



Product Energy Efficiency Standards and Incentive Schemes in Asia: Lessons from the UK's Energy Technology List

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Product market barriers stopping UK action on climate change in 2001

*Technology lists
are a valuable
tool driving
voluntary
product market
transformation*

BARRIERS

Awareness

- Customers unclear of energy efficiency/low carbon opportunities that exist, or how to capture them
- Manufacturers & suppliers unclear of market opportunity

Understanding and Trust

- Uncertainty on what constitutes good technology
- Lack of accessible technical expertise
- Information asymmetry between buyers and sellers

Finance

- Poor access to partial or full project financing

CARBON TRUST SOLUTIONS

Awareness and energy survey
programmes

Energy Technology List

Enhanced Capital Allowances
0% SME loans

UK Governments Energy Technology List

A verified list of technologies valued by manufactures and customers

Essential elements

- On-line product catalogue
- High energy performance product specifications (HEPS)
- Fiscal incentive
- Aligned with other policies (eg energy surveys, loans)

100%

Accelerated tax relief on investment

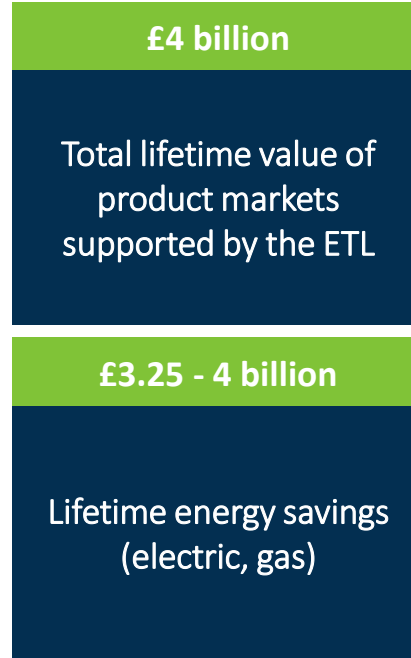
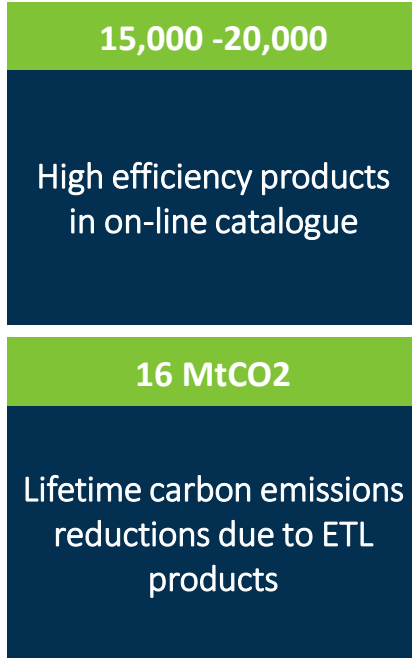
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Industrial, commercial & building technologies (e.g. LED, heating, cooling)

Progressive tightening of product specifications stimulates repeated cycles of voluntary product innovation

ETL product markets are forecast to capture the following benefits

Product policy is one of the UK's most effective drivers of large scale carbon reduction



Direct benefits presented over 15 years of ETL. Total lifetime market value ~£15billion, sales 350 million, 60 MtCO₂ lifetime, £12-15 billion lifetime energy savings

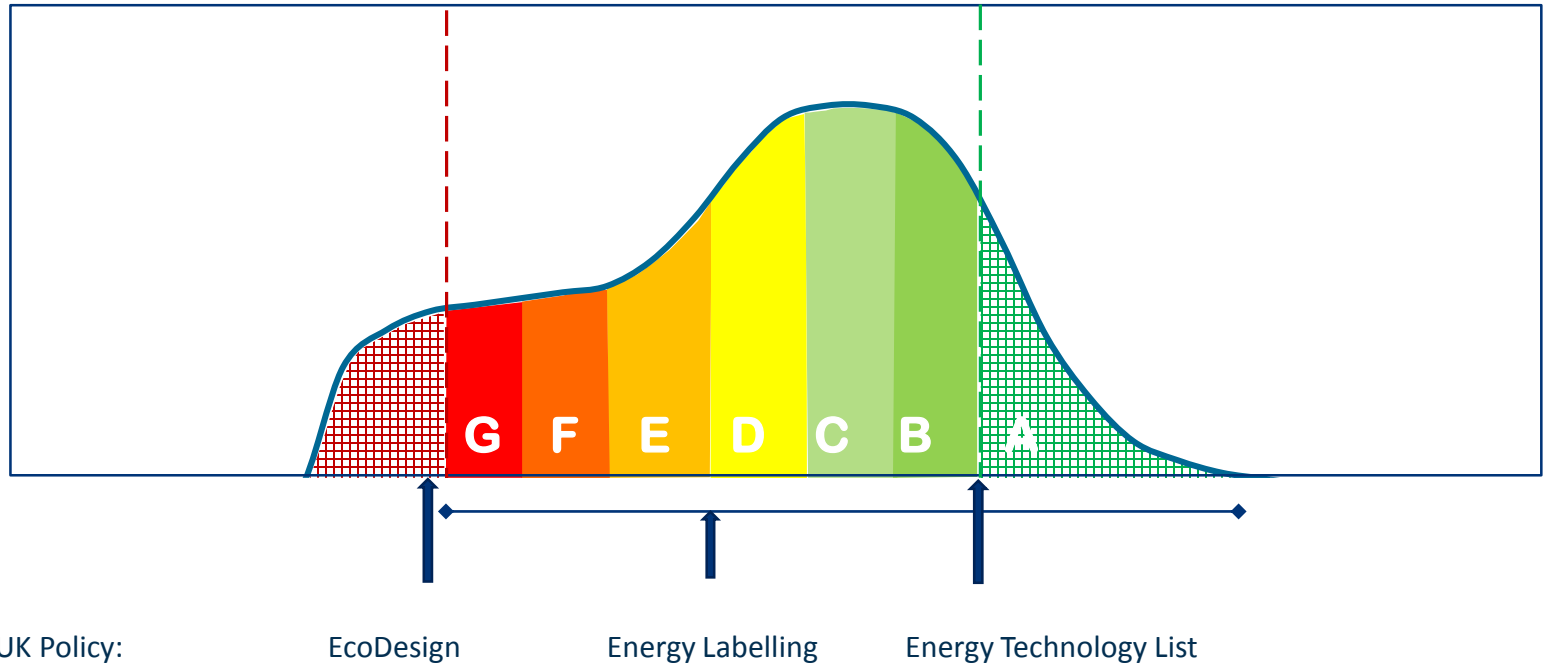
Building blocks of product market transformation

Learnings for Asian market transformation

- Effective product standards
- Industry agreement on MEPS
- Make HEPS voluntary. Set stretching targets. Industry will follow...
- HEPS drive innovation

Minimum performance standards (MEPS)

High performance standards (HEPS)



UK Policy:

EcoDesign

Energy Labelling

Energy Technology List

Sustainable Energy For All - United for Efficiency Initiative

Carbon Trust is sharing its experience in market transformation through the SE4All U4E Initiative

Build regional coalitions to transformer product markets

U4E approach

Encouraging countries to implement an integrated policy approach through energy-efficient products to bring about sustainable and cost-effective transformation.



Lighting



Residential Refrigerators



Room Air Conditioners



Transformers

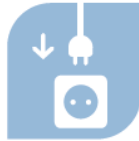


Industrial Electric Motors

If Asia supported U4E initiative and implemented MEPS

2030 benefits of implementing MEPS across 5 product types

Incredible benefits exist through adopting MEPS



232TWh

Annual energy saved in 2030



US\$23 billion

Annual saved on 2030 electricity bills



170 power stations

Equivalent energy generating capacity – that wouldn't be needed



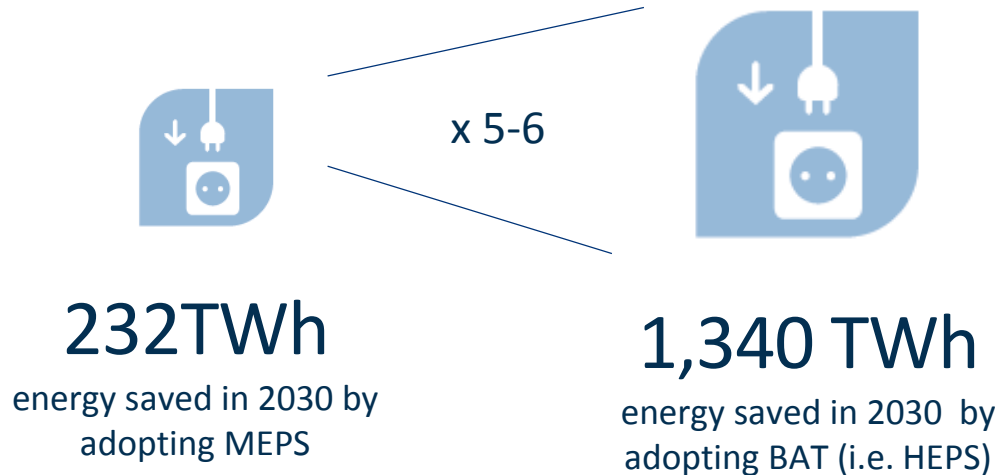
165 MtCO₂

Annual carbon emissions saved in 2030

If Asia moved to the current best available technology

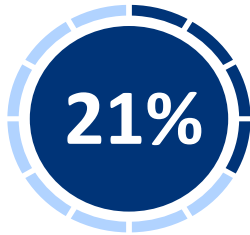
2030 benefits of implementing BAT across 5 product types

Significant benefits exist from adopting MEPS



Across Asia MEPS can unlock the energy savings

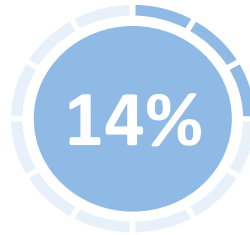
Average efficiency savings for 27 countries in Asia



Lighting



Residential
Refrigerators



Room Air
Conditioners



Transformers



Industrial
Electric
Motors

Conclusions

- Product market transformation can deliver sizable cost, energy, and carbon savings
- The UN Sustainable Energy For All - United for Efficiency Initiative is encouraging the deployment of MEPS across the globe.
- Based on our market leading expertise, we are committed to supporting and encouraging this transformation



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