Product Energy Efficiency

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Energy efficiency is crucial for achieving global climate goals. Energy efficiency is expected to contribute over 40% of energy sector GHG abatement up to 2040. A slowdown in energy efficiency today lessens the chance of meeting long-term climate goals.
Efficiency progress, already weakened, faces setbacks from the pandemic

The Covid-19 crisis has shocked both economic activity and energy demand. Primary energy intensity progress will halve this year.
Efficiency 2020

• The recent slowdown in energy efficiency progress has been exacerbated by the 2020 crisis

• Investment is down and structural trends are putting pressure on energy efficiency

• Scaling up efficiency action has the potential to create millions more jobs as well as ensure lower energy bills and lower emissions in the future

• Yet government actions on energy efficiency are uneven: opportunities to boost efficiency are not being seized

• Firm policy action can ensure that returns to growth lock in energy efficiency, not higher costs and emissions - the next three years are crucial
Energy efficiency - job creation at the heart of sustainable recovery

The IEA Sustainable Recovery Plan envisions average annual investments of USD 1 trillion for the next three years. Energy efficiency related investments are the largest category of spending and creates most jobs per unit of investment.
Governments are supporting efficiency, but spending is uneven

Governments have announced nearly USD 70 billion in energy efficiency related stimulus to date, with Europe accounting for 85% of the total. Buildings are the main target.
Short-term purchasing behaviours may have increased efficiency

With more time at home, appliance purchases may have increased in 2020, helping to maintain or even increase the efficiency of the stock.
COP26 Product Efficiency Call to Action — Objectives

As COP Presidents, the UK wants to drive international action on product energy efficiency policy. Ahead of COP26, the UK and IEA have launched a call to action to strengthen the Super-efficient Equipment and Appliance Deployment (SEAD initiative) to support countries in achieving raised ambition more quickly, easily and at a lower cost. The objectives of the call to action are to:

- Set countries on a trajectory to double the efficiency of key products sold globally by 2030 – motors, air conditioners, refrigerators, lighting
- Support the delivery of crucial national climate change targets
- Provide consumers and businesses with more efficient products that are affordable and cost-effective to own and operate
- Stimulate innovation and provide businesses with export opportunities
- Promote a dual course of action making products both energy efficient and climate friendly by reducing the use of refrigerants in cooling appliances
Performance ladder as a basis to set energy efficiency levels

Example: Electric Motors

All countries can use the same ladder for their policy thresholds. Viet Nam (IE1) and the EU (IE3) use different levels for Minimum Energy Performance Standards (MEPS). Whilst, Kenya currently uses (IE) tiers for its 3-star energy labelling of new electric motors.

Objective is to lay out a ten year plan for the moving up the ladder using MEPS and voluntary measures.
The ideal policy package for appliances, equipment and lighting

1. Regulations, which lay out legal requirements
   - Minimum energy performance standards that eliminate the least efficient products in the market
   - Clear roles and responsibilities for all public and private sector stakeholders
   - An adequately resources compliance programme

2. Information that help users make choices
   - Labels – including QR codes on products.
   - Information campaigns – advertising in store, in the media and most importantly online
   - Education and training of people selling products and installing them.

3. Incentives applied to highly efficient products to transform markets
   - Public procurement to generate demand to help build a domestic market for energy efficiency products
   - Rebates to consumers
   - Innovation awards for manufacturers
   - On-bill financing to cover the purchase costs of the efficient appliances

The most effective policy approach is a combination of all three of these mechanisms
   - Regulations or standards remove the least efficient products from the market
   - Information campaigns encourage consumers to purchase more efficient products by providing information about full life-cycle costs
   - Incentives to encourage the development of highly efficient products
   - Training for public and private sector stakeholders in all parts of the supply chain
Helping consumers purchase efficient products?
Helping consumers purchase efficient products

QR system helps consumer to understand what the label means and is also a platform for manufacturers and compliance.
Energy Efficiency Policy Training 2019

145 Participants
39% Women

34 Countries

3 Ambassadors
More than a dozen guest speakers