

"Sustainable energy for all is an important tool for eradicating extreme poverty, creating economic opportunity, combating climate change and supporting sustainable development. But we need all stakeholders to act together across all relevant sectors" - UN Secretary-General Ban Ki-moon, 2014.

What is WFP's Energy Efficiency Strategy?

WFP works in some of the most challenging locations in the world. In order to run its operations, in often isolated and vulnerable locations, responding to complex emergencies, WFP requires a great deal of power. Recognizing that energy-efficient and renewable technologies have significant environmental and financial benefits, WFP has developed an Energy Efficiency Strategy to fundamentally change how it powers its operations in the field.

Objectives

WFP believes that sustainable energy is not only critical for ensuring that operations continually reduce their impact on the environment, but also to ensure that operational costs are kept to a minimum, directing funds away from fuel costs to beneficiaries, to further the WFP goal of achieving zero hunger.

A three step process

The strategy follows a simple three step process:

- 1. Energy survey—The Green Box
- 2. Report and Recommendation
- 3. Implement and save

Energy Survey

Country offices request an Energy Efficiency Survey which comes in the convenient form of the Green Box (pictured above). With remote technical support the Green Box allows WFP Operations, even those in the most remote locations, to assess their energy use and requirements.

The findings of these surveys provide live energy consumption monitoring to help identify potential energy savings.

The Green Box

WFP Engineering and Environmental Sustainability teams developed the Green Box, in collaboration with the Munich Innovation Accelerator. A unique tool, it consist of tailored energy survey forms developed for use by non-specialists, an online energy monitoring meter, all the equipment needed to get the survey done and the remote technical support of WFP Engineering.















Report and Recommendation

The results of the energy survey will provide for online live monitoring and the production of a report on the premises energy profile, including a series of recommendations on:

- No cost energy reduction solutions such as switch off campaigns or revised maintenance schedules
- Low cost energy reduction solutions such replacement of light fittings or solar heaters
- Capital investment projects such as the installation of solar arrays or hybrid generators

Implement and save

On a daily basis the WFP Environmental Sustainability team works with country offices to reduce their energy dependence. Through the surveys and no cost recommendations they are able to tailor their engagement to maximize effect.

For low cost measures WFP Engineering through the Energy Efficiency Programme (a carbon levy on WFP's fleet) provides small grants to operations to assist them in implementing lost cost measures.

For the large scale capital investments WFP Engineering, provides the technical know how and financial support, via the WFP Capital Budgeting Facility, to deliver projects which make both economic and environmental sense to invest in.

Achievements so far

- From the **USD 2.8 million** invested in greening projects, a reduction of approximately 1.6% in energy use for the organization has been achieved.
- Over 40 energy efficiency projects have been implemented, in 13 countries.
- These energy efficiency projects will see an annual reduction in GHG emissions by around 2,600 tonnes CO2e, and annual cost savings of USD 1.35 million per year equivalent to providing school meals to 14,839 students for a year.
- Energy Surveys are currently being undertaken in 82 WFP facilities across 14 different countries with monitors now live in 30 locations.

Looking to the future

Projects so far have highlighted numerous opportunities for WFP to achieve even greater energy efficiency. It is estimated that every **USD 1 million** invested in energy efficiency upgrades should result in operational cost savings of approximately **USD 3 million** over the next 10 years, a **three-fold return**. And that's only WFP! This project has the capacity to be scaled up in support of all humanitarian actors.

