





# Space cooling represents up to 50% of electricity demand in Southeast Asia

The world is poised to install 700 million new room air conditioners by 2030, and 2.5 billion by 2050. Cooling and refrigeration are essential to improving lives and livelihoods by enhancing healthcare, education, and productivity. In Southeast Asia alone, the room air conditioner (AC) market is expected to grow by 10% annually over the next five years, hand in hand with increasing energy demand and greenhouse gas emissions.

Under the Kigali Amendment of the Montreal Protocol, 197 countries committed to cut the production and consumption of hydrofluorocarbons (HFCs) — potent greenhouse gases used in refrigeration and air conditioning — by more than 80 percent over the next 30 years. This effort has the potential to avoid up to 0.5° C of global warming by the end of the century. The Kigali Cooling Efficiency Program (K-CEP) is a philanthropic program focused on using energy efficient cooling to increase and accelerate the climate and development benefits of the Kigali Amendment to phase down HFCs.

In collaboration with K-CEP, CLASP is working regionally with the Association of Southeast Asian Nations (ASEAN) and nationally in Thailand, Vietnam, and the Philippines, to increase the market share of highefficiency, low global warming potential space cooling and refrigeration appliances, through targeted policy and market interventions.

# Standards & Labeling Policy

# Vietnam

Assistance to improve AC efficiency requirements: minimum energy performance standards (MEPS)

# Thailand

Assistance to improve AC efficiency requirements: MEPS & highefficeincy performance standards (HEPS)

# **Philippines**

Assistance to improve AC efficiency requirements: MEPS

# Compliance

# **ASEAN**

Accreditation, mutual recognition agreements (MRAs), and regional network

#### Vietnam

Strengthen capacity, measure compliance baseline & improvements

# **Philippines**

Implementing procedures, rules, & regulations

# Market Transformation



#### Vietnam

Opportunities for incentives and large-scale AC procurement and replacement programs

# Thailand

Opportunities to incorporate recycling and disposal activities for AC replacement programs

Learn more at clasp.ngo/SEA.



2030 EMISSIONS SAVINGS BY POLICY

# Thailand AC exports benefit from vibrant regional trade

In ASEAN, tariff reductions on intraregional trade along with regional standards harmonization has led to AC markets dominated by products manufactured and traded regionally as opposed to Chinese-made ACs. Already, Thailand is the world's second largest AC manufacturer and exporter, with several of its largest export markets from within ASEAN.

# Potential emissions savings from high-efficiency ACs

# By 2030

- Enhancing MEPS in Thailand, the Philippines, and Vietnam could avoid over 3.5 Mt CO<sup>2</sup> in emissions relative to business as usual scenario.

- Transforming markets to best available technologies would avoid more than 15.6 Mt CO<sup>2</sup>.



# **Program Overview & Expected Impacts**



#### 1 REGION & 3 COUNTRIES ASEAN, the Philippines, Thailand, and Vietnam

3 AC EFFICIENCY REQUIREMENTS/MEPS

revised or improved in the Philippines, Thailand, and Vietnam

#### 3.5 Mt CO<sub>2</sub> EMMISSIONS SAVED in 2030 from adoption of more stringent efficiency requirements for ACs and revised AC MEPS in three countries



20% IMPROVED COMPLIANCE RATES over 3 years for MEPS in Vietnam



GREATER PENETRATION OF HE/LOW-GWP ACs in ASEAN

in ASEAN Region on compliance best practice

**50% IMPROVED RECYCLING & DISPOSAL RATES** 

and 3 test labs improve capacity for testing ACs in ASEAN Region





for ACs in Thailand

**1 LAB ACCREDITED** 

**40 STAFF TRAINED** 

**CLASP** improves the energy and environmental performance of the appliances & equipment we use every day, accelerating our transition to a more sustainable world. Our programs increase uptake of affordable, low-impact, high-quality appliances. We serve as the leading international voice & resource for appliance energy efficiency policies and market acceleration initiatives.