Where to start
Planning energy efficiency programmes

Session 1
Emily McQualter and Kevin Lane - Paris, 21 May 2019

#energyefficientworld
## Agenda

### Tuesday 21 May

| 0 | Introduction and roundtable |
| 1 | **Planning energy efficiency programmes** |
| 2 | Selecting products for MEPS and Labelling programmes |
| 3 | Assessing efficiency performance and setting MEPS |
| 4 | Industry transformation |
| 5 | The relationship between product efficiency and price |

### Wednesday 22 May

| 6 | Stakeholder involvement and communication |
| 7 | Insights into energy labels |
|   | Site Visit. |

### Thursday 23 May

| 8 | Modernising energy efficiency through digitalisation |
| 9 | Monitoring, verification and enforcement |
| 10 | Monitoring and evaluating policies and programmes |
| 11 | Roundtable discussion, review and report back |
The government wants a range of options for interventions to rapidly increase residential energy efficiency for appliances and equipment.

*How do you identify, prioritise and quantify options for interventions?*
Activity

List all the different kinds of activities (policy measures) your government is undertaking on energy efficiency
Policy Measures  [page 1/2]

- MEPS/Labels
  - MEPS
  - Comparative labels
  - Endorsements labels

- Mandatory obligations on utilities
  - Green certificates
  - White certificates

- Financial incentives
  - To consumers/retailers/suppliers/third parties (architects, plumbers, etc)
  - Grants and subsidies
  - Loans
  - Tax relief
  - Taxes

- Procurement by institutions/government
Policy Measures [page 2/2]

• Awareness raising campaigns

• Information
  - Appliances labels
  - Retail and/or trade staff training
  - Advice Centres, hotlines, publications, etc.

• Education
  - School programmes
  - Professional training and qualification/accreditation

• RD&D
  - Research
  - Demonstration
  - Commercialisation
Minimum Energy Performance Standards

• **MEPS** specify the **minimum** level of **energy performance** that appliances, lighting and electrical equipment (products) must meet or exceed before they can be offered for sale or used for commercial purposes.

• MEPS are an effective way to increase the energy efficiency of products.

• Inefficient products are prevented from entering the marketplace, and manufacturers are given appropriate signals to increase product efficiency.

• For consumers, MEPS mean that products available in the market use less energy and have lower running costs over their lifetime.
Consumer Information

• When people buy appliances they buy an energy service in two parts:
  o They can see the appliance, and its cost
  o They cannot see the energy consumed, or its running costs

• Labels helps consumers understand which products have the lowest total cost during the purchase process

• Comparative labels may be voluntary, but mandatory is more common

• Comparative labels usually communicates in two ways:
  o quick visual rating
    o Some data e.g. actual kilowatt-hours (kWh), running costs, capacity/size
  o Endorsement labels, using recognisable logos, are usually voluntary, and may consider issues beyond energy efficiency
Summary of policy measures, by measure type for selected countries, 2013


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Awareness Raising Campaigns – ASEAN SHINE AC

https://www.youtube.com/watch?v=ma9d8z20CHw
Activity

What do you think is the most effective policy measure?

What do you need to consider?
What to consider when ranking these different options?

- Do they best help meet our programme objectives?
- How effective are they likely to be?
- Do they act on a small or large part of the relevant market?
- How certain are the outcomes?
- What resources will each require – costs, time, people, admin support, other?
- How fast acting are they?
- Are the outcomes sustainable in the long term?
- How difficult are each to organise? What partners could help?
Market Transformation: impact of different policies

**Leading Edge:** establishing new technologies in the market

**Mid Market:** spreading good practice

**Laggards:** discouraging bad practice

**Innovation**
- R&D*
- Demonstration
- Technology transfer
- Endorsement labels

**Reduce barriers**
- Access to information / finance
- Endorsement labels
- Comparative labels

**Remove worst**
- Minimum Performance standards

* Market mechanisms increase incentives for higher energy efficiency across the whole distribution

* Research and Development

Now where want to be
Energy Efficiency Standards and Labelling

• MEPS and labelling often work closely together
  o Lowest rank of comparative label begin at MEPS level
  o Endorsement labels align with higher ranks

• EESL programmes operate in >80 countries, covering >50 different types of equipment in all sectors

• Provide the foundation for many other programme types:
  o Financial incentives
  o Procurement
  o Utility programmes
Findings: Global Impact of EESL

• The energy efficiency of major appliances have increased at more than 3x the underlying rate of technology improvement in countries with EESL programmes.

• One-off improvements of more than 30% have been observed.

• The most mature national EESL programs covering a broad range of products are estimated to save between 10% and 25% of national or relevant sectoral energy consumption.

• In all programmes reviewed, the national benefits outweighed the additional costs by a ratio of at least 3 to 1.
Effects of multiple policies

• Often more than one policy is required to create market transformation

• Some policies work well together
  - MEPS removes worst products; Labels incentivise the best products
  - Procurement and financial incentives used to support highest labelled appliances

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You will need to know about the attributes of different programme types:
- Industry /consumers often ask why government is doing more or focusing elsewhere
- Many regulatory impact processes require analysis of other policy options

An analytical approach is used throughout S&L programme planning
- Need to assess what level of information is sufficient
- How to deal with a lack of information
- Be aware of a range of concerns and particular sensitivities
Resources

IEA 4E Energy Standards and Labeling Programs Throughout - IEA 4E https://www.iea-4e.org/.../energy-standards-labelling-programs-throughout-the-world-in...

U4E https://united4efficiency.org/resources/publications/?fwp_resource_type=guidance-documents