



Food and Agriculture
Organization of the
United Nations



CORPORATE ENVIRONMENTAL RESPONSIBILITY AT FAO

2019 Report



FAO Corporate Environmental Responsibility

The Food and Agriculture Organization of the United Nations (FAO) recognizes the impact of its internal operations on the environment and continues to engage in projects to enhance sustainability in its premises and limit its contribution to climate change. In particular, the Infrastructure Service with its Corporate Environmental Responsibility (CER) Team is committed to measure, reduce and offset the emissions related to FAO facilities, travel and procurement. This report presents an overview of FAO's environmental footprint and sustainability efforts made in 2019. Among others: solar projects to reduce electricity consumption and improve energy efficiency in FAO premises, single-use plastics ban, sustainable procurement practices implementation, etc. Good cooperation with local staff in the decentralized offices (DOs) has enabled to expand the projects beyond the scope of headquarters.



UN Strategy for Sustainability and the Climate Action Summit

The United Nations (UN) system, through the Greening the Blue network and the UN Environment Management Group (EMG) has drafted its first Strategy for Sustainability Management, which covers the years 2020-2030 and is designed to raise the UN's ambitions on sustainability and ensure greater system-wide coherence. The document has been endorsed by the High Level Committee on Management (HLCM) and the Chief Executives Board (CEB) last spring, and will be proudly presented at the next Climate Action Summit in September. This Summit is a crucial meeting for UN agencies, governments, the private sector, civil society, local authorities and other international organizations to develop ambitious solutions and discuss actions and targets for the next years to come in order to accelerate the implementation of the Paris Agreement.

The UN strategy covers five environmental impact areas (greenhouse gas emissions, waste, water, air pollution and biodiversity) and six management functions (procurement, human resources, facilities management, travel, events and ICT). The main aim is to create a common vision for internal sustainability and support the systematic integration of environmental considerations into management functions.

The Infrastructure Service has been working in close collaboration with the Sustainable UN (SUN) team and other sister agencies (UNDP, WFP and IFAD), and has been aligning its efforts with the UN targets by working on drafting a FAO Sustainability Strategy for 2020-2030 that could set new ambitious environmental targets for the whole organization.



CLIMATE ACTION SUMMIT 2019



A RACE WE CAN WIN

#GREENINGTHEBLUE

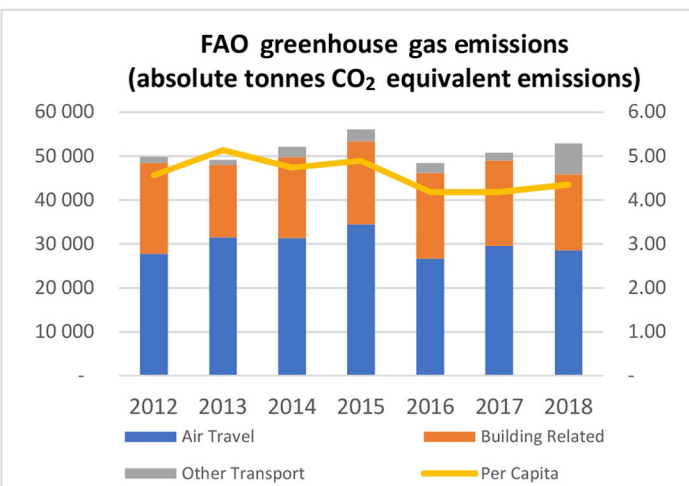


Environmental reporting: greenhouse gas emissions, water use, waste management and sustainable procurement

The environmental inventory exercise for 2018 relied on a higher data accuracy and produced more precise greenhouse gas (GHG) emissions results than previous years.

The graph on the right shows the trend of GHG emissions from electricity consumption, fuel usage, refrigerants and travels for the past years and the information below summarizes data on water, waste and sustainable procurement.

This year we registered a higher participation rate and 89 percent of the targeted DOs reported on their emissions (110 countries). The increase in total FAO CO₂e emissions is due to the inclusion and account of all local travels (by flight, train and car), even though we witnessed a reduction of 6 percent in total number of Travel Authorizations compared to 2017. A total amount of 49 879 tonnes of CO₂e will be offset through the Clean Development Mechanism and FAO will be climate neutral for the fifth consecutive year.



Water Usage



105 reporting DOs
(91% total personnel)
11 514 ℓ per capita
121 393 950 ℓ total

Waste Management



106 reporting DOs
(91% total personnel)
192 kg per capita
51% recycling rate

Sustainable Procurement



53% of reporting DOs implements sustainable procurement



Environmental Management System in the FAO Regional Office for Asia and the Pacific

The FAO Regional Office for Asia and the Pacific (FAO RAP) in Bangkok has officially implemented an Environmental Management System (EMS) and integrated environmental considerations in its internal management. The objectives include reducing the electricity consumption by 10 percent (of kWh used), achieving a 10 percent decrease in the amount of prints and paper used, and a 5 percent reduction in CO₂e emissions from energy usage. From 1 July 2019, the following actions were implemented to meet the set targets:



- waste management and reduction: recycle paper, compost food waste, ban plastic bottles, ban use of plastic cutlery and food containers, recycling and installation of e-waste bins
- reduction of electricity and energy usage: moderate air conditioning (AC) temperature between 24 °C and 25 °C
- reduction of central AC running hours (7.00-16.00 and week days only), switching off AC systems and lights at lunch time
- reduction of paper use: print double-sided or avoid printing, use of double A sustainable green papers for printing



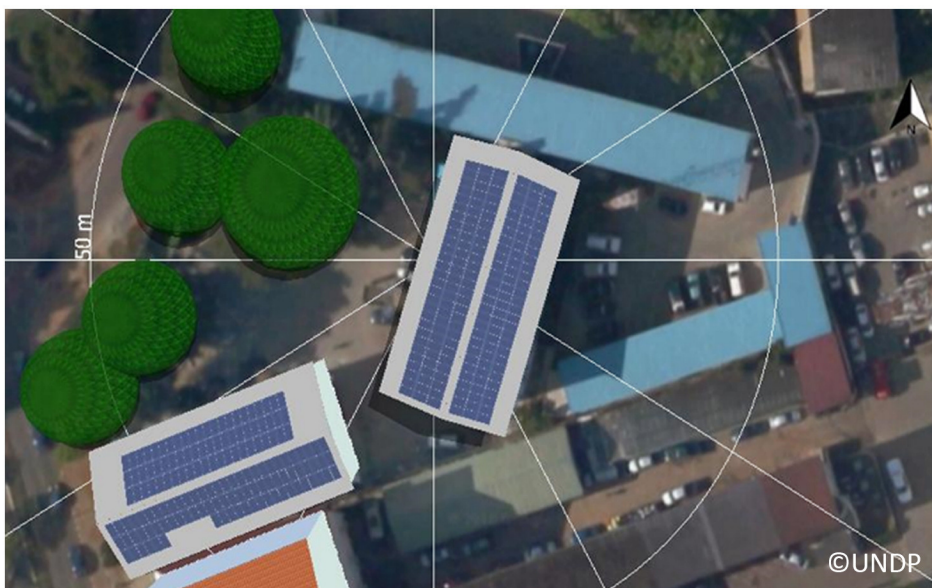
Reduction efforts in decentralized offices

Three solar photovoltaic (PV) projects in Ghana, Mauritania and Uganda are under development at the time of writing and will be finalized by the end of the year.

The solar project in FAO Mauritania country office (20 kWp and 36 kWh battery storage) will enable the office to get rid of the diesel generator for power failures, becoming the first example of FAO premise where business continuity is assured with a mix of clean energy and electricity from the grid. The renewable energy fraction of 74.4 percent is estimated to enable total savings of 15 tonnes of CO₂e and USD 4 700 per year.

The FAO Regional Office for Africa (FAORAF) in Ghana is installing a grid-tied solar PV system of 105 kWp thanks to a CapEx investment of USD 135 000. The system is estimated to provide a renewable fraction of 45 percent and save approximately 33 tonnes of CO₂e and USD 20 000 every year.

Finally, in the FAO country office in Uganda a 20 kWp solar system with 15 kWh battery storage will be integrated with a pre-existing 60 KVA generator in order to supply power during normal operation and outages, and reduce the reliance on the diesel generator. This will allow to approximately save 20 tonnes of CO₂e and USD 5 500 per year, with a renewable fraction of 31 percent.



Moreover, numerous FAO premises have made some improvements in the sustainability practices in their offices. FAO Palestine has banned single-use plastics and substituted it with plates, glasses and a dishwasher. FAO Ethiopia, Tanzania and Panama stopped purchasing plastic water bottles during workshops and meetings and now provide biodegradable items, jugs and glasses instead. In addition, they also installed water dispensers in the buildings to encourage staff to use their refillable containers.

FAO Panama installed movement sensors for lights in meeting rooms, restrooms and common areas and a timer for the AC and office lights to eliminate superfluous consumptions.

Energy savings LED light bulbs replaced normal lighting in FAO Venezuela and Guatemala.

On a more policy oriented and behavioural change perspective, FAO Ecuador and Trinidad and Tobago are focusing on enhancing good practices between employees: they designed guides for good environmental practices and documents available to the staff on how to handle and dispose waste. FAO Palestine staff is encouraged to reduce the use of paper by receiving a monthly report on their use of it.



Reduction efforts at FAO headquarters

Data centre

FAO headquarters is also reducing energy consumption by diminishing the size of its data centre, removing some servers and transferring the data into the Cloud. A reduction of 25 percent on the total space and a reduction of the total number of machines enabled total energy savings of 276 000 kWh, EUR 40 000 and 88 tonnes of CO₂e per year. The plan is to further reduce the number of machines, for more consistent energy savings.

DATA CENTRE	May 2017	May 2019
Area (m ²)	299	225
Estimated consumption for conditioning (kWh/month)	38 990	28 330
Racks consumption (kWh/month)	52 023	38 765
Tot savings (kWh/year)	276 000	

Air conditioning system

In the past few years, 24 old AC systems were substituted with new and more efficient ones. In May 2019 other 10 new systems were installed and within October 2019 other 23 new systems will be introduced, resulting in a total amount of energy saved of 164 343 kWh and estimated 87 266 kg of CO₂e saved in a one year time scale. The new systems use the refrigerant gas R410A, with a lower global warming potential (GWP) than the R417A, currently used for the existing systems and that substituted the highly pollutant R22, which was banned by the Kyoto Protocol.

Operational procedures for using air conditioning and heating have been in place for many years at FAO headquarters. For example, during the summer colleagues in offices with autonomous air conditioning systems are asked to maintain a temperature between 24 °C and 26 °C. In fact, setting it lower will not cool down the room faster and will use 4 percent electricity more per degree cooler.



Sustainable catering and single-use plastic ban at headquarters



From January 2019, FAO headquarters has a new catering service that provides 70 percent organic food, vegetarian and vegan options and menus based on seasonal ingredients. Some products come from fair trade and social farming to align with FAO's sustainability efforts. The contractor is also focusing on reducing packaging and supplying products in recyclable packaging.

Furthermore, FAO is progressing in the fight against plastic pollution and working on the single-use plastic ban. In the past decade, FAO headquarters has managed to reduce the amount of plastic bottles sold by more than 75 percent, with the installation of water fountains.

For the year 2019, the main achievements include:

- from March 2019: removal of plastic straws and single-use plastic bottles from bars and catering locations, replaced with PLA, glass or recyclable cans
- from June 2019: reintroduction of FAO logo bottles sold in the FAO shop, to incentivize staff to abandon single-use plastic



Greening the International Symposium on Agricultural Innovation for Family Farmers

The International Symposium on Agricultural Innovation for Family Farmers was held in Rome in November 2018 to promote exchange of knowledge and agricultural innovation. One hundred ten participants attended the symposium and some travelled a long way to FAO headquarters.

Travel-related GHG emissions were offset beginning of 2019 to make the event climate neutral, by purchasing Certified Emission Reductions through the UNFCCC Climate Neutral Now platform and funding a project in India that transforms industrial residues into renewable energy.

