Greening the Blue Report 2022's Methodology

DATA COLLECTION AND INVENTORY PROCESS

The methodologies for the yearly collection of data for the *Greening the Blue Report* is the result of close UN inter-entity coordination. The UNEP Sustainable UN team works with a network of officially appointed Sustainability Focal Points in each reporting entity. The Focal Points are responsible for coordinating the data collection process throughout their respective entity and keeping methodologies and measures up-to-date and harmonized with UN system-wide guidance. To this end, Focal Points (and their colleagues in various country offices) are trained and updated every year on the data collection methodology for the Report. Once the data collection is finalized, the UNEP Sustainable UN team collates, calculates, and reviews results for the *Greening the Blue Report*.

GREENHOUSE GAS (GHG) EMISSIONS METHODOLOGY AND AIR POLLUTION & RENEWABLE ENERGY DATA

GHG EMISSIONS

The inventory covers emissions under the financial and/or operational control of the UN. 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 (CO2eq) - the mass of each GHG multiplied by its GWP compared to that of CO2.

Collection, estimation and reporting of the GHG emissions are undertaken 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 Organization (ICAO);
- A calculator developed by Sustainable UN to generate emissions results; and,
- In addition to the above tools, some entities have developed their own emissions calculators.

AIR POLLUTION

For the Air Pollution section of the *Greening the Blue Report*, data was derived by extracting information on refrigerant use and fuel use provided through the GHG inventory.

RENEWABLE ENERGY

For the Renewable Energy section of the Report, the percentage of electricity from renewable sources was calculated by dividing the electricity that came from renewable sources with the total electricity consumption. The total electricity consumption for each building is calculated as the kilowatt-hour (kWh) equivalent of all purchased electricity as well as electricity produced on-site through stationary combustion in generators and through renewable energy installations such as solar panels. The electricity from renewable sources is calculated as the kWh equivalent of all renewable electricity generated on-site (through renewable energy installations such as solar panels and through the combustion of renewable fuels), plus all purchased electricity from renewable sources. The

renewables share of the purchased electricity is calculated by using data that entities provide on their energy mix. If this data is not provided, average values for the electricity grid of the country in which the building is located is used.

AIR TRAVEL AND THE INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO) CALCULATOR METHODOLOGY

In April 2009, the **Environmental Management Group (EMG)** adopted the **ICAO Carbon Emissions Calculator (ICEC)** as the official tool for United Nations entities to quantify their air travel CO2 footprint, in support of their climate neutral commitments and the overarching *Strategy for Sustainability Management in the United Nations System 2020-2030*. Since then, organizations have reported their greenhouse gas inventories through the Greening the Blue using the ICAO carbon emissions calculator (ICEC).

An updated version 5.0.6 of the ICEC was used to calculate the 2021 data. For additional information on the ICEC, please visit this webpage or contact officeenc@icao.int

CLIMATE NEUTRALITY AND OFFSETTING

While the UN system is working hard to reduce its carbon footprint, some emissions are still unavoidable and need to be addressed. To achieve carbon neutrality, the UN will need to reduce and offset carbon emissions to the maximum extent possible and offset those emissions that cannot yet be reduced.

Offsetting is the process whereby entities take responsibility and compensate for their remaining unavoidable emissions by purchasing UN-certified carbon credits from projects that are achieving the removal of, or reductions in greenhouse gas (GHG) 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.

Offsetting encourages the development of additional GHG emission reduction or avoidance projects and brings sustainable development benefits to developed countries, in line with the UN Sustainable Development Goals.

Certified Emission Reductions (CERs) 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) Secretariat in a process that requires third party verification and national government and CDM Executive Board's approval.

The UN system committed in 2015 to offset 100 per cent of unavoidable emissions by 2020. The goal was established as part of the UN system's initial commitment to measure, reduce and offset GHG emissions. Offsetting remains an important factor in managing unavoidable emissions, the priority for the UN system is however emissions reductions.

WASTE METHODOLOGY

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 the implementation of policy and waste management plans is collected to enable the sharing of best practices between UN entities.

The UN-wide figures and 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 waste data.

WATER METHODOLOGY AND WASTEWATER DATA

WATER

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.); and,
- 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 the implementation of policies and water management plans, is collected to enable the sharing of best practices between UN entities.

WASTEWATER

Data on wastewater management is, to this date, not yet included in the UN system environmental inventory.

ENVIRONMENTAL GOVERNANCE, PROCUREMENT AND HUMAN RESOURCES METHODOLOGIES

ENVIRONMENTAL GOVERNANCE

Data for the year 2021 for indicators on environmental management systems (EMS), environmental reporting and environmental and social standards of UN entities were collected via a survey to UN entities. The questions in the survey and the updated criteria for EMS were refined early in 2022 based on input from entity Focal Points. The scope of the questions and criteria remain aligned with the indicators for EMS in the *Strategy for Sustainability Management in the United Nations System 2020-2030, Phase I: Environmental sustainability in the area of management* and the EMS requirements in the ISO 14001:2015, which is the recommended approach of EMS in the UN system. The UN entities that responded to the survey performed quality assurance of their submissions before the final scoring on EMS according to the below criteria was made.

EMS CRITERIA

Exceeds: the entity was ISO 14001 certified or has performed a self-declaration of an EMS in compliance with ISO 14001 for the year 2021.

Meets: in 2021, the entity, in addition to the requirements in 'Approaches', had addressed and incorporated the following activities in their EMS: environmental aspects and impacts are identified and integrated into action plans; the entity has a mandatory staff training on environmental sustainability; risk management is mapped and addressed; operational controls and procedures are in place; monitoring and measuring; periodic internal audits on EMS; holds an annual management review meeting and takes corrective actions that are integrated into action plans. The scope of the EMS must cover a minimum of 50 per cent of the entity's personnel.

Approaches EMS: in 2021, the entity had an environmental policy that had been adopted and/or reviewed in the past five years, objectives and targets in place on environmental performance which all had been approved by their senior management. The scope of the EMS must cover at least headquarters or one or more outposted offices.

Does not meet: in 2021, the entity did not yet have an environmental policy and/or environmental targets and objectives in place which had been approved by their senior management.

For more detailed information on these requirements, please visit the UNEP online resource at emstoolkit.org

PROCUREMENT

All data published in the *Greening the Blue Report 2022* is obtained from the 2021 Annual Statistical Report on UN Procurement (ASR).

The ASR is compiled annually by the United Nations Office for Project Services on behalf of the UN system. The ASR reported on the sustainable procurement efforts of UN entities for the first time in 2008. The data is obtained through a voluntary questionnaire that is shared with all UN entities reporting to the ASR. Since 2018, all 39 UN entities that submitted procurement transaction data to the ASR have voluntarily shared information on their sustainable procurement practices.

HUMAN RESOURCES

Data for indicators on environmental training and awareness of UN personnel and performance management systems of senior management were collected via survey to UN entities. The survey remained largely unchanged since its initial release in 2021. Early this year the survey was shared with interested entity Focal Points for input and clarifications were made in the questions as needed. The scope of this indicator covers all personnel which includes staff, consultants and independent contractors. Additionally, answers on training of staff factor into the EMS scoring as noted above.

ENTITY REPORTING COMPLETENESS

The criteria to determine an entity's reporting completeness in each are of the *Greening the Blue Report 2022* is as follows.

GREENHOUSE GAS EMISSIONS

Complete/filled cell on table: Entity reported on greenhouse gas emissions for all personnel with the defined boundaries for the reporting year.

Partial/Half-filled cell on table: Entity reported on greenhouse gas emissions for a percentage of total personnel for the reporting year or reported on emissions from the previous year.

Did not report/Empty cell on table: Entity did not report on greenhouse gas emissions.

WASTE

Complete/filled cell on table: Entity reported quantitative data for some or all its waste for the reporting year.

Partial/Half-filled cell on table: Entity reported qualitative data for the reporting year or reported quantitative data from previous years.

Did not report/Empty cell on table: Entity did not report waste data.

WATER

Complete/filled cell on table: Entity reported quantitative data for some or all its water for the reporting year.

Partial/Half-filled cell on table: Entity reported qualitative data for the reporting year or reported quantitative data from previous years.

Did not report/Empty cell on table: Entity did not report water data.

ENVIRONMENTAL GOVERNANCE AND HUMAN RESOURCES

Environmental Governance and Human Resources are grouped because data on these two areas were submitted jointly via a survey.

Entities had to complete the entire survey to submit any data, which is why partial is not a category for these areas. On the table, a filled cell marks complete and an empty cell marks no response.