



Maximising the Impact of Appliance Efficiency Policy with Digital Tools

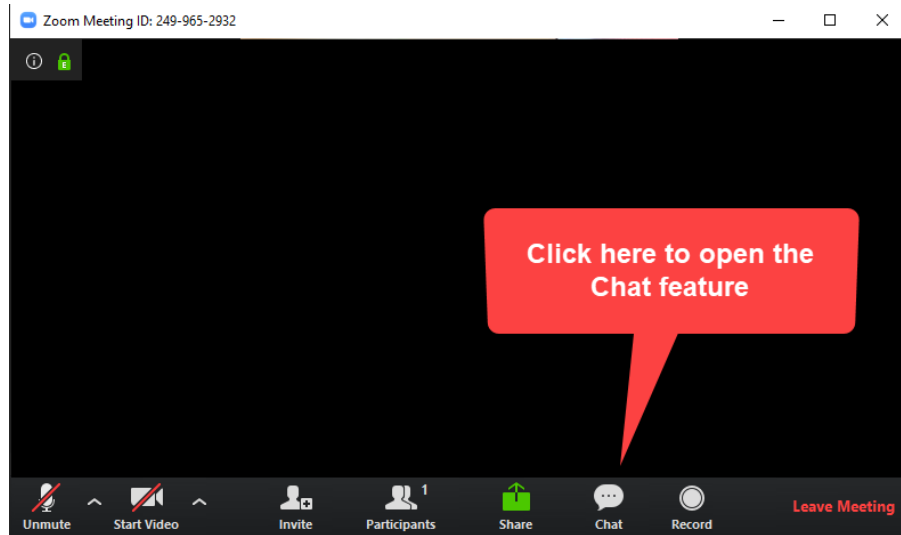
International Energy Agency, 3 December 2020

Agenda

14:00	Introduction: Melanie Slade, International Energy Agency
14:10	Peter Bennich, Swedish Energy Agency
14:25	Kasper Schäfer Mogensen, Big2Great ApS
14:40	Chris Watson, Premise
14:55	Panel Discussion
15:25	Conclusions
15:30	Meeting Close

Please share your questions and comments with us!

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What is the Super-efficient Equipment and Appliances Deployment initiative?

- Founded in 2009 under the Clean Energy Ministerial and IPEEC
- The UK, India and the European Commission have been co-leads since 2016
- IEA took over coordination of activities in 2019

SEAD supports appliance energy efficiency policies and programmes for the 18 member countries aiming to:

Increase partner participation and engagement

Highlight the benefits and urgency of product efficiency

Increase awareness among manufacturers

Ahead of CoP 26, we plan to focus attention on four key product categories:

1) electric motors, 2) air conditioners, 3) refrigerators and 4) lighting with the aim of increasing ambition of efficiency levels on this group of product over the next ten years.

We will track and monitor progress on these products through SEAD.

SEAD Members and Partners



Lawrence Berkeley
National Laboratory



COP26 Product Efficiency Call to Action – Objectives

As COP Presidents, the UK wants to drive international action on product energy efficiency policy. Ahead of COP26, the UK and IEA have launched a **call to action** to strengthen the **Super-efficient Equipment and Appliance Deployment (SEAD initiative)** to support countries in achieving raised ambition more quickly, easily and at a lower cost. The objectives of the call to action are to:



by Set countries on a trajectory to double the efficiency of key products sold globally by 2030 - motors, air conditioners, refrigerators, lighting



Support the delivery of crucial national climate change targets



Provide consumers and businesses with more efficient products that are affordable and cost-effective to own and operate



Stimulate innovation and provide businesses with export opportunities

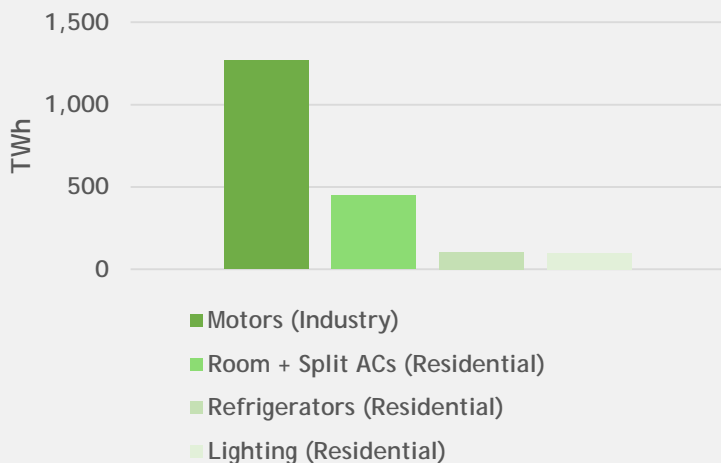


Promote a dual course of action making products both energy efficient and climate friendly by reducing the use of refrigerants in cooling appliances



Huge energy savings potential from product efficiency

Electricity consumption savings potential (TWh) in 2030 globally by product



Savings potential is equivalent to:

More than USD 230 billion in bill savings in 2030



640 avoided coal-fired power plants in 2030



Electricity savings in 2030 equivalent to the current consumption of India, France and Mexico combined

Assumptions: Motors savings potentials are based on differences between the Stated Policies Scenario (STEPS) and the Sustainable Development Scenario (SDS), savings for the other products are based on a separate model with aligned scenarios.

Consumer bill savings are based on current electricity prices in countries where savings accrue. The average coal-fired power plant is assumed to generate 3 TWh per year.

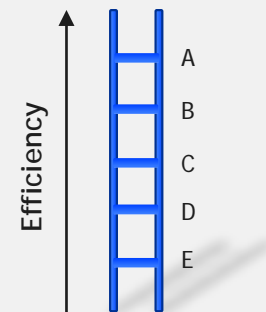
Source: IEA-Provisional estimates subject to change

Performance ladder as a basis to set energy efficiency levels

Ladder steps can be used to define performance requirements, e.g. for:

- Minimum energy performance standards (MEPS)
- Label thresholds for both categorical labels and endorsement labels
- Requirements for rebates (such as obligation programmes)
- Requirements to appear on energy technology lists in general
- Future aspirational targets

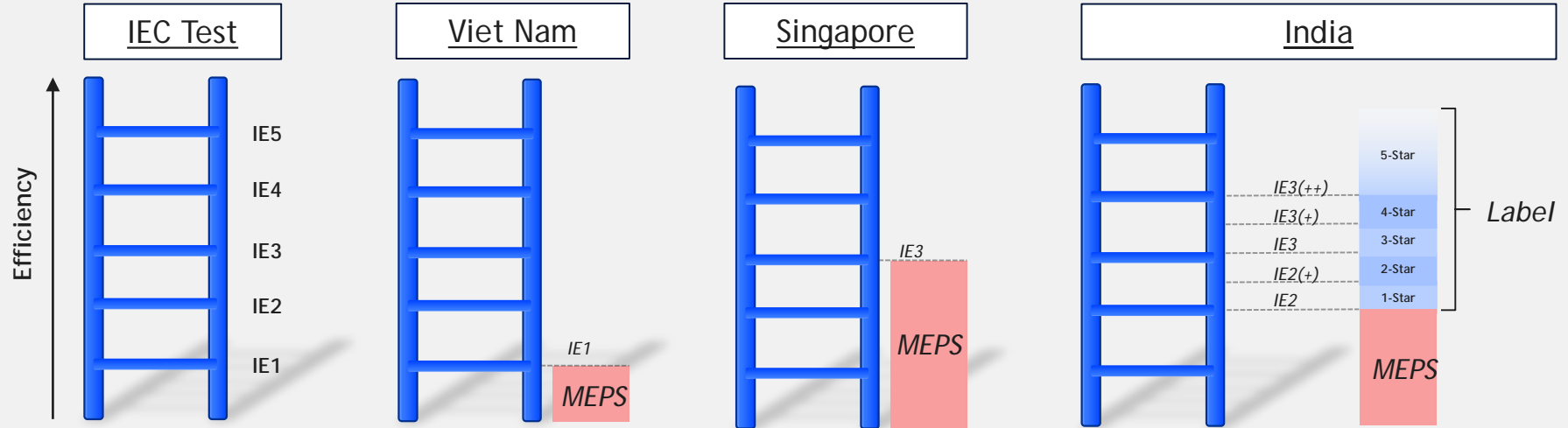
Ideally, steps are used by different policy tools in a coordinated way, and revised over time.



Key steps for developing an energy efficiency ladder:

1. Agree on testing procedures to measure energy efficiency
2. Define efficiency thresholds (tiers or steps on the ladder), plus other requirements
3. Map existing requirements
4. Set the target steps to climb the ladder

Example: Motors - All countries employ the same ladder



All countries can use the same ladder for their policy thresholds.

Viet Nam (IE1) and Singapore (IE3) use different levels for Minimum Energy Performance Standards (MEPS).

Whilst, India currently uses half (IE) tiers for its 5 -star energy labelling of new electric motors.

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