Energy Labelling for Appliances

WHAT THEY ARE

Labelling programmes are an information instrument in the appliance policy package. They provide information for consumers to promote purchasing decisions towards a more energy-efficient product or appliance.

Generally, two types of labels can be distinguished. Comparative labels, which are often mandatory, have a classification scale to enable consumers to compare the energy performance of different products and are generally found on all products of the same type. Endorsement labels, which are voluntary, are found only on best-in-class models or those exceeding a certain efficiency level. These two types of labels can also complement each other.

There are different designs of labels, but it is essential to ensure that the label is understandable to the target consumer and therefore that it reflects relevant local norms. Provided there is a product registration system put in place, or that sales are reported according to energy performance, energy efficiency labels, particularly mandatory ones, are also an important tool to collect data for market analysis, providing information for the implementation of other programmes, such as minimum energy performance standards or purchase incentives. Today, 113 countries have a labelling scheme for appliances in place.

HOW TO IMPLEMENT

The implementation of labels requires a Quality Infrastructure System adjusted to local requirements. This contains a regulatory framework (standards and technical regulations for the labelling scheme), institutions (standardisation, accreditation and certification bodies, inspectors) and dedicated infrastructure such as local or regional laboratories. The implementation usually follows this process:

1. **Technical assessment**: Using energy demand analysis and market data, identify target products based on the potential impact of a labelling scheme. Assign priorities based on energy consumption and savings potential.
2. **Technical standards**: Develop standards which define and specify the testing procedures and conditions to determine the efficiency of a product. These can be based on recognised international standards (such as ISO or IEC standards) to facilitate the trades and simplifies the implementation process. It can be useful to consult behavioural experts to ensure the policy has its intended effects.
3. **Technical regulations and legislative acts:** Issue regulations which mandate the labelling of specific products. They define the scope, the obligations, the implementation timeline, the conformity assessment procedures and other relevant requirements.
4. **Implementation period**: Identify the date the regulation will come into force. To give market actors more time to adapt, policymakers can set an implementation period.

5. **Compliance and enforcement**: Set up frameworks to ensure that products comply with the requirements, based on three pillars:
    - Conformity assessment procedures define the steps for manufacturers and importers to ensure their product complies with the regulation. They can include product testing, performance declaration and product registration.
    - Market surveillance by the authorities to monitor products, verify declarations and screen the market for non-registered products. For labelling schemes, this includes verifying that products are labelled accordingly and checking the information provided in the labels is consistent with testing reports.
    - Enforcement by the authorities, including issuing of penalties for non-compliance and to deter further non-compliance.
6. **Continuous updates**: Once the system functions and the labels are recognised by the public, add appliances/products to increase the coverage. Follow the priorities in the technical assessments. For products with a label, rescale to avoid the concentration of products in the top classes, aligned with the revision of MEPS.

HOW TO MONITOR

To update the policy and to ensure compliance, the programme should be periodically evaluated in an independent and transparent way. Objectives, indicators and methods for data collection and analysis should be clear in advance. Analysis should include indicators on target achievement (e.g. new devices have at least the regulated minimum energy performance), impacts (e.g. the energy consumption is reduced by x% per year; household energy savings), and process (e.g. number of faulty energy performance certificates; number of complaints by manufacturers; cost of market surveillance). The evaluation should define a baseline of equipment that would have been sold without the regulation and compare it with the equipment sold. Manufacturers may need to report annually their sales by efficiency level.