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## PROJECT AT-A-GLANCE

Accelerating the implementation of the ASEAN Regional Policy Roadmap for Energy Efficient Room Air Conditioners

### GEOGRAPHICAL SCOPE

Regional project

ASEAN

For more information, please visit:  
[www.united4efficiency.org](http://www.united4efficiency.org)

TARGETED PRODUCTS



### STATUS ACTIVE

STARTING DATE    CLOSING DATE  
**FEBRUARY 2023**    **APRIL 2025**

### TOTAL PROJECT COST



**\$1,100,000**

### PARTNERS

**United Nations Environment Programme (UNEP)**  
 – **United for Efficiency (U4E)**

**Lawrence Berkeley National Laboratory (LBNL)**  
**International Institute for Energy Conservation (IIEC)**

### IMPLEMENTING PARTNERS

**ASEAN Centre for Energy (ACE)**

**Singapore:** National Environment Agency

**Malaysia:** Ministry of Natural Resources, Environment and Climate Change and, Energy Commission

### DONOR

**Clean Cooling Collaborative**

### TEAM LEADER

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## KEY PROJECT OBJECTIVES

The project aims to promote the increased deployment of high efficiency room air conditioners (ACs) by providing technical assistance and capacity building on Minimum Energy Performance Standards (MEPS) and labels in the region, with in depth activities in Singapore and Malaysia. If all ten ASEAN member states make the transition to more efficient ACs, the potential savings in the region could be:

Annual Savings in 2040\*



**144 TWh of annual electricity savings** (avoided investment costs for 65 power plants of 500 MW)



**17 billion USD savings in annual electricity costs**



**112 million tonnes of CO<sub>2</sub> avoided annually** (equivalent to around 62 million cars)

\* Based on the U4E 2022 Country Savings Assessment. Assumes Minimum Energy Performance Standards (MEPS) come into full force in 2023.



### THE CHALLENGE

The ASEAN region is one of the fastest growing markets for cooling products in the world. The current market penetration of air conditioners is 15% and this is expected to grow from 73 million installed units in 2020 to about 243 million units in 2040. To address the impact this growth will have on climate and energy, the ASEAN member states have adopted a roadmap for harmonization and implementation of MEPS in the region. This sets guidance for member states to achieve a less stringent Phase I by 2023, and a more stringent Phase II by 2050. However, a comprehensive strategy to transform the market to higher efficiency ACs using low-global warming potential (GWP) refrigerants is still needed.

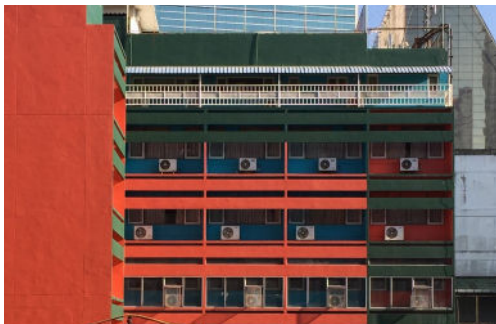


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### WHAT THE PROJECT DOES

United for Efficiency (U4E)'s team of experts and partners, following the U4E Integrated Policy Approach, provides technical assistance to ASEAN member states through the development of a regional and national efficient cooling policies, regulations and practical innovative interventions to ensure a successful market transition to energy-efficient and climate-friendly air conditioners, thereby reducing electricity consumption and related greenhouse gas and air pollution emissions. The project will accelerate the adoption of the ASEAN regional roadmap on air conditioners to enable countries to go straight to Phase II, focusing on Singapore and Malaysia to be frontrunners in implementing more stringent regulations. This will involve:

- Undertaking data collection on products in the market and a technical analysis for the government on updating regulations.
- Developing stringent regulations, including MEPS, labels and refrigerant requirements for single- and multi-split ACs, which will create a mandatory floor for the products entering the market.
- Supporting government on stakeholder engagement and consultations.
- Conducting an analysis to demonstrate the positive impact of the proposed MEPS levels, low GWP refrigerants, and labels.
- Financial incentives for higher uptake of energy-efficient appliances.
- Awareness raising with local SME manufacturers, assemblers, suppliers.

The project will leverage the effects of the activities in Malaysia and Singapore through regional level activities with the ASEAN Centre for Energy (ACE), including:

- An update of the regional policy roadmap to cover all ACs with cooling capacities up to 4.5 kW.
- An update of the regional analysis which will be used for a policymaker awareness raising campaign on the benefits of the updates MEPS levels.
- Organization of regional meetings and awareness raising, as well as stocktaking on agreed MEPS levels.

### UN ENVIRONMENT'S INTERVENTION



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 (residential and commercial), room air conditioners, motors and transformers - five 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 Environmentally 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.), policy roadmaps and harmonization process recommendations, development of training for policymakers and practitioners and National action plan implementation support.