

Labeling and Appliance Standards for Energy Efficiency from an International Perspective

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CLASP Overview and Mission

- Who we are:
 - USA non-profit established 1999
 - Worked in over 50 countries / economies
 - 40+ staff around the globe
 - Dedicated programmes in Africa, India and Europe
- Mission: “CLASP supports the development and implementation of policies and programs to improve the energy and environmental performance of appliances and equipment we use every day.”



Electricity enables us to do things....



- Cold drinks
- Cool air
- Bright lights
- Great movies
- Clean clothes

- Quality of life is really about services, not electricity
- Energy-efficiency enables you to enjoy the same services while using less electricity – any policy-makers hold the key

Benefits of market transformation to more efficient products

- **Household savings** - reduce household energy bills (but still enjoy the same services!);
- **Grid reliability** – reduce electricity shortages (brown-outs / black-outs); reduces peak power demand
- **Save national investment** – reduce capital and loans tied up in power stations and grid upgrades; slows new demand growth
- **Market protection** - avoid becoming dumping-ground for technologies banned elsewhere
- **Energy imports** – reduce capital out-flow for fuel purchases / electricity imports; strengthen national energy security
- **Climate change** – develop on a ‘soft energy path’, avoid becoming a high CO₂ emission country

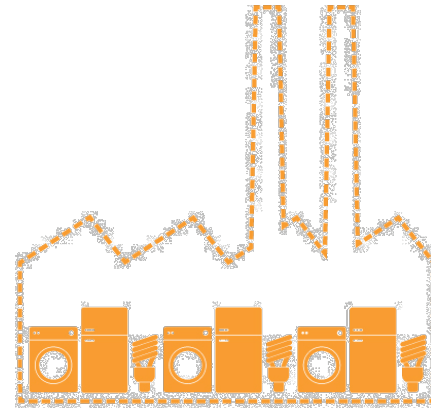


Efficiency is a “Negawatt” Power Station

- Freeing-up existing capacity is the same as building new capacity
- “Negawatts” of free capacity are cheaper and faster than building new capacity, and have zero running costs



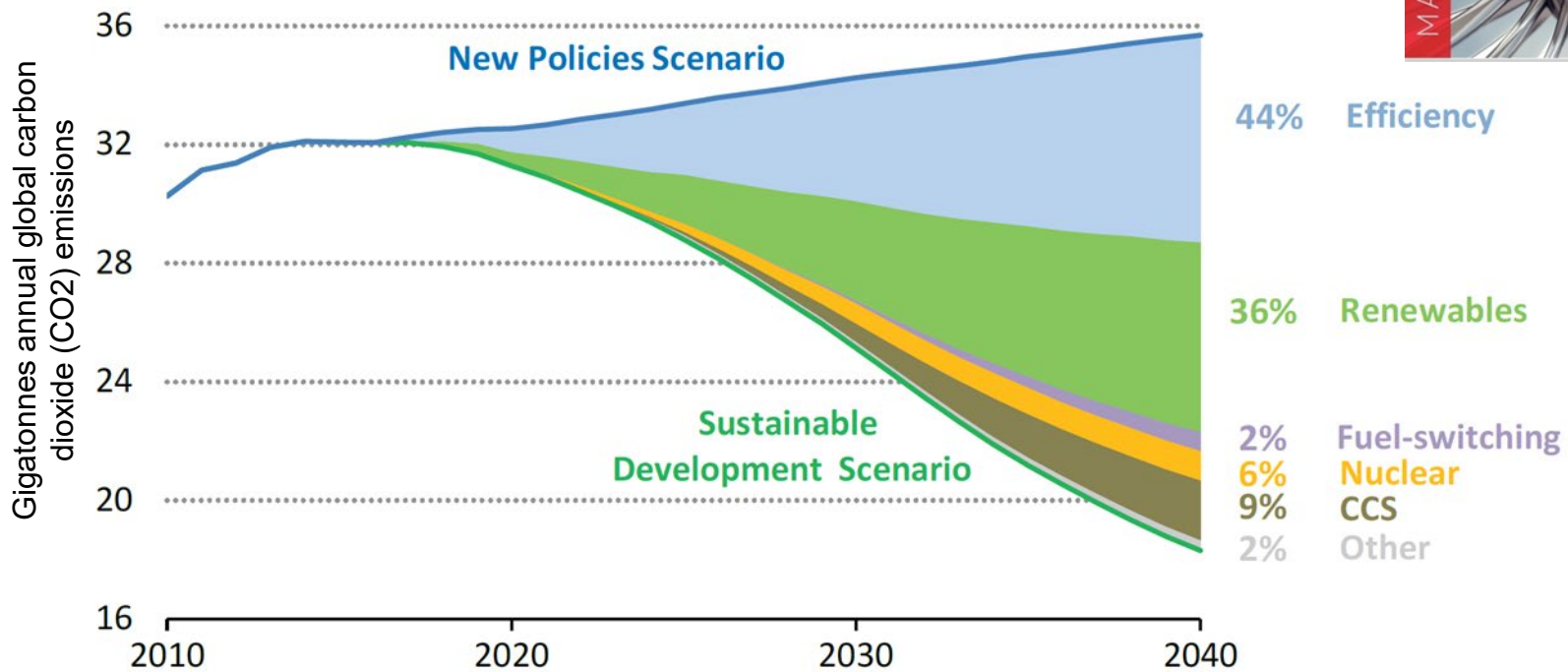
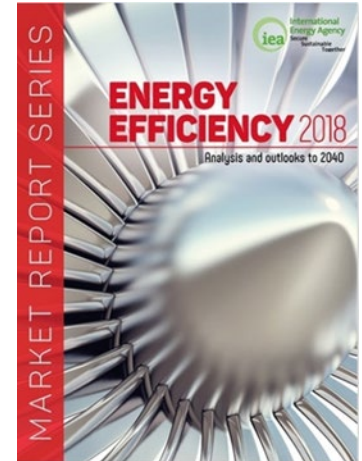
Traditional
Power Station –
“Megawatts”



Virtual Power
Station –
“Negawatts”

Energy-Efficiency is the Corner Stone of Climate Protection

- Energy Efficiency Market Report 2018 - [Free Download](#)
- Efficiency can deliver 44% (7.1 Gt) savings by 2040
- Buildings/Appliances, Industry and Transportation
- China (25 EJ); India (14 EJ); ASEAN (5 EJ); ROW (67 EJ)



IEA/OECD - World Energy Outlook 2017

Market transformation requires a comprehensive approach



- **Energy & Quality Standards** push the market toward high-quality, high-efficiency products; including MEPS and performance requirements



- **Labeling & Buyer Education** communicate energy, performance, and quality to consumers & other buyers, inspiring demand for sustainability



- **Incentives & Bulk Procurement** accelerate market saturation of high-quality, high-efficiency products & reduce market risk



- **Compliance, Testing & Quality Assurance** ensure products perform as promised & markets are fair to all

RCREEE

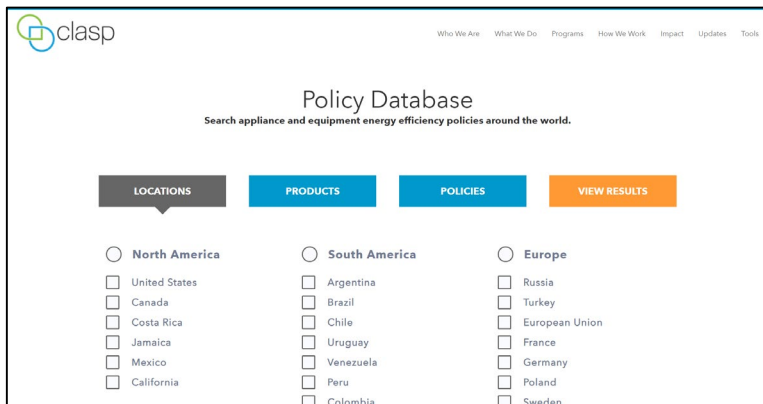
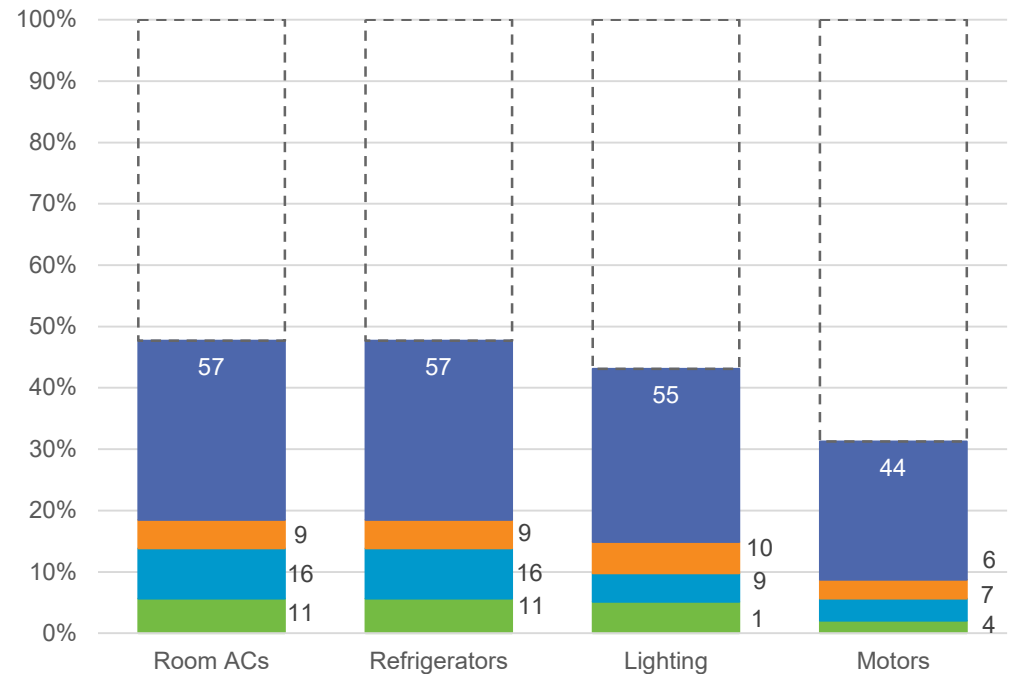
Regional Center for Renewable Energy and Energy Efficiency
المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة

- **Global Collaboration & Knowledge Sharing** leverage cutting edge & collective knowledge and forge productive partnerships



CLASP Policy Database – Opportunity for New Policies

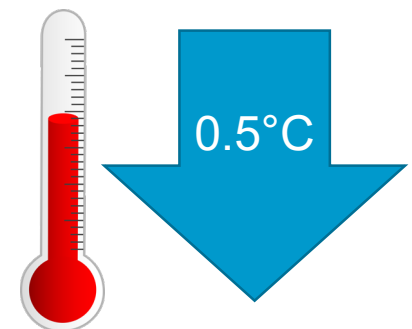
- Analysis of policy trends:
CLASP Policy Database (2019)
<https://clasp.ngo/policies>
- A web-based database for energy efficiency performance standards, labelling, and quality standards for appliances and equipment
- Enables you to research and compare existing energy-efficiency policies from around the world



- Potential penetration of S&L worldwide
- Remainder of countries worldwide
- South and Southeast Asia
- Latin America
- Africa

Kigali Cooling Efficiency Program (K-CEP)

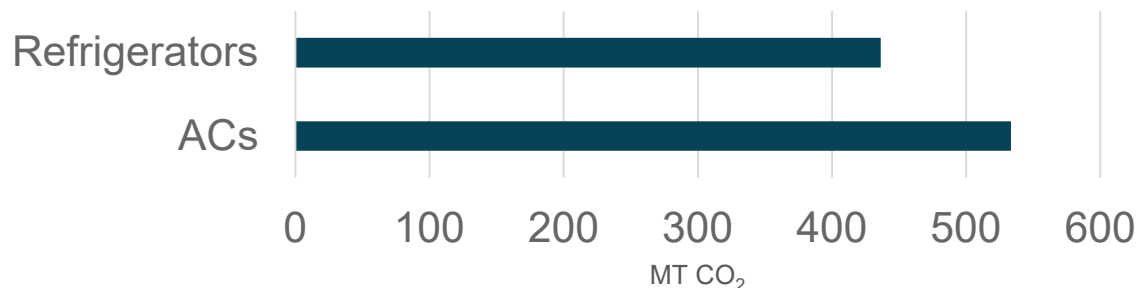
- A \$50M+ philanthropic program to support the Kigali Amendment of the Montreal Protocol
- 197 countries committed to cut HFCs — potent GHGs used in refrigeration and AC — by over 80% in 30 years
- Potential to avoid 0.5°C of global warming by 2100
- K-CEP focuses on cooling efficiency to increase and accelerate the climate and development benefits of the Kigali Amendment.



Activities on Cooling Efficiency



Minimum energy performance standards for cooling products could save nearly **1 GT of CO₂** from 2022 to 2030



Equivalent to the CO₂ content of **2.2 billion barrels of oil**

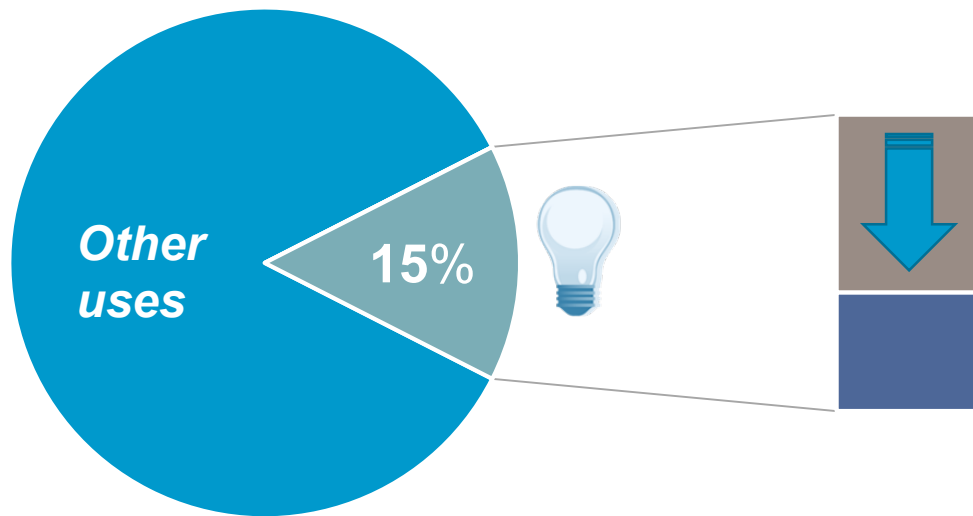
India	AC Eco-Label AC Degradation Study AC MEPS Revisions VRF and Chiller MEPS	Vietnam	AC MEPS Revision AC Label Revision Market Transformation
Kenya	AC MEPS Revision Refrigerator MEPS Revision Market Transformation	Thailand	AC MEPS Revision AC Label Revision Market Transformation
ECOWAS & ASEAN	Regional Compliance	Philippines	AC MEPS Revision Improved Compliance
Brazil	Assessment of Compressor Market Labeling Revision Study	Indonesia	Refrigerator Market Study

Lighting the World Efficiently



Lighting accounts for 15% of the world's electricity consumption

Reducing energy demand for lighting has massive climate and economic benefits



*Global electricity
consumption*

LEDs are 10 times more efficient than incandescent lamps, with extremely short payback periods

MEPS and labels can deliver 40% to 60% energy savings on lighting overall

Global policy-making: phasing-out inefficient lighting

- UN Environment working with >10 countries on lighting regulations
- Europe has phased out....
 - Mains-voltage halogen spot lights in Sept. 2016
 - Non-directional halogen lamps in Sept. 2018
 - Compact fluorescent lamps in Sept. 2021
 - T8 linear fluorescent tubes in Sept. 2023
 - HID sources – MV banned in 2015; low eff HPS and MH banned



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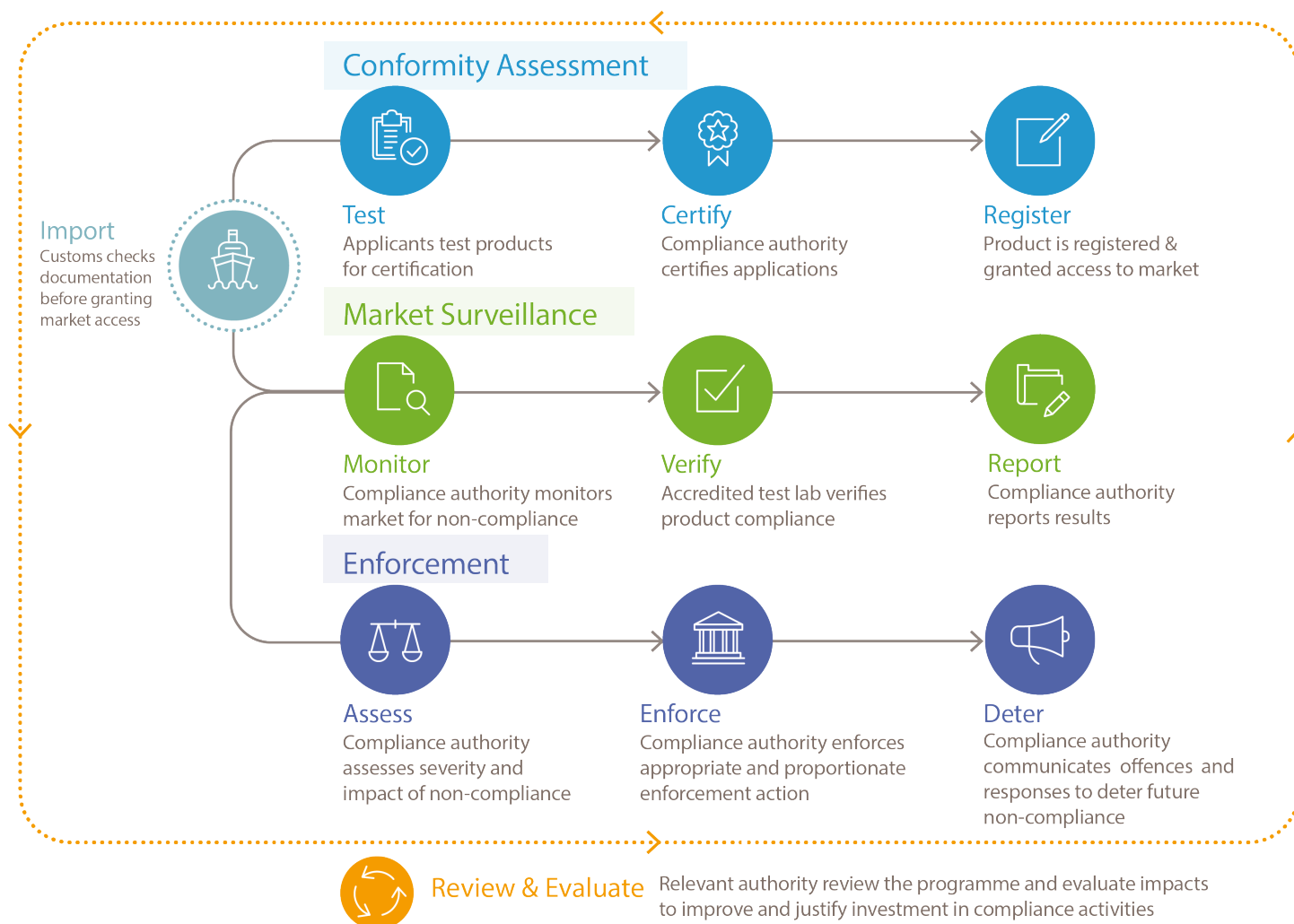
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Halogen lighting heads into the sunset while LEDs are on the rise (MAGAZINE)

Published on: Oct 12, 2018

By Simon Reed[Sylvania]

Holistic Approach to Compliance



Compliance is key for safeguarding interest of stakeholders as well as environment



Advantages of Regional Harmonisation

- **Lower consumer costs** – more choice and more competition
- **Lower government costs** - preparing test methods and MEPS
- **Lower supplier costs** - test results accepted in multiple countries; higher rates of compliance
- **Share market surveillance** - easier for governments to conduct/share market verification and enforcement
- **Faster and less expensive testing** – for compliance and other purposes – as harmonized testing creates a larger choice of laboratories who can conduct product tests



Thank you, any questions?

For more information visit www.clasp.ngo or contact:

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