Executive summary

■ *Energy efficiency plays a critical role in addressing energy security, environmental and economic challenges.*

The imperative to significantly improve energy efficiency remains a priority for all countries. Recent meetings of the G8 leaders and the IEA Ministerial Meeting reaffirmed the critical role that improved energy efficiency can play in addressing energy security, environmental and economic challenges.

■ *The IEA recommendations present an opportunity for significant energy savings.*

To support governments with their implementation of energy efficiency, the IEA recommended the adoption of specific energy efficiency policy measures to the G8 summits in 2006, 2007 and 2008. The consolidated set of recommendations to these summits covers 25 fields of action across seven priority areas: cross-sectoral activity, buildings, appliances, lighting, transport, industry and power utilities[1]. The IEA estimates that if implemented globally without delay, the **proposed actions could save around 8.2 Gt CO_2/year by 2030** – equivalent to twice the European Union's current yearly emissions.

At the 2007 IEA Ministerial Meeting, Energy Ministers placed energy efficiency high on the agenda. They "strongly welcomed" the energy efficiency recommendations and invited the IEA "to evaluate and report on the energy efficiency progress of IEA member and key non-member countries".

■ *This analysis investigates progress with implementing energy efficiency policies in IEA countries up to 31 March 2009.*

This report evaluates the progress of all IEA member countries in implementing energy efficiency policy, including the 25 IEA recommendations. The report also addresses whether IEA countries are on track to maximise their implementation of energy efficiency policies. Information in this report is current up to 31 March 2009. Conclusions are based on country completion of a detailed questionnaire measuring energy efficiency policy implementation and subsequent IEA review and analysis. In November 2009, the Secretariat intends to conduct an evaluation of the progress reporting process.

■ *There are many positive examples of energy efficiency policy implementation.*

The IEA finds many positive examples of energy efficiency policy implementation in IEA member countries. Governments are investing in a wide array of well-known energy efficiency policies from national strategies to minimum energy performance standards for appliances and equipment. There are also signs of energy efficiency policy innovations. These include the widespread development of energy efficiency strategies and action plans, innovative financial instruments, active policies promoting energy efficiency in buildings, the extensive adoption of standby power policies and policies to phase out inefficient lighting, measures to promote proper inflation of tyres and innovative policies to create incentives for utilities to promote energy efficiency.

■ *Yet the current suite of energy efficiency policies is not enough.*

But is the current suite of energy efficiency policies enough? Are IEA member countries on track to meet pressing economic, environmental and energy security challenges? The answer to this is no. Evidence in the IEA publications, *World Energy Outlook 2008 and Energy Technology Perspectives 2008* suggests that there is a need to increase the rate of energy efficiency improvement significantly and urgently across all countries, even beyond what can be achieved with the current 25 IEA recommendations.

■ *No IEA country has fully or substantially implemented more than 57% of the IEA recommendations, and two countries report less than 10% substantial implementation.*

There is certainly room for further energy efficiency action in IEA member countries. For example, no IEA member country has 'fully' or 'substantially'[2] implemented more than 57% of the relevant IEA recommendations, and two countries report less than 10% 'substantial implementation' (Figure 1). Another way of looking at this is that even in the countries with the most active energy efficiency policies, around 40% of the potential[3] energy savings

1. For further information on the full set of recommendations, see http://www.iea.org/textbase/papers/2008/cd_energy_efficiency_policy/index_EnergyEfficiencyPolicy_2008.pdf and Annex 1.

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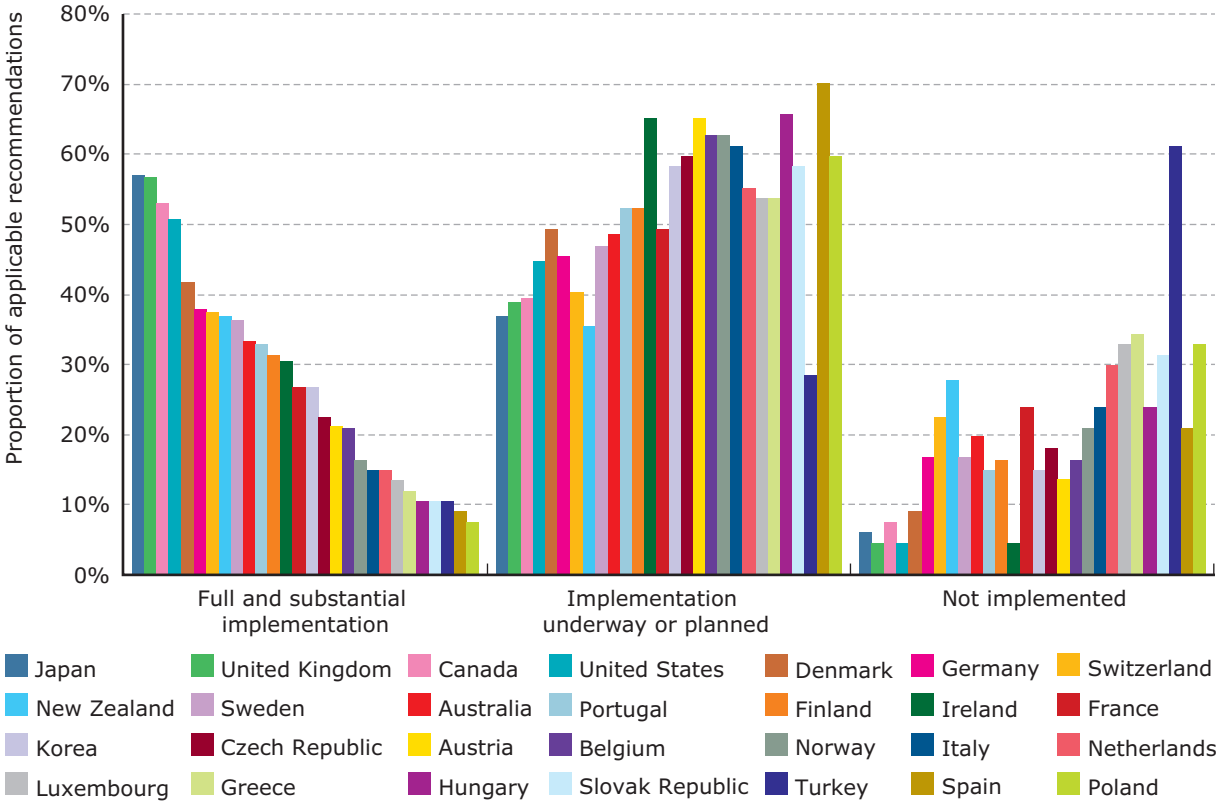
Figure 1
Level of implementation of applicable IEA recommendations, all IEA countries, all recommendations



Note: Proportion of all recommendations minus those recommendations considered 'not-relevant'.

No IEA country has 'fully' or 'substantially' implemented more than 57% of the applicable IEA recommendations. Two countries report that less than 10% of the recommendations have been 'substantially implemented'.

- *On a sectoral basis, across all IEA countries, policies for transport stand out as having the least 'substantial implementation'.*
- *Countries need to increase the rate of energy efficiency improvement significantly and urgently.*
- *Energy efficiency faces pervasive barriers.*

from the IEA recommendations, or measures that achieve similar outcomes, remains to be captured. On a sectoral basis, across all IEA member countries, policies for transport stand out as having the least substantial implementation (see Figure 2) – although in transport, many policies are 'planned'. The IEA concludes that all its member countries urgently need to expand their implementation of energy efficiency policies, including the IEA recommendations.

Why is it that IEA member countries have not implemented the full suite of cost-effective energy efficiency policies or equivalent measures their leaders endorsed? Energy efficiency continues to face pervasive barriers including lack of access to capital for energy efficiency investments, insufficient information, principal-agent problems and externality costs that are not reflected in energy prices. Political commitment to maximising implementation of energy efficiency policies may also have been challenged by the current economic crisis. Energy efficiency programmes must compete for funding with other priorities such as employment, health and social security. When making decisions about how to allocate

2. That is, considering only those recommendations that have been 'fully' or 'substantially' implemented.
3. That is, cost-effective technical potential.

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■ *Energy efficiency is having to compete alongside other priorities.*

■ *But energy efficiency can deliver significant co-benefits.*

■ *The IEA calls for Worldwide Implementation Now of energy efficiency.*

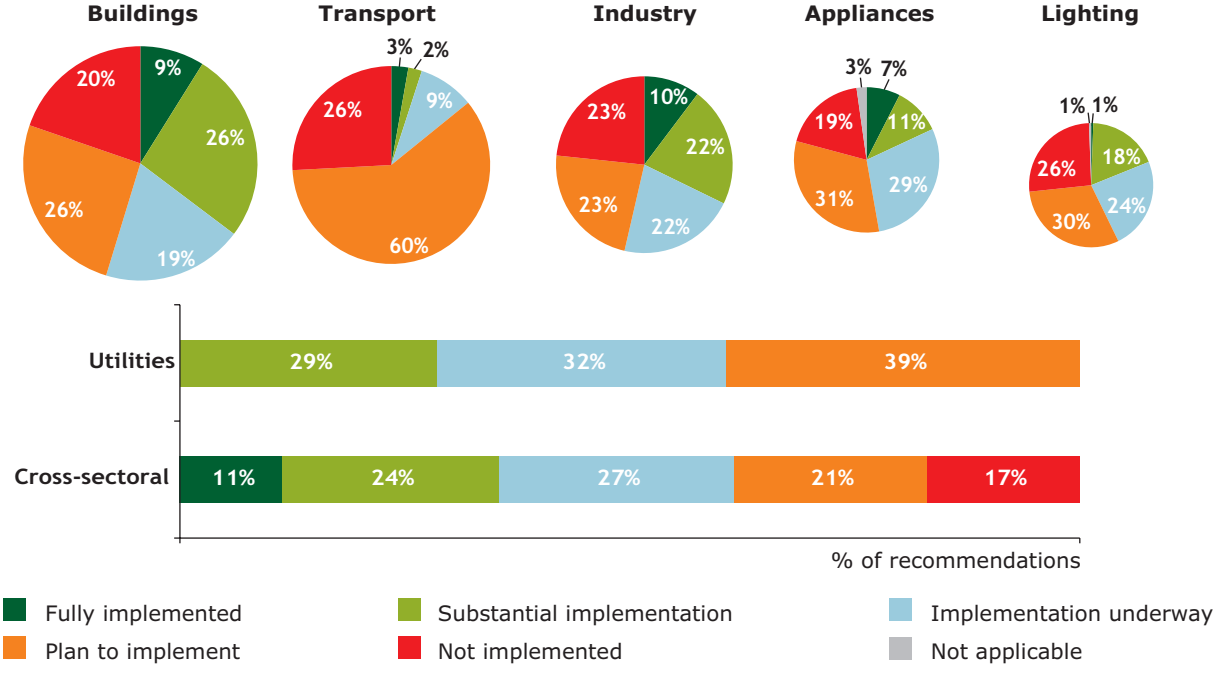
limited resources, governments should keep in mind that the benefits of implementing energy efficiency extend beyond energy security and climate change mitigation. Experience shows that energy efficiency investments can deliver significant co-benefits - including job creation and health improvements. Several countries have recognised these co-benefits and allocated substantial stimulus funds to energy efficiency efforts. The IEA supports this increase in funding for energy efficiency and urges other governments to enhance the resources allocated to energy efficiency. Allocating resources to energy efficiency can achieve many policy objectives at the same time.

This report shows that IEA member countries are implementing a full range of energy efficiency activities. However, more action is needed to ensure IEA countries are on track to meet pressing energy-related challenges. To address the action gap, IEA member countries need to urgently extend their efforts in energy efficiency policy.

The IEA and its member countries can play a critical role in promoting "Worldwide Implementation Now" (W.I.N.) of energy efficiency. What will it be? W.I.N. or lose the opportunity?

Figure 2

Progress with implementing IEA 25 energy efficiency recommendations, all recommendations, all IEA member countries



Note: Pie charts have been scaled to reflect relative global energy savings potential of each sector. For example, lighting recommendations are estimated to deliver roughly one-third the energy savings of buildings. Because the IEA does not calculate energy efficiency potential for the utilities and cross-sectoral recommendations, these are presented as bar charts.

Across all IEA member countries, policies for transport stand out as having the least substantial implementation.

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