COP26 Product Efficiency Call to Action

Doubling the energy efficiency of key products globally by 2030

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

- Founded in 2009 under the Clean Energy Ministerial and IPEEC
- Since 2016, the UK, European Commission and India have taken over as co-leads
- IEA has taken over operating duties in summer 2019

SEAD supports appliance energy efficiency policies and programmes for the 18 member countries. Through its activities, SEAD aims to:

Increase partner participation and engagement	**Highlight the benefits and urgency of product efficiency**	**Increase awareness among manufacturers**
• By providing knowledge and tools needed to help impact policy change	• Through technical analysis demonstrating role of product policy	• Highlighting the value of producing super-efficient appliances and among retailers of the value of stocking such appliances

Ahead of COP, we want to focus our action on four key product categories – electric motors, air conditioners, refrigerators and lighting and track and monitor progress through SEAD on these products.

Super-efficient Equipment and Appliances Deployment Initiative

SEAD Members and Partners

Joining SEAD provides opportunity for regional and global coordination which brings multiple benefits

Access to knowledge exchange and policy support
Opportunity to share and learn from 18 member Governments, including through webinars, masterclasses and other events

SEAD provides framework for coordination
Domestic policy making becomes better-coordinated with regional and global partners

Accelerates the pace of decarbonisation

Manufacturers and industry
International market is simpler as countries coordinate product policy bringing benefits for innovation and economies of scale

Governments
Enforcement is simpler and oversight in-country becomes easier, with possibility of reducing amount of low efficient products imported

Consumers
Demand is aggregated and costs come down for essential products and reduces electricity bills

Expectations for membership of SEAD

Mandatory:

1. Allocated **focal point** for contact
2. **Participation** in yearly membership meetings (plus where possible representation at other meetings throughout the year)
3. **Explicit support** for SEAD and its aims confirmed to co-leads of SEAD

Other desired collaboration:

1. **Policy:**
   a. Engage with the IEA's new tool "a ladder of progress" for raising product efficiency for own policy development (where appropriate), including in identifying opportunities for development aid allocation;
   b. Identify opportunities for raising ambition in for product standards in India;
   c. Seek to raise ambition on other policy levers, e.g. incentives, public procurement programmes.
2. Identify opportunities to take **leadership** through SEAD on specific areas of action e.g. product or policy area action;
3. Actively taking part in **best-practice sharing** through existing planned webinars, or leading on new opportunities to share knowledge;
4. Seek opportunities to **expand membership** of the SEAD initiative.
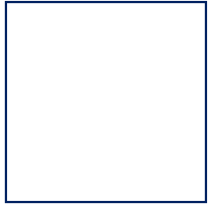
COP26 Product Efficiency Call to Action

COP26 Product Efficiency Call to Action — Objectives

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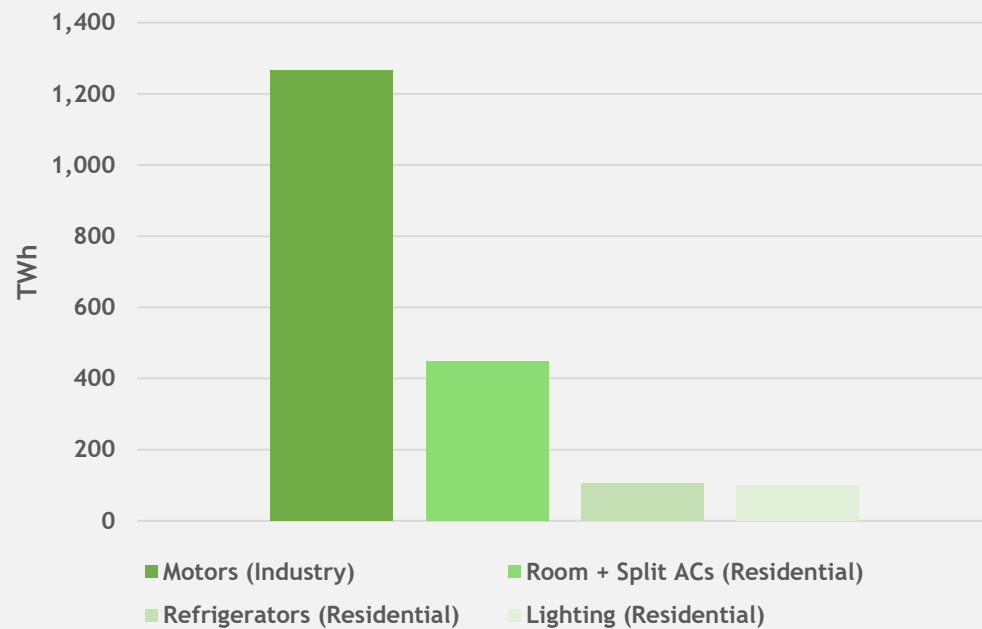
Promote a dual course of action making products both **energy efficient and climate friendly** by reducing the use of refrigerants in cooling appliances

Huge energy savings potential from product efficiency, especially industrial motors

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

Legend:
- Motors (Industry)
- Room + Split ACs (Residential)
- Refrigerators (Residential)
- Lighting (Residential)

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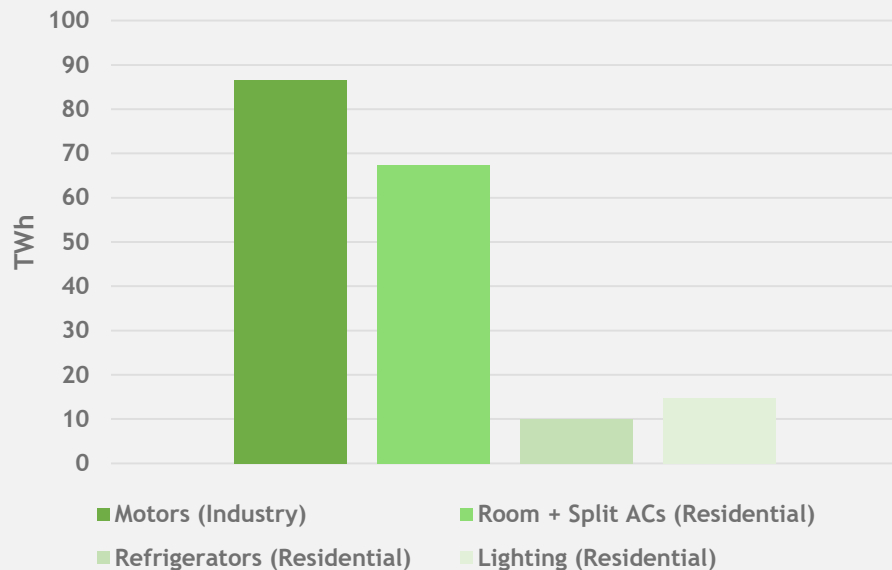
Assumptions: Motors savings potentials are based on differences between the Stated Policies Scenario (STEPS) and the Sustainable Development Scenario (SDS), savings for the other products are based on a separate model with aligned scenarios.
Consumer bill savings are based on current electricity prices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

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Significant energy savings potential from product efficiency also in India, especially industrial motors and ACs

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

Legend:
- Motors (Industry)
- Room + Split ACs (Residential)
- Refrigerators (Residential)
- Lighting (Residential)

Savings potential is equivalent to:

More than USD 13 billion in bill savings in 2030

60 avoided coal-fired power plants in 2030

Electricity savings in 2030 equivalent to the current consumption of Thailand

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.
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Performance ladder as a basis to set energy efficiency criteria
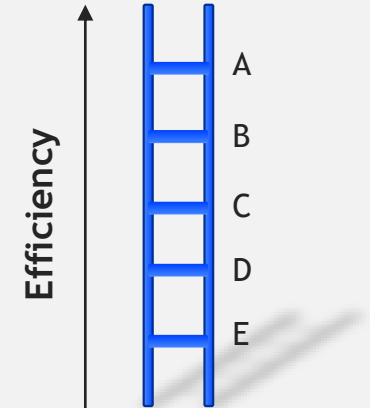
Ladder steps can be used to define performance requirements, e.g. for:

- 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
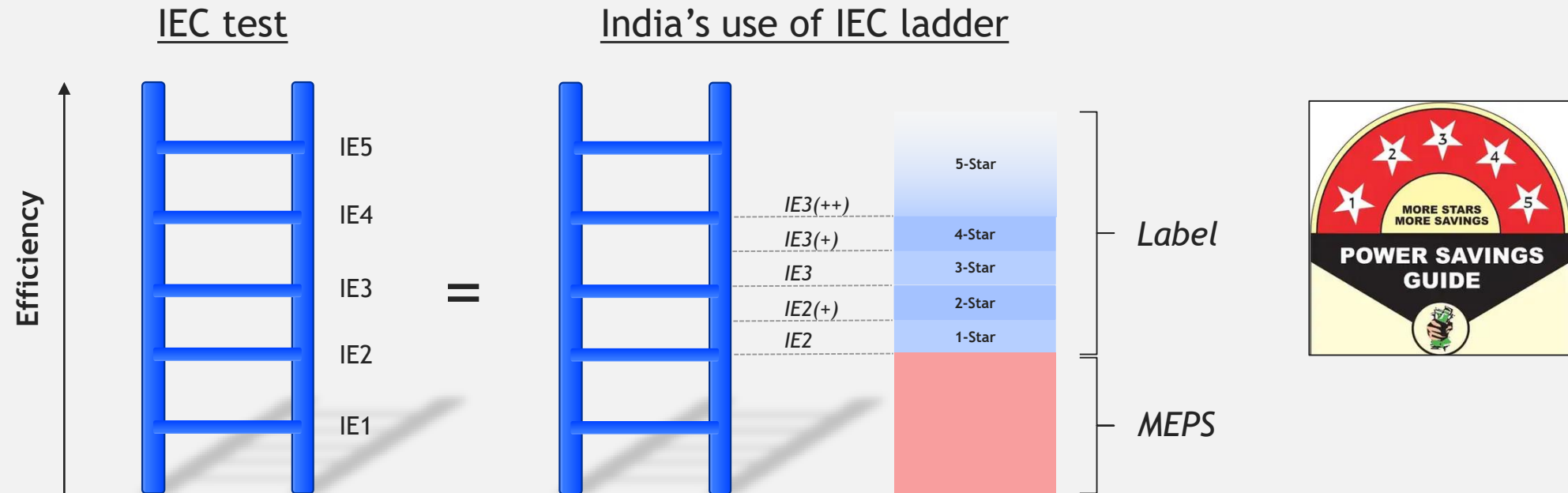- Future aspirational targets

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)

3. Map existing requirements

4. Set the target steps to climb the ladder

Example: Motors – All countries employ the same ladder

IEC test

India's use of IEC ladder

Efficiency

IE5
IE4
IE3
IE2
IE1

=

IE3(++)
IE3(+)
IE3
IE2(+)
IE2

5-Star
4-Star
3-Star
2-Star
1-Star

Label

MEPS

MORE STARS
MORE SAVINGS
POWER SAVINGS GUIDE

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

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

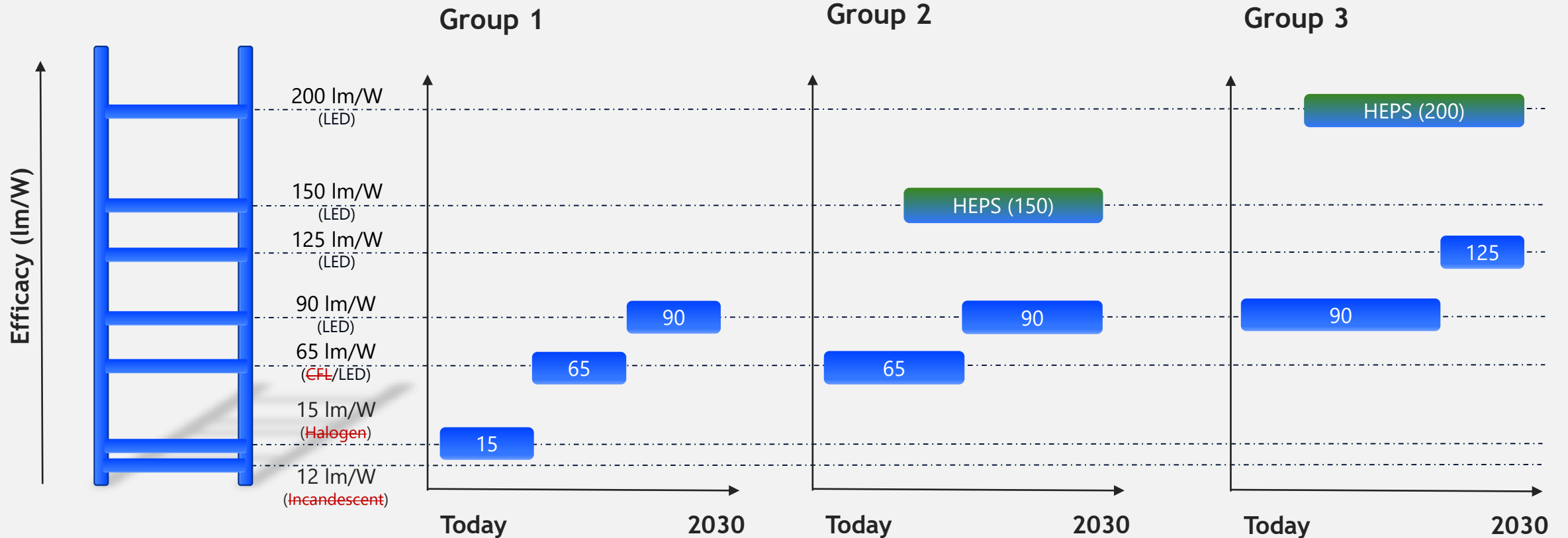# Example: Motors – Setting future requirements
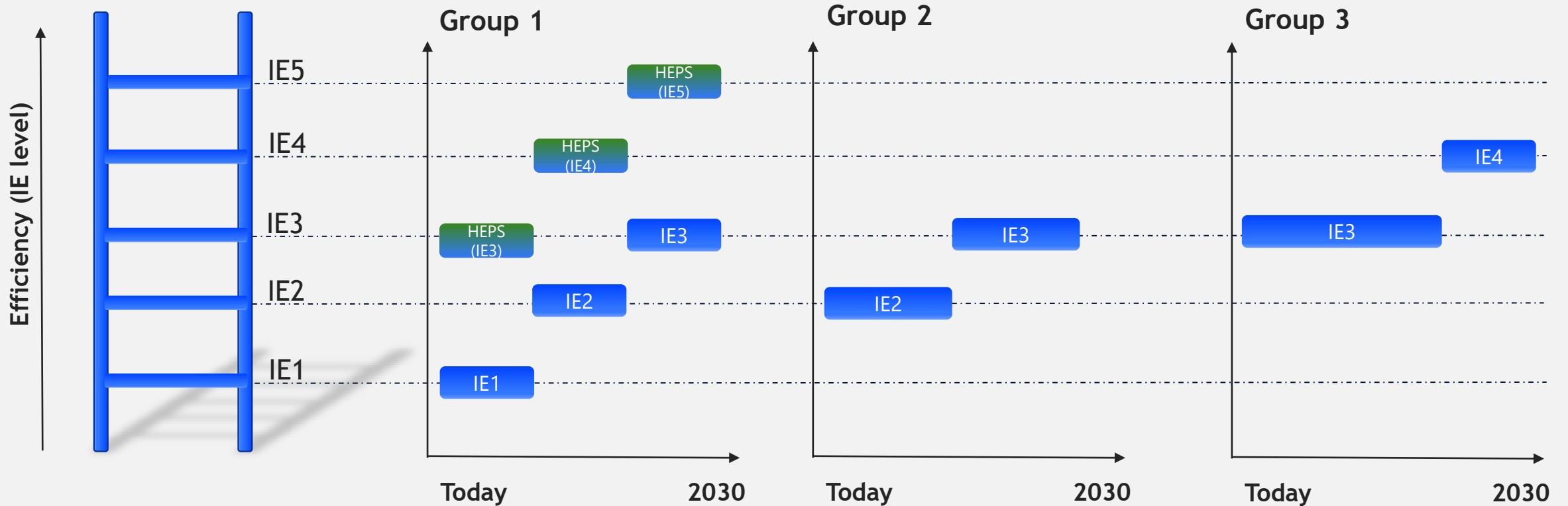
Countries and regions can set different future levels, implementing them at different times.

Identifying future HEPS levels will allow voluntary supporting policy to develop markets for higher efficiency, which can also be future MEPS levels.
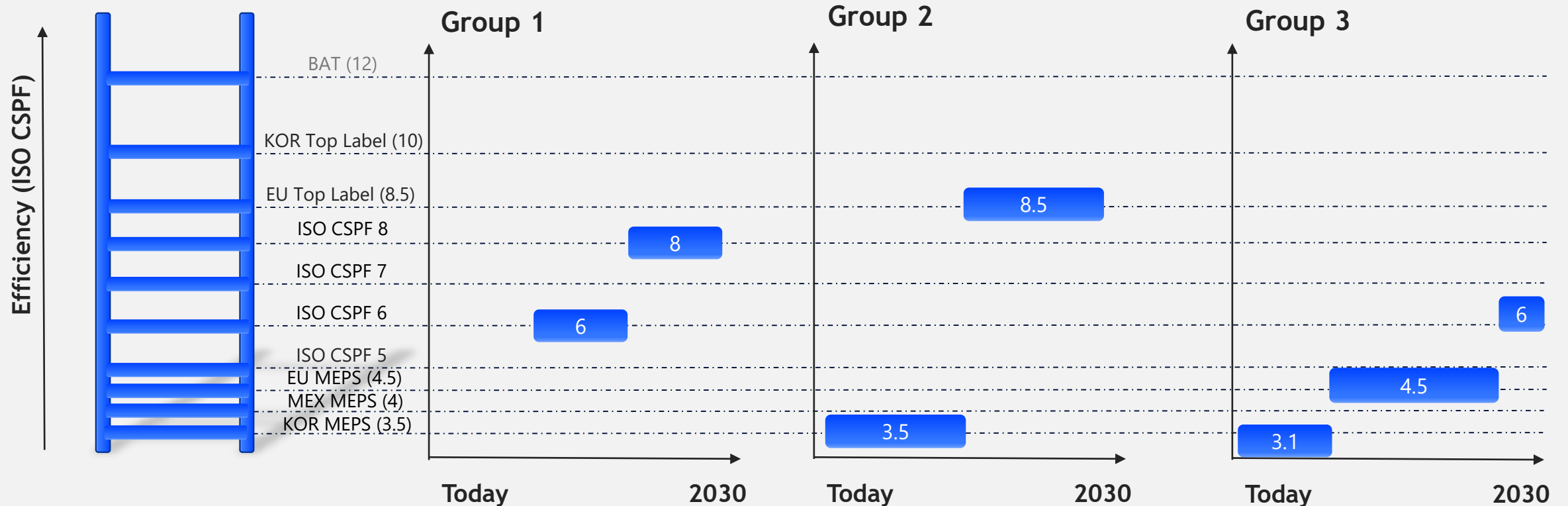
The efficiency levels shown above are indicative.

Example: Lighting – Setting future requirements

Ideally targets are technology neutral, however efficacy is linked to technology.

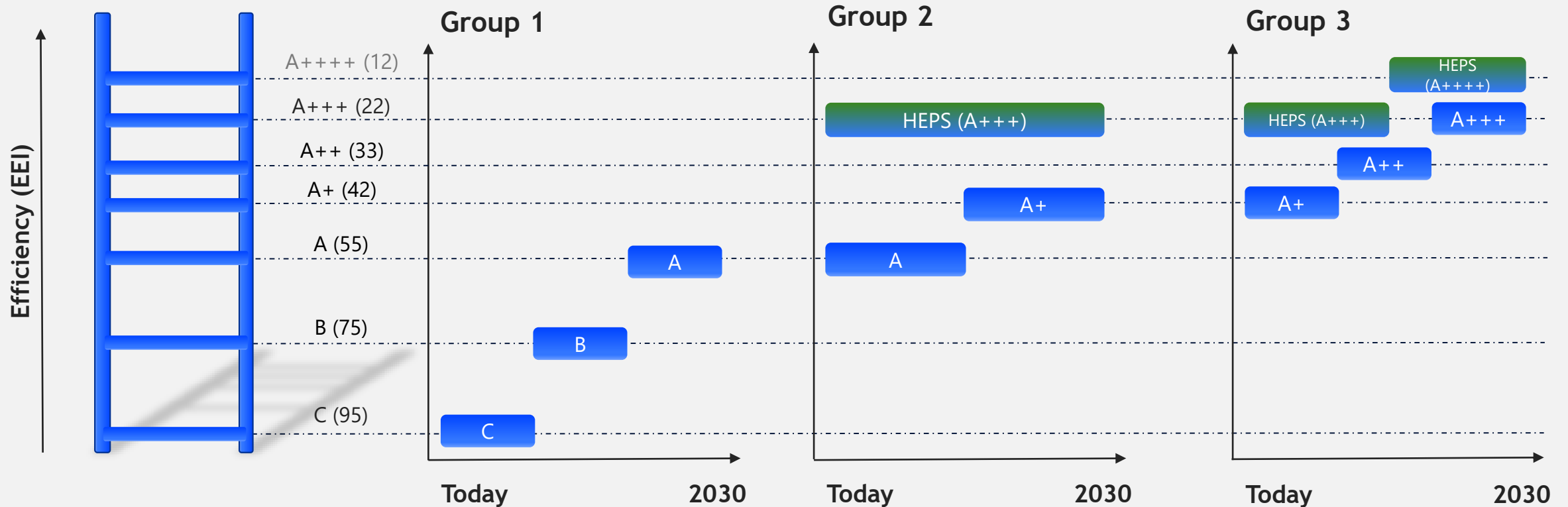The efficacy levels shown above are indicative.

Example: Residential ACs – Setting future requirements

Group 1   **Group 2**   **Group 3**

Efficiency (ISO CSPF)

BAT (12)

KOR Top Label (10)

EU Top Label (8.5)

ISO CSPF 8

ISO CSPF 7

ISO CSPF 6

ISO CSPF 5

EU MEPS (4.5)

MEX MEPS (4)

KOR MEPS (3.5)

Group 1: 8, 6 — Today / 2030
Group 2: 8.5, 3.5 — Today / 2030
Group 3: 6, 4.5, 3.1 — Today / 2030

Countries and regions can set different future levels (based on their own metrics), implementing them at different times.

The efficiency levels shown above are indicative.

Example: Refrigerators – Setting future requirements

Countries and regions can set different future levels, implementing them at different times. When they reach higher efficiency levels, labels can be rescaled.

The efficiency levels shown above are indicative.

Summary and next steps

Summary of Call to Action

- Targeting four products for improved efficiency to 2030

- Defining future performance tiers, to better enable policy development

- Harmonising future performance regionally/internationally

Next steps

- Continue to raise ambition, commitment to further raise ambition

- Set future policy pathway to deliver increased efficiency

Partners: