

Food and Agriculture Organization of the United Nations



CORPORATE ENVIRONMENTAL RESPONSIBILITY AT FAO 2022 ANNUAL REPORT

PREPARED BY

The Corporate Environmental Responsibility Team Infrastructure service (CSLI) DECEMBER 2022

FOREWORD

"As we look at the current state of our planet, at the loss of biodiversity, rising sea levels, ecosystem degradation, and the negative effects of climate change, it is clear that the time for action is now."

Director General, FAO CER Strategy 2020-2030 Launch Event, May 2021

The Corporate Environmental Responsibility (CER) team operates within the Logistics Services Division (CSL). Each year, the team carries out its Environmental Inventory Exercise to measure the environmental footprint of FAO. Our annual report presents the results of this exercise, and highlights the varied sustainability initiatives that have been implemented across FAO during the reporting year. Striving for continuous improvement, it also outlines some of our projects on the horizon.



While the core CER team is quite small, all of us in FAO are essential to the sustainability efforts of the Organization. Therefore, every employee of FAO is a member of the sustainability team in their own right, and everyone has their own essential part to play in meeting our ambitious targets. Together, we are greater than the sum of our constituent parts. The journey ahead, towards the realization of FAO's Corporate Environmental Responsibility Strategy goals, will be fraught with many challenges. I have no doubt that we will rise to them, in every step, and in every small action that we take.

The greatest resource we have in meeting these challenges is each other. The green champions of FAO are a fountain of new ideas and innovation, and constantly drive us to walk the talk, and to go above and beyond. Such is their way. FAO's achievements are their achievements, and the annual CER report serves as a testament to their spirit. Our colleagues never cease to inspire me, and I am proud to showcase the achievements we have made across FAO.

Rodrigo de Lapuerta Director, CSL Division

MEET THE CER TEAM



Tina Mittendorf Head of CSLI, FAO CER Focal Point



Pablo Sanchez Ortega Environmental Engineer



Stefano DiFilippo Facilities Management Officer



Christopher Breen Environmental Specialist



Giulia Cavo Energy Engineer



Shashank Bhattarai Infrastructure Engineer

SCALING UP

With a new **UN Environment Programme (UNEP) report** outlining that the world is close to irreversible climate breakdown, with no credible pathway to 1.5 °C in place due to inadequate progress on cutting carbon emissions, FAO hopes to be part of a larger scaling up on global climate ambition.

To walk the talk and to play its part, this reporting year has been defined by a discernible increase in the scope and ambition of the FAO Corporate Environmental Responsibility (CER) Team, which compliments an increased uptake and acknowledgement of the importance of the **Corporate Environmental Responsibility Strategy 2020-2030** throughout the Organization. Similarly, at the ground level, there is an ever-growing grassroots movement dedicated to sowing and nurturing the seeds of sustainability throughout FAO. We realize that only by fostering this growth and encouraging it will be able to reach our Organization's targets, and our societal goals more broadly.

CALL FOR EXPRESSION OF INTEREST

An increasing number of FAO offices have shown interest in the installation of solar panels and energy efficiency initiatives, having seen the great success of similar initiatives already in place in a number of Country Offices. Since 2018, the CER team, in **collaboration with the UNDP Green Energy Team**, have installed solar photovoltaic (PV) systems in FAO offices in Nepal, Djibouti, Ghana, Mauritania, Uganda, and Jordan. These resounding successes in Country Offices have accrued significant cost and emissions savings. In fact, FAO now has an average of **2-3 solar system installations per year**.

To capitalize on this momentum, FAO's CER team launched a **Call for Expression of Interest: Energy Efficiency and Sustainability in FAO Decentralized Offices (DOs)**. This has allowed country offices to submit project proposals concerning energy efficiency measures, in order to receive technical and potentially financial support. Approximately 22 country offices responded to the call, with around 37 distinct proposals. Around 50 percent of these are proposals for solar PV systems, while other projects include LED lights, electrical system assessments, replacement of AC units and occupation sensors. The proposals have been evaluated and ranked accordingly, and 22 projects across 14 DOs have been selected to apply for CapEx funding. This is a great step towards further promoting energy efficiency and improving the prevalence of renewable energy in the Organization. Preliminary estimations indicate that these projections will save around **2 827 038.87 kgCO2 over 10 years** (3.6% of absolute reduction needed in buildings to achieve CER Strategy 2020-2030 target), while reducing fuel consumption by 32 930 liters of diesel annually and grid dependency by 489 063 kWh annually.



ENVIRONMENTAL REPORTING

For the latest environmental inventory exercise, 228 FAO Offices from 131 countries reported their environmental data. This represents a 3 percent increase in participation compared to the previous year, showing a positive trend in engagement with sustainability at FAO, and reflecting the increasing outreach efforts of the CER team

Emissions reductions seen in the previous reporting year continued in 2021 (Figure 1). In 2021, total FAO emissions were **19 251 tCO2e**, or 1.39 tCO2e per capita, which is a reduction of 15 percent relative to 2020 and 67 percent lower than the 2018 baseline established in the CER Strategy 2020-2030. Across the board, emissions associated with FAO facilities, purchased electricity, stationary combustion, and refrigerants, are all down by significant percentages relative to the 2018 baseline. Air travel, the largest source of FAO emissions (8 063 tCO2e in 2021), decreased by 7 percent relative to the previous year and by 72 percent compared to 2018, while for non-air travel (1 347 tCO2e) this was a 9 percent and 80 percent reduction respectively.

As in 2020, many of these reductions are due to the restrictions on travel and building occupancy that arose due to the COVID pandemic. However, this has also been an illuminating experience, and has demonstrated what is possible in terms of emissions reductions when our collective habits are changed. FAO intends to capitalize on the opportunity presented by these drastic reductions, the lessons learned, and the new capacities developed, to ensure emissions remain low.



Figure 1: FAO GHG emissions (absolute tonnes CO2e emissions)

Apart from emissions, FAO has also seen a decrease in other environmental parameters (Table 1). For the year 2021, total waste volume has continued to decline by 7 percent relative to the previous reporting year, and by 43 percent relative to the 2018 baseline.

Other parameters, such as water consumption, have instead shown a slight increase. FAO's total water footprint from 2021 is 129 604 862 litres, which represents an increase compared to the previous reporting year and compared to the 2018 baseline. This is due to an increase in the resolution of environmental reporting across FAO. The CER Strategy 2020-2030 specifically targets an increase in reliable data on water consumption and treatment and a 10 percent reduction in per capita water consumption by 2030. Therefore, this will be an area to target for improvement in the future.

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Reporting	HQ + 220 DOs		HQ + 221 DOs			Sustainabe procurement
Indicator	Total water (l)	Water per capita (l)	Total waste (kg)	Waste per capita (kg)	Recycling rate (%)	practice prevalence (%)
Field	111 907 862	12 840	768 198	88	7 %	45.04
All FAO*	129 604 862	11 206	1 002422	87	23 %	45 %

 Table 1: FAO's waste and water footprint, and prevalence of sustainable procurement practices

 * Including reporting locations + HQ

CER STRATEGY 2020-2030

The implementation of the CER strategy will be an iterative process. To ensure that the working group for the CER Strategy 2020-2030 implementation is well placed to address dynamic challenges as they arise, group meetings between the environmental focal points of regional offices and workstreams take place biannually to report on progress, challenges, and next steps. This is further underpinned by dedicated one-on-one meetings, to increase engagement and ownership of the strategy workplans.

To provide an easy reference for strategy implementation status, the CER team has developed a **dashboard** that reflects the progress of the workplans prepared and submitted by the strategy focal points, who will be able to use the tool to track and compare progress, and to identify areas for improvement. Strategy implementation progress currently stands at 56.8 percent.



Similarly, the new **Country Office Management & Monitoring Tool (COMMIT)** is a recently released corporate tool which allows Country Offices to assess their performance across a variety of parameters. Environmental performance indicators, including on emissions, have also been integrated into this tool, to give an extra layer of visibility to these metrics.

ACHIEVEMENTS

ACHIEVEMENTS IN HQ

BEHAVIOURAL SCIENCE



Behavioural science can offer simple, cost-effective, and subtle interventions to help people align with their goals and values. In the FAO context, this can help us understand the factors influencing employee behaviour. In partnership with the FAO Office of Innovation (OIN), as well as the Food and Nutrition Division (ESN), **two behavioural science pilots** were launched in FAO Headquarters (HQ), focusing on **improving proper recycling of waste**, and on **increasing the purchase of healthy items** in the FAO cafeteria. Ideation and design around a further project on **reducing air travel** is also currently underway.

Results from the waste project showed that modifying bin signage, introducing behaviourally-informed graphics to aid people in choosing where to place certain items, led to a **78 percent increase** in the number of items that staff correctly sorted, as compared to the existing signage. Similarly, the introduction of subtle new signage and menu designs, designed to highlight healthy food items, led to a small, but statistically significant increase in the relative proportions of healthy snacks and items purchased in the FAO cafeteria.

The findings from these projects will be used to inform FAO efforts to stimulate sustainable behaviour changes among FAO employees.

AIR CONDITIONING LIMITS



To constrain expenses and limit CO2 emissions, the FAO Infrastructure Service (CSLI) has instituted **default temperature settings in HQ of 25°C in summer and 19°C in winter**, in line with other UN agencies. <u>Changing the air</u> <u>conditioner temperature by even 1°C could reduce the</u> <u>amount of electricity used by almost 10 percent</u>.

By applying this measure, CSLI estimates that FAO will save roughly **96 000 EUR/year and 296 880 kgCO2/year.**







ACHIEVEMENTS









FAO GARDEN INITIATIVE

In order to increase staff wellbeing, and to enhance greenery and biodiversity at FAO HQ, a new HQ Garden project has been implemented. More than **3500 plants** are being installed, consisting mainly of Mediterranean plants, as well as some refined ancient varieties of roses and bulbs.

Having plants feature prominently in the workplace can improve air quality, workplace satisfaction, as well as productivity and mental fortitude. Additionally, these plants will also attract a large variety of insects, including bees and butterflies, allowing FAO Headquarters to **promote local biodiversity**.

GREENING THE FAO FLEET

To increase the prevalence of electric vehicles (EVs) in FAO's fleet, CSLI has developed a plan to **replace two traditional combustion engine vehicles in HQ with EV models**

The adoption of EVs brings benefits such as increased energy efficiency and reduced local pollution and is promoted in the CER Strategy 2020-2030. It is estimated that <u>13 percent of new cars sold in 2022 will be electric</u>, attesting to their increasing popularity. <u>15 percent of global emissions come from road</u> <u>transport</u>. To align with a 2050 Net Zero Emissions target, EVs will therefore play a crucial role, where feasible and sensible.

EIGHTH FLOOR CAFETERIA

The new eighth floor cafeteria is now open, providing a wonderful meeting point for staff in FAO Headquarters. To ensure that the design also incorporated sustainability considerations, **energy-saving windows** were installed, along with **LED lighting fixtures** throughout and **motion-sensors** in the restrooms and corridors.

The cafeteria will provide a new focal point for colleagues to gather, exchange ideas, and learn from each other.

ACHIEVEMENTS IN FIELD OFFICES



New solar system in FAO's Regional Office for Asia and the Pacific

On their own initiative, the FAO Regional Office for Asia and the Pacific (FAO RAP) completed a solar PV project on the 13th of September. The 132.84 kWp grid-tied system was installed on the roof of two buildings in the compound, as well as the car park. It is expected to result in 20–30 percent annual energy savings, reducing around 80 tCO2 per year. The new system will help reduce the environmental impact of FAO RAP and serves as an example to other offices to walk the talk.

"Thanks to our new solar PV system, RAP has been able to generate electricity from a renewable energy source and save expenses up to 50 percent! The RAP team takes pride not only in strengthening environmental awareness among staff, but also in taking these extra, proactive efforts to avoid a climate catastrophe"

ENERGY PROJECTS



Jong-Jin Kim, Assistant Director-General and Regional Representative

In **FAO**'s **Subregional Office for Southern Africa** in Zimbabwe, after the success of an initial 25kWp hybrid solar system with a 38.4kWh battery, the office is now scaling up. In phase two of the project, the battery capacity will be doubled from 38.4 kWh to 76.8 kWh. In phase three, the office aims to solarize the rest of the building to supply all electrical loads except kitchens, air conditioners, and heaters, increasing the system array capacity by 25.45kWp and adding a 20Kw inverter system and another 38.4 kWh battery bank. New systems in FAO Country Offices in **Burundi** (a 40 kWp solar PV hybrid solution with a 81kWh battery bank), **Sierra Leone** (a 15 kWp system with a 42 kWh battery that will provide a 37% renewable fraction), and **Congo** (a 15 kWp system with a 34 kWh battery that will provide a 71% renewable energy fraction for the office) are also underway, estimated to cumulatively save 46 tCO2e annually. In FAO's **Sao Tome and Principe** Country Office, the design of a 12.5 kWp system with 12 kWh batteries has been approved and is awaiting procurement and shipment of components.

Thanks to the continued collaboration with the UNDP Green Energy team, a 13 kWp grid-tied solar system has been completed in the **FAO Jordan Office**. The system was inaugurated with a hybrid event on the 13th of June. Attendants included Jordanian Ministers, the General Manager of the Jordanian Electric Power Company, and representatives of FAO senior management. The system further compliments <u>a number of sustainability measures</u> <u>being undertaken by the office</u>, including the installation of LED lights, awareness raising efforts to lower water consumption, and the procurement of electric vehicles.





CER PHOTO CONTEST

The theme of World Environment Day 2022 was **#OnlyOneEarth**, focusing on sustainable consumption patterns and behaviours towards living in harmony with nature. In order to celebrate this sentiment, the CER team launched a sustainability photo competition to understand how FAO employees 'see' sustainability in their everyday contexts. The top three entries came from Employees in Bangladesh, Bangkok, and the Dominican Republic, and presented subjects of sustainable agriculture, cross-generational environmental stewardship, and office

SETTING AN EXAMPLE

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For example, the **FAO Dominican Republic Representation** has implemented their first Corporate Environmental Responsibility Plan 2022-2023. The plan focuses on waste recycling, improving paperless office initiatives, strengthening sustainable procurement practices, and eliminating the use of single-use plastics.

© MD. MASUD RAHAMAN Winner of the photo contest

The green team of the **FAO Regional Office for Africa** has also begun developing an Action Plan, focusing on energy, waste, water, travel, and awareness raising. It utilises a phased approach, with priority going to energy and waste activities.

Similarly, **FAO Samoa** has also adopted a phased approach to their sustainability efforts. They are developing communication materials to create a dynamic and participatory approach to implementing sustainability measures in the office, and to support offices in Pacific nations more broadly.



The development of the new mandatory corporate environmental responsibility training course is now underway. The CER team is working in collaboration with the Human Resources (HR) division and two designers to create an engaging training that is due to be released in early 2023.



With the pilot call for interest now complete, the CER team, pending funding approval, will begin the development of these projects, based on feasibility. The projects will be implemented over a two-year period by order of priority.



