



United Nations Environment Programme en.lighten Initiative

Overview of Monitoring, Verification & Enforcement on Efficient Lighting Products

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Federal Ministry
for Economic Cooperation
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National Lighting Test Centre
China

Value Added of Regional Strategy

- “ **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

- “ **Realization of substantial additional energy savings**

Through adoption of stringent performance requirements and broader product scopes than are currently in place

- “ **Lower compliance costs**

For manufacturers through the use of uniform test methods and other regulatory and informational mechanisms

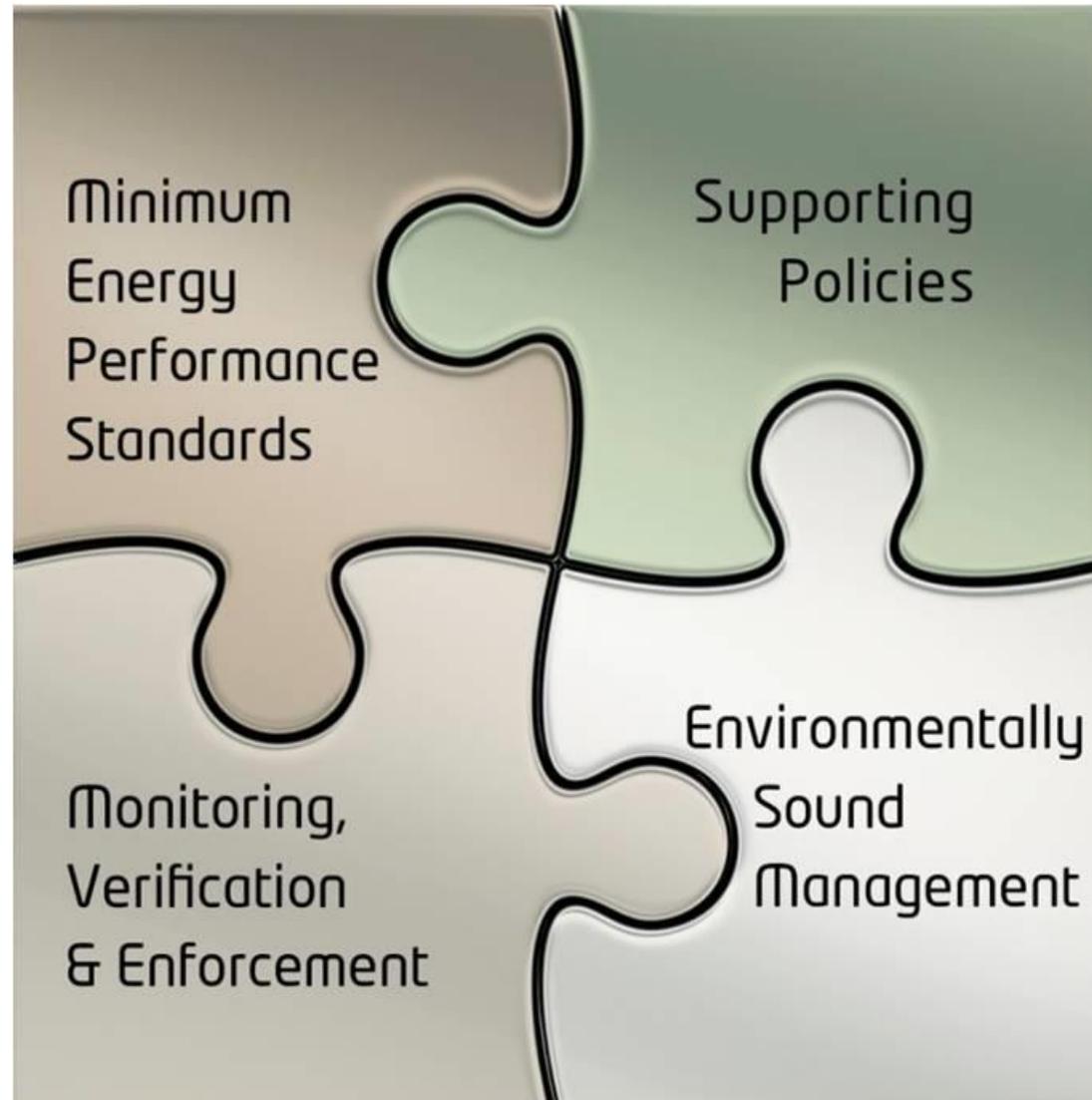
- “ **Increased regional trade / market competition**

through the removal of barriers to regional trade, improved the potential for local and cross border enforcement actions, and potentially lowered costs to consumers

- “ **Improved credibility and clarity of product information to consumers**



Recommended activities



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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

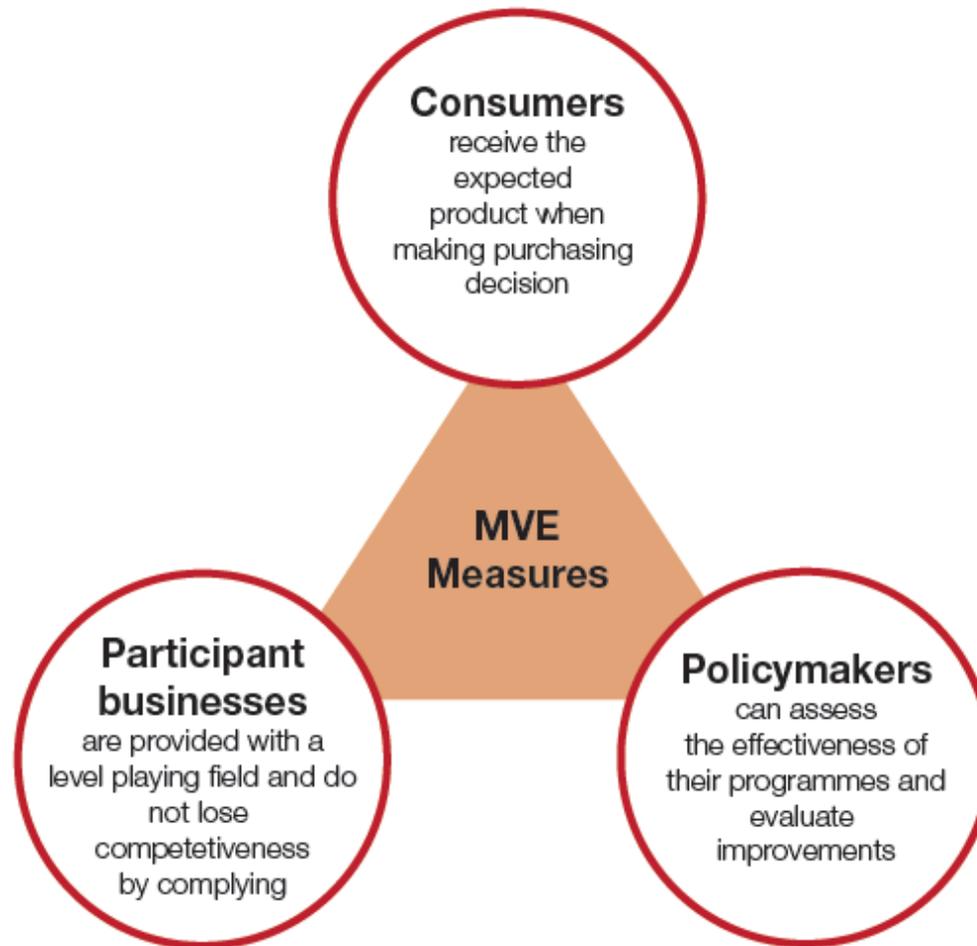


Objectives of Monitoring, Verification and Enforcement (cont'd)

- “ 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



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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



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MVE Programme Entry Conditions (cont'd)

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



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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



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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



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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%



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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



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MVE Legislative Framework & Division of Labour

- “ 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
- “ **Approach**
- “ Identify parties responsible for market surveillance activities
- “ **Establish clear delineation of authority**
 - between surveillance activities and enforcement activities
- “ **Requirement**
- “ 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



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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

- “ **Key Considerations**
- “ **Frequency of testing** – accredited laboratory may not be cost-effective for testing for occasional product development
- “ **Volume of testing** – large market with many suppliers and products vrs voluntary labelling programme in smaller market
- “ **Certification of products** – accredited laboratories critical for testing to provide certification of products to international standards
- “ **Independent compliance testing support** – manufacturer’s own lab or local lab to accommodate product development & quality control
- “ **Product range or testing scope** – range of lighting products to be adaptable in case of shift in market demand for another product
- “ **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



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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

- “ MVE essential to counter existence of poor lighting product quality in the market
- “ 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
- “ Harmonized MVE strategies at the regional level may
 - maximize available resources
 - increase MVE effectiveness
 - increase consumer confidence - through cross-border sharing of information



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Thank You.

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