The IEA's Policy Pathways Series

Grayson Heffner

Senior Energy Policy Analyst

Grayson.heffner@iea.org

Guidance on delivering the energy efficiency policy recommendations

Policy Pathway

1. Across sectors

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.

2. 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.

3. Appliances

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.

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.

5. 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.

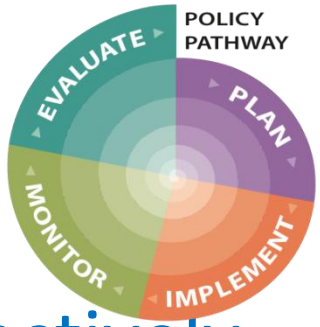
6. Industry

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.

7. Utilities

7.1 Utility end-use energy efficiency schemes.

Aims & objectives



- Assist governments to effectively implement energy efficiency policy
- Identify and communicate proven implementation practices for specific policies
- Over time, to share proven practice for all the policy recommendations

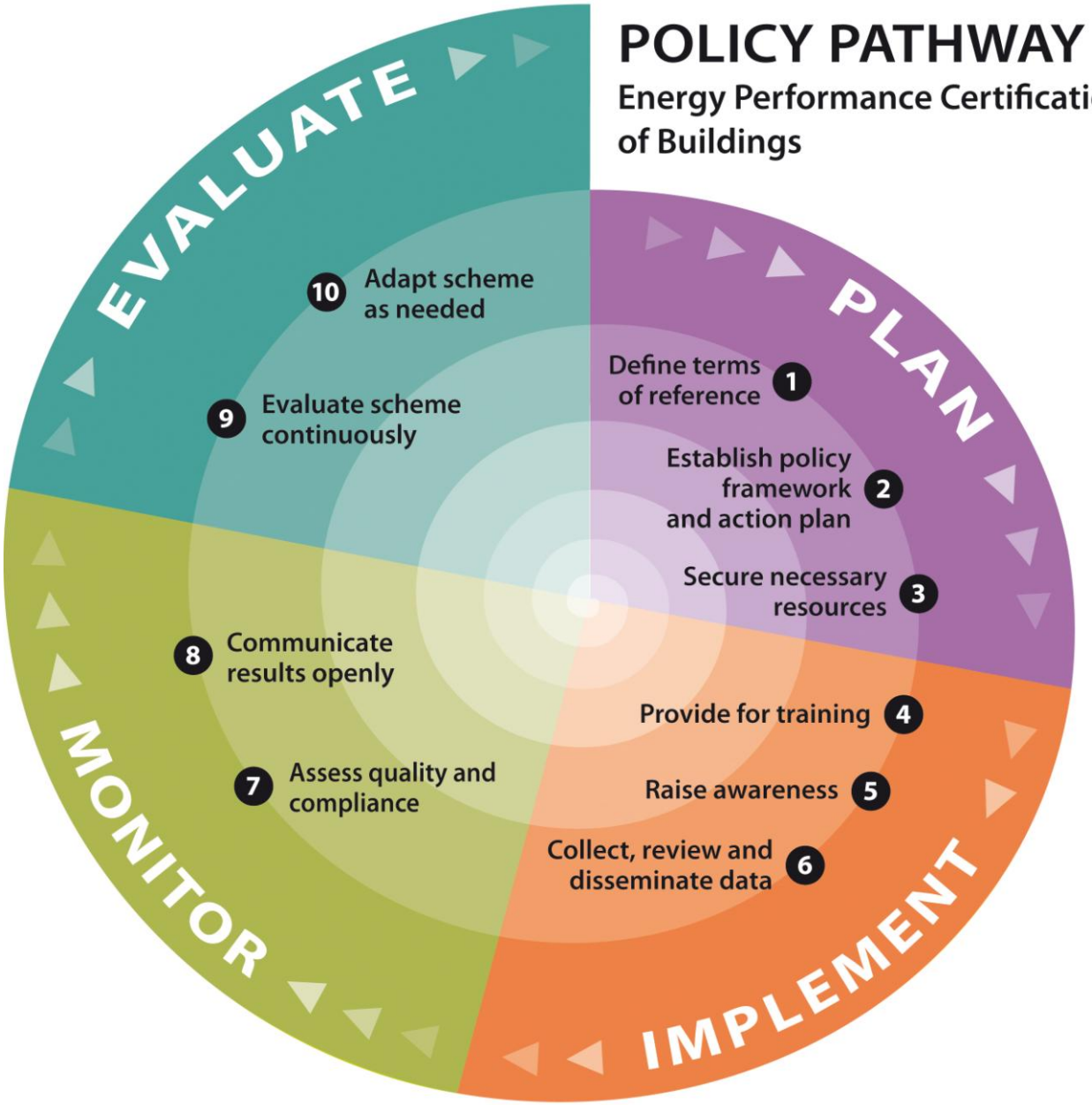
Policy Pathway

Energy Performance Certification of Buildings

A policy tool to improve energy efficiency

POLICY PATHWAY

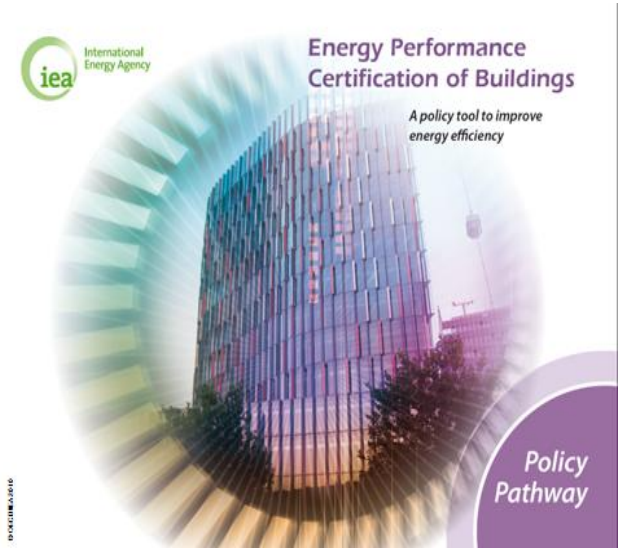
Energy Performance Certification of Buildings



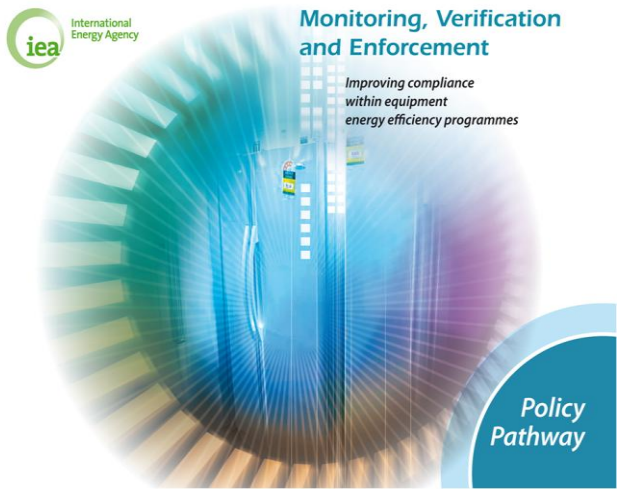
Policy Pathway

Policy Pathway Series

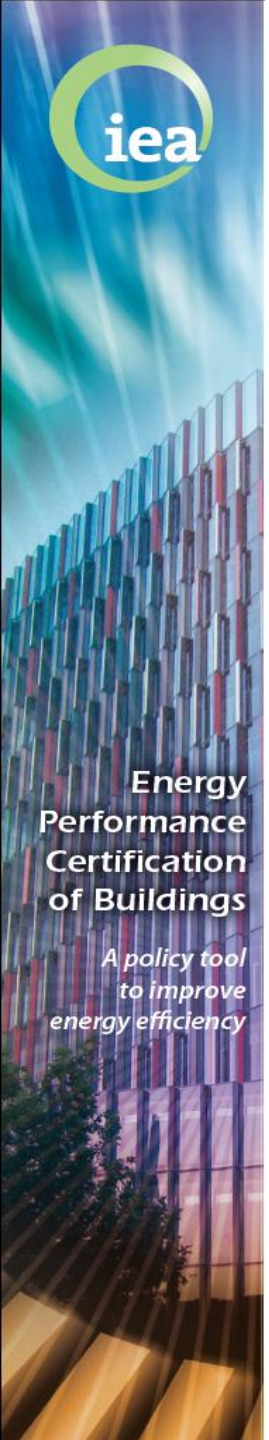
Energy performance certification of buildings



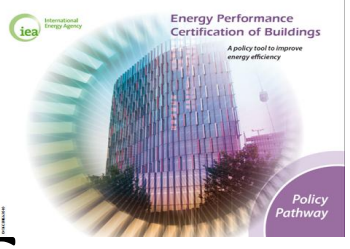
Monitoring, verification and enforcement of efficient equipment standards



Policy Pathway

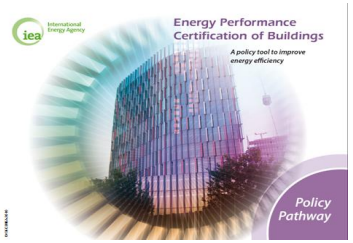


Energy Performance Certification of Buildings



- Very effective tool for promoting energy efficiency in buildings
- In **new** buildings, certification:
  - Ensures compliance with building standards
  - Provides incentives to improve energy efficiency beyond minimum standards
- In **existing** buildings, certification:
  - Incorporates energy efficiency into rental or purchase decisions
  - Provides a marker for energy performance improvement potential

Voluntary certification



- Most certification around the world is voluntary
- Many voluntary certification schemes are essentially endorsements by credible entities
- Such schemes provide incentives for owners or developers to upgrade energy performance
  - To increase market price
  - To gain market share
- Governments can also implement policies tied to voluntary certification

Energy Performance Certification of Buildings

A policy tool to improve energy efficiency

Voluntary certification: Singapore and US

ENERGY SMART HOTEL

ENERGY SMART OFFICE

ENERGY SMART RETAIL MALL

BCA GREEN MARK

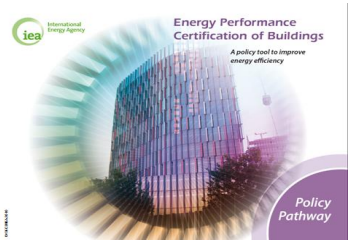
Energy Smart and Green Mark in Singapore

Passive House

ENERGY STAR

US Energy Star

Mandatory performance certification in the EU

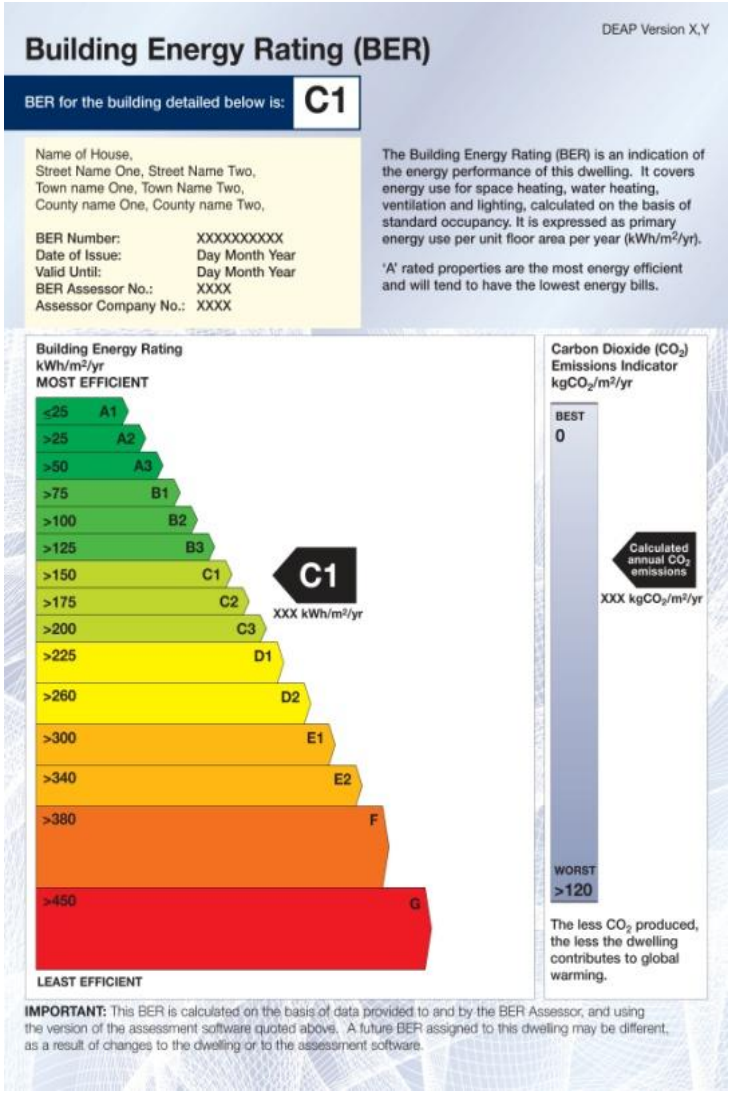


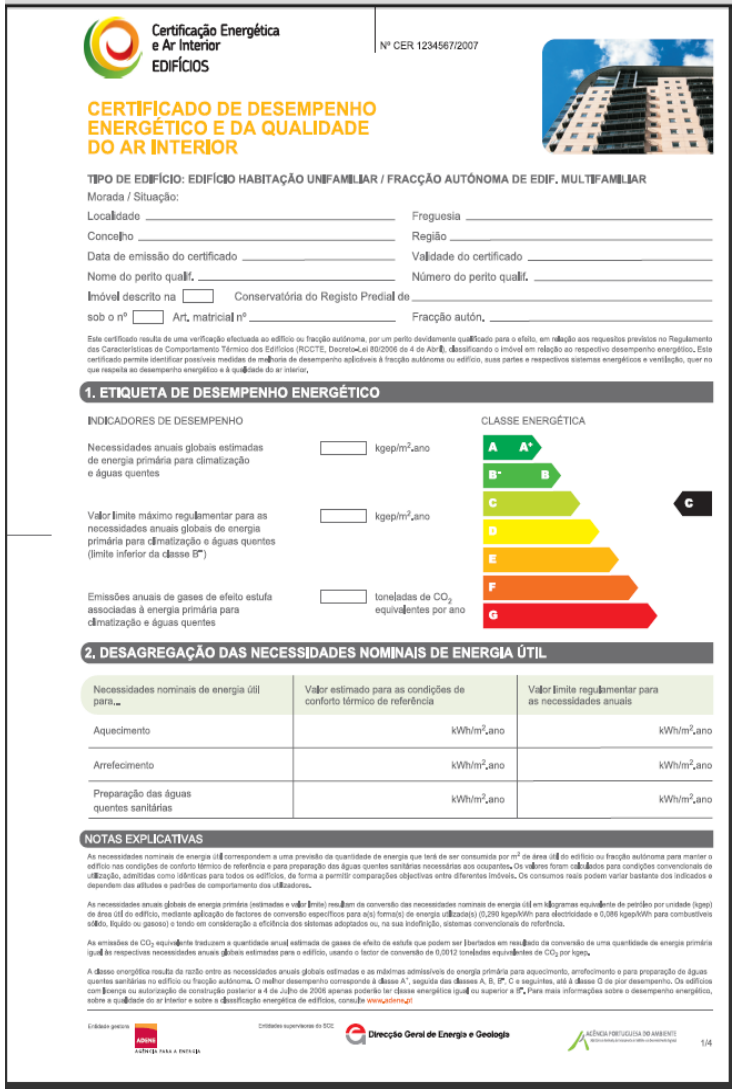
- In the EU, buildings energy performance certification is obligatory:
  - For new buildings
  - For transfer of ownership
  - At sale or rental of apartments or units
- Certification label must be displayed for all public buildings.
- Certification label "look and feel" is EU-wide, but performance gradations vary by EU member state
- Portugal and Ireland are examples of good implementation practice

Building Performance Certification Labels

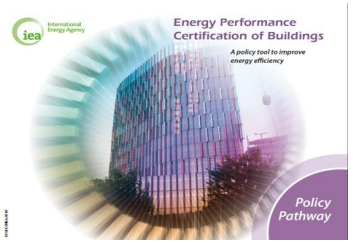
Energy Performance Certification of Buildings

A policy tool to improve energy efficiency





Lessons learned

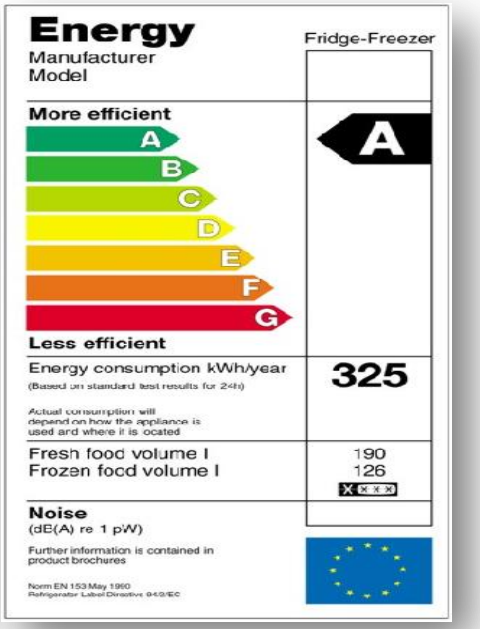


- Key lessons from Irish and Portuguese experience:
  - Identify and resolve key questions early in the process
  - Engage stakeholders in planning
  - Build capacity (e.g., training certification assessors) ahead of implementation
  - Coordinate with other policies (e.g., subsidies and incentives)
- Basic Policy Pathway scheme fits quite well
  - Plan
  - Implement
  - Monitor,
  - Evaluate and Improve

Monitoring, Verification & Enforcement (MV&E) of Equipment Efficiency Standards

- MV&E is critical for successful outcomes of equipment standards and labeling programmes
- The complexities of MV&E are not obvious but need to be communicated
- MV&E requires building new technical and administrative capacity
- MV&E design should:
  - match needs with resources and keep up with evolution of standards programmes;
  - Be tailored to legal requirements and capacity level of both public and private sector.
- International cooperation can be an important shortcut

Equipment efficiency standards and labels



Standards & labels (S&L) programmes are a common policy tool for promoting energy efficiency in equipment

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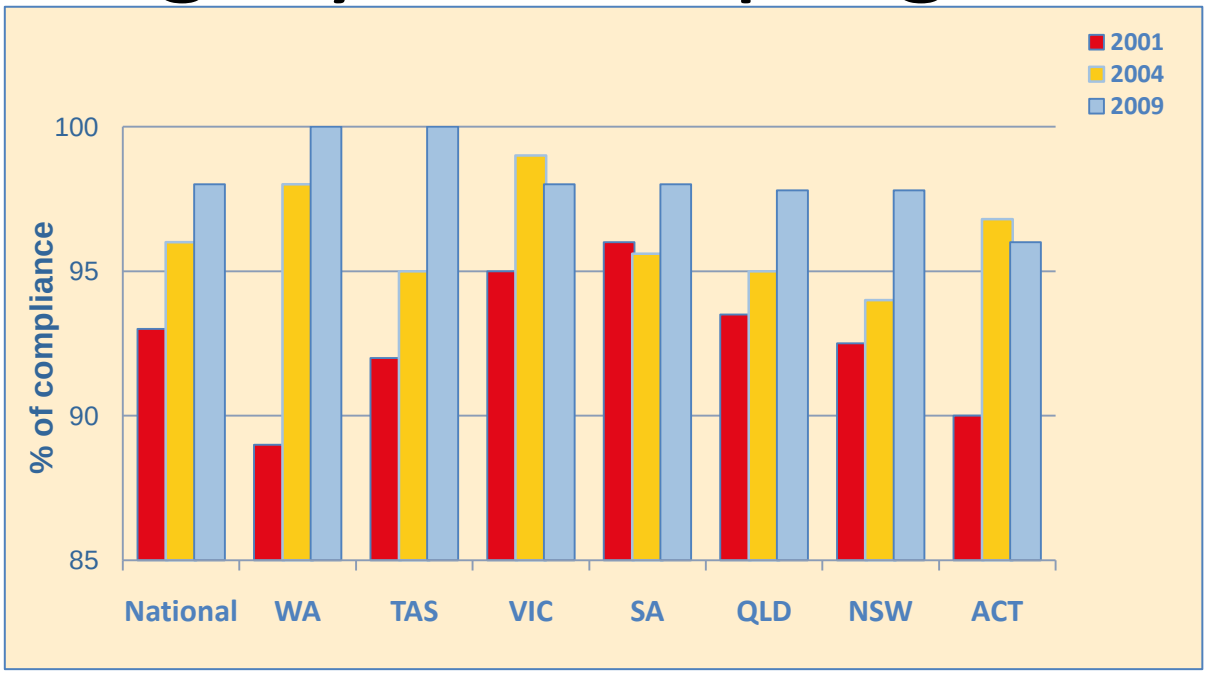
MV&E activities ensure the integrity of S&L programmes



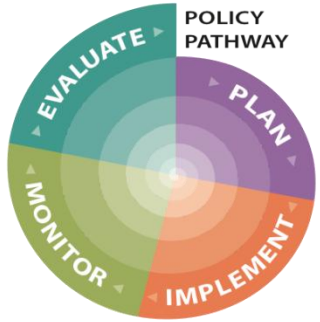
Benefits of MV&E:

- Assures policy makers expected outcomes will be achieved
- Sends clear signals to domestic and overseas equipment manufactures
- Gives confidence to consumers

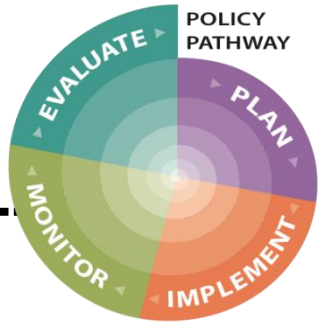
Policy Pathway

Insights so far….

- Many countries have experiences (30 years) with energy efficiency policies and available to provide advice
- Sharing experiences helps leapfrog potential policy pitfalls for countries embarking on process
- Implementation important to achieve energy savings – different ways to get results
- Country feedback positive – Russian translation
- Use lessons learned by others. Don't reinvent the wheel!

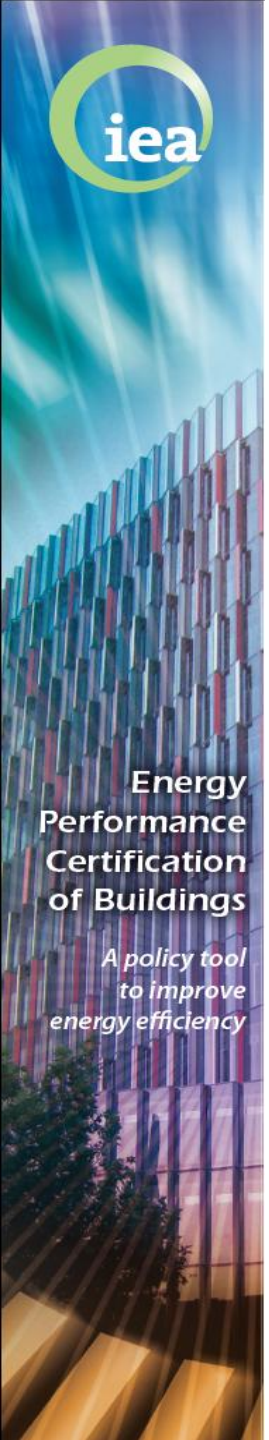


Schedule of work 2010/2011



Policy Pathway	When?
Public-private partnership for energy efficiency finance	September 2011
Light duty and heavy duty vehicle fuel economy standards	October 2011
Energy efficient windows	November 2011
Energy management in industry	February 2012

Policy Pathway



For more information on Policy Pathways:

Lisa.ryan@iea.org

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