# **Good Practice**

on Environmental Sustainability in the United Nations Sy

# Introduction

# **GREENING THE BLUE**

is an initiative to engage and support the UN System in the transition towards greater environmental sustainability in the management of its facilities and operations."

Learn more at <u>http://greeningtheblue.org</u>

Greening the Blue is an initiative coordinated by the Sustainable United Nations (SUN) facility of UNEP that supports the improvement of the UN system's environmental performance. Guided by the objectives of the <u>Strategy for Sustainability Management in the United Nations System</u> <u>2020- 2030</u>, endorsed by the Chief Executives Board (CEB), Greening the Blue Annual Reports present quantitative information on the internal environmental performance of the UN system.

Yet, understanding and learning from the efforts of dedicated personnel across the UN system cannot be achieved through numbers alone. Sharing their stories is essential.

Each year, the Greening the Blue Community shares good practices from across the UN system that aim to improve environmental performance and reduce environmental footprints. For 2024, these practices have been compiled into a single collection.

This compilation spotlights innovative approaches adopted by UN organizations, providing insights into motivations, success factors, and replicable elements. Beyond describing the initiative, each story emphasizes practical steps and actions that can be replicated across the UN system.

These good practices target emissions reduction, diverse types of waste recycling, water use efficiency, biodiversity enhancement, travel, optimized workspaces, and improved environmental management systems and procurement. These practices have achieved environmental improvements in a wide range of locations and operating contexts, from biodiversity gardens in dense city centers to digitally-enabled carpooling in conflict areas.

This compilation of good practices aims to inspire not only the UN system but also a global audience, particularly leaders and management teams across diverse institutions. By demonstrating commitment, creativity, and partnership, this compilation encourages people and organizations at all levels worldwide to be inspired and take action in their own capacities to help limit the planet's temperature rise and reduce the impacts on the environment.

# Contents



Greenhouse Gas Emissions

**3** UNICEF's Innovative Approach to Cutting Greenhouse Gas Emissions

4 UNDP's Greening Moonshot Commits to 50% Emission Reduction



#### Biodiversity

**11** Rare Orchids Flourish amidst Biodiverse Plantings in UNESCO's Vegetable Garden

**12** Smart Technologies Infuse Biodiversity at FAO's Rooftop Garden

**13** Ariana Park at UNOG Turns into an Urban Biodiversity Oasis

### Waste

**5** 80% of Construction Waste Is Recycled at ESCAP

**6** At FAO Headquarters, We Finish Our Plates for the Planet

**7** IOM Ends Use of Plastic Bags

Environmental

**14** Environmental

15 UNON, First UN

Headquarters to

Certification

Training at UNMISS South

Sudan Drives Sustainable

Achieve ISO 14001:2015

Governance

Practices

# 

::

Air Pollution

8 UNHCR's Smart Ridesharing Makes UN's Largest Fleet More Sustainable

**9** UNOG Reduces Air Pollution by Pioneering Sustainable Solutions



.

#### Water

**10** ECLAC's Sustainable Aproach to Water Management and Landscape Conservation

#### Facilities

**16** UNU-FLORES' Journey to Sustainable Offices

#### Procurement

**17** UN Procurement Awards: Fostering and Celebrating Sustainable Procurement in the UN system

**18 Read More** The Annual Statistical Report on United Nations Procurement

#### **19** Acknowledgement

2 GREENING THE BLUE | Good Practices on Environmental Sustainability in the United Nations System

### **UNICEF's Innovative Approach to Cutting Greenhouse Gas Emissions**

The United Nations Children's Fund (UNICEF) is committed to becoming an environmentally responsible organization and is actively transforming its operations to achieve a 45 percent reduction in greenhouse gas (GHG) emissions.

In 2023, UNICEF launched its <u>Sustainability</u> and <u>Climate Change Action Plan 2023-</u> 2030, with a key objective to reduce the emissions and the environmental footprint within UNICEF, support its global network of partners to do the same, and advocate for the fulfillment of ambitious international sustainability and climate change agreements.

With a focus on climate neutrality through measuring, reducing, and offsetting carbon emissions, UNICEF has already made significant strides, achieving a 29 percent CO<sub>2</sub> reduction in 2023. While air travel, building energy use, and vehicle fuel consumption remain primary sources of GHG emissions for UNICEF, the organization's commitment to greening its operations has experienced remarkable growth since sustainability became a core value. Today, UNICEF staff understand the importance of embedding environmental sustainability into all aspects of their work.

#### **Green building certification**

UNICEF is implementing green building certifications for all new constructions and owned premises, reinforcing its environmental achievements and validating the greening efforts of its offices.

In 2023, UNICEF Mozambique country office set a groundbreaking precedent by becoming the first building in the country to receive the <u>Excellence in Design for Greater</u> <u>Efficiencies (EDGE) Advanced Certificate.</u> This certification was earned through the integration of an on-site solar photovoltaic (PV) system, energy efficiency measures and a thermally efficient envelope, resulting in an impressive 50 percent energy savings. Water efficiency measures including low-flow fixtures and a rainwater harvesting system, further reduced water usage by 29 percent. Additionally, by sourcing materials locally, minimizing material waste, and prioritizing sustainable construction practices, UNICEF Mozambique successfully lowered the embodied carbon in its buildings by 35 percent, setting a new standard for green construction in the region.

UNICEF Office in Kandahar, Afghanistan has also achieved a preliminary EDGE certification showcasing remarkable results: 72 percent reduction in energy consumption, 52 percent reduction in water usage, and a significant 41 percent reduction in embodied materials. Additionally, several UNICEF offices are in the process or have already obtained multiple green certifications, including those from the German Sustainable Building Council (DGBN) and Leadership in Energy and Environmental Design (LEED), further solidifying UNICEF's leadership in environmental stewardship across its global operations.

#### **Renewable energy**

To achieve its goal of sourcing 80 percent of electricity from renewable sources by 2030, UNICEF has launched multiple initiatives.

South Sudan Country Office and Burkina Faso's Fada N' Gourma Field Office have successfully transitioned to solar power. Six UNICEF offices in Madagascar have also switched to solar energy, ensuring reliable electricity, reducing operational costs and environmental impact. 60 UNICEF offices have now installed solar PV systems across the organization. These efforts collectively raised the organization's share of renewable energy to 36.5 percent in 2023. With the establishment of Long-Term Agreements with solar service providers across all regions, UNICEF is poised to scale up renewable energy projects even further.

#### **Green teams**

UNICEF takes pride in its extensive network of 137 active Green Teams worldwide driving positive change. These teams are instrumental in fostering staff engagement, promoting eco-friendly practices, and raising awareness about sustainable behaviors.

In 2023, Green Teams engaged in over 350 activities, focusing on enhancing biodiversity around offices, reducing energy and water consumption, optimizing waste management, and minimizing carbon footprint. A notable highlight was the "Bike to Work" month organized by the Supply Division in Copenhagen, Denmark in May 2023, where 75 dedicated colleagues collectively cycled 13,000 kilometers, thereby preventing 1.5 tonnes of  $CO_2$  emissions from entering the atmosphere. This remarkable achievement showcases how both individual and collective actions can lead to positive strides for the environment.

#### In May 2023,

the Supply Division in Copenhagen held a **"Bike to Work"** month, with 75 colleagues cycling 13,000 km and preventing 1.5 tonnes of CO<sub>2</sub> emissions. Story from

#### ©UNICEF/Drouyn Cambridg

UNICEF Supply Division Office

Cyclists in the 2023 "Bike to Work" challenge.

### **UNDP's Greening Moonshot Commits to 50% Emission Reduction**

United Nations Development Programme (UNDP) is committed to being green, sustainable, and just, leading by example on climate action. In August 2019, UNDP Administrator Achim Steiner launched the '<u>Greening Moonshot</u>', pledging to reduce its operational carbon footprint by 50% by 2030.

Data collection on sustainability performance is facilitated through the Greening Moonshot tracker, an Environmental Management Tool (EMT) developed for UNDP's operations. This tool gathers annual data on emissions, electricity and fuel use, air travel, refrigerants, waste, water management and more for over 170 offices. Results are analyzed at all levels of the organization to identify opportunities for reductions, intervention needs, and detect data inaccuracies.

#### **Investing in Green Technologies**

UNDP goes beyond just reporting; results are carefully analyzed to develop targeted reduction measures.

For instance, an office depending on generator operations might be a good candidate for solar power, while an office in a location with green grid electricity might pursue e-Mobility. Based on this analysis, the Greening Moonshot Facility–established to support greening UNDP operations–allocates funding to offices for green energy and e-Mobility investments. The Facility prioritizes cost-effective emission reduction, directing scarce resources to where they can make the greatest and quickest impact on UNDP's carbon footprint.

#### Taking Local Actions Worldwide

In addition to initiatives led by headquarters, many UNDP regional and country offices have implemented their own greening plans, carried out by dedicated staff across the globe. Beyond corporate-led efforts, many UNDP offices have adopted additional greening plans, implemented by dedicated staff worldwide.

For example, <u>UNDP Zambia</u> launched a groundbreaking green energy initiative at the UN House in Lusaka, Zambia, successfully installing a grid-tied solar photovoltaic (PV) system. In 2019, <u>UNDP Ecuador</u> introduced the Greening the Office Plan, aiming to reduce the carbon footprint and improve waste management by decreasing the use of disposable plastic items and transitioning to digital formats. Meanwhile, <u>UNDP Sri Lanka</u> powers its office's electric vehicle with solar panels, effectively addressing fuel crises.

To date, UNDP's Greening Moonshot has funded over 180 projects globally. These projects collectively avoid 3,473 tCO<sub>2</sub>eq every year and are projected to reduce UNDP's electricity carbon footprint by 17%. Additionally, they save the organization over \$19 million in energy and fuel costs over their lifetimes, demonstrating that environmental action and financial benefits go hand in hand.

#### Strengthening Resilience and Community Impact

Beyond energy and cost savings, providing reliable, on-site power also improves productivity and continuity for UNDP operations, particularly in vulnerable situations and locations with unreliable electricity grids. By reducing security risks from fuel storage and handling, as well as noise and pollution from on-site generator operations, these projects also enhance staff well-being. These replicable projects ensure that UNDP's operations are resource-efficient, resilient and future-proof, while putting climate talk into action and supporting local sustainability priorities especially for the communities UNDP serves.

For example, switching from generators to on-site solar energy reduces air pollution, which is a leading health concern for millions of people, and improves electricity reliability in those communities. By partnering with local vendors, UNDP helps build local capacity, encourages replication, and drives innovation

#### UNDP Sri Lanka

UNDP Zambia

"Our Greening Moonshot is driven by two key factors: a data-driven, analytical approach, which advances bold emissions reduction measures, and the dedication of our colleagues worldwide, implementing the plan on the ground.

UNDP is committed to achieving our ambitious Moonshot targets, including a 50% emissions reduction by 2030, grounded in the recognition that organizations like UNDP

must lead by example on climate action. "

Achim Steiner Administrator, UNDP ) ) Contact greening@undp.org M

Story from

#### Read more

- UNDP Zambia embarks on a green energy journey by investing in solar panels
- Alliances strengthen greening efforts at UNDP Ecuador: Improving waste management practices

UNDP Ecuador

### At FAO Headquarters, We Finish Our Plates for the Planet

The Food and Agriculture Organization (FAO) has introduced a smart food waste monitoring system at its headquarters in Rome to track and reduce food waste effectively.

"You can put as much food as you want on your plate, but you have to finish it all."

This might ring a bell for many people from their grandmothers, reminding us not to waste food —a message often forgotten in today's world of abundance.

Globally, 1/3 of the food produced ends up as waste. FAO reports that in 78 countries where it operates, over 333 million people faced acute levels of food insecurity in 2023. This also translates into a financial loss of about 1 trillion USD annually, roughly the equivalent of Turkey's entire GDP in 2023.

Despite these alarming global statistics, the real question arises: how much food waste comes from our own plates? How much  $CO_2$  is emitted when we throw away food simply because we overestimated our appetite?

#### Walking the Talk on Food Waste

FAO, as the UN organization leading international efforts to defeat hunger and improve nutrition and food security, recognized the need to address food waste within its own operations. Under the leadership of Director-General Qu Dongyu, a mandate was issued to ensure that the organization was "walking the talk" by implementing a system to monitor food waste at its headquarters.

In response, the FAO Corporate Environmental Responsibility team launched an initiative during the World Food Forum in October 2023, to monitor food waste in the canteens. This ambitious project was carried out with the help of a startup that provided digital measurement systems, alongside university volunteers who supported the campaign engaging canteen users in the initiative. Throughout this initial phase, invaluable insights were gained, which helped further refine the initiative.

#### How the System Works

Today, it has been scaled up. Employees and visitors are encouraged to sort their leftovers at smart food waste stations in 5 cafeterias. The waste is categorized into 4 groups:

- Cereals & Pulses
- Fruits & Vegetables
- Roots, Tubers & Oil-Bearing Crops
- Meat & Animal Products

Each station is equipped with smart scales connected to a tablet that records the weight of waste in each category. This data is stored in the cloud, providing real-time insights into waste volumes and environmental impact. The tablet also displays to customers how much food waste they have contributed.

#### Measuring the Impact on CO<sub>2</sub> Reduction

In its first month, the initiative recorded 1,372 kg of food waste from FAO canteens, equating to approximately 8 grams of leftovers per meal. This waste translates into roughly 1,800 kg of  $CO_2$  emissions, comparable to the carbon absorbed by 81 trees in one year. With this data, FAO is now better equipped to develop strategies for reducing food waste.

Between January and June 2024, the system recorded a total of 2,609 kg of food waste, with 86% originating from kitchen preparation. This waste corresponds to around 2,601 kg of  $CO_2$  emissions—equivalent to the carbon absorbed by 118 trees. Notably, fruits and vegetables accounted for the highest levels of waste, mainly due to food preparation processes.

Recognizing that over 80% of food waste at FAO originates from kitchen operations, the organization expanded its monitoring efforts to the kitchens. Since March 2024, FAO has been training kitchen staff to minimize food waste and implement best practices. In May 2024, the kitchen monitoring system was deployed in three kitchens—two fully operational and one in progress—providing a comprehensive view of food waste throughout the food production process.

#### **Future Steps**

FAO's food waste monitoring system continues to evolve, with ongoing efforts to improve its efficiency, speed, and userfriendliness. A key challenge moving forward is maintaining high levels of participation and engagement among employees, ensuring that food waste reduction becomes an ingrained part of FAO's daily operations.

The priority for 2024 is to establish baselines and pilot solutions, with the long-term goal of replicating this initiative across FAO's global offices.

> The tablets display each customer's food waste weight and the running total.



Food and Agriculture Organization of the United Nations

Contact

corporate-environmentalresponsibility@fao.org

" This marks just the initial phase of FAO's food waste monitoring project.

Looking ahead, we hope to replicate this initiative across country offices, further reducing FAO's environmental footprint and food waste, one plate at a time. "

CER Team at FAO Headquarters

### 80% of Construction Waste Is Recycled at ESCAP

The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) has set a benchmark in sustainable waste management through innovative approaches during its Seismic Mitigation Project, reinforcing the UN's broader commitment to environmental responsibility.

Waste management remains a central focus in the United Nations' ongoing commitment to curbing the environmental impact of its global operations. While each UN entity generates waste as part of regular office activities, a significant challenge arises from the large volumes of construction waste produced during renovation or maintenance projects within the office facilities.

This waste stream often remains elusive to accurate quantification and management practices, primarily because it falls under the direct purview of the construction companies contracted for the projects.

#### Proactive Measures to Reduce Construction Waste

Recognizing the need for comprehensive waste management, ESCAP took proactive steps at its large UN Compound in Bangkok, Thailand. As part of its multi-dimensional renovation project, the **Seismic Mitigation Project**, aimed at enhancing the Secretariat and Service buildings in an active seismic zone, ESCAP prioritized creating a safe, healthy, and inclusive office of the future for increased sustainability. One of the goals was implementing mandatory waste management and reporting requirements for bidding companies.

This approach required a minimum construction waste reuse and/or recycling rate of 75%, along with detailed reports on the exact quantities and disposal methods employed for each type of waste generated on-site during the construction process. In addition to these stringent measures, ESCAP incorporated packaging minimization requirements to proactively prevent waste generation, where possible.

### Results-Driven Commitment to Recycling and Green Procurement

These procurement efforts yielded notable results: ESCAP reached an important milestone in 2023 by recycling approximately 79% of the construction waste from the Seismic Mitigation Project, and 80% in 2022.

The recycled waste found new life being repurposed at other construction sites, sold, or sent to recycling plants. This initiative aligns with the <u>Strategy for Sustainability</u> <u>Management in the United Nations System</u> <u>2020-2030</u>, which mandates that UN organizations ensure their primary suppliers comply with the United Nations' environmental and social standards.

ESCAP's approach not only underscores the UN's commitment to reducing its environmental footprint but also sends an important sustainability message to the private sector. ESCAP encourages companies to contribute significantly to a sustainable future by integrating green management practices into their operations.

ESCAP's efforts are a powerful reminder of the impact that can be achieved when environmental awareness is integrated into large-scale projects, fostering innovation and progress towards a sustainable future. " By 2023, **79%** of construction waste was recycled, with **80%** in 2022.

This waste has been repurposed at other construction sites, sold, or sent to recycling plants, driving sustainable progress."



Read more

ESCAP Environmental Sustainability Report 2023

ESCAP Seismic Mitigation Project (SMP)

Sustainable Procurement at ESCAP

### **IOM Ends Use of Plastic Bags**

As we witness the impacts of climate change on communities across the world, the International Organization for Migration (IOM) recognizes its responsibility to contribute to global sustainability efforts. As part of these efforts, IOM has committed to phasing out the use of plastic bags, opting instead for compostable and biodegradable alternatives, as an important step towards sustainable operations.

IOM's commitment aligns closely with the Strategy for Sustainability Management in the United Nations System 2020- 2030 and the <u>Climate and Environment Charter</u> for Humanitarian Organizations, both emphasizing the importance for humanitarian organizations to play their part in climate action. One of the key opportunities identified to achieve these strategic objectives is to foster environmentally responsible procurement.

In 2022 alone, IOM facilitated the dignified and safe transportation of 198,010 migrants around the globe. This encompassed a wide range of support services, including safe evacuation, family reunification, relocation, repatriation, resettlement, return, and other types of migration. To ensure migrants have their important documents with them throughout the journey, the organization provides easily recognizable IOM bags.

#### A Science-Based Shift to Compostable Alternatives

To reduce the environmental impact of operations behind these international movements, IOM decided to update its IOM bag directive shifting from plastic to compostable and biodegradable alternatives. The initiative began with a science-based approach that included a comparative Life Cycle Analysis (LCA) to evaluate the environmental impact of the plastic bags used and that of the compostable options considered for replacement.

The LCA revealed that oxo-biodegradable bags have nearly four times higher litter effects than compostable bags, and for the latter to have a lower environmental impact, they would need to be reused at least three times.

The analysis also included the examination of both quantity and quality aspects. Quantitywise, it involved assessing minimum order requirements and estimating the annual global demand for the IOM bags across IOM missions. Quality-wise, it focused on identifying suppliers that offer durable materials while avoiding single-use items.

In the pilot phase from December 2020 to February 2023, IOM introduced a compostable bag for its Missions to consider and provide feedback. During this time, an assessment conducted in 2022 took centre stage, focusing on the compostable bag inventory and exploring potential new vendors.

#### Phasing Out Plastic Bags Across All Missions

Following extensive coordination between global teams involved in resettlement and movement operations, supply chain management and environmental sustainability, and implementing IOM missions worldwide, the organization introduced a new directive mandating the phase-out of plastic bags. As of March 2023, IOM has officially replaced its plastic IOM bags with compostable and biodegradable alternatives.

Over 30,000 environmentally friendly bags have been procured since then, and another batch with the same number of bags is currently being purchased.

The phase-out of plastic IOM bags aligns with other initiatives in IOM and in its movement

operations. Since 2022, IOM has conducted the first ever programme-level environmental inventory for its movement operations under the United States Refugee Admissions Program (USRAP) and established an environmental sustainability action plan consistent with IOM's global environmental sustainability commitments. The action plan includes various measures to improve waste and water management and energy efficiency and reduce greenhouse gas emissions to establish sustainable, climate-resilient workspaces.

With these initiatives, IOM programmes are contributing to the organization's sustainable procurement and waste reduction goals outlined in the <u>Strategy for Sustainability</u> <u>Management in the United Nations System</u> <u>2020-2030</u> and creating a safe environment for communities – both refugees and communities at destination.

Oxo-biodegradable bags have nearly four times higher litter effects than compostable bags.

Since March 2023, IOM has replaced plastic bags with compostable and biodegradable alternatives across all missions.

*Over 30,000 eco-friendly bags have been procured.* 

Story from Contact greening@iom.int

©IOM

IOM beneficiaries with travel packages in compostable bags at Queen Alia International Airport in Amman.

©IOM

IOM Field Support staff assist beneficiaries with their luggage and tickets.

### **UNHCR's Smart Ridesharing Makes UN's Largest Fleet More Sustainable**

The United Nations High Commissioner for Refugees (UNHCR) works on reducing its own environmental footprint, including through the greening of its offices, supply chain, fleet and travel, under the fourth objective of its Focus Area Strategic Plan for Climate Action.

UNHCR's fleet consists of about 7,000 light, heavy, and other specialized vehicles worldwide, making it the largest fleet operator in the UN system. These vehicles are indispensable for delivering humanitarian assistance, but they are also a major contributor to UNHCR's CO<sub>2</sub> emissions, accounting for 16.2% of the total.

To reduce the environmental impact of necessary vehicle travel and to support the organization's wider climate action efforts, UNHCR has introduced a Smart Fleet Programme which aims to reduce its number of vehicles and to lower its CO<sub>2</sub> emissions. A key component is a ridesharing platform, which coordinates and unites separate vehicle bookings when UNHCR personnel travel to the same or nearby locations. By reducing vehicles travelling on the same route, unnecessary CO<sub>2</sub> emissions can be avoided.

#### An Innovative and Optimal Fleet Strategy

The deployment of Smart Fleet Ridesharing relies on effective operational procedures on fleet management, an advanced technology platform and a comprehensive training programme. These measures ensure that UNHCR operations have the tools necessary to optimize its fleet's use.

In coordination with its field operations, UNHCR develops standard operating procedures and shares best practices from across UNHCR and other entities. Since every UNHCR operation is unique, collaboration is crucial to tailor procedures to individual needs and the local operational context.

This Smart Fleet programme leverages an innovative vehicle booking and dispatch technology platform called UN Mobility,

developed by the World Food Programme. This platform automates the booking and dispatch process and helps the team to identify opportunities for ridesharing.

Finally, a comprehensive training programme ensures that UNHCR personnel have the skills they need to optimize the use of UNHCR vehicles while continuing to provide the transportation on which UNHCR teams depend to implement programmes for forcibly displaced and stateless people.

#### **Ridesharing Cutting Costs and CO<sub>2</sub> Emissions**

This programme's benefits are clear: ridesharing optimizes the resource use, including vehicles and fuel, reducing both CO<sub>2</sub> emissions and costs, while increasing the availability of personnel and fleet to provide humanitarian assistance. In addition, in rapidly changing circumstances, such as emergency responses, ridesharing provides a structure to quickly scale up fleet movements.

Since its launch and scale-up in November 2022, the programme has been implemented at 160 UNHCR offices, reducing  $CO_2$  emissions by 500 tonnes and costs by over 700,000 USD.

Approximately 955,000 USD in annual savings and  $CO_2$  reductions of about 960 tonnes per year are anticipated once Smart Fleet is fully implemented across all UNHCR operations, based on current rollout data.

Savings from ridesharing are channeled back to UNHCR programmes, allowing teams to provide additional support to people forced to flee their homes and stateless people.

#### **Collaborative Action for Sustainable Fleet**

Collaboration within the UN system on ridesharing initiatives to optimize fleet management has been crucial for accelerating rollout. UNHCR participates in a monthly forum with other UN organizations to share expertise and learn from each other's experiences. In addition, UNHCR invites colleagues from other organizations to participate in ridesharing trainings, unlocking the power of knowledge sharing and collaboration for the benefit of all UN organizations involved.

In the longer term, further CO<sub>2</sub> reductions could be achieved through inter-agency carpooling, where vehicles and drivers are shared among UN organizations.

> This approach is being piloted by UNHCR, the World Food Programme (WFP), the United Nations Children's Fund (UNICEF) and the International Labour Organization (ILO) in Iraq.

Story from

#### Read more

Climate Action: Focus Area Strategic Plan for 2024 – 2030

UNHCR's approach on climate change and displacement

For the first time, UNHCR colleagues travelled using Smart Fleet ridesharing, in the Yola Field Office, Adamawa, Nigeria, in April 2024

©UNHCR/Rowan Veal

#### " Approximately 955,000 USD in annual savings and CO<sub>2</sub> reductions of about 960 tonnes per year are anticipated once Smart Fleet is fully implemented. "

### **UNOG Reduces Air Pollution by Pioneering Sustainable Solutions**

For several decades, the city of Geneva has grappled with an air pollution problem, with certain air pollutants periodically exceeding the limits set by regional legislation: <u>Ordonnance sur la protection de l'air</u>. The United Nations Office at Geneva (UNOG) is committed to reducing its carbon footprint and promoting greener alternatives.

Fuel consumption at the Palais des Nations, home to UNOG, has fallen from 23,970 litres in 2018 to 12 900 litres in 2023 with diesel

in 2018 to 12,900 litres in 2023, with diesel consumption specifically dropping from around 16,500 litres to 5,500 litres over the same period.

Republic of Moldova. The electricity used for charging is sourced from renewable sources. These efforts are yielding positive results.

#### Heating Solutions and a Greener Future

Another priority in the Air Protection Strategy 2030 is transitioning from individual stationary combustion heating systems to heat networks. UN Geneva is working toward this goal, aiming to be among the first entities to use heat pumps and thermal energy from Lake Geneva, replacing the existing gas boilers to heat the Palais des Nations.

These initiatives underscore UN Geneva's broader commitment to a greener United Nations and the safeguarding of our local environment.

Story from Contact greening-unog@un.org 🖂

Air Protection Strategy 2030 - Swiss Federal Office for the Environment (FOEN)

" In 2023, fuel consumption at the Palais des Nations, home to UNOG, has decreased by **46%**, while diesel consumption dropped by **67%**. "

UNOG Electric Security Vehicle

(FOEN, originally titled: OFEV, Office fédéral de l'environnement) estimates that air pollution causes thousands of premature deaths annually in Switzerland and contributes to numerous cases of respiratory diseases. Beyond its impact on human health, air pollutants also cause acid deposition that disrupts ecosystems and damages buildings, particularly historic structures like the Palais

The Swiss Federal Office for the Environment

particularly historic structures like the Palais des Nations, the second largest United Nations centre, where the United Nations Office at Geneva (UNOG, referred to as UN Geneva below) is housed.

Notably, 40% of local air pollution comes from vehicles in Geneva, making the promotion of greener transportation a key priority of the city's Air Protection Strategy 2030 (originally titled Stratégie de protection de l'air 2030). UN Geneva is actively supporting this effort, one vehicle at a time, aligning with broader UN Secretariat objectives for greening vehicle fleets. Electric Bikes and Vehicles at UNOG

#### **Greener Transportation Initiatives**

Each time a vehicle needs replacing, research is carried out to identify greener alternatives that meet specific requirements. Over the past five years, electric or hybrid options have been chosen consistently. By the end of 2027, all vehicles are expected to be replaced with electric or hybrid models, with the goal of having all security vehicles fully electric. Additionally, two security vehicles have been replaced with bicycles, increasing the total number of bicycles to 13. As part of the Safety & Security team's commitment to the Sustainable Development Goals, all security personnel, except for some specialized teams, are now requested to move around the Palais on foot or by bike.

UN Geneva's electric vehicles can be charged onsite via dedicated charging stations, partly financed by donations from the Swiss Confederation and the government of the

### ECLAC's Sustainable Approach to Water Management and Landscape Conservation

In response to increasing challenges posed by climate change and increasing water scarcity, the Economic Commission for Latin America and the Caribbean (ECLAC), one of the five regional commissions of the United Nations headquartered in Santiago, Chile, has implemented a comprehensive water management plan.

In response to mounting challenges posed by climate change and increasing water scarcity, the Economic Commission for Latin America and the Caribbean (ECLAC) has implemented a comprehensive water management plan in Santiago, Chile. This plan emphasizes water conservation strategies and preventing the discharge of untreated wastewater.

#### Aligned with Phase I of the <u>Strategy for</u> <u>Sustainability Management in the United</u> <u>Nations System 2020- 2030</u>, specific objectives and indicators were set to measure the impact of water consumption reduction. Key components of the plan include:

- Sustainable landscape
- · Optimization of water wells
- Waterproofing of water ponds
- · Improvement of restroom fixtures
- Maintenance of rainwater systems
- Drought response plans
- Water treatment plant

#### Sustainable Landscape for Water Saving

Since 2023, the Sustainable Landscape for Water Saving project has been underway to reduce water usage through optimized landscape management at ECLAC Santiago. The project area is divided into four zones related to vegetation, covering the central grassland beds, native square, and the gardens of the CLADES building. Zones 1 and 2 are expected to be completed by 2024, with the remaining areas still in progress.

Before the project, annual water consumption up to 2023 for the landscape

was approximately 15,230 m<sup>3</sup>. With the implementation of sustainable practices, water consumption is projected to decrease by 42.7% (to 8,731 m<sup>3</sup>). Irrigation and landscaping water use is expected to drop by 52.6%, with the most substantial reductions projected during peak water usage periods, such as the summer months of January and December.

This project seeks to reduce water consumption related to vegetation, achieving a 52.6% reduction of current requirements. Meanwhile, the Water Treatment Plant is expected to treat 7,000 m<sup>3</sup> of water annually, a significant effort towards water recycling. Other initiatives include reducing water loss through pond waterproofing and improving infrastructure to optimize water delivery across the ECLAC Santiago compound.

#### **Climate Change and Water Scarcity in Chile**

Chile faces severe water shortages due to climate change, marked by rising temperatures and declining precipitation. These conditions have triggered droughts, threatening food security and disproportionately impacting vulnerable populations, including women and children, who often bear the brunt of caregiving and food production responsibilities.

In January 2022, Chile's Ministry of Public Works issued 21 decrees of water scarcity, impacting 184 neighborhoods, including Vitacura, where the ECLAC compound is located. These decrees aim to prioritize resources for human consumption and address the growing water crisis.

The Drought Response Plan for Water Consumption is designed to ensure water availability for essential operations at ECLAC, enabling sustainable practices while maintaining critical functions. By progressively decreasing in water consumption, the plan ensures that the ECLAC Santiago facility can operate efficiently during periods of scarcity.

ECLAC's comprehensive plan is a critical step in addressing water management challenges through sustainable practices, not only helping mitigate the effects of climate change but also ensuring responsible water use and conservation for the future.

> " **42.7%** of water consumption is projected to decrease after landscape completion,

with irrigation and landscaping use expected to drop by

**52.6**%."

Story from

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ECLAC Santiago Water Management Plan in progress

### Smart Technologies Infuse Biodiversity at FAO's Rooftop Garden

In the heart of Rome, atop the headquarters of the Food and Agriculture Organization (FAO), lies a verdant oasis—a rooftop garden teeming with life and innovation. In recent years, smart technologies have emerged as innovative solutions to urban sustainability challenges. Among them, this garden stands as a notable example of green innovation, showcasing the impact of AI-driven solutions.

Inaugurated in November 2021, FAO's rooftop vegetable garden was created in collaboration with <u>Mountain Partnership Secretariat</u>, NaturaSì, Ecobubble, Sapienza University-Botanical Gardens of Rome, Slow Food, and the support of the Italian Development Cooperation.

#### Smart Technologies for Sustainability

This garden, a prototype agroecological laboratory fueled by cutting-edge smart technology, aims to generate an intelligent automation system in which the plants communicate how much water and nutrients they need to keep thriving.

Central to the rooftop garden's success is the integration of smart technologies, which revolutionize traditional gardening practices. These technologies are harnessed for water detection, multispectral imaging, rain gauges, weather data, and eventually, nutrient and pathogen monitoring. The transformative potential of smart technology manifests in several key areas:

- Precision Irrigation: Automated systems monitor soil moisture to reduce water wastage, crucial for rooftop gardens affected by environmental changes.
- Nutrient Management: Smart sensors track soil composition for precise fertilization, minimizing environmental harm.
- Pest and Disease Monitoring: Early detection using smart cameras allows quick intervention, reducing pesticide use and promoting ecological balance.
- Data-Driven Decision Making: Collected data supports informed decisions, improving garden management practices over time.

Ground sensors, humidity monitors, and multispectral cameras form the backbone of this technological ecosystem. Grounded in AI, the AIoT system provided by Ecobubble stands at the forefront, harnessing data to optimize resource management and plant health.

In particular, advancements in technology were evident with the replacement of multispectral cameras. These upgraded models, coupled with an Artificial Intelligence (AI) system, now enable precise monitoring of plant lushness by tailoring irrigation practices to each species' requirements. They measure the light spectrum reflected by the plant leaves, known as "reflectance," creating a database of reflectance curves specific to each plant species grown on the rooftop. The goal is to create an intelligent automation system where plants can indicate if they are under stress and prompt appropriate responses based on their conditions.

#### **Infusing Intelligence to Biodiversity**

In 2023, the initiative witnessed significant strides in greening efforts. In March, the installation of two bee hotels marked a pivotal moment, providing sanctuary to bees, particularly solitary pollinators like Osmia bicornis (Osmia rufa), or Mason bees. These bees lay their eggs within bamboo canes, symbolizing the garden's commitment to nurturing ecosystems. Notably, 33 bees have already laid their eggs in the shelters, heralding a promising cycle of pollination and biodiversity. These shelters also promote environmental education and labor inclusion, as the skills of young people with disabilities were involved in their constructions.

#### Lessons Learned and Continued Innovation

The Mountain Partnership Secretariat and the Corporate Environmental Responsibility Team at FAO are keen on sharing the valuable insights and best practices from this experience, which will help other offices worldwide to promote sustainable urban farming initiatives. Below are key takeaways:

- Conduct environmental assessments and understand specific conditions (sun exposure, wind patterns, temperature extremes) to optimize technology settings and plant selection.
- The weight of growing media, plants, and irrigation system is key in urban farming projects. Lightweight materials like pumice helps mitigate structural strain on the roof.
- Prioritize native and drought-tolerant species to enhance resource efficiency. They require less water and demonstrate better adaptability to varying conditions.

Beyond the rooftop, FAO donates produce from this garden to local associations, expanding its impact to support the community. Integrating community support is recommended to maximize social benefits.

Moving forward, ongoing research and partnerships in smart technology. The upcoming inauguration of an outdoor hydroponic garden highlights the initiative's dedication to sustainable agriculture in fragile ecosystems.

" Our rooftop garden showcases how smart technologies can enhance biodiversity and sustainability. "

Giorgio Grussu Project Coordinator, Mountain Partnership Secretariat.



Story from

Rooftop farm at FAO HQ/ Mountain Partnership

Mountain Partnership Products Initiative

FAO Director-General Qu Dongyu at the Garden Inauguration

Bee Sanctuary at the Garden

# Rare Orchids Flourish amidst Biodiverse Plantings in UNESCO's Vegetable Garden

United Nations Educational, Scientific and Cultural Organization (UNESCO) staff have continued to foster a sense of stewardship over their biodiversity and vegetable garden throughout 2023, flourishing at the Organization's Headquarters in Paris in its fourth year now.

The garden serves as a living symbol of UNESCO's commitment to sustainability, promoting global collaboration to practice what it advocates.

#### **Revitalizing Urban Biodiversity**

Reviving biodiverse ecosystems in urban settings has never been more crucial as we continue to see the devastating effects of climate change. UNESCO actively focuses on protecting an array of flora and fauna species in the heart of Paris. This flourishing garden thrives with plants and herbs from over 40 countries, representing all world regions.

Thanks to pollination from bees and other pollinators, many native and local species have returned to the garden, enriching the ecosystem. A remarkable example of this biodiversity success is the discovery of rare orchids, such as *Anacamptis Pyramidalis*, in the wild garden area. Nigel Crawhall, Chief of UNESCO's Indigenous and Local Knowledge Section, expressed his amazement upon encountering a cluster of these orchids.

Over 140 different plant species have been documented, reflecting significant strides

" These orchids stand as a precious testament to the outstanding results of our biodiversity strategy. " Nigel Crawhall, UNESCO in restoring and nurturing biodiversity in an urban environment.

#### Workshops for Staff Engagement

Between April and October 2023, 38 garden workshops engaged 220 colleagues in activities focused on local biodiversity, seasonal harvesting, and pesticide-free urban gardening. Guided by professional gardeners and organized under UNESCO's Garden Club, which comprises over 200 personnel members, this initiative allows colleagues from all sectors to put UNESCO's biodiversity agenda into practice right on the spot, sending a strong message about the organization's commitment to sustainability.

From planting seedlings in March to the final harvest in November, these free workshops delivered comprehensive knowledge on cultivating vegetables and herbs in an environmentally conscious way. To encourage the use of locally grown produce, the workshops utilized each garden ingredient around its natural time of harvest. Eating seasonally typically reduces the need for extensive transportation, refrigeration and storage, thus lessening the environmental impact of agriculture.

The garden's produce – around 1.5 tonnes of locally grown vegetables per year– is given out to staff and delegates who subscribe to bi-weekly vegetable baskets. During the 2023 harvesting season, 45 colleagues received fresh tomatoes, squash, sweet potatoes, onions, strawberries, miont and salads, among others. Nearly 400 baskets were distributed. Throughout the workshops, participants immersed themselves in nature, learning how to identify ripe fruits, make cuttings, and compost. They also helped prepare ecofriendly, low-tech and sustainable grow beds for the season, getting their hands dirty. These activities raised awareness among staff about the importance of connecting with nature, investing in ecosystems and preserving essential biodiversity. In an end-of-season feedback survey, the workshops' educational value scored an average of 4.56/5 stars.

In addition to staff workshops, UNESCO visitor service organized weekly garden visits for school classes and other external groups. Students received a booklet with riddles designed to teach them about urban agriculture and biodiversity.

Thanks to valued support from the <u>French</u> <u>National Commission for UNESCO</u>, which currently manages the biodiversity garden, and other generous funding from several partners, the garden provides pedagogical opportunities to foster a culture of sustainability across UNESCO and Paris. The vegetable patch, developed in collaboration with the City of Paris, adds an agriculturally productive element, attracting the attention of staff, donors, and the public alike.

> " This opened my eyes to variations recipes with veggies that I would not necessarily have thought of. Delicious! "



" The workshops were very interesting as I learned a lot, and practicing simultaneously helped me memorize the lessons. A strong group spirit was created among the participants. "

OUNESC

UNESCO colleagues participating in garden workshops

### Ariana Park at UNOG Turns into an Urban Biodiversity Oasis

Ariana Park, home to the United Nations Office at Geneva (UNOG), has transformed into a thriving hub for biodiversity, thanks to the initiative of the Head Gardener, the dedication of its staff, and the support of the Director-General.

The heart of the United Nations Offices in Geneva, the Palais des Nations building complex, is found in the <u>Ariana Park</u>. This unexpectedly large green area of 46 hectares, equivalent to 65 football fields, is still within the city, overlooking Lake Geneva and Mont-Blanc.

There we find buildings and artifacts revealing the use of the park while still in the ownership of the Revilliod de Rive family. Their last descendant donated it to the city, which in turn made it available to the League of Nations, now United Nations, for as long as they exist. UN personnel work in 19th century villas that now host different entities and impressive buildings of the classicism and modernism architectural styles from the '30s and '70s. The latter are currently being renovated to accommodate modern day needs and accessibility requirements. The park is home also to numerous art works exposed in the open air. They were donated by countries to the United Nations to mark important moments in human history, such as the end of the World Wars and the conquest of space.

#### **Urban Parks and Biodiversity**

Emblematic parks such as this one were traditionally groomed with certain aesthetics: fields of well-arranged grass lawn, annual flower beds, and an overall constructed nature that offered an uninterrupted human experience. Such interventions were not ideal for biodiversity and species seeking refuge in urban green areas. In the context of the triple planetary crisis, this model of green space is being challenged worldwide by movements and new legal frameworks that push towards forest gardens, reintroduction of more resilient native species and bans in the use of chemical pesticides.

Current trends of biodiversity loss and ecosystem degradation undermine progress towards 80% of the assessed targets of the Sustainable Development Goals, also affecting directly human health, well-being, security, and economic development. The UN system released the <u>Common approach to integrating</u> biodiversity and nature-based solutions for sustainable development into the United Nations policy and programme planning and delivery and 50+ ways to integrate biodiversity and nature-based solutions.

#### Turning into a Hub for Biodiversity

Thanks to the initiative of the Facilities Management Service, responsible for Ariana Park, and with the support of the Director-General, a shift in the park's management was achieved. This shift prioritized biodiversity by adopting techniques to support the thriving of diverse flora and fauna. The Park, located within one of the world's major decisionmaking centers that hosts around 8,000 meetings annually, has since become a haven for biodiversity.

A series of interventions took place:

- Synthetic pesticides were avoided in favour of natural controls
- Allowing wild grass and flowers to grow, with areas of grass left uncut when mowing as a refuge for insects
- Installing nesting boxes, leaving dead wood for insects, and providing shelters for animals needing temporary refuge

- Reintroducing native flowers less dependent on water, significantly contributing to a 66% reduction in water consumption
- Circular use of garden waste through composting and mulching, as well as donation as animal feed
- Change of lighting practices for fauna protection and energy savings

In 2023, a biodiversity inventory was prepared with the help of a biodiversity consulting firm. This showed the impact of the measures in place, identifying 38 nesting birds, and a plethora of insect species, several of which are endangered and/or part of the list of national priority species of Switzerland.

#### **Future Steps**

The biodiversity inventory will inform tailored management approaches for the park, aimed at adding to Ariana Park's ecological value.

Staff are encouraged to discover the biodiversity in the park and share their experiences through video materials, photos and articles. Every week a different species from the park is introduced on the Intranet. Furthermore, a plot of land has been dedicated to the UNOG Staff Gardening Club, encouraging staff to plant their own vegetables and learn together, with UNOG gardeners sharing knowledge informally.

> " It is not rare to see different animals including magnificent peacocks walk around the Ariana Park."

Contact greening-unog@un.org 🖂

Story from

Read more Environmental Management at UNOG

Visitors can enjoy the rich biodiversity of the park, home to over 800 species, including majestic trees and wildflowers.

### **Environmental Training at UNMISS South Sudan Drives Sustainable Practices**

Environmental management is at the heart of the United Nations Mission in South Sudan (UNMISS). The Environmental & Occupational Safety and Health (Env&OSH) Unit is firmly committed to implementing the Environment Strategy for Peace Operations, contributing to the 2030 Agenda and the objectives of the <u>Strategy for Sustainability Management in the United Nations System 2020-2030</u>.

To ensure environmental awareness among staff and integrate environmental risk reduction and resource efficiency into daily operations, UNMISS conducts mandatory environmental training. This enables staff to adopt environmentally-responsible behavior, supporting the mission's commitment to "do no harm" while leaving a positive legacy to the host community. These efforts align with the <u>Strategy for Sustainability Management in the</u> <u>United Nations System 2020- 2030</u>, which aims to increase staff awareness and capacity building through environmental training at the entity level.

#### **Building Awareness: Environmental Induction and Inspection**

Upon joining UNMISS, all personnel undergo induction training on environmental standards and compliance. This face-to-face Environmental Induction Training provides a general overview of the environmental challenges faced by the mission, strategies to mitigate water, wastewater and solid waste risks, and recommendations for reducing their environmental footprint. From July 2023 to August 2024, more than 1,570 UNMISS Civilian and Staff Officers attended the induction training.

To ensure compliance with environmental standards, UNMISS conducts field visits and inspections across its field locations. After an environmental inspection of newly rotating Military or Police contingents, UNMISS offers tailored environmental training sessions to different audiences including Military, Police components, National Staff, Environmental Focal Points, and Independent Contractors. During these activities, the Env&OSH team shares recommendations, best practices and lessons learned from field operations.

#### **Field Training on Environmental Impacts**

More than 380 personnel from Troop Contributing Countries (TCCs) attended the field training from July 2023 to August 2024, ensuring a comprehensive understanding of environmental norms. This training enables TCCs to implement the recommendations identified during environmental inspections and ensures compliance with the Mission Environmental Standards. This is imperative for future-proofing against environmental accidents and incidents.

During the training activities, UNMISS personnel are briefed on the principle of 'doing no harm' and methods for minimizing environmental impact while fulfilling the mission's mandate. UNMISS staff receive training on a wide range of environmental impacts, including water and wastewater, solid waste management (such as composting, recycling and proper waste disposal), hazardous materials management and energy efficiency.

The Env&OSH (EOSH) Unit has developed an Environmental Compliance App to monitor the progress of environmental inspections and training. The app is available to Field Engineers and the Field Administrative Officer, allowing them to log and track personnel attendance, individual recommendations provided during environmental inspections, and completed corrective actions.

UNMISS is working towards integrating environmental considerations into various aspects of its operations. By raising environmental awareness among staff, UNMISS aims to drive positive behavioral change and uphold best practice environmental standards. This commitment not only seeks to leave a positive legacy through its operational footprint but also contributes to a greener United Nations.

#### Story from

#### Contact

unmiss-env-osh@un.org UNMISS Environmental & Occupational Safety and Health (Env&OSH) Unit

Environmental field training for Rwanda Battalion in Torit, June 2024.

" Over **380** UNMISS personnel are trained on "doing no harm" and minimizing environmental impacts,

including water and wastewater, solid waste, hazardous materials, and energy efficiency. "

Environmental field training for CHINA HMEC in Wau, August 2024.

### **UNON, First UN Headquarters to Achieve ISO 14001:2015 Certification**

The United Nations Office at Nairobi (UNON) reached a significant milestone by becoming the first UN Headquarters to achieve ISO 14001:2015 Certification for its efforts in Environmental Management System (EMS).

Serving as the UN Headquarters in Africa, the UN Gigiri Complex, located in Nairobi, Kenya, comprises 140 acres, and accommodates approximately 50 UN agencies, funds and programmes and 4,000 UN staff.

#### Journey to ISO 14001:2015 Certification

The journey of the United Nations Office at Nairobi (UNON) towards an Environmental Management System (EMS) and ISO 14001:2015 certification began in 2016. This was quickly followed by trainings, scope development and documentation.

For example, to support just one of the targets, which is waste management, it was necessary to first set up a Waste Management (WM) facility, contract a WM service provider and develop a waste separation at source program for all UN staff before any documentation related to waste could begin.

#### **EMS Structure and Leadership**

In 2019, UNON officially launched its EMS and Environmental Policy Statement on the Greening the Blue website. This policy, aligned with the environmental policy of the UN Secretariat, commits UNON and all its personnel and operations to stewardship and protection of the environment at the Gigiri Complex, Nairobi, Kenya. Following a series of internal audits, corrective actions, and some delays due to the COVID-19 pandemic, UNON completed the two-stage external audit by 2022, leading to ISO 14001:2015 certification.

UNON'S EMS and ISO 14001:2015 certification reflect a fully integrated approach. Leadership of the EMS begins with the Director General and includes senior managers across various departments under the Director of Administration. The lead responsibility lies with the UNON Chief of Facilities Management, supported by a team that includes a focal point for Environmental Sustainability, a lead EMS focal point, and an Internal Auditor, along with 4 technical focal points on facilities and 25 section-level focal points.

Responsibility for UNON'S EMS is very specifically and firmly embedded within the daily operations of the Facilities Management Section, and all staff, in addition to other daily tasks work on the EMS. With this integrated approach, environmental sustainability is always front and central to UNON's facilities programs and projects. It is not an add-on, but rather what the entity likes to call part of the 'DNA' of their operations, focusing on the facilities related areas of energy, water, wastewater and waste management, as well as emissions reductions.

#### **Key Milestones and Way Forward**

In the spirit of continuous improvement, the facilities management section has continued to identify new opportunities to reduce the environmental footprint of UNON's activities. After completion of the first potential net-zero energy facility in 2022 other special milestones in 2023/2024 include construction of UNON's first potential net-zero energy office building equipped with solar panels sized to generate at a minimum the equivalent of the total energy consumed by the building throughout the year.

Another key initiative includes efforts to increase biodiversity at the UNON complex. As part of UNON's reforestation strategy the original dry upland forest environment will be restored to as much of the complex as possible through the planting of indigenous biodiversity supporting trees. The reforestation strategy, which has already reached a milestone of 2500 trees planted by April 2024, also supports UNON's indooroutdoor work concept which provides a work environment close to nature, with pleasant green spaces for staff and visitors.

All UN agencies, funds and programmes housed on the site benefit directly from the sustainability initiatives undertaken, as the improved environmental performance is attributed proportionately to all agencies, funds and programmes and reported annually as part of Greening the Blue Report.

UNON is also pleased to report that its efforts towards environmental sustainability at the UN Gigiri complex culminated in the award of ISO 14001:2015 certification for its EMS as of January 2023, marking the first time a UN Headquarters has achieved this distinction.

" A 2024 milestone includes constructing a net-zero energy office building, equipped with solar panels designed to generate at least the equivalent of its total annual energy consumption. " Story from

" By 2024, **2,500** trees have been planted as part of UNON's indooroutdoor work concept, creating a nature-centric environment for staff and visitors."

*Before & after the reforestation of UNON complex* 

### UN Procurement Awards: Fostering and Celebrating Sustainable Procurement in the UN system

Coordinated by the High-Level Committee on Management's Procurement Network and its Professional Development working group, the UN Procurement Awards aim to recognize and celebrate excellence within the United Nations system regarding procurement and supply chain management.

The UN Procurement Awards are coordinated by the High-Level Committee on Management's Procurement Network and its Professional Development working group. The responsible cross-agency Project Team comprises representatives of the International Monetary Fund (IMF), the United Nations Children's Fund (UNICEF), the United Nations Development Programme (UNDP), the United Nations Office for Project Services (UNOPS), and the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO).

In 2022, the Procurement Network endorsed a soft launch of one award category "Sustainable Procurement and Supply Chain" to recognize successful and valueadding sustainable procurement projects and reward procurement and supply chain initiatives that were compatible and in favour of the protection of the environment, of social progress and in support of economic development.

For the 2023 award on "Sustainable Procurement and Supply", five projects were shortlisted:

- IOM E-waste Project: Greening humanitarian response through repair, recovery and recycling of solar lantern e-waste in displacement settings.
- ILO Employment Intensive Infrastructure
  Programme
- UNOPS Women-Owned Business Initiative
  in Yemen

- UNICEF Reduction of plastic waste in deliveries of long-lasting insecticidal mosquito nets
- UNDP UNDP's Sustainable Procurement Index for Health

Among these, the UNOPS project "Women-Owned Business (WOBs) Initiative in Yemen" received an award in the "Sustainable Procurement and Supply" category. This initiative, developed in collaboration with the World Bank, supports Yemen's women-owned businesses in their journey toward economic recovery. Through targeted procurement efforts, contracts totalling over USD 1.4 million have been awarded to more than 50 womenowned businesses in the country.

This project combined rigorous verification processes with tailored training programs and capacity-building support to help these businesses can fully participate in formal procurement. A significant milestone was reached when these women-led suppliers successfully navigated the formal procurement processes of UNOPS and other UN organizations, demonstrating their capability to submit competitive bids and contribute to reconstruction efforts.

This initiative not only empowers women entrepreneurs but also strengthens Yemen's local economy by fostering local businesses and creating new economic opportunities for women in a region severely impacted by conflict. " The United Nations oversees the spending of billions of dollars every year – on medicines, safety equipment, vehicles, and other goods and services.

It is essential that this money is spent efficiently, effectively and sustainably, and contributes to our efforts to be more agile and responsive. "

António Guterres Secretary-General of the United Nations

> A person washing their hands under a newly installed tap in Bafole, Westeren Cameroon.

A worker carries a solar panel on a rooftop of the Alsalam Hospital in Yemen. Yemen had the largest procurement volume among all least developed countries

(LDCs) in 2023.

UNOPS

### **UNU-FLORES' Journey to Sustainable Offices**

Amidst global calls for environmental sustainability, the United Nations University Institute for Integrated Management of Material Fluxes and of Resources (UNU-FLORES) embarked on a transformative overhaul of its office spaces at the World Trade Center Dresden.

The Flexible Offices (FLORES) initiative, also affectionately known as the "floating office" initiative, was launched in 2018 by the institute's leadership to revamp office dynamics in alignment with sustainability principles. To meet the diverse needs of its workforce, including field workers, interns, and researchers with varying work contracts such as short-term or field-based assignments (e.g. researchers spend months away from their desks on their field studies), UNU-FLORES adopted a policy change towards flexible working hours and telecommuting, alongside hotdesking and coworking spaces aimed to accommodate different work styles.

Central to the design were six key factors:

Flexibility	Socializing and well-being
Resilience	Greenery
Color effect	Sustainability

#### **Participatory Design Empowers Changes**

This is more than just a hybrid work model—it is a new narrative for the traditional 'office', restructured with dynamic features like Quiet Space and Pods, Call Corners, Phone Booth, Recharge Room, Team Labs, Community Space and Team Labs, and Lounges for social interactions. Each has a unique design and color scheme to support its specific function.

Crucially, the success of this implementation hinges on the participatory design process. The new office layout emerges from the collective input of members, representing diverse roles and units within the institute. A task force of five colleagues from different teams and committees was formed.

#### Maximizing Resources, Minimizing Footprint

Through greening practices, significant benefits have been observed. It mobilizes the team to value space as a resource and rethink its optimal usage, underscoring its dedication to the Nexus, a concept central to UNU-FLORES's research and advocacy.

Optimizing workstation allocation has increased office capacity without additional rentals, while reducing commuting time helps cut transportation-related carbon footprints. Although precise data on emission reductions is still pending, this is a key step in minimizing the institute's carbon footprint. Existing furniture is upcycled, and sustainable procurement practices are prioritized to ensure the use of materials that benefit both planetary and human health.

The benefits go beyond resource optimization. Employee productivity has notably increased, fostering creativity and collaboration. The new office concept promotes better work-life balance, greater autonomy, and enhanced interactions, especially in the wake of the COVID-19 pandemic.

#### **Challenges and Lessons Learned**

Despite the success, UNU-FLORES faced challenges, from navigating local regulations to addressing ergonomic concerns and acoustic considerations. The COVID-19 pandemic prompted a review and update of the concept to ensure its resilience in changing circumstances. These challenges, however, became opportunities for refinement, emphasizing the importance of feedback among colleagues. Key takeaways include:

- Focus on people, and the participatory design process is the key. Consider needs, perspectives, and actions. Invest in social interaction space at design phase.
- Build trust among colleagues through open communication to engage and foster participation. Ownership is key in community building, especially when staff no longer have individual desks. Transparent channels, like lounge message cards and digital platforms, are essential for feedback and input
- Allocate adequate resources for implementation. Sustainable solutions may require more time and expense than conventional options, but successful outcomes depend on strong commitment and investment.

Moving forward, UNU-FLORES is committed to further refining and assessing the longterm impacts on sustainability. With the completion of the concept design, the focus has shifted to the implementation phase, slated for completion by the end of 2024.

" Everyone wants a healthy, happy workplace. We prioritized gathering insights on individual work preferences and needs,

hoping we can inspire others to create green spaces that benefit both the planet and people's well-being. "



Contact flores@unu.edu

About UNU-FLORES

Flexible Office: Concept for Resource Optimisation (FLORES)

UNU-FLORES: What is the Nexus Approach

Lounge

Formal Meeting Room

#### Workshop Space

Task Force members: Juliane Dziumla, Associate Sustainability and Impact Officer (left) / Atiqah Fairuz Salleh, Project Manager of the flexible office initiative

# Read More

### **Advancing Sustainable Procurement in the UN system**

### The Annual Statistical Report on United Nations Procurement

2024 marked the 40th edition of the annual report on UN procurement, which was originally managed by the United Nations Development Programme (UNDP).

The report provides a comprehensive overview of the procurement of the UN system in support of its operations, projects, and programmes. One of the key aspects of the report is sustainable procurement with 30 out of 32 UN entities providing data, based on voluntary reporting of high coverage.

#### As reported in this report,

Z

Z

Z

Z

UN organizations accelerated sustainable procurement efforts. Here are some examples:

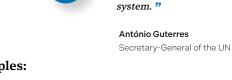
**UNGM Sustainable Procurement Indicators** were used, alongside an increase in the number of sustainable tenders.

**UNOPS launched a Supplier Resource** 

**Centre,** enhancing supplier engagement and market development by providing resources and training materials tailored to suppliers.

**UNICEF conducted a Scope 3 greenhouse gas baseline assessment** to identify supply chain hotspots and prioritize mitigation actions.

**67% of UN organizations** actively encourage suppliers to participate in the UN Global Compact.





57%

**83%** 

47%

have have sustainable sustainable procurement procurement policies. strategies. have measurable sustainability targets.

" For the past **40** years, this annual

report on UN procurement has

detailed exactly what we spend,

It is an important contribution

transparency, sustainability and

collaboration across the entire UN

towards accountability,

where we spend and what we buy.

Sustainable procurement principles

were integrated by



of reporting entities.

3%, 20% and 7% respectively compared to 2022.

These shares

increased by

REPORTING COVERAGE

**30** entities



# More Resources

#### Greening The Blue Annual Report 2024

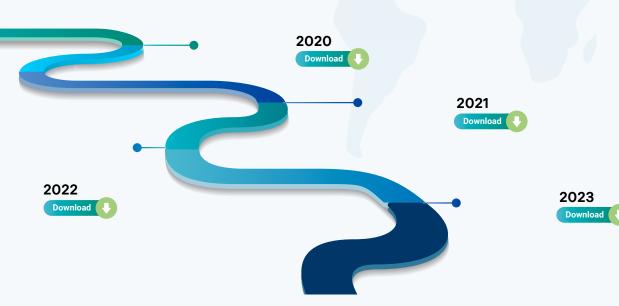


The Sustainable United Nations (SUN) facility of UNEP coordinates the initiative through close collaboration with the Greening the Blue Community. On an annual basis, Greening the Blue provides information on the UN system's environmental footprint and the efforts to reduce it.

Greening the Blue Annual Reports highlight the progress in the implementation of the Sustainability Strategy I. These reports are publicly available, assuring transparency of the environmental performance and efforts and, serving as a source of inspiration for other organizations to green their facilities and operations.

2024 edition showcases the environmental sustainability performance of the UN system in 2023, covering 322,900 personnel from 58 UN entities.

#### Explore Greening the Blue Annual Reports from previous years



#### UN Offsetting Q&A: Frequently Asked Questions And Answers

Offsetting unavoidable GHG emissions through approved emission reduction certificates is a crucial step in the UN commitment to reducing them. SUN compiled a comprehensive list of frequently asked questions (FAQs) and their answers.

Download 🕂

#### Greenhouse Gas Emissions Assessment Across 3 Scopes

Comprehensive greenhouse gas emissions reporting is imperative for climate action. While the UN has been monitoring mainly Scope 1 and 2 emissions, the inclusion of Scope 3 emissions will become essential for a comprehensive understanding of its environmental impact.



#### Greenhouse Gas Science-Based Targets Guidance For UN Organizations

The report covers the main issues to be considered for Greenhouse Gas (GHG) target setting and outlines specific guidance and recommendations.

Download

K Find more at <u>http://greeningtheblue.org</u>

# Acknowledgements

This compilation is developed by the Sustainable UN (SUN) facility and is only made possible because of dedication and efforts of the Greening the Blue Community. SUN extends its gratitude to the community focal points for sharing their insights and contributing these case studies.

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