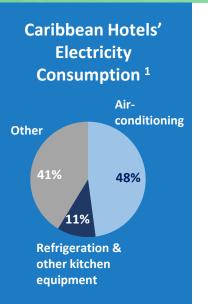
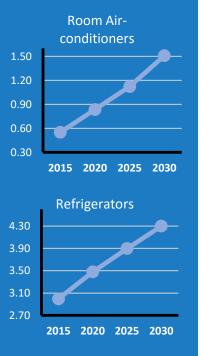
# **Caribbean Cooling Initiative (C-COOL)**



## Projected Stock in Participating Countries<sup>2</sup>



1 CHENACT. Assess Performance (Phase II): Analytics & Recommendations. 2016 2 Approximation from U4E Country Savings Assessment, 2016



#### **REGIONAL CONTEXT**

Air conditioners and refrigerators provide essential services in the yearround tropical climate of the Caribbean. Growing local populations and the tourism that helps drive many economies are demanding ever more cooling products. Unfortunately, the energy performance is largely unregulated, so inefficient models are common and up to 80 per cent of the electricity is wasted. With high electricity prices and reliance on imported fossil fuels, this waste has big implications: residents and businesses suffer from expensive power bills, utilities struggle to meet peak energy demand, governments are saddled with increasing dependence on imported energy (with prices that fluctuate), and pollution and greenhouse gas emissions are exacerbated.

Improving air conditioner and refrigerator performance with available and affordable solutions, while transitioning to new refrigerants (the gases used in the operation of the equipment), offers an unparalleled opportunity to address these challenges. The Bahamas, Barbados, the Dominican Republic, Jamaica and St. Lucia have been proactive in pursuing a variety of energy and environment goals over the years. They represent a diverse cross-section of the Caribbean, and their governments and tourism industries have expressed a strong interest in transforming their markets for cooling products.

### **PROJECT BACKGROUND**

UN Environment's United for Efficiency (U4E) programme is conducting market transformation projects in nearly 20 developing and emerging economies around the world. U4E brings together leading experts from international organisations, the private sector, and civil society groups to provide tailored technical assistance to participating governments and stakeholders. Support ranges from developing model regulations and outreach campaigns to assisting with market monitoring, product testing, piloting financial mechanisms, recycling used equipment, and beyond. U4E has also developed a variety of tools, guidance, and training packages for policymakers and practitioners.

In 2017, U4E was selected by a new philanthropy - the Kigali Cooling Efficiency Program - to assist the aforementioned countries with transforming their markets. The resulting Caribbean Cooling Initiative (C-COOL) was launched in early 2018. The aim is to showcase the myriad benefits of a rapid and comprehensive transition to energy-efficient and climate-friendly air conditioners and refrigerators. Government officials, tourism stakeholders, technology providers, financial institutions, and civil society organisations will be engaged throughout the project.











## ACTIVITIES

**Market Assessment:** An in-depth market assessment will be undertaken to gather data and stakeholder input on the current stock and future projections of refrigerators and air conditioners in each country, the impacts on electricity demand and other factors, and the supply chain and key actors (e.g. importers, distributors, retailers, installers, service companies, financial providers, civil society organisations).

**National Cooling Strategy:** A strategy will be developed in consultation with government officials and stakeholders. It will include:

- · insights from the market assessment on the cooling sector;
- a roadmap to adopt model regulations and supporting policies (e.g. product labels) for room air conditioners and refrigerators;
- links to existing energy policies, refrigerant transition plans, Nationally Determined Contribution, etc.;
- an overview of the potential to use financial mechanisms to address first-cost barriers to adopting higher-performance products;
- insights on how to address cooling demand through building codes, use of shading and cool roofs, operations and maintenance, etc.

**Financial Mechanism:** Financial analysis (e.g. return on investment, sensitivity analysis) will be conducted to assess the impacts of representative investments in new technologies. Suitable risk coverage instruments (e.g. standardized contract, surety insurance, bank guarantee, independent validation mechanism) will be considered. Based on the findings and the interests of participating organisations, a scheme will be developed to help address barriers to purchasing energy-efficient and climate-friendly products. Local financial service providers and their clients will be engaged in the development process. Volunteers will be solicited to pilot the financial mechanism.

**Model Policies and Capacity Building:** Based on the National Cooling Strategy and global practices, the project team will recommend minimum energy performance standards (MEPS) and product labels for air conditioners. Stakeholder consultations will be conducted with relevant groups (manufacturers, consumers, civil society organisations) to ensure different viewpoints are properly considered, and recommendations that will be provided on public outreach. Targeted capacity building will be offered to facilitate the adoption of the policy recommendations.

Estimated Benefits in 2030 from Transforming the Cooling Markets\*



1,237 GWh of Electricity Savings Bahamas: 48 Barbados: 44 Jamaica: 232 Dom. Republic: 900 St Lucia: 13



## \$222 million in Energy Bills savings

Bahamas: 5.8 Barbados: 7.7 Jamaica: 80 Dom. Republic: 125 St Lucia: 3.4

# 1,000 kilotonnes of CO2 emissions avoided

Source: Approximation from U4E Country Savings Assessment, 2016.

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

### **GET INVOLVED**

C-COOL's success depends on the input and collaboration of a range of organisations from the public, private and non-profit sectors. Senior policymakers and representatives from the private sector will provide overall strategic guidance and input on key deliverables to the project team. For information on how to get involved, please contact the C-COOL project lead, Loreto Duffy-Mayers, at <u>loreto.duffy-mayers@un.org</u>. U4E's coordinator for cooling activities may be reached at <u>brian.holuj@un.org</u>.