Overview of Monitoring, Verification & Enforcement on Efficient Lighting Products

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Value Added of Regional Strategy

Â **Coordinated platform and criteria**
To address the quality issue of lighting products in the ECOWAS region, eliminating low quality products and accelerate the phase-out inefficient lamps

Â **Realization of substantial additional energy savings**
Through adoption of stringent performance requirements and broader product scopes than are currently in place

Â **Lower compliance costs**
For manufacturers through the use of uniform test methods and other regulatory and informational mechanisms

Â **Increased regional trade / market competition**
through the removal of barriers to regional trade, improved the potential for local and cross border enforcement actions, and potentially lowered costs to consumers

Â **Improved credibility and clarity of product information to consumers**
Recommended activities

- Minimum Energy Performance Standards
- Supporting Policies
- Environmentally Sound Management
- Monitoring, Verification & Enforcement
Objectives of Monitoring, Verification and Enforcement

- Assess product and market compliance levels
  - Routinely evaluate lighting products available in the market
  - Industry participants need to be assured all their competitors are subject to same requirements and scrutiny
- Reduce or eliminate non-compliant lighting products
  - Risk of exposure of non-compliant manufacturers (who mislead consumers) motivates them to comply
  - Visibility of enforcement process has significant effect on rate of compliance
- Verify that MEPS are implemented as designed
  - Programme data analysis and evaluation to inform sensible decisions about future direction or further development of lighting policy
  - Government agencies have evidence to inform future standards and labelling negotiations with the lighting industry
Objectives of Monitoring, Verification and Enforcement (cont’d)

Inform stakeholders about programme performance

- Survey the market to collect sufficient data to determine how the standards and labelling programme is working
- Subsequent availability of information on the effectiveness of the lighting policy or programme
- Data collection inform governments to better allocate resources and/or meet their international commitments
Benefit of MVE measures for energy efficiency actions

- **Consumers**
  - receive the expected product when making purchasing decision

- **Participant businesses**
  - are provided with a level playing field and do not lose competitiveness by complying

- **Policymakers**
  - can assess the effectiveness of their programmes and evaluate improvements

ECOWAS Regional workshop on Energy Efficiency
MVE Programme Entry Conditions

• Compulsory entry condition for efficient lighting products
  - Self-declarations by importers and suppliers containing confirmation of compliance
  - Practised by many countries with successful MVE programmes

• Canada - suppliers ensure that energy efficiency verification mark is on a product
  - from certification organization, accredited by Standards Council of Canada

• Chile - suppliers certify their products through a third party institution prior to entering the market

• Australia - all products under mandatory standards and labelling programmes must register the details of all models
MVE Programme Entry Conditions (cont’d)

Å United Kingdom - suppliers obliged to produce test reports as justification upon request
  ▪ Though not condition of participation in market
Å Korea - manufacturers must allow inspection and testing of their factories
  ▪ as part of quality assurance process
Monitoring (Market Surveillance)

Ensures compliance with lighting standards or labelling programme requirements

Checks for compliance with legal or programme requirements
- also retrieves programme data

Approaches
- Market surveillance for energy labels
- Market surveillance for MEPS
- Complaint-based market surveillance
- Legislative framework and division of labour for market surveillance

Requirements
- transparent product sampling methodology and sufficient testing capacity
- ensure products in the market are regularly sampled and tested
Market Surveillance for Energy Labels

• Visual checks in retail outlets or other distribution points
• Verify that lamps available in market carry label compliant with applicable regulations or programme rules
• Products in market sampled and tested to verify they meet label claims
• Labelling infringements addressed via
  - Notification
  - Fines
  - Other sanctions prescribed in the MVE scheme
Market Surveillance for MEPS

- Helps to identify products in marketplace not compliant with energy efficiency requirements
- Checks on MEPS requirements
  - lamp efficacy levels
  - start time
  - colour temperature
  - average life etc
- If labelling not a requirement - information available via
  - registration
  - self-certification schemes or
  - general information provided online by the manufacturer
- Requirements
  - regular & transparent market sampling & testing to ensure lamps meet MEPS performance requirements
  - expert surveillance staff with an appropriate level of technical knowledge
Compliance rates for total CFL output in China

Compliance rates on annual sampled CFLs from factories and marketplaces in China

- 1998: 50%
- 2002: 77%
- 2005: 82%
- 2007: 90%
Complaint-Based Market Surveillance

- Successful handling of complaints – powerful tool for MVE programs
- Approach
  - Encourage programme participants to check on non-compliance
  - Allow complainants to stay anonymous
    - To avoid for fear of retaliatory complaints from their competitors
- Surveillance authorities not to rely solely on tip-off information
  - but devise own procedures for systematic & effective compliance checks
- Requirements
  - Complaints should be easily filed and promptly investigated
    - to maintain credibility
  - Support of competitors and civil society stakeholders should be enlisted
    - to maximize the reach of the approach
MVE Legislative Framework & Division of Labour

Å Framework legislation - describes activities to ensure compliance
  ▪ when a third party is centrally involved in implementing MVE program
  ▪ applies where independent certification authorities are involved in verification process

Å Approach
Å Identify parties responsible for market surveillance activities
Å Establish clear delineation of authority
  ▪ between surveillance activities and enforcement activities

Å Requirement
Å Great degree of attention to coordination
  ▪ to ensure compliance activities remain appropriate to the scale, scope and objectives of the energy efficiency programme
Verification

- Involves checking whether an energy performance product performs as claimed
- Testing - core means of determining whether energy performance claims have been met
Types of Verification

• **Registration verification** - confirms registered products meet the requirements for registration
  ▪ as part of the programme entry conditions

• **Screening or check testing** - used to provide preliminary assessment of products likely to fail a full verification test

• **Third party certification** - review and confirmation by an independent and competent third party
  ▪ that manufacturer or supplier’s claim of conformity adheres to specified procedure

• **Full procedure verification tests** - ensures that the specified procedure is followed precisely in an accredited laboratory
  ▪ all measurements and records stipulated in the procedure are followed

• **Benchmark testing** - ensures complete check of products available in the market
  ▪ conducted on a regular basis in a systematic manner
Enforcement

Enforcement strategy - set of responses to incidents of non-compliance

Sanctions for non-compliance include:

- private notification
- identifying correction period for minor transgressions
- delisting products from qualified products list
- public notification
- legal actions and sanctions
  - suspension and fines
Developing Test Capacity

Â Key Considerations

Â Frequency of testing – accredited laboratory may not be cost-effective for testing for occasional product development

Â Volume of testing – large market with many suppliers and products vrs voluntary labelling programme in smaller market

Â Certification of products – accredited laboratories critical for testing to provide certification of products to international standards

Â Independent compliance testing support – manufacturer’s own lab or local lab to accommodate product development & quality control

Â Product range or testing scope – range of lighting products to be adaptable in case of shift in market demand for another product

Â Complementary capacities – option to share capacity with neighbouring states
  • e.g. reciprocating test capacity for LED lamps, in return for use of test facilities for CFLs
Strengthening Test Capacities

- To determine testing capacity and laboratory requirements, and levels of required investment:
  - Assess existing capacities
    - incl. staff competencies & training needs
  - Determine immediate, & estimate future, levels of testing required
  - Identify types & physical dimensions of lamps that require testing
  - Identify which international standard testing protocols to be used
  - Clarify test capacity needs
    - e.g. how many lamps will be tested simultaneously
  - Define the type of laboratory equipment, calibration and maintenance required to fulfill identified needs
  - Decide whether the test results have to be shared with others
    - e.g. with other countries
Conclusions

**Å MVE essential to counter existence of poor lighting product quality in the market**

**Å Policy response - strengthen market surveillance to remove non-compliant lighting products from the market through**

- enhanced collaboration with regulators, public authorities, industry, civil society stakeholders and others
- training for new programme managers
- inter- and intra-agency information sharing

**Å Harmonized MVE strategies at the regional level may**

- maximize available resources
- increase MVE effectiveness
- increase consumer confidence - through cross-border sharing of information
Thank You.

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