International Energy Agency

Energy Efficiency 2025

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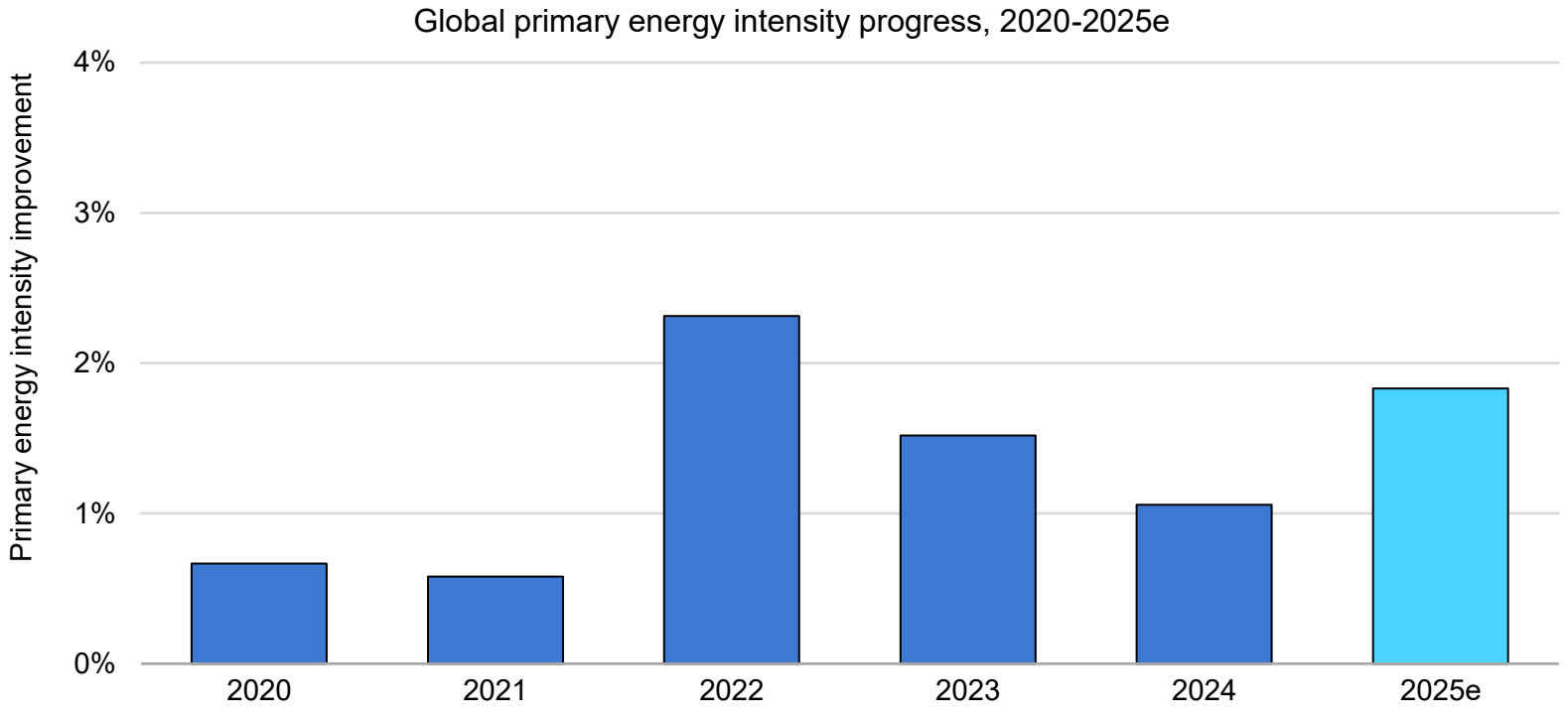
Energy Evaluation Asia Pacific webinar, 3 March 2026

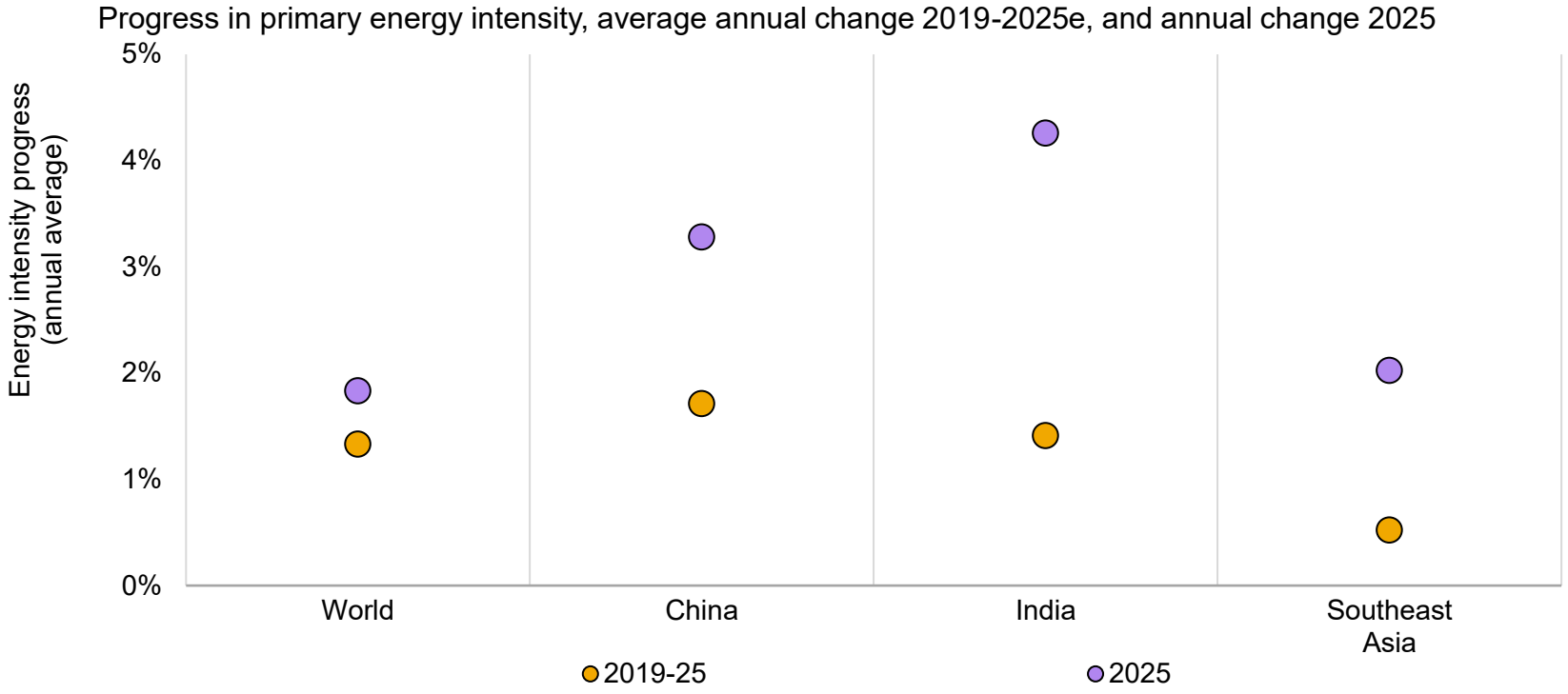
Recent trends in energy efficiency

Global energy efficiency progress sees improvement in 2025



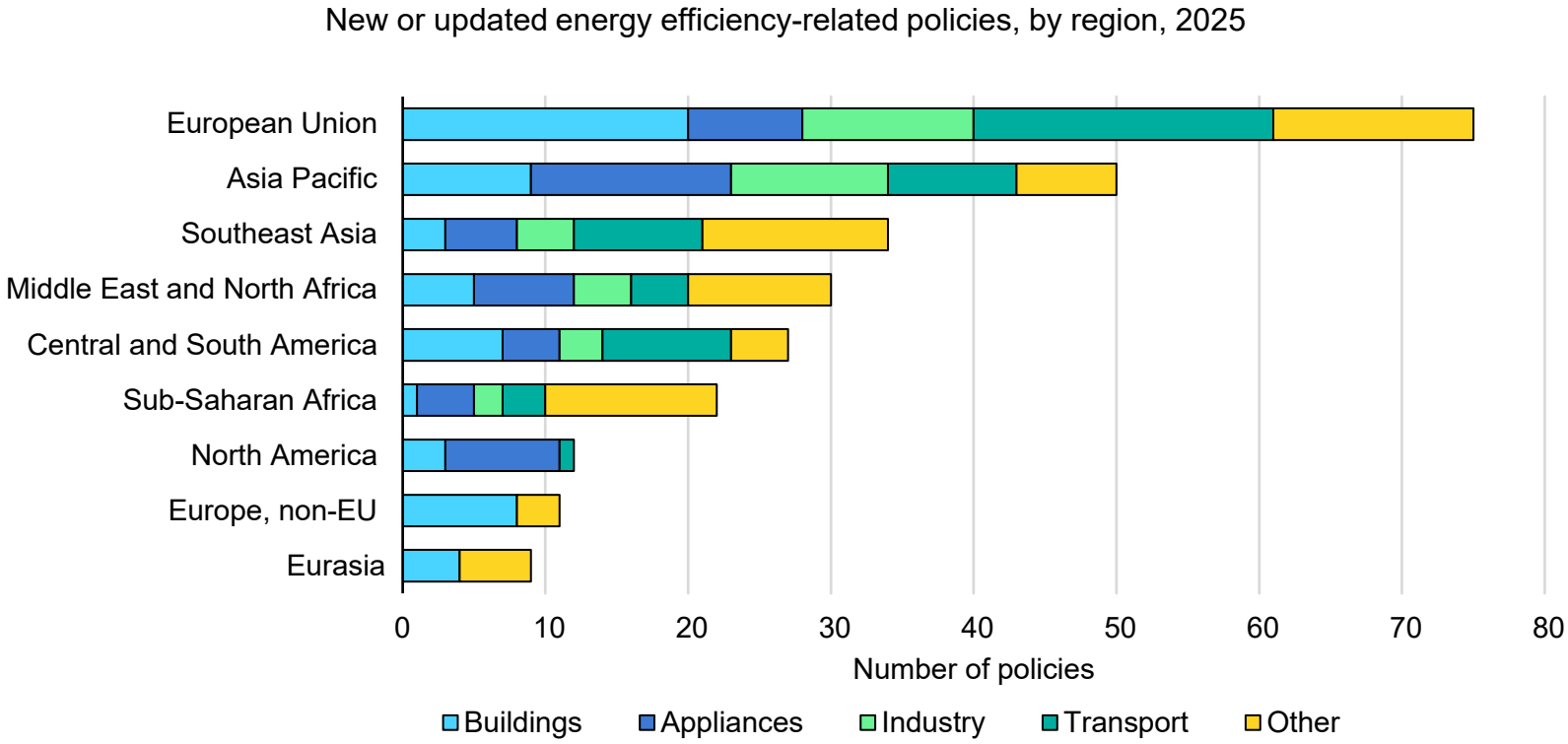
Estimates for 2025 show an improvement rate of 1.8%, compared to 1% in 2024

Global energy efficiency progress sees improvement in 2025



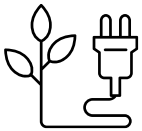
2025 data shows strong progress in several key regions, particularly in Asia

Policy making is accelerating in many areas



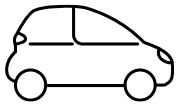
More than 250 new or updated energy efficiency-related policies announced in 2025

Examples of new or updated policies implemented in 2025



1. **Australia** increased funding for the Clean Energy Finance Corporation by 1.25 billion US dollars, enhancing support for clean energy, electrification and efficiency projects

2. **The People's Republic of China** released an action plan for promoting efficient heat pumps and announced the development of zero-carbon industrial parks



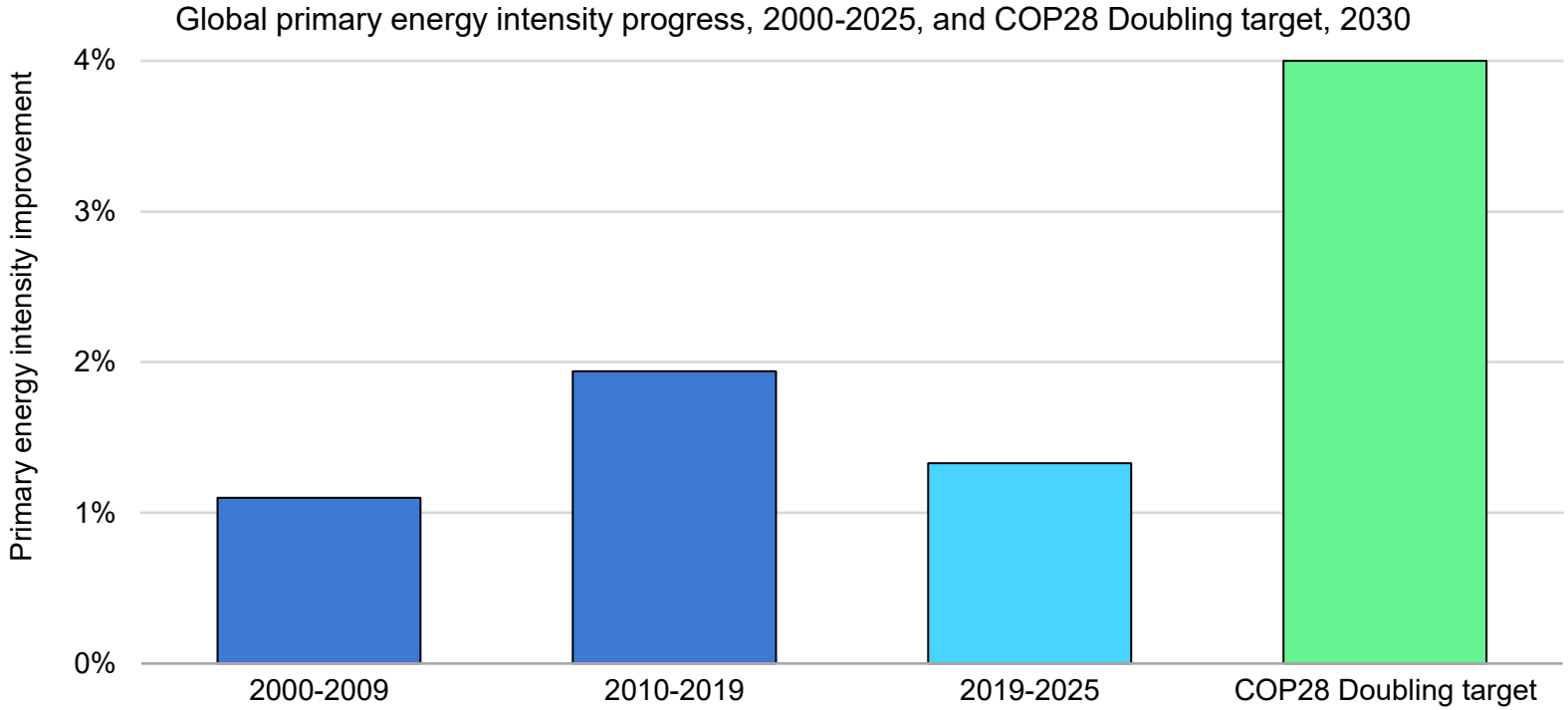
3. **The Republic of Korea** and **Malaysia** promoted electric vehicles using financial incentives such as grants and rebates

4. **Viet Nam** amended its Energy Efficiency and Conservation law, increasing responsibilities for designated key energy users and expanding energy labelling

COP28 marked a historic milestone for energy efficiency globally

Countries agreed to double the global average annual rate of energy efficiency progress by 2030

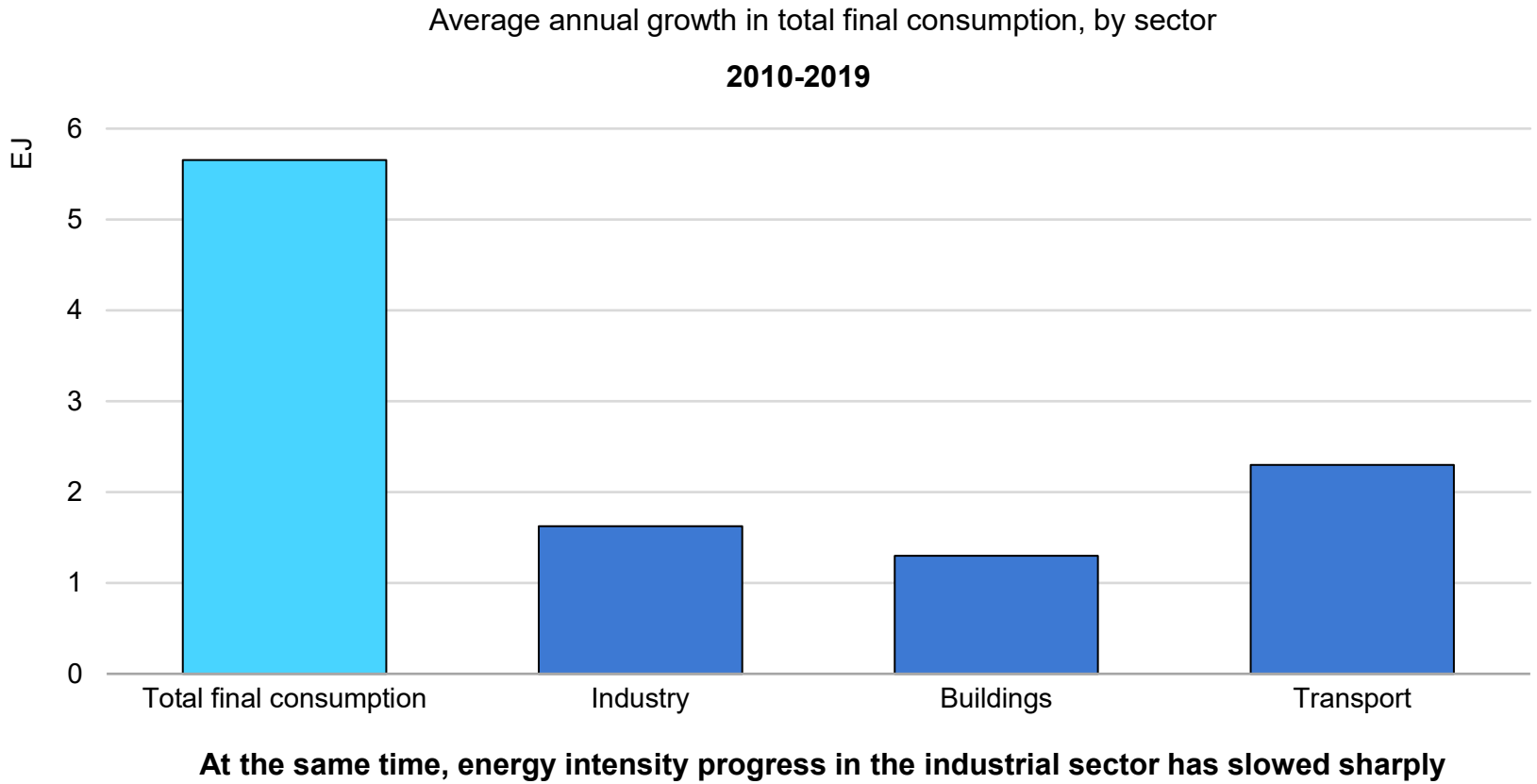
Average efficiency progress this decade remains slow



The world remains well off track to achieve its COP28 ambition to double energy efficiency progress by 2030

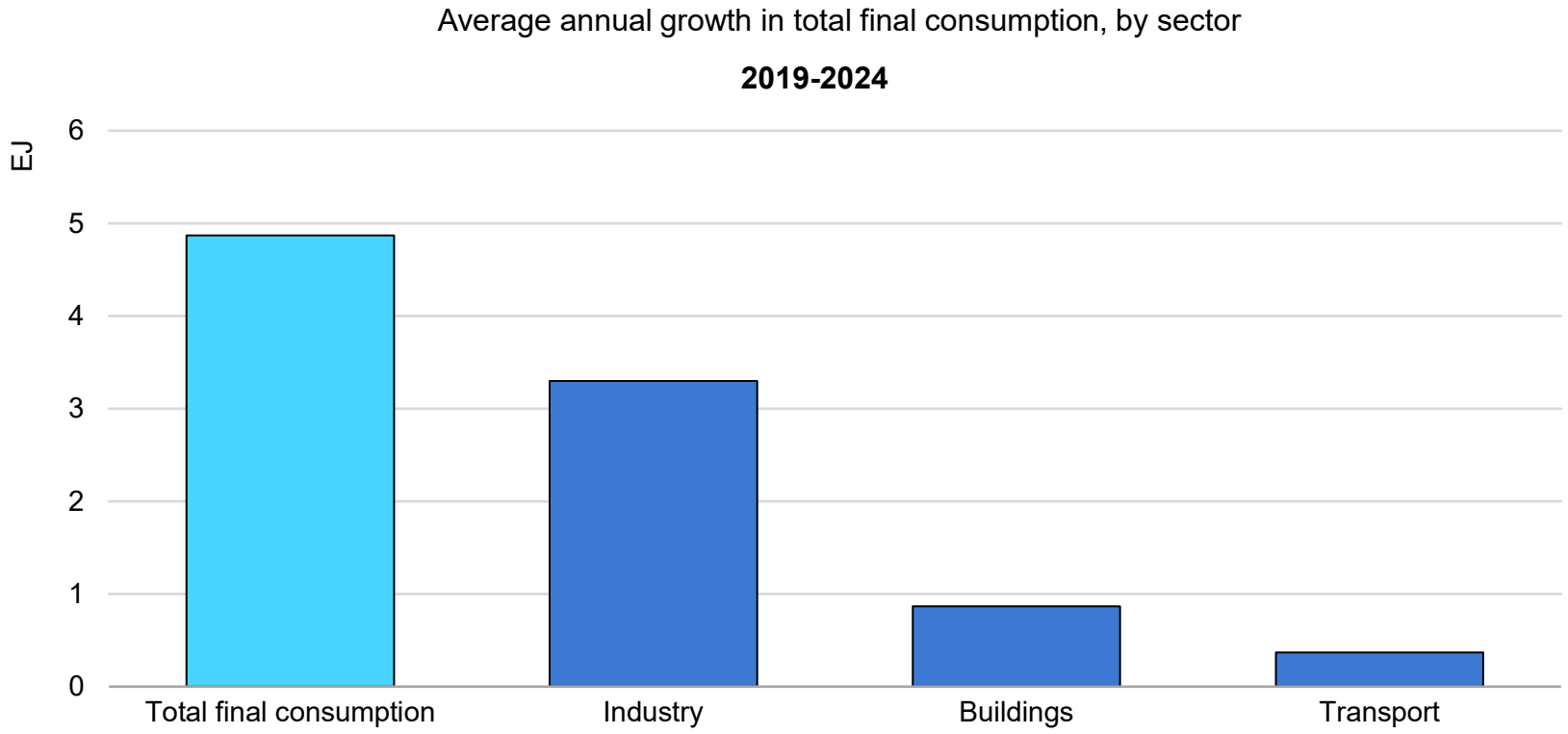
Why has progress not been faster this decade?

Two-thirds of energy demand growth since 2019 was in industry



At the same time, energy intensity progress in the industrial sector has slowed sharply

Two-thirds of energy demand growth since 2019 was in industry



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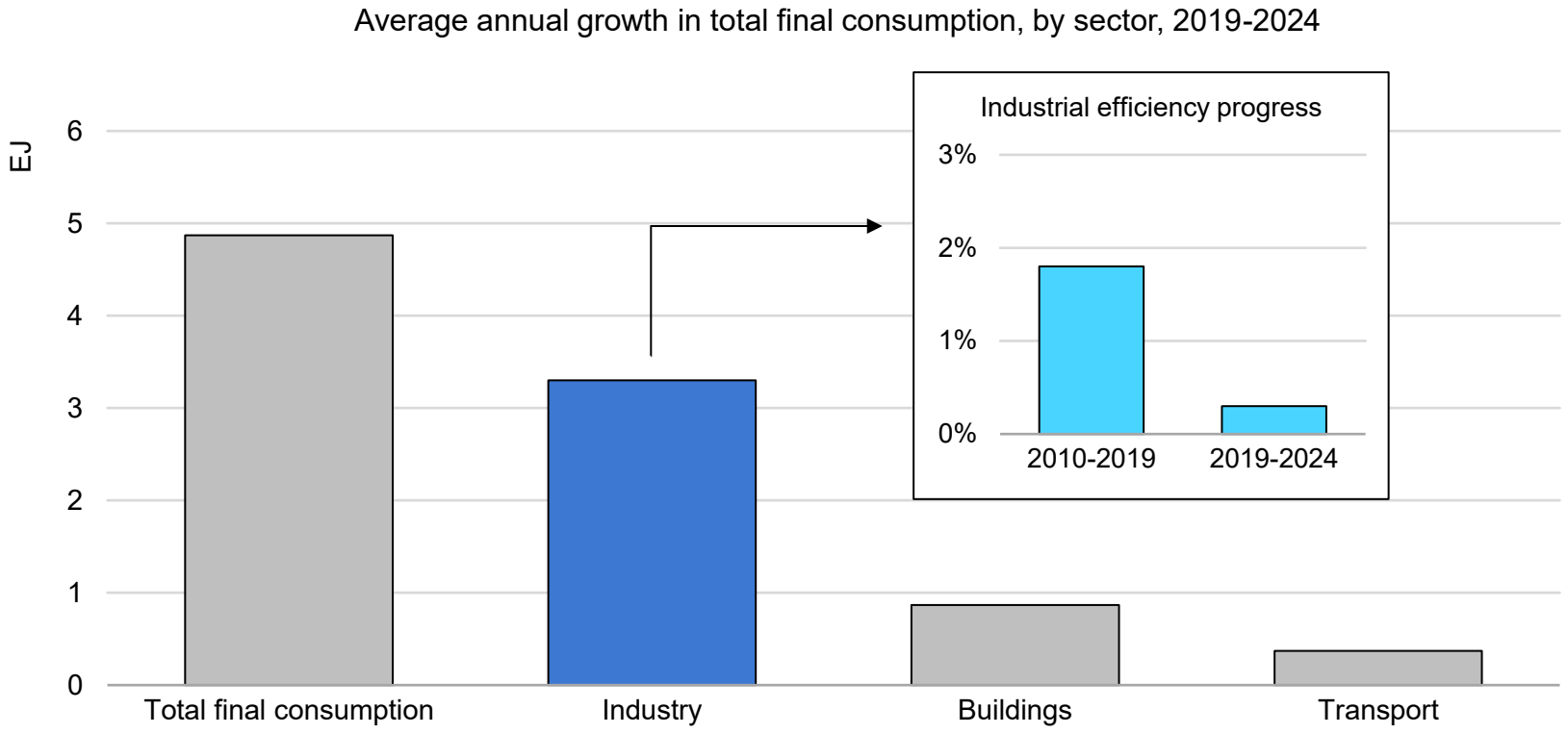

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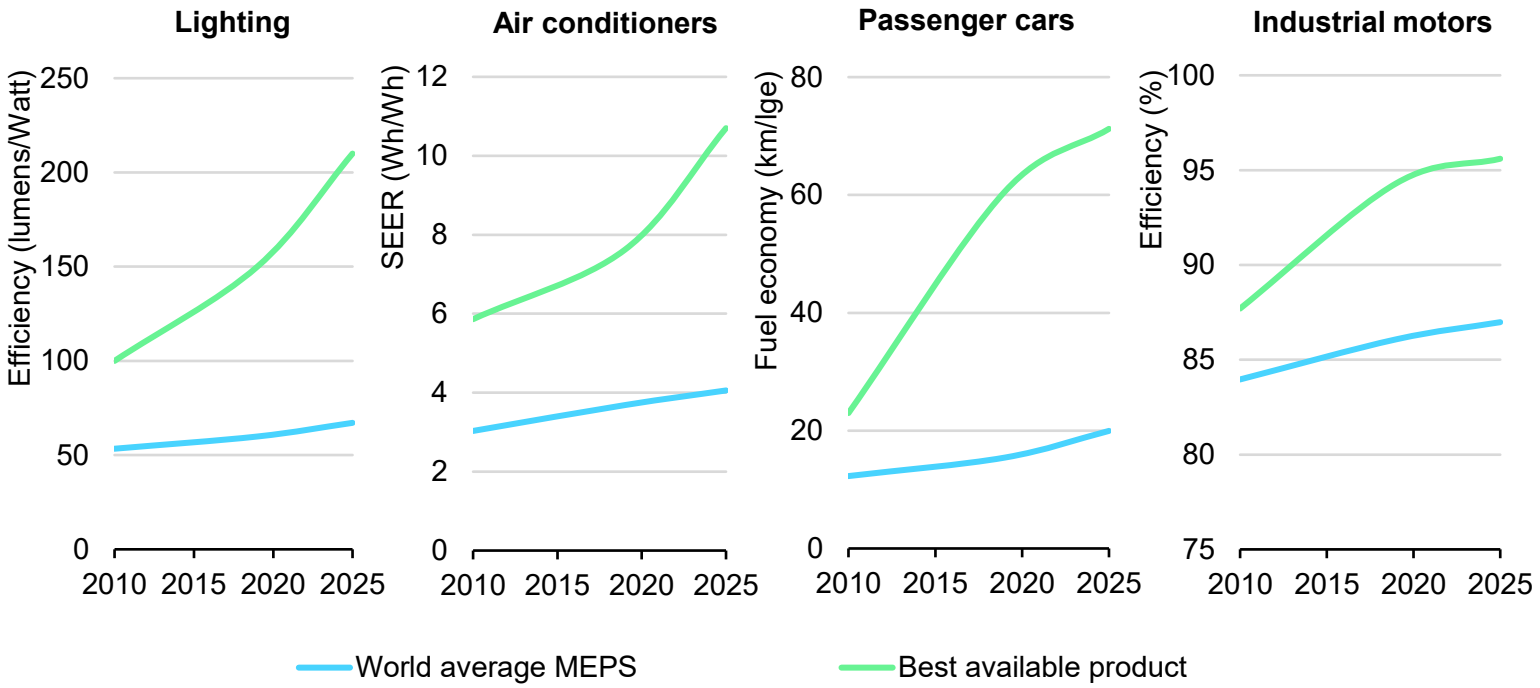
Policies have lagged technology progress in recent years

Energy efficiency levels of selected end-use technologies, 2010-2025



Today, appliances are often only half as efficient as the best models, showing policy has fallen behind technology

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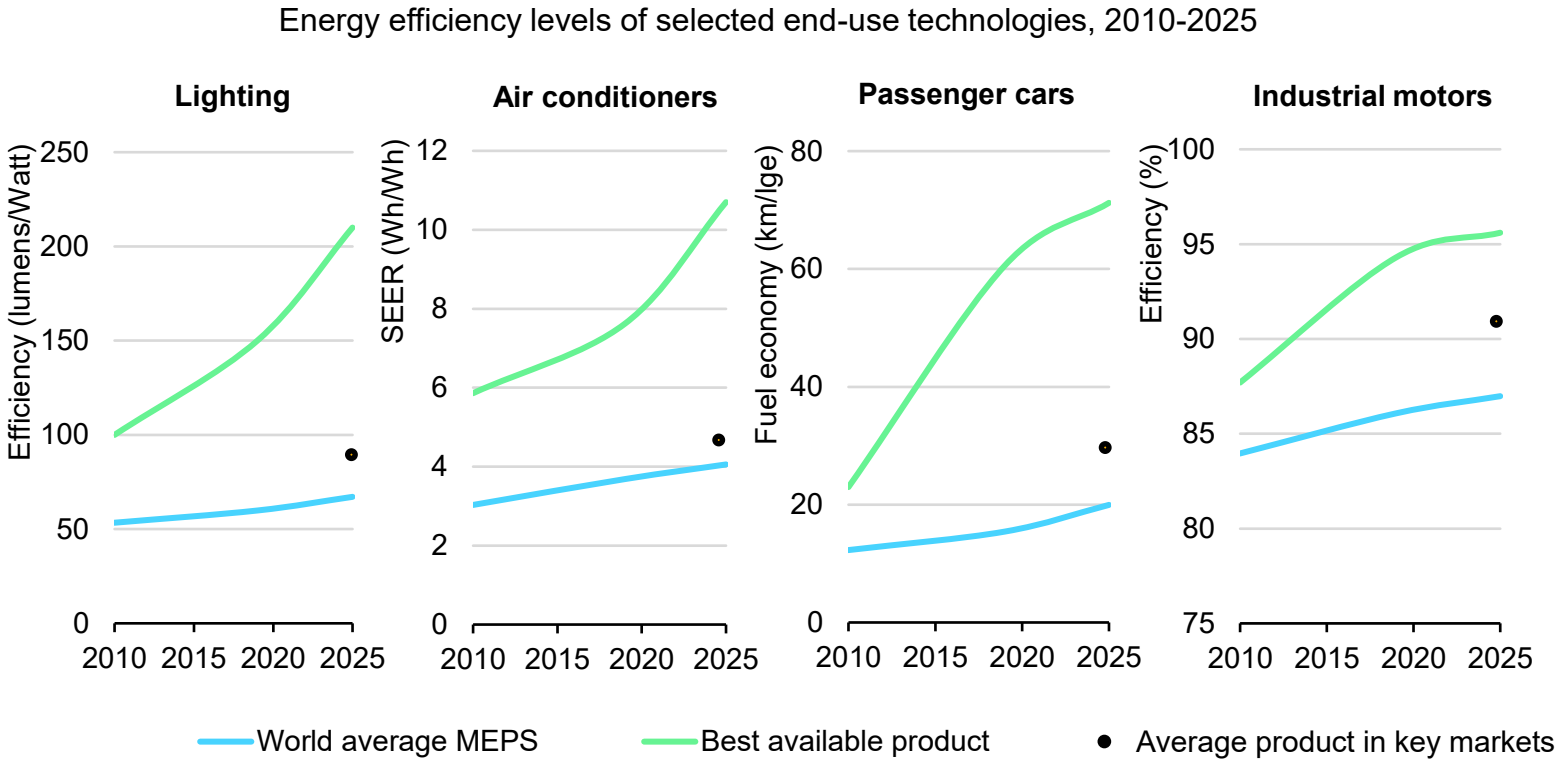

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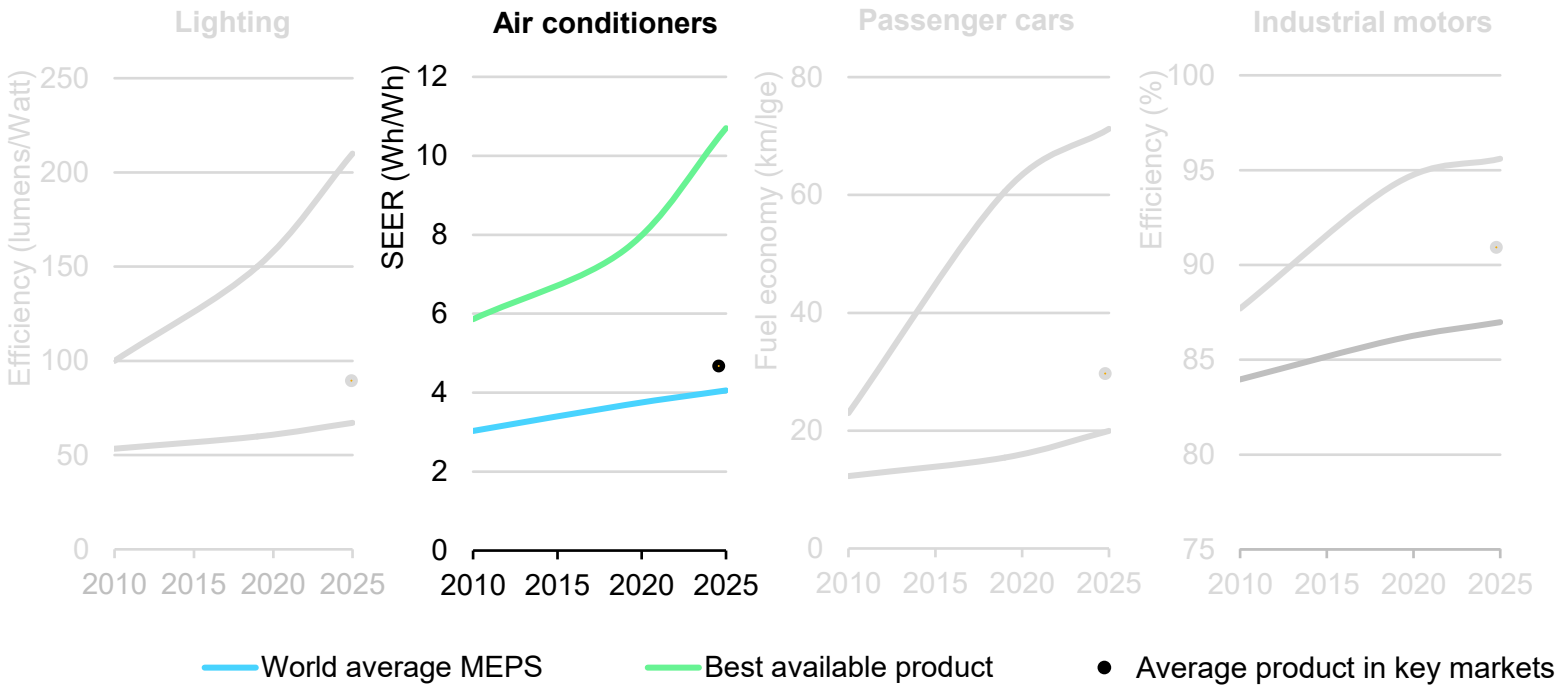

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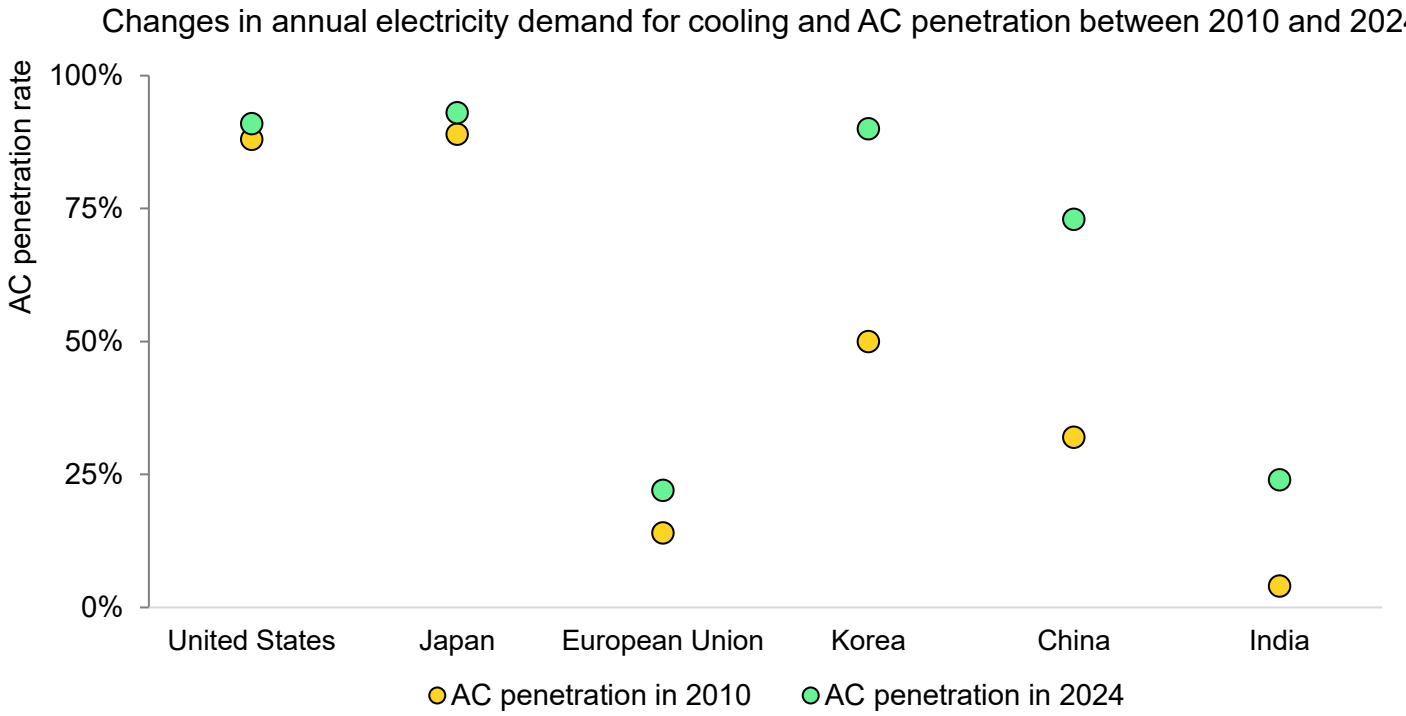
Cooling is a key driver of electricity demand growth



Energy to keep people cool has seen the fastest growth of any end-use technology in buildings this century

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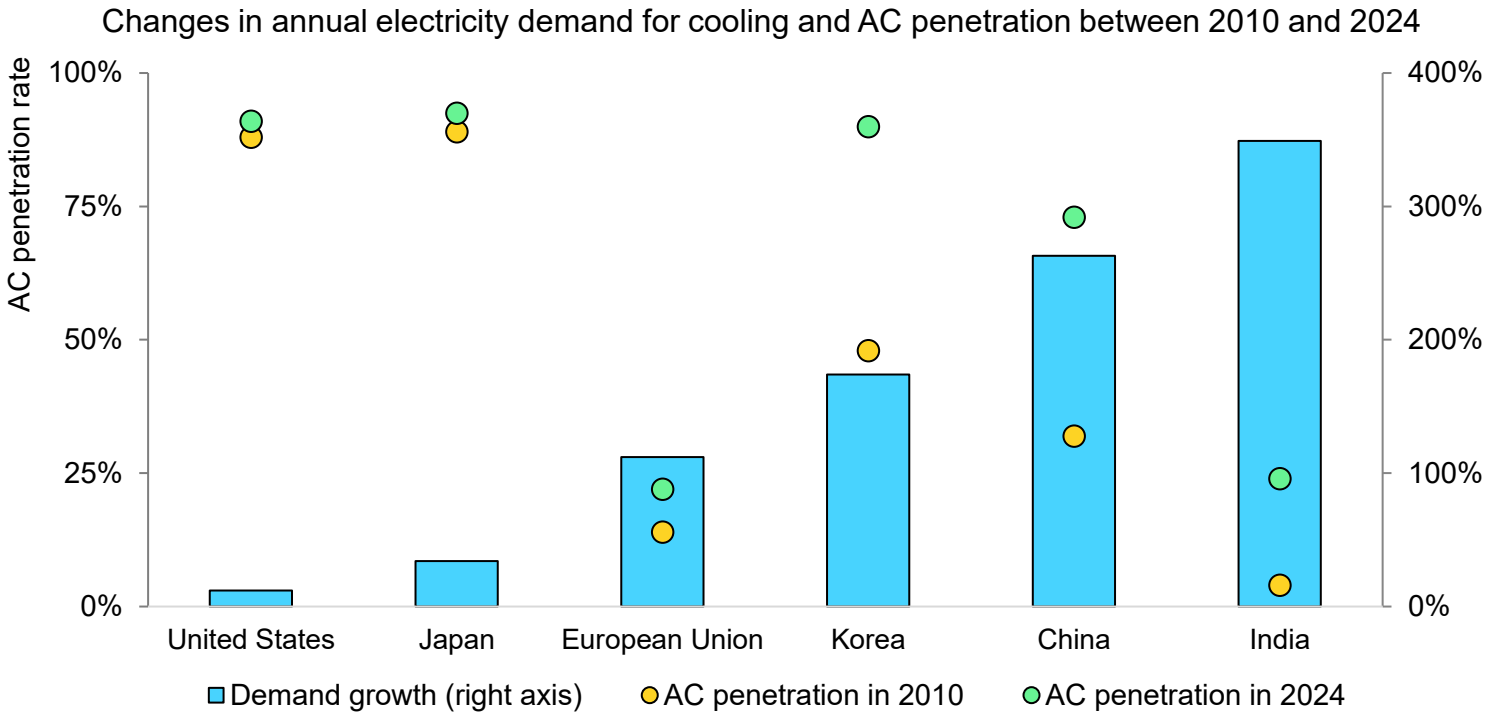

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Accelerating progress requires policy action

First, economies can raise the ambition of existing policies

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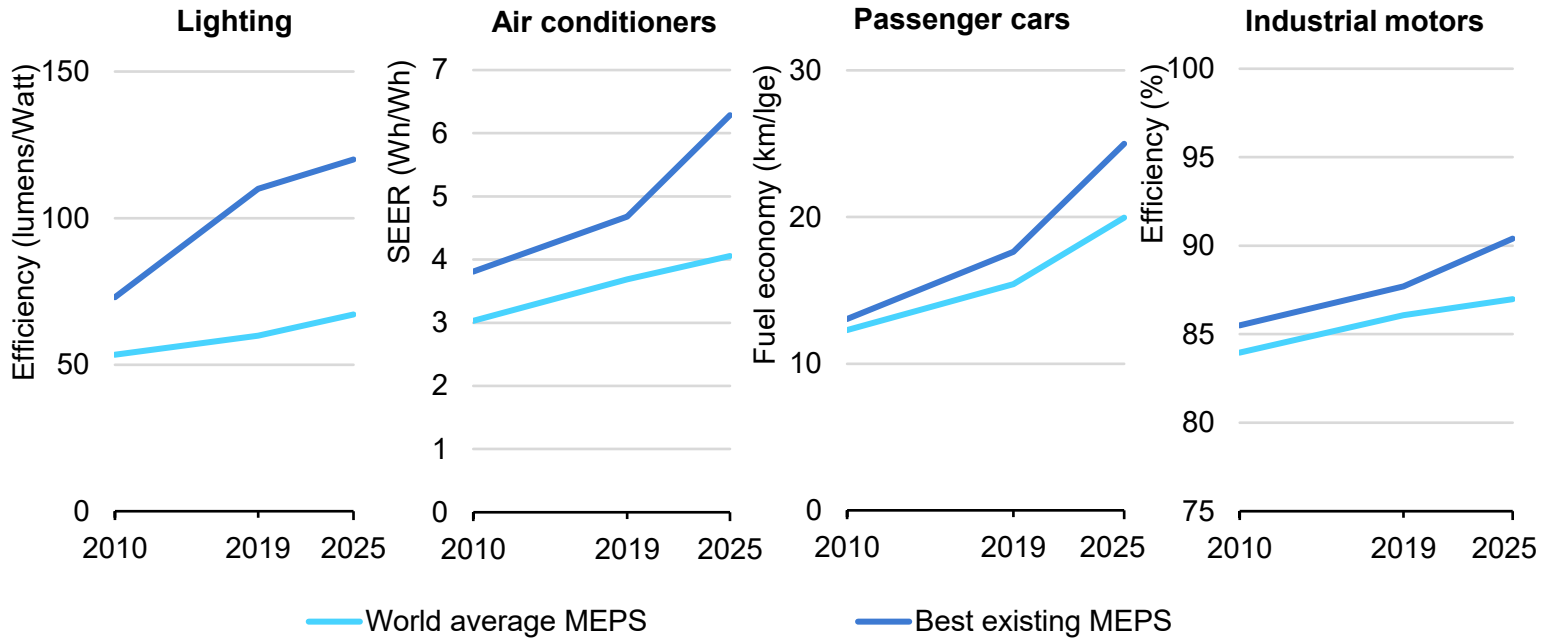
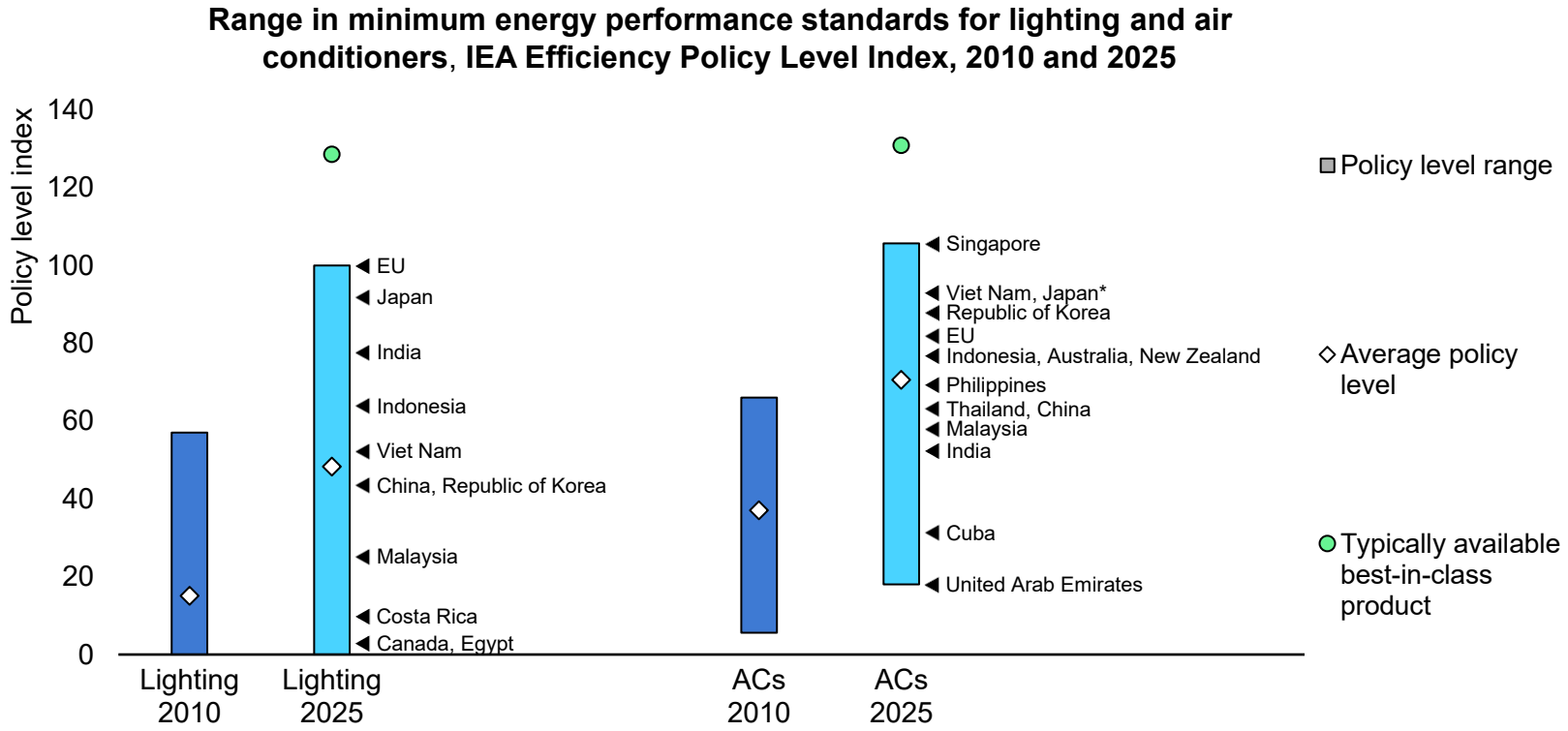


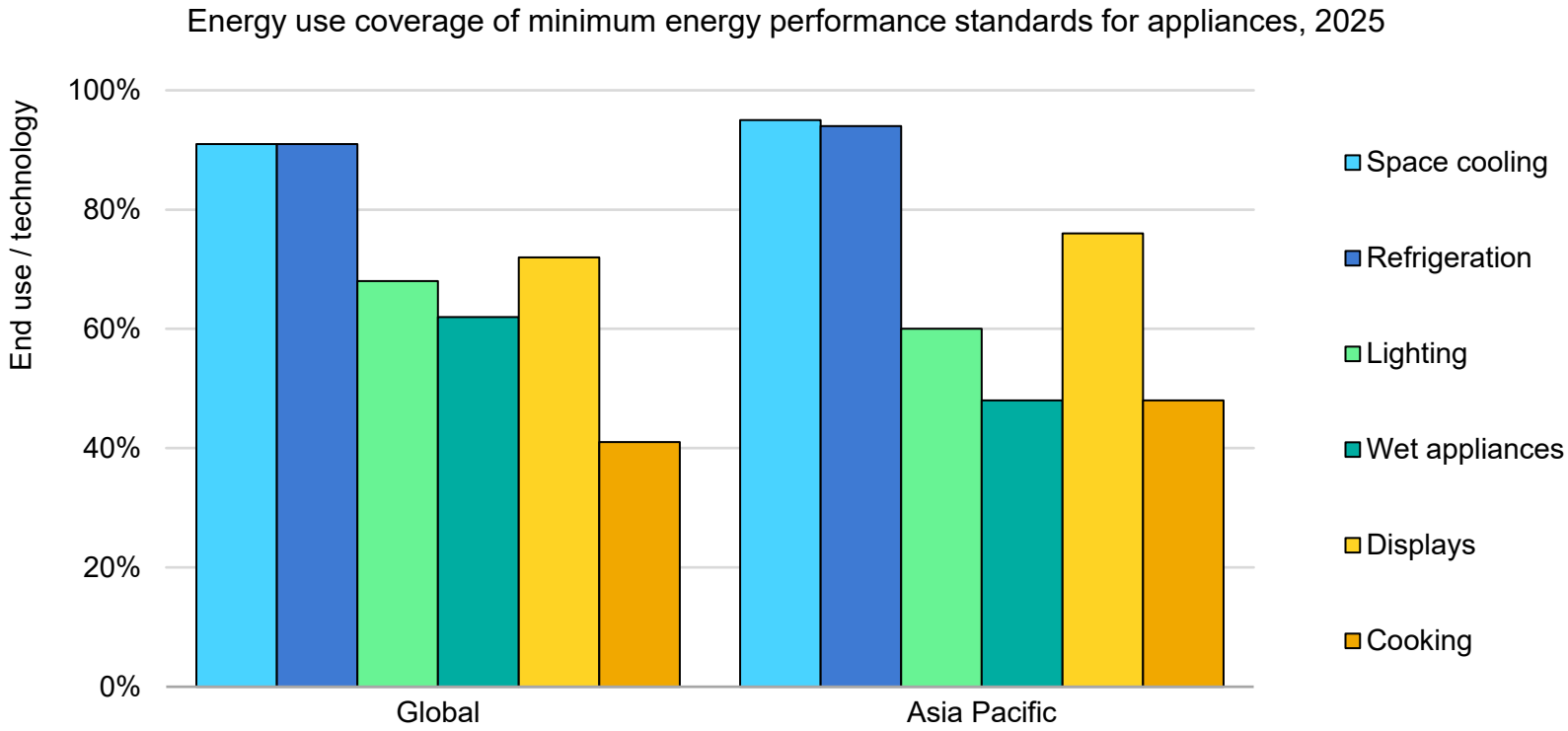
There is a wide range between the global average MEPS level and the most ambitious ones in place today

Ambition levels vary widely across the world



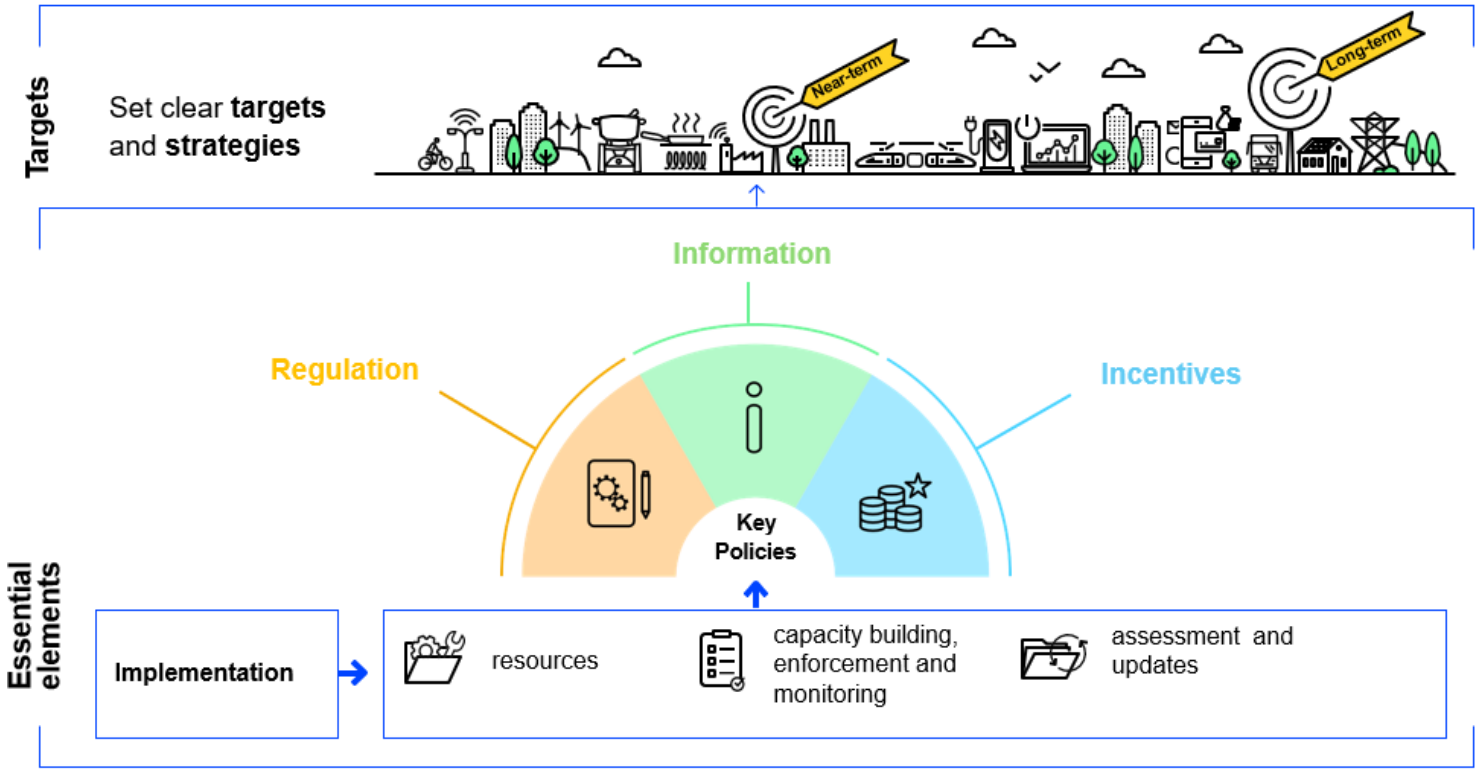
There is a wide range between the global average MEPS level and the most ambitious ones in place today

Second, there remain important policy gaps to be filled



90% of energy used by air conditioners and refrigerators is regulated in 2025, but other end uses lag behind

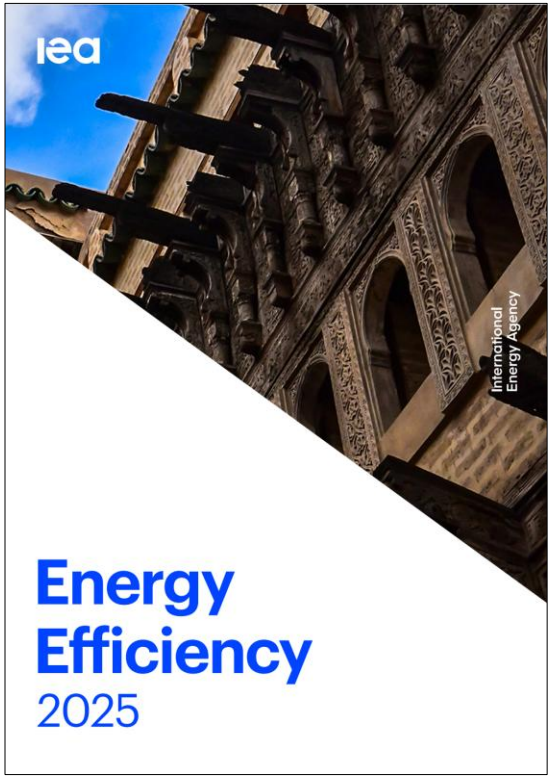
IEA policy toolkit provides practical advice for policy implementation



Comprehensive policy packages are the most effective tool for governments in delivering strong efficiency gains across end-use sectors

Energy Efficiency 2025

- Read all this and more in the report:
  - In-depth insights for each end use sector
  - Trends in efficiency investment and employment
  - Key regional policy developments
  - New analysis on the benefits of efficiency
- In parallel to the report, the IEA updated its Energy Efficiency Progress Tracker



Tracking energy efficiency progress

Tracking the goal of doubling of energy efficiency progress by 2030

- Nearly 200 governments agreed at COP28 in 2023 to double the global average annual rate of energy efficiency progress by 2030.
- The IEA is supporting and reporting on global energy efficiency progress: COP28 & SDG7

$$\textbf{Primary Energy Intensity} = \frac{\text{Total Primary Energy Supply}}{\text{GDP}}$$

$$\textit{Final Energy Intensity} = \frac{\textit{Total Final Consumption}}{\textit{GDP}}$$

United Nations — FCCC/PA/CMA/2023/16/Add.1

Framework Convention on Climate Change

Distr.: General
15 March 2024

Original: English

28. *Further recognizes* the need for deep, rapid and sustained reductions in greenhouse gas emissions in line with 1.5 °C pathways and *calls on* Parties to contribute to the following global efforts, in a nationally determined manner, taking into account the Paris Agreement and their different national circumstances, pathways and approaches:

(a) Tripling renewable energy capacity globally and doubling the global average annual rate of energy efficiency improvements by 2030;

(b) Accelerating efforts towards the phase-down of unabated coal power;

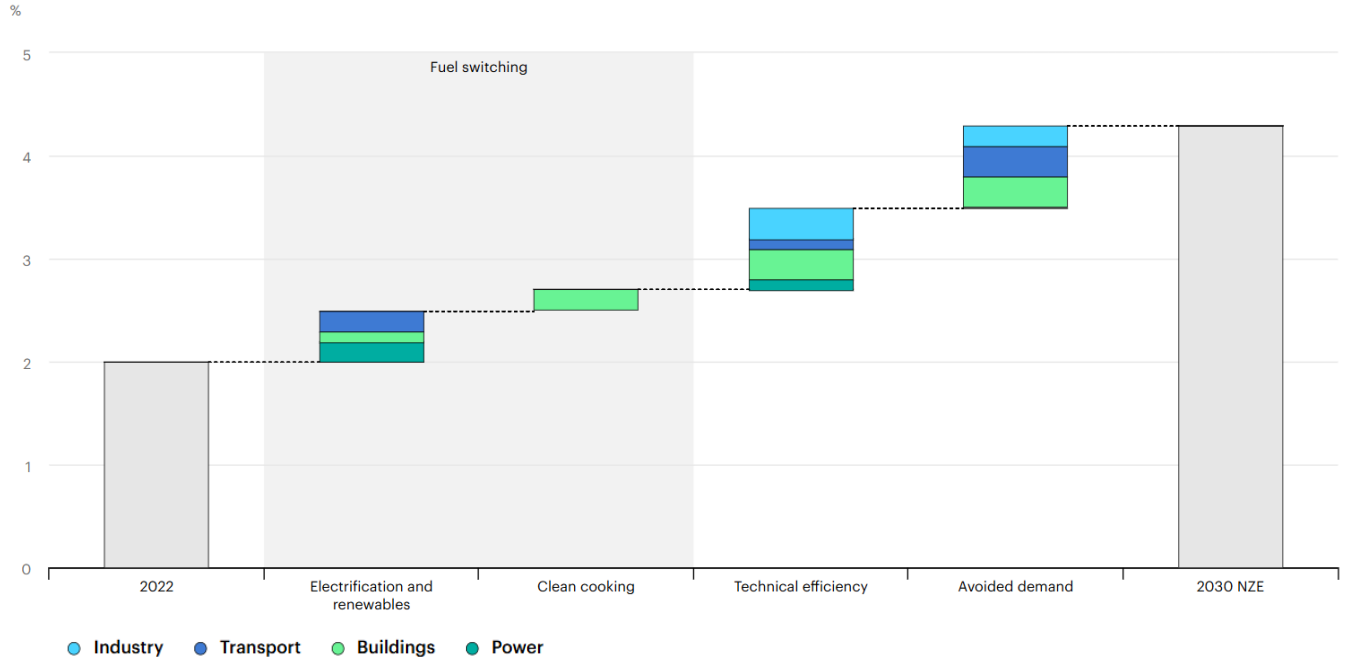
(c) Accelerating efforts globally towards net zero emission energy systems, utilizing zero- and low-carbon fuels, well before or by around mid-century;

(d) Transitioning away from fossil fuels in energy systems, in a just, orderly and equitable manner, accelerating action in this critical decade, so as to achieve net zero by 2050 in keeping with the science;

Source: www.unfccc.int/decisions

Tracking the goal of doubling of energy efficiency progress by 2030

Groups of actions contributing to a doubling in the rate of annual primary energy intensity improvements in the Net Zero Emissions by 2050 Scenario



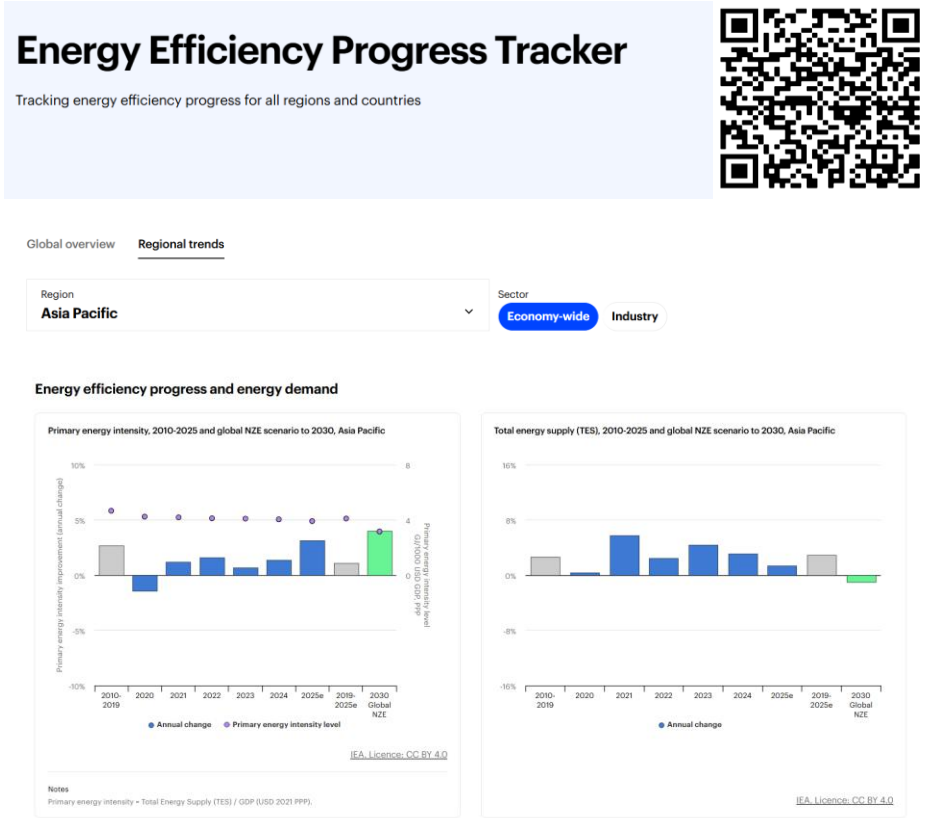
A range of energy efficiency solutions will be needed to double energy efficiency progress by 2030

Energy Efficiency Progress Tracker

- Data up to 2025 and IEA Scenarios to 2030
- Global overview and regional trends:
  - primary energy intensity progress
  - total energy supply
    - *final energy intensity progress*
    - *total final consumption*
- **2025 edition includes industry sector module:**
  - Industry energy intensity and energy consumption
- Free and accessible here:

www.iea.org/data-and-statistics/data-tools/energy-efficiency-progress-tracker

- Contact: energy.efficiency@iea.org



Upcoming event

IEA 11th Annual Global Conference on Energy Efficiency

29-30 June 2026

Montreal, Canada

Co-hosted by the International Energy Agency and Government of Canada

Key themes of **energy security**, **energy affordability** and **industrial competitiveness**

Questions

- What other types of energy efficiency topics could the IEA look at?
- What types of indicators would you like to see?
- What other ways can the IEA evaluate energy efficiency progress?
- What data sources do you think could be useful for future analysis?