

SAVING MONEY - MAKING MONEY THROUGH ENERGY EFFICIENCY

Poor water and energy management introduces risks of wastage, low productivity, and inflated costs of production. WE4F and Eenovators Ltd have partnered to set up a water energy service company (WESCO) model to tackle energy inefficiency in the agri-food sector and to train young professionals on water and energy efficiency.

Background

Climate change and the rapid population growth in Kenya are putting increasing pressure on food systems. The efficient use of water and energy will be key for addressing these issues, which is why the **WE4F East Africa Regional Innovation Hub (EA RIH)** and **Eenovators Limited** have partnered to build technical capacities and develop innovative management solutions water and energy efficiency in the agri-food sector.

Project in a Nutshell

The overall goal is for Eenovators and its partners to pioneer a **WESCO model for the promotion of water and energy efficiency in the agri-food sector in Kenya**. This involves:

1. Capacity development for 10 young professionals. The youth undergo a six-month intensive training as part of the **Youth in Energy Empowerment Program (YEEP)**. They then intern with food processing industries to support the uptake of energy and water management best practices.
2. Implementation of **investment-grade energy and water audits** in the selected industries and installation of **Eagles Energy Management Systems** for the real-time monitoring of consumption and implementation of conservation measures to achieve cost savings.
3. Setting up a **water energy service company (WESCO) model with five industry partners** to design, finance, and implement energy efficiency measures in the agri-food sector.

PROJECT TARGETS AT A GLANCE

- 10 young professionals trained in water and energy management
- Eagles Energy Management Systems installed in 10 processing plants for real-time energy- and water-use monitoring
- Investment-grade energy and water audit reports for 10 firms developed
- Energy Service Company (ESCO)



1st cohort of energy auditors ready for learning sessions
Photo credit: Eenovators

YEEP students undertaking a training on Energy audit
Photo credit: Eenovators

Training	10 young professionals undergo six-month technical training in water and energy management and work placement in food processing companies
Water and energy efficiency	Installation and use of smart water and energy metering systems to reduce consumption in 10 agro-processing companies for cost saving measures
Water and Energy Saved	5% reduction of energy consumption 95,000,000 liters of water saved in 10 Agri-processing companies
Innovative Business Model	Develop and pilot a Water and Energy Service Company (WESCO) Model in Kenya

What has been achieved so far?

Youth in Energy Empowerment Program (YEEP) imparted essential skills in water and energy management to the first cohort of **10 young professionals**. Each of the young professionals is currently interning with an agri-food company to contribute towards the uptake of energy and water management best practices. Among the agri-food companies are **Kenya Nut, Cargill, Tamo, Wildfires, KEFRI, Kagwe Tea, Kenchic, Kapa Oil and Olnjorow**.

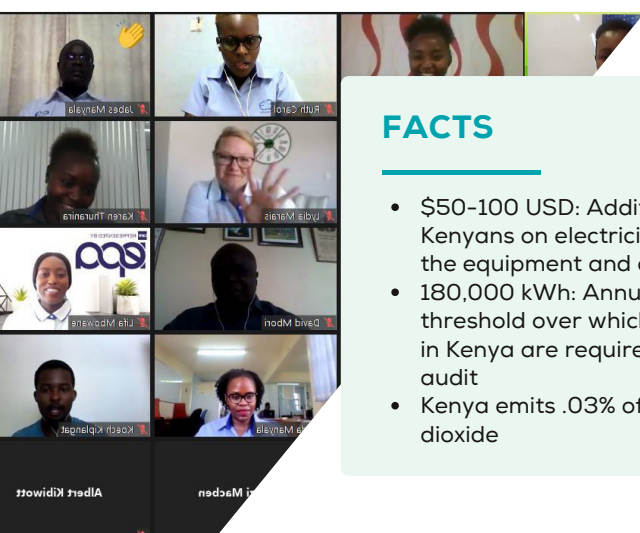
In the 10 companies, real-time water and energy monitors were installed for data collection and analysis. This helps to track progress in implementing efficiency measures.

Several round tables and educational forums have been implemented through the World Energy Day platform being coordinated by EEnovators.

Looking Forward

1. Training of staff for adoption of energy and water management best practices with **guaranteed savings of up to 30%**.
2. **Ten youth trained in energy and water management** with a focus on food industry.
3. **Ten agro-processing plants** become more **energy and water efficient** and use production methods that help reduce carbon emissions.
4. Improved **food and nutrition security**, following more efficient processing practices within the companies.
5. **Investment-grade energy and water audit** reports for 10 firms that would results into savings, hence more profits.
6. **Energy management committees** in each of 10 firms with representatives trained on the use of Eagles Energy and Water Management System.

Virtual launch for partners and students
Photo credit: EEnovators



FACTS

- \$50-100 USD: Additional amount spent by Kenyans on electricity every year because of the equipment and appliances that they use.
- 180,000 kWh: Annual energy consumption threshold over which all designated facilities in Kenya are required to undergo energy audit
- Kenya emits .03% of the world's carbon dioxide

Funded by: Water and Energy for Food (WE4F) Grand Challenge, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) and the European Union

Main Implementer:
Eenovators Ltd and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Main Partners:
Federal Ministry for Economic Cooperation and Development (BMZ)
European Union (EU)
Ministry of Foreign Affairs of the Government of the Netherlands
Swedish International Development Cooperation Agency (Sida)
US Agency for International Development (USAID)

Duration: October 2020–October 2021

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More about the global initiative Water and Energy for Food (WE4F) Grand Challenge: <https://we4f.org/>

Further information about the project: <https://we4f.org/>

As at September, 2021