

ECOWAS Refrigerators and Air Conditioners Initiative (ECOFRIDGES)

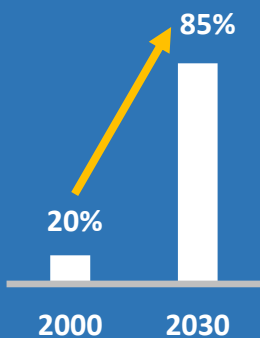
ECOFRIDGES aims to unlock \$25M in finance for efficient, climate-friendly products



Refrigerators' share of household appliance electricity use in Ghana*



Senegalese Households that own a Refrigerator**



REGIONAL CONTEXT

Countries in the Economic Community of West African States (ECOWAS) are experiencing significant economic and population growth, which is driving ever greater demand for refrigerators and air conditioners. Cooling products are essential for the health, well-being and competitiveness of these economies, but they pose critical challenges in terms of energy consumption and impacts on the environment. Outdated products consume 2 to 3 times the amount of energy as efficient options available today, and they often contain refrigerant gasses that are harmful to the planet. A lack of information on product performance, inadequate policies, and higher purchase prices often prohibit adoption of efficient models.

ECOFRIDGES aims to unlock \$25 million in potential financing to support the purchase of 50,000 energy-efficient and climate-friendly cooling products to replace old existing equipment. It will build on lessons from Ghana and others' successful policies and financial mechanisms and link with activities underway by the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) to spur the adoption of superior cooling solutions. ECOFRIDGES includes complementary components, notably the proper disposal of used appliances, product testing, policy considerations, and awareness campaigns.

The resources developed with Ghana and Senegal will be packaged into a toolkit, and training will be provided to other ECOWAS countries to encourage replication. Ghana and Senegal will also be recognised globally for their ambitious leadership via events and outreach by UN Environment.

COLLABORATIVE APPROACH

UN Environment's United for Efficiency (U4E) initiative is partnering with the governments of Senegal and Ghana, ECREEE, and the Basel Agency for Sustainable Energy to conduct ECOFRIDGES. U4E is highly experienced with convening top experts from international organisations, the private sector, and civil society to provide tailored technical assistance on market transformation in 40 countries. This same collaborative approach will be taken throughout the ECOFRIDGES project.

ECOFRIDGES is made possible with funding support by the Kigali Cooling Efficiency Program. Activities will get underway in early 2019, and the financial mechanism is expected to launch in 2020. Success will require close engagement with a range of stakeholders, including energy and environment officials, customs agents, manufacturers, retailers, financial institutions, waste management companies, electric utilities, consumer protection groups, the media, product testing laboratories, and beyond.

*Energy Commission of Ghana. National Energy Statistics 2007-2016.

**LBNL 2012. Potential Savings for Cote d'Ivoire, Ghana, Nigeria Senegal from BUENAS modelling.



ACTIVITIES

Financial Mechanism

A financial mechanism will be developed for households that wish to replace an operational refrigerator that is at least 10 years old. A simple review of bill payment history, income and other basic information will be used to determine eligibility for financing. Different financial mechanism approaches will be explored, such as giving consumers the option to finance the purchase through monthly payments on their electric utility bills, or other channels that meet the country-specific needs. A financial tracking tool will be used to follow repayment progress and program operations to assure the viability of the mechanism over time.

Monitoring and Evaluation

Building on existing regional efforts on market surveillance and enforcement, ECOFRIDGES will include robust qualification procedures to ensure that only energy-efficient and climate-friendly products are eligible for the financial mechanism. Technical specifications will be defined to indicate minimum performance levels, features and other considerations for product to be eligible for the financial mechanism. A sample of products will be tested to verify compliance. New product sales and the submission of old refrigerators and air conditioners will be regularly checked to evaluate the project's impacts. Additional policy recommendations that support the use of the financial mechanism will also be provided.

Outreach and Awareness

Multi-faceted outreach will be conducted to raise awareness and interest among suppliers and consumers on the opportunities presented by ECOFRIDGES. In collaboration with local media outlets, non-profit organisations, industry and government channels, ECOFRIDGES may be featured in print and radio spots, highlight success stories and case studies, and participate in public events. It will target communities to participate directly in the project, and encourage others from around the world to take similar action.

Capacity Building

Capacity building will be conducted with stakeholders responsible for implementing the project. In addition, a toolkit will be developed for others to apply lessons learned from Ghana and Senegal, encouraging adoption of similar policies and practices in the region. A multi-day training, organised by ECREEE, will be conducted for key officials from each ECOWAS member state. U4E will also disseminate the toolkit in similar cooling projects in its portfolio around the world.

Estimated Benefits in 2030 from Transforming the Residential Refrigerators and Air Conditioners Market in ECOWAS*



4288 GWh of Electricity Savings



\$472million in Energy Bills savings



Mitigate 1933 kilotons of CO2 emissions

Source: Approximation from U4E Country Savings Assessments, 2016.

*Assumes MEPS are adopted in 2020 based on the best MEPS available as of 2015.

GET INVOLVED

ECOFRIDGES' success depends on the input and collaboration of a range of organisations from public, private and non-profit sectors. Policymakers and stakeholder representatives provide strategic guidance to the project team:

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