## **Energy Efficiency and the IEA**

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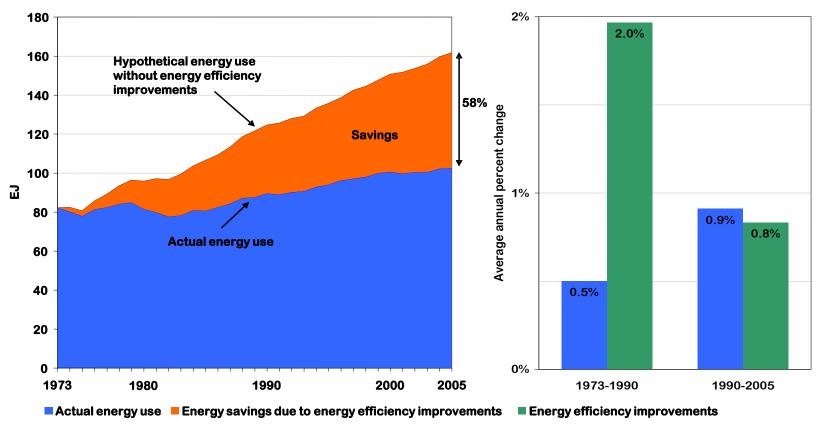
Energy Efficiency Day December 7, 2011 Durban

## **Topics**

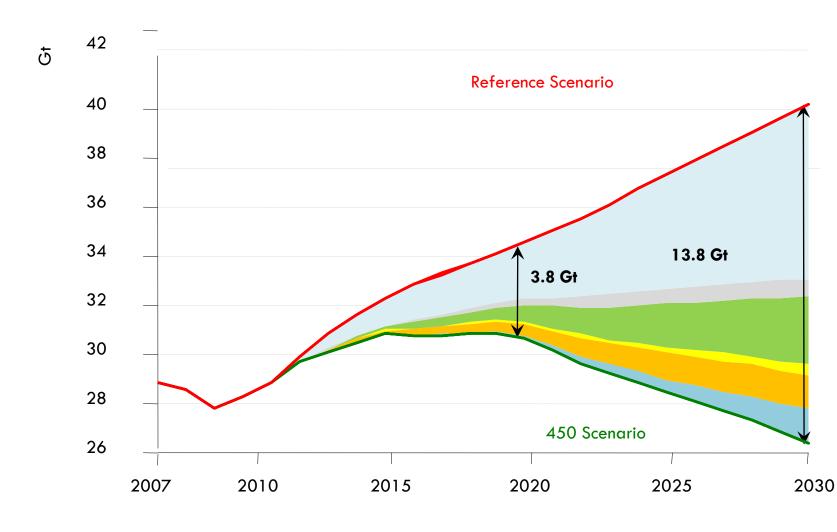
- Why Energy Efficiency
- The IEA's Energy Efficiency programme of work
- The IEA's 25 Energy Efficiency Recommendations
- **IEA efforts in support of policy implementation**

## 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**

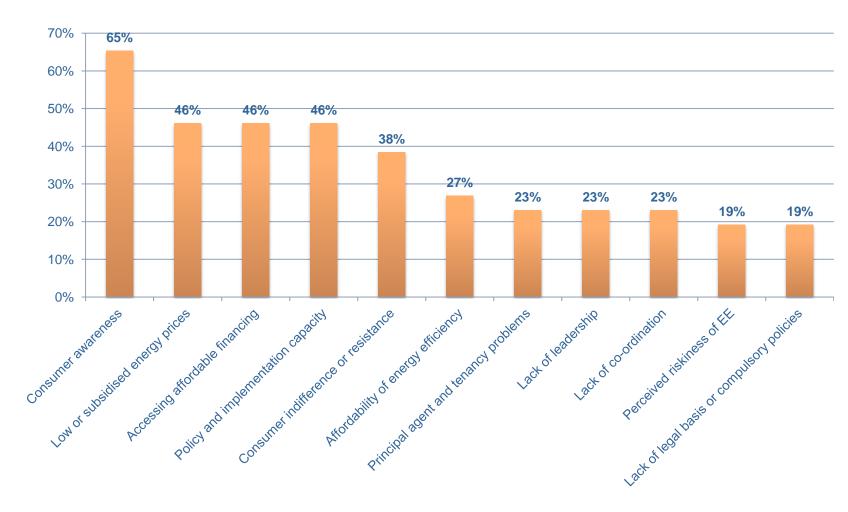


Efficiency measures account for two-thirds of the 3.8 Gt of abatement in 2020

## The Energy Efficiency Gap

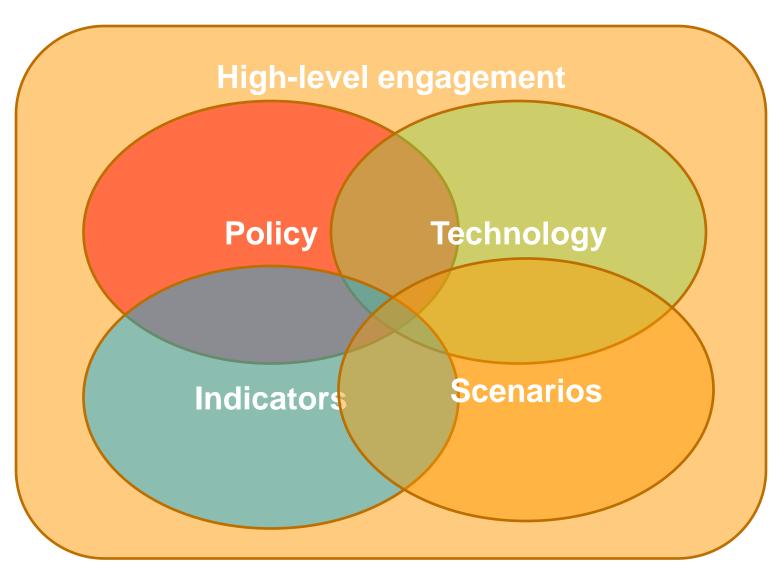
- However, market and institutional barriers hinder additional efficiency improvements
- Public policies are needed to correct these failures and deliver more efficient outcomes

### 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

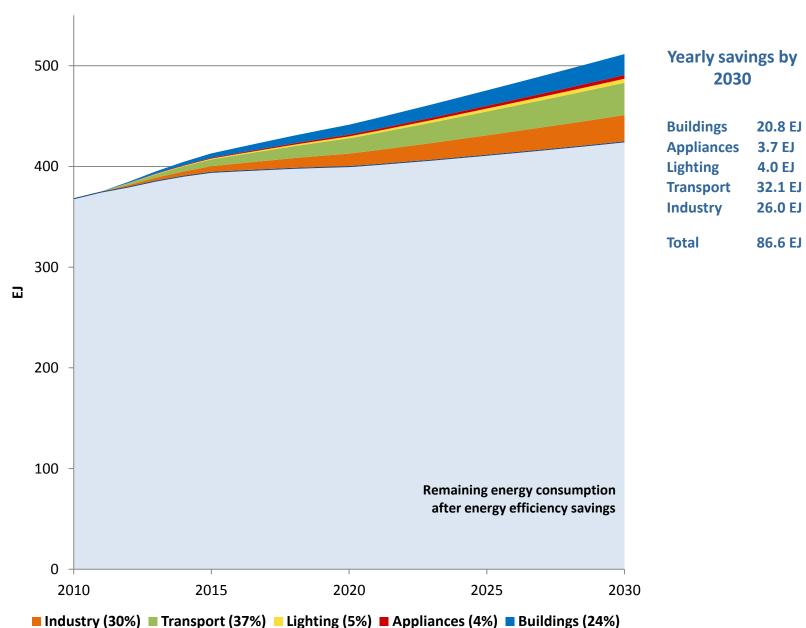
#### **Industry**

- 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**



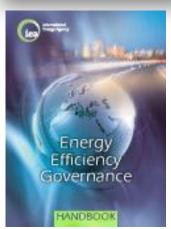
## Why the Recommendations Work

- 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**