PROJECT AT-A-GLANCE

Leapfrogging Chilean’s markets to more efficient refrigerator and freezers

GEOGRAPHICAL SCOPE
Latin America and the Caribbean

STATUS  ACTIVE
STARTING DATE  AUGUST 2018
CLOSING DATE  AUGUST 2021

TEAM LEADERS
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PARTNERS
National Government; Samsung; MABE; Whirlpool; Intertek; CESMEC; Lenor; MIDAS Chile Recycling; Regener Chile; ASHRAE

TOTAL PROJECT COST
$ 8.97 million

DONOR
Global Environment Facility (GEF)

IMPLEMENTING PARTNER
United Nations Environment Programme

OTHER EXECUTING PARTNERS
Fundación Chile, Ministry of Energy

KEY PROJECT OBJECTIVES

Residential refrigerators represent the second largest (after lighting) end-user sub-sector with significant potential for energy saving. Based on U4E Country Assessments, the reduction potential range in electricity consumption, monetary savings and GHG emissions mitigation in Chile due to a market transformation to energy efficient refrigerators and freezers – compared with current values, with a Best MEPS Scenario (2016 levels) – is very significant by 2030:

- **1.3 TWh** on annual electricity savings (Avoided investment costs for 3 power plants of 100MW).
- **600,000 tonnes of CO₂** avoided annually (equivalent to more than 340,000 cars). Cumulative CO₂ emission reductions between 2020-2030 can reach 3.41 million tonnes.
- **Over 294 million USD** savings in annual electricity costs.
THE CHALLENGE

In 2015 the electricity consumption of refrigerators and freezers in Chile was about 4.5% of the total electricity consumption in the country and the stock is expected to increase by around 2% per year from 2015 to 2030. Refrigerators sales in Chile amounted to approximately 600,000 units of refrigerators / freezers on average each year. The major market players are national brands Fensa and Mademsa (made in Chile by Electrolux) and international brands: Samsung, LG and Daewoo.

The refrigerator/freezers available in the market in Chile have an average energy efficiency index of 50 (class A). Therefore, there is still a need to improve the energy efficiency of refrigerators/freezers in the market.

The project will help Chile to achieve the objectives of its energy efficiency strategy by strengthening the capacity of the Government of Chile, raising awareness among consumers and interest of refrigerating industry key players about efficient refrigeration technologies.

WHAT WE DO

United for Efficiency Center of Excellence team of experts, following the U4E Integrated Policy Approach, provide technical assistance to Chile in order to achieve market transformation to energy efficient residential refrigerators/freezers.

The project seeks to achieve four main outcomes:
- Accelerated transformation of the market for energy efficiency residential refrigerators/freezers via implementation of advanced minimum energy performance standards (MEPS) and labels in line with international best practices and provision of associated capacity building.
- Actors comply with improved monitoring, verification, and enforcement (MVE) labeling regulations, testing protocols and measurements methodologies to ensure residential refrigerators/freezers meet improved efficiency levels.
- Successful supporting policies including communication campaigns on high efficiency products, financial mechanism design to overcome higher initial cost and demonstration programmes on energy efficient refrigerators designed and implemented.
- Strategy proposal for a national framework and the environmentally sound management of refrigerators/freezers developed and communicated to local stakeholders.

UN ENVIRONMENT’S ROLE

United for Efficiency provides developing and emerging economies through their in-house experts and specialized partners with tailored technical support to transform their markets by accelerating the adoption of energy-efficient lighting, appliances, and equipment. Currently it is present in more than 30 countries worldwide. Based on each country’s circumstances, United for Efficiency works with any of the following products: lighting, refrigerators, room air conditioners, motors and transformers - 5 products that together consume over half of the world’s electricity.

By following United for Efficiency's Integrated Policy Approach and covering crucial elements from the transformational pathway, such as Standards and Regulations; Labelling and Communication strategies; Financial Mechanisms; Monitoring, Verification and Enforcement; and Environmental Sound Management, countries achieve a lasting market transformation, allowing monetary savings on their utility bills, helping businesses thrive through greater productivity, enabling utilities to meet growing demand for electricity, and assist governments in reaching their economic and environmental ambitions. Such support is available at three levels: Global, Regional and National providing several tools and resources to support committed countries in their efforts, such as Policy Guides, multiple assessments (country level, street lighting, etc), regional policy roadmaps and harmonization process recommendations, development of training for policymakers and practitioners and National Action Plan implementation support.