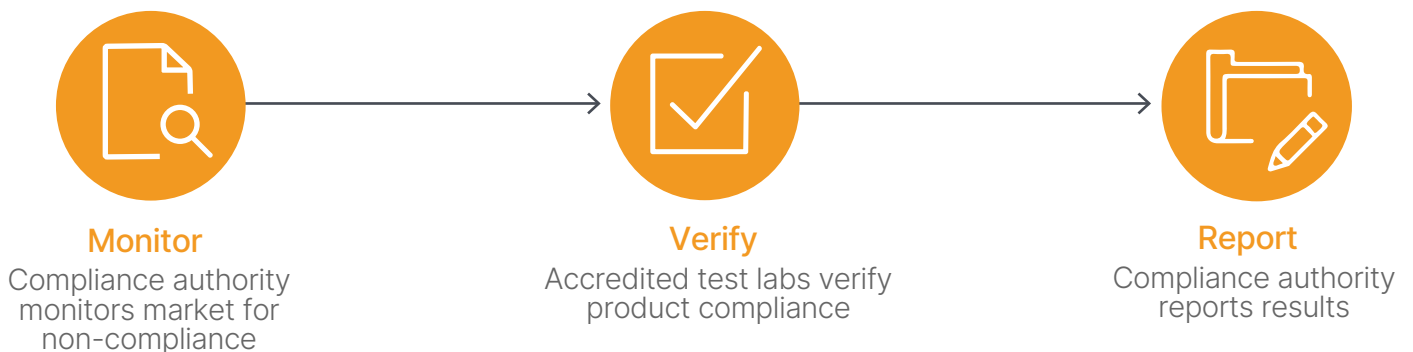# Market Surveillance Identifies Non-Compliance

Strategic compliance with appliance efficiency policies safeguard energy savings, CO_2 emissions reductions, and other benefits. They bolster the credibility of standards and labels, protect consumers, and provide a competitive market for suppliers of energy-efficient and quality products.

Robust, cost-effective, and well-rounded compliance processes including conformity assessment, market surveillance and enforcement protect the market from inefficient and low-quality products. Market surveillance involves monitoring and checking whether products on the market comply with energy efficiency policy requirements. Market surveillance consists of three key activities:

Monitor
Compliance authority monitors market for non-compliance

Verify
Accredited test labs verify product compliance

Report
Compliance authority reports results

Product data and intelligence gathered during the conformity assessment process allows for targeted market surveillance efforts. A range of monitoring activities identify products at greatest risk of non-compliance, and verification testing is then conducted to prove non-compliance. Reports on market surveillance activities and relevant results ensure their transparency and accountability.

Market surveillance activities catch cases of non-compliance and help check that:

All product labels portray accurate performance information.

Labels are displayed correctly and fake labels are not in use.

Only certified or registered products are available on the market.

Products meet the relevant performance requirements.

In Practice: Risk-Based & Random

Australia's Equipment Energy Efficiency (E3) program uses risk-based selection criteria to choose and test over 300 products per year. The key objectives of selection criteria are:

1. Identify products with higher-than-average risk of failure to meet MEPS or performance claims.

2. Identify products with the greatest potential impact on energy and emissions savings.

3. Include all appliance and equipment product categories regulated under the E3 program.

In Singapore, Mutual Recognition Agreements with accredited test labs in foreign countries allow the National Environment Agency to conduct random selection of registered products from the market and test them both locally and abroad, where testing capacity for certain products may be greater. In 2014, TÜV SÜD tested 26 products locally and contracted with a lab in Guangzhou, China to test 20 air-conditioner models. Singapore was able to cost-effectively export this testing to China, because the testing company in Guangzhou was accredited by the China National Accreditation Service for Conformity Assessment, which had signed an MRA with the Singapore Accreditation Council.

Approaches to Strategic Verification Testing

Risk-based testing is the best practice and most cost-efficient approach. Regulators utilize market intelligence to select product brands or models based on perceived increased risk of non-compliance.

Random testing is more costly than risk-based, and is often used when regulators have no data or experience with a particular product sector.

In both risk-based and random approaches, some cases of non-compliance may be missed.

Conducting Effective & Resource-Efficient Market Surveillance

Market surveillance is often postponed due to the misperception that all activities are costly, but some market surveillance is better than none. Market monitoring can start with low-resource efforts, including checking product information and claims on retailer websites, monitoring product complaints, or reviewing product certification documents. These activities help identify priority products for more resource-intensive checks, such as label inspections in stores or verification testing to check whether products meet performance claims and minimum standards.

Low Cost / Low Resource   **High Cost / High Resource**

| Market inspection through customs | Online market surveillance | Complaint based market surveillance | Product documentation inspection | Screening tests | Retailer and stakeholder training | Label inspections in stores | Verification testing |