



CORPORATE ENVIRONMENTAL RESPONSIBILITY AT FAO

2023 ANNUAL REPORT



Prepared by

The Corporate Environmental Responsibility Team Infrastructure Services (CSLI) - Logistics Services (CSL)

FOREWORD



"Celebrating the remarkable achievements of the CER Team in 2023, we continue to pave the way towards a greener future. Only by fostering collective engagement of all FAO divisions and offices in the field, can we meet our organizational targets. Together, we continue to "walk the talk" and set an example for a more sustainable and environmentally conscious FAO".

> Rodrigo de Lapuerta Director, CSL Division

UN SUSTAINABILITY STRATEGY 2020-2030

The Strategy for Sustainability Management in the UN System 2020-2030 aims to integrate environmental and social sustainability dimensions in a systematic way by 2030. FAO is doing its part to contribute to these common efforts, adopting best practices and innovative initiatives in order to walk the talk and contribute to the goals of this UN Strategy.

At FAO, the UN Strategy for Sustainability Management is implemented through our dedicated <u>Corporate</u> <u>Environmental Responsibility (CER) Strategy 2020-2030</u>. This reporting year, the FAO Corporate Environmental Responsibility (CER) Team experienced substantial growth in scope and ambition, indicating an increased recognition of its significance within the Organization. Our initiatives span from implementing the CER strategy to engaging in interagency discussions on travel reduction, pursuing entity-wide environmental management systems and renewing our environmental policy.

MEET THE CER TEAM



Tina Mittendorf Head of CSLI, FAO CER Focal Poin



Riccardo DelCitto Energy Engineer



Stefano DiFilippo acilities Management Office



Christopher Breen



Giulia Cavo Energy Engineer



Ana Reñones González Communications Specialist

ENVIRONMENTAL INVENTORY



FAO's total carbon emissions for 2022 are 32 704 tonnes CO₂eq. To put this into perspective, this quantity is equivalent to the carbon absorbed by approximately 1.48 million trees. Overall, FAO emissions levels have rebounded by 70 percent in 2022 compared to the previous year.

Emissions from stationary combustion have notably increased. Power outages and other factors have contributed to these increases, underscoring the need for accurate reporting and exploration of hybrid solar photovoltaic systems to supply FAO facilities with clean energy. Predictably, air travel emissions have increased post-pandemic. **Air travel is FAO's largest source of emissions,** so there is an urgent need to reduce the volume to align with our reduction targets and ensure a sustainable future.

The increase in building-related emissions has been partly offset by a **decline in electricity consumption emissions.** The trend indicates a shift towards more sustainable and efficient technologies. FAO offices are implementing practical measures to reduce their emissions and environmental footprint, including transitioning to the use of LED lights and motion sensors, and introducing water conservation measures such as low flow regulators.

	(Ū					
Reporting	FAO headquarters + 186 Decentralized Offices								
Indicator	Total water (m3)	Water per capita (m3)	Total waste (kg)	Waste per capita (kg)	Recycling rate (%)	practice prevalence (%)			
Field	128 838	18	762 644	106	6%	62%			
All FAO*	158 778	16	1064647	108	23%	0270			

Table 1: FAO's waste and water footprint in 2022.

* Including reporting locations + headquarters

The above table provides this year's values for water consumption and waste. **Water consumption at reporting locations has increased by approximately 18 percent** compared to the previous year, while **waste has shown a slight increase of around 6 percent.** This increase is a logical result of the gradual return to offices in 2022 following the COVID pandemic. Notably, gathering comprehensive and precise data on both waste and water has historically posed challenges. To address this, the CER team is intensifying its efforts to acquire more accurate data and estimations from country offices and is advocating for the installation of both water meters and scales to measure waste generation. This will enhance data resolution.

CER STRATEGY 2020-2030



In 2022, FAO emissions were 38.2 percent lower than the 2018 baseline, well placed to achieve our 45 percent emission reduction goal by 2030. However, our journey in implementing the CER strategy is continuous, and despite our progress toward the 45 percent goal, we must ensure that levels do not continue to rise, underscoring the importance of continuous efforts.

The CER team created a dashboard for strategy implementation status, allowing focal points to track, compare progress and identify areas for improvement in their workplans. **Strategy implementation progress currently stands at 58.8 percent.** This is lower than the last reporting year, but it represents a greater resolution of data in terms of key action steps and progress indicators developed by FAO Regional Offices and work streams.

CER Strategy Progress			Division Avg. progress 10.5% KAS Avg. progress 0%													
No. of KAS 200					HQ		RAF		RAP		REU		RLC		RNE	
KAS Avg. progress	As of:	: Nov-2023	Regions Avg. progress 1.8%	Division	No. of KAS	KAS Avg. progress										
50.070	Key A	Key Action Step (KAS) by Region		CSG	5	49.2%										
	KAS % completion 0-30		0-60 🖩 60-100 📕 Completed	CSH	5	66.0%										
Deadline				CSI	11	33.4%										
All 👻	HQ		63	CSL/Facilities	16	37.7%										
Region	0.514			CSL/Governance	4	60.8%										
All *	REU	38		CSL/Procurement	6	58.0%										
Division	RAP	32		CSL/Travel	7	18.6%										
All	RLC	29		Events			1	25.0%	- 4	93.8%	3	66.7%	2	44.5%		
Aii •				Facilities			6	81.0%	- 11	88.4%	17	67.5%	15	78.4%	11	73.0%
	RNE	21		Human Resources			- 4	22.5%	- 4	43.5%	1	100.0%	2	20.0%	- 4	0.0%
	RAF	17		π			2	16.5%	6	80.5%	- 4	91.8%	3	88.7%	- 4	91.8%
				осв	9	63.8%										
				Procurement			2	58.5%	2	50.0%	7	11.4%	2	75.0%		
				Programming									2	100.0%	2	50.0%
				Travel			2	31.5%	5	55.0%	6	100.0%	3	16.7%		

During the Working Group meetings, focal points presented **sustainable initiatives across various regions.** In Bangkok, **the FAO Regional Office for Asia and the Pacific (RAP)** made significant strides, focusing on waste reduction and solar power, now targeting greener events and reduced travel. **The FAO Regional Office for Latin America and the Caribbean (RLC)** prioritized a full building renovation with solar integration. Headquarters departments, like IT, are striving for a paperless environment, while HR integrates CER questions into hiring processes. These efforts highlight a commitment to sustainable practices under the CER strategy.

ACHIEVEMENTS IN HEADQUARTERS

FOOD WASTE REDUCTION INITIATIVE

A new food waste monitoring system has been set up in FAO headquarters. Launched during the World Food Forum (WFF), it aims to measure the type and quantity of food waste being generated at kitchen and consumer phases in canteens. Employees were actively **sorting meal leftovers into four distinct categories**, using smart scales that automatically record the weight. These four categories were used to align with the aggregated groups developed for the <u>FAO State of Food and Agriculture Report (SOFA) 2019</u>.



During the first month since its implementation, a total of 1 372 kg of food waste has been generated in FAO canteens. This corresponds to around 1 800 kg CO₂eq, which is approximately the carbon absorbed by around 72 trees. The highest volumes of food waste were generated by fruits and vegetables, while the highest emissions are associated with cereals and pulses. Each customer contributed an average of 8 grams of plate leftovers daily (17 grams during the WFF).

8 g per capita

1 372 kg total waste

1 800 kg CO₂eq

Notably, **the majority of food waste in FAO is associated with the kitchen side**, which accounts for **around 80 percent** on average of the overall food waste at FAO headquarters. This highlights the need of addressing food waste not only at the consumer level but also during the preparation of food in the kitchen.





ACHIEVEMENTS





FAO SWAP DAY

The Swap Day in FAO headquarters was a partnership between the Office of Climate Change, Biodiversity and Environment and the Logistics Services Division. This green event gave the opportunity for FAO colleagues to **give a second life to their unwanted items.** The Flag Hall witnessed active participation, with over 80 colleagues donating preloved items for recycling and exchange among peers. Clothes, books, kitchenware and ornaments were all included among the 600 items on offer. FAO's unclaimed bikes were among the quickest items to be adopted.







UPGRADING LIGHTING SYSTEM

The transition to dimmable LED lights in the **Plenary Hall** drastically reduced power demand from 96 kW to 25 kW, yielding significant savings. Likewise, the adoption of dimmable LED fixtures in the **Red Room** halved its power demand, improving efficiency and reducing energy consumption. These new lights also feature LED headlights specially designed for TV recordings. Notably, from October to December 2023, these transitions in both spaces led to substantial results: energy savings of 19 994 kWh, cost reduction by EUR 4 598 and a decrease in emissions by 5 584 kg CO₂. The **Green Room** is next in line for a lighting upgrade.



ROOFTOP GARDEN

The innovative <u>FAO rooftop garden</u> marks the first installation of its kind within a UN building. It is a prototype agro-ecological laboratory utilizing **artificial intelligence (AI) to process ground sensor, water and weather data.** Its aim is to develop an intelligent automation system where plants communicate their water and nutrient needs, ensuring optimal growth. Furthermore, these plants attract diverse insects like bees and butterflies, **promoting local biodiversity** at the FAO headquarters. The crop varieties cultivated will rotate every three months and FAO is committed to donating all harvested vegetables to local associations.

ACHIEVEMENTS IN FIELD OFFICES



RNE WATER CONSERVATION



The Regional Office for Near East and North Africa (RNE) set a benchmark for sustainability enhancement within FAO this year. Through various measures, such as installing an automated irrigation system, RNE is promoting efficient water usage. Additionally, their installation of flow regulators in water taps led to a substantial reduction of around 60 percent in water flow.

Moreover, RNE's transition to LED lights and the installation of electricity meters for consumption monitoring are indicative of their commitment to sustainability.

RAP FOOD COMPOSTING



The Regional Office for Asia and the Pacific (RAP) has reactivated a food composting campaign that started back in 2018, because of the current increase in the number of employees working in the office after the COVID-19 crisis. All RAP personnel, including the canteen workers, contribute to a better management of organic and food waste by segregating food scraps and other recyclable materials. This compost from organic waste is then used in the RAP's garden.



CUBA LIGHTING PROJECT



Finally coming to fruition, LED fixtures donated by Aura Taitle for the **FAO Office in Cuba** have arrived and have been successfully installed. Preliminary calculations indicate a reduction in electricity consumption of up to 70 percent. This advances efforts to improve energy efficiency in Country Offices and highlights the importance of collaborative approaches in the field of sustainability.



ENERGY PROJECTS

Since 2019, **FAO has installed 11 solar systems across Decentralized Offices**, including the FAO Regional Offices for Africa in Ghana and for Asia and Pacific in Thailand, along with FAO Country Offices in Mauritania, Uganda, Jordan, Togo, El Salvador, Burundi, Congo, Sierra Leone and Zimbabwe. Among these, seven systems were developed collaboratively with UNDP, while the remaining four were entirely developed in-house.

The seven solar systems installed between 2019 and 2022 **collectively generated 283 MWh during 2023**, resulting in savings of 113 tonnes of CO_2 and USD 51 481 annually. Additionally, the five systems installed in 2023, along with the two under construction in Eritrea, are projected to produce an extra 290 MWh/year, contributing to an annual saving of 182 tonnes of CO_2 and USD 116 500.

FAO Country Offices have funded **four additional PV systems in Botswana, Bangladesh, Madagascar and Guinea Bissau.** These are currently under construction or in the design phase, with technical assistance from the CER Team.



THE WAY FORWARD



MID-TERM REVIEW OF CER STRATEGY 2020-2030

The CER Strategy will undergo a mid-term review in 2025, marking halfway to the 2030 goals. The CER team is collaborating with focal points to enhance the Strategy's implementation. Our review will prioritize areas such as travel, sustainable procurement, Environmental Management System (EMS) implementation and phasing out ozone-depleting refrigerants.



SCALING UP: FOOD WASTE REDUCTION PLAN

The CER food waste project initiated in FAO headquarters is just the beginning. The next step is to replicate this pioneering initiative across Country Offices. This expansion will enable us to further reduce our environmental footprint and inspire even greater change worldwide.

