CER STRATEGY 2020-2030 Q & A

Corporate Environmental Responsibility Team (CSLI)



Food and Agriculture Organization of the United Nations

Infrastructure Service (CSLI) - June 2021







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The following document is designed to address some of the questions and concerns raised at the launch event for the Corporate Environmental Responsibility Strategy 2020-2030. The responses are not exhaustive and represent only the views of the Corporate Environmental Responsibility team. We hope they can be taken as a basis for further discussion on the points raised, so that FAO employees can continue to learn from each other

Resource Mobilisation for Strategy Implementation

1.Reading the Strategy, it states sufficient financing is necessary to achieve the targets, and to ensure effective implementation of the FAO's environmental commitments. This will involve: reinvesting the unspent budget from other projects (e.g. trust funds, donors) into environmental sustainability projects. However, this will certainly depend on the donor. FAO cannot force donors to allow us to use any unspent funds on other things, albeit for good use, and it also looks bad if we do not spend all the funds on a project.

The mechanisms to mobilize sufficient resources for the strategy implementation are still to be defined in detail.

Depending on the current donor agreement, unspent money may be utilized to fund the implementation of the Strategy. In other cases, consultation with the donor will be necessary to amend the terms of the agreement to reutilize the funds. Moving forward, project managers and technical officers will be aware of the environmental impacts of the projects, and therefore strive for environmental and sustainability aspects to be included in donor agreements from the beginning.

As a good example, in El Salvador the renovation of the country office was financed by a portion of the funds provided by the Green Climate Fund for the project "Upscaling climate resilience measures in the dry corridor agroecosystems of El Salvador (RECLIMA)". Due to this budget allocation the FAO country office in El Salvador can now count on the LEED certification for green building.





2. What are the financial aspects of funding such a transition, and for the installation of alternative energy systems? How was this made possible in Accra, Ne pal, and other FAO premises?

So far, many solar projects such as the ones in Nepal, Djibouti, Uganda and Mauritania have been co-funded by the country office internal funds for administration and by the Infrastructure Service budget allocated to Corporate Environmental Responsibilities activities (often on a 50/50 basis).

Additionally, the solar system in Accra was financed through CapEx, being the first solar system financed through FAO Capital Expenditure funds.

All approved CapEx projects have a defined cost-benefit analysis and a benefits realisation plan. The fact that the implementation of a solar system was approved to be funded by CapEx demonstrates that solar systems in facilities have now been recognised as beneficial and relevant infrastructural projects. It also shows they are regarded as compliant with health and safety regulations and as systems that are able to achieve lower maintenance and running costs for FAO premises.

The FAO country office in El Salvador has financed the sustainable renovation of its premises, including the installation of a small solar PV system, through a portion of the GCF funds dedicated to the RECLIMA project.

3. How will the human resources for implementation be factored into to the strategy, along with financial resources for making the strategy a reality?

By endorsing this strategy, FAO management is committing to foster the creation of internal funds to be used for environmental innovation and climate neutrality in HQ and decentralized offices. Moreover, they are committed to ensuring the compliance of projects and programmes with the environmental and social management and safeguards mechanisms. The annual resources, in the range of USD 800 000 to USD 2 000 000, are expected to be mobilized and assembled through regional and country offices budget share for administration, CapEx punctual requests, CSLI annual budget designated for CER activities, partnership with private sector, government donations etc. (see **Annex I**).



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The approval of the Strategy has allowed the allocation of USD 300 000 annually from the FAO Infrastructure Service (CSLI) budget for the Corporate Environmental Responsibility functions, projects and team.

Additionally, the Strategy aims to have an environmental focal point appointed in each country office, and have 100% of administrative (facilities manager, assistants, procurement etc.) trained on environmental issues.

Notably, by implementing energy saving measures in country offices, avoiding printing, and occupying office spaces on a rotational basis, the country offices will achieve consistent financial savings and the money saved could be reinvested in further projects for the sustainability of operations.

4.Could FAO be involved in voluntary carbon credits with countries and people who will need it the most?

Every year, FAO offsets its unavoidable emissions related to operations (facilities and travel) by purchasing Certified Emissions Reduction credits (CERs) of the Adaptation Fund from the <u>Clean Development Mechanism</u> (CDM) of UNFCCC, that are then invested in sustainable projects in developing countries.

In 2020 FAO has been accredited as 51st Adaptation Fund implementing entity, and will contribute to develop new adaptation projects that will serve the most vulnerable countries to climate change. However, there is no influence on the use of the pooled AF resources. When FAO purchases the AF CERs to offset its emissions, the funds are invested in projects with no financial association to the FAO activities. Indeed, FAO does not choose the projects the funds are destined to.

All FAO employees are encouraged to voluntarily offset their personal emissions on the <u>Carbon Offset Platform</u> provided by UNFCCC.





Waste Management and Plastic

5. How do we reduce growing waste and recycling problems from PPE (masks, gloves..) during ongoing COVID-19 ? It would be good to have solutions:

The COVID-19 pandemic has indeed resulted in an increase in plastic pollution from personal protection equipment. Recent estimates suggest that, globally, 3.4 billion single-use facemasks are discarded daily completely devastating efforts in the global fight against plastic pollution.

FAO health services have required the exclusive use of surgical masks because these are the only models to comply with safety rules and regulations. Unfortunately, these masks are disposable and the CER team cannot change the health and safety requirements stipulated by health services.

As further action to reduce the disposing of unnecessary single-use plastic items, hydroalcoholic gel dispensers that are made available by the medical service at HQ on every office desk can be refilled by the medical centre itself upon request.

The CER team will keep informing FAO employees on recommendations and developments on this and other environmental issues through our regular newsletter. Please send us an E-mail at Corporate-Environmental-Responsibility@fao.org if you would like to be added to the mailing list.

6.Is there any plan to phase out single-use items in offices all together? Single-use items in offices are rarely necessary, and biodegradable items still have to be produced, transported, and are only degradable under specific circumstances.

This will definitely be an area of attention during the course of the strategy.

As highlighted by the Director General of FAO, Qu Dongyu, during the Corporate Environmental Strategy Launch Event 2020-2030, sustainable office habits are of paramount importance.

There have been a number of measures implemented to phase out single use plastics in various FAO offices (e.g. HQ, RAP). Moreover, catering services at headquarters are piloting the shift to reusable containers for take away food, in order to limit the single use containers which are currently compostable, as single use plastic items have been banned since 2019.



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By now, the negative aspects of biodegradable and related items have gained increased visibility in academia. In many ways, the promotion of a supposedly environmentally friendly alternative to single use plastics, under the label of 'degradable', promotes a mindset that encourages people to continue unsustainable consumption and disposal patterns. Instead, the only truly sustainable consumption pattern is to consume as little as possible, and to ensure that all waste arising from this minimal consumption is disposed of in the appropriate manner.

The Corporate Environmental Responsibility Team will work to promote sustainable consumption patterns, including for plastics and other single use items, through awareness raising campaigns, and through behavioural nudges. Behavioural change forms a key component of the new CER Strategy 2020-2030, and the CER team will develop its capacity to promote such changes.

7.It would be great to share good practices on environmentally friendly solutions between our offices to learn more about reduction and recycling the waste.

A lot has been going on in FAO offices in recent years, clearly showing a big mindset change in the Organization working culture. Within the CER team we try to spread awareness and information related to environmental best practices implemented in FAO offices worldwide. For example, have a look at our latest report!

Best practices stories are also highlighted in the Greening the Blue platform, and since this year also in the Global Synthesis Report and Country Annual Report.

In addition, we regularly issue our newsletter, where we display study cases, provide news and tips on how to live our lives in an environmentally conscious way etc.





Fleet Management and Electric Vehicles

8."Could FAO's whole fleet, where appropriate, be fully electrified? For instance, if I may, could our our Director-General, all Regional representatives, and FAORs drive an electric car? How about all Member Country Representatives in Rome, why are these fleets not yet electrified?

The increased use of electric cars has been factored into the projections for emissions reductions in FAO, and are prominently featured in wider mitigation pathway scenarios to limit global warming to below 1.5 °C.

As there is increased inclusion of electric vehicles in the FAO fleet, we hope this will stimulate a wider transition in the UN family, and encourage others to take up similar measures.

However, based on 2019 data, 54% of FAO emissions come from air travel, while 13% come from other transport, and 33% from facilities. Therefore, air travel represents a far larger share of the emissions, and to meet the objectives of the Strategy it is in this realm of transport that emissions reductions will be primarily targeted. The pandemic, which has already increased our capacity for teleworking, will possibly instigate a new virtual meeting and working culture, to help us achieve this aim. It is imperative that we build back better!

9.Electro-mobility is also to be looked carefully: how the energy is generated to fuel the batteries...Also what kind of battery: at the moment the most promising technology is based on Lithium Iron Phosphate Battery. Phosphorus is a very limited resource, and of major importance for agriculture...What will happen to the phosphorus market when the demand will increase, and the offer decrease.... big companies might support the increased in the cost, not sure will be the same for small scale farmers....but something sure: public transportation is better than a car, thus no car is always better than electric car

It is true that there is an environmental cost to be paid, even in the transition to more sustainable and environmentally friendly alternatives to conventional methods. FAO will strive to do all that it can to minimize the impact of its facilities and operations.

As has been highlighted by this comment, the only truly sustainable consumption pattern is to consume as little as possible, and to ensure that all waste arising from this minimal consumption is disposed of in the appropriate manner. The Corporate Environmental Responsibility Team will work to promote sustainable consumption patterns, including for plastics and other single use items, through awareness raising campaigns, and through behavioural nudges. Behavioural change forms a key component of the new CER Strategy 2020-2030, and the CER team will develop its capacity to promote such changes.



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In the case of electric vehicles it is certainly true that a range of factors can impact their environmental footprint. These include the origin of the battery components, the lifetime distance travelled by the vehicle, the vehicles energy consumption, and the energy mix of the electricity used for battery charging.

The CER team has researched some of these issues and will do all that it can to raise awareness. The team has prepared a briefing on electric vehicles which you can access by clicking on the electric vehicle icon. However, the current consensus is that, in most cases, electric vehicles are still more environmentally friendly than their conventional counterparts over the full course of their lifetime, and will play a key part in mitigation pathway scenarios to limit global warming to below 1.5 °C, attesting to their importance.

Solar PV Systems

10."Regarding HQ "solarization", Rome counted 218 sunny morning and 238 clear sky evening (data between 1971-2020). Let us tap into the sun to power the HQ future "

The installation of a solar PV system in FAO HQ was completed in 2016, serving as an institutional mandate and inspiration to begin developing similar systems in country offices around the globe. More information is available <u>here</u> and also

The solar PV system in FAO HQ has an annual energy production of 104 000 kWh, and provides cost savings worth 18 000 USD annually, and CO2 savings of 40 tCO2e per year, equal. to 8.5 passenger cars taken off the streets for a year.

11."Solar panels and electric cars give us the feeling we are not polluting, but they do have a significant impact on the planet. I do hope FAO will move towards more sobriety and reduce all sorts of consumption."

As it has already been highlighted in this document, all consumption has an environmental cost. In the case of solar panels, there is a variety of concerns regarding the componenmaterials of components, end-of-life disposal and the efficiency.

The CER team has researched some of these issues and will do all that it can to raise awareness. However, the current consensus is that, in most cases solar panels are still more environmentally friendly than their conventional counterparts over the full course of their lifetime, and will play a key part in mitigation pathway scenarios to limit global warming to below 1.5 °C, attesting to their importance.











Energy Efficiency in HQ and Individual Targets

11."How to be sure we separate an absolute net reduction of GHG from relocation: for instance, the energy saving this year is not an absolute reduction: FAO energy consumption have been supported by thousands of individuals, more energy for communication tools but attributed to external companies to have their server running (Zoom, MS, etc). Thus a reduction for FAO do not mean automatically a global reduction. indirect effects are always difficult to size, but should not be ignored.

The covid pandemic, which stimulated an increase in teleworking, has indeed produced abnormal results in terms of GHG emissions. The CER team is aware that the emission reductions resulting from less commuting and less office work, are also subject to a rebound

effect due to the increased use of internet, energy and communication tools in the home environment. The CER team has produced some material on this, available by clicking on this icon to provide an overview of these competing effects, and is working to quantify, to the extent that it is possible, some of these effects as they pertain to FAO HQ.



12. "I would like to know how the energy efficiency of HQ will be taken into account in the strategy. As we see from the example of Nepal a lot can be done, and as Rodolphe above mentioned the most environmental-friendly energy is still the one that is not used at all"

Every year the CER team undertakes the greenhouse gas inventory exercise, which allows for the quantification of FAO's environmental impact in terms of emissions, energy/fuel consumption, water use, and waste generation, including at HQ.

Sustainability measures have been implemented at HQ for more than 10 years and this has already resulted in a number of achievements.

For example, a new waste management system has been in place since 2018, and over 70% of waste is recycled. There has been an environmental management system in place since 2015, and over the last decade (in the period 2010-2019) 18 735 334 kWh of energy has been saved, leading to cumulative savings of more than 27 000 000 Kg CO2e, equivalent to 147 million m2 of forests planted.

A solar panel system has been in place since 2016, and there has been a reduction of -32% kWh in electricity consumption since 2012, thanks to a series of measures such as installation of LED fixtures for external lighting, corridors and many meeting rooms; the reduction of the data center size to limit the cooling needs hence reducing electricity consumption; the substitution of more than 80% of office windows to better insulate the building and reduce the heating and cooling needs of the offices etc.



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The CER team will continue to build on this momentum, and to introduce new measures to ensure energy efficiency.

As this question has identified, behavioural change, outside of technical innovation will also be crucial to the successful realisation of the strategy. The Corporate Environmental Responsibility Team will work to promote sustainable consumption patterns through awareness raising campaigns, and through behavioural nudges. Behavioural change forms a key component of the new CER Strategy 2020-2030, and the CER team will develop its capacity to induce such changes.

13."I would like to inquire about your concrete Action Plan for each of the Divisions mentioned by the Facility Manager. What are the goals for each of the Divisions (HR, IT, Facility, Climate Change Decisions, etc.)? how do you plan to achieve those goals and what are the indicators by which you measure progress in each of the areas?"

The individual targets for each Division are outlined in the new <u>CER Strategy 2020-2030</u>. They include:

- Commiting to a 45% reduction in GHG emissions from FAO facilities and operations;
- 75% of FAO employees and 100% of facility managers, procurement officers and administrative assistants, will receive environmental training;
- A 45% reductions in GHG emissions from all official air and non-air travels;
- Systematically integrate environmental considerations into procurement actions;
- Make 100% of events with over 300 participants sustainable or climate neutral;
- Align IT functions with the ambitions of the strategy, by using energy efficient equipment, enabling virtual working, safely disposing of e-waste, and instituting a one device policy.

In terms of measurable indicators, every year the CER team undertakes the greenhouse gas inventory exercise, which allows for the quantification of FAO's environmental impact in terms of emissions, water consumption, and waste generation. These indicators will provide a macro view of the uptake of the measures outlined in the Strategy. At the micro scale, each division will have its own performance indicators to ensure alignment with the Strategy, and the CER team may develop new indicators to measure behavioural change and the impacts of interventions or nudges in individual offices.

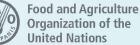




Annex I - Financial Analysis of the Strategy Implementation

- Main financial implications of the CER Strategy implementation for the next ten years are listed in this section. The displayed figures are based on very broad estimations and are provided with the purpose of giving a general overview of a costs-benefits analysis. In fact, this Strategy has been built primarily with the purpose of achieving an ambitious emission reduction target, which is necessary to respect the recommendations mandated at UN level and take active part to the global fight against climate change.
- Only the list of key activities proposed in the emission reduction plan has been studied from a financial perspective. In fact, the largest stake of investment is associated with infrastructural and energy efficiency projects in facilities. While remaining important for the strategy's successful implementation, other areas such as human resources, events organization, procurement etc. have less quantifiable goals that cannot determine the calculation results. In addition, financial savings derived from improved waste separation and reduction in water consumption in facilities are also currently not part of the calculations, since it is still not possible to provide a meaningful estimation. Potentially, higher savings and shorter return on investment may be envisaged
- The implementation of the measures indicated in the proposed emission reduction plan will require the Organization to mobilize resources in the range of 798 502 USD/year up to 2 076 035 USD/year. This range has been defined depending on whether the two main sources of emissions (facilities and air-travel) will be equally targeted (-45% each, *standard scenario*) or whether new travel patterns triggered by the current Covid pandemic will lead to a higher-than-expected reduction in air-travel emissions. In this case (e.g. -60% air-travel emissions, -15% emissions from facilities *alternative scenario*), by building back better after the pandemic crisis and by reaching a "new normal" where travels are done only when strictly necessary, the global emission reduction target will be more likely to be reached without major infrastructural projects and with significant lower upfront costs.
- In the *standard scenario* assumed by the Strategy, the proposed measures will generate global financial saving of **USD 28 167 310** by 2030, due to:
 - a. Cumulative savings linked to energy efficiency projects in FAO facilities, over ten years: **USD 14 754 578 by 2030**
 - b. Reduction of travel expenses every year: **1 341 273 USD/year**, for a total amount of USD 13.412.733 at the end of the Strategy implementation period. These savings only account for the avoided costs in transportation (flight tickets); by including also avoided DSAs and meetings costs the global savings are likely to be higher.







- Within the estimated resources mobilization, USD 300 000 are to be used within the Infrastructure Service in order to:
 - a. Initiate sustainability projects (co-finance mainly solar PV projects) in decentralised offices, to reduce the environmental impact of the Organization and minimize the use of fossil fuels;
 - b. Purchase the necessary emission reductions certificates to offset the Organization's unavoidable emissions and confirm the climate neutrality of FAO;
 - c. Develop awareness raising campaigns to intensify behavioural changes concerning energy, waste, and water use;
 - d. Conduct extensive audits in major country offices to cover electrical system quality and safety, air and ventilation system upgrades to prevent pollution, and the implementation of energy efficiency practices (solar systems, LED, windows etc.);
 - e. Cover the costs for incorporating the services of at least two full time consultancies within the Corporate Environmental Responsibility team.
- The annual resources are expected to be mobilized and assembled through regional and country offices budget share for administration, CapEx punctual requests, CSLI annual budget allocated to CER activities, partnership with private sector, governments donation etc. See below for an indicative distribution of financial responsibilities.

Activity	Unit	Annual Expenditure (USD)	Annual Savings (USD)	Financial responsibility
Energy efficiency measures		1.157.156	95.037	 Decentralised offices CapEx (e.g. RAP and RLC)
HVAC multisplit upgrade	20	652.245	9.321	
A/C monosplit upgrade	50	150.000	3.921	
Windows upgrade	100	167.910	353	 Host Government (e.g. Italy provides
Lighting Upgrade - indoor	400	48.000	10.480	funds for HQ building renovation)
Lighting Upgrade - outdoor	200	64.000	59.158	Partnerships (e.g. Auralight donations to HQ and RAF)
Appliances upgrade (e.g. ICT, kettles etc.)	150	75.000	11.804	
Solar PV installations in DOs		850.000	101.270	 Decentralised Offices (e.g. solar
Solar PV (kWp)	200	400.000	53.300	 system in FAOMR) CapEx (e.g. solar system in RAF) CSLUCER budget (e.g. solar system in
Solar hybrid (kWp)	150	450.000	47.970	 CSLI/CER budget (e.g. solar system in FAODJ, FAOUG) Donor country (e.g. Germany donated the solar system for HQ)
Solar Water Heating		62.880	16.876	 Decentralised Offices CSLI/CER Budget
Electric cars for fleet		6.000	0	 Decentralised Offices Partnership with private sector (cars donation)
Behavioural changes		0	55.082	 Decentralised Offices CSLI (consultancy)
Reduction in emissions air travel		0	1.341.273	-

Distribution of Financial Responsibilities for the Emission Reduction Plan Implementation