

Energy Efficiency Policy Recommendations for the Arab - SEMED Region

MEED Qatar Energy & Water
Efficiency Conference

8-10 Dec 2013
Robert Tromp



Regional Center for Renewable Energy and Energy Efficiency
المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة



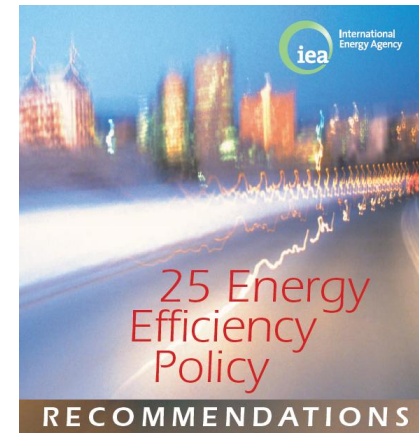
European Bank
for Reconstruction and Development



International
Energy Agency

Carrying forward the success of the 25 EEPRs

- A compact, comprehensive policy package
- Useful in building political support for energy efficiency
- Capitalizes on the IEA's brand recognition
- Broadly applicable to most economies
- Provides a basis for tracking implementation progress



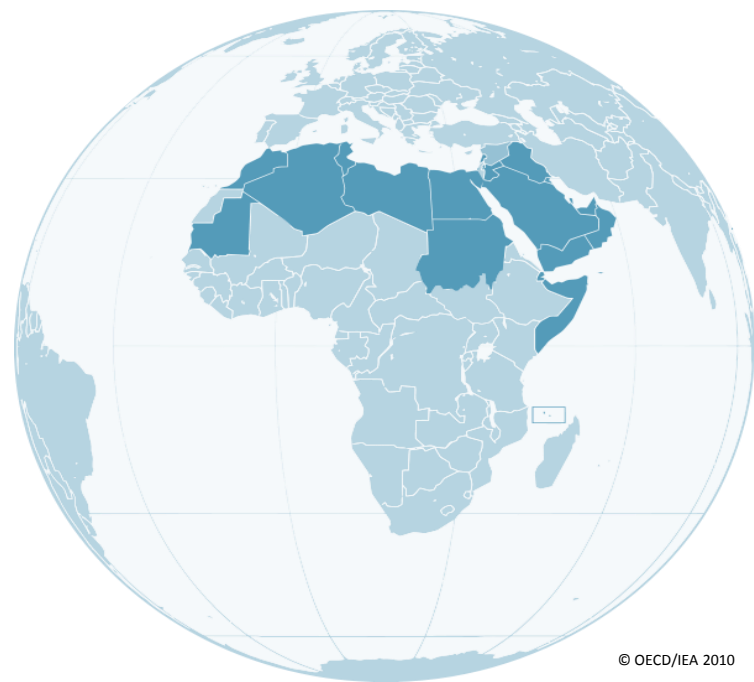
Regional EEPs for the world

- **Adjust the 25 EEP to suit emerging economy conditions**
- **Reflect regional energy savings opportunities, barriers, and conditions**
- **Engage with energy efficiency networks serving the developing world**
- **Seek endorsement of regional political networks**
- **Process**
 - **Regional Roundtables**
 - **Development of regional EEPs**
 - **Cooperative dissemination, co-branding and implementation progress tracking**

MENA, SEMED Roundtable

- 15/16 April 2013 in Amman, Jordan
- Supported by EBRD
- Co-delivered by IEA, EBRD, RECREEE, and the League of Arab States
- Participating countries:

Bahrain	Egypt
Iraq	Jordan
Kuwait	Lebanon
Morocco	Palestinian Territories
Sudan	Tunisia



SEMED-Arab region; barriers to EE

- **Rapid energy demand growth**
- **Low institutional capacity**
- **Subsidized energy**
- **Low private sector EE capacity**
- **For energy-importing countries (Jordan, Tunisia), energy price volatility and supply disruption issues**
- **Low capacity for manufacturing, servicing or testing energy efficient products**
- **Demanding climactic conditions**
- **Capital and spending constraints**

Cross-sectoral policies

1. Establish energy data collection capacity
2. Develop national energy efficiency plans
3. Facilitate private investment
4. Establish lead energy efficiency institutions
5. Progressively address energy price subsidies



THE NATIONAL ENERGY
EFFICIENCY ACTION PLAN
FOR LEBANON

NEEAP 2011-2015

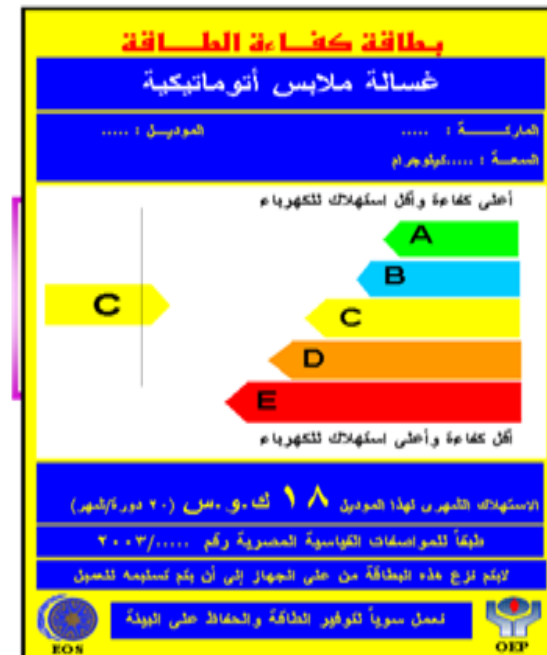
Buildings

- 6. Mandatory energy efficiency building codes**
- 7. Encourage energy efficient building renovations**
- 8. Encourage use of high-efficiency building components**



Appliances and equipment

9. Minimum energy performance standards for appliances
10. Monitoring, verification and enforcement of standards



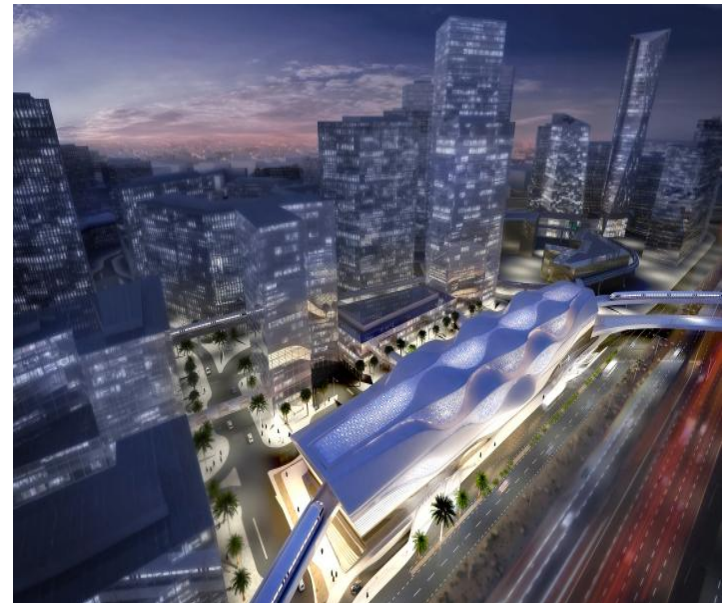
Lighting

- 11.** Phase-out of energy-inefficient lamps
- 12.** High-efficiency street lighting



Transport

- 13. Mandatory fuel economy standards for vehicles**
- 14. Encourage light duty vehicle fleet renewal**
- 15. Promote eco-driving**
- 16. Promote public transit development**



Industry

- 17. Mandatory adherence to energy management protocols**
- 18. Minimum energy performance standards for equipment**
- 19. Promote energy efficiency for small/medium enterprises**
- 20. Complementary policies to support industrial energy efficiency**





Recommended as they provide a foundation for energy efficiency policies

Establish energy data collection capacity

Develop national energy efficiency plans

Recommended for immediate adoption by all governments in the region

Energy performance standards for appliances

Mandatory energy management protocols

Recommended for strong consideration by all governments in the region and immediate adoption in most countries.

Facilitate private investment

Establish lead energy efficiency institutions

Mandatory energy efficiency building codes

Monitoring and enforcement of standards

Phase-out of energy-inefficient lamps

Encourage light duty vehicle fleet renewable

Recommended but require special attention and additional consideration before adoption

Progressively remove energy price subsidies

Fuel economy standards for vehicles

Next Steps

Finalise the format of the Global series of Regional Energy Efficiency Policy Recommendations

Release of the Arab-SEMED REEPR early in 2014.

**South East Asia Roundtable; ASEAN countries,
Jakarta, 11-12 December 2013 Sponsored by:
ADB, REEEP, ICA.**

LAC region 2014 ...



Our thanks to the Project Partners

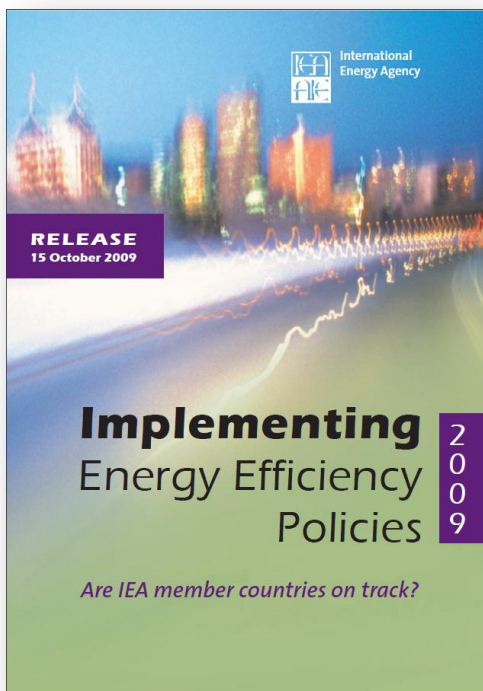


Regional Energy Efficiency Policy Recommendations

Arab - SEMED REGION

The IEA, League of Arab States, and Regional Centre for Renewable Energy and Energy Efficiency gratefully acknowledge the financial support of the European Bank for Reconstruction and Development (EBRD) to the SEMED-Arab Region Energy Efficiency Policy Recommendations effort. We also would like to thank the Ministry of Energy and Mineral Resources of Jordan for their patronage of this event. We are also grateful to the many regional energy efficiency experts who made this Regional Energy Efficiency Expert's Roundtable a success. Finally we acknowledge the important contributions of our colleagues from the World Energy Council (WEC) for their update on energy efficiency policy developments around the world..

The IEA is tracking progress with implementing the recommendations



Fully implemented



Substantial implementation



Implementation underway



Plan to implement



Not implemented



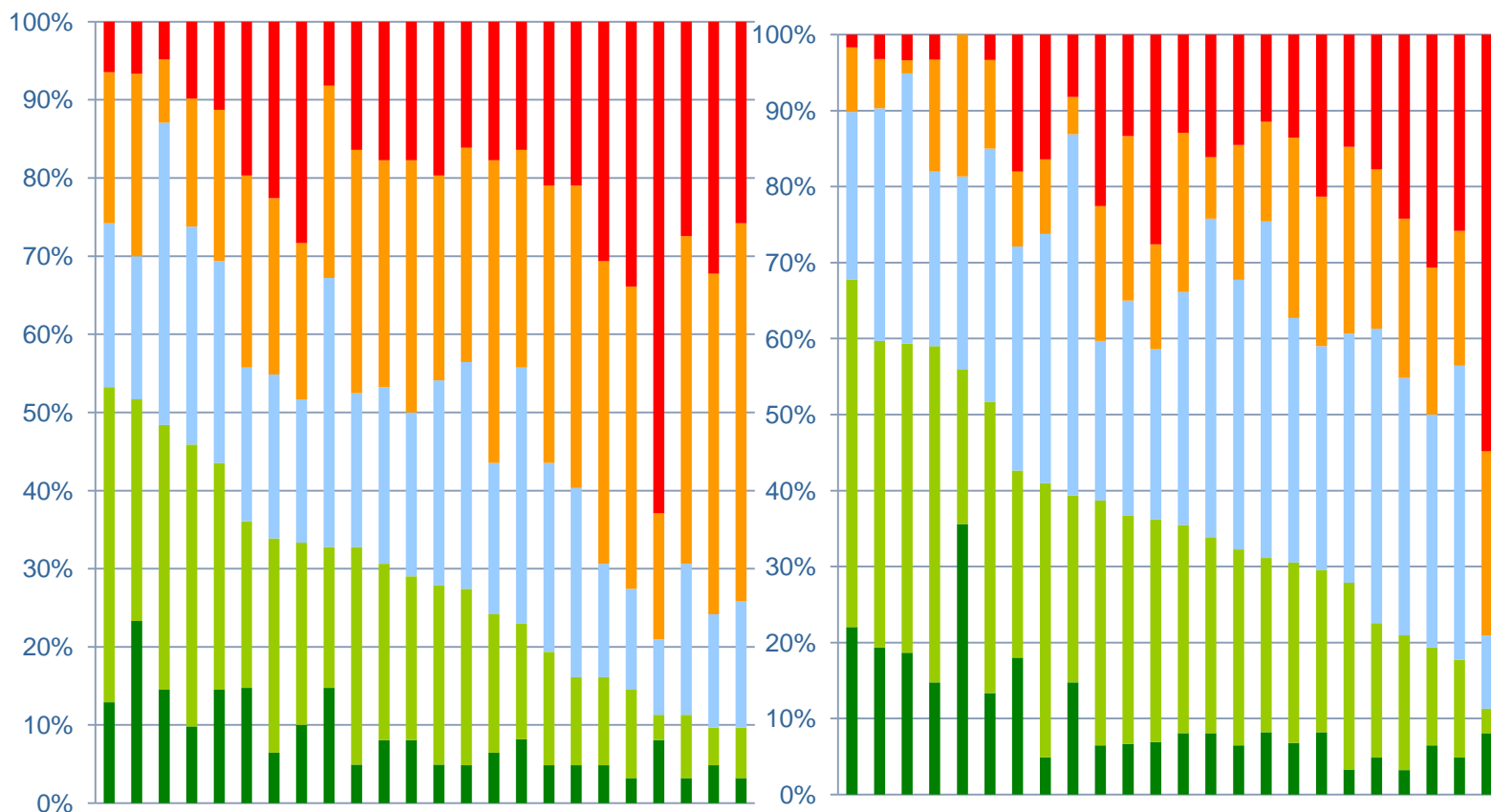
Not applicable

- Each member country evaluated on progress with implementing energy efficiency policies.
- Used the 25 recommendations as a common benchmark.
- Initial evaluation in 2009; second evaluation in 2011.

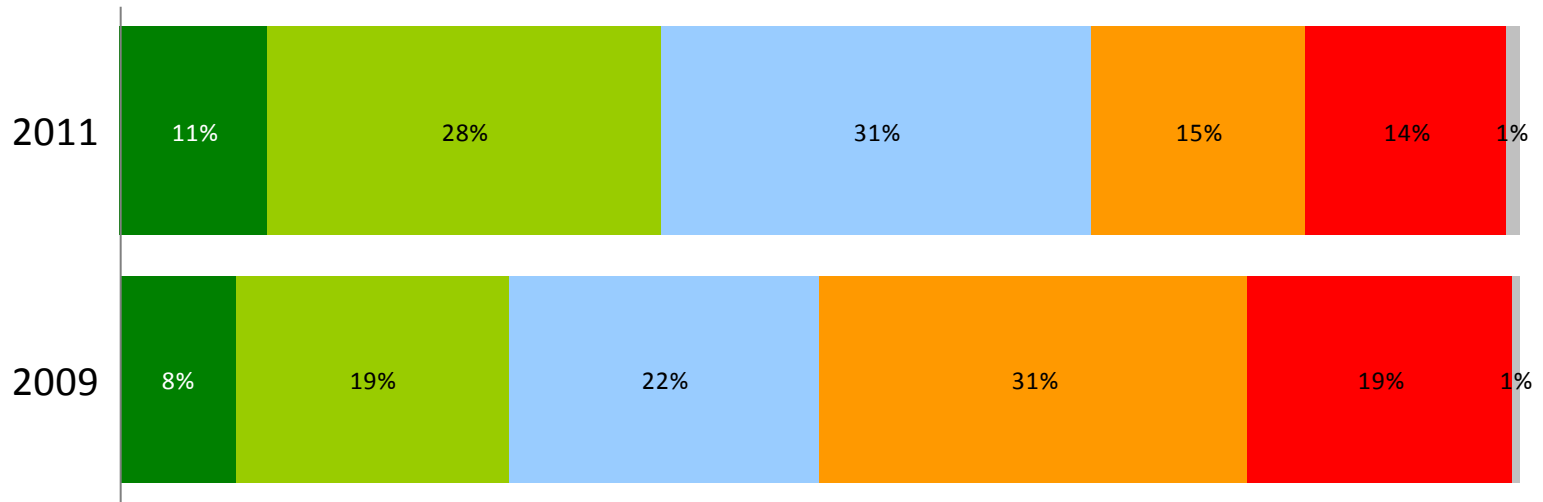
Policy implementation has improved

2009

2011



Policy developments since 2009



Key messages

- All countries have developed and implemented new energy efficiency policies.
- Energy savings opportunities still exist.
- Policy implementation experience is a valuable resource to member and non-member countries alike.

Cross-sectoral

- 1.1** Measures for increasing investment in energy efficiency
- 1.2** National energy efficiency strategies and goals
- 1.3** Compliance, monitoring, enforcement and evaluation of energy efficiency measures
- 1.4** Energy efficiency indicators
- 1.5** Monitoring and reporting progress with the IEA energy efficiency recommendations themselves

Worldwide Implementation Now

Cross-sectoral



Buildings



Appliances and
equipment



Lighting



Transport



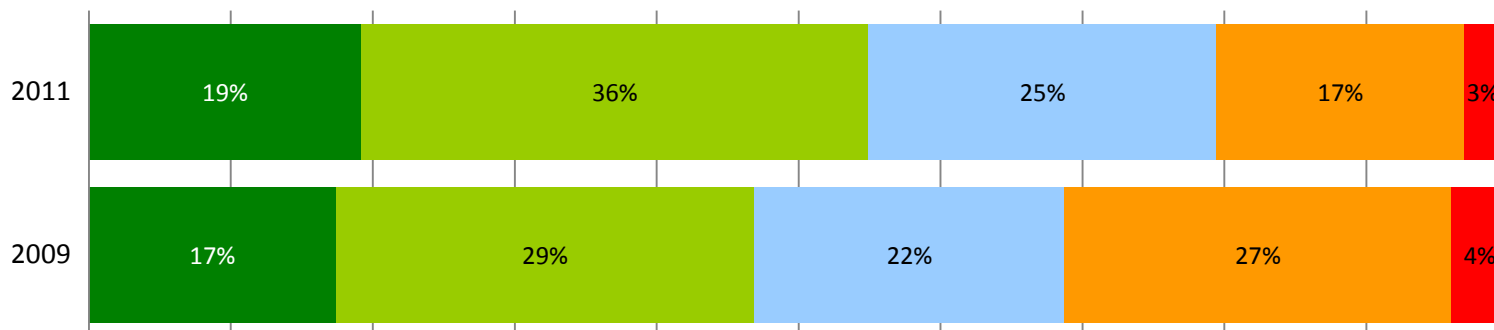
Industry



Energy utilities



1. Cross-sectoral developments



Strengths

- Common savings measurement and verification protocol developed.
- Efforts to improve monitoring, enforcement and evaluation reported in Australia, Canada, EU member states, Turkey and in US.

Areas for improvement

- Improve national energy efficiency strategies and action plans further.
- Expand efforts to increase financing.
- Improve quality and coverage of energy indicators.

Buildings

- 2.1** Building codes for new buildings
- 2.2** Passive Energy Houses and Zero Energy Buildings
- 2.3** Policy packages to promote energy efficiency in existing buildings
- 2.4** Building certification schemes
- 2.5** Energy efficiency improvements in glazed areas

Worldwide Implementation Now

Cross-sectoral



Buildings



Appliances and equipment



Lighting



Transport



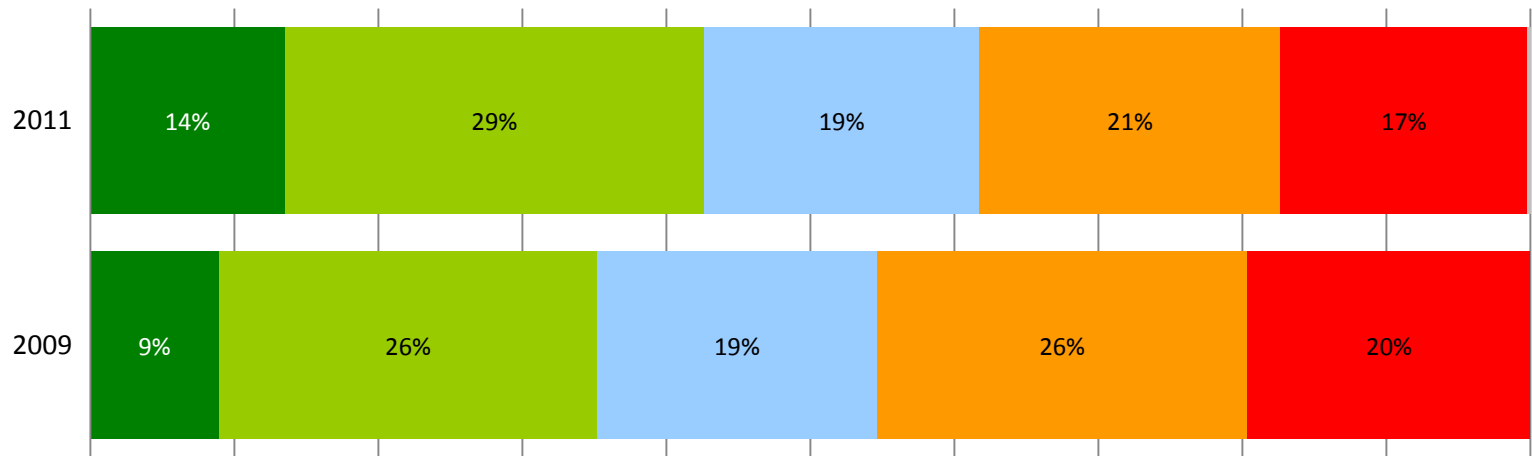
Industry



Energy utilities



2. Building developments



Strengths

- Strengthening building codes.
- Building certification expanded.
- Information on energy efficiency in existing buildings systematically collected and reported.

Areas for improvement

- Strengthen MEPs.
- Scale up construction of PEH and ZEB.
- Put in place policies to increase the rate of deep renovations.
- Promote energy-efficient windows and glazing.

Appliances and equipment

- 3.1** Mandatory energy performance requirements or labels
- 3.2** Low-power modes, including standby power, for electronic and networked equipment
- 3.3** Televisions and “set-top” boxes
- 3.4** Energy performance test standards and measurement protocols

Worldwide Implementation Now

Cross-sectoral

1

Buildings

2

Appliances and
equipment

3

Lighting

4

Transport

5

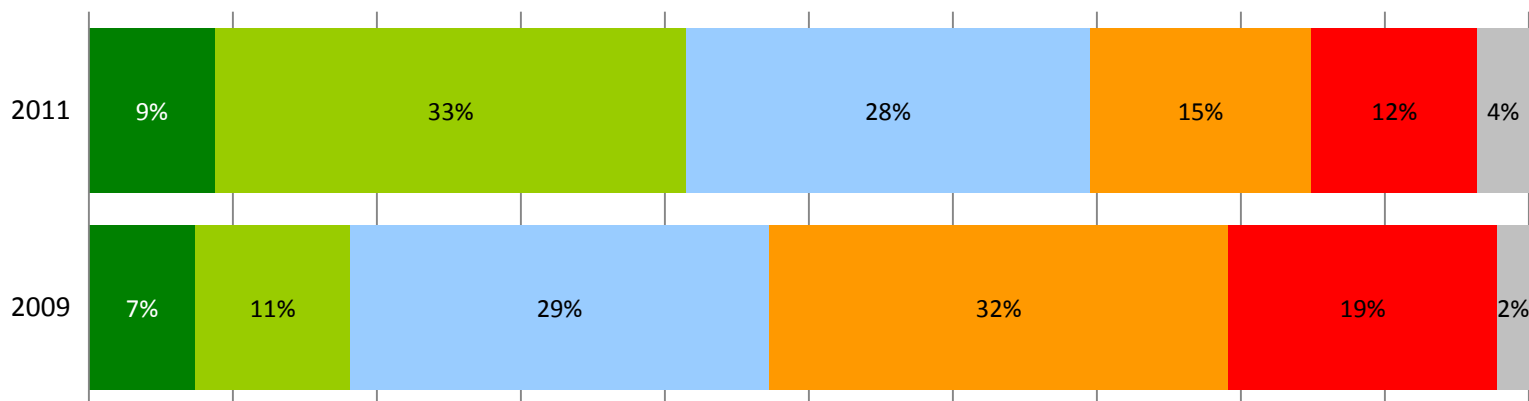
Industry

6

Energy utilities

7

3. Appliance and equipment developments



Strengths

- MEPS strengthened and expanded to cover new appliances and equipment.
- Many standby power requirements planned in 2009 are now implemented.

Areas for improvement

- Ensure network-connected electronic devices minimise energy consumption.
- Ensure appropriate policies are in place to encourage television service providers to deliver a product which is as energy efficient as possible.

4 Lighting

- 4.1** Best practice lighting and the phase-out of incandescent bulbs
- 4.2** Ensuring least-cost lighting in non-residential buildings and the phase-out of inefficient fuel-based lighting

Worldwide Implementation Now

Cross-sectoral



Buildings



Appliances and equipment



Lighting



Transport



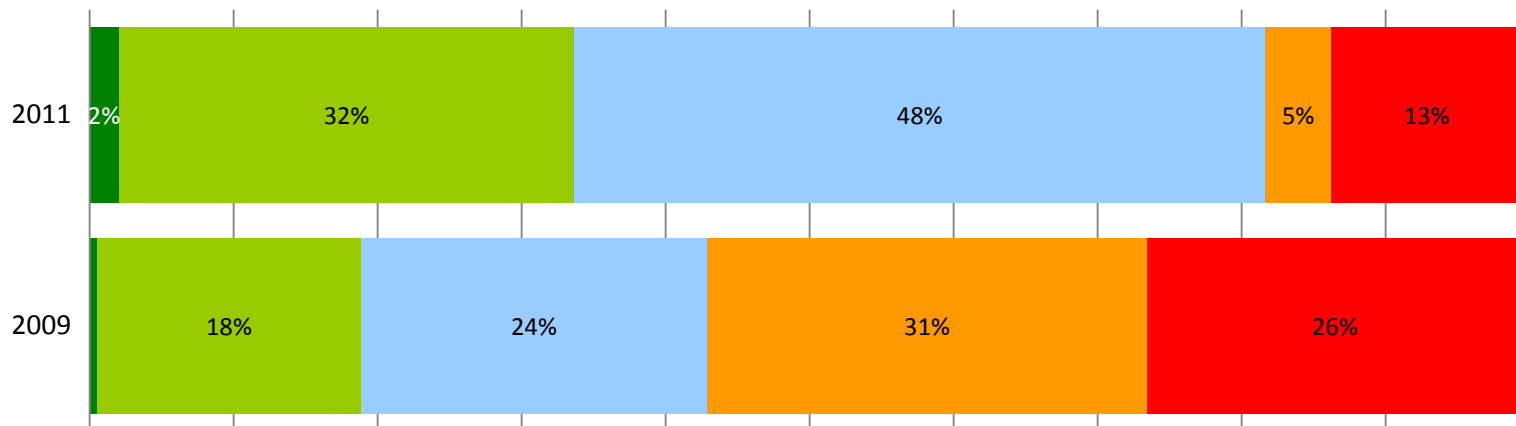
Industry



Energy utilities



4. Lighting developments



Strengths

- All but two countries continue to phase out inefficient incandescent lamps.
- Canada, Japan, Netherlands, UK and US support international efforts to stimulate adoption of higher efficiency alternatives to fuel-based lighting.

Areas for improvement

- Develop measures for promoting energy efficiency in non-residential lighting.
- Further support adoption of high-efficiency alternatives to fuel-based lighting.

Transport

- 5.1** Fuel-efficient tyres
- 5.2** Mandatory fuel efficiency standards for light-duty vehicles
- 5.3** Fuel economy of heavy-duty vehicles
- 5.4** Eco-driving

Worldwide Implementation Now

Cross-sectoral

1

Buildings

2

Appliances and
equipment

3

Lighting

4

Transport

5

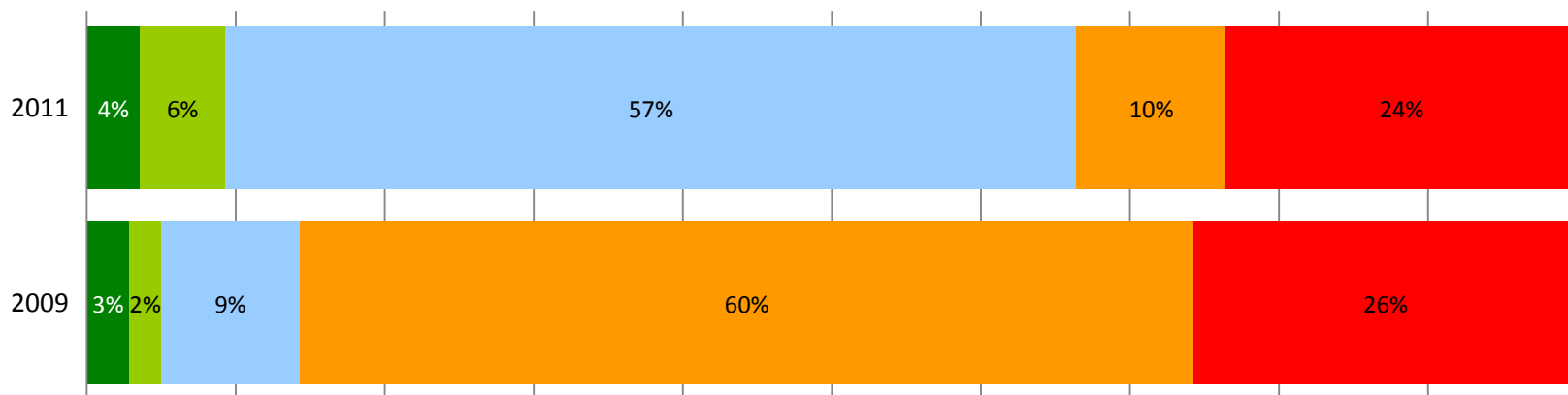
Industry

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Energy utilities

7

5. Transport developments



Strengths

- EU adopted regulations for TPMS, tyre rolling resistance and labelling.
- Japan started voluntary tyre labelling scheme.
- EU adopted a regulation for CO2 emissions for passenger cars.
- US tightened CAFE standards for MY 2012–2016.
- Gear-shift indicators mandatory (all new manual passenger cars) in EU.

Areas for improvement

- Create fuel efficiency standards and labelling for heavy-duty vehicles.
- Ensure implementation of planned policies.
- Include eco-driving in driving education.

Industry

- 6.1** Collection of high-quality energy efficiency data for industry
- 6.2** Energy performance of electric motors
- 6.3** Assistance in developing energy management capability
- 6.4** Policy packages to promote energy efficiency in small and medium-sized enterprises

Worldwide Implementation Now

Cross-sectoral



Buildings



Appliances and equipment



Lighting



Transport



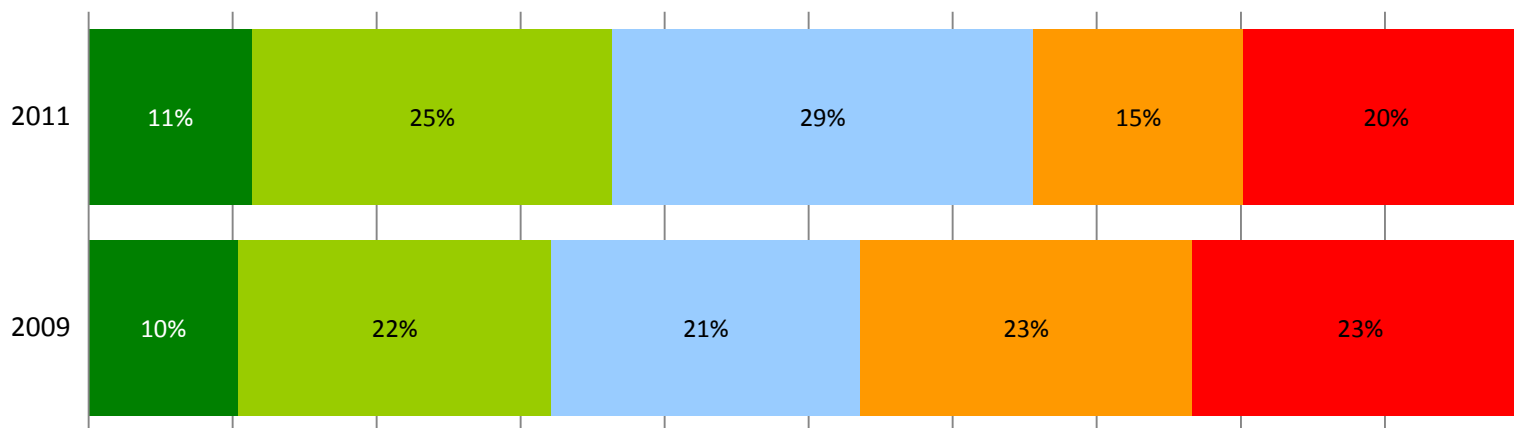
Industry



Energy utilities



6. Industry developments



Strengths

- Coverage of industry statistics in all countries.
- Policies to promote MEPs for motors in EU Member States, Japan & US.
- Energy management strengthened: Australia, Norway, Slovak Republic & UK.
- Advances in policies for SMEs in Italy, Slovak Republic, Spain and Sweden.

Areas for improvement

- Examine barriers to the optimisation of energy efficiency in electric motor-drive systems and design and implement comprehensive policy portfolios aimed at overcoming such barriers.
- Design and improve policies and measures to assist SMEs.

Energy utilities

7.1 Utility end-use energy efficiency schemes

Worldwide Implementation Now

Cross-sectoral



Buildings



Appliances and equipment



Lighting



Transport



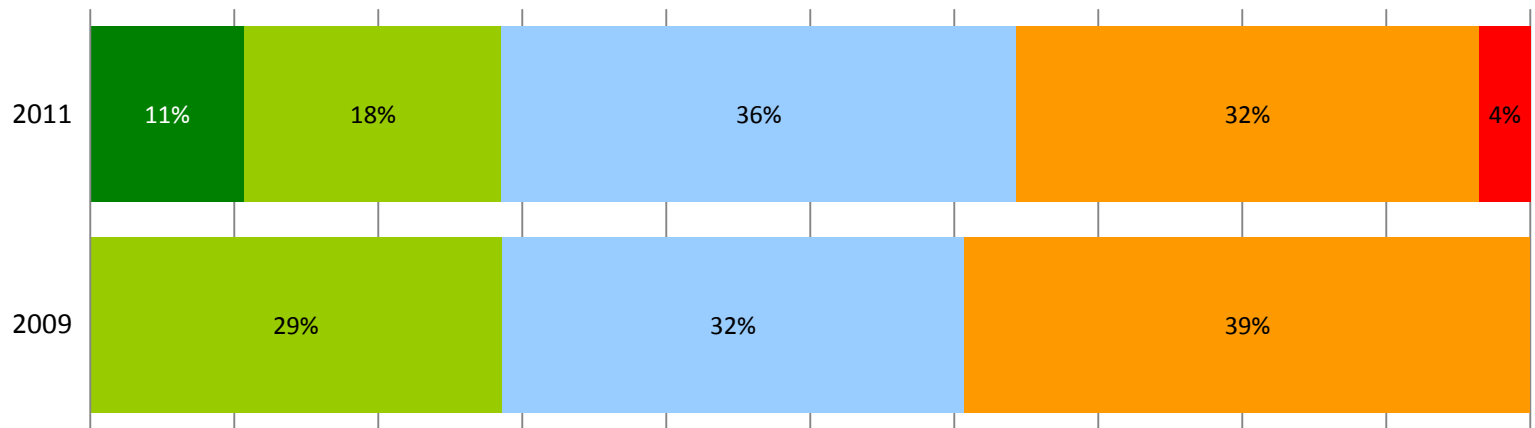
Industry



Energy utilities



7. Energy utility developments



Strengths

- Further implementation of policies to encourage utilities to deliver cost-effective energy savings to end users in Canada, Denmark, Ireland, Poland, Spain, UK & US.

Areas for improvement

- Almost a third of member countries have either not implemented or are not planning to implement the IEA or similar recommendations in this sector.

Support from IEA Website

General Energy Efficiency:

<http://www.iea.org/topics/energyefficiency/>

EE Indicators & benchmarking

<http://www.iea.org/statistics/>

EE, RE and GHG Policies

<http://www.iea.org/policiesandmeasures/>

EE Market Report

<http://www.iea.org/Textbase/npsum/EEMR2013SUM.pdf>

