.

Both the new editions of the Global Chemicals Outlook and the Global Waste Management Outlook planned for the coming years -together with their regional outlooks- will make use of data and information offered by UNEP Live and other sources, and disaggregated by vulnerable groups, especially by gender, geography and age. This is essential since many women are frequently responsible for managing hazardous substances and waste within their households. Globally they are the primary users of waste management services, for instance. Therefore, it is important to understand their needs and preferences, which may differ from those of men.

It is well known that the health of women is often more at risk when exposed to specific harmful chemicals like endocrine disruptors. At particular stages of their lives, such as pregnancy, lactation, and menopause, endocrine disrupting chemicals can have very strong negative effects on the health of women and both their born and unborn children. Negative health effects on fetal and post-natal development can be long-lasting. The chemicals projects in this portfolio, and in particular the project on generating and sharing chemicals knowledge, will develop and communicate information and raise awareness about the consequences of environmental exposure of mothers and children to these and other harmful chemicals. In this way, these projects can assist in triggering counter-measures to halt these augmented negative health impacts on specific gender-differentiated segments of the global population.

As the Global Waste Management report published by UN Environment in 2015 has indicated, several studies have now highlighted the impact of gender issues on the perception, handling and management of waste in both the formal and informal, and private and public sectors. The UN Environment's waste management project in the Chemicals, Waste and Air Quality Subprogramme's portfolio for 2018-2021 recognizes this and plans to contribute to mainstreaming gender by ensuring that waste management policies, programmes and systems take into account their implications and the impacts for women and girls as this facilitates the design of more effective, efficient and inclusive waste management systems while also providing more equitable access to livelihoods and enhancing women's roles in economic and political spheres.

## **5. Stakeholder Analysis**

The overall objective of the chemicals, waste and air quality subprogramme is to support countries in their efforts to improve the management of chemicals and waste and improve air quality in order to significantly reduce negative impacts on the environment and human health. This objective can only be achieved by working with and through key stakeholders such as intergovernmental organizations, national and local governments, private companies and civil society organizations (CSOs). By embracing a partnership approach, the multiple projects in the 2018-2021 portfolio of UN Environment's Chemicals, Waste and Air Quality Subprogramme will focus on leveraging impact through others, by scaling up delivery and enhancing collaboration with key players in the fields of chemicals and waste management, and air pollution.

A group of key stakeholders that UN Environment will definitely partner with to deliver upon the 2018-2021 Mid Term Strategy (MTS) include the secretariats of the chemicals and waste-related Multilateral Environmental Agreements (MEAs) such as the Basel, Rotterdam and Stockholm conventions, the Minamata Convention on Mercury, the Vienna Convention for the Protection of the Ozone Layer, the Montreal Protocol on Substances that Deplete the Ozone Layer, and the Convention on Long-range Transboundary Air Pollution (CLRTAP).

Strongly engaging with the participating UN agencies of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) will be a key condition to achieve the larger goals of this subprogramme. The IOMC includes key sister organizations like the Food and Agriculture Organization of the United Nations, the International Labour Organization, the United Nations Development Programme, the United Nations Industrial Development Organization, United Nations Institute for Training and Research, the World Health Organization, the Organization for Economic Cooperation and Development and the World Bank. The fact that UN Environment is also a member of the IOMC is a great success factor to ensure full engagement of the other participating UN agency stakeholders. The subprogramme's portfolio project on air pollution monitoring will work closely with the World Meteorological Organization and the World Health Organization to advance capacity to closely monitor and assess changes in air quality across strategic locations across the globe.

Regarding the private sector UN Environment will work, among others, closely with the International Council of Chemical Associations (ICCA) which is formed by national associations of the chemicals industry around the world. This Council brings together innovators, visionaries, solutions providers and product stewardship pioneers who address global chemicals issues that involve the chemical industry. By working closely with the ICCA, and for instance the Lead Paint Alliance (GAELP), UN Environment will be able to influence game changing global private enterprises involved in the design, production and distribution of chemical substances.

Another set of game changing players are non-governmental organizations (NGOs), research centers and foundations. These organizations can help UN Environment position better the chemicals, waste and air pollution agenda and raise awareness among citizens, consumer groups and other actors in the fields of pollution. Examples of such organizations that UN Environment will partner with to achieve the outcomes of the subprogramme's portfolio projects are Clean Air Asia, the International POPs Elimination Network (IPEN), the PCBs Elimination Network (PEN), and the International Solid Waste Association (ISWA). Moreover, the Global Mercury Partnership (GMP) and the Global Waste Management Partnership (GWMP) are considered strategic vehicles to move ahead the mercury and waste agendas. UNEP will further strengthen its leading role in supporting and implementing partnerships that promote better air quality. Examples of such partnerships at the global level include the Partnership for Clean Fuels and Vehicles (PCFV) and the Climate and Clean Air Coalition (CCAC). The latter coalition will help unite governments, civil society and private sector, committed to improving air quality and protecting the climate by reducing short-lived climate pollutants across sectors.

## 6. Summary Table of Projects<sup>1</sup>

**Table 1.** Summary overview of new and existing projects.

NEW PROJECTS							
Project No.	Project Title	New/ Existing	Proposing Team	Proponent	Geographic Scope	SDGs and Targets	UNEA Resolutions
5.I.	Preventing marine pollution and promoting sound management of wastewater and nutrients	New	Ecosystems Division	Habib El-Habr	Global, Regional	2, 3, 6, 11, 12, 13, 14, 15, 16, 17	1/5, 1/6, 1/9, 2/5, 2/7, 2/8, 2/10, 2/11
5.II.	Generating and sharing knowledge for sound management of chemicals and waste	New	Economy Division	Jacqueline Alvarez	Global, Regional	12.4, 17.6, 17.18	1/5, 2/7
5.III.	Accelerating the implementation of the chemicals and waste Multilateral Environmental Agreements and achieving the targets of related Sustainable Development Goals for improved human health and a clean environment	New	Economy Division	Eisaku Toda	Global, Regional	3.9, 12.4, 17.6, 17.7, 17.16	1/5, 2/7
5.IV.	Advancing Sustainable Chemistry and a Green & Circular Economy Through Chemical-Safe Products and Production (ChemSafe)	New	Economy Division	Jacqueline Alvarez	Global	3.9, 12.4, 17.6, 17.7, 17.16	1/5, 2/7
5.V.	Promotion and delivery of environmentally sound waste management technologies and methods for improved legislative frameworks and in-country technical and advisory support	New	Economy Division	Claudia Giacobelli	Global, Regional	3.9, 11.6, 12.2, 12.4, 12.5, 13.1, 13.a., 17.6, 17.7, 17.16	1/5, 2/7
5.VI.	Air Pollution and Health Initiative	New	Economy Division	Rob de Jong, Fanny Demassieux, Soraya Smaoun, Valentin Foltescu	Global, Regional	1.4, 3.9, 7.a, 7.b, 9.4, 11.6, 12.1, 12.4, 12.5, 12.6, 12.7, 12.8, 12.a, 13.3, 17.6, 17.7, 17.16	1/5, 1/7, 2/5, 2/7, 2/8, 2/21
5.VII.	Increasing capacity to combat sand and dust storms in Asia and Africa	New	Science Division	Valentin Foltescu	Global, Regional	3.9, 9.4, 11.6, 17.7	1/7, 2/21
EXISTING PROJECTS							
511.1	Secretariat services to SAICM and its financial mechanism ( <b>continuing from PoW 2016-17; ending after ICCM5 in 2020</b> )	Existing (ends in Dec20)	Economy Division	Jacob Duer	Global	3.9, 12.4, 17.6, 17.7, 17.16	1/5, 2/7
514.2	Environmentally sound collection, management and destruction of ODS banks in developing countries ( <b>continuing from PoW 2016-17</b> )	Existing (ends in Dec18)	Economy Division	Shamila Nair-Bedouelle	Global	3.9, 12.4, 17.6, 17.7, 17.16	1/5, 2/7
515.2	Operationalization of the Special Programme to support institutional strengthening ( <b>continuing from PoW 2016-17</b> )	Existing (ends in Dec21)	Economy Division	Nalini Sharma	Global, Regional	3.9, 12.4, 17.6, 17.7, 17.16	1/5
531.1	Global Waste Management Outlook ( <b>continuing from PoW 2016-17</b> )	Existing (ends in Apr19)	Economy Division	Claudia Giacobelli	Global	6.3, 11.6, 12.4 and 12.5	1/5, 2/7
531.2	Secretariat Support to the Global Partnership on Waste Management ( <b>continuing from PoW 2016-17</b> )	Existing (ends in Jan19)	Economy Division	Mahesh Pradan	Global	6.3, 11.6, 12.4 and 12.5	1/5, 2/7
534.1	Delivering integrated waste solutions at the national and local level ( <b>continuing from PoW 2016-17</b> )	Existing (ends in Apr19)	Economy Division	Shunichi Honda	Global	6.3, 11.6, 12.4 and 12.5	1/5, 2/7

<sup>1</sup> The table includes a total of six 'existing' projects that are part of the 2014-2017 Chemicals and Waste subprogramme's portfolio and will continue beyond December 2017. Hence, they will deliver upon the 2018-19 PoW, and in some cases also upon the 2020-21 PoW. Considering that these projects already have in place PRC-approved ProDocs they do not require the development of a new concept. Therefore, these 'carry-over' projects have only been included in the table, but are not present with a concept description.

## 7. Overview of Tentative Budgets of New Projects

The estimated tentative budget to achieve the expected accomplishments of the 2018-2021 Mid Term Strategy of UN Environment's Chemicals, Waste and Air Quality Subprogramme is estimated at USD 449.4 million, of which USD 357.5 million is expected to be raised through the GEF and GCF. This implies a tentative annual budget of around USD 110 million, of which 23 million will need to come from non-GEF, non-GCF sources.

**Table 2.** Overview of tentative budgets of new projects.

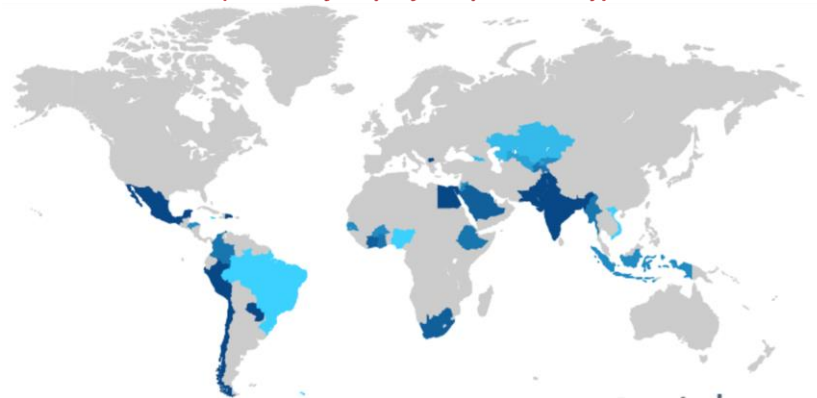
<b>NEW PROJECTS</b>									
<b>Project No.</b>	<b>Project Title</b>	<b>Project Start Date, End Date and Duration (months)</b>	<b>Total Tentative PoW Project Budget (USD), (GEF/GCF plus non-GEF/GCF)</b>	<b>Non-GEF/GCF Tentative PoW Project Budget (USD)</b>	<b>GEF/GCF Tentative PoW Project Budget (USD)</b>	<b>Annual 2018 PoW Project Budget (USD)</b>	<b>Annual 2019 PoW Project Budget (USD)</b>	<b>Annual 2020 PoW Project Budget (USD)</b>	<b>Annual 2021 PoW Project Budget (USD)</b>
5.I.	Preventing marine pollution and promoting sound management of wastewater and nutrients	01/2018 - 12/2021 (48)	<b>8 million</b>	4 million	4 million	2 million	2million	2 million	2 million
5.II.	Generating and sharing knowledge for sound management of chemicals and waste	01/2018 - 12/2021 (48)	<b>9 million</b>	2 million	7 million	2 million	2.5 million	2.5 million	2 million
5.III.	Accelerating the implementation of the chemicals and waste Multilateral Environmental Agreements and achieving the targets of related Sustainable Development Goals for improved human health and a clean environment	01/2018 - 12/2021 (48)	<b>85 million</b>	25 million	60 million	20 million	22.5 million	22.5 million	20 million
5.IV.	Advancing Sustainable Chemistry and a Green & Circular Economy Through Chemical-Safe Products and Production (ChemSafe)	01/2018 - 12/2021 (48)	<b>8 million</b>	8 million	TBD	2 million	2 million	2 million	2 million
5.V.	Promotion and delivery of environmentally sound waste management technologies and methods for improved legislative frameworks and in-country technical and advisory support	01/2018 - 12/2021 (48)	<b>35 million</b>	15 million	20 million	8 million	9 million	9 million	9 million
5.VI.	Air Pollution and Health Initiative	01/2018 - 12/2021 (48)	<b>25 million</b>	15 million	10 million	6 million	6 million	7 million	6 million
5.VII.	Increasing capacity to combat sand and dust storms in Asia and Africa	03/2018 - 02/2021 (36)	<b>3.5 million</b>	1 million	2.5 million	0.5 million	1.25 million	1.25 million	0.5 million
<b>TOTALS</b>			<b>173.5 million</b>	<b>70 million</b>	<b>103.5 million</b>	<b>40.5 million</b>	<b>45.25 million</b>	<b>46.25 million</b>	<b>41.5 million</b>

## 8. Regional Delivery Overview

Increased regional delivery is a key condition to achieving the objectives and expected accomplishments of the 2018-2021 Medium Term Strategy and 2018-2019 Programme of Work of UN Environment’s Chemicals, Waste and Air Quality Subprogramme. To attain regional delivery, subprogramme projects at sub-global scales (region, sub-region, national and local levels) will be designed and implemented to address the needs of countries. To this end, a set of 32 priority countries (see Map 1) have been identified for the delivery of seven new 2018-2021 projects. Synergies will be sought with the GEF Chemicals portfolio (mercury, ozone, and persistent organic pollutants) project regions and countries (e.g., Brazil, Cameroon, China, India, Kyrgyzstan, Mexico, Pacific nations, South Africa, Tajikistan, Uruguay, Vietnam), to allow for increased efficiency and effectiveness.

### *Priority Countries for UN Environment’s 2018-2021 MTS Delivery towards the Chemicals, Waste and Air Quality Subprogramme*

#### *First Tier Priority Countries for the Subprogramme (three to five projects per country)*



**Top countries mapped:** Bangladesh, Burkina Faso, Bahrain, Brazil, Ivory Coast, Chile, Colombia, Dominican Republic, Egypt, Ethiopia, Georgia, Ghana, Honduras, Indonesia, India, Jamaica, Jordan, Kyrgyzstan, Kazakhstan, Macedonia, Myanmar, Mexico, Nigeria, Peru, Pakistan, Paraguay, Saudi Arabia, Senegal, Tajikistan, Uzbekistan, Vietnam, South Africa

#### *Countries with > 100 million inhabitants that are a priority for the Subprogramme*



Bangladesh, Brazil, People's Republic of China, Ethiopia, India, Indonesia, Mexico, Nigeria, Pakistan

## 9. Detailed Project Concepts

<b>Project Title/Area:</b>	<b>5.I. Preventing marine pollution and promoting sound management of wastewater and nutrients</b>		
<b>Subprogramme:</b>	Chemicals, Waste and Air Quality		
<b>Other Subprogramme/s:</b>	Healthy and Productive Ecosystems		
<b>Proposing Teams/ Units/</b>	Global Programme of Action (GPA) for the protection of the marine environment from land-based activities, Ecosystems Division	<b>Focal Points</b>	Habib El-Habr (GPA lead) with support of Christopher Cox (nutrients), Birguy Lamizana (waste water), and Heidi Savelli (marine litter)
<b>Type of project:</b>	<b>Regional / country-level [Y]</b> <b>Global/ Normative [Y]</b>	<b>New stream of work [N]</b>	<b>Existing stream of work [Y]</b>
<b>Expected Accomplishment (EA) (primary)</b>	Chemicals, Waste and Air Quality EA (b) on <b>Waste</b> : Policies and legal and institutional and fiscal strategies and mechanisms for waste prevention and sound management developed or implemented in countries within the framework of relevant multilateral environmental agreements.		
<b>Expected Accomplishment (EA) (secondary)</b>	Chemicals, Waste and Air Quality EA (a) on <b>Chemicals</b> : Policies and legal, institutional and fiscal strategies and mechanisms for sound chemicals management developed or implemented in countries within the framework of relevant multilateral environmental agreements and the Strategic Approach to International Chemicals Management (SAICM).		
<b>Expected Accomplishment (EA) (tertiary)</b>	Healthy and Productive Ecosystems EA (a) on <b>Marine, freshwater and terrestrial ecosystems</b> : The health and productivity of marine, freshwater and terrestrial ecosystems are institutionalized in education, monitoring and cross-sector and transboundary collaboration frameworks at the national and international levels		
<b>PoW Indicator(s):</b>	<p>EA (b) (i) Increase in the number of countries that have used UN Environment analysis or guidance in implementing waste prevention and sound management policies and good practices, in accordance with relevant multilateral environmental agreements, SAICM and other relevant international agreements.</p> <p>EA (b) (ii) Increase in the number of private companies/industries that have used UN Environment analysis or guidance in implementing policies and good practices for waste prevention and sound waste management.</p> <p>EA (b) (iii) Increase in the number of civil society organizations that have taken action to enhance waste prevention and improve waste management using UN Environment analysis or guidance</p> <p>EA (a) (i): Increase in the number of countries that have used UN Environment analysis or guidance, and where possible are applying a multi-sectoral approach, in developing or implementing legislation, policies or action plans that promote sound chemicals management and implementation of the relevant multilateral environmental agreements and SAICM;</p> <p>EA (a) (ii): Increase in the number of private companies/industries that have developed or implemented a strategy or specific actions on sound chemicals management using UN</p>		

	<p>Environment analysis or guidance;</p> <p>EA (a) (iii): Increase in the number of civil society organizations that have undertaken action on improving chemicals management using UN Environment analysis or guidance.</p>
<p><b>Outcome Statement:</b></p>	<p>Governments, businesses and civil society make considerable changes in their policies, strategies and action plans meant to tackle pollution caused by marine litter (including plastic debris and micro-plastics), wastewater and excessive nutrients which affect the health of rivers, lakes, seas, oceans, their biodiversity, and the local communities depending on these affected ecosystems and their services and goods.</p>
<p><b>Brief description/ project logic:</b></p>	<p>Oceans and coasts are the very basis of much of the world's economy. 350 million jobs around the world are linked to the oceans. They flow over nearly three-quarters of our planet, and hold 97% of the planet's water. The marine environment supplies the planet with key services such as climate regulation, storm protection, food security, nutrients cycling, etc. All these services are underpinning lives and livelihoods in different sectors from tourism to fisheries.</p> <p>Yet regardless of this importance, oceans are suffering from advanced degradation mainly as a result of human activities. Over the past decades marine pollution (including plastic debris and micro-plastics) has become an increasingly significant problem. Marine pollution occurs when harmful, or potentially harmful, effects result from the entry into the ocean of chemicals, particles, industrial, agricultural and residential waste, noise, plastic debris or the spread invasive organisms. With a growing population, set to reach nine billion by 2050, marine pollution and impacts are likely to build up unless global action is taken to sustainably manage and protect oceans and coastal ecosystems.</p> <p>To meet this challenge this project will address the accelerating degradation of the world's oceans and coastal areas by encouraging governments, regional organizations, the business sector and civil society to prepare and implement comprehensive, continuing and adaptive policies, strategies and action plans to protect the marine environment, recognizing the effects on food security, poverty alleviation, and ecosystem health, as well as the resulting economic and social benefits. The main focus is on reducing and preventing marine litter (including plastic debris and micro-plastics), promoting the sound management of wastewater, and reducing the amount of excess nutrients such as nitrogen and phosphorous in freshwater, coastal and marine environments.</p>
<p><b>Project outputs/ activities:</b></p>	<ul style="list-style-type: none"> <li>- Tackle pollution issues in target countries with NPAs that have been approved nationally, supporting NPA implementation and mainstreaming.</li> <li>- Ensure endorsement within Regional Seas and LME frameworks.</li> <li>- Promote a watershed-based approach – Ridge-to-Reef/ Source to Sea; IWCAM, etc., within the SAP framework – LME framework.</li> <li>- Champion appropriate technology innovation solutions in the focus areas – strong buy-in and support to private innovators: very targeted – high visibility working examples – countries selected based on agreed criteria.</li> <li>- Promote the circular economy – SCP – Green Chemistry – with an emphasis on closed loop systems.</li> <li>- Provide support to policy and financial incentive frameworks at local levels (municipal).</li> <li>- Conduct scientific research and assessments to inform decision making.</li> <li>- Conduct demonstration projects to share examples and best practices.</li> <li>- Communicate and raise awareness on freshwater and marine pollution and the negative consequences and costs to humanity.</li> </ul>

	<ul style="list-style-type: none"> <li>- Advocacy campaigns on land-based pollution and the role of oceans and seas in sustainable development;</li> <li>- Provide secretariat support services and coordination to key partnerships to address the freshwater and marine pollution issue: the Global Partnership on Marine Litter (GPML), the Global Partnership on Nutrient Management (GPNM) and the Global Wastewater Initiative (GW2I).</li> <li>- Strengthen the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) and enhance effectiveness of its governance structure.</li> <li>- Enhance synergies with the chemicals-related Conventions and other relevant ones.</li> </ul>
<p><b>Project Outcome indicator(s):</b></p>	<p>Number of governments, businesses and civil society that make considerable changes in their policies, strategies and action plans meant to tackle pollution caused by marine litter (including plastic debris and micro-plastics), wastewater and excessive nutrients which affect the health of rivers, lakes, seas, oceans, their biodiversity, and the local communities depending on these affected ecosystems and their services and goods.</p>
<p><b>Expected long term impacts</b></p>	<p>Clean and healthy rivers, lakes, seas and oceans as a result of a reduction and ultimately the prevention of the influx of marine litter (including plastic debris and micro-plastics), excessive, illegal or unregulated wastewater discharges, and excess nutrients that result from industrial and agricultural activity, among others. Human health protected. Biodiversity protected and healthy. Healthy fisheries. Reduced poverty among coastal communities. Reduced stress on globally-threatened marine biodiversity/ ecosystems. Improved economic gains; reduced economic vulnerability. Reduced global warming potential.</p>
<p><b>Related SDG(s) and SDG targets:</b></p>	<p><b>Goal 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture</b></p> <p><b>Target 2.4:</b> By 2030 ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality</p> <p><b>Goal 3: Ensure healthy lives and promote well-being for all at all ages</b></p> <p><b>Target 3.9:</b> By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination</p> <p><b>Goal 6: Ensure availability and sustainable management of water and sanitation for all</b></p> <p><b>Target 6.3:</b> By 2030, improve <b>water quality</b> by reducing <b>pollution</b>, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally</p> <p><b>Goal 11: Make cities inclusive, safe, resilient and sustainable</b></p> <p><b>Target 11.6:</b> By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to <b>air quality</b>, municipal and other <b>waste</b> management.</p>



	<p><b>Goal 12: Ensure sustainable consumption and production patterns</b></p> <p><b>Target 12.2:</b> By 2030, achieve the sustainable management and efficient use of natural resources.</p> <p><b>Target 12.4:</b> 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</p> <p><b>Target 12.5:</b> By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.</p> <p><b>Goal 13: Take urgent action to combat climate change and its impacts</b></p> <p><b>Target 13.2:</b> Integrate climate change measures into national policies, strategies and planning.</p> <p><b>Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development</b></p> <p><b>Target 14.1:</b> By 2025, prevent and significantly reduce <i>marine pollution</i> of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.</p> <p><b>Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</b></p> <p><b>Target 15.3:</b> By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world</p> <p><b>Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development</b></p> <p><b>Target 17.6:</b> Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism;</p> <p><b>Target 17.16:</b> Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.</p>
<p><b>Related UNEA 1 &amp; 2 resolution(s):</b></p>	<ul style="list-style-type: none"> <li>- 1/5: Chemicals and waste;</li> <li>- 1/6: Marine plastic debris and microplastics;</li> <li>- 1/9: Global Environment Monitoring System/Water Programme (GEMS/Water);</li> <li>- 2/5: Delivering on the 2030 Agenda for Sustainable Development;</li> <li>- 2/7: Sound management of chemicals and waste;</li> <li>- 2/8: Sustainable consumption and production;</li> </ul>

	<ul style="list-style-type: none"> <li>- 2/10: Oceans and seas;</li> <li>- 2/11: Marine plastic litter and microplastics;</li> </ul>			
<b>Related MEAs</b>	<ul style="list-style-type: none"> <li>- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal;</li> <li>- Bonn Convention on the Conservation of Migratory Species of Wild Animals (CMS);</li> <li>- Convention on Biological Diversity (CBD);</li> <li>- Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter;</li> <li>- Manila Declaration on Health and Environment;</li> <li>- Nagoya Protocol;</li> <li>- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade;</li> <li>- Ramsar Convention on Wetlands;</li> <li>- Regional Seas Conventions;</li> <li>- Stockholm Convention on Persistent Organic Pollutants (POPs);</li> <li>- Strategic Approach to International Chemicals Management (SAICM);</li> <li>- United Nations Convention on the Law of the Sea (UNCLOS);</li> </ul>			
<b>Strategic UN Environment priorities</b>	<ul style="list-style-type: none"> <li>- Cities, Pollution, Oceans ;</li> </ul>			
<b>Geographical focus</b>	<ul style="list-style-type: none"> <li>- Africa: TBD</li> <li>- Asia and the Pacific region: TBD</li> <li>- Europe: TBD</li> <li>- Latin America and the Caribbean: TBD</li> <li>- West Asia: TBD</li> </ul>			
<b>Partners</b>	<ul style="list-style-type: none"> <li>- Basel Rotterdam Stockholm Conventions Secretariat (BRS);</li> <li>- Deltares, Netherlands;</li> <li>- Food and Agriculture Organization (FAO);</li> <li>- Global Environment Facility (GEF);</li> <li>- Global Partnership on Marine Litter (GPML);</li> <li>- Global Partnership on Nutrient Management (GPNM);</li> <li>- Global Wastewater Initiative (GW2I);</li> <li>- Green Climate Fund (GCF);</li> <li>- United Nations Development Assistance Framework (UNDAF);</li> <li>- United Nations Development Programme (UNDP);</li> <li>- UN Division for Ocean Affairs and the Law of the Sea (UNDOALOS);</li> <li>- United Nations Educational, Scientific and Cultural Organization (UNESCO);</li> <li>- UN Habitat;</li> <li>- World Bank;</li> <li>- World Resources Institute (WRI);</li> </ul>			
<b>Duration:</b>	<b>Start:</b> 01/2018	<b>End:</b> 12/2021	<b>Total months:</b>	48
<b>Tentative budget and funding sources</b>	<ul style="list-style-type: none"> <li>- USD 8 million in total, including:</li> <li>- USD 4 million from GEF and GCF;</li> </ul>			

<b>Project Title/Area:</b>	<b>5.II. Generating and sharing knowledge for sound management of chemicals and waste</b>		
<b>Subprogramme:</b>	Chemicals, Waste and Air Quality		
<b>Other Subprogramme/s:</b>	Environment under Review		
<b>Proposing Team/ Unit/</b>	Economy Division, Chemicals and Health Branch, Chemicals team in Geneva	Focal Point	Jacqueline Alvarez
<b>Type of project:</b>	<b>Regional / country-level [Y]</b> <b>Global/ Normative [Y]</b>	<b>New stream of work [ ]</b> <b>Existing stream of work [ ]</b>	
<b>Expected Accomplishment (primary)</b>	Chemicals, Waste and Air Quality EA (a) on <b>Chemicals</b> : Policies and legal, institutional and fiscal strategies and mechanisms for sound chemicals management developed or implemented in countries within the framework of relevant multilateral environmental agreements and the Strategic Approach to International Chemicals Management (SAICM).		
<b>Expected Accomplishment (secondary)</b>	Chemicals, Waste and Air Quality EA (b) on <b>Waste</b> : Policies and legal and institutional and fiscal strategies and mechanisms for waste prevention and sound management developed or implemented in countries within the framework of relevant multilateral environmental agreements.		
<b>Expected Accomplishment (tertiary)</b>	Chemicals, Waste and Air Quality EA (c) on <b>Air Quality</b> : National emissions sources identified, policies, legal, regulatory, fiscal and institutional frameworks and mechanism for the reduction of air pollution developed, institutional capacity built for improved air quality, and air quality assessments done by countries with UN Environment support.		
<b>PoW Indicator(s):</b>	<ul style="list-style-type: none"> <li>- EA (a) (i): Increase in the number of countries that have used UN Environment analysis or guidance, and where possible are applying a multi-sectoral approach, in developing or implementing legislation, policies or action plans that promote sound chemicals management and implementation of the relevant multilateral environmental agreements and SAICM;</li> <li>- EA (a) (ii): Increase in the number of private companies/industries that have developed or implemented a strategy or specific actions on sound chemicals management using UN Environment analysis or guidance;</li> <li>- EA (a) (iii): Increase in the number of civil society organizations that have undertaken action on improving chemicals management using UN Environment analysis or guidance;</li> </ul>		
<b>Outcome Statement:</b>	Countries, businesses and civil society organizations are using cutting-edge policy relevant knowledge on selected chemicals and waste topics, and are raising awareness, assessing the magnitude of problems, and exploring the need for possible action to minimize the adverse impacts on human health and the environment at the global, regional, national and local levels.		
<b>Brief description/ project logic:</b>	<p>The global sales of chemicals have more than doubled over the last decade, hitting a record US\$5.2 trillion by 2013. Recent statistics suggest that the environmental effects on health represent 23 per cent of deaths globally. The figure increases to 26 per cent for children under 5 years and to 25 per cent for adults between the ages of 50 and 75.</p> <p>Furthermore, new evidence on different areas, such as resistance mechanisms, is emerging and potentially threatening our ability to effectively prevent or treat infections, challenging ecosystems' natural behavior and therefore posing questions and challenges that need to be addressed. Antimicrobial resistance might put the gains of the Millennium Development</p>		

	<p>Goals at risk and endangers achievement of the Sustainable Development Goals, and hence will need to be addressed as well.</p> <p>Significant knowledge gaps still exist how the increase in the production, use and disposal of chemicals (and products made with chemicals) affect environment and human health. Understanding of science, fate, behavior and impact of chemicals is therefore essential for policy considerations to minimize risks to human health and the environment. It is important to highlight the debates on certain groups of chemicals, such as endocrine disruptors, where still no global conclusions have been achieved and cutting edge knowledge and information needs to be shared further.</p> <p>In order to ensure that adequate science-based information and knowledge is generated, shared and considered in decision-making, this project will focus on identifying trends, providing assessments and generating monitoring data to keep the environment under review for chemicals and waste. It will also facilitate sharing of science-based knowledge and development of innovative knowledge products to facilitate consideration of knowledge in decision making.</p> <p>The project will engage with key change agents to promote policy dialogues and capacity development related to scientific knowledge on chemicals and waste and provide science-based advice. In doing so, countries and relevant stakeholders will increase their capacity to interact, learn from each other, and positively influence policy and markets.</p> <p>The involvement of academia and engagement with the private sector is a key component of this project since research findings and approaches are drivers to enhance understanding, provide sustainable solutions and support behavioral change.</p> <p>This project will provide an opportunity to scale-up participation of these sectors by generating discussion to action spaces, through new platforms and/or already existing advisory groups and steering committees on emerging policy issues and other issues of emerging evidence of risk. Knowledge platforms and awareness raising tools targeting decision makers and the general public will be developed as part of this project.</p>
<p><b>Project outputs/ activities:</b></p>	<p>The main project objective is to collect, assess, monitor and widely share cutting-edge policy relevant knowledge on selected chemicals and waste topics and engage with governments and other stakeholders in raising awareness, assessing the magnitude of problems, and exploring the need for possible action to minimize the adverse impacts on human health and the environment at the global, regional, national and local levels.</p> <p>Main outputs:</p> <ul style="list-style-type: none"> <li>- Global Mercury Assessment</li> <li>- Global Chemicals Outlook II</li> <li>- Global Monitoring (POPs, Mercury)</li> <li>- Inventory Development (POPs, Mercury)</li> <li>- Knowledge-sharing on emerging priority issues (Endocrine Disrupting Chemicals, Environmentally Persistent Pharmaceutical Pollutants, Highly Hazardous Pesticides, and perfluorinated compounds)</li> <li>- New knowledge platform, products, methodologies and tools</li> </ul> <p>This project builds on the following Programme of Workprojects in 2014-2017 cycle and on Global Environment Facility projects on monitoring of Persistent Organic Pollutants, and Mercury:</p>

	<ul style="list-style-type: none"> <li>- Provision of Information on Endocrine Disrupting Chemicals (513.1)</li> <li>- National dioxin/furan inventories and global Persistent Organic Pollutants monitoring (522.1)</li> <li>- Global Chemicals Outlook (522.2)</li> <li>- Global support to implementation of Multilateral Environmental Agreements (524.2)</li> <li>- Chemicals in Products (527.1)</li> </ul>
<b>Project Outcome indicator(s):</b>	Number of governments, businesses and civil society organizations that take action to address the environmental and health risk of hazardous chemicals using tools and guidance from UN Environment.
<b>Expected long term impact</b>	Significant reduction in negative impacts on environmental and human health as a result of sound management of chemicals and waste
<b>Related SDG(s) and SDG targets:</b>	<p><b>Goal 3: Ensure healthy lives and promote well-being for all at all ages</b></p> <p><b>Target 3.3:</b> By 2030, end the <i>epidemics</i> of AIDS, tuberculosis, malaria and neglected tropical <i>diseases</i> and combat hepatitis, water-borne diseases and other communicable diseases;</p> <p><b>Target 3.9:</b> By 2030, substantially reduce the number of deaths and illnesses from hazardous <i>chemicals and air, water and soil pollution and contamination</i>.</p> <p><b>Target 3.d:</b> Strengthen the capacity of all countries for <i>early warning, risk reduction</i> and management of <i>national and global health risks</i>;</p> <p><b>Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</b></p> <p><b>Target 4.7:</b> By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development;</p> <p><b>Goal 6: Ensure availability and sustainable management of water and sanitation for all</b></p> <p><b>Target 6.3:</b> By 2030, improve <i>water quality</i> by reducing <i>pollution</i>, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally</p> <p><b>Goal 12: Responsible consumption and production</b></p> <p><b>Target 12.4:</b> By 2020, achieve the environmentally sound management of <i>chemicals</i> and all <i>wastes</i> throughout their life cycle, in accordance with agreed international frameworks, and significantly <i>reduce their release to air, water and soil</i> in order to minimize their adverse <i>impacts on human health and the environment</i>.</p> <p><b>Goal 17: Partnerships for the goals</b></p> <p><b>Target 17.6:</b> Enhance North-South, South-South and triangular <i>regional and international cooperation</i> on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved</p>

	<p>coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism;</p> <p><b>Target 17.18:</b> By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.</p>
<b>Related UNEA 1 &amp; 2 resolution(s):</b>	<ul style="list-style-type: none"> <li>- 1/5 Chemicals and waste</li> <li>- 2/7 Sound management of chemicals and waste</li> </ul>
<b>Related MEAs</b>	<ul style="list-style-type: none"> <li>- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal;</li> <li>- Minamata Convention on Mercury;</li> <li>- Montreal Protocol on Substances that Deplete the Ozone Layer;</li> <li>- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade;</li> <li>- Stockholm Convention on Persistent Organic Pollutants (POPs);</li> <li>- Strategic Approach to International Chemicals Management (SAICM);</li> <li>- Vienna Convention for the Protection of the Ozone Layer;</li> </ul>
<b>Strategic UN Environment priorities</b>	<ul style="list-style-type: none"> <li>- Cities, Pollution, Oceans, Biodiversity, Green Finance;</li> </ul>
<b>Geographical focus</b>	<p>Interested countries (tentative):</p> <ul style="list-style-type: none"> <li>- Africa: Ghana, Mauritius, Morocco, South Africa, Zambia;</li> <li>- Asia and the Pacific region: mostly regional;</li> <li>- Europe: Belarus, Ukraine;</li> <li>- Latin America and the Caribbean: Chile, Mexico, Panama, Paraguay, Uruguay;</li> <li>- West Asia: Bahrain, Iraq, (Saudi Arabia);</li> </ul>
<b>Partners</b>	<ul style="list-style-type: none"> <li>- 10-Year Framework of Programmes on Sustainable Consumption and Production;</li> <li>- Basel and Stockholm Conventions Regional Centers (BCRC, SCRC);</li> <li>- Basel Stockholm Rotterdam conventions Secretariat (BRS);</li> <li>- Food and Agriculture Organization (FAO);</li> <li>- Global Alliance for Alternatives to DDT;</li> <li>- Global Environment Facility (GEF);</li> <li>- Global Mercury Partnership (GMP);</li> <li>- GRID Arendal;</li> <li>- International Conference on Chemicals Management (ICCM);</li> <li>- International Panel on Chemical Pollution;</li> <li>- International Persistent Organic Pollutants Elimination Network (IPEN);</li> <li>- International Solid Waste Association (ISWA);</li> <li>- Inter-Organization Programme for the Sound Management of Chemicals (IOMC);</li> <li>- Lead Paint Alliance (formerly, the Global Alliance to Eliminate Lead Paint, GAELP);</li> <li>- Minamata Convention Interim Secretariat;</li> <li>- Multilateral Development Banks;</li> <li>- Organisation of Economic Cooperation and Development (OECD);</li> <li>- PCBs Elimination Network (PEN)</li> </ul>

	<ul style="list-style-type: none"> <li>- Society of Environmental Toxicology and Chemistry;</li> <li>- Strategic Approach to International Chemicals Management (SAICM);</li> <li>- United Nations Industrial Development Organization (UNIDO);</li> <li>- United Nations Institute for Training and Research (UNITAR);</li> <li>- World Chlorine Council;</li> <li>- World Health Organization (WHO);</li> </ul>			
<b>Duration:</b>	<b>Start:</b> 01/2018	<b>End:</b> 12/2021	<b>Total months:</b>	48
<b>Tentative budget and funding sources</b>	USD 2 million (PoW) + USD 7 million (GEF)			

<b>Project Title/Area:</b>	<b>5.III. Accelerating the implementation of the chemicals and waste Multilateral Environmental Agreements and achieving the targets of related Sustainable Development Goals for improved human health and a clean environment</b>		
<b>Subprogramme:</b>	Chemicals, Waste and Air Quality		
<b>Other Subprogramme/s:</b>	Environmental Governance, Resource Efficiency		
<b>Proposing Team/ Unit/</b>	Economy Division	<b>Focal Point</b>	Eisaku Toda with support from Wanhua Yang (Law Division) on strengthening legal and policy frameworks
<b>Type of project:</b>	<b>Regional / country-level [Y]</b> <b>Global/ Normative [Y]</b>	<b>New stream of work [Y]</b> <b>Existing stream of work [ ]</b>	
<b>Expected Accomplishment (primary)</b>	Chemicals, Waste and Air Quality EA (a) on <b>Chemicals</b> : Policies and legal, institutional and fiscal strategies and mechanisms for sound chemicals management developed or implemented in countries within the framework of relevant multilateral environmental agreements and the Strategic Approach to International Chemicals Management (SAICM).		
<b>Expected Accomplishment (secondary)</b>	Chemicals, Waste and Air Quality EA (b) on <b>Waste</b> : Policies and legal and institutional and fiscal strategies and mechanisms for waste prevention and sound management developed or implemented in countries within the framework of relevant multilateral environmental agreements.		
<b>PoW Indicator(s):</b>	<p>EA (a) (i): Increase in the number of countries that have used UN Environment analysis or guidance, and where possible are applying a multi-sectoral approach, in developing or implementing legislation, policies or action plans that promote sound chemicals management and implementation of the relevant multilateral environmental agreements and SAICM;</p> <p>EA (a) (ii): Increase in the number of private companies/industries that have developed or implemented a strategy or specific actions on sound chemicals management using UN Environment analysis or guidance;</p> <p>EA (a) (iii): Increase in the number of civil society organizations that have undertaken action on improving chemicals management using UN Environment analysis or guidance.</p> <p>EA (b) (i) Increase in the number of countries that have used UN Environment analysis or guidance in implementing waste prevention and sound management policies and good practices, in accordance with relevant multilateral environmental agreements, SAICM and other relevant international agreements;</p>		

<p><b>Outcome Statement:</b></p>	<p>Governments, the private sector and civil society organizations have developed, strengthened or implemented legislation, policies, strategies, institutional frameworks, fiscal instruments, solutions or actions that promote sound chemicals management and enhance compliance and enforcement, while meeting the requirements of the chemicals and waste Multilateral Environmental Agreements and advancing on the Sustainable Development Goals targets of the 2030 Agenda for Sustainable Development</p>
<p><b>Brief description/ project logic:</b></p>	<p>The 2030 Agenda for Sustainable Development sets out a target to achieve environmentally sound management of chemicals and waste throughout their life cycle by 2020, and include specific targets under several Sustainable Development Goals related to chemicals and waste and protection of human health. Equally relevant, the Basel, Rotterdam, Stockholm and Minamata Conventions set out legally binding obligations and policy guidance for their implementation, while the voluntary agreement on Strategic Approach to International Chemicals Management (SAICM) provides important policy guidance on reducing the risk of chemicals and waste on human health and the environment. In order to continue translating the existing agreements into practice, significant capacity and gaps in legal and policy frameworks and enforcement in developing countries and countries with economy in transition will need to be addressed. Innovative approach for financing chemical management technologies are needed combining with energy efficiency and productivity gains. UN Environment, with its expertise, experience and broad network, is in a unique position to assist governments and stakeholders in developing capacity to address the environmental and health challenges posed by hazardous chemicals.</p> <p>The sound management of chemicals and waste cannot be achieved by the efforts of governments alone. Industry has a primary responsibility to manage chemicals they produce and handle. Consumers need to be aware of the environmental impact of the consumption. Non-Governmental Organizations have important advocacy and technical role. In implementing chemical management actions, closer partnership is needed between governments and stakeholders.</p> <p>This project aims at assisting governments and stakeholders in implementing policy and other strategic action for sound management of chemicals by convening partnerships among stakeholders, developing and sharing technical and policy tools, providing training and advice for policy development and implementation, and raising awareness among stakeholders. This will allow governments, the private sector and civil society organizations to develop or implement new or improved legislation, policies, strategies, solutions or other actions that promote the sound chemicals management, while ensuring that the requirements of the chemicals and waste Multilateral Environmental Agreements are met and society advances towards achieving the Sustainable Development Goals' targets of the 2030 Agenda for Sustainable Development.</p>
<p><b>Project outputs/ activities:</b></p>	<ol style="list-style-type: none"> <li>1. Capacity development/enhancement, policies and technology transfer to implement the Minamata Convention on Mercury at the regional, national and local level, modelling on success of other Multilateral Environmental Agreements and also involving civil society and various stakeholders in advisory groups.</li> <li>2. Technical and policy assistance to address social concerns related to the management of chemicals, such as formalization of the artisanal and small-scale mining sector which contributes to poverty eradication and an improved quality of life.</li> <li>3. Regional, national and local advisory services and policy development and implementation to reduce pollution, by hazardous chemicals, such as the establishment of legal limits to lead paint with assistance by local Non-</li> </ol>



	<p>Governmental Organizations.</p> <ol style="list-style-type: none"> <li>4. Policy advice to national governments for developing foundational regulatory capacities and strengthening legal, institutional</li> <li>5. and policy frameworks for chemicals and waste management, to allow for meeting the obligations under the multilateral environmental agreements (including capacity enhancement training of customs and other enforcement officers for effective enforcement of chemical and waste legislations and related MEAs).</li> <li>6. Knowledge-sharing and support of safe technologies and alternatives to reduce risks from chemicals and waste.</li> <li>7. Scaled-up involvement of the private sector such as by voluntary pledges to reduce or replace mercury, lead and other hazardous substances, and country projects involving companies that provide technology.</li> <li>8. Guidelines, tools and other knowledge management materials to guide chemical and waste legislation, policy making and enforcement;</li> <li>9. Identification of options for financing the deployment of technology for chemicals management actions such as PCB elimination and mercury reduction.</li> <li>10. Secretariat services to support global partnerships of governments and other stakeholders to address priority chemicals.</li> <li>11. Outreach and awareness products including reports, press releases and digital media.</li> </ol> <p>This project builds on the following Programme of Work projects in the 2014-2017 cycle and Global Environment Facility projects on the implementation of the Stockholm and Minamata Conventions:</p> <ul style="list-style-type: none"> <li>• Consolidated advisory services (515.1)</li> <li>• Global Mercury Partnership and Mercury Programme (524.1)</li> <li>• Implementation of chemicals and waste MEAs (524.2)</li> <li>• Addressing risk posed by lead and cadmium (524.3)</li> </ul>
<b>Project Outcome indicator(s):</b>	Number of governments and stakeholders that take action (e.g., strengthening or improving their policies, legal and institutional frameworks, compliance and enforcement efforts) to address the environmental and health risks of hazardous chemicals using tools and guidance from UN Environment.
<b>Expected long term impact</b>	Significant reduction in negative impacts on environmental and human health as a result of sound management of chemicals and waste. More responsible consumption and production of chemicals and chemical products. Improved environmental quality. Better drinking water and cleaner oceans.
<b>Related SDG(s) and SDG targets:</b>	<p><b>Goal 3: Ensure healthy lives and promote well-being for all at all ages</b></p> <p><b>Target 3.9:</b> By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination</p> <p><b>Goal 6: Ensure availability and sustainable management of water and sanitation for all</b></p> <p><b>Target 6.3:</b> By 2030, improve <b>water quality</b> by reducing <b>pollution</b>, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally</p> <p><b>Goal 11: Make cities inclusive, safe, resilient and sustainable</b></p> <p><b>Target 11.6:</b> By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to <b>air quality</b>, municipal and other <b>waste</b> management.</p>

	<p><b>Goal 12: Ensure sustainable consumption and production patterns</b></p> <p><b>Target 12.4:</b> 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</p> <p><b>Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development</b></p> <p><b>Target 14.1:</b> By 2025, prevent and significantly reduce <i>marine pollution</i> of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.</p> <p><b>Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</b></p> <p><b>Target 16.a:</b> Strengthen relevant <i>national institutions</i>, including through international cooperation, for building capacity at all levels, in particular <i>in developing countries</i>, to prevent violence and combat terrorism and crime.</p> <p><b>Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development</b></p> <p><b>Target 17.6:</b> Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism;</p> <p><b>Target 17.7:</b> Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favorable terms, including on concessional and preferential terms, as mutually agreed;</p> <p><b>Target 17.16:</b> Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.</p>
<p><b>Related UNEA 1 &amp; 2 resolution(s):</b></p>	<ul style="list-style-type: none"> <li>- 1/5: Chemicals and waste;</li> <li>- 2/5: Delivering on the 2030 Agenda for Sustainable Development;</li> <li>- 2/7: Sound management of chemicals and waste;</li> <li>- 2/8: Sustainable consumption and production;</li> </ul>
<p><b>Related MEAs</b></p>	<ul style="list-style-type: none"> <li>- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal;</li> <li>- Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter;</li> <li>- Minamata Convention on Mercury;</li> <li>- Montreal Protocol on Substances that Deplete the Ozone Layer;</li> <li>- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade;</li> </ul>

	<ul style="list-style-type: none"> <li>- Stockholm Convention on Persistent Organic Pollutants (POPs);</li> <li>- Strategic Approach to International Chemicals Management (SAICM);</li> <li>- Vienna Convention for the Protection of the Ozone Layer;</li> </ul>
<b>Strategic UN Environment priorities</b>	<ul style="list-style-type: none"> <li>- Cities, Pollution, Oceans, Green Finance;</li> </ul>
<b>Geographical focus</b>	<p>Global, and regional focus:</p> <ul style="list-style-type: none"> <li>- Africa: Benin, Burkina Faso, Central African Republic, Congo, Cote d'Ivoire, Ethiopia, Guinea, Madagascar, Senegal, Swaziland, Tanzania, Uganda and Zambia;</li> <li>- Asia and the Pacific region: Afghanistan, Bangladesh (Agrochemicals, Lead); Bhutan; Cambodia, Lao PDR, Malaysia; Myanmar (Mercury); Mongolia, Myanmar; Nepal; Pakistan; Thailand (Agrochemicals, Lead); Viet Nam;</li> <li>- Central Asia: Kyrgyzstan, Tajikistan;</li> <li>- Europe: Albania, FYR of Macedonia, Georgia, Moldova, Ukraine;</li> <li>- Latin America and the Caribbean: Argentina, Brazil, Colombia, Costa Rica, Honduras, Jamaica, Peru, Suriname;</li> <li>- West Asia: Lebanon, Gulf Cooperation Council (GCC) countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates) and Iraq;</li> <li>-</li> </ul>
<b>Partners</b>	<ul style="list-style-type: none"> <li>- 10-Year Framework of Programmes on Sustainable Consumption and Production (10YFP);</li> <li>- Artisanal Gold Council;</li> <li>- Association of Southeast Asian Nations (ASEAN);</li> <li>- Basel and Stockholm conventions Regional Centers (BSRCs);</li> <li>- Basel Stockholm Rotterdam conventions Secretariat (BRS);</li> <li>- Caribbean Community (CARICOM);</li> <li>- Economic Community Of West African States (ECOWAS);</li> <li>- Food and Agriculture Organization of the United Nations (FAO);</li> <li>- Global Alliance for Alternatives to DDT;</li> <li>- Global Alliance on Health and Pollution (GAHP);</li> <li>- Global Environment Facility (GEF);</li> <li>- Global Mercury Partnership (GMP);</li> <li>- Global Partnership on Waste Management (GPWM);</li> <li>- Green Climate Fund (GCF);</li> <li>- Health Care without Harm</li> <li>- IEA Clean Coal Centre</li> <li>- International Council of Chemical Associations (ICCA);</li> <li>- International Lead and Zinc Study Group</li> <li>- International Lead Association</li> <li>- International POPs Elimination Network (IPEN);</li> <li>- International Solid Waste Association (ISWA);</li> <li>- Inter-Organization Programme for the Sound Management of Chemicals (IOMC);</li> <li>- Lead Paint Alliance (formerly, the Global Alliance to Eliminate Lead Paint, GAELP);</li> <li>- Minamata Convention Interim Secretariat;</li> <li>- Ministries of Environment and other relevant governmental departments;</li> <li>- Organisation of Economic Cooperation and Development (OECD);</li> <li>- Partnership for Clean Fuels and Vehicles (PCFV);</li> <li>- PCBs Elimination Network (PEN);</li> <li>- Southern African Development Community (SADC);</li> </ul>

	<ul style="list-style-type: none"> <li>- Secretariat of the Convention on Long-range Transboundary Air Pollution (CLRTAP);</li> <li>- Strategic Approach to International Chemicals Management (SAICM);</li> <li>- United Nations Development Assistance Framework (UNDAF);</li> <li>- United Nations Development Programme (UNDP);</li> <li>- United Nations Industrial Development Organization (UNIDO);</li> <li>- United Nations Institute for Training and Research (UNITAR);</li> <li>- World Health Organization (WHO);</li> <li>- Zero Mercury Working Group</li> </ul>			
<b>Duration:</b>	<b>Start:</b> 01/2018	<b>End:</b> 12/2021	<b>Total months:</b>	48
<b>Tentative budget and funding sources</b>	USD 25 million (PoW) + USD 60 million (GEF)			

<b>Project Title/Area:</b>	<b>5.IV. Advancing Sustainable Chemistry and a Green &amp; Circular Economy Through Chemical-Safe Products and Production (ChemSafe)</b>		
<b>Subprogramme:</b>	Chemicals, Waste and Air Quality		
<b>Other Subprogramme/s:</b>	Resource Efficiency		
<b>Proposing Team/ Unit/</b>	Economy Division, Chemicals and Health Branch, Chemicals Team Geneva	<b>Focal Point</b>	Jacqueline Alvarez
<b>Type of project:</b>	<b>Regional / country-level [ ]</b> <b>Global/ Normative [Y]</b>	<b>New stream of work [Y]</b> <b>Existing stream of work [ ]</b>	
<b>Expected Accomplishment (primary)</b>	Chemicals, Waste and Air Quality EA (a) on <b>Chemicals</b> : Policies and legal, institutional and fiscal strategies and mechanisms for sound chemicals management developed or implemented in countries within the framework of relevant multilateral environmental agreements and the Strategic Approach to International Chemicals Management (SAICM).		
<b>Expected Accomplishment (secondary)</b>	Chemicals, Waste and Air Quality EA (b) on <b>Waste</b> : Policies and legal and institutional and fiscal strategies and mechanisms for waste prevention and sound management developed or implemented in countries within the framework of relevant multilateral environmental agreements.		
<b>PoW Indicator(s):</b>	<p>EA (a) (i): Increase in the number of countries that have used UN Environment analysis or guidance, and where possible are applying a multi-sectoral approach, in developing or implementing legislation, policies or action plans that promote sound chemicals management and implementation of the relevant multilateral environmental agreements and SAICM;</p> <p>EA (a) (ii): Increase in the number of private companies/industries that have developed or implemented a strategy or specific actions on sound chemicals management using UN Environment analysis or guidance;</p> <p>EA (a) (iii): Increase in the number of civil society organizations that have undertaken action on improving chemicals management using UN Environment analysis or guidance.</p>		
<b>Outcome Statement:</b>	Countries, the private sector and civil society organizations advance sustainable chemistry throughout the value chain by identifying, sharing and using information on alternatives on chemicals in products and production available through governments, the private sector, and the research community and by developing market incentives, as well as supporting policies, guidance and relevant standards within the frameworks of relevant MEAs and the Strategic Approach to International Chemicals Management (SAICM).		

<p><b>Brief description/ project logic:</b></p>	<p>Chemicals are a part of daily life, important for development and responsible for advances in economic and social development. Chemicals are used in a wide variety of products and productions processes and their sound management throughout their life cycle is essential in order to avoid significant risks to human health and the ecosystems and thus costs to the national economies.</p> <p>The first Global Chemicals Outlooks (GCO-I) (UN Environment, 2013) documented a continued high growth of the chemical industry, and the intensification of chemical use in the global economy, fueled by the growing demands for products produced with, or containing chemicals. This trend has led to increased emissions through products and exposures of humans and the environment to a high number of chemicals at relatively low levels, also referred to the cocktail effect. New information is being generated, however, that a significant number of chemicals in products and production have adverse effects, and little is known how these chemicals interact with each other. Research indicates that vulnerable populations, such as woman and children are particularly affected.</p> <p>The “Healthy Environment, Healthy People” (UN Environment 2016) report underpins the importance of “detoxification” or the removal of harmful substances from and/or mitigate their impact on the environment in which people live and work. Certain types of chemicals such as persistent organic pollutants (POPs), endocrine disrupting chemicals (EDCs), heavy metals (mercury, lead, cadmium, arsenic), as well as environmentally persistent pharmaceutical pollutants (EPPPs) can build up to dangerous levels in humans and wildlife causing adverse reproductive, developmental, immunological, hormonal, and carcinogenic effects.</p> <p>Clearly, the traditional chemical-by-chemical assessment and regulatory approach is at its limits, and a paradigm change is needed which emphasizes innovation, substitution and precaution to address the sustainable development challenges of chemistry in the future. It is in this context, that the sustainable chemistry concept has emerged to be of great promise, by focusing on innovation and incentives and by addressing all three dimensions of sustainable development.</p> <p>Sustainable chemistry is a concept that seeks to improve the efficiency with which natural resources are used to meet human needs for chemical products and services. Sustainable chemistry encompasses the design, manufacture and use of efficient, effective, safe and more environmentally benign chemical products and processes. Sustainable chemistry is also a process that stimulates innovation across all sectors to design and discover new chemicals, production processes, and product stewardship practices that will provide increased performance and increased value while meeting the goals of protecting and enhancing human health and the environment.</p> <p>Given its potential for sustainable development, UNEA2 has mandated UN Environment to get engaged in advancing sustainable chemistry globally. The project will implement this mandate by focusing on information sharing, guidance for selecting alternatives and support of safe product and production standard.</p> <p>The project will be implemented by taking a product sector approach which has been identified, taking into account the exposure situation of vulnerable groups, such as woman and children::</p> <ul style="list-style-type: none"> <li>- ChemSafe: Toys;</li> </ul>

	<ul style="list-style-type: none"> <li>- ChemSafe: Cosmetics;</li> <li>- ChemSafe: Household Products;</li> <li>- Chemsafe: Building Materials;</li> <li>- ChemSafe: Paints.</li> <li>- ChemSafe: Textiles;</li> </ul> <p>Linking sustainable chemistry key product sectors is a practical and applied way to put the concept into practice.</p> <p>While recognizing the importance of chemicals in industry and the economy, this proposed project will demonstrate the environment and health linkages by promoting and advancing the safe use of chemicals in products (CIP) and preventing exposure to hazardous chemicals that could impact negatively on health and the environment. It aims to support SDG goals 3 (good health and well-being), 6 (clean water and sanitation), 8 (occupational safety), as well as SDG 12 (responsible consumption and production); see below.</p>
<p><b>Project outputs/ activities:</b></p>	<p>For each of the identified ChemSafe sectors, the project will deliver the following outputs:</p> <ul style="list-style-type: none"> <li>- Knowledge sharing and awareness raising on chemicals in products causing health or environmental concern in the value chain;</li> <li>- Guidance for identifying safe alternatives that meet sustainable chemistry criteria</li> <li>- Review of relevant regulatory and policy frameworks;</li> <li>- Guidance for developing chemsafe policies, standards and incentives (e.g. consumer product standards and labelling);</li> <li>• Capacity development with key constituencies, including pilot action in cooperation with the private sector;</li> <li>• Identification of green investment opportunities to fund safe chemical alternatives;</li> <li>-</li> </ul>
<p><b>Project Outcome indicator(s):</b></p>	<p>Number of governments, private sector entities, and stakeholders that are enabled to take action to address the environmental and health risk of hazardous chemicals in products and production, using tools and guidance from UN Environment.</p>
<p><b>Expected long term impact</b></p>	<p>Significant reduction in negative impacts on environmental and human health as a result of sustainable chemistry and sound management of chemicals and waste. More responsible consumption and production of chemicals and chemical products. Enhanced circular and green economy. Better drinking water and cleaner oceans.</p>
<p><b>Related SDG(s) and SDG targets:</b></p>	<p><b>Goal 3: Ensure healthy lives and promote well-being for all at all ages</b></p> <p><b>Target 3.9:</b> By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination</p> <p><b>Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</b></p> <p><b>Target 8.2:</b> Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors</p> <p><b>Target 8.4:</b> Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead</p>

	<p><b>Goal 12: Ensure sustainable consumption and production patterns</b></p> <p><b>Target 12.4:</b> 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</p> <p><b>Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development</b></p> <p><b>Target 17.6:</b> Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism;</p> <p><b>Target 17.7:</b> Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favorable terms, including on concessional and preferential terms, as mutually agreed;</p> <p><b>Target 17.16:</b> Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.</p>
<p><b>Related UNEA 1 &amp; 2 resolution(s):</b></p>	<ul style="list-style-type: none"> <li>- 1/5: Chemicals and waste;</li> <li>- 2/7: Sound management of chemicals and waste;</li> </ul>
<p><b>Related MEAs</b></p>	<ul style="list-style-type: none"> <li>- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal;</li> <li>- Minamata Convention on Mercury;</li> <li>- Montreal Protocol on Substances that Deplete the Ozone Layer;</li> <li>- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade;</li> <li>- Stockholm Convention on Persistent Organic Pollutants (POPs);</li> <li>- Strategic Approach to International Chemicals Management (SAICM);</li> <li>-</li> </ul>
<p><b>Strategic UN Environment priorities</b></p>	<ul style="list-style-type: none"> <li>- Cities, Pollution, Green Finance;</li> </ul>
<p><b>Geographical focus</b></p>	<ul style="list-style-type: none"> <li>- Global;</li> <li>- Regions and countries which have expressed an interest in potential country delivery (including, but not limited to):             <ul style="list-style-type: none"> <li>o Africa: Cote d'Ivoire, Egypt, Nigeria, Seychelles, South Africa;</li> <li>o Asia and the Pacific region: Bangladesh, Indonesia, Pakistan, Viet Nam (POPs); Sri Lanka (Alternatives to Asbestos); China and India (Counterfeit Agrochemicals);</li> <li>o Central Asia: Kyrgyzstan (Linking to PAGE);</li> <li>o Europe: Azerbaijan;</li> <li>o Latin America and the Caribbean: Argentina, Brazil, Colombia, Mexico, Trinidad &amp; Tobago;</li> <li>o West Asia: Jordan, Oman;</li> </ul> </li> </ul>

<b>Partners</b>	For selected product categories, partners will be identified at the global level to participate in an advisory group and execute activities, among others: <ul style="list-style-type: none"> <li>- ChemSec (civil society);</li> <li>- Downstream companies and major retailers with sustainable chemistry policies;</li> <li>- Greenpeace (civil society);</li> <li>- International Council of Chemical Associations (ICCA);</li> <li>- International Sustainable Chemistry Collaborative Centre (ISC3);</li> <li>- Non-Governmental Organizations (NGOs) (TBD);</li> <li>- Organisation for Economic Co-operation and Development (OECD);</li> <li>- Specific chemical companies committed to introduce safe chemical alternatives;</li> <li>- United Nations Industrial Development Organization (UNIDO);</li> </ul>			
<b>Duration:</b>	<b>Start:</b> 01/2018	<b>End:</b> 12/2021	<b>Total months:</b>	48
<b>Tentative budget and funding sources</b>	USD 8 million (PoW) Potential donors: European Commission (DEVCO) and other development cooperation agencies interested in advancing the green economy in the chemical industry sector, Germany through ISC3;			

<b>Project Title/Area:</b>	<b>5.V. Promotion and delivery of environmentally sound waste management technologies and methods for improved legislative frameworks and in-country technical and advisory support</b>		
<b>Subprogramme:</b>	Chemicals, Waste and Air Quality		
<b>Other Subprogramme/s:</b>	Environmental Governance; Resource Efficiency;		
<b>Proposing Team/ Unit/</b>	Economy Division, International Environmental Technology Centre (IETC), Osaka	<b>Focal Point</b>	Claudia Giacobelli
<b>Type of project:</b>	<b>Regional / country-level</b> [Y] <b>Global/ Normative</b> [Y]	<b>New stream of work</b> [Y] <b>Existing stream of work</b> [ ]	
<b>Expected Accomplishment (primary)</b>	Chemicals, Waste and Air Quality EA (b) on <b>Waste</b> : Policies and legal and institutional and fiscal strategies and mechanisms for waste prevention and sound management developed or implemented in countries within the framework of relevant multilateral environmental agreements.		
<b>Expected Accomplishment (secondary)</b>	Chemicals, Waste and Air Quality EA (a) on <b>Chemicals</b> : Policies and legal, institutional and fiscal strategies and mechanisms for sound chemical management developed or implemented in countries within the relevant Multilateral Environmental Agreements (MEAs) and the Strategic Approach to International Chemical Management (SAICM).		
<b>Expected Accomplishment (tertiary)</b>	Chemicals, Waste and Air Quality EA (c) on <b>Air Quality</b> : National emissions sources identified, policies, legal, regulatory, fiscal and institutional frameworks and mechanisms for the reduction of air pollution developed, institutional capacity built for improved air quality, and air quality assessments done by countries with UN Environment support.		
<b>PoW Indicator(s):</b>	(i) Increase in the number of countries that have used UN Environment analysis or guidance in implementing waste prevention and sound management policies and good practices, in accordance with relevant multilateral environmental agreements, SAICM and other relevant international agreements.  (ii) Increase in the number of private companies/industries that have used UN Environment analysis or guidance in implementing policies and good practices for waste prevention and		



	<p>sound waste management.</p> <p>(iii) Increase in the number of civil society organizations that have taken action to enhance waste prevention and improve waste management using UN Environment analysis or guidance.</p>
<b>Outcome Statement:</b>	<p>To deliver innovative and integrated solutions related to environmentally sound approaches and technologies, contributing to the reduction of environmental and health risks, in line with UN Environment’s Vision 2030.</p>
<b>Brief description/ project logic:</b>	<p>This project aims to assist national and local governments, private companies/industries, and civil society organizations to improve waste management system by promoting environmentally sound technologies and practices. Improper waste management practices can pollute land, air and water and impede the provision of basic necessities for public health such as clean water, clean air and safe food. Unsound waste management also disproportionately affect poorer communities more as wastes are often dumped in land adjacent to poorer neighborhoods and slums. This leads to formation of informal waste management sector with poorer communities as waste pickers. Many waste pickers belong to vulnerable groups such as recent migrants, unemployed, disabled, or elderly persons, women and children.</p> <p>Environmentally sound technologies protect the environment, are less polluting, use resources in a more sustainable manner, recycle more of their wastes and products, and handle residual wastes in a more acceptable manner than the technologies for which they were substitutes. Environmentally sound technologies are not just individual technologies, but total systems which include know-how, procedures, goods and services, and equipment as well as organizational and managerial procedures.</p> <p>Sound waste management, which promotes environmentally sound technologies, establishing formal waste management sector, engaging private sector, local entrepreneurs and workers and waste to resources approach, is expected to have positive impacts on pollution reduction, public health, vulnerable groups such as women and children, poverty alleviation and human rights.</p> <p>This integrated project contains three work streams that are intricately connected and capitalize upon the synergies between them by taking advantage of their complementary advantages: Enhancing policy frameworks, providing in-country technical and advisory support, and outreach and awareness raising.</p> <p><i>Enhancing policy frameworks</i></p> <p>In collaboration with the national and local authorities the enhancement of existing policy frameworks of beneficiary countries will be supported and a dialogue for the identification of appropriate incentives will be facilitated to support the uptake of innovative environmental technologies and approaches.</p> <p>In addition developing counties and countries with economies in transition will be supported to integrate sound management solutions (also for hazardous waste) into national agendas for the Sustainable Development Goals.</p> <p>Technical capacity building will be designed and provided to policy makers, industry practitioners, civil society and other stakeholders involved in the sector to (i) improve ability to collect data and information for planning, monitoring and evaluation purposes; (ii) transfer technical capacity for identification and assessment of environmentally sound</p>

	<p>technologies and (iii) identification and design of financing options. When designing financing options, making business cases for investors and developing mechanisms for green financing will be promoted.</p> <p>Policy briefs and publications such as the Global Waste Management Outlook will be developed to provide policy guidance and raise awareness on the value of efficient use of resources and prevention of unnecessary waste generation.</p> <p><i>Providing in-country technical and advisory support</i></p> <p>Technical and capacity gaps will be identified in targeted countries and initiatives for addressing such gaps will be designed, providing a framework for sustainable and continuous improvements. Social surveys including gender analysis will also be carried in order to understand the challenges faced by local communities particularly women, who are the primary users of waste management services in many societies.</p> <p>Based on the surveys, it is intended to design and implement demonstration projects for each of the beneficiary countries, where citizens, government and the private sector collaborate on piloting innovative solutions to reduce environmental impact through the adoption of innovative technologies and approaches. The private sector will play a major role in a demonstration project as technology provider. It will enable the private sector to upscale demonstration projects in other cities and countries. Green financing will be an integral part of the demonstration project and this will ensure the financial sustainability of the sound waste management system after completion of the demonstration project.</p> <p>Furthermore, support to developing countries and countries with economies in transition is provided with the aim to improve also their hazardous waste practices, to reduce illegal dumping of hazardous waste and to reduce health impact due to unsound management of hazardous waste.</p> <p><i>Outreach and awareness raising</i></p> <p>Closely related to the previous work streams, a concerted global outreach and education programme on environmentally sound technologies will be developed in line with the objectives of the Global Partnership on Waste Management. Civil society organizations will be involved in the outreach and educational programmes.</p> <p>An on-going monitoring mechanism will be established, to be adopted by local counterparts to monitor the status and progress of the activities, ensure up-to-date information and reporting, while providing an opportunity to introduce corrective measures where necessary.</p> <p>Throughout the project, mutual benefits with Basel Convention activities will be sought, for instance in relation to the expert working group on environmentally sound management of wastes.</p>
<p><b>Project outputs/ activities:</b></p>	<ul style="list-style-type: none"> <li>- Enhanced and enabling policy frameworks for the uptake of environmentally sound technologies and approaches, within the frameworks of the relevant multilateral environmental agreements</li> <li>- Thematic assessments and policy briefs on current and emerging environmentally sound technologies, including comparative indicators for internationally agreed best available techniques (BAT) and best environmental practices (BEP) on waste management</li> </ul>

	<ul style="list-style-type: none"> <li>- Enhanced capacity to assess and select and implement appropriate environmentally sound technologies and approaches suitable to the local context</li> <li>- Pilot demonstration projects designed and implemented to showcase social, economic and environmental benefits of innovative environmentally sound solutions as well as waste, pollution and climate linkages</li> <li>- Educational materials and outreach campaigns on uptake and dissemination of environmental sound technologies relate to waste prevention and environmentally sound waste management</li> </ul>
<b>Project Outcome indicator(s):</b>	No. of governments, businesses/industry, and civil society organizations that are enabled to implement innovative approaches and technologies introduced by UN Environment/IETC and its partners
<b>Expected long term impact</b>	Significant reduction in negative impacts on environmental and human health as a result of waste prevention and sound management of waste. More responsible consumption and production. Enhanced circular and green economy. Cleaner air, water and land. Better drinking water. More sustainable cities and communities.
<b>Related SDG(s) and SDG targets:</b>	<p><b>Goal 3: Ensure healthy lives and promote well-being for all at all ages</b></p> <p><b>Target 3.9:</b> By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination</p> <p><b>Goal 11: Sustainable cities and communities</b></p> <p><b>Target 11.6:</b> By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.</p> <p><b>Goal 12: Responsible consumption and production</b></p> <p><b>Target 12.2:</b> By 2030, achieve the sustainable management and efficient use of natural resources.</p> <p><b>Target 12.4:</b> 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.</p> <p><b>Target 12.5:</b> By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.</p> <p><b>Goal 13: Climate change</b></p> <p><b>Target 13.1:</b> Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.</p> <p><b>Target 13.a:</b> Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible.</p> <p><b>Goal 17: Partnerships for the goals</b></p>

	<p><b>Target 17.6:</b> Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism;</p> <p><b>Target 17.7:</b> Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed.</p> <p><b>Target 17.16:</b> Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.</p>			
<b>Related UNEA 1 &amp; 2 resolution(s):</b>	<ul style="list-style-type: none"> <li>- 1/5 Chemicals and waste</li> <li>- 1/7: Strengthening the role of UN Environment in promoting air quality;</li> <li>- 2/7 Sound management of chemicals and waste</li> </ul>			
<b>Related MEAs</b>	<ul style="list-style-type: none"> <li>- Convention on Long-range Transboundary Air Pollution;</li> <li>- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal;</li> <li>- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade;</li> <li>- Stockholm Convention on Persistent Organic Pollutants;</li> <li>- Montreal Protocol on Substances that Deplete the Ozone Layer;</li> <li>- Strategic Approach to International Chemicals Management (SAICM);</li> <li>- Minamata Convention on Mercury;</li> <li>- Vienna Convention for the Protection of the Ozone Layer;</li> </ul>			
<b>Strategic UN Environment priorities</b>	<ul style="list-style-type: none"> <li>- Cities, Pollution, Green Finance, Oceans;</li> </ul>			
<b>Geographical focus</b>	<ul style="list-style-type: none"> <li>- Africa: Burkina Faso, Ethiopia, Ghana, Kenya, Mauritius;</li> <li>- Asia and the Pacific region: Bhutan, Nepal, and Mongolia; India (state level) and Maldives (Prior Informed Consent -PIC- Chemicals); Sri Lanka (Asbestos Disposal); Viet Nam (Medical and Hospital Waste); Thailand (Climate-Waste); China, Indonesia, Philippines, Thailand, Viet Nam (Marine Litter/Plastics); Bangladesh and Pakistan (Ship-Recycling);</li> <li>- Europe: Albania, Belarus, Georgia;</li> <li>- Latin America and the Caribbean: Antigua &amp; Barbuda, Dominican Republic, Honduras, Jamaica, Paraguay;</li> <li>- West Asia: Bahrain, Lebanon;</li> </ul>			
<b>Partners</b>	<ul style="list-style-type: none"> <li>- IGES</li> <li>- KIRDI</li> <li>- The Asia Foundation</li> <li>- Basel Rotterdam Stockholm Conventions Secretariat (BRS)</li> <li>- Basel Stockholm Regional Centers</li> <li>- UN Habitat</li> </ul>			
<b>Duration:</b>	<b>Start:</b> 01/2018	<b>End:</b> 12/2021	<b>Total months:</b>	48

<b>Tentative budget and funding sources</b>	<ul style="list-style-type: none"> <li>- USD 35 million in total, including;</li> <li>- USD 15 million non-GEF, non-GCF: for instance, Government of Japan, International Climate Initiative (IKI), European Commission (EC);</li> <li>- USD 20 million: GCF and GEF;</li> </ul>
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<b>Project Title/Area:</b>	<b>5.VI. Air Pollution and Health Initiative</b>		
<b>Subprogramme:</b>	Chemicals, Waste and Air Quality		
<b>Other Subprogramme/s:</b>	Climate Change; Resilience to Disasters and Conflicts; Healthy and Productive Ecosystems; Environmental Governance; Resource Efficiency; Environment under Review;		
<b>Proposing Teams/ Units/</b>	Economy Division, Environment and Health and Transport and Air Quality Unit; Science Division, Scientific Assessments Branch; Law Division; Communications Division;	<b>Focal Points</b>	Rob de Jong (Transport and Air Quality); Soraya Smaoun (Air Quality); Fanny Demassieux (Environment and Health); Valentin Foltescu (Air Pollution Monitoring); Wanhua Yang (Law Division); Samantha Leroyal (Communications Division);
<b>Type of project:</b>	<b>Regional / country-level [Y]</b> <b>Global/ Normative [Y]</b>	<b>New stream of work [Y]</b> <b>Existing stream of work [Y]</b>	
<b>Expected Accomplishment (EA) (primary)</b>	Chemicals, Waste and Air Quality EA (c) on <b>Air Quality</b> : National emissions sources identified, policies, legal, regulatory, fiscal and institutional frameworks and mechanism for the reduction of air pollution developed, institutional capacity built for improved air quality, and air quality assessments done by countries with UN Environment support.		
<b>Expected Accomplishment (EA) (secondary)</b>	Chemicals, Waste and Air Quality EA (a) on <b>Chemicals</b> : Policies and legal, institutional and fiscal strategies and mechanisms for sound chemicals management developed or implemented in countries within the framework of relevant Multilateral Environmental Agreements (MEAs) and the Strategic Approach to International Chemicals Management (SAICM).		
<b>Expected Accomplishment (EA) (tertiary)</b>	Climate Change EA (b) on Low Greenhouse Gas Emissions: Countries increasingly adopt and/or implement low greenhouse gas emission development strategies and invest in clean technologies.  Environmental Governance EA (b): Institutional capacities and policy and/or legal frameworks enhanced to achieve internationally agreed environmental goals, including the 2030 Agenda for Sustainable Development and the Sustainable Development Goals.		
<b>PoW Indicator(s):</b>	<ul style="list-style-type: none"> <li>- EA (c) (i): Increase in the number of countries that have developed national emission inventories and air quality assessments with publicly accessible monitoring data and information electronically available</li> <li>- EA (c) (ii): Increase in the number of countries that have adopted policies, standards, and legal, regulatory, fiscal and institutional frameworks and mechanisms for improved air quality with UN Environment analysis or guidance.</li> <li>- EA (c) (iii): Increase in the number of countries that have raised awareness on the</li> </ul>		

	<p>importance of air quality and have made air quality monitoring data and other information publicly available and easily understandable with UN Environment analysis or guidance.</p>
<p><b>Outcome Statement:</b></p>	<p>The innovative Air Pollution and Health Initiative is aiming at tackling the huge air pollution challenge the world is facing today. It will be highly strategic, integrated, time-bound and issue-based, and help scale up delivery on multiple environmental, social, economic and health benefits.</p> <p>Outcome: Countries, cities, the private sector, civil society, and other relevant stakeholders prevent and reduce environment and health degradation, with a particular focus on air pollution for improved human health and well-being. Governments, cities, private sector companies, and civil society organizations have developed and/or improved legislation, policies, strategies, standards, practices, and national/sectoral development plans, and built capacity to address the environment-health linkages, and in particular monitor and tackle air pollution successfully, while moving towards a low-emissions, low-carbon transport sector, among others, using UN Environment support, expertise, tools and knowledge.</p>
<p><b>Brief description/ project logic:</b></p>	<p>The impact of air pollution on human health and the environment has become increasingly global in scale and extent. The need to recognize and to address the health risks associated with air pollution has become even more urgent. Analyses of the burden of disease have highlighted again that modifiable environmental factors represent 23% of premature death per year worldwide. It is estimated that a hundred million people across the world are affected annually by pollution. Given the strong interlinkages between a healthy environment and healthy people across the Sustainable Development Goals, there are multiple opportunities for environment and health actors to combine their efforts and join forces with other sectors for mutual benefits.</p> <p>The main environmental pressures on health are closely related to the pollution agenda, which is the overarching theme of the Third Session of the UN Environment Assembly to be held in December 2017. They include: 1) air pollution 2) poor water quality (both freshwater and marine), including from improperly managed sanitation, leading to a lack of access to safe water and deteriorating health of water related ecosystems 3) chemical pollution; 4) poorly managed waste; and 5) land/soil pollution. In addition, the linkages between environment and health are increasingly exacerbated by climate change, urbanization, demographic trends and lifestyles, as well as ecosystem disruption and land-use change.</p> <p>In fact, air pollution is the first “environmental” killer: it leads to approximately 6.5 million deaths every year according to the estimates from WHO based on 2012 data. Seventy percent of these deaths occur in Asia and the Pacific region. Considerable health issues in South-East Asia result from haze caused by forest fires, for instance. It is estimated that fifty-one million years of life are annually lost or lived with disability due to lower respiratory infections caused by household and ambient air pollution. Another 119 million years of life lost, or lived with disability due to cardiovascular diseases occur because of household and ambient air pollution, second hand tobacco-smoke, and exposure to chemicals.</p> <p>The disease burden attributable to environmental risk factors also varies geographically, by age groups and gender. In developing countries where solid fuel is widely used in homes for cooking or heating, air pollution levels can be high, meaning a high attributable fraction of this source, with higher values for women than for men. This source of air pollution disproportionately impacts women and children, and also causes increased levels of ambient air pollution in developing country cities. This project will be tailored as far as possible to</p>

	<p>evidence the gender perspective in terms of population exposure to different kinds of pollution. Negative impacts of air pollution upon the poor and most vulnerable groups in terms of livelihoods will be highlighted as well, along with recommendations for appropriate air quality management with an aim of improving population health.</p> <p>A large share of current UN Environment activities across all sub-programmes, have –directly or indirectly– positive impacts on human health and wellbeing, whether through addressing the pressing need for sound management of chemicals and waste, or through tackling the issues of greenhouse gas emissions and air quality, or safe wastewater treatment, or by addressing marine litter and plastic debris, or sustainable consumption and production, among others. In fact, the Montreal Protocol, the Climate and Clean Air Coalition, the Partnership for Clean Fuels and Vehicles, the adoption of the Minamata Convention on Mercury, and the Basel, Rotterdam and Stockholm Conventions offer powerful success stories on issues related to pollution and health.</p> <p>Hence, undertaking concerted efforts to address environmental pollution, with a particular emphasis on air quality, is quintessential to achieving the sustainable development goal 3 on health and well-being, among other goals. Similarly, sustainable development goal 12 is key since pollution would be significantly reduced once sustainable consumption and production patterns have been strongly adopted. UN Environment is uniquely positioned to take on a leadership role in this field, working closely with member states, the private sector and civil society and to address air pollution effectively and timely.</p> <p>The high-level session of the second United Nations Environment Assembly positioned UN Environment as an important player among UN agencies at the nexus of pollution, health and environment. The preparation of the background report on <i>Healthy Environment, Healthy People</i> for that session has enabled UN Environment to initiate or solidify working relationships on air pollution with a number of UN organizations, including the World Health Organization, and Multilateral Environmental Agreements secretariats, among others.</p> <p>Today, developing countries are setting ambitious air quality targets and require clear strategies, emission inventories, standards, and technical, financial, institutional and legal measures to achieve those targets in partnership with relevant stakeholders at global, national and regional levels. At the regional level, for instance, there are several key processes and initiatives taking place that address air pollution. Many of these have been operational for a number of years and have built a wealth of knowledge, particularly in the Asia and Pacific region. The UN Environment PoW 2018-2019 identifies the Asia-Pacific Clean Air Partnership, as a promising example of success. Building on this partnership among others it is proposed to scale up UN Environment support to regional, national and city efforts that focus on controlling and preventing air pollution in developing regions like Asia-Pacific, Africa, Latin America and the Caribbean.</p> <p>In order to address these multiple issues that converge at the nexus of pollution, health and the environment, UN Environment plans to have targeted interventions through this project that:</p> <ul style="list-style-type: none"> <li>- Develop and share technical guidance, tools and methodologies in a number of sectors to measure health and well-being co-benefits of environmentally sound action and decisions;</li> <li>- Strengthen capacity, providing technical assistance and policy support at regional and national levels, for instance by showing the economic benefits of clean air;</li> <li>- Provide advisory services to Regional Fora and targeted countries to adopt an integrated approach across departments and sectors, catalyze a shift to green and low carbon economies, and strengthen the legal and policy framework to prevent pollution and improve environmental quality;</li> </ul>
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	<ul style="list-style-type: none"> <li>- Support finance investments in technologies that contribute to a detoxified economy and society (e.g. to improve air quality) in a number of sectors including transport, waste, chemicals and building materials;</li> <li>- Build and enhance global and regional partnerships for a pollution free planet;</li> <li>- Increase global and regional awareness (e.g., capitalizing on the global public campaign #BreatheLife led by the Climate and Clean Air Coalition and WHO) among governmental decision makers at all levels, businesses (e.g., the transport sector, energy sector, chemicals sector), and civil society stakeholders, engaging citizens, on pollution and health risks, and the cost of inaction while showcasing success stories and mobilizing powerful game changers/champions that can catalyze change globally and regionally. This will also include the development of media products and advocacy toolkits for partners to use in their respective contexts.</li> <li>- Apply partnership approaches, in particular with the private sector to contribute to a move to a low and no emission transport sector.</li> <li>- Provide to countries support on technology, infrastructure and investment guidance to green the transport business sector and enhance sustainable mobility, by working with partners.</li> <li>- Strengthen the capacity of developing countries and their respective cities in Africa and Latin America to monitor air pollution and subsequently take policy action to improve air quality.</li> <li>- Enable countries to establish baselines and generate data for SDG indicators 3.9.1 and 11.6.2, to identify hotspots and sources of pollution, to inform policy action to address air pollution issues and to measure the effectiveness of such policies on the urban environment.</li> <li>- Help countries create the necessary enabling environments for initiating and sustaining cost-effective, air quality monitoring, reporting and assessment.</li> <li>- Seek synergies with ongoing efforts to establish a sensor Testing Centre in Africa, where emerging air sensor technology could be co-located with reference monitors to establish the real-world sensor performance, thereby assuring reliability of the collected data.</li> <li>- Work with key stakeholders to focus primarily on air quality management in countries facing rapid urbanization and strong needs for pollution abatement measures.</li> <li>-</li> </ul> <p>The project will look at maximizing synergies in order to offer a <u>comprehensive menu of services</u> to relevant countries and cities, in collaboration with stakeholders. This menu of services will provide, as stated above, e.g., technical guidance, advisory services and capacity enhancement to enable countries and relevant stakeholders to address air pollution, environment and health linkages in a more integrated and holistic manner, improving the quality of the air globally.</p>
<p><b>Project outputs/ activities:</b></p>	<p>The project will offer a menu of products and services to a selected set of countries and cities in demand of coherent, consistent and integrated support to tackle the issue of air quality. The following products and services (outputs) will be offered, among others:</p> <ul style="list-style-type: none"> <li>- Tailor made science-based information for policy and decision makers to <i>inter alia</i> identify the main air pollution problems and their source attribution;</li> <li>- Technical guidance, guidelines, tools/toolkits, methodologies and other knowledge</li> </ul>



	<p>management materials to measure health and well-being co-benefits and address pollution effectively;</p> <ul style="list-style-type: none"> <li>- Technical assistance and policy support at regional, national and municipal levels;</li> <li>- Advisory services to Regional Fora and targeted countries on integrated approaches for developing/strengthening the legal and policy frameworks to prevent/control pollution, building on e.g., national sustainable consumption and production action plans;</li> <li>- Improved global and regional partnerships for a detoxified / depolluted world;</li> <li>- Mobilization of powerful game changers, including business, industry and finance stakeholders globally and regionally;</li> <li>- Multi-stakeholder partnerships with key stakeholders, including the World Health Organization and the World Meteorological Organisations (e.g. “Coalition for Health, Environment and Climate Change”, Partnership to accelerate delivery in country for air quality with WHO and WMO);</li> <li>- Capacity-building workshops/trainings on the nexus of pollution, environment and health (e.g. “Capacity to Act “ programme with WHO;</li> <li>- National/ city level action plans for control and prevention of pollution, focusing in particular on air pollution;</li> <li>- Regional, national and city roadmaps to improve air quality;</li> <li>- Support to countries and cities help them adopt roadmaps for the introduction of electric vehicles;</li> <li>- Measures to introduce cleaner and no emissions fuels and vehicles in cities and at national levels;</li> <li>- Measures to promote non-motorized and clean alternatives to motorized vehicles use;</li> <li>- Assessments of country-needs and country readiness for air quality monitoring and affordable air quality monitoring networks;</li> <li>- Training on processing of air quality monitoring data and data analysis (data management) and training on the use of indicator reporting information systems for local, national, regional and global reporting to policy audiences and the public (information management, analysis and reporting);</li> <li>- Workshops on results and discussions how air quality monitoring data can strengthen environmental and health policy and contribute through best practices to norm setting and SDG baselines for SDG indicators reporting;</li> <li>- Documentation of successful project results, and possible set up of twinning arrangements between interested partners;</li> <li>- Global monitoring of air quality policies implemented by countries;</li> <li>- Global and regional awareness campaigns on selected pollution related themes, including air quality monitoring and sustainable mobility, and communication activities, including through ambassadors;</li> </ul>
<p><b>Project Outcome indicator(s):</b></p>	<ul style="list-style-type: none"> <li>- Laws, Strategies and Capacity: Number of national and city governments that have developed or improved either their legislation, or policies, or strategies, or national/sectoral development plans to prevent or reduce air pollution, including on the issue of sustainable and electric mobility / transport sector (e.g., measures to promote non-motorized and clean alternatives), or built capacity to do so, using UN Environment support, advice, tools and knowledge;</li> <li>- Partnerships: Multi-stakeholder partnerships to address environment-health linkages with UN Environment support;</li> <li>- Monitoring: Number of monitoring networks for air pollution that are fully up and running; Number of stakeholders using data from monitoring networks in developing SDG reports, policy documents, environmental and/or health reviews, guidelines, and protocols; Number of countries that gather and consolidate data for reporting on SDG indicator targets 3.9.1 and 11.6.2;</li> </ul>

	<p>- Awareness and Communication: Number of national and city governments and large business stakeholders that use UN Environment support / materials to raise awareness about environment- health linkages and air pollution;</p>
<p><b>Expected long term impacts</b></p>	<p>More effective delivery on the 2030 Agenda for Sustainable Development by using the environment-health nexus as a cross-cutting solution through international, regional, national and local cooperation. Reduction in negative impacts on environmental and human health. Reduced air pollution and cleaner air. Cleaner environmental technologies. More sustainable cities and communities. Reduced numbers of premature deaths resulting from air pollution. Cleaner energy. Reduced levels of climate change. Reduced inequalities, including in relation to gender.</p>
<p><b>Related SDG(s) and SDG targets:</b></p>	<p><b>Goal 1: End poverty in all its forms everywhere</b></p> <p><b>Target 1.4:</b> By 2030, ensure that all men and women, in particular the poor and the vulnerable, have <b>equal rights to</b> economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, <b>appropriate new technology</b> and financial services, including microfinance.</p> <p><b>Goal 3: Ensure healthy lives and promote well-being for all at all ages</b></p> <p><b>Target 3.9:</b> By 2030, substantially reduce the number of deaths and illnesses from hazardous <b>chemicals and air, water and soil pollution and contamination</b>.</p> <p><u>UN Environment is the custodian agency for indicator 3.9.1 on air quality monitoring: "Mortality rate attributed to household and ambient air pollution."</u></p> <p><b>Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all</b></p> <p><b>Target 7.a:</b> By 2030, enhance <b>international cooperation to facilitate access</b> to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and <b>promote investment in energy infrastructure and clean energy technology</b>.</p> <p><b>Target 7.b:</b> By 2030, <b>expand infrastructure and upgrade technology</b> for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support.</p> <p><b>Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</b></p> <p><b>Target 9.4:</b> By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource use efficiency and greater adoption of <b>clean and environmentally sound technologies</b> and industrial processes, all countries taking action in accordance with their respective capabilities.</p> <p><b>Goal 11: Make cities inclusive, safe, resilient and sustainable</b></p> <p><b>Target 11.6:</b> By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to <b>air quality</b>, municipal and other <b>waste</b> management.</p>

Data will be disaggregated by city for indicator 11.6.2: “Annual mean levels of fine particulate matter (PM2.5 and PM10) in cities”.

**Goal 12: Ensure sustainable consumption and production patterns**

**Target 12.1:** Implement the 10-Year Framework of Programs on sustainable consumption and production (10YFP), all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries.

**Target 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**.

**Target 12.5:** By 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse.

**Target 12.6:** Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.

**Target 12.7:** Promote public procurement practices that are sustainable, in accordance with national policies and priorities.

**Target 12.8:** By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.

**Target 12.a:** Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production.

**Goal 13: Take urgent action to combat climate change and its impacts**

**Target 13.3:** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

**Goal 17: Partnerships for the goals**

**Target 17.6:** Enhance North-South, South-South and triangular **regional and international cooperation** on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism;

**Target 17.7:** Promote the **development, transfer, dissemination and diffusion of environmentally sound technologies** to developing countries on favorable terms, including on concessional and preferential terms, as mutually agreed;

**Target 17.16:** Enhance the global partnership for sustainable development, complemented by **multi-stakeholder partnerships** that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.

<b>Related UNEA 1 &amp; 2 resolution(s):</b>	<ul style="list-style-type: none"> <li>- 1/5: Chemicals and waste;</li> <li>- 1/7: Strengthening the role of UN Environment in promoting air quality;</li> <li>- 2/5: Delivering on the 2030 Agenda for Sustainable Development;</li> <li>- 2/6: Supporting the Paris Agreement;</li> <li>- 2/7: Sound management of chemicals and waste;</li> <li>- 2/8: Sustainable consumption and production;</li> <li>- 2/21: Sand and dust storms;</li> </ul>
<b>Related MEAs</b>	<ul style="list-style-type: none"> <li>- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal;</li> <li>- Convention on Long-range Transboundary Air Pollution (CLRTAP);</li> <li>- Minamata Convention on Mercury;</li> <li>- Montreal Protocol on Substances that Deplete the Ozone Layer;</li> <li>- Paris Agreement (Accord de Paris) on climate change ;</li> <li>- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade;</li> <li>- Stockholm Convention on Persistent Organic Pollutants (POPs);</li> <li>- Strategic Approach to International Chemicals Management (SAICM);</li> <li>- United Nations Framework Convention on Climate Change (UNFCCC);</li> <li>- Vienna Convention for the Protection of the Ozone Layer;</li> </ul>
<b>Strategic UN Environment priorities</b>	<ul style="list-style-type: none"> <li>- Cities, Pollution, Green Finance;</li> </ul>
<b>Geographical focus</b>	<p>The top priority countries that are mentioned below will form the core group of countries to which the project would deliver. Other countries may be added as appropriate.</p> <p>Top priority countries:</p> <ul style="list-style-type: none"> <li>- Africa: Cote d'Ivoire, Egypt, Ethiopia, Ghana, Kenya, Nigeria, Rwanda, Senegal, South Africa;</li> <li>- Asia and the Pacific region: India, Indonesia, Mongolia;</li> <li>- Central Asia: Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan;</li> <li>- Europe: Georgia, Serbia;</li> <li>- Latin America and the Caribbean: Brazil, Chile, Dominican Republic, Mexico, Paraguay, Peru; Uruguay;</li> <li>- West Asia: Bahrain;</li> </ul>
<b>Partners</b>	<p><u>Main Partners:</u></p> <ul style="list-style-type: none"> <li>- Africa Sustainable Transport Forum (ASTF);</li> <li>- Air Pollution Information Network for Africa (APINA);</li> <li>- Asia Pacific Clean Air Partnership (APCAP);</li> <li>- Basel Stockholm Rotterdam conventions Secretariat (BRS);</li> <li>- Basel and Stockholm Conventions Regional Centers (BCRC, SCRC);</li> <li>- Clean Air Asia;</li> <li>- Clean Air Initiative – Sub-Saharan Africa (CAI-SSA);</li> <li>- Climate and Clean Air Coalition to Reduce Short-lived Climate Pollutants (CCAC);</li> <li>- Economic Commission for Europe;</li> <li>- Global Alliance on Health and Pollution (GAHP);</li> <li>- Global Environment Facility (GEF);</li> <li>- Global Fuel Economy Initiative (GFEI);</li> </ul>

	<ul style="list-style-type: none"> <li>- Global Partnership on Waste Management (GPWM);</li> <li>- Global Partnership on Nutrient Management;</li> <li>- Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA);</li> <li>- Gulf Cooperation Council (GCC);</li> <li>- Green Climate Fund (GCF);</li> <li>- International Council on Clean Transportation (ICCT);</li> <li>- International Transport Forum (ITF);</li> <li>- Inter-Organization Programme for the Sound Management of Chemicals (IOMC);</li> <li>- Minamata Convention Interim Secretariat;</li> <li>- Ministries of Environment;</li> <li>- Organisation for Economic Co-operation and Development (OECD);</li> <li>- Ozone Secretariat;</li> <li>- Partnership for Clean Fuels and Vehicles (PCFV);</li> <li>- Secretariat of the Convention on Long-range Transboundary Air Pollution (CLRTAP);</li> <li>- Secretariat of the UN Convention to Combat Desertification (UNCCD);</li> <li>- Share the Road (StR) Programme;</li> <li>- Strategic Approach to International Chemicals Management (SAICM);</li> <li>- United Nations Development Assistance Framework (UNDAF);</li> <li>- United Nations Development Programme (UNDP);</li> <li>- United Nations Environment Finance Initiative and Principles for Sustainable Insurance;</li> <li>- United Nations Framework Convention on Climate Change (UNFCCC);</li> <li>- United Nations Industrial Development Organization (UNIDO);</li> <li>- United Nations Institute for Training and Research (UNITAR);</li> <li>- United Nations International Children's Emergency Fund (UNICEF);</li> <li>- United Nations Human Settlements Programme (UN-Habitat);</li> <li>- United States Environmental Protection Agency (EPA or sometimes USEPA);</li> <li>- World Bank's Pollution Management and Environmental Health (PMEH);</li> <li>- World Health Organization (WHO);</li> <li>- World Meteorological Organization (WMO).</li> </ul>			
<b>Duration:</b>	<b>Start:</b> 01/2018	<b>End:</b> 12/2021	<b>Total months:</b>	48
<b>Tentative budget and funding sources</b>	<ul style="list-style-type: none"> <li>- USD 25 million in total, including:</li> <li>- USD 15 million non-GEF, non-GCF: for instance, Rockefeller Foundation, UN Development Account, German IKI, European Commission (EC);</li> <li>- USD 10 million GEF, GCF;</li> </ul>			

<b>Project Title/Area:</b>	<b>5.VII. Increasing capacity to combat sand and dust storms in Asia and Africa</b>		
<b>Subprogramme:</b>	Chemicals, Waste and Air Quality		
<b>Other Subprogramme/s:</b>	Resilience to Disasters and Conflict, Healthy and Productive Ecosystems, Environment under Review		
<b>Proposing Team/ Unit/</b>	Science Division, Scientific Assessments Branch	<b>Focal Point</b>	Valentin Foltescu

<b>Type of project:</b>	<b>Regional / country-level [Y] Global/ Normative [ ]</b>	<b>New stream of work [Y] Existing stream of work [ ]</b>
<b>Expected Accomplishment (primary)</b>	Chemicals, Waste and Air Quality EA (c) on <b>Air Quality</b> : National emissions sources identified, policies, legal, regulatory, fiscal and institutional frameworks and mechanism for the reduction of air pollution developed, institutional capacity built for improved air quality, and air quality assessments done by countries with UN Environment support.	
<b>Expected Accomplishment (secondary)</b>	Healthy and Productive Ecosystems EA (a): The health and productivity of marine, freshwater and terrestrial ecosystems are institutionalized in education, monitoring and cross-sector and transboundary collaboration frameworks at the national and international levels.	
<b>Expected Accomplishment (tertiary)</b>	Resilience to Disasters and Conflict EA (c): Crisis-affected countries adopt key environmental and natural resource governance policies and sustainable practices as a contribution to recovery and development.	
<b>PoW Indicator(s):</b>	<ul style="list-style-type: none"> <li>- EA (c) (i): Increase in the number of countries that have developed national emission inventories and air quality assessments with publicly accessible monitoring data and information electronically available</li> <li>- EA (c) (iii): Increase in the number of countries that have raised awareness on the importance of air quality and have made air quality monitoring data and other information publicly available and easily understandable with UN Environment analysis or guidance</li> </ul>	
<b>Outcome Statement:</b>	The capacity of countries to monitor and assess air quality deteriorated by Sand and Dust Storms is enhanced. Countries take well-informed policy actions to improve air quality as a result of reduction of Sand and Dust Storms.	
<b>Brief description/ project logic:</b>	<p>While the global burden of human health impacts of airborne sand and dust storms is presumed to be significant, the subject has lacked the kind of attention given, for example, to the health effects of air pollutant emissions from industry, energy generation and transportation.</p> <p>Few long-term systematic studies have been conducted of health consequences in major dust source regions (De Longueville et al. 2013), even though dust levels all too often far exceed air quality standards (Ginoux et al. 2012). For example, Brown et al. (2008) report annual mean values of PM10 concentration in Kuwait ranging between 66 to 93 µg/m<sup>3</sup> (31 to 38 µg/m<sup>3</sup> for PM2.5), both well above the World Health Organization air quality guidelines of 20 µg/m<sup>3</sup> annual mean for PM10 and 10 µg/m<sup>3</sup> for PM2.5 (WHO 2006). The objective of this project is to strengthen the capacity of selected countries in Asia and Africa to reduce health impacts and combat sand and dust storms by: a) showcasing possible options – including finance and technology ones - for effective and efficient preventive and mitigation measures; b) quantifying the damage to human health from sand and dust storms; c) supporting national effort to generate and disseminate interpreted sand and dust storms forecasts to respond to the adverse health effects in hotspots.</p> <p>This project will also enable target countries to establish baselines and generate data for SDG indicators 3.9.1 and 11.6.2, to identify hotspots and sources of dust pollution, to inform policy action to address dust related air pollution and to measure the effectiveness of mitigation policies. The project will help target countries create the necessary enabling environments for initiating and sustaining cost-effective monitoring/modelling, reporting, assessment and policy response.</p>	
<b>Project outputs/ activities:</b>	<ul style="list-style-type: none"> <li>- Establishment/enhancement of sand and dust storm monitoring networks in the selected countries;</li> <li>- Economic assessments of measures to mitigate sand and dust storms and their</li> </ul>	

	<p>impacts (in collaboration with United Nations Convention to Combat Desertification (UNCCD) and WMO);</p> <ul style="list-style-type: none"> <li>- Policy and institutional options towards an improved framework for preventing and reducing the exposure to sand and dust storms at country level (in collaboration with WHO, UNCCD, and WMO);</li> <li>- Industry Roundtables on promising technologies for combatting sand and dust storms and associated impacts;</li> <li>- Funds raised for ecosystem protection and restoration initiatives and evaluation of effectiveness in reduction of sand and dust storms impacts;</li> <li>- Overview on studies on health implications associated with sand and dust storms (in collaboration with WHO);</li> <li>- Workshops on dust exposure, environmental and health policy and SDG progress reporting;</li> <li>- Baseline data concerning sand and dust storms toward SDG indicators 3.9.1 and 11.6.2;</li> <li>- Assessment of the current policy response for preventing and reducing the impacts of sand and dust storms on air quality in the selected countries;</li> <li>- National trainings on processing of air quality monitoring/modelling data and data analysis (data management) and training on the use of indicator reporting information systems for local, national, regional and global reporting to policy audiences and the public (information management, analysis and reporting);</li> <li>- Local level training on sand and dust storms forecasts for personnel from air quality monitoring networks (e.g. Mashad, Esfahan, and Arak in Iran);</li> <li>- Launch of national schemes for mass dissemination of recipient-friendly early warning and awareness-raising information on sand and dust storms in the selected countries. (In collaboration with WMO and WHO);</li> <li>- Institutional arrangements for a region-wide network of communication channels for the dissemination of interpreted dust forecasts at a frequency that enables preparedness and development of its business model (in collaboration with WMO and WHO);</li> <li>- Documentation of successful project results and possible set up of twinning arrangements between interested partners.</li> <li>- Establishment/enhancement of dust monitoring networks in the selected countries.</li> </ul>
<p><b>Project Outcome indicator(s):</b></p>	<ul style="list-style-type: none"> <li>- Number of countries that have improved their capacity to monitor and assess air quality deteriorated by sand and dust storms.</li> <li>- Number of countries that have developed SDG reports, policy documents, environmental and/or health reviews, mitigation guidelines, and protocols for air pollution (triggered by sand and dust storms) monitoring and assessments.</li> <li>- Number of countries that take well-informed policy actions to improve air quality as a result of reduction of sand and dust storms.</li> <li>- Number of new agreements that have been reached among partners with the aim to finance resilience and technology transfer for combatting sand and dust storms.</li> </ul>
<p><b>Expected long term impact</b></p>	<p>Significant reduction in negative impacts on environmental and human health. Reduced air pollution and cleaner air. Cleaner environmental technologies. Good health. Reduced levels of climate change. Reduced land degradation. Reduced hunger due to improvement of soil productivity and crop harvests. Economic gains. Stemming of migration.</p>
<p><b>Related SDG(s) and SDG targets:</b></p>	<p><b>Goal 3: Ensure healthy lives and promote well-being for all at all ages</b></p> <p><b>Target 3.9:</b> By 2030, substantially reduce the number of deaths and illnesses from hazardous <b>chemicals and air, water and soil pollution and contamination.</b></p>

	<p><b>Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</b></p> <p><b>Target 9.4:</b> By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities</p> <p><b>Goal 11: Make cities inclusive, safe, resilient and sustainable</b></p> <p><b>Target 11.6:</b> By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to <i>air quality</i>, municipal and other <i>waste</i> management.</p> <p><b>Goal 17: Partnerships for the goals</b></p> <p><b>Target 17.7:</b> Promote the <i>development, transfer, dissemination and diffusion of environmentally sound technologies</i> to developing countries on favorable terms, including on concessional and preferential terms, as mutually agreed;</p>			
<b>Related UNEA 1 &amp; 2 resolution(s):</b>	<ul style="list-style-type: none"> <li>- 1/7: Strengthening the role of UN Environment in promoting air quality;</li> <li>- 2/21: Sand and dust storms</li> </ul>			
<b>Related MEAs</b>	<ul style="list-style-type: none"> <li>- Convention on Long-range Transboundary Air Pollution (CLRTAP);</li> <li>- United Nations Framework Convention on Climate Change (UNFCCC) ;</li> </ul>			
<b>Strategic UN Environment priorities</b>	<ul style="list-style-type: none"> <li>- Cities, Pollution, Biodiversity, Nexus between Peace, Security and the Environment ;</li> </ul>			
<b>Geographical focus</b>	<ul style="list-style-type: none"> <li>- Based upon demand expressed by national governments, about five countries will be selected from:                             <ul style="list-style-type: none"> <li>- Africa: Algeria, Mali, Morocco, Namibia, Niger;</li> <li>- Asia and the Pacific region: Islamic Republic of Iran;</li> <li>- Central Asia: Kazakhstan, Uzbekistan, Turkmenistan (specific risks related to migration of radio-active/hazardous waste tailings);</li> <li>- West Asia: Gulf Cooperation Council (GCC) countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates); Iraq, Jordan, Turkey, Syria.</li> </ul> </li> </ul>			
<b>Partners</b>	<ul style="list-style-type: none"> <li>- Air Pollution Information Network for Africa (APINA);</li> <li>- Asia Pacific Clean Air Partnership (APCAP);</li> <li>- Clean Air Asia;</li> <li>- Clean Air Initiative – Sub-Saharan Africa (CAI-SSA);</li> <li>- Climate and Clean Air Coalition to Reduce Short-lived Climate Pollutants (CCAC);</li> <li>- Gulf Cooperation Council (GCC);</li> <li>- Secretariat of the Convention on Long-range Transboundary Air Pollution (CLRTAP);</li> <li>- Secretariat of the UN Convention to Combat Desertification (UNCCD);</li> <li>- World Health Organization (WHO);</li> <li>- World Meteorological Organization (WMO).</li> </ul>			
<b>Duration:</b>	<b>Start:</b> 03/2018	<b>End:</b> 02/2021	<b>Total months:</b>	36



<b><i>Tentative budget and funding sources</i></b>	<ul style="list-style-type: none"><li>- USD 3.5 million - Including:</li><li>- Governments and Development Banks: 1 million USD;</li><li>- GEF and GCF: 2.5 million USD;</li></ul>
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## 10. Contributions from UN Environment as Implementing Agency of the Global Environment Facility (GEF), the Multilateral Fund for the Implementation of the Montreal Protocol (MLF) and the Green Climate Fund (GCF)

### 10.a. Contributions from UN Environment as an Implementing Agency of the Global Environment Facility (GEF) towards the Chemicals, Waste and Air Quality Subprogramme's 2018-2021 MTS

**Table 4.** Overview of GEF-funded projects complementary to the Chemicals, Waste and Air Quality Subprogramme.

GEF ID	Title	Type of project	Total GEF grant	Status	Budget 2018-21 (approx.)	Geographic Scope	Objective	Key Partners (Executing Agencies)	Duration	Start date
2310	Pacific POPs Release Reduction through Improved Mgmt of Solid and Haz. Wastes	FSP	2,800,000	Under implementation	1,000,000	Pacific	POPS	SPREP	5 Years	June 2013
4692	Defining and Demonstrating Best Practises for Exchange of Info. on Chem. in Textile Products in China	MSP	2,000,000	Under implementation	500,000	China	POPS	MEP FECO China	6 Years	Dec 2013
4881	Continuing reg. support for POPs Global Monitoring Plan under the Stockholm Conv. in the LAC Region	FSP	3,640,000	Under implementation	500,000	LAC	POPS	Basel Stockholm Centre Uruguay	3 Years	June 2015
4886	Continuing reg. support for POPs Global Monitoring Plan under the Stockholm Conv. in the Africa Region	FSP	4,210,000	Under implementation	500,000	AFR	POPS	C&W Branch	3 Years	March 2015
4894	Continuing reg. support for POPs Global Monitoring Plan under the Stockholm Conv. in the Asian Region	FSP	3,940,000	Under implementation	500,000	EAP	POPS	C&W Branch	3 Years	March 2015
6978	Continuing reg. support for POPs Global Monitoring Plan under the Stockholm Conv. in the Pacific Region	FSP	2,000,000	Under implementation	250,000	EAP	POPS	C&W Branch	4 Years	March 2015
4612	Development & pro-motion of Non-POPs alternatives to DDT	MSP	1,700,000	Under implementation	500,000	India	POPS	TBD	4 Years	Aug 2015
4668	Demonstr. of effectiveness of div. env. sound and sust. interventions, & strength. natl. capacity for innovative implem. of IVM for disease prev. & control in WHO AFRO Region	FSP	9,550,000	Inception end of October 2016	5,000,000	Africa	POPS	WHO AFRO	5 Years	Oct 2016

**Table 4.** Overview of the GEF-funded projects complementary to the Chemicals, Waste and Air Quality Subprogramme. *CONTINUED.*

GEF ID	Title	Type of project	Total GEF grant	Status	Budget 2018-21 (approx.)	Geographic Scope	Objective	Key Partners (Executing Agencies)	Duration	Start date
5367	PCB Reduction in Cameroon through the use of local expertise and the development of national capacities		3,000,000	Under implementation	1,500,000	Africa	POPS	Cameroon	4 Years	Apr 2016
5532	Disposal of PCB oils in transformers and disposal of capacitors containing PCB in Southern Africa	FSP	7,710,000	Launched October 2016	4,000,000	Africa	POPS	Africa Instit	5 Years	Oct 2016
5532	Disposal of PCB oils in transformers and disposal of capacitors containing PCB in Southern Africa	FSP	7,710,000	Launched October 2016	4,000,000	Africa	POPS	Africa Instit	5 Years	Oct 2016
9080	Integrated Health and Env. observatories and legal & instit. strengthening for the sound mgmt. of chemicals in Africa (Africa ChemObs)	FSP	10,500,000	PRC October 2016 - GEF CEO endorsement by end 2016	8,000,000	Africa	POPS	WHO AFRO and Africa Institute	5 Years	March 2017
9276	Regional Development of Natl. Action Plans for Art. and Small Scale Gold Mining in Africa	Enabling Activity	4,000,000	Launched Oct 2016	2,000,000	Africa	Mercury	Africa Instit	2 years	Oct 2016
9421	ESM of DDT wastes in Kyrgyzstan, Tajikistan	FSP	15,000,000	PIF technically cleared	5,000,000	Central Asia	POPS	Green Cross	2 + 5 years	Mid 2018
9602	Global opport. for long term dev. of ASGM sector - GEF GOLD	PFD	18,000,000	PFD for review at Oct 2016 Council	5,000,000	Asia and Global	Mercury	Global Mercury Partnership	2 + 5 years	Mid 2018
9607	Mediterranean Sea Programme	PFD	11,000,000	PFD for review at Oct 2016 Council	4,000,000	Medi-terranean	POPS and Mercury	Med Partnership	2 + 5 years	Mid 2018
9614	Reducing global env. risks through the monitoring & dev. of alternative livelihood for primary mercury mining sector in Mexico	FSP	7,035,000	PIF technically cleared	35,000,000	Mexico	Mercury	SEMARNAT	2 + 5 years	Mid 2018
USD			87,495,000		73,250,000					
	Under finalisation for submission by Mid 2017									
TBA	Global coal - reduction in mercury from coal fired power plants	FSP	15,000,000	PIF ready for CRC	3,000,000	South Africa and Vietnam	Mercury	TBD	2 + 5 years	late 2018
9412	ESM of POPs in Brazil	FSP	16,000,000	PIF under review	3,000,000	Brazil	POPS	Brazil MOE	2 + 5 years	Mid 2018
TBA	Global SAICM project	FSP	13,000,000	PIF under development	3,000,000	Global	SAICM	SAICM Sec	2 + 5 years	late 2018
TBA	CIP textiles	FSP	5,000,000	PIF under development	1,000,000	Asia	POPS	Basel Centre China	2 + 5 years	late 2018
USD			136,495,000		83,250,000					

## **10.b. Contributions from UN Environment as an Implementing Agency of the *Multilateral Fund for the Implementation of the Montreal Protocol (MLF)* towards the Chemicals, Waste and Air Quality Subprogramme's MTS cycle 2018-2021**

### *Introduction*

UN Environment has submitted its three-year rolling Business Plan for its Montreal Protocol-related activities covering the years 2017-2019 for the consideration of the 77<sup>th</sup> meeting of the Executive Committee of the *Multilateral Fund for the Implementation of the Montreal Protocol*. The focus and orientation of UN Environment's work under this Business Plan, which comprises individual country projects, continues to be defined by the evolving needs of countries operating under Article 5 of the Protocol ("Article 5 countries") as they progress in their implementation of the *Montreal Protocol on Substances that Deplete the Ozone Layer*, and as they meet and sustain compliance with specific obligations. It is noted that this is an evolving plan and changes continuously depending on country needs.

Through the activities identified in the Business Plan, UN Environment will assist the countries with implementing their HCFC phase-out responsibilities including preparing for the 2020 target and subsequent reduction steps, strengthening the government institutions in Article 5 countries responsible for implementing and reporting on their national strategies to comply with the Montreal Protocol, and sustaining Article 5 countries' compliance with ozone depleting substance (ODS) phase out targets already met.

This will be achieved through two means: (a) the Compliance Assistance Programme (CAP), and (b) project services that include preparation and implementation of HCFC Phase out Management Plans (HPMPs), Institutional Strengthening projects, and technical assistance.

### *Compliance Assistance Programme*

Through CAP and depending on country needs UN Environment will provide through 1,062 country-specific special compliance services (note: figure for 2017 only), the operation of 10 Regional/sub-Regional Networks of Ozone Officers, facilitation of South-South cooperation, assistance with regional awareness activities, and provision of a global Information Clearinghouse that provides National Ozone Units (NOUs) with services that include information, communication, education, electronic knowledge management and capacity building.

### *HPMP project preparation and implementation*

UN Environment will assist 73 developing countries with Stage II preparation in accordance with Executive Committee policies and guidelines. UN Environment will also assist countries with the implementation of the non-investment components of the HPMPs (both Stages I and II), in cooperation with other Implementing Agencies and bilateral agencies.

### *Institutional Strengthening projects*

UN Environment provides 104 developing countries with ongoing technical assistance and administrative support for the implementation of their IS projects, including the submission of IS renewals and assistance with activities covered by these projects.

## **10.c. Contributions from UN Environment as an Implementing Agency of the *Green Climate Fund (GCF)* towards the Chemicals, Waste and Air Quality Subprogramme's MTS cycle 2018-2021**

Around 1.5 million USD is currently being raised from the Green Climate Fund for our work on waste management in Mongolia. In particular, the proposed project -to be managed by the International Environmental Technology Centre, IETC- will focus on strengthening and enhancing the application of environmentally sound technologies related to holistic waste management in addressing climate change challenges in Mongolia. It is hoped that a full proposal for Mongolia will go in for approximately 50 million USD. A similar concept note is being developed by the International Environmental Technology Centre for a future project in Kenya.

Other project proposals to be developed for the Green Climate Fund that will contain components relating to chemicals and waste, will address topics such as the generation and sharing of knowledge, and the implementation of the Sustainable Development Goals and multilateral environmental agreements.

However, there is no developed pipeline in place yet for the latter type of projects. The development of project proposals for the Green Climate Fund will build on any possible Global Environment Facility experience. Proponents will make sure that when they develop any Green Climate Fund project elements, they will link them with other projects that are under development for the Global Environment Facility.

It is expected that around 50 million USD will be raise from the Green Climate Fund for our work on air pollution and climate change, and in particular for an electric motorbikes project in East Africa. The total budget for that project will be USD 90 million, which would include 35 million USD from the European Investment Bank and another 5 million USD from UN Environment. The project proponent plans to ask first for a project preparation grant (USD 500,000 for one year) to develop the project.

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