GREENING THE BLUE REPORT 2020

The UN System's Environmental Footprint and Efforts to Reduce it

GREENING THE BLUE

UN environment programme

RECOMMENDED CITATION

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EXECUTIVE SUMMARY

In 2007, the United Nations (UN) System embarked on a journey to integrate environmental sustainability in its facilities and operations. Since then, the United Nations Environment Programme annually collects and analyses information provided by UN System entities on their environmental impacts and publishes this data in the *"Greening the Blue Report: The UN system's environmental footprint and efforts to reduce it."*

The report is composed of two elements: a brochure and entity-specific webpages. This brochure focuses on the UN System data as a whole; whereas, on www.greeningtheblue.org each contributing entity provides information about its environmental impacts and reduction measures taken in the course of the reporting year.

The *Greening the Blue Report 2020* covers emissions for 2019; therefore, the effects of the COVID-19 pandemic on travel and facilities' emissions are not yet visible in the reported data and will not be until 2021.

The report focuses on the environmental impacts of over 310,000 personnel in Headquarters, field offices and operations on the ground. Data was provided by close to 60 UN System entities and one new member of the growing Greening the Blue community: The Green Climate Fund.

Hundreds of personnel, from Headquarters to remote offices on the field, work on the data collection in an effort to continuously improve the data accuracy and the coverage of the environmental inventory.

In 2019, the UN System continued its downward trend on emissions generation. It produced ~2 million tonnes CO_2eq emissions, with per capita emissions of 6.5 tonnes CO_2eq. As a comparison, per capita emissions of 8.3 tonnes CO_2eq were reported in *Greening the Blue Report 2010*.

With 97% of reported 2019 emissions offset, the UN System is well on track to achieve its goal of 100% climate neutrality of its 2020 footprint.

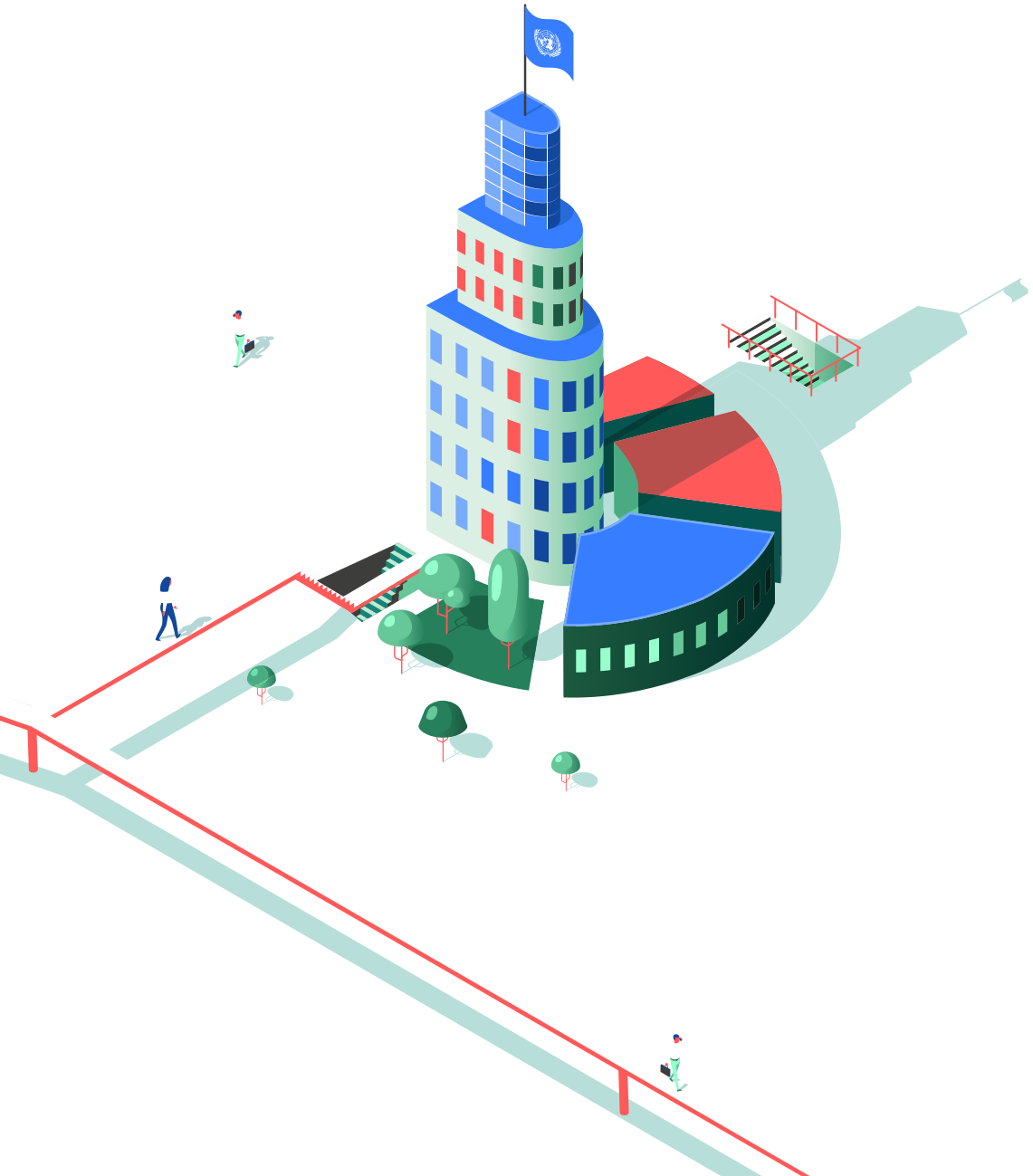
Environmental Governance has also progressed with five additional UN entities advancing in their implementation of environmental management systems.

As part of these efforts, UN entities are finding innovative ways to fund projects in their offices around the globe. For instance, UNICEF Uruguay was able to renew their old air conditioning system and replace all lighting across the office with energy-efficient LED lights via UNICEF's Greening and Accessibility Fund. The fund is generated by UNICEF's 3% air travel surcharge to finance or co-finance small scale Environmental Impact Reduction as well as Accessibility Improvement projects.

The power of partnerships is leveraged by UN entities to reduce their environmental impacts in field offices. FAO Regional Office for Africa in Ghana and UNDP Green Energy Team cooperated in 2019, to build a solar system that will strongly reduce energy costs and cover for 30-40% of the office energy demand.

UN entities are also implementing efforts to address environmental impacts. For example, UNON in Nairobi, Kenya has changed landscaping practices and developed a number of initiatives to respect and foster biodiversity at their compound.

Despite operational challenges experienced in 2020 by the COVID-19 pandemic, the vast majority of UN entities were able to provide data on their 2019 environmental footprint. Looking forward, more efforts are necessary to further improve and facilitate data collection and quality in all areas. Based on better data, emissions reductions can both be tracked more precisely and supported by a solid environmental management approach.



ANTÓNIO GUTERRES

UN Secretary-General

"The emergence of COVID-19 is a stark reminder of how we are all a part of nature and the environment. Just as humanity does not exist in isolation, neither does the United Nations system. Everything we do affects the world around us. We are all part of the global climate crisis, and our efforts to achieve environmental sustainability are essential to tackling it. We must work harder and faster to bequeath a livable planet for this and future generations."

–

António Guterres

OVERVIEW

The annual *Greening the Blue Report* provides information on the UN System's environmental footprint and efforts to reduce it. The report acts as a means to help determine if the UN System's facilities and operations are "on the right track" with their environmental objectives and to show where adjustment might be needed. The report also serves to inform the public both on how the UN System is doing in its environmental sustainability efforts and, hopefully, as a source of inspiration for other organisations.

The UN System first published its greenhouse gas (GHG) emissions in 2009 (for 2008 emissions) and has continued to do so ever since. With time, reporting has improved in accuracy and in scope and offers an ever-more detailed picture of the UN System's emissions and their sources.

It is important to remember that the annual report is a snapshot in time and does not reflect all of the intricacies and ever-changing realities that are involved with environmental sustainability in a system as varied as the United Nations.

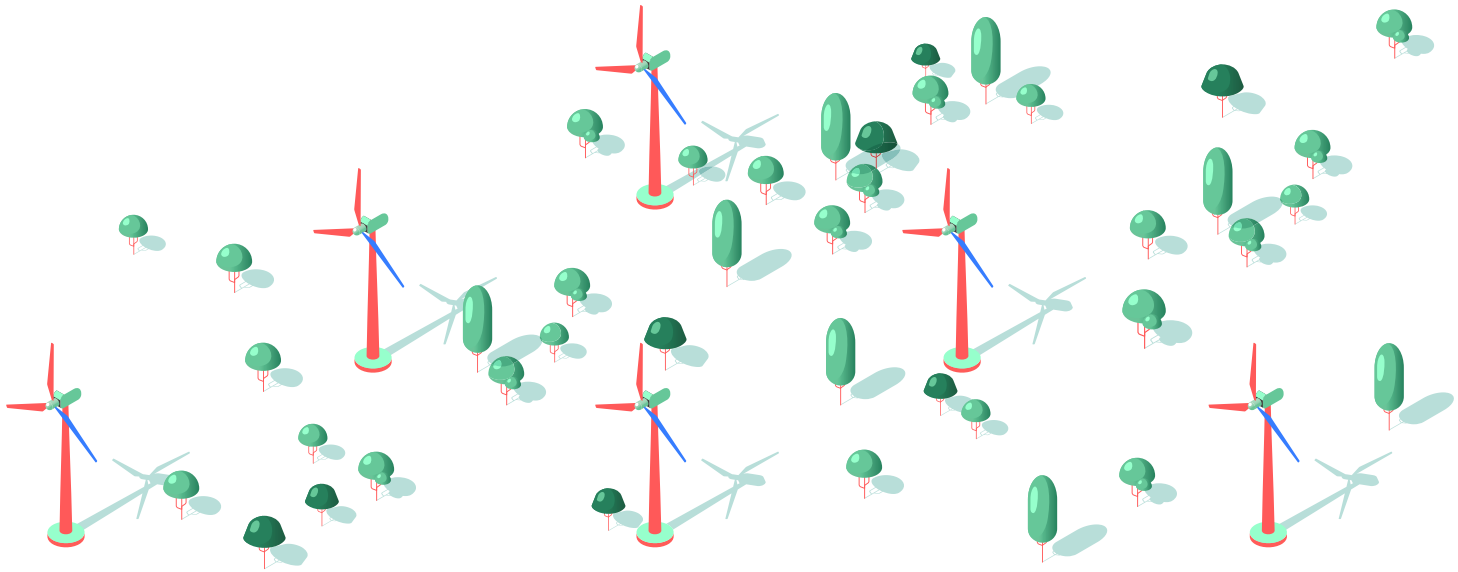
In no way does the report rank UN System entities against one another, nor against a scale of good or bad sustainability efforts. Entity-specific data is available online at www.greeningtheblue.org.

For the years 2009 to 2019, the UN System's approach to environmental sustainability focused on three main objectives:

MEASURE AND REPORT ITS ENVIRONMENTAL IMPACTS

UNDERTAKE EFFORTS TO SYSTEMATICALLY MANAGE AND REDUCE ITS ENVIRONMENTAL IMPACTS

OFFSET ITS UNAVOIDABLE EMISSIONS AND ACHIEVE CLIMATE NEUTRALITY BY 2020



2020 IS A TURNING POINT

This 2020 report marks a change. The UN's Chief Executive Board for Coordination has now endorsed the UN Sustainability Strategy 2020-2030, Phase I: Environmental Sustainability in the Area of Management.

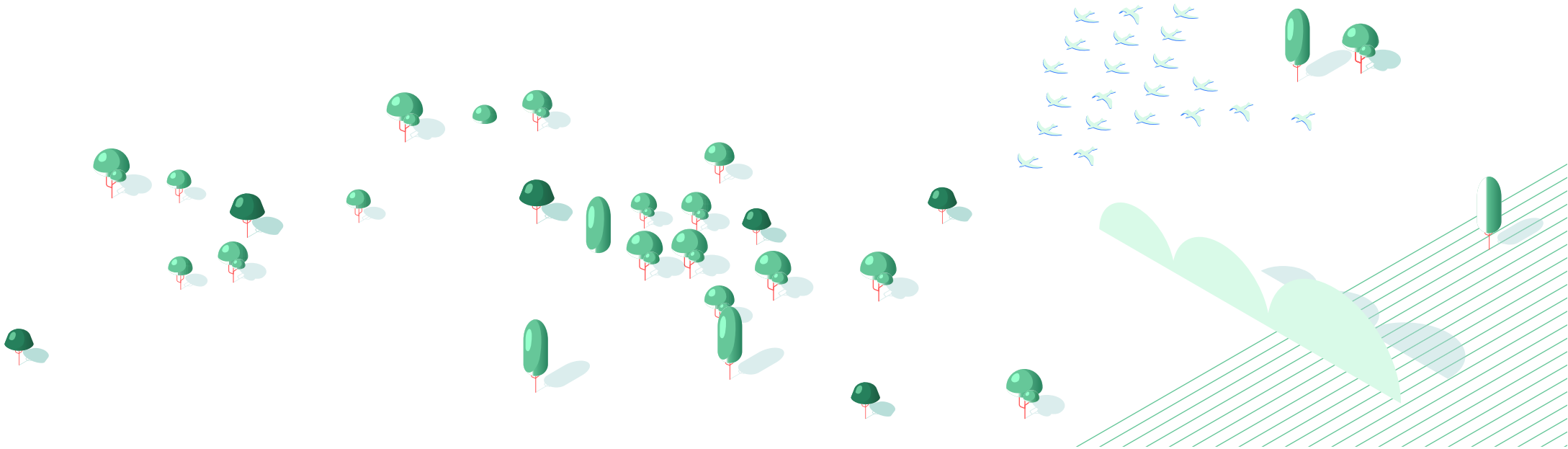
The strategy intends to accelerate the UN System's corporate efforts to combat climate change and to systematically integrate sustainable development considerations into how it operates. In particular, UN entities are committed to reducing their environmental impacts via targeted actions on greenhouse gas (GHG) emissions, waste management, air and water pollution, and biodiversity degradation.

In the area of GHG emissions, UN System entities agreed to align with the recommendations of the 2018 Intergovernmental Panel on Climate Change (IPCC) report. This requires them to take concrete steps in energy demand reductions in all facilities and operations; transition to renewables; make improvements in travel and transport management; and, to maintain climate neutrality.

Entities will adopt environmental management approaches based on the principles of continuous improvements. They will also ensure that opportunities for improvements are captured wherever possible via the application of environmental and social safeguards in projects and programmes.

Building on the Greening the Blue experience, the UN System committed to upscale and improve its sustainability reporting framework to transparently communicate about progress, efforts, and challenges on the journey.

In 2020, the Greening the Blue community opened its membership to other intergovernmental organisations that are willing to follow the UN System's path towards emissions reduction. The Green Climate Fund is the first of such organisations to become a member, which is why its environmental information is shared in this report and on the Greening the Blue website.



ENVIRONMENTAL IMPACTS

Included here is information on the environmental impact areas identified in the UN Sustainability Strategy 2020-2030, Phase I: Environmental Sustainability in the Area of Management for which UN entities have provided 2019 data. For each environmental impact area, the strategy establishes a UN System-wide objective to be achieved by 2030. How best to achieve this objective is specific to each UN entity; for this reason, entity-specific data is available online at www.greeningtheblue.org.

In each area, a '2019 best practice' from a UN entity that successfully made improvements in the area is highlighted. It is highlighted to celebrate success and provide a concrete example of what can be done with determination, creativity, and innovation.

Prior to the endorsement of the strategy, biodiversity was not an identified environmental impact area; therefore, no 2019 data on it was collected by entities. A coordinated approach for collecting data across the UN System on biodiversity is currently being discussed. While no data is available, a 2019 best practice is included, as some UN entities have begun work in the area.

GREENHOUSE GAS EMISSIONS

2030 OBJECTIVE

Reduce absolute greenhouse gas emissions by 2030 to limit the increase in global temperature to 1.5°C, in line with the recommendations of the 2018 report of the Intergovernmental Panel on Climate Change.

To achieve the objective, each entity will look at aspects such as: use of electricity, energy sources, air travel, and ground travel.

2019 UN SYSTEM DATA

OVERALL EMISSIONS

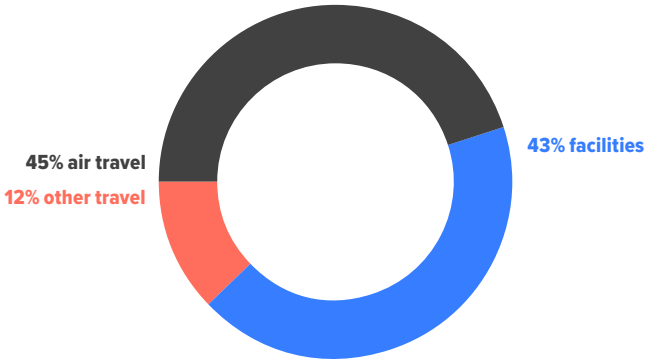
~2.0 million tonnes CO_2eq

were emitted by the UN System

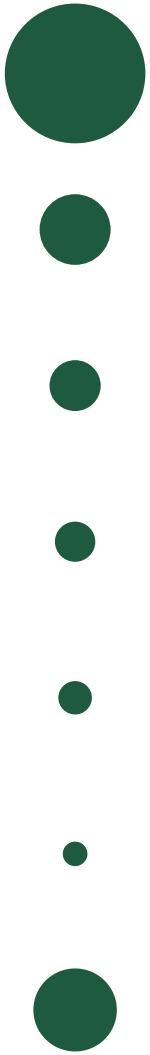
PER CAPITA EMISSIONS

6.5 tonnes CO_2eq

EMISSIONS BY SOURCE



SHARE OF TOTAL EMISSIONS BY ENTITY



41%
Peace Operations

10%
World Bank Group

5%
UNHCR, WFP

3%
UNICEF, UNDP, FAO, UNHQ

2%
IMF, IOM, IAEA, WHO

1%
UNESCO, UNFPA, UNOV, ILO, UNIDO, UNOPS, UNRWA

14%
Remaining entities

A detailed table with each entity's reported 2019 data is available on www.greeningtheblue.org.

GREENHOUSE GAS EMISSIONS BEST PRACTICE STORY

"FAO GHANA SOLAR SYSTEM"

UN Entities:
Food and Agriculture Organization of the United Nations (FAO) & United Nations Development Program (UNDP)

In cooperation with the UNDP Green Energy Team, a 105 kWp grid-tied solar photovoltaic (PV) system, the largest built in a FAO Decentralized Office so far, was inaugurated in the FAO Regional Office for Africa in Ghana in December 2019.

This is the first solar system financed through FAO Capital Expenditure (CapEx) Facility funds*. All approved CapEx projects have defined cost-benefit analysis and a benefits realisation plan. The fact that the implementation of a solar system was approved to be funded by CapEx demonstrates that solar systems in facilities have now been recognised as beneficial and relevant infrastructural projects. It also shows they are understood as systems that ensure compliance with health and safety regulations and achieve lower maintenance and running costs for FAO premises.

The solar system will enable the Ghana office to reduce energy related expenses **(projected savings estimation consists in more than $20,000 per year)**, and will cover for 30-40% of the office energy demand. The project team estimates that the saved energy will cover all the costs in approximately seven years. While improving the office business continuity, it will allow saving 40 tonnes of CO_2eq every year, which is equal to the emissions of nine cars driven for one year.

Performance and Lessons Learned

The system was commissioned in November 2019. The energy production was constant (12 MWh/month), and **the system covered for up to 30% of the energy requirement of the FAO office.**

Nevertheless, right after commissioning, the system experienced some inefficiencies reducing energy production by half. These inefficiencies were found to be due to voltage instability in the national grid and dirtying of the panels.

Solutions to both issues have been implemented and the system is now performing as expected: a regular cleaning schedule was established, and the UNDP Green Energy Team and the supplier adjusted the parameters of the system to improve operations.

** The Capital Expenditure Facility serves to define and authorize expenditures on tangible and intangible assets with a useful life in excess of FAO's financial period of two years. FAO capital investments achieve benefits in terms of a more capable and efficient infrastructure and operating environment to serve the business needs of the Organization and Strategic Objectives delivery.*

WASTE

2030 OBJECTIVE

Ensure that no solid waste from United Nations facilities, operations or activities is causing pollution or other harm to the environment and local populations by avoiding the release of toxic substances into the air, soil and water bodies and preventing adverse impacts on biodiversity and ecosystems.

To achieve the objective, each entity will look at aspects such as: non-hazardous waste, hazardous waste, and single-use plastic.

2019 UN SYSTEM DATA

AVERAGE WASTE GENERATED

457 kg/person
for the whole UN System

227 kg/person
for the UN System excluding Peace Operations (Peace Operations have a higher waste generated average compared to other entities as their waste generation includes living quarters)

DISPOSAL ROUTES OF WASTE GENERATED BY THE UN SYSTEM

54%
Controlled Disposal

14%
Closed Incineration

13%
Reuse, Recycle, Composting or Energy Recovery

9%
Open Incineration

5%
Landfill

3%
Unknown

1%
Other

These percentages are subject to significant variations year to year due to specific circumstances, such as large construction projects. A detailed table with each entity's reported 2019 data is available on www.greeningtheblue.org.

WASTE
BEST PRACTICE STORY

"WFP GIVES A SECOND LIFE TO PLASTIC WASTE IN SUPPLY CHAIN"

UN Entity:
World Food Programme (WFP)

Recycling plastic pallets in Ethiopia

Pallets are critical warehouse assets for WFP and are used across their operations for storage and handling. The pallets support thousands of tonnes of food in warehouses across the world, and invariably some eventually break. WFP Ethiopia has found a way to give broken pallets a second life: they are collected from warehouses around the country and consolidated in Adama, then sent to the capital, Addis Ababa, for recycling. The damaged pallets are crushed, mixed with virgin material, and then moulded into reusable beverage crates. The plastic is high-quality, so the new crates are durable and have a long lifespan. But if they do break, they can be recycled again. So far, over 9,000 pallets have been recycled, with proceeds from the sale of the waste material put back into other waste management initiatives.

A new use for old polypropylene food bags in Kenya

Most of the food distributed to WFP beneficiaries arrives in woven polypropylene (PP) bags. Some are used by beneficiaries to carry their food rations, but surplus bags remain. The bags are highly recyclable, but can be a source of environmental pollution if not properly disposed of, and when marked with donor branding this also becomes a reputational risk. To combat this challenge, WFP Kenya signed a recycling agreement with a Nairobi-based recycler who purchased the surplus bags, showing that waste can be a valuable resource. A recycling trial was launched, turning the WFP bags into new unbranded bags, containing 50% recycled content, for use on the local market. The pilot had positive results demonstrating that bag recycling is technically viable, reduces negative environmental impacts, and can have economic benefits. To date 1 million bags have been recycled, and the aim is to replicate the project in other countries in the region and elsewhere.

AIR POLLUTION

IN THE LOWER AND UPPER ATMOSPHERE

2030 OBJECTIVE

Ensure that United Nations premises and fleet do not contribute to or exacerbate local air quality issues, in both urban and remote community settings.

To achieve the objective, each entity will look at aspects such as: fossil fuels, and refrigeration and air conditioning.

Note: in the the UN Sustainability Strategy 2020-2030, Phase I: Environmental Sustainability in the Area of Management, Air Pollution as a category of environmental impacts included pollution in the lower and upper atmosphere. For this reason, very different aspects such as fossil fuels and Ozone Depleting Substances were associated with it. As an environmental impact area Air Pollution is new to the *Greening the Blue Report* and will be further developed next year.

2019 UN SYSTEM DATA

AIR POLLUTANTS IN THE LOWER ATMOSPHERE (GROUND-LEVEL)

The UN System will begin collecting data on the fuel quality of its fleet and premises and the impact it has on local air quality in 2021.

OZONE DEPLETING SUBSTANCES IN THE UPPER ATMOSPHERE (STRATOSPHERE)

70%

of UN offices did not know which refrigerants they use

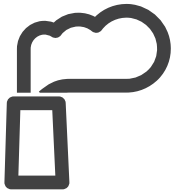
20%

use non-ozone depleting refrigerants*

10%

use ozone depleting refrigerants

**Offices that use non-ozone depleting refrigerants include the 2% of offices that use low Global Warming Potential (GWP) refrigerants*



AIR POLLUTION BEST PRACTICE STORY

"UNICEF URUGUAY GREEN TEAM'S 2019 PROJECTS IMPROVE ELECTRICITY USE AND REDUCE AIR POLLUTION"

UN Entity:
UNICEF Uruguay

unicef

As part of the commitment to reduce its environmental impact, UNICEF Uruguay launched a staff Green Team in 2017, which kicked off applying several practical measures to introduce an eco-friendly culture at the office.

These initiatives included waste sorting, paper and plastic recycling, special collection points for batteries and expired medicines, disposal of electronic equipment through specialized e-waste providers, installation of hand dryers in all toilets, sharing tips on good greening practices to raise awareness among staff members, and even having a 'clean-and-tidy-up' day.

In 2018, the Green Team took a further step and submitted a project to the Greening & Accessibility Fund (GrAF)* with the aim of becoming more efficient in the use of electricity. This was identified as a key area of improvement as most of the lighting and ventilation equipment was long outdated and inefficient.

The project submitted to the GrAF consisted of two initiatives:

- **Renewal of the old air conditioning system with inverter units with R410A refrigerant**
- **Replacement of all lighting across the office with energy-efficient LED lights**

The funds were granted to the Uruguay office in 2019. In addition to becoming more energy efficient, an added benefit of renewing the air conditioning system was reducing the office's impact to air pollution.

** UNICEF Offices are able to access the GrAF, generated by its 3% air travel surcharge, to finance or co-finance small scale Environmental Impact Reduction as well as Accessibility Improvement projects.*

WATER AND WASTEWATER

2030 OBJECTIVE

Ensure water conservation and avoid the release of untreated wastewater into the environment.

To achieve the objective, each entity will look at aspects such as: water management and wastewater management.

2019 UN SYSTEM DATA

Average water consumption by the UN System is

49 m^3

per UN personnel per year.

This, in a UN System context, includes water consumption for multiple uses such as facilities and their gardens, kitchens, and cooling systems. It also covers individuals' consumption, including those who live in compounds such as the Peace Operations personnel.

A detailed table with each entity's reported 2019 data is available on www.greeningtheblue.org.

WATER AND WASTEWATER BEST PRACTICE STORY

"BIOGAS CHAMBER ATTACHED TO COMMUNAL LATRINES"

UN Entity:
International Organization for Migration (IOM) South Sudan

IOM UN MIGRATION

In the Malakal Protection of Civilians (PoC) site, IOM commissioned two biogas reactors to treat sludge from latrines and produce clean cooking energy for internally displaced persons (IDPs). A biogas reactor is an airtight chamber, which facilitates anaerobic digestion of wastewater, sludge or biodegradable waste, producing biogas and a sanitized liquid by-product known as digestate.

A biogas researcher deployed through Norwegian Capacity (NORCAP) successfully optimized system performance in one of the commissioned biogas reactors in the Malakal PoC site. The biogas produced was connected to a central kitchen where IDPs use it for cooking. Using biogas for cooking is projected to save 9.4 - 11.4 tonnes of firewood per year. Emissions abated from firewood combustion and through the conversion of methane to less potent greenhouse gas (carbon dioxide) during cooking is projected to reduce emissions by 11.07 tonnes CO_2eq -13.32 tonnes CO_2eq per year. Using biogas as a cooking fuel also reduces air pollution as it burns with a clean flame devoid of smoke and particulate matter produced during firewood combustion.

- The biogas reactor treats an average of 214 litres of faecal sludge per day from 10 latrines, serving about 177 IDPs.
- The reactor is projected to treat a total of 78,110 litres of faecal sludge per year.
- The average biogas production rate is 3.6-4.3 m^3 per day.
- The biogas produced is adequate for preparing lunch and dinner for 4 - 6 households. Each household has an average of 5 people; hence, around 20 - 30 people will be served by the biogas reactor per day.

The technology has been confirmed to be feasible for expansion outside the PoC site. IOM is performing an assessment for co-digestion of faecal sludge with food waste in a bid to further reduce the waste and the carbon footprint of waste management in the PoC.

BIODIVERSITY

2030 OBJECTIVE

Avoid adverse impacts on biodiversity from United Nations facilities, operations and activities.

To achieve the objective, each entity will look at aspects such as: biodiversity conservation.

Biodiversity is a new environmental impact area to report on for the UN System. Specific indicators and guidance on biodiversity will be developed in 2021, in line with the principles of the UN decade of Biodiversity Restoration.

BIODIVERSITY BEST PRACTICE STORY

"UNON LANDSCAPING RESPECTS AND FOSTERS BIODIVERSITY"

UN Entity:
United Nations Office at Nairobi (UNON)

Introduction and Background

The UN compound in Gigiri Area, Nairobi was established in 1975, as the new United Nations Environmental Programme Headquarters. Over the years, more UN entities joined the compound and it is currently home to more than 50 agencies and programmes under the UN System.

The UN compound consists of 140 acres of land, which originally was a coffee plantation bordering Karura Forest. Several species of birds, snakes and mammals freely come into the complex from the neighbouring forest. The proximity with the Karura Forest plays a great role on the biodiversity conservation work of the compound. UNON takes part in protection of wildlife species in partnership with The Friends of Karura Forest.

Lately, due to climate change, Nairobi is experiencing variations to its seasons with longer heavy rains and longer dry seasons, which have been negatively impacting biodiversity.

Vegetation on the UN Compound

UNON landscaping practices have moved away from a manicured garden **in an effort to restore the savannah vegetative status of the area.** This encourages more species of hardier indigenous plants, which require less watering and provide a natural home for various fauna species.

A minimum of **25-30 new indigenous trees are planted annually** within the compound. A program, with the aim to have the area kept as a natural refuge for birds and wildlife, is in place for the continued removal of invasive, non-native plants, and replacement with appropriate indigenous plants. Where possible, plant debris is re-used sustainably for mulch, compost and fuel.

During World Environment Day 2019, staff participated in planting 20 indigenous trees classified as red-listed and in need of protection.

Animals on the UN Compound

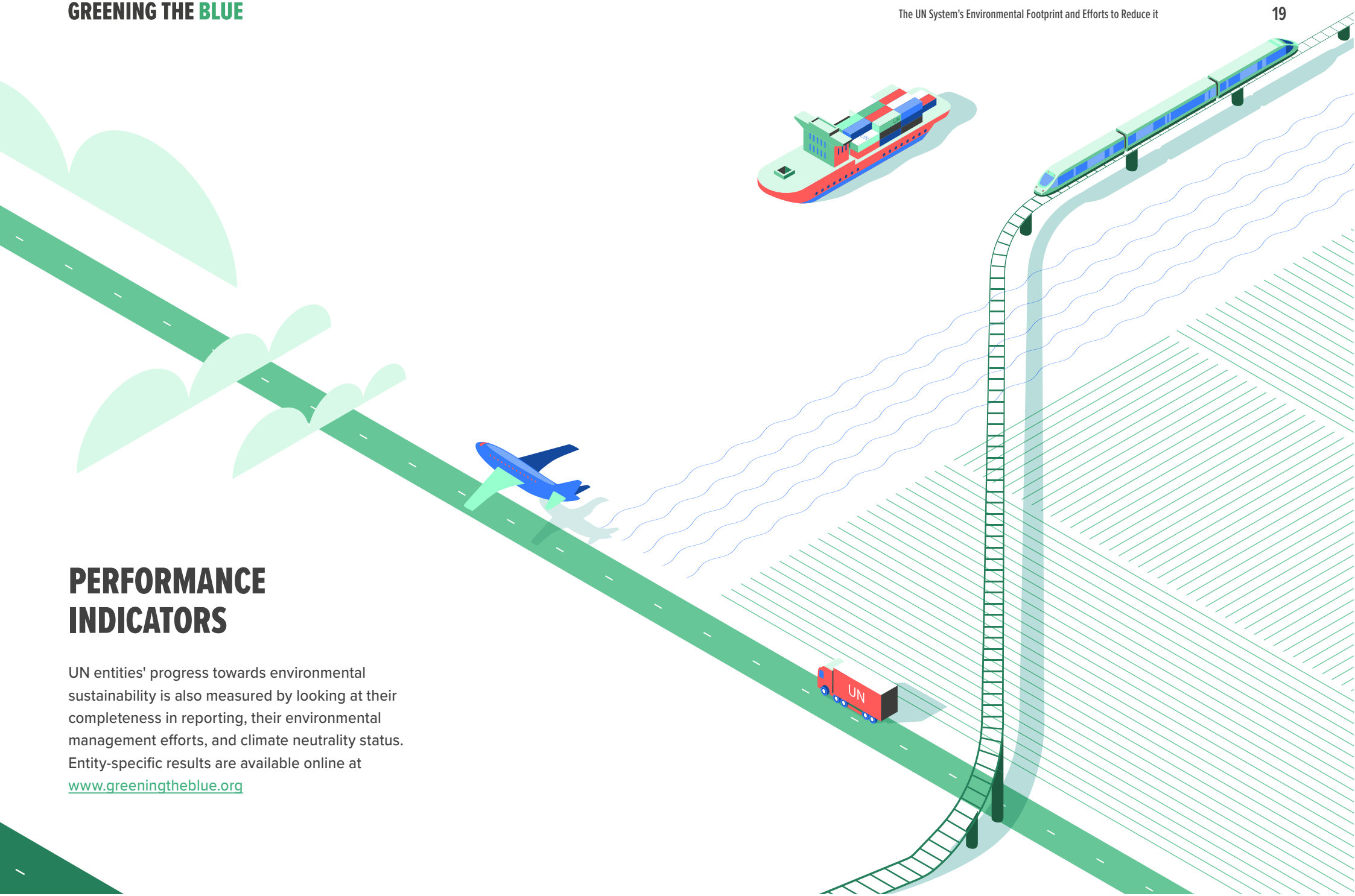
The UN compound hosts a variety of wildlife animals. Besides mammals and birds, reptiles are often spotted. In 2019, joggers along the nature trail glimpsed a juvenile African Rock Python sunning herself near the caves. Hired by UNON, a reptile specialist captures any snakes found in offices or public human interaction spaces, and humanely releases them into the nature trail. On the rare occasion that a poisonous snake is spotted, it is rehomed at the National Museums of Kenya snake park.

There is also a rich diversity of insects supported by the compound. A detailed inventory of insects is almost an impossible task; however, bees deserve special care due to their ecological importance. UNON carries out beekeeping to reduce the random settling of bees in light poles, satellite dishes, roof eaves and other infrastructure. **Beekeeping helps create a wide biodiversity of flowers and plants.** There are several beehives around a nature trail area and the honey is sold at the UNON nature trail shop.

Looking forward

The indigenous flora and fauna certainly make the UN compound in Nairobi a very pleasant working environment fostering wonderful biodiversity. UNON is committed to keep and further enhance the biodiversity on the compound by:

- Campaigns to raise staff awareness of the biodiversity on the complex;
- Special requirements in our tender documents as required by the Environmental Management System (EMS);
- Training contractors;
- Engaging staff;
- Planting native vegetative species onsite to encourage birds, insects and mammals;
- Providing diverse green spaces for staff to enjoy;
- Establishing wildflower meadows to provide more food sources for bees; and,
- Encouraging the health of indigenous aquatic species of fish and amphibians in the ponds.



PERFORMANCE INDICATORS

UN entities' progress towards environmental sustainability is also measured by looking at their completeness in reporting, their environmental management efforts, and climate neutrality status. Entity-specific results are available online at www.greeningtheblue.org

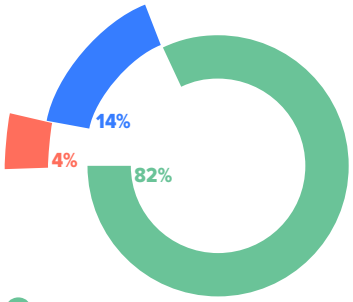
REPORTING COMPLETENESS

A commitment to tracking and reporting on the environmental impact areas is a key aspect of the UN Sustainability Strategy 2020-2030, Phase I: Environmental Sustainability in the Area of Management, and is an essential part of making sure UN entities allocate resources correctly. Therefore, part of the performance of each entity documented in the *Greening the Blue Report* is their level of completeness of reporting.

UN SYSTEM-WIDE OVERALL REPORTING RESULTS*

(percentage of total entities)

GREENHOUSE GAS EMISSIONS

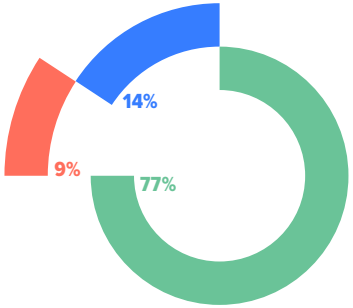


Complete
Entity reported greenhouse gas emissions for all of its personnel with the defined boundaries for the reporting year.

Partial
Entity reported greenhouse gas emissions for a percentage of total personnel for the reporting year or reported on emissions from previous year.

Did not report
Entity did not report greenhouse gas emissions.

WASTE

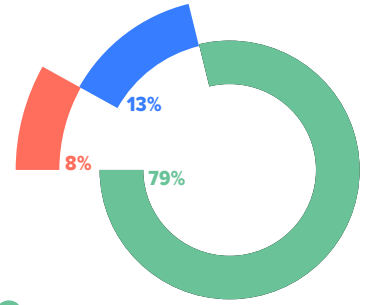


Complete
Entity reported quantitative data for some or all of its waste for the reporting year.

Partial
Entity reported qualitative data for the reporting year or reported quantitative data from previous years.

Did not report
Entity did not report waste data.

WATER



Complete
Entity reported quantitative data for some or all of its water for the reporting year.

Partial
Entity reported qualitative data for the reporting year or reported quantitative data from previous years.

Did not report
Entity did not report water data.

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* *The UN System-wide overall reporting results were calculated based on the number of entities listed on the "Environmental Performance Indicators" table. The table, available on www.greeningtheblue.org, provides entity-specific results.*

ENVIRONMENTAL MANAGEMENT

Environmental Governance is the overarching commitment of the UN Sustainability Strategy 2020-2030, Phase I: Environmental Sustainability in the Area of Management to systematically improve control over and reduce risk from the environmental impacts of UN entities' facilities and operations.

The recommended approach for doing so is the implementation of environmental management systems and the reference is the international standard ISO 14001.

For the purpose of this report, and in an effort to recognise the complexities and variety of situations in UN System operations, other approaches are also accepted as long as the UN entity shows that a systematic effort is implemented.

UN SYSTEM-WIDE DATA

14 entities

Have a systematic approach to Environmental Management underway

The entity meets two or more elements of an environmental management system based on ISO 14001 or equivalent, covering at least headquarters or a majority of its personnel:

- Environmental policy (reviewed within the last 5 years)
- Defined Roles and Responsibilities
- Environmental action plans
- Reporting mechanism and review system

14 entities

Have a systematic approach to Environmental Management in place

The entity meets all elements of an environmental management system based on ISO 14001 or equivalent covering at least headquarters or a majority of its personnel. OR The entity's majority of personnel sits in a certified green building (BREEAM, LEED or equivalent).

26 entities

Do not have an Environmental Management in place

Entity has no systematic approach to environmental management.

PROGRESS COMPARED TO 2018 REPORTED DATA

+4 entities

Have a systematic approach to environmental management underway

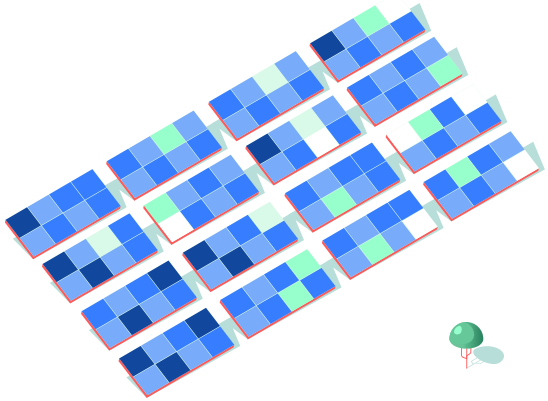
+1 entity

Has a systematic approach to environmental management in place

* The UN System-wide data were calculated based on the number of entities listed on the "Environmental Performance Indicators" table. The table, available on www.greeningtheblue.org, provides entity-specific results.

CLIMATE NEUTRALITY

While the UN System is working hard to reduce its carbon footprint, some emissions are unavoidable and need to be addressed. The UN System's commitment to offset 100% of unavoidable emissions by 2020, comes into play at this stage.



Offsetting is the process whereby entities take responsibility and compensate for their remaining emissions by purchasing UN-certified carbon credits from projects that are achieving the removal of, or reductions in, greenhouse gas emissions of an equivalent amount. Example projects include installing new renewable energy facilities, restoring forests, delivering clean cook-stoves or improving energy efficiency in homes.

Certified Emission Reductions are offsets issued by projects that are part of the UN's Clean Development Mechanism (CDM). The quality of a project is verified and guaranteed by the United Nations Framework Convention on Climate Change (UNFCCC) in a process that requires third party verification, national and CDM Executive Board's approval.

2019 UN SYSTEM DATA

97%

of the UN System's reported 2019 greenhouse gas emissions are offset

GREENHOUSE GAS EMISSIONS METHODOLOGY AND AIR POLLUTION DATA

The October 2007 decision of the Chief Executives Board set the scope of the UN greenhouse gas (GHG) inventory to **emissions from facility operations and travel that can be influenced by management-level decisions**. Therefore, the inventory covers emissions under the financial and/or operational control of the UN (the details of how each agency determines the boundaries of its financial and/or operational scope can be found in their individual Inventory Management Plans). Following the GHG Protocol, the inventory covers all Scope 1 and Scope 2 emissions. Additionally, it covers Scope 3 business travel emissions due to the major role of travel in UN operations.

The inventory includes the six GHGs originally covered by the Kyoto Protocol: **CO_2, CH_4, N_2O, HFCs, PFCs and SF_6**, and all refrigerants with a global warming potential (GWP). Total GHG emissions are reported as an aggregate using the common comparable unit of carbon dioxide equivalents (CO_2eq) - the mass of each GHG multiplied by its global warming potential compared to that of carbon dioxide.

Estimation and reporting of the emissions are done through the following tools:

- Formatted files for data collection, available in English, French and Spanish;
- A stand-alone air travel emissions calculator developed by the International Civil Aviation Organisation (ICAO);
- A web-portal, where the data files can be uploaded for submission;
- A calculator developed by Sustainable UN to generate emissions results; and,
- In addition to the above tools, some agencies have developed their own emissions calculators.

For the Air Pollution section of the report, data was derived by extracting information on Ozone Depleting Substances provided through the GHG inventory.

WASTE METHODOLOGY

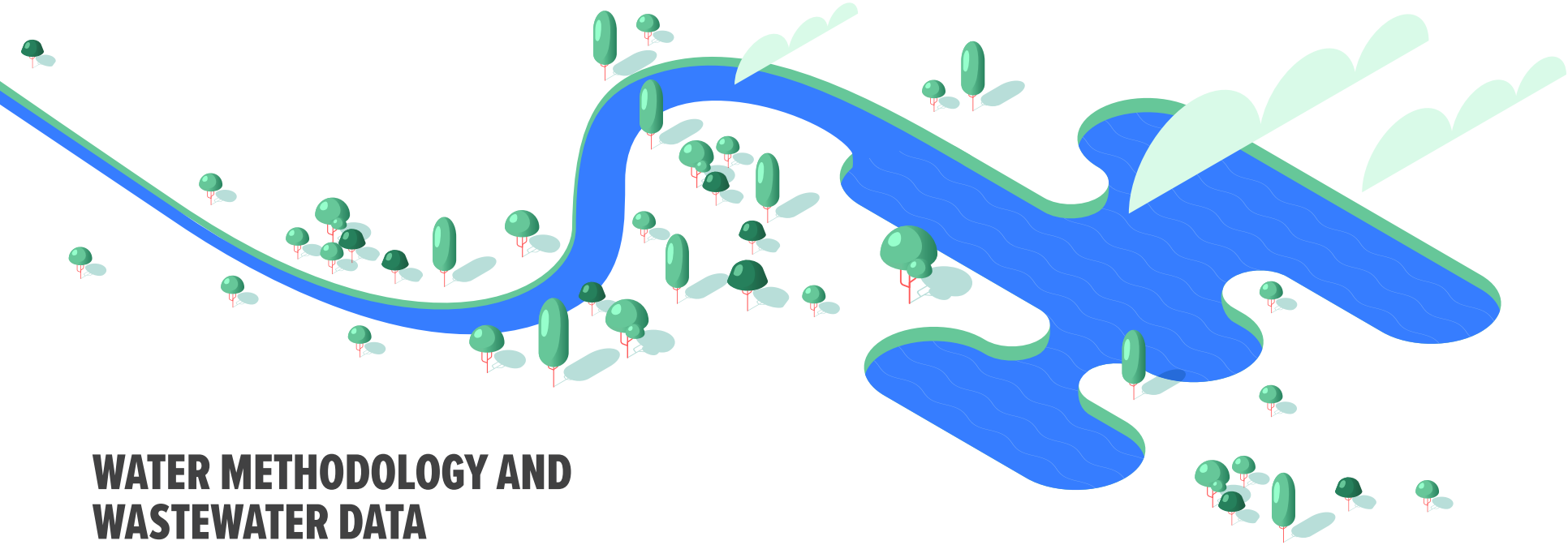
The methodology for measuring and reporting waste management practices was developed and implemented during the 2016 waste inventory. It was improved in 2018, by incorporating lessons learnt and feedback from UN focal points. The scope of the UN waste inventory is set to waste from facilities and operations. The approach requires the collection of data on waste quantities by:

- type of waste
  (e.g. paper, plastics, metal, e-waste, etc.);
- method of collection
  (e.g. municipality, private contractor, take-back scheme, etc.); and,
- type of treatment and disposal
  (e.g. landfill, recycling, reuse, etc.).

The approach follows the recommendations of the Framework for the Development of Environment Statistics developed by the Statistics Division at the UN Department of Economic and Social Affairs and is in line with Global Reporting Initiative indicators.

In addition, qualitative information on activities such as implementation of policy and waste management plans is collected to enable the sharing of best practices between UN entities.

The information on waste averages and methods of disposal provided in the report are based only on UN sites that were able to provide complete data. Some sites provide data only on certain waste streams for which they have information, which does not present a full picture of their waste; these sites are not included in the UN System-wide waste estimates.



WATER METHODOLOGY AND WASTEWATER DATA

The approach for measuring and reporting water management practices was developed and implemented during the 2018 inventory exercise. It was improved in 2019, by incorporating lessons learnt and feedback from UN focal points. The scope of the UN water inventory is set to water from facilities and operations. The approach requires the collection of data on water as follows:

- Water usage
  (e.g. water source, volume of water, etc.)
- Water recycled internally

The approach is in line with Global Reporting Initiative indicators and looks at affected water sources.

In addition, qualitative information on activities, such as implementation of policies and water management plans, is collected to enable the sharing of best practices between UN entities.

Data on wastewater management is, to this date, not yet included in the UN System environmental inventory. A methodology to collect it will be developed in the future.

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