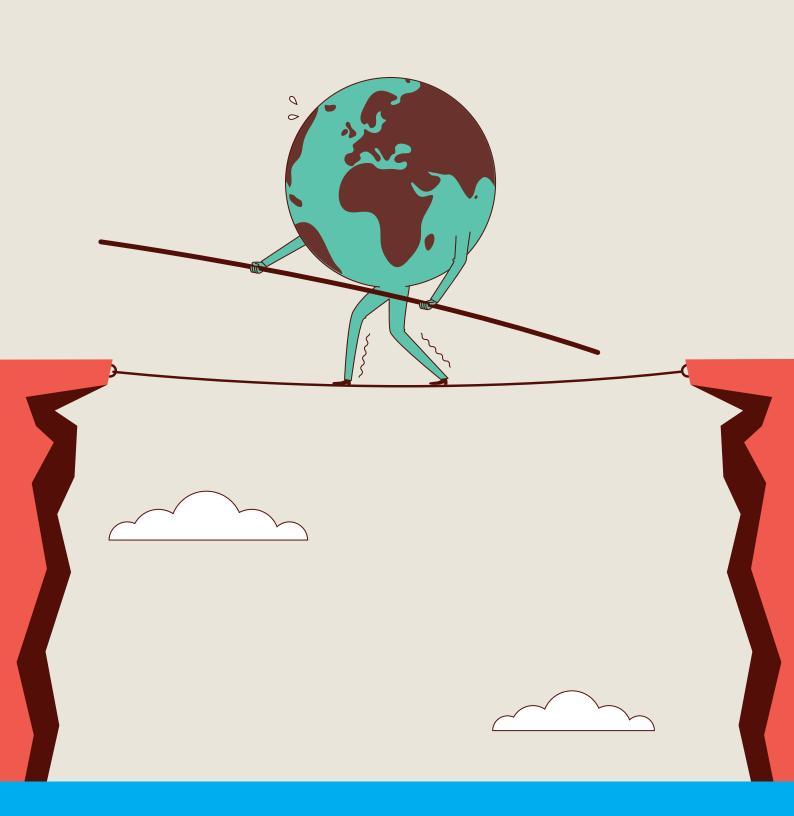


### **UNEP in 2022**



## Message from the Executive Director



In many ways, 2022 was the year of renewed vigour on environmental action. Towards the beginning of the year, at the fifth United Nations Environment Assembly, Member States adopted **landmark resolutions** to ramp up efforts to curb pollution, mitigate and adapt to climate change, and protect and restore nature worldwide. The 2022 UN Climate Change Conference delivered a historic moment with the creation of a **loss and damage fund**. Global **negotiations** to end plastic pollution got off the ground in Uruguay. The UN General Assembly recognized the **universal right** to a clean, healthy and sustainable environment. And, as the year ended, the UN Biodiversity Conference in Montreal saw the adoption of an ambitious framework to protect and revive biodiversity by 2030. This year also marked the **50**th **anniversary** of the UN Environment Programme (UNEP) and the **Stockholm+50** conference.

Yet it was also a year of extreme hardship. The devastating impacts of the triple planetary crisis of climate change, nature and biodiversity loss, and pollution and waste were compounded by widening inequality, the war in Ukraine and rising food and energy prices. As always, the poor and vulnerable were hit hardest by the droughts, floods, wildfires, dwindling biodiversity and surging pollution levels.

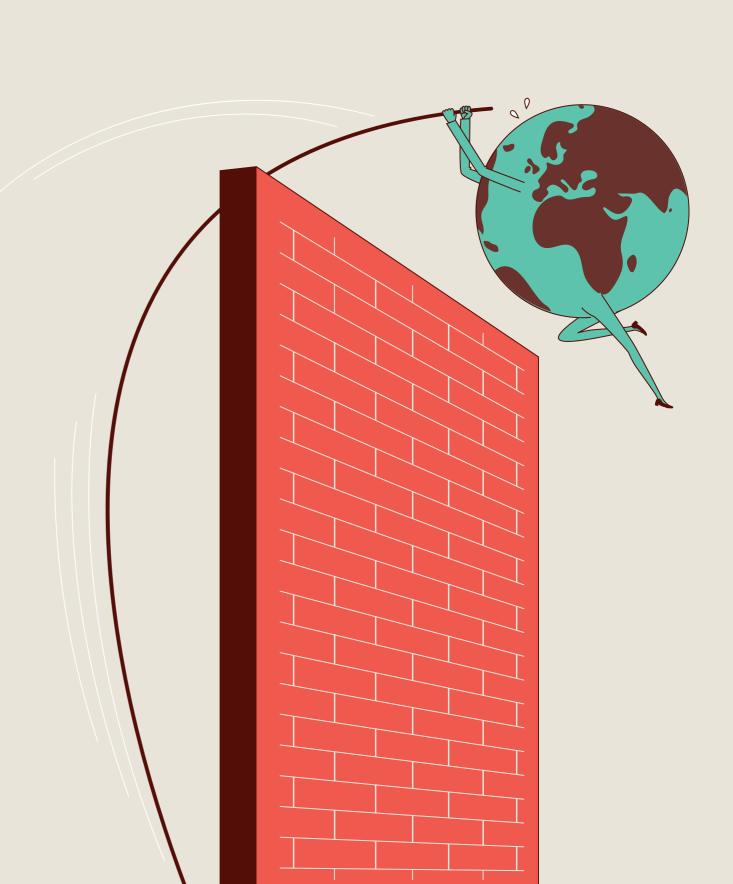
It is little wonder, then, that demands for action rather than promises are growing louder. UNEP enhanced efforts to respond to these crises and started delivering on its **2022-2025 strategy**. Drawing upon the strength of its partnerships, UNEP worked with Member States to make good on promises to mitigate and adapt to climate change, protect and **restore ecosystems** and reduce the burden of pollution. In all these, UNEP continues to support countries in implementing **UN Environment Assembly** resolution 4/17 by embedding gender equality and human rights in environmental policies, strategies, programmes and projects, even as it works towards restructuring its gender architecture to better meet this mandate.

At the organizational level, UNEP is committed to becoming a more agile, responsive organization. UNEP reshaped its approach to engaging with sister agencies in UN Country Teams to better address Member State priorities and the **Sustainable Development Goals**, and created three new **thematic funds** that provide flexible financing to drive progress on climate stability, living in harmony with nature and moving towards a pollution-free planet. UNEP also reached gender parity at all professional and above levels and improved the geographic diversity of its workforce.

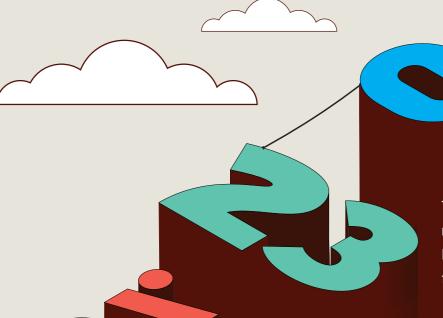
But much work lies ahead to slow the triple planetary crisis. As the leading global environmental authority, UNEP will push ever harder and cooperate more closely with countries, the UN system, civil society and the private sector to deliver solutions and work towards a world where all people, everywhere, can enjoy their right to a healthy environment.

Inger Andersen

UN Under-Secretary-General and UNEP Executive Director



UNEP by the numbers



80%

The amount by which plastics flowing into the ocean could be reduced through circular economy measures, including under the deal to tackle plastic pollution nations began negotiating in 2022.

0.5-1°C

The additional global warming that may be avoided by the Montreal Protocol by protecting carbon sinks from ultraviolet radiation.

23

The number of concrete targets to be met by 2030 under the new Kunming-Montreal Global Biodiversity Framework.



2.7 Million

The total number of people expected to benefit from UNEP's ecosystem-based adaptation work.

### 1.2 Million

The equivalent number of cars that will be taken off the road each year by emissions cuts delivered through UNEP-supported efficient lighting work in Pakistan and Indonesia.

15,000 m<sup>3</sup>

The quantity of debris recovered and sorted in Mosul by a new UNEP-backed recycling centre.

#### **65 Million**

The number of people engaged during World Environment Day.

# The fifth UN Environment Assembly

Multilateralism **delivered high-impact outcomes** at the resumed second session of the **fifth UN Environment Assembly** (UNEA 5.2), which took place in February in Nairobi.

The **political declaration** of UNEA 5.2 – an event attended by more than 3,400 in-person and 1,500 online participants – emphasized the urgent need to halt the decline of biodiversity and the fragmentation of habitats. Resolutions on nature covered issues such as biodiversity and health, sustainable lake management, and a universal definition of nature-based solutions. Resolutions on resilient infrastructure, a greener recovery from COVID-19 and the environmental aspects of minerals and metals management reinforced the importance of circular economies.

Big strides were made on chemicals, waste and pollution. The resolution to start negotiating a deal on ending plastic pollution plugs a critical gap in environmental action. While the resolution to establish a science-policy panel on the sound management of chemicals and waste, and prevent pollution, will give these critical issues a scientific body similar to those for climate (the **Intergovernmental Panel on Climate Change**) and biodiversity (the **Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services**).

UNEA also held a special session to commemorate **UNEP's 50**th **anniversary** and take stock of the fruits of environmental multilateralism over the past five decades. Heads of State and delegations from 175 countries issued a **landmark declaration** strengthening their commitment to environmental action. They **paid tribute to UNEP's work**, which has delivered successes such as protecting the ozone layer and phasing out leaded petrol.





66

The planet was already showing signs of buckling under the weight of humanity back in 1972 when the agency was founded. In the following decades, UNEP and its partners would work with Member States to combat air pollution, restore the ozone layer, protect the world's seas, promote a green and inclusive economy, and raise the alarm about biodiversity loss and climate change. That work has never been more important.

UN Secretary-General António Guterres

# PLANETARY ACTION

Climate, Nature, Chemicals & Pollution

## **Climate action**

#### **Science for climate**

As world leaders gathered at the **UN Climate Change Conference** (COP27) – the global meeting held to increase action on the climate crisis – UNEP released two reports ahead of the negotiations. Both reports informed the **Sharm el-Sheikh Implementation Plan** adopted by Member States at the end of the conference.

The **Emissions Gap Report 2022: The Closing Window** found that climate pledges leave the world heading for a global temperature rise of 2.4-2.6°C this century. An urgent system-wide transformation is needed to get on track to 1.5°C. The report outlined how to deliver this transformation in the electricity supply, industry, transport and buildings sectors, and the food and financial systems.

UNEP's **Adaptation Gap Report 2022: Too Little, Too Slow** found that financing and implementation of adaptation actions are inadequate. US\$160 billion to US\$340 billion will be needed per year for adaptation by 2030. In 2020, international adaptation finance flows to developing countries were only US\$29 billion.

#### **Climate change adaptation** The Global ecosystem-based adaptation (EbA) Fund, co-managed by UNEP and the International Union for Conservation of Nature, provides seed capital for innovative EbA approaches. The first and second Global EbA Fund grantee selection processes approved US\$5.6 million for 23 projects, which will support ecosystems across the world, including protecting coral reefs in the Philippines and restoring riverbanks for erosion control in Fiji. The third and fourth grantee selection processes are ongoing, with another 30 projects in the pipeline. Meanwhile, UNEP's EbA portfolio grew to over 45 projects, including a **US\$6 million project in Mozambique** to protect coastlines through the restoration and conservation of nature. Overall, UNEP's EbA projects aim to restore 131,000 hectares of ecosystems and benefit 2.7 million people.

## Financing action on climate

Through the UNEP-convened Net-Zero Banking Alliance, over 60 banks set science-based targets to decarbonize their portfolios, including investments in the coal and gas industries. Over half of the alliance has set intermediate decarbonization targets for 2030 that are in line with the 1.5°C target of the Paris Agreement. In its first 18 months, the alliance, run by the UNEP Finance Initiative (UNEP FI), has grown to over 120 banks, representing almost 40 per cent of global banking assets.

The **Seed Capital Assistance Facility** (SCAF), a multi-donor trust fund managed by UNEP, in July saw construction begin on an important project it backed: a hydropower plant in Zimbabwe. The commission of the 5 MW plant is set to take place in 2023. Overall, **SCAF II**, the second phase of the facility, has supported projects in 14 countries across Asia and Africa. These projects are expected to mitigate almost 4 million tonnes of carbon dioxide equivalent per year and create close to 14,000 jobs.

#### **Access to technology**

The UNEP-hosted **Climate Technology Centre and Network** (CTCN) provided technical assistance to 68 countries in 2022, helping to roll out innovations such as the **Slamdam**, a mobile flood barrier in Burundi. To date, the CTCN has supported 109 countries, benefited around 100 million people, and delivered 12.9 million tonnes of carbon dioxide-equivalent reductions per year.

#### **Pushing for energy efficiency**

Increasing energy efficiency is a crucial part of the climate agenda, and the UNEP-led **United for Efficiency** (U4E) initiative made strides in 2022. UNEP worked with Pakistan to put in place regulations that will result in annual energy savings of 1.3 TWh by 2030, with emission reductions equivalent to taking 630,000 passenger cars off the road. Meanwhile, U4E supported Indonesia in developing a ministerial decree on regulations that will deliver annual energy savings similar to those in Pakistan.

These efforts are aligned with the Association of Southeast Asian Nations (ASEAN) Roadmap for the Harmonisation of Lighting Product Standards, developed with U4E. With the implementation of these standards, ASEAN is projected to save 24 TWh of electricity consumption annually by 2030. This could help slash 18 million tonnes of carbon dioxide equivalent emissions annually and enable consumer savings of more than US\$2 billion on electricity bills per year.

U4E's **2022 Country Savings Assessments** indicate that if all developing and emerging economies adopted minimum energy standards for lighting, over 122 TWh of electricity consumption would be saved annually by 2030, equivalent to the energy produced by 55 large power stations.

### **Climate** action

## Keeping the climate cool through action on ozone

In the 35<sup>th</sup> year of the UNEP-hosted **Montreal Protocol on Substances that Deplete the Ozone Layer**, research showed that this agreement had delivered higher climate benefits than expected. **One study** indicates that the Protocol may have warded off 1.7°C of warming by the end of the century by banning ozone-depleting substances that contribute to global warming.

The same study found that, without the Montreal Protocol, ultraviolet radiation would have destroyed ecosystems, leading to the release of 690 billion tonnes of carbon currently being held in plants and soil. The additional temperature increase avoided was estimated at 0.5-1°C. Under its Kigali Amendment, the Protocol is pursuing further benefits by phasing down hydrofluorocarbons, a potent greenhouse gas, and increasing the energy efficiency of cooling equipment.

## Ramping up action on methane emissions

In its first year, UNEP's International Methane Emissions Observatory (IMEO) played a critical role in helping reduce methane emissions, the second-biggest driver of global warming. The observatory was set up to help deliver on goals such as the Global Methane Pledge to slash 30 per cent off methane emissions in the oil and gas, agriculture and waste sectors by 2030. As of November 2022, 150 countries had endorsed the pledge, and over 50 countries had developed national methane action plans or were in the process of doing so. The Climate and Clean Air Coalition (CCAC) rolled out national roadmaps to support the pledge, including helping Nigeria set a target of reducing oil-and-gas-related methane emissions by 60 per cent by 2030.

At the UN Climate Change Conference, IMEO launched its **Methane Alert and Response System**, a new satellite-based system to detect emissions of the climate-warming gas, which would enable governments and businesses to respond in a timely manner. In addition, over 80 oil and gas companies have committed to measuring and reducing their methane emissions through the **Oil and Gas Methane Partnership 2.0**, a key component of IMEO's data-driven approach.





### **Nature action**

#### A new global plan for living in harmony with nature

In December, at the **UN Biodiversity Conference** (the 15<sup>th</sup> meeting of the Conference of the Parties to the Convention on Biological Diversity – COP15), States agreed on a ground-breaking new framework to protect biodiversity - the **Kunming-Montreal Global Biodiversity Framework**, with four goals and 23 targets to slow biodiversity loss by 2030. The targets – many of which focus on strengthening the rights of indigenous peoples, who are key stewards of biodiversity – include:

- effective conservation and management of at least 30 per cent of the world's lands, inland waters, coastal areas and oceans;
- have restoration completed or underway on at least 30 per cent of degraded terrestrial, inland waters, and coastal and marine ecosystems;
- reduce to near zero the loss of areas of high biodiversity importance;
- ensure benefits from the use of genetic resources and digital sequence information on genetic resources are shared fairly and equitably;
- · halve food waste and significantly reduce overconsumption and waste generation;
- halve excess nutrients and the risk posed by pesticides and hazardous chemicals;
- phase out or reform subsidies that harm biodiversity by at least US\$500 billion per year;
- mobilize at least US\$200 billion per year in domestic and international funding; and
- ensure that companies and financial institutions monitor, assess and disclose their risks, dependencies and impacts on biodiversity.

The **Global Environment Facility** will set up a special fund to scale up financing to implement the new framework. Another multilateral fund will be established to support the equitable sharing of benefits of digital sequencing information on genetic resources.

Other UNEP-administered conventions on nature also delivered results during the year. For example, in November, Parties to the **Convention on International Trade in Endangered Species of Wild Fauna and Flora** (CITES) **adopted proposals** to regulate international trade in more than 500 additional species.



## Restoration and protection of vital ecosystems

The **UN Decade on Ecosystem Restoration**, led by UNEP and the Food and Agriculture Organization of the UN (FAO), is helping to deliver on commitments to restore 1 billion hectares of land, an area the size of China, by 2030. In 2022, the Decade awarded the first 10 World Restoration Flagships, which seek to restore more than 68 million hectares – an area bigger than Myanmar, France or Somalia – and create nearly 15 million jobs. The Decade will support these initiatives with promotion, networking, monitoring and funding.

UNEP engaged the public in restoration through the **Green Game Jam 2022**, part of the UNEP-facilitated Playing for the Planet Alliance. Some 38 gaming studios adapted their games to incorporate environmental themes, with the potential to reach almost 276 million monthly active players. As a result of the activations, around 2.5 million trees were planted through partnerships with **Ecosia** and **Ecologi**.

The UN also designated 2022 as the International Year of Sustainable Mountain Development to bring attention to the vulnerability of mountain ecosystems. The UNEP-hosted Carpathian Convention —a treaty that seeks to protect the mountainous Carpathian region in Eastern Europe — pushed for action on mountain biodiversity at the UN Biodiversity Conference.

## Right to a healthy environment recognized at the highest level

In July, the UN General Assembly declared access to a clean, healthy and sustainable environment a **universal human right**. The achievement was the culmination of five decades of work, which began with the **1972 Stockholm Declaration**, and tireless advocacy from UNEP, thousands of civil society organizations and indigenous peoples' groups.

The resolution builds on the UN Human Rights Council's declaration of the previous year. It will help people stand up for their right to a safe climate, clean air and water, adequate food, healthy ecosystems and nontoxic environments.

66

The resolution will help reduce environmental injustices, close protection gaps and empower people, especially those that are in vulnerable situations, including environmental human rights defenders, children, youth, women and indigenous peoples.

UN Secretary-General António Guterres

### **Nature action**

#### **One Health approach**

In 2022, UNEP joined a UN initiative to increase action across the triple planetary crisis by addressing human, animal, plant and environmental health as one interlinked challenge. The quadripartite

alliance of UNEP, FAO, the World Health Organization (WHO) and the World Organisation for Animal Health (WOAH) released the **One Health Joint Plan of Action** – a five-year plan that focuses on strengthening health systems and addressing zoonotic epidemics, neglected tropical and vector-borne diseases, food safety risks and antimicrobial resistance.



#### **Financing for nature**

UNEP's **State of Finance for Nature Report 2022** found that governments, businesses and financial institutions need to triple their annual investments in nature to limit global warming, halt biodiversity loss, achieve land degradation neutrality and meet the **Sustainable Development Goals**. Finance flows to nature-based solutions are currently at US\$154 billion per year – a third of the US\$484 billion needed annually by 2030.

UNEP is working with partners to unlock financing for nature. For example, the UNEP-supported **Responsible**Commodities Facility mobilized over US\$11 million in investment from major supermarkets in the United Kingdom and Northern Ireland to incentivize Brazilian farmers to use deforestation- and conversion-free soy cultivation. Meanwhile, UNEP's **Restoration Factory Incubator Program**, which supports restoration-focused small and medium enterprises, welcomed a new Kenya-based cohort and expanded operations to Viet Nam by launching a **Sustainable Forest Trade Incubation Program**.



Photo: MaineiK

In June, the **Stockholm+50 conference** marked 50 years since the birth of the environmental movement at the **1972 UN Conference on the Human Environment**. It also brought the world together to accelerate action on the Sustainable Development Goals. The event's **Agenda for Action, Renewal and Trust** laid out 10 actions for achieving a healthy planet. A few days later, **World Environment Day** engaged over 65 million people and saw a host of commitments from governments and the private sector, including Sweden banning new licenses for the extraction of coal, oil and natural gas.

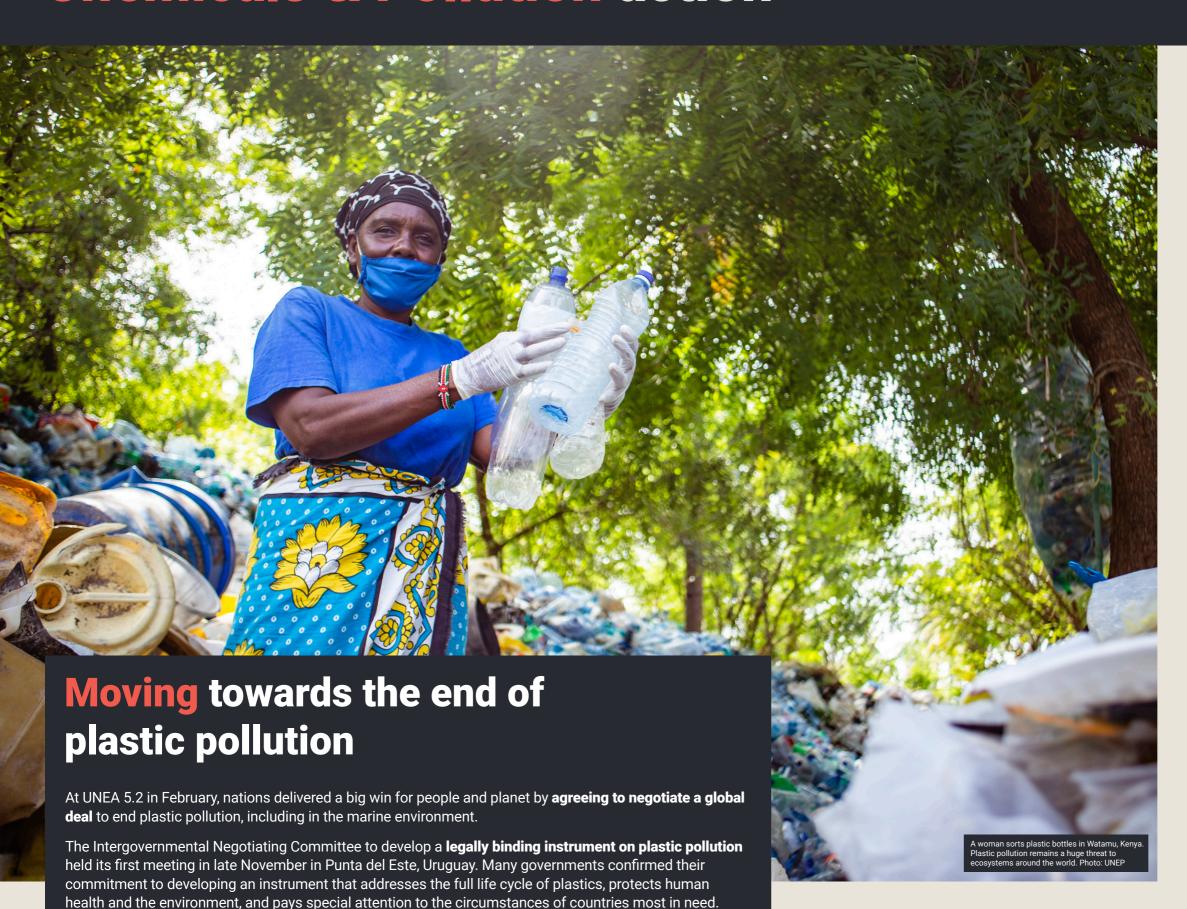
UNEP unveiled Aquaman star and ocean activist Jason Momoa as the new Advocate for Life Below Water at the **The UN Ocean Conference**.

## **Chemicals & Pollution action**

Participants at the meeting agreed on two work streams: one to set objectives, core obligations and control

measures; the other on means of implementation and financing, institutional arrangements, assessment of

progress and stakeholder engagement.





#### **Cleaning up after conflict**

In 2022, five years after the end of the Islamic State in Iraq and the Levant conflict in Iraq, the International Organization for Migration and UNEP established a **debris recycling centre** in Mosul and handed it over to Mosul municipality for its continued operation.

So far, 15,000 m3 of debris have been recovered and sorted. Half of this has been crushed into recycled aggregate, which complies with Iraqi national standards for use in road and highway foundations. Over 200 jobs were created through cash-for-work schemes for vulnerable people. Three other debris recycling operations have been set-up in other conflict-affected areas of the country.

15

## **Chemicals & Pollution action**

#### Setting standards for cleaner air

UNEP helped Latin America and the Caribbean develop the **Regional Action Plan** on Air Quality 2022-2025. At the 18th session of the UNEP-hosted **African Ministerial Conference on the Environment**, 54 African countries **pledged to eliminate** the open dumping and burning of waste. In Asia-Pacific, the Committee on Environment and Development of the UN Economic and Social Commission for Asia and the Pacific adopted a ministerial declaration on implementing the Regional Action Programme on Air Pollution, on which UNEP advised.

In January, **Cambodia launched** its first Clean Air Plan. This plan targets reductions of 60 per cent in PM2.5 and black carbon emissions, 24 per cent in methane emissions and 18 per cent in carbon dioxide emissions by 2030. It could also help avoid up to 900 premature deaths per year. With support from CCAC, Cambodia has started implementing **Euro 4/IV vehicle emission standards** and equivalent fuel quality.

UNEP has also supported West and East African States to adopt vehicle standards that will reduce the import of old, polluting second-hand vehicles. Fifteen Economic Community of West African States have adopted regulations that make vehicle imports comply with EURO 4/IV standards. In 2022, UNEP began supporting countries to translate this commitment into national standards. Five East African Community countries adopted similar standards. With advice from UNEP, the European Union has also started to revise its end-of-life vehicles directive.

In partnership with the UN Development Programme and the Finnish Meteorological Institute, UNEP undertook the first-ever study of air pollution sources in Kyrgyzstan's capital, Bishkek. The study identified **emissions from households** heated with sulfur-rich coal as the primary cause of air pollution, more so than transport or the city's power station, which were previously considered the main causes. The findings supported decisions by development banks to channel investments into reducing emissions from key sectors, such as residential heating.





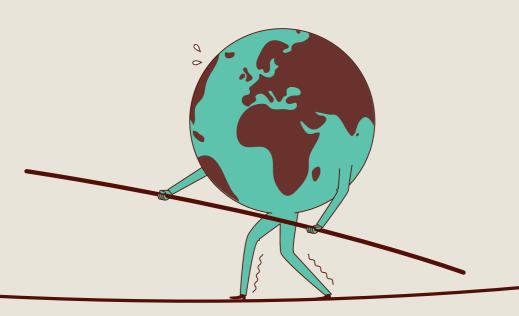
In 2022, the Minamata Convention on Mercury expanded its scope to cover unregulated sources of this harmful chemical element, including certain lamps, satellite propellants and children's dental fillings. Mercury-added products like these account for 30 per cent of global mercury use. Meanwhile, parties agreed to amend the Basel Convention to make all e-waste subject to prior informed consent, a means of sharing information globally regarding certain chemicals and pesticides considered dangerous. Globally, 53 million tonnes of e-waste were generated in 2019, of which only 17 per cent was recycled. Sister conventions – the Rotterdam and Stockholm conventions – also added important industrial chemicals to their controlled lists.

dangerous waste

The Implementing Sustainable Low and Non-Chemical Development in Small Island Developing States programme was launched in June. This five-year initiative, funded by the Global Environment Facility, seeks to prevent the release of over 23,000 tonnes of toxic chemicals and more than 185,000 tonnes of marine litter. It supports 33 Small Island Developing States and addresses the obligations of the Stockholm Convention, the Minamata Convention and the **Strategic Approach to International Chemicals Management**.

UNEP also stepped up its efforts to tackle wastewater pollution and associated ecological and health risks, especially antimicrobial resistance. Antimicrobial resistance occurs when bacteria, viruses, fungi and parasites no longer respond to antimicrobial agents. In 2019, drug-resistant bacterial infections contributed to nearly 5 million deaths. The quadripartite alliance of UNEP, FAO, WHO and WOAH set up a **new framework** to support national responses to antimicrobial resistance and advocated for action on the issue at the highest level, including the Group of 20.

## Expanding UNEP's reach.







## **Geographic representation and gender parity**

UNEP has created a human resources outreach strategy to increase the organization's visibility as an employer of choice for young talent from underrepresented Member States and lessrepresented regional groups. There has also been progressive improvement in regional group diversity. In 2022, there was an overall increase (compared to 2021) of over 35 per cent in the selection of candidates from less represented regional groups for positions in the Professional and above categories. Within that context, the professional and above categories saw an increase - between January and December 2022 – of approximately 10 per cent of staff from Latin America and the Caribbean, 12 per cent of staff from the Asia Pacific Group, and approximately 20 per cent of staff from the Eastern European Group. In 2022, UNEP met or exceeded the UN target range on gender balance (47-53 per cent) at all professional and above levels.

#### **Thematic funds**

UNEP created three thematic funds to provide flexible financing to support delivery of the **Medium-Term Strategy** (2022-2025) objectives of climate stability, living in harmony with nature and moving towards a pollution-free planet. US\$14 million was raised for the funds in 2022.

The thematic funds will complement UNEP's Environment Fund and help shift the balance away from earmarked funding of individual projects towards thematic funding for bigger impact. Contributions from public and private partners to the thematic funds will facilitate a comprehensive, science-based approach, which should help fortify UNEP's role as the global environmental authority and enable the organization to better support Member States.

#### **Private sector engagement**

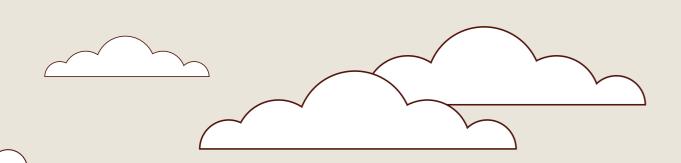
UNEP has made the strategic decision to move toward cross-sector and multi-sector alliances and initiatives in high-impact industries. UNEP is engaging with private sector entities through more than 40 initiatives focused on energy, plastics, food and agriculture, healthcare, finance and information technology. UNEP's science supports businesses to find better solutions. For instance, UNEP's **Partnership for Clean Fuels and Vehicles** – a public-private initiative of 73 partners promoting cleaner fuels and vehicles in developing countries and emerging economies – helped to end the use of leaded petrol.

Another example is UNEP's **Global Tourism Plastics Initiative** (GTPI). The initiative has 121 signatories, with a combined estimated annual revenue of over US\$43 billion. In 2021 and 2022, GTPI organized a pilot reporting campaign for large companies that joined the initiative in 2020 and for which annual reporting is mandatory. Some 108 million plastic items have been removed from use across the reporting businesses.

#### **Digital transformation**

The Coalition for Digital Environmental Sustainability (CODES) – a UN-backed coalition of 1,000 stakeholders – was **launched** during Stockholm+50 to support the application of digital technologies to address the triple planetary crisis. CODES aims to increase the number of countries and companies collaborating to implement joint action plans under the UN Secretary General's **Roadmap for Digital Cooperation**.

19





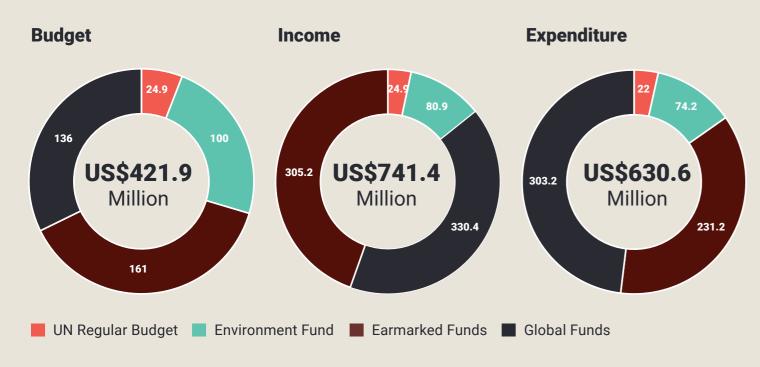
## FUNDING

## Funding

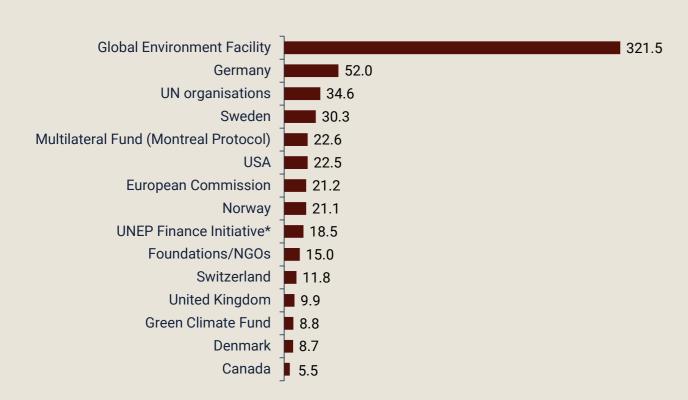




#### **2022 Financial Status as at 31 December 2022 (**US\$ Millions)

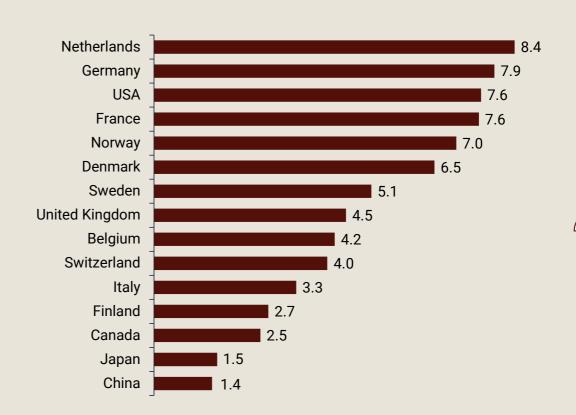


#### **Top-15 Earmarked contributions in 2022** (US\$ Millions)



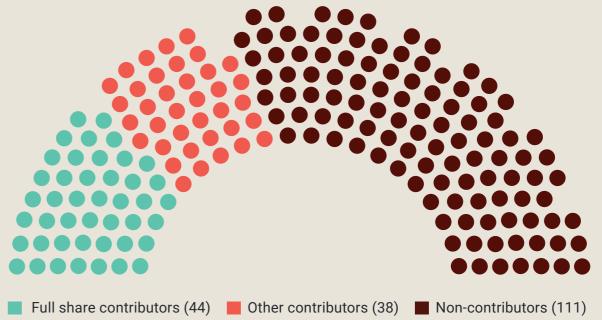
<sup>\*</sup>Partnership between UNEP and the global financial sector to mobilize private sector finance for sustainable development.

#### **Top-15 Environment Fund Contributors in 2022** (US\$ Millions)



#### **Contributors to Environment Fund in 2022 by category**

(number of Member States)



23 24



United Nations Avenue, Gigiri P O Box 30552, 00100 Nairobi, Kenya Tel +254 720 200200 unep-info@un.org www.unep.org

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder provided acknowledgment of the source is made. The United Nations Environment Programme would appreciate receiving a copy of any publication that uses this publication as a source. No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior permission in writing from the United Nations Environment Programme. The designation of geographical entities in this report, and the presentation of material herein, do not imply the expression of any opinion whatsoever on the part of the publisher or the participating organizations concerning the legal status of any country, territory or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries. Credits: Unless otherwise indicated, all data in this publication have been sourced from the United Nations Environment Programme. For more information: unep.org/annualreport.

©United Nations Environment Programme, 2023