

# Energy Efficiency and the IEA

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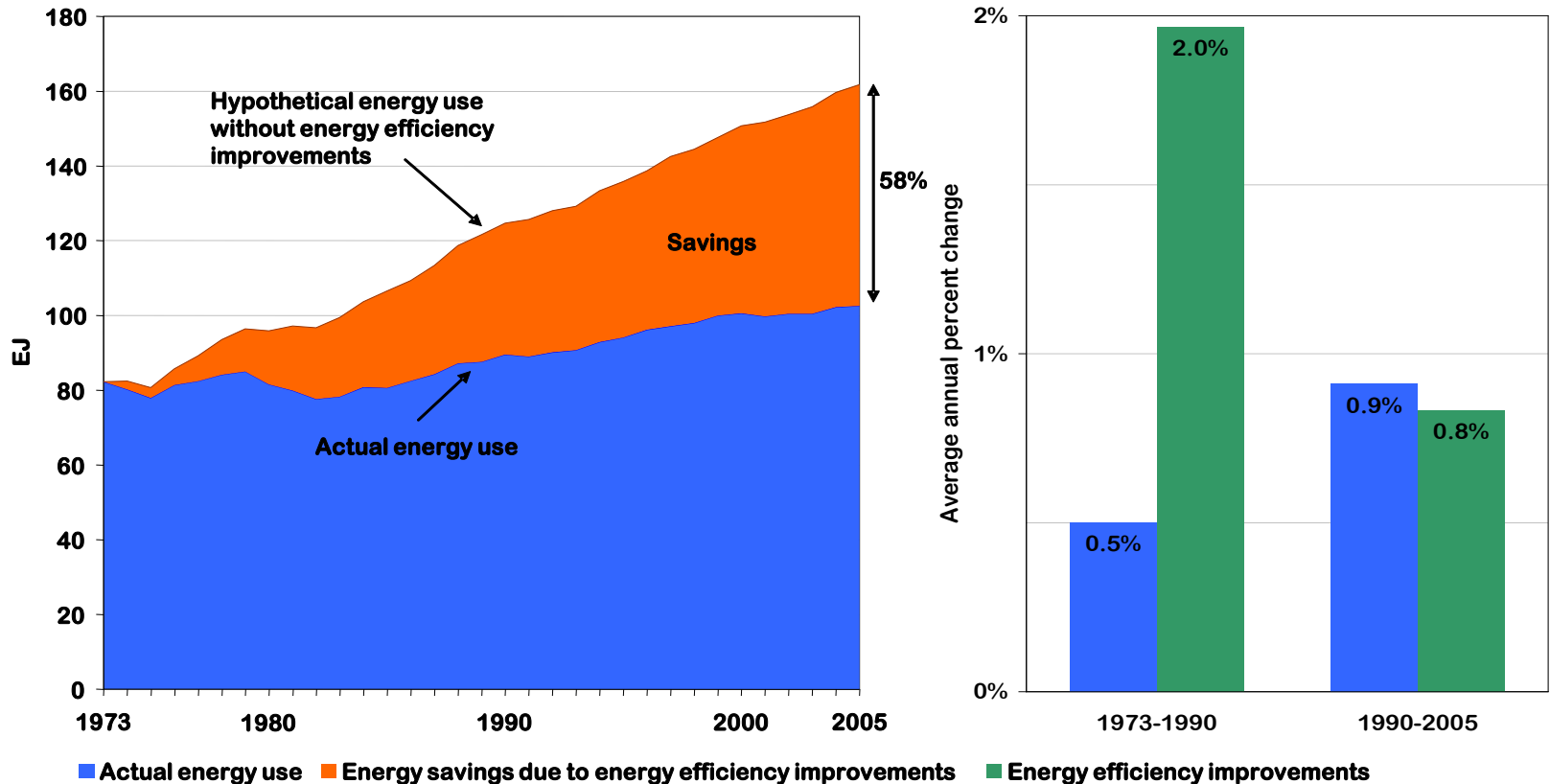
**International  
Energy Agency**

# Topics

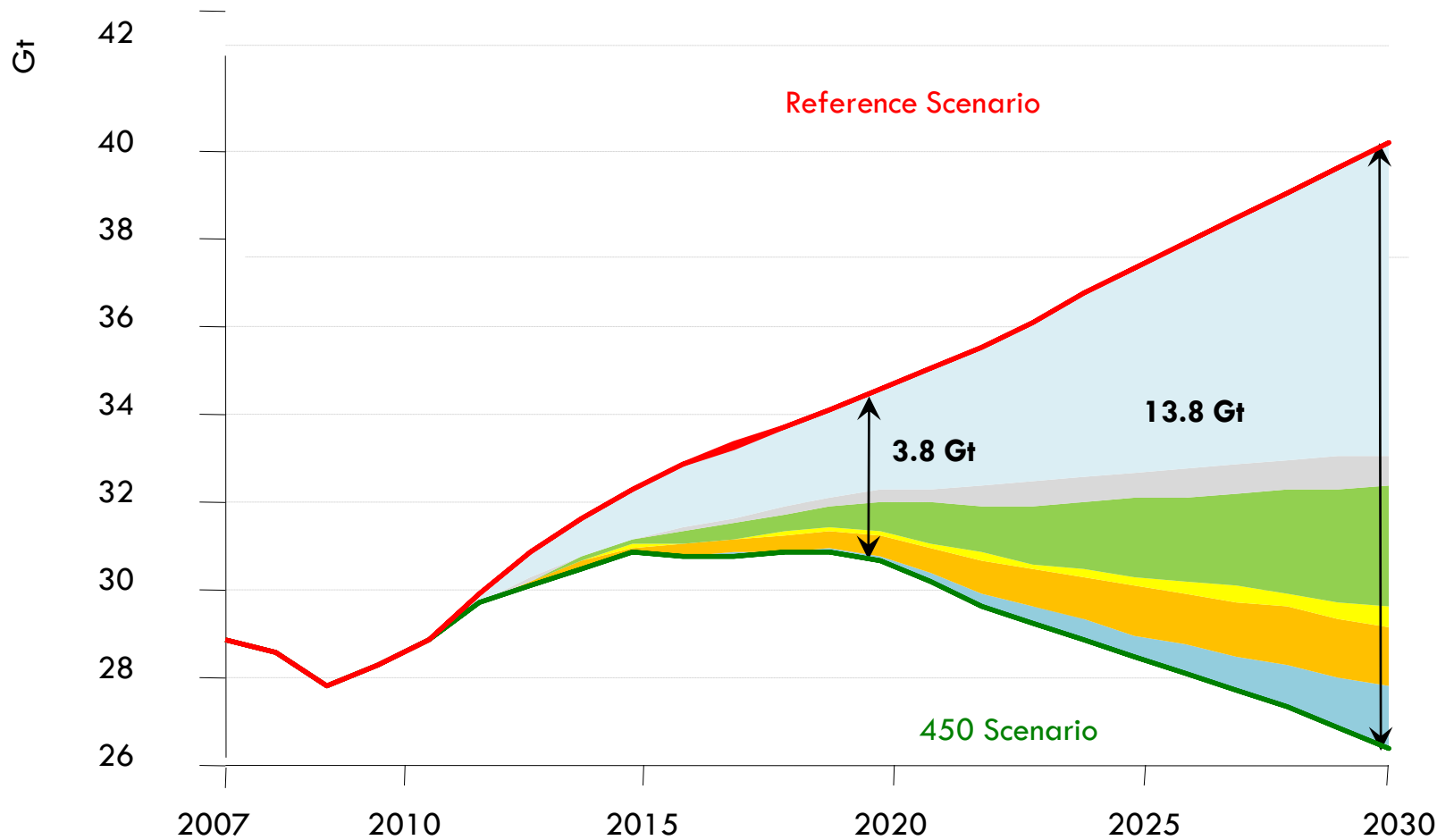
- **Why Energy Efficiency**
- **The IEA's Energy Efficiency programme of work**
- **The IEA's 25 Energy Efficiency Recommendations**
- **IEA efforts in support of policy implementation**

# The Energy Efficiency Yield

- Analysis and experience shows Energy Efficiency to be a least-cost way to achieve sustainable development



# Energy Efficiency and 450 ppm

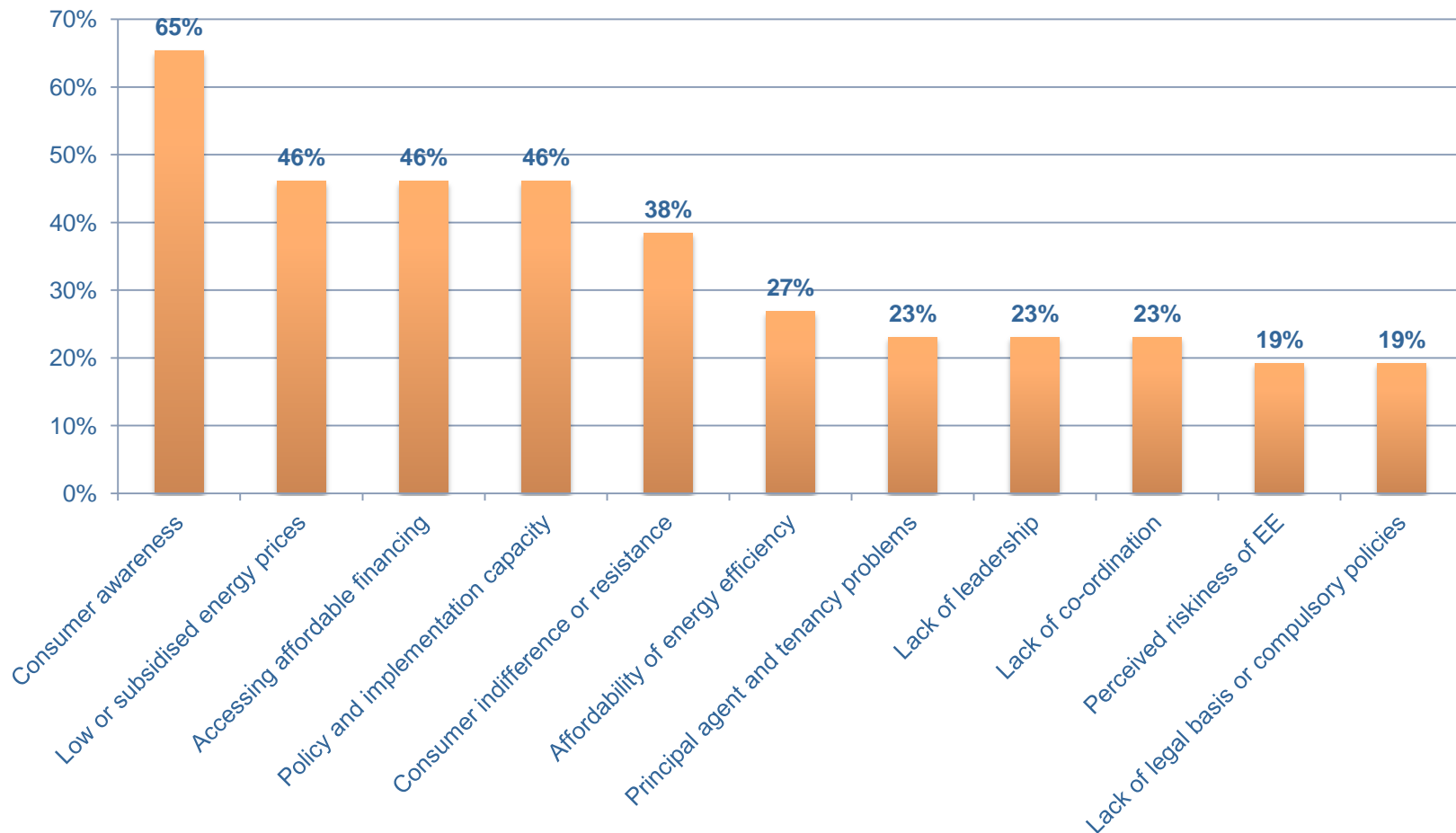


Efficiency measures account for two-thirds of the 3.8 Gt of abatement in 2020

# The Energy Efficiency Gap

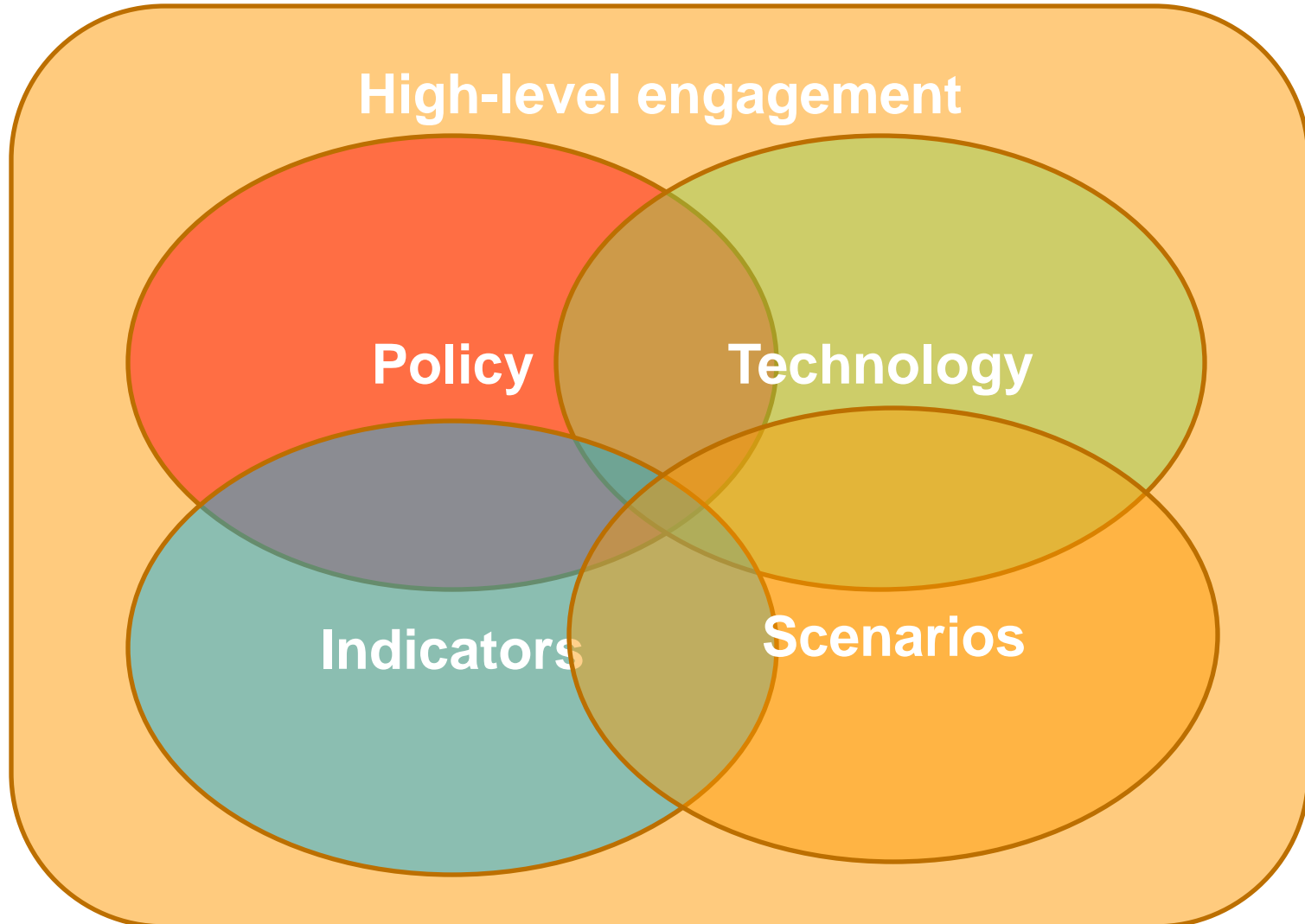
- However, market and institutional barriers hinder additional efficiency improvements
- Public policies are needed to correct these failures and deliver more efficient outcomes

# Market and institutional barriers



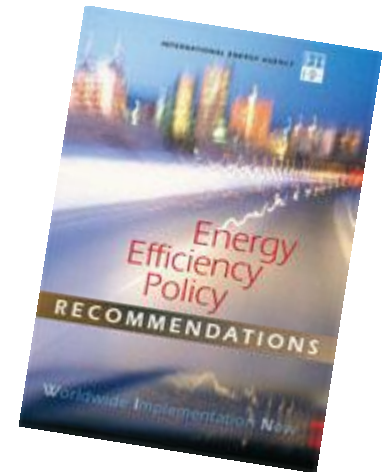
*End-user awareness, low energy prices, financing, and implementation capacity are the most common barriers cited*

# The IEA's Energy Efficiency work program



# The IEA's 25 Energy Efficiency policy recommendations

- Developed through dialogue with political leaders
- Launched at the 2008 Hokkaido G8 meeting
- Grounded in the IEA's work on climate change and energy efficiency
- Flexible vehicle for policy dissemination
  - A clear package for decision makers
  - Strong 'brand' and awareness
  - Strong IEA country buy-in
  - Conductive to tracking progress
- Recently updated to reflect implementation progress and new opportunities





# 25 Energy Efficiency Policy Recommendations Across 7 Priority Areas

## Cross sectoral

1. Energy efficiency data collection and indicators
2. Strategies and action plans;
3. Competitive energy markets with appropriate regulation;
4. Private investment in energy efficiency
5. Monitoring, enforcement and evaluation of policies and measures.

## Buildings

6. Mandatory building energy codes and minimum energy performance requirements;
7. Aiming for net zero energy consumption in buildings;
8. Improving the energy efficiency of existing buildings;
9. Building energy labels or certificates;
10. Improved energy performance of building components and systems.

## Appliances and Equipment

11. Mandatory MEPS and labels for appliances and equipment;
12. Test standards and measurement protocols for appliances and equipment
13. Market transformation policies for appliances and equipment

## Lighting

14. Phase-out of inefficient lighting products and systems;
15. Energy efficient lighting systems

## Transport

16. Mandatory vehicle fuel efficiency standards;
17. Measure to improve vehicle fuel efficiency;
18. Fuel-efficient non-engine components
19. Improved vehicle operational efficiency through Eco-driving and other measures .
20. Transport system efficiency

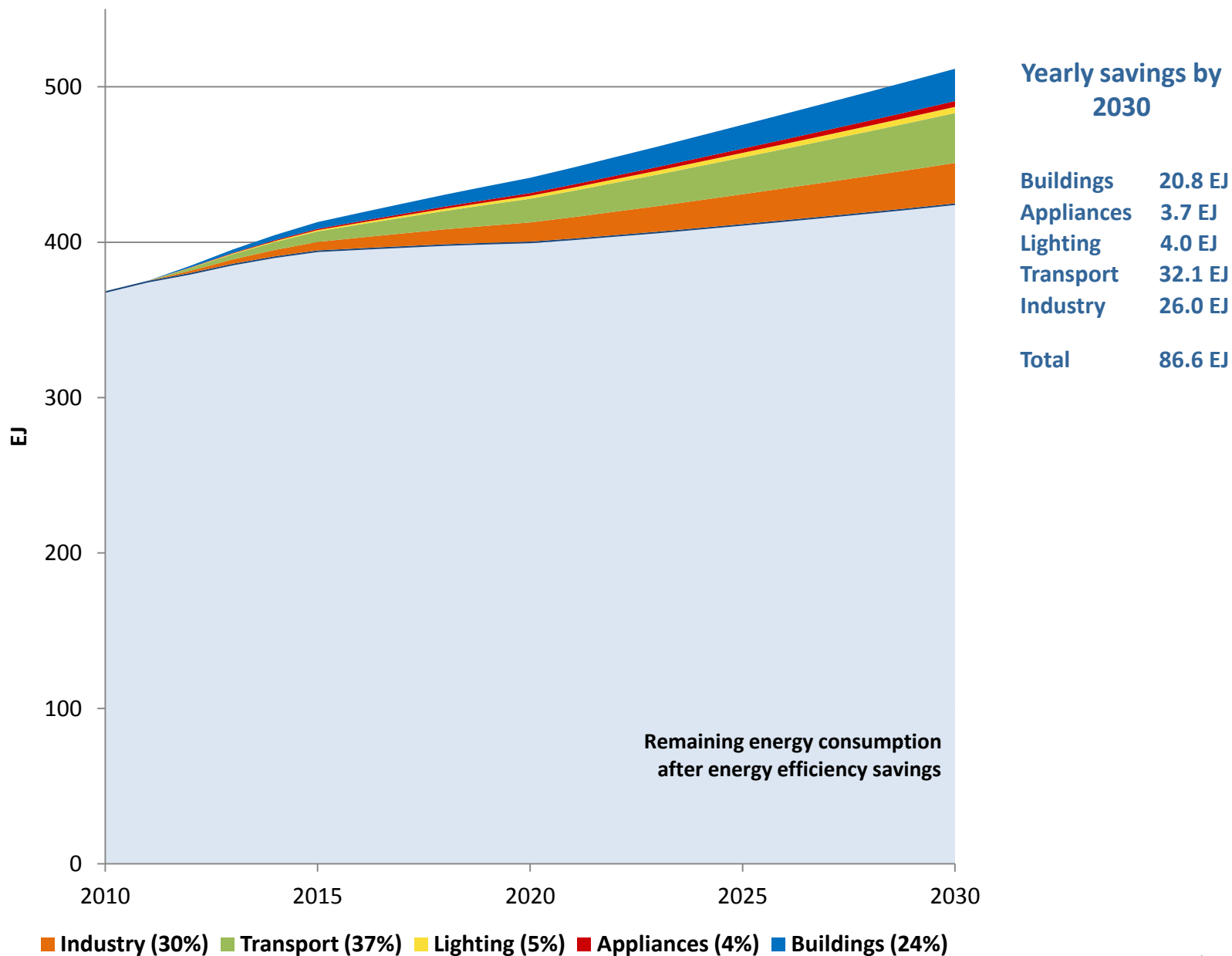
## Industry

21. Energy Management in industry;
22. High efficiency industrial equipment and systems;
23. Energy efficiency services for small and medium enterprises;
24. Complementary policies to support industrial energy efficiency

## Utilities and end-use

25. Energy Utilities and end-use energy efficiency.

# Energy savings attributable to the IEA 25 Recommendations



# Why the Recommendations Work

- **Linked to the IEA's energy security and climate change work**
  - **Abatement of energy-related CO<sub>2</sub> under the 450 scenario**
  - **Estimates of potential impacts by sector and recommendation**
- **Provides a “policy package” that can be taken up by leaders**
- **Easily communicated and recognized**
  - **IEA “brand” and dissemination capacity**
  - **50,000 downloads in three years**
- **Reflects a high quality of analysis from an objective source**
- **Conducive to tracking implementation progress over time**
- **Recommendations also apply to non-IEA member countries**
- **They can be updated or revised over time to reflect implementation progress or technological development**

# IEA support to policy implementation

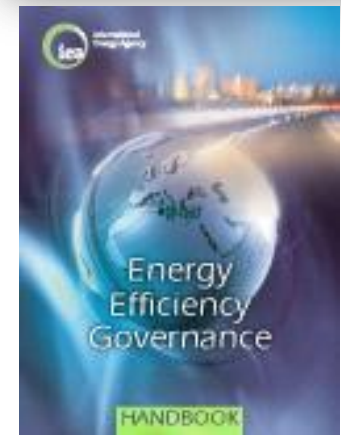
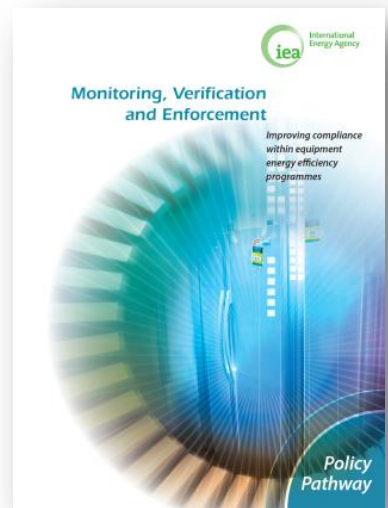
## ■ Policy pathways series

- Helping governments implement their policies
- Sharing good practice

## ■ Energy Efficiency governance

- Implementation advice and support
- Key governance elements:
  - ◆ Enabling frameworks
  - ◆ Institutional arrangements
  - ◆ Coordination mechanisms

## ■ Workshops, Capacity Building, Knowledge Exchange



# Conclusions

- **The IEA is committed to a strong, long-term programme of work addressing all aspects of Energy Efficiency**
- **Energy efficiency policies are needed to overcome the market failures and institutional barriers that hinder energy savings**
- **The IEA's 25 Energy Efficiency policy recommendations if adopted can contribute significantly to energy security, climate change mitigation and sustainable development**

**Thank You**

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