Food and Agriculture Organization of the United Nations

FAO Corporate Environmental Responsibility Strategy 2017 – 2020

Contents

Acknowledgements

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Key messages

In 2007, the UN Secretary General Ban Ki Moon called the United Nations to contribute to global efforts to safeguard our planet and climate. In succession, the Chief Executives Board for Coordination officially decreed their commitment towards this movement in October of the same year.

Since 2008, FAO adhered to the *Moving Towards a Climate Neutral UN* initiative and began its long-term collaboration with the UN Issue Management Group on Environmental Sustainability Management. The Organization has monitored the carbon footprint of its functional operations (facilities management, travel and fleet) and worked on several projects to lower its environmental impact as a whole (cumulative reduction of over 10 000 000 kg of CO_2 and over USD 1 000 000 since 2008).

On June 2016, FAO launched its Corporate Environmental Responsibility Policy to reduce and eventually eliminate its potentially negative impact on the climate. As a result, the Organization has already offset its emissions relative to 2014 and 2015.

As part of the 2030 Agenda and in line with the Sustainable Development Goals, with this Strategy FAO is committing to:

- Continue monitoring the environmental impact of its functional operations;
- Improve its ecological performance and reduce its GHG emissions by 5.4% (as compared to the 2015 baseline) both at Headquarters and in Decentralized Offices and continue offsetting the remaining emissions that cannot be reduced;
- Embrace the circular economy principle when procuring goods and services and managing waste;
- Develop Environmental Management Systems for Offices.

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Executive summary

In the past 8 years, FAO has monitored the carbon footprint of its functional operations (facilities management, travel and fleet) and worked on several projects to lower its environmental impact, in line with the *Moving Towards a Climate Neutral UN* initiative and in collaboration with the Issue Management Group on Environmental Sustainability Management.

On occasion of the World Environment Day in June, 2016, the Organization launched its Corporate Environmental Responsibility Policy "as part of FAO's commitment to reducing and eventually eliminating its potentially negative impact on the climate."[1] In line with the 2030 Agenda, FAO is committing to lower its environmental impact even further in order to fulfill the Organization's mandate and Corporate Environmental Responsibility Policy.

This Strategy includes an analysis of the current environmental performance of the Organization in the areas of Greenhouse Gas Emissions, energy efficiency, sustainable procurement, waste management and water usage. The Strategy also identifies the key steps needed to improve its ecological footprint, namely:

- Adhere to the internal Corporate Environmental Responsibility Policy;
- Continue monitoring of the environmental impacts from functional operations (i.e. Greenhouse Gas emissions, waste production, water usage) through annual Inventory exercises[2] in compliance with UN-wide standards and in collaboration with the UN Issue Management Group for Environmental Sustainable Management (IMG);
- Reduce approx. 5.4% of emissions stemming from functional operations in Headquarters and Decentralized Offices by 2020 (as compared to the 2015 baseline) through:
  -Energy use reduction measures
  -Transition from fossil-fuels to renewables;
- Continue offsetting the remaining emissions that cannot be reduced through internal funding mechanism(s), as described later in this document;
- Implement a circular economy strategy through:
  -Improved waste and water management practices,
  -Further efforts to sustainably procure goods and services;
- Develop Environmental Management Systems to systematically improve the environmental footprint of key FAO Offices.

1 *FAO Corporate Environmental Responsibility Policy*, 2016. Available at fao.org/3/a-i5690e.pdf.
2 The latest report can be found at fao.org/3/a-i6991e.pdf.

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Mandates & environmental governance

In order to fulfill the Organization's mandate and achieve its Strategic Objectives, FAO must utilize a significant amount of physical and human resources in its operations – considering there over 500 global locations and more than 10 000 personnel. These activities often carry with them environmental impacts which directly affect those most vulnerable whom the Organization strives to protect. While it is impossible to completely eliminate these impacts in the foreseeable future, there are many opportunities to reduce them.

FAO joined the *Moving Towards a Climate Neutral UN* initiative in 2008 after it was launched in 2007 by Secretary General Ban Ki-moon and consequently endorsed by the Chief Executives Board for Coordination (CEB) the following year. Many other related commitments and mandates have followed, which further solidified the continuing attention to this area.[3] Particularly, FAO institutionalized its commitment to internal sustainability with the publication of the *FAO Corporate Environmental Responsibility Policy* (Annex I) in June 2016.[4] Complementary to the *FAO Environmental and Social Management Guidelines*[5] and Climate Change Strategy[6] which covers the Organization's global projects and programmes, the Policy focuses on the environmental aspects of our functional operations (facilities management, official travel, and procurement). The three together form a comprehensive framework ensuring that any negative environmental impacts stemming from the Organization's activities are minimized.

As the scope of corporate environmental responsibility activities mainly focus on facilities, official travel and procurement, this area has generally been managed from within the FAO Corporate Services Department (CS) – although often in close collaboration with other operational areas including Energy and Tenure Division (NR), Forestry (FO), Fisheries (FI), Security, Office of Support to Decentralization (OSD), Information Technology Division (CIO), Communications (OCC), and Partnerships (OPC). The current FAO Focal Point for Corporate Environmental Responsibility works in the Infrastructure and Facilities Management branch, as designated by the Policy. Within this structure, the work is managed through several internal mechanisms:

- An Environmental Management System (EMS)[7], provides a systematic method to track and monitor activities related to environmental management and also provide guidance on prioritizing

3 Some examples: UN Global Compact, UN General Assembly Resolutions 66/288 'The future we want', GA/Res/67/226, A/RES/67/215 (para 18) 'Sustainable Development: Promotion of New and Renewable Sources of Energy', HLCM decision on "Environmental Sustainability Management in the UN System" 7-8 March 2013 and HLCM Strategic Plan 2013-2016, HLCM Strategic Plan 2013-2016.

4 *Administrative Circular 2016/15*, 7 June 2016. The document is available at intranet.fao.org/fileadmin/user_upload/FAO_Communications/ac/AC16_15.pdf.

5 *FAO Environmental and Social Management Guidelines, available at intranet.fao.org/fileadmin/user_upload/FAO_Communications/ac/AC16_15.pdf.*

6 FAO Climate Change Strategy, available at fao.org/3/a-mr738e.pdf

7 It is a set of processes and practices modeled after international standards (ISO-14001, EMAS) in-line with the UN Environmental Management System Milestones Framework. The system has been developed in response to the recommendations of the High-Level Committee on Management (HLCM) and the CEB. A recent survey on the progress of UN agencies found that FAO ranked 2nd among the 17 surveyed in its progress towards establishing an EMS.

resources and related initiatives;

- The Infrastructure and Facilities Management branch incorporates and executes projects stemming from the EMS – along with the normal branch responsibilities – through its Activity Plan. Traditional operational activities and those related to environmental management are developed together and seamlessly integrated. In this way, not only are the financial pieces considered, but also the environmental aspects are weighed – often with synergetic results.

In the past 8 years FAO, along with 52 other UN agencies – which form the Issue Management Group for Environmental Sustainability Management (hereafter known as IMG) – have strongly collaborated with UNEP and the Sustainable United Nations (SUN) group on a variety of sustainability initiatives. The collaborative efforts of the network aim to:

- Monitor the environmental impact of the UN system (through annual inventory exercises dedicated to CO_2 equivalent emissions, waste and water) through the annual Greening the Blue reports;
- Propose periodic Emission Reduction Strategies and develop/implement EMS's; and
- Ultimately implement and share best practices to lower the environmental footprint of the UN as a whole.

FAO is actively involved in the mitigation and adaptation to climate change in the agriculture sector (crops, livestock, forestry, fisheries) through the achievement of its Strategic Objectives.[8] Moreover, the FAO Council has recently endorsed the *Report of the 25th Session of the Committee on Agriculture*.[9] Particularly, this document identified sustainable production and climate change as the main priorities (among the others) for FAO's work in the Medium Term Plan 2018-21.[10] Hence, Corporate Environmental Responsibility is paramount as part of the Organization's work in supporting Member Countries to implement the 2030 Agenda for Sustainable Development as well as the Paris Agreement on Climate Change.

8 See the Strategic Objective 2 "Make agriculture, forestry and fisheries more productive and sustainable".
9 Report of the 25th Session of the Committee on Agriculture.
10 *Unedited Report of the Council of FAO*. Hundred and Fifty-fifth Session. Rome, 5 – 9 December 2016 (page 2, point 10.a).

Where we stand

FAO defines the quality of its work also by the degree to which it can reduce its impact on the environment. For this reason, since 2008 the Organization has translated its commitment to environmental sustainability into a holistic approach, which includes its functional activities. In line with several SDGs, FAO has embedded environmental protection into its daily operations and developed a vision for environmental sustainability underpinned by targets in key impact areas.

Greenhouse gas emissions

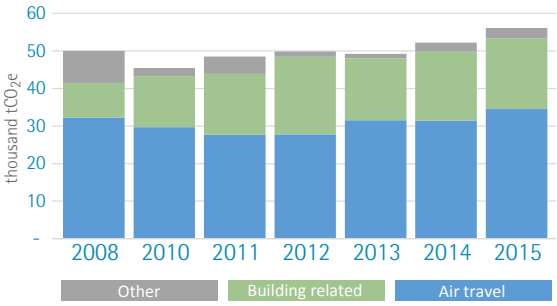
The Paris Agreement set a very ambitious agenda for the international community, and recognized the critical role of companies and organizations in accelerating the challenging transition to a low-carbon future. Climate change can also be an opportunity for growth and innovation though. FAO addresses climate change by:

- Conducting inventories of the tonnes Carbon Dioxide equivalent emissions (tCO_2e)[11] it produces;
- Undertaking projects to reduce emissions and improve efficiency of operations;
- Offsetting unavoidable emissions.

Monitoring

In order to manage something, one must be able to measure and monitor it. Since 2008, an annual GHG inventory has been conducted covering FAO's global operations (2009 data not available). The charts below summarize the Organization's emissions as absolute totals (Figure 1).[12]

Figure 1. Emissions by year (tCO_2e)



In order to understand the overall expansion of our carbon footprint throughout the years, it is important to highlight a few changes to the Organization's core business and the GHG reporting methodology.

First of all, despite an almost flat nominal budget and decline in posts overall, technical capacity in FAO has increased through the reinvestment of administrative reductions into technical posts and resources. Moreover, the Organization has remarkably invested in the process of decentralization – a key element to implement its strategy properly and to adapt its wide range of programmes and activities to a constantly changing global environment. The combination of these two factors has resulted in enhanced support to member countries through FAO Decentralized Offices (DOs), but

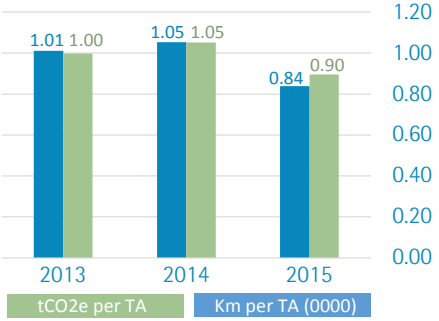
11 A greenhouse gas (or GHG for short) is any gas in the atmosphere which absorbs and re-emits heat, and thereby keeps the planet's atmosphere warmer than it otherwise would be. The main GHGs in the Earth's atmosphere are water vapour, carbon dioxide (CO_2), methane (CH4), nitrous oxide (N2O) and ozone. GHGs occur naturally in the Earth's atmosphere, but human activities, such as the burning of fossil fuels, are increasing the levels of GHG's in the atmosphere, causing global warming and climate change. "Carbon dioxide equivalent" or "CO_2e" is a term used for describing different greenhouse gases in a common unit. For any quantity and type of greenhouse gas, CO_2e signifies the amount of CO_2 which would have the equivalent global warming impact.

12 Data available at the FAO Corporate Environmental Responsibility 2016 Report.

it has also sensibly resulted in an increase of air travel (e.g. +38% Travel Authorizations, TAs in 2015 as compared to 2014), which is FAO's major source of emissions. Nevertheless, it is interesting to observe that – notwithstanding the increase in TAs – in the last few years there has been a drop in the quantity of tCO_2e emissions per TA (e.g. -20% in 2015 as compared to 2014) and travelled kilometers per TA (-15%) (Figure 2). These ratios testify that while FAO has travelled more to better fulfil its mandate, it has done so on shorter distances and with a lower environmental impact per project, in line with the environmentally friendly air travel guidelines[13] implemented throughout FAO in 2012.

Moreover, FAO has significantly improved the monitoring of all Travel Authorizations (TAs) raised at Headquarters (HQ) and in DOs. Following the implementation of an Enterprise Resource Planning system (EPR) in November 2012, the recording of International travel has moved from the legacy system (Atlas) to the Oracle based ERP system, known in FAO as the Global Resource Management System (GRMS).

Figure 2. tCO_2e emissions and Km per TA



13 This relates to: the director-general's bulletin 19 September 2013 No. 2013/54 "Official Travel of FAO Staff" which sets limitations to amount of official travel; the FAO Manual section 401.3.32 Travel by Air entitlement to economy vs. business class travel rule.

The GRMS system was rolled out to FAO's decentralized offices in 2013 and was fully deployed and stabilized in early 2014. While awaiting the final deployment of GRMS for local air travel (i.e. in-country travel purchased by DOs) which should take place in 2017, we can already observe a significant improvement of the reporting methodology and consequent increased reliability of the data.

Previous systems – e.g. Atlas Travel – did not allow for capturing the full TA itineraries but only information about major destinations/ airports; hence portraying only a partial picture of FAO's CO_2e emissions from air travel. On the contrary, having a more detailed and granular understanding of each trip through GRMS ultimately contributed to an overall increase in travelled km and CO_2e emissions.

Lastly, while the greatest bulk of emissions derives from air travel, a significant portion is due to FAO's global facilities. In order to better keep track of the energy situation in DOs and ultimately identify offices where it is possible to implement energy saving projects, the Corporate Environmental Responsibility team has requested a stronger participation of the DOs in the GHG Inventory exercise. Local Focal Points have responded to the call resulting in an 8% increase of buildings accounted for in the 2015 exercise as compared to 2014.

In sum, the increase in CO_2e emissions reflects profound changes to the way the Organization conducts its business, for which reason the carbon footprint growth can be partly justified. Nevertheless, considering that climate change and its physical, social and economic consequences are being exacerbated by greenhouse gas (GHG) emissions from human activities, FAO

should further commit to reduce its own footprint and mitigate impacts.

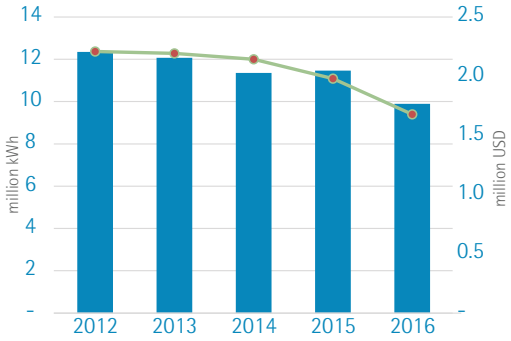
Reducing

The continuous monitoring through the GHG inventory exercises (and the HQ EMS) have resulted in the identification of specific areas for improvement. Among the other way to address climate change, using energy more efficiently helps reduce carbon emissions, preserves our finite natural resources and lowers costs.[14]

Projects implemented since 2008 related to Corporate Environmental Responsibility have resulted in a cumulative annual reduction of over 10 000 000 kg of CO_2e in emissions while also achieving over USD 1 000 000 in cumulative annual savings (Annex II).

Activities in these areas historically focused on the HQ (e.g. corridor lighting upgrade, solar photovoltaic system), with significantly positive results obtained both from a financial (-24% electricity costs in 2016 as compare do 2012) and environmental (-20% kWh consumption) standpoint (Figure 3 - kWh and USD savings at HQ).

Figure 3. kWh and USD savings at HQ



14 This area of work is also particularly advantageous for the Organization's mandates and best interests, including financial implications. Energy efficiency and conservation tie in directly to FAO's Strategic Objectives, particularly SO2: to make agriculture, forestry, and fisheries more productive and sustainable – with climate change being a major factor to contend with.

While the scope of the work has expanded over the years to include DOs as well, the HQ case study paves the way for an immediate strengthened support to these offices. A network of Corporate Environmental Responsibility focal points, along with the even larger UN-wide web of focal points, has so far provided a medium for sharing experiences and best practices with HQ and among the DOs. The network presents new opportunities for collaboration in the area of energy efficiency. There are increasingly more energy supply issues in various regions where FAO works (especially in Africa), and this not only has financial and environmental impacts, but also affects the programme work for the offices and the success of FAO delivering on its mandates. Hence further technical and financial support is deemed necessary to ensure operational efficiency in DOs.[15]

Offsetting

As part of the 2030 Agenda for Sustainable Development, the IMG members committed to be climate neutral as of 2020 (i.e. reducing and offsetting the 2020 emissions reported in 2021).

Despite the fact that significant efforts have been made in the past and shall continue going forward, it has and will not be possible in the near future to completely eliminate all of FAO's emissions while still

15 A proposal for Capital Expenditure funding (*FAO's Strategy for energy issues and reducing operational costs in Decentralized Offices*) that addresses these issues has been drafted by CSAI in collaboration with OSD and CIO and is currently under review.

effectively meeting its Strategic Objectives. For this reason, FAO purchased Certified Emission Reduction credits (CERs) from the Clean Development Mechanism (CDM)[16] which were invested into Adaptation Fund projects[17] - hence joining many other UN agencies in becoming climate neutral[18].

Though FAO HQ achieved 8% emissions reductions (-257 tCO_2e) in 2014 as compared to the previous year, the carbon footprint of the Organization as a whole increased by 6% (+2,969 tCO_2e). In order to remedy this negative performance, FAO invested in Adaptation Fund projects that compensated for the unavoidable emissions that FAO had produced in the same year. Similarly, FAO achieved climate neutrality in 2015 by offsetting its remaining unavoidable emissions.

FAO can therefore claim climate neutrality for its 2014 and 2015 emissions[19] and – through its Corporate Environmental Responsibility Policy – it has committed to do so for the coming years. Notwithstanding this huge progress, there is still a long way ahead to further reduce emissions (which remains the primary goal of the Organization) and consequently the unavoidable emissions to offset.

16 The Clean Development Mechanism (CDM, http://cdm.unfccc.int/) allows emission-reduction projects in developing countries to earn certified emission reduction (CER) credits, each equivalent to one tonne of CO_2e. A 2% levy on CERs is issued by the CDM to sustain the UNFCCC Adaptation Fund.

17 The Fund (www.adaptation-fund.org) finances adaptation projects and programmes in developing countries that are Parties to the Kyoto Protocol and particularly vulnerable to the effects of climate change.

18 A total of 32 UN entities offset their greenhouse gas emissions for 2015, making them climate neutral.

19 The CDM projects for 2014 emissions were CN3882, CN4685 (fao.org/3/a-bl729e.pdf), while for 2015 emissions they were CN1749, CN1896, CN1900, CN2037 (fao.org/fileadmin/user_upload/Corporate_Environmental_Responsibility/docs/Certificate_offsets_FAO_2015.pdf).

Other areas of activity

Besides energy and travel, other environmental impacts also occur from our operations, from waste management to water usage. It is worth mentioning that while more difficult to accurately quantify, great strides have been made in procurement, waste management and water usage through the FAO HQ EMS.

Sustainable procurement

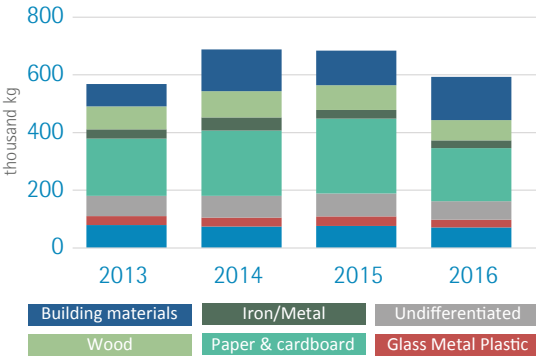
Many tenders and contracts have already sought to maximize environmental considerations in the solicitation and evaluation process of vendors while continuing to ensure best value for money and in a way that does not hinder competition. For example in 2015, approximately 15% of all procurement tenders at HQ included some type of sustainability requirements[20], as compared to 12% in 2014 and 8% in 2013. The focus of sustainable procurement has so far been on FAO HQ's purchases and contracts, hence more support could be given to DOs (when feasible) and the commitment to procure sustainably could be officially institutionalized. Moreover, a better monitoring system could be developed to ensure that all sustainability practices are captured and showcased for all product types.

20 Among the procurement sustainability requirements: compliance with relevant environmental standards and labels (e.g. ISO- 14001), mandatory use of eco-friendly products, agreed takeback schemes.

Waste management

In order to keep the environmental impact of waste at minimum, FAO tries to effectively prevent waste through sustainable procurement choices. We also seek creative solutions that keep waste out of landfills, whether reducing (e.g. by donating unsold product to food banks) or recycling material before treatment, incineration or disposal. Since 2008 FAO has focused on better waste management within its HQ. A large initiative was implemented to establish waste separation for recycling and composting. This included installing separate waste bins throughout HQ building along with ongoing communications campaigns to inform the staff about the programme. Nevertheless – perhaps due to an insufficient communication campaign and a high staff turnover at HQ (i.e. HQ's non-staff personnel represented 39% of the total personnel in 2015) – waste separation has not improved significantly over the years (Figure 4 – Total Waste Production). This makes sustainable waste management at HQ an area for further improvements in the future.

Figure 4. Total waste (kg) production at HQ



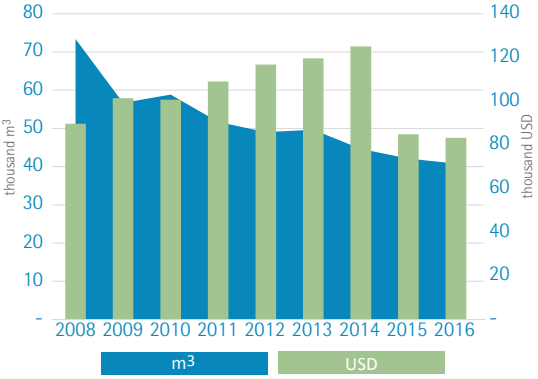
While it can be difficult to properly manage waste in various locations in the world, there are many areas where there may be services and facilities to do so. For example, in FAO staff at the regional office in Accra, Ghana setup a paper recycling program, building on what other UN agencies had already implemented. Another positive example comes from the regional office in Santiago (FAORLC), which was recognized by a national foundation devoted to environmental awareness in 2013 with an award. FAORLC was successful in recycling 4.5 tonnes of old and unused electronic equipment as well as reducing its paper usage by almost half just by changing printer preferences. The office is now recycling 350kg of glass, paper, cardboard, tetrapak, cans and plastic bottles per month. Building on these success stories, FAO HQ can provide additional support tailored to the specific area and in conjunction with in similar projects led by other UN agencies in hopes to implements improvements in DOs.

Water management

Water issues (e.g. quality, scarcity, variability, pollution) are increasing in quantity and seriousness around the world and they will be aggravated by the effects of climate change that is already impacting some of the planet's most vulnerable rivers, lakes and ecosystems. These issues are global and at the same time inherently local,

thus FAO is committed to manage water resources sustainably in all its premises. Though further action is required in its DOs, FAO has reported on its water quality[21] and consumption at HQ since 2008. Particularly, it is interesting to see that FAO has decreased its water consumption by 44% and costs by 7% since 2008 (Figure 5 - Water Cubic Metre (m^3) and USD savings at HQ).

Figure 5. Water (m3) and USD savings at HQ



21 The water in Rome is considered safe and suitable to human consumption. Moreover, FAO HQ conducts microbiological tests of the faucets and dispensers (which are systematically disinfected) in addition to the chemical analyses performed by the local National Health Service unit.

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Way forward

Considering that climate change and sustainability are some of the world's most pressing issues, and with more and more public and private organizations looking to partner and work with other organizations that are following the path towards climate neutrality, it is an opportune time for FAO to take the next step. Today, the Organization has set second generation targets for reducing greenhouse gas emissions and other environmental impacts (e.g. waste to landfill) to make certain our collective ecological footprint is minimized and a culture of environmental responsibility is fostered.

Emission reduction plan

As part of the Corporate Environmental Responsibility policy, FAO must implement activities that will result in tangible emission reductions for FAO. A previous Emission Reduction Plan (ERP) was developed in 2011 which spanned the 2012-2014 timeframe. Having successfully met and exceeded those targets, the Organization is poised to now address the post-2016 development period as it relates to internal operations.[22] While significant progress has been made, there are some key steps that need to be taken in order to further "green" FAO. More than 50 initiatives have been identified to be realized within the 2017-2020 period (Annex III). While it is difficult to quantify all of the projects with regards to actual emission reductions and financial gains, a few key activities have been selected to be included in the 2017-2020 emission reduction targets:

Energy use reduction measures:[23]

- Windows replacements at Headquarters
- Data Centre and Disaster Recovery Renovation at Headquarters
- Lighting upgrades at Headquarters and in Decentralized Offices
- Heating, Ventilation and Air Conditioning (HVAC) system replacement at Headquarters
- Air Travel reduction through increased support to teleconferencing and awareness raising campaigns

Transition from fossil-fuels to renewables:

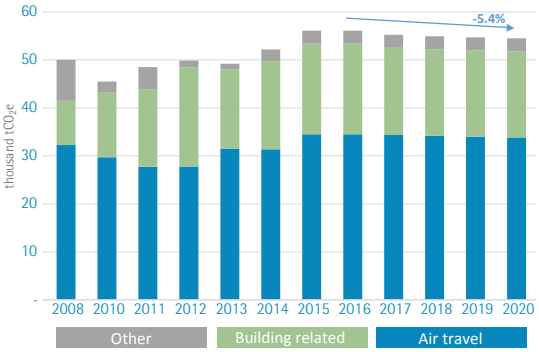
- Solar PV installations at Headquarters and in Decentralized Offices
- Purchase of electric cars for Headquarters fleet

Some of the activities will be implemented repeatedly in consecutive years, such as energy projects in different DOs (for further details and timeline, see Annex III). These projects represent relatively significant reductions in emissions – as showed in the Figure 6 (Projected Total GHG Emissions tCO_2e by emission source) – alongside advantageous financial return on investments. Moreover the projects destined to DOs will address high priority operational issues such as adequate energy supplies and consequent safety standards and business continuity.

22 Other agencies – such as UNDP, WFP, and UNFPA – have already developed and are implementing Emission Reduction or Climate Neutral Strategies with reference to the current time period.

23 Energy efficiency projects at the HQ also often qualify for the Italian sponsored White Certificates program which provides rebates on these types of investments, allowing for further financial savings.

Figure 6. Projected total GHG emissions tCO_2e by emission source



Circular economy, water management & EMS

In order to pursue opportunities in the field of sustainable procurement and waste management, FAO is committing to integrate the principles of **circular economy**[24] by working on some key activities, namely:

- Integration of sustainability considerations in at least 20% procurement tenders by 2020 and development of a monitoring system for all product types;
- Institutional formalization of FAO's commitment to further reduce its impact in the field of procurement through a policy applicable at HQ and, when possible, in DOs;
- Strengthened communication and awareness-raising campaigns to encourage environmentally virtuous behaviors among the personnel;
- Continued monitoring of waste, increased waste separation and reduced landfilling at HQ (although not quantifiable at this time) as compared to the 2015 baseline;
- Waste reporting in DOs (starting from Regional and then Sub-regional Offices first) by 2019.

With regards to **water management**, FAO commits to keep monitoring its water usage at HQ and start reporting the consumption in DOs (starting from Regional and then Sub-regional Offices first) by 2020 – in line with the Greening the Blue Movement. Moreover the Organization commits to constantly look for opportunities to streamline waste usage and pursue efficiency in all its offices.

Finally, considering the instrumental role that the HQ EMS has had in systematically improving the environmental footprint of the Rome office, FAO is committing to piloting **EMSs** in no. 3 regional offices by 2020.

24 Find out more about the Circular Economy at ellenmacarthurfoundation.org/circular-economy/overview/principles.

Funding mechanism

Continuing to reduce the Organization's environmental footprint while achieving climate neutrality is the core goal of the overall approach. The funds necessary to accomplish this goal and implement the proposed projects amount to more than USD 3 million.

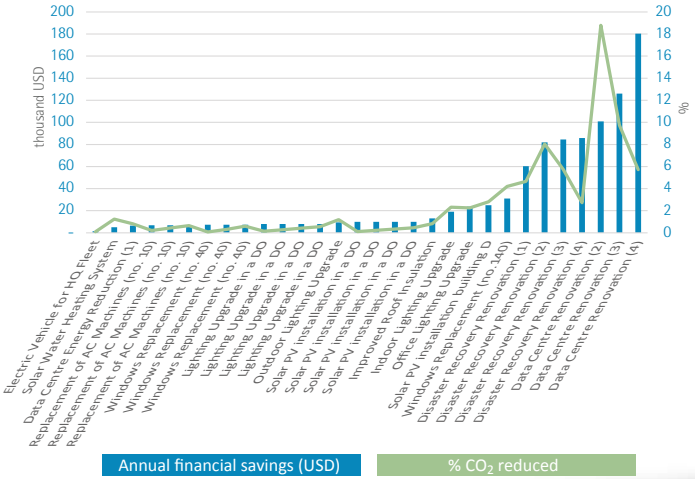
Nevertheless, the proposed projects are mostly associated with infrastructural works (i.e. projects not related to travel), which are led by CSAI. As the most advantageous ones requires high upfront investments, CSAI will prioritize low-hanging fruit and smaller projects that will cumulatively producing savings over time. The Organization will hence be able to use these savings to invest in projects having larger initial price tags, but with comparatively higher financial and environmental saving potentials. The Figure 7 (Annual Financial and %CO_2e Savings from Infrastructural projects) describes the financial savings deriving from the implementation of the proposed projects, alongside their share of CO_2 equivalent savings as compared to the total reductions over the ERP period. By following the above-mentioned rational the first projects to implement could be for instance the purchase of an electric vehicle for the HQ fleet, the installation of a solar water heating system and/or the renovation of the data centre.

In addition to the financial savings deriving from infrastructural projects, FAO will also benefit from the avoided offsetting costs that would derive from a business as usual state in which none of the proposed projects – and especially air travel reduction – is implemented.

Therefore, USD 100 000 shall be set aside each year from the Corporate Services (CS) budget in order to provide minimum financial support to initiate sustainability projects and to purchase the necessary CERs to offset FAO's unavoidable emissions.[25] Additional funding will be requested depending on specific needs

25 This projected amount dedicated to CERs is based on current offsetting market prices and the anticipation that costs will rise in the coming years.

Figure 7. Annual financial and %CO_2e savings from infrastructural projects



(e.g. USD 1 million requested through the *Proposal for Capital Expenditure Funding - FAO's Strategy for energy issues and reducing operational costs in Decentralized Offices).*[26]

Through such an arrangement, FAO will remain climate neutral while also continuing to reduce emissions at the actual sources. The less emissions the Organization produces, the less CERs would need to be purchased. While offsetting is essential for climate neutrality, it is important to keep in mind the goal of the model is to always decrease emissions and other environmental impacts, not just purchase offsets in place of taking action internally.

Conclusion

With this strategy, FAO can continue to be a leader within the UN system and among other global entities while also contributing to minimizing negative environmental impacts – a motivating factor which closely aligns with the Organization's Strategic Objectives and the Sustainable Development Goals.

26 The Proposal is currently under review by ODG.

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Annexes

Annex I
Corporate environmental responsibility policy, June 5th 2016

Agricultural sectors are inherently dependent on climate and consequently may be negatively affected by climate change. FAO therefore dedicates a significant amount of resources towards agricultural development in areas that are often most vulnerable to climate change. By increasing efficiency and reducing unnecessary negative impacts on the environment, the Organization increases the success towards achieving its five Strategic Objectives established in 2013. Not only do these measures help combat climate change, they also often lead to financial savings and resiliency against external forces.

In line with the Strategic Objectives and the Environmental and Social Management Guidelines, this policy spans all of FAO's operations worldwide while primarily focusing on the Administrative areas including Facilities and Infrastructure, Travel, and Procurement. Taking into consideration the endorsement by the UN Chief Executives Board (CEB) of the Climate Neutral United Nations movement and the CEB commitment to implement Environmental Management Systems at the agency level, this policy commits FAO to the following principles and accountability framework.

The Organization will:

- Strive to comply with the applicable guidelines related to its Corporate Environmental Responsibility activities;
- Monitor and measure its impact on the environment resulting from daily operations, benchmark with other similar organizations, and set biennial targets for continuous improvement;
- Actively pursue energy, water and travel efficiencies, along with reducing greenhouse gas emissions and pollution in all parts of its operations, departments and functions by periodically setting concrete and realistic targets;
- Seek to reduce waste production and further improve differentiation for recycling;
- Integrate environmental criteria into the procurement process where viable and in the best interests of the Organization and its stakeholders;
- Strive to integrate environmental responsibility aspects into the way it organizes and conducts conferences and meetings;
- Strive to become climate neutral no later than 2020 and thereafter by offsetting the emissions that cannot be reduced, via purchasing carbon credits that meet the standards of the Clean Development Mechanism (CDM) at a minimum;
- Collaborate with other UN agencies to share knowledge and best practices. The Organization will also contribute to climate neutrality networks within the High-Level Committee on Management (HLCM) and the Environment Management Group (EMG);
- Systematically implement an Environmental Management System as

mandated by the UN Chief Executives Board (CEB). At a minimum, this will include:
-A document management system which monitors and tracks past, current and planned Corporate Environmental Responsibility related activities as well as progress;
-An annual greenhouse gas (GHG) inventory of its facilities and travel (HQ and Decentralized Offices). FAO will use the same boundaries for its carbon footprint as indicated in the UN Climate Neutral Strategy and further agreed upon in the UN Environment Management Group (EMG)
-An annual publication of FAO's Corporate Environmental Responsibility Report which includes an Emission Reduction Strategy.

Responsibility and accountability

The FAO Corporate Services Department (CS) will be responsible for advancing these principles and activities throughout FAO Headquarters. The Assistant Director-Generals/Regional Representatives will play a similar role within their respective regions, in collaboration with support staff from Headquarters. Specifically, they are called upon to:

- Encourage offices to participate in the annual greenhouse gas inventory exercise;
- Encourage and support awareness-raising initiatives and participation by staff in activities that help reduce the Organization's environmental impact such as improving efficiency and waste management programmes;
- Champion best practices and initiatives that help reduce the FAO's environmental impact and simultaneously improve operational effectiveness.

While it is important that Senior Management provide the necessary leadership, each person working within FAO also bears responsibility for their actions which affect the Organization's environmental impact.


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Annex II
Summary of past corporate environmental responsibility activities

Below you will find a summary of some other projects and initiatives related to Corporate Environmental Responsibility within FAO. Many have already been completed, some are in progress, and some are planned although not necessarily confirmed for implementation. Although not displayed here, figures on environmental impacts and financial savings have been collected where possible. Efforts will continue to quantify these activities in order to further strengthen the relationship between the financial and environmental aspects of these investments.

Decentralized offices

- Outdoor lighting upgrade in Gambia (2016);
- Energy audit in Sierra Leone (2016);
- Outdoor lighting upgrade in Ghana (2015);
- Installation of 12 kWh Solar PV back-up system in Eritrea (2013);
- Perform energy/efficiency audit at FAO Regional Office in Santiago, Chile (RLC) (2012);
- Paper recycling programme at FAO Regional Office in Accra, Ghana (2012).

Headquarters

- Installation of a solar photovoltaic system (donated by the Government of Germany) for the roof of the Plenary Hall (2016);
- Installation of LED lighting and motion sensor technology in the corridors (2016);
- Installation of light sensors in all restrooms (2014);
- Installation of water sensors in newly renovated restrooms (2014);
- Substitution of lamps with LED ground floor Bldg. A entrance (2014);
- Installation of light sensors in large marble stairs area (2014);
- Replacement of 100 windows (safety and environmental) (2014);
- Increased percentage of eco-friendly stationary (2014);
- Collaboration with SUN and European Union on Sustainable Events (2014);
- Elimination of ozone-depleting refrigerants (2013);
- Inclusion of eco-friendly criteria in Dry Cleaning procurement process (2013);
- Fair trade coffee and tea in cafes/ cafeteria (2013);
- Addition of 50 new parking spaces for bicycles (2013);
- Closure of the petrol / car washing station (2013);
- Installation of 3rd set of doors in Bldg. D to reduce draft, therefore saving energy (2013);
- Implement waste diversification and collection centre, including better separation and monitoring (2013);
- Reduction of can sodas by installation of drink dispensers in cafeteria (2013);

- Introduction of nutritious fruit drinks dispensers in order to reduce consumption of sodas as well as the associated waste from packaging (2013);
- Substitution of 13 elevators (2013);
- Elimination of plastic utensils (only metal or bio) (2013);
- Reduction of plastic water bottles in cafeteria (2013);
- Installation of automatic hand-dryers, replacing paper towels (2013);
- Reduction of food waste leftovers (2013);
- Elimination of plastic water bottles for conferences and meetings (2013);
- Installation of energy saving lighting including solar tubes in the Bldg. B Main Dining 8th floor (2013);
- Sustainable procurement training tutorial mandatory for all procurement staff (2013);
- Bldg. C - catering storage area: substitution refrigerant cells (2013);
- Increase video-conferencing (substitute for flights sometimes) (2012);
- Substitution of 4 chillers on Bldgs. A and B, and 2 chillers on Bldg. C (2012);
- Elimination of single-use cups at Bldg. C bar by installing a dish-washer. (2012);
- Training of catering staff on proper separation of waste (2012);
- Installation of organic waste compactor (2012);
- Integration of eco-label cleaning products into cleaning contract (2012);
- Use of eco-friendly paint products (2012);
- Integration of environmental aspects into Philippine Room renovations (2012);
- Integration of environmental aspects into Ethiopia Room renovations (2012);
- Elimination of plastic cups in all eating and vending areas (only glass, bio and PLA) (2012);
- Reduction of usable lifts during weekend from 4 to 2 (2012);
- Implementation of an energy monitoring system (2012);
- Installation of automated lighting timers in the cafeteria kitchen, kitchen hoods, and the free flow area (2012);
- Inclusion of environmental criteria in furniture purchases (procurement agreements with companies that are ISO-14001) (2011);
- Substitution of lamps in Morocco Room (2011);
- Installation of automatic timers on corridor lights in Bldgs. A, B, C and D (2010);
- Introduction of the "turn off library lights" policy (timers for nights and weekends) (2010);
- Substitution of halogen lamps with LED in the stoplights at entrances (2010);
- Installation of 10 LED lights in bar "B" (8th floor), replacing 10 light bulbs of 60 W (2010);
- Substitution of 2 elevators (2010);

- Installation of water dispensers in corridors and cafeterias (53) to help reduce plastic bottle purchases (2010);
- Substitution of plastic bags in the commissary with paper or cloth (2010);
- Installation of 174 flow reducers on washroom faucets (2010);
- Installation of two electric chargers for motor scooters (2010);
- Implementation of the "Workstation Hibernation" policy (2009);
- Integration of environmental aspects into the German Room (2006).

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Annex III
Emission reduction plan, Key activities (2017-2020)

Year	Activity	Location	TOT kgCO_2e emissions reduction by 2020	Annual financial savings (USD)	Initial investment costs (USD)*	% CO_2 reduced
2017	Data centre renovation (1)	HQ	58 782	6 473	-	0.8%
	Disaster recovery renovation (1)	HQ	575 866	81 903	-	8.0%
	Windows replacement (no.140)	HQ	300 840	30 988	512 400	4.2%
	Outdoor lighting upgrade	HQ	85 462	9 411	35 380	1.2%
	Indoor lighting upgrade (A6 - A24)	HQ	165 606	19 135	1 277 164	2.3%
	Solar PV installation in a DO	DO	32 000	10 000	60 000	0.4%
	Lighting upgrade in a DO	DO	40 000	8 000	30 000	0.6%
	Solar water heating	HQ	88 924	5 016	71 031	1.2%
	Electric car for HQ fleet	HQ	6 987	1 403	7 320	0.1%
	-0.5% GHG emissions from air rravel	ALL	690 374	2 700 000	-	9.6%
2018	Data centre renovation (2)	HQ	1 346 947	100 775	-	18.8%
	Disaster recovery renovation (2)	HQ	410 829	84 446	-	5.7%
	Windows replacement (no. 40)	HQ	6 051	7 256	120 000	0.1%
	Office LED lights	HQ	161 700	23 741	610 000	2.3%
	Solar PV installation building D	HQ	201 000	24 945	158 600	2.8%
	Solar PV installation in a DO	DO	24 000	10 000	60 000	0.3%
	Lighting upgrade in a DO	DO	30 000	8 000	30 000	0.4%
	Replacement of AC machines (no. 10)	HQ	46 200	6 783	366 000	0.6%
	-0.5% GHG emissions from air travel	ALL	517 781	2 700 000	-	7.2%

*Reductions from Air Travel will result from awareness raising campaigns that do not require dedicated funding.

Year	Activity	Location	TOT kgCO_2e emissions reduction by 2020	Annual financial savings (USD)	Initial investment costs (USD)*	% CO_2 reduced
2019	Data centre renovation (3)	HQ	698 367	126 069	-	9.7%
	Disaster recovery renovation (3)	HQ	334 007	60 295	-	4.7%
	Windows replacement (no. 40)	HQ	42 977	7 256	120 000	0.6%
	Replacement of AC machines (no. 10)	HQ	30 800	6 783	366 000	0.4%
	Improved roof insulation	HQ	59 290	13 058	183 000	0.8%
	Solar PV installation in a DO	DO	16 000	10 000	60 000	0.2%
	Lighting upgrade in a DO	DO	20 000	8 000	30 000	0.3%
	-0.5% GHG emissions from air travel	ALL	345 187	2 700 000	-	4.8%
2020	Data centre renovation (4)	HQ	409 380	180 319	-	5.7%
	Disaster recovery renovation (4)	HQ	194 837	85 820	-	2.7%
	Windows replacement (no. 40)	HQ	21 489	7 256	120 000	0.3%
	Replacement of AC machines (no. 10)	HQ	15 400	6 783	366 000	0.2%
	Solar PV installation in a DO	DO	8 000	10 000	60 000	0.1%
	Lighting upgrade in a DO	DO	10 000	8 000	30 000	0.1%
	-0.5% GHG Emissions from air travel	ALL	172 594	2 700 000	-	2.4%

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