



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

“Mayekawa’s technology will help cool our products with less energy consumption and reduced use of GHGs, which is more efficient and harmless to the environment.”

Ms. Katinka Condes, Head of Quality, Sir Fruit Co., Ltd., South Africa

Japanese low carbon technologies contribute to energy savings in Africa

Japanese low carbon technologies were identified to help companies in Egypt, Kenya, Senegal and South Africa upgrade their manufacturing technologies and processes, with a view of contributing to energy-efficient production and reduced emissions. One of the technologies, an efficient cooling system with heat recovery function from Mayekawa Mfg. Co., Ltd., helped SirFruit Co., Ltd. of South Africa reduce energy consumption in juice processing.

UNIDO’S APPROACH

The UNIDO project ‘low carbon and climate resilient industrial development in Africa’ (Egypt, Kenya, Senegal and South Africa), funded by the Government of Japan, sought climate resilient technologies from Japan and organized a study tour from the four countries to Japan in 2017.

During this visit, African companies met Japanese technology providers, facilitated by UNIDO ITPO Tokyo’s environmental technology database (currently Sustainable Technology Promotion Platform).

Through the project, technologies for climate change adaptation in mainly food processing industries were evaluated. As a result, several projects were successfully promoted, including a cooling system with heat recovery

function by Mayekawa Co. used in processing of fresh fruit juice by SirFruit Co., Ltd. of South Africa (one of the selected companies in Africa).

IMPACT

Mayekawa Mfg. Co., Ltd. met with all project partner companies, including SirFruit Co., Ltd., during the study tour and presented how their technology could help improve the efficiency of the cooling systems. After an open competitive bidding, Mayekawa Mfg. Co., was selected to provide its technology.

As a direct result of using the efficient chillers with heat recovery system, SirFruit Co. is saving roughly 40% energy. The company plans to invest those savings in solar panels, with envisaged total savings of 50%.

WAY FORWARD

Having established initial business partnerships through UNIDO, the African companies have the opportunity to expand the adoption of energy efficient climate resilient technologies from Japan on a commercial basis. Energy efficiency is not only a commercial necessity, but also a social one.

Building on the longstanding experience in safeguarding the environment, UNIDO takes a holistic approach to facilitate the transformation of industries in developing countries and economies towards a low carbon and climate resilient future.

AT A GLANCE

Project title	Low carbon and climate resilient industrial development in Africa
Thematic area	Safeguarding the environment
Donor	Japan
Project counterpart	National Cleaner Production Centers in each country
Budget	1.5 million EUR
Duration	2013-2019