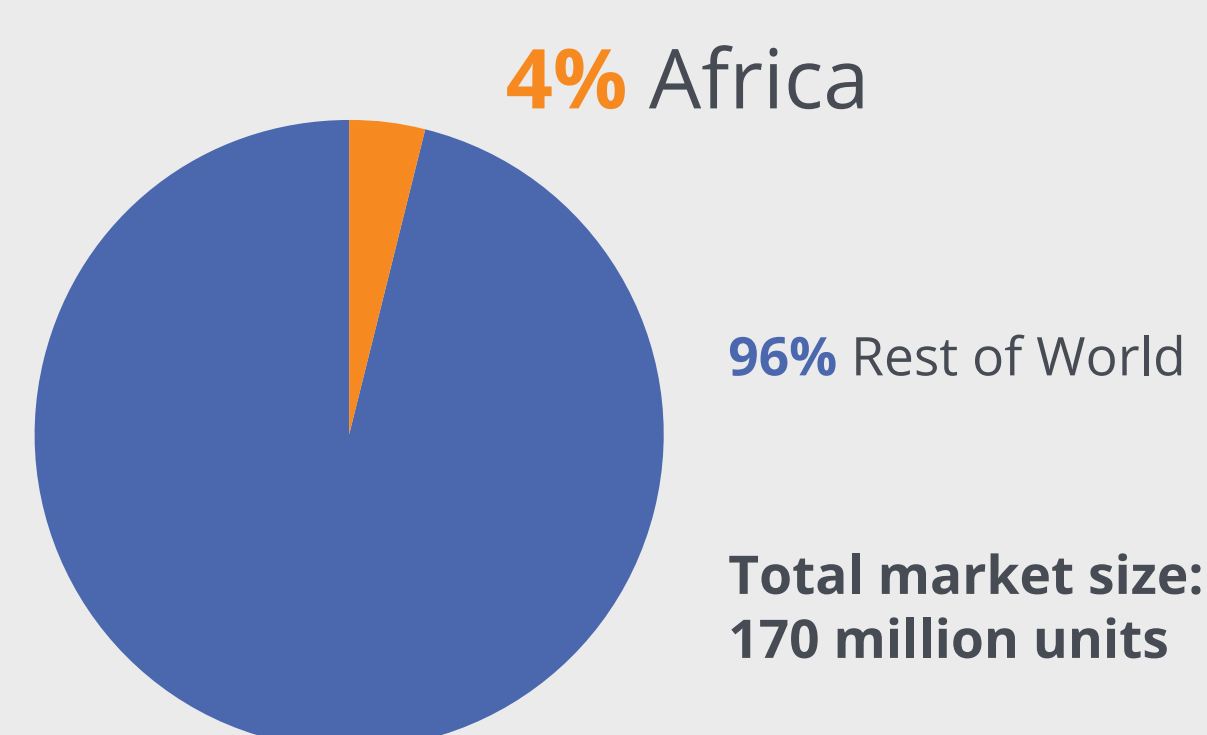
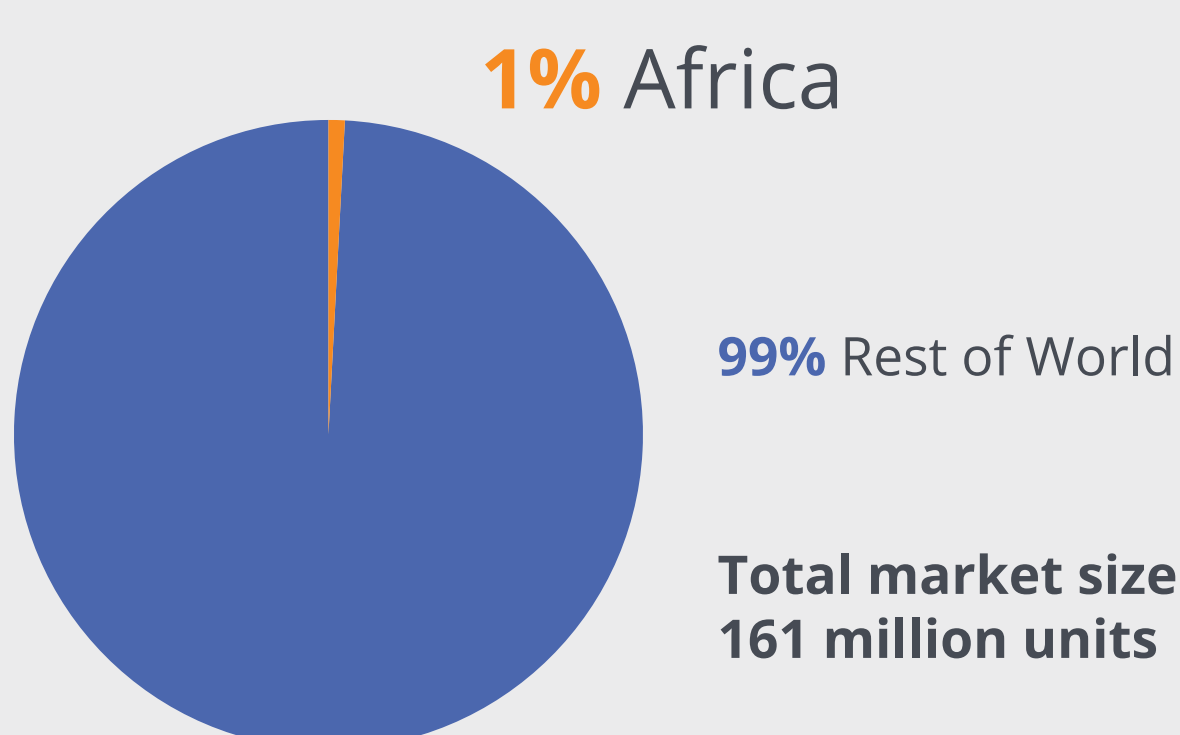


AFRICAN MARKET SHARES IN THE GLOBAL REFRIGERATION AND AIR CONDITIONER MARKET

Global Refrigeration Market



Global Air Conditioners Market

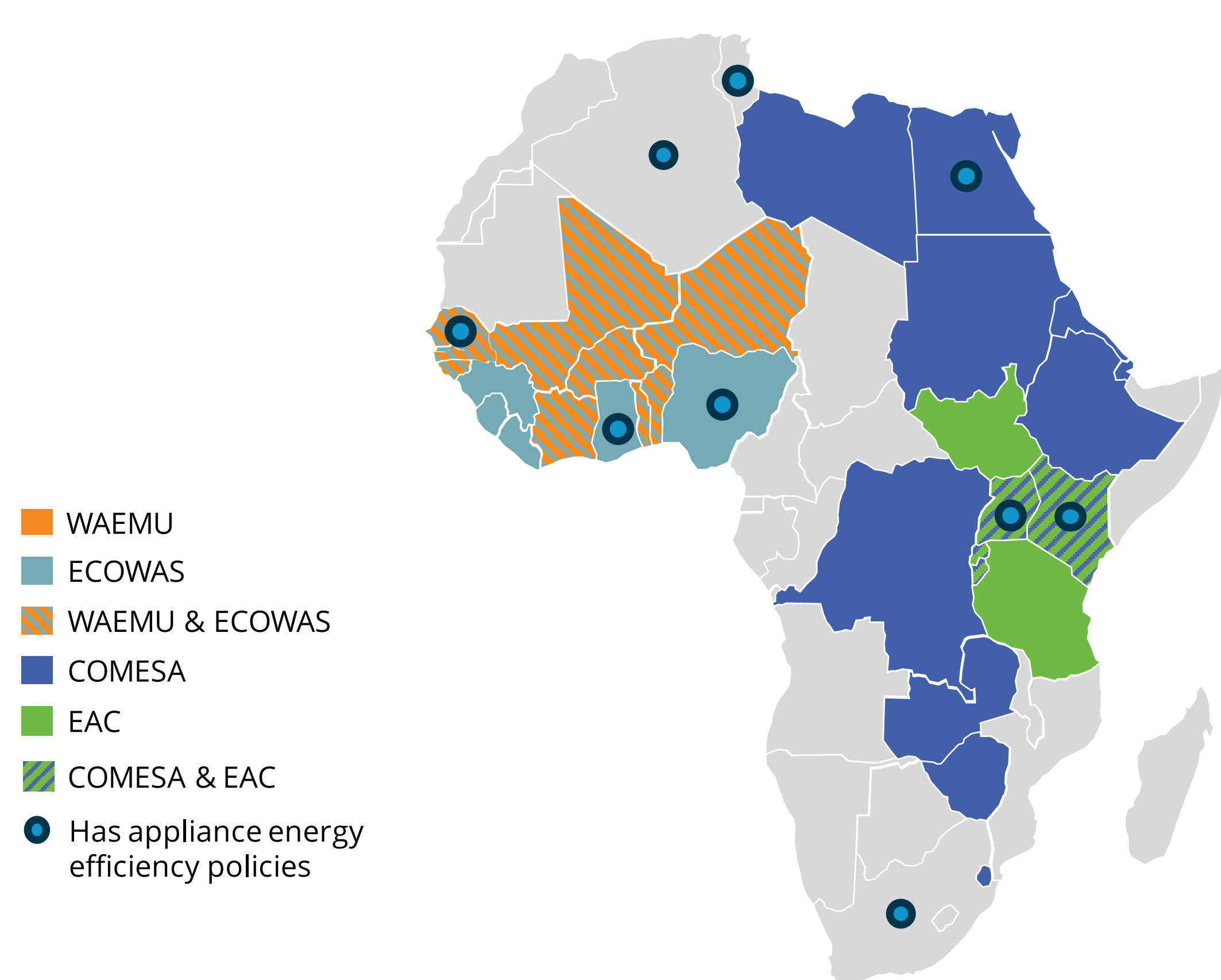


African markets represent a very small portion of the global market for air conditioners and refrigeration appliances, accounting for 1% and 4%, respectively.

What if coupling proven energy efficiency policy tools with effective trade policy could reshape the regional market for highly efficient appliances in Africa?

African countries import most, if not all, of their cooling equipment from a handful of large trading partners

ENERGY EFFICIENCY PROGRAMS FOR ROOM AIR CONDITIONERS AND REFRIGERATORS IN AFRICA



THE TRADE CONNECTION

Countries in ECOWAS and EAC import 80% to 90% of their cooling appliances from 10 major trade partners

ECOWAS Top 10 Trade Partners			
Room Air Conditioner		Refrigeration	
Country	Share	Country	Share
China	48%	China	49%
Thailand	14%	Turkey	5%
France	6%	South Africa	5%
Malaysia	4%	Italy	4%
United Arab Emirates	4%	France	4%
USA	3%	USA	4%
Germany	2%	Romania	4%
Rep of Korea	2%	India	3%
India	2%	Indonesia	3%
Italy	2%	Denmark	2%

China, Thailand, South Africa, and other trade partners' MEPS are more stringent than what is currently required in African countries

MEPS for room ACs from selected trade partners	
Country	Efficiency ratio (W/W)
China (EER)	3.20
Thailand (SEER)	3.27
South Africa (EER)	3.00

AFRICAN COOLING ENERGY EFFICIENCY POLICY: Under Development

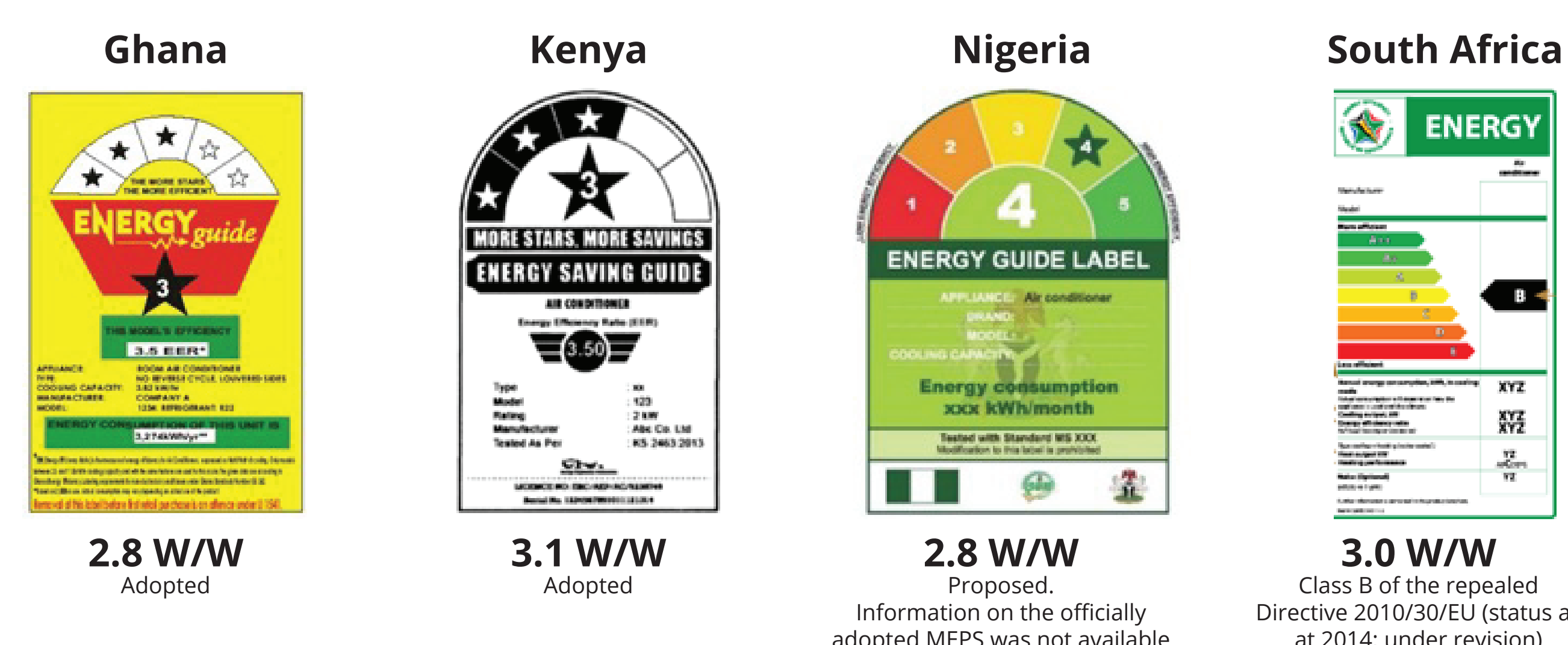
In the Economic Community of West African States (ECOWAS):

- 2/3 of the 15 member states do not currently have energy efficiency policies in place
- Ghana and Nigeria have well established appliance energy efficiency programs
- The ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) has developed several regional Minimum Energy Performance Standards (MEPS)
- The West African Economic and Monetary Union (WAEMU), has drafted but not implemented harmonized product labels

In the East African Community (EAC):

- Kenya has implemented energy efficiency policies for room ACs and refrigerators
- Uganda and Rwanda are currently developing standards

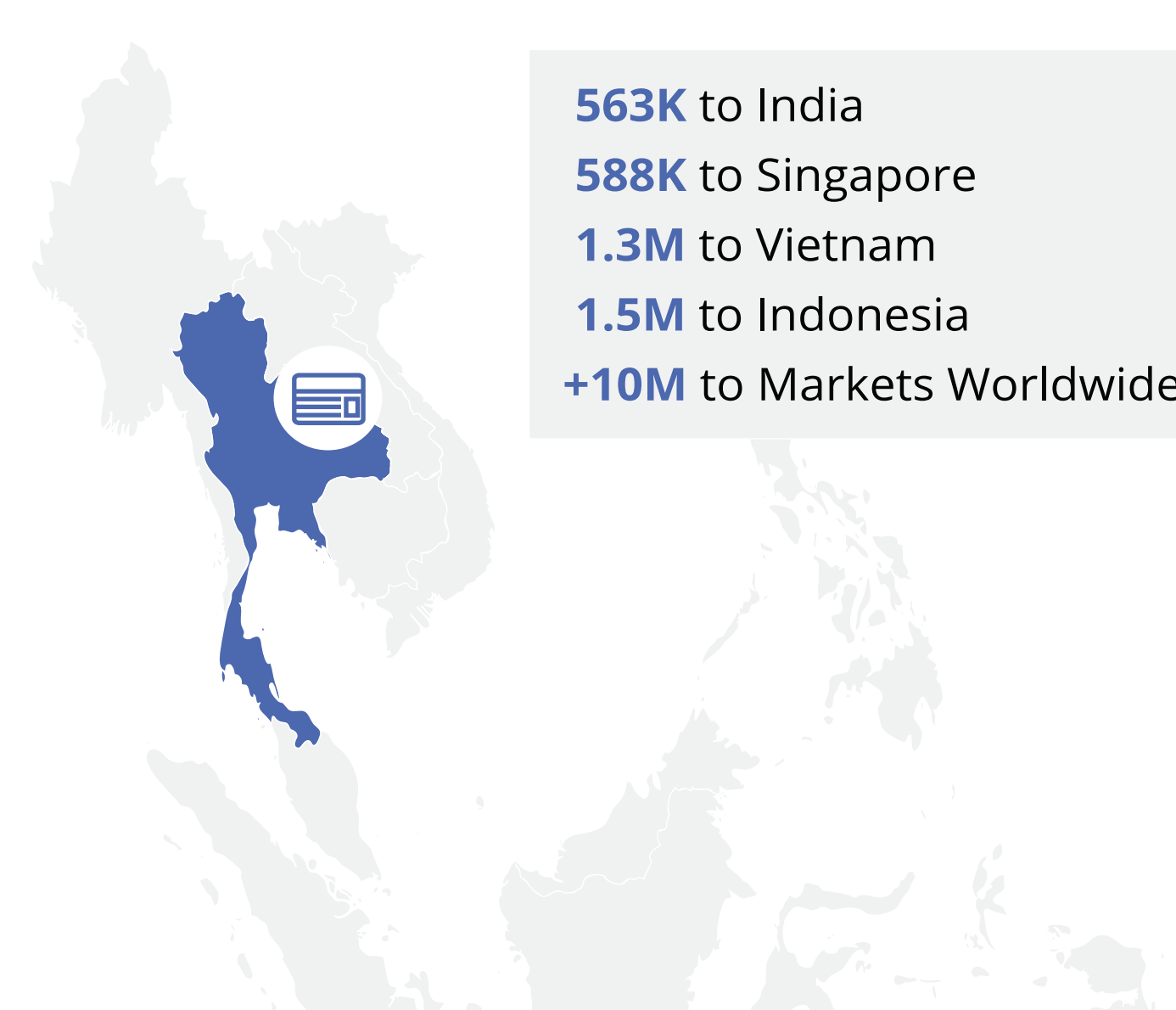
MEPS FOR ROOM ACS IN SELECTED COUNTRIES IN AFRICA



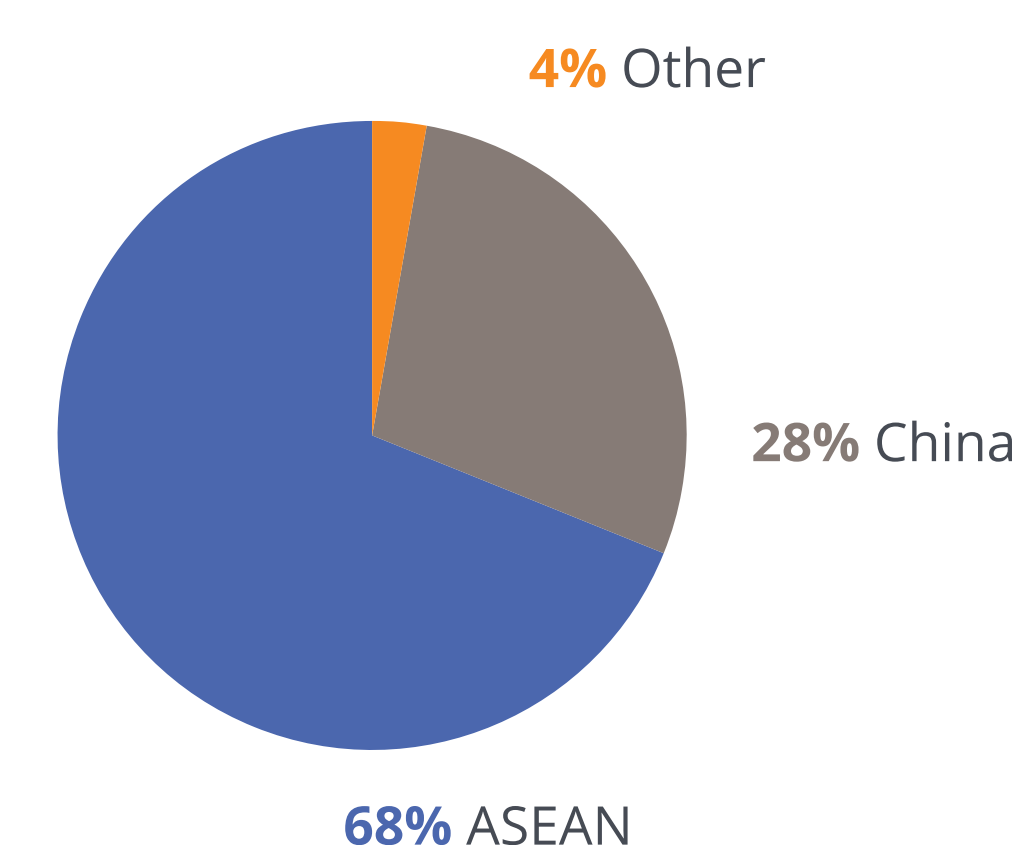
REGIONAL HARMONIZATION AND TRADE SUCCESS: The ASEAN Experience

The Association of Southeast Asian Nations (ASEAN) has stimulated regional trade in AC units by harmonizing their test standard and reducing import tariffs within the member states

Major Markets for Thai AC Exports



Share of Imports in ASEAN, 2015



CONCLUSIONS

- 1 A regional framework for appliance energy efficiency would strengthen regional trade and protect markets from inefficient, environmentally harmful, and poor performing cooling products.
- 2 Energy efficiency standards in small markets that rely on imports will have a better chance at promoting the markets for efficient appliances when aligned with international standards, major trading partners, or a trading block within the region.
- 3 The efficiency gap of cooling equipment available in African markets vis-à-vis major trading partners further highlight opportunities for African policymakers to improve and promote the availability of high efficiency products through energy efficiency policy.