

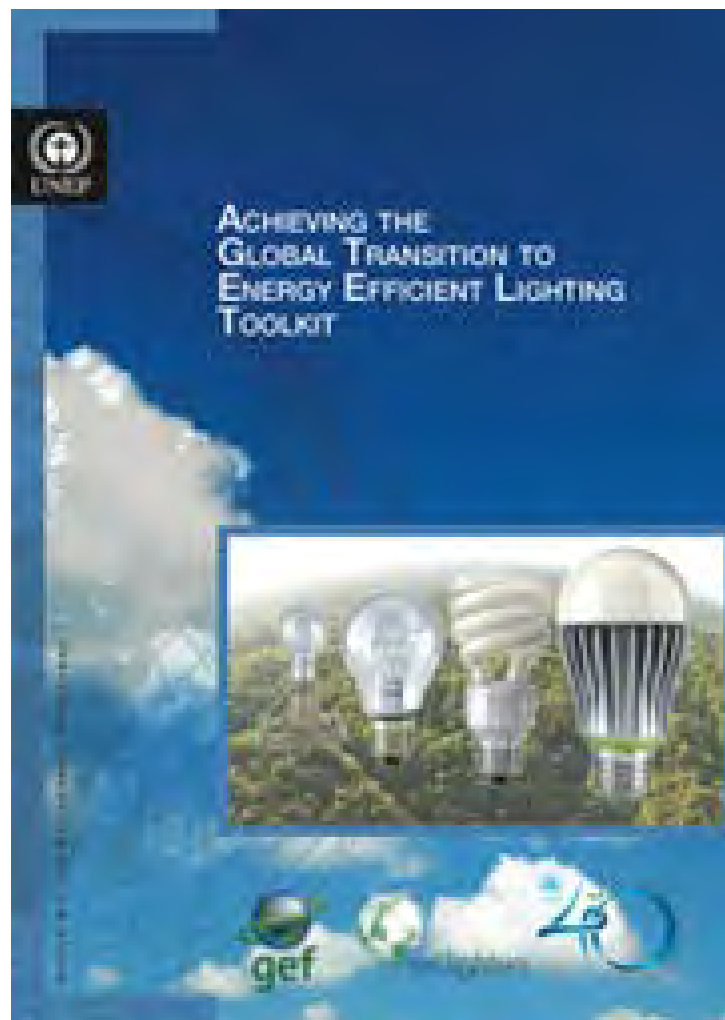
AGENDA

- **The Efficient Lighting Toolkit**

Presenter: Kathryn M. Conway, Programme Officer



Achieving the Global Transition to Energy Efficient Lighting Toolkit



Download pdf versions in
English and Spanish:

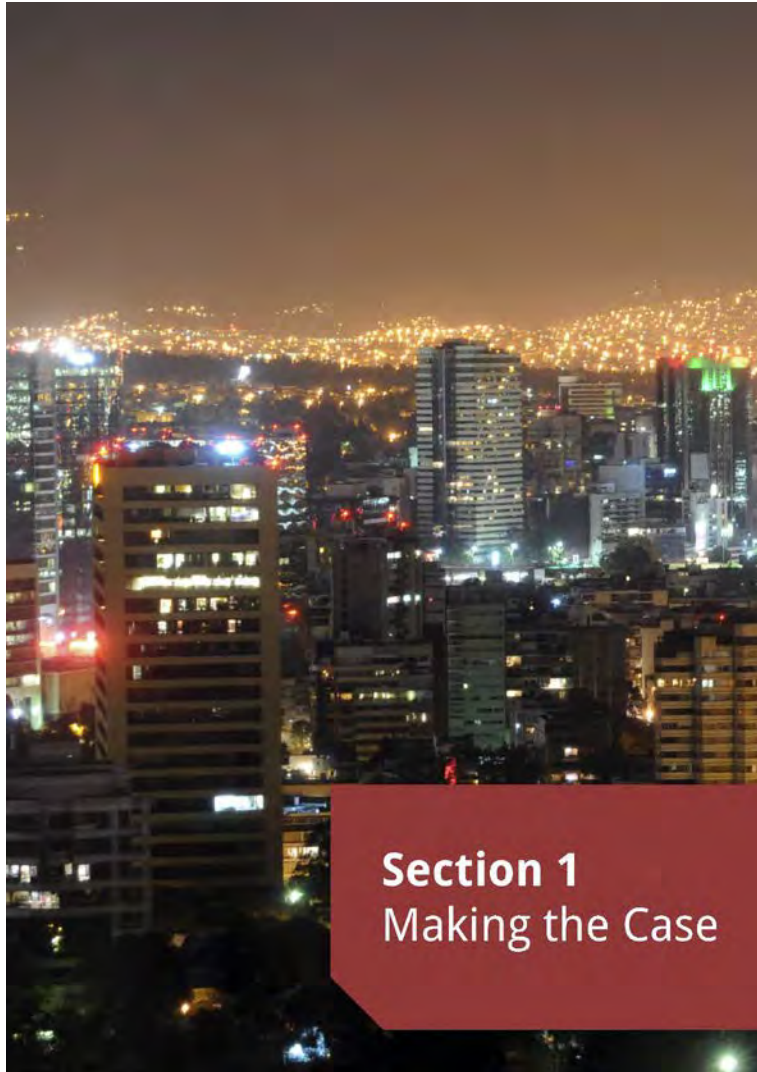
www.enlighten-initiative.org

Forthcoming:

Arabic, Russian & Spanish,
and, e-book editions



Section 1: Making the Case



A rapid transition to energy efficient lighting by 2016 is possible if countries develop policies to phase out inefficient lamps.

In addition to reducing their greenhouse gas emissions, countries can benefit by:

- Reducing peak demand and thus being able to avoid power outages
- Having electrical generating capacity to redeploy for other uses
- Reducing energy imports and increasing their economic security
- Reducing the need to invest in new power plants

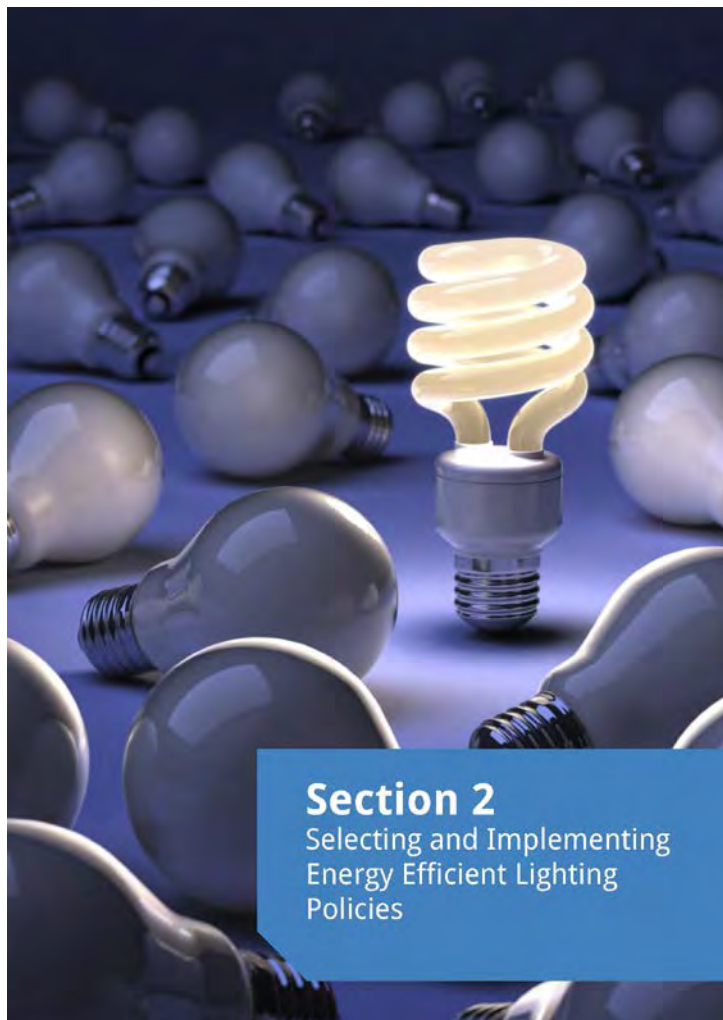


Scope of toolkit: single-base, omnidirectional lamps, mainly for consumer applications



Transition to efficiency focuses first on phasing out inefficient, incandescent lamps

Section 2: Selecting & Implementing Energy Efficient Lighting Policies

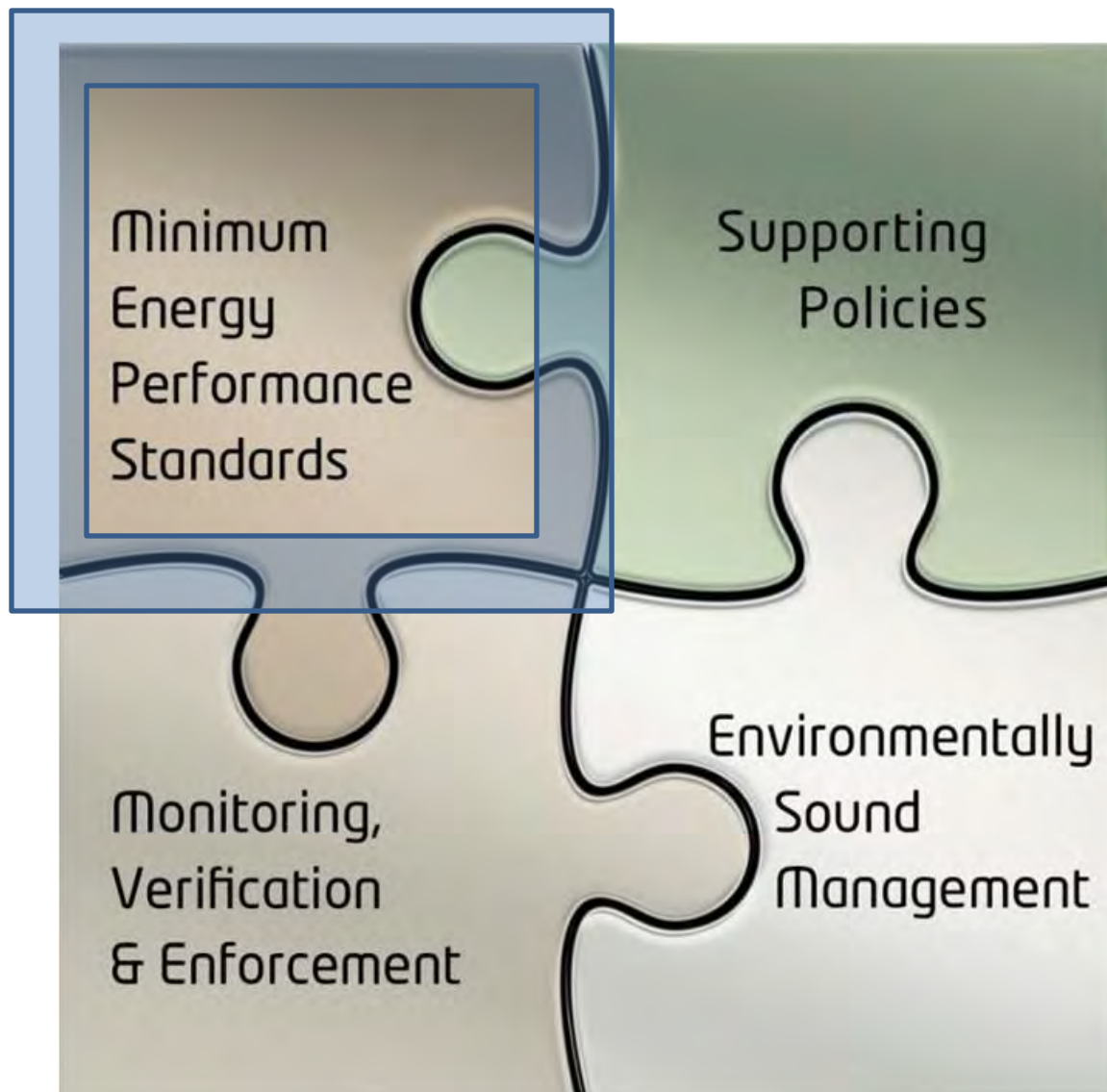


Tools available to policymakers:

- Regulatory measures to legislate conformance to energy efficiency standards
- Economic, fiscal, market-based (taxes & financial incentives)
- Awareness initiatives to influence consumer purchasing behaviours



Elements of an Integrated Policy Approach



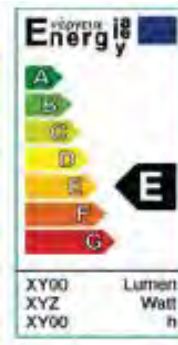
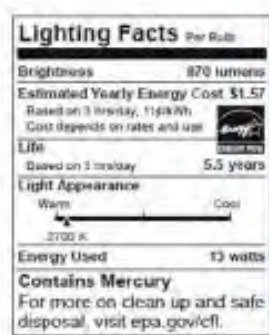
Selecting and Implementing Minimum Energy Performance Standards (MEPS)

- Minimum level of product performance: energy efficiency
- Cornerstone of successful, sustainable lighting strategy
- Encourages manufactures to increase efficiency of existing products, or, replace less efficient products with new models
- Consultations with manufacturing and sales stakeholders are essential for adoption and success of MEPS
- The process should include practical cost/benefit analyses to ensure positive economic outcomes for all parties
- Must be supported by ongoing monitoring, control, testing and enforcement of full compliance
- MEPS success is enhanced by aligning country standards with regional trading partners

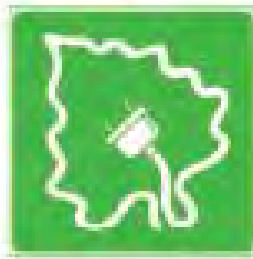


Product Information Labels Should Coordinate with MEPS

- Mandatory and voluntary labels on lamps
- Clear, credible information
- Overcomes consumer awareness issues and decision barriers



← Energy rating labels



← Endorsement labels



Additional Policy Options

- Technology prohibition (imports, sales and/or manufacturing)
- Cooperative procurement, subsidies, rebates and giveaways
- Taxation incentives for efficiency/disincentives for inefficiency
- Installment payments for efficient products can be facilitated through on-bill financing, with the cooperation of electric utility companies



Section 3: Financing the Transition to Energy Efficient Lighting

Investment in efficiency is cost-effective

- Energy efficient lamps are a relatively simple option for dramatic, rapid energy and emissions savings
- Increased energy security and independence is an added benefit

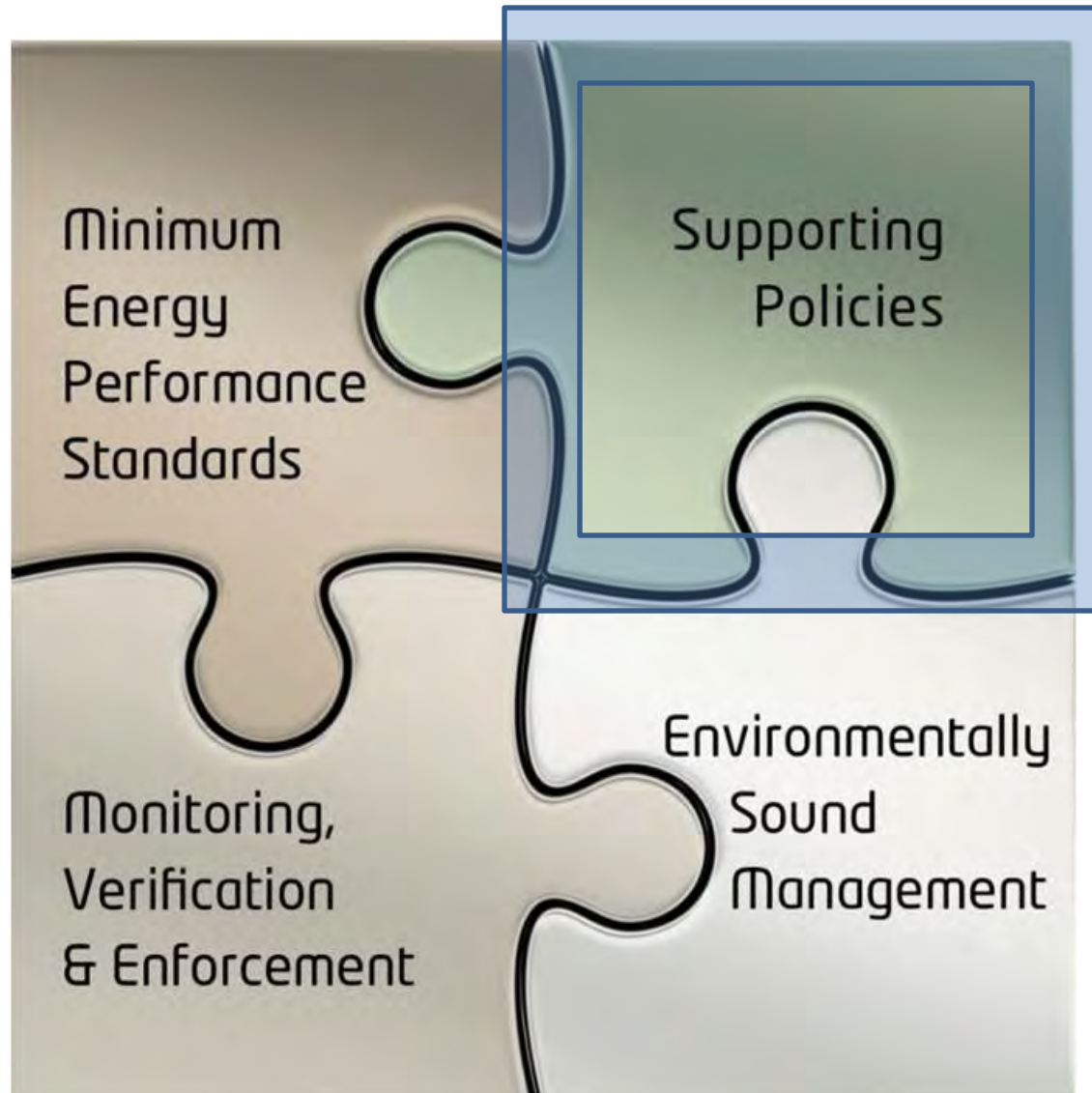


Section 3

Financing the Transition to Energy Efficient Lighting



Elements of an Integrated Policy Approach



Financing the Transition to Efficient Lighting

Success achieved through investment in key areas:

- Development of and conformance to MEPS
- Rigorous monitoring, verification and enforcement delivers return on investment
- Design and implementation of supporting policies
- Establishment of environmental management policies should be considered in financing plans
- Each implementation level for new policies requires training and support, which must be included in financing plans



Financing the Transition to Efficient Lighting: Ensuring Success and Sustainability

- Sustained political will and long-term commitment
- Regional, International and cross-border cooperation and collaboration
 - Coordinated MEPS, testing, monitoring, verification & enforcement (MVE)
 - Consistent consumer labelling approaches
 - Common phase-out programs
 - Shared capacities, resources and funding structures
 - Sharing of information and harmonized standards
- Regional alignment significantly increases consumer confidence



Section 4: Ensuring Product Availability & Conformance



Section 4
Ensuring Product Availability
and Conformance

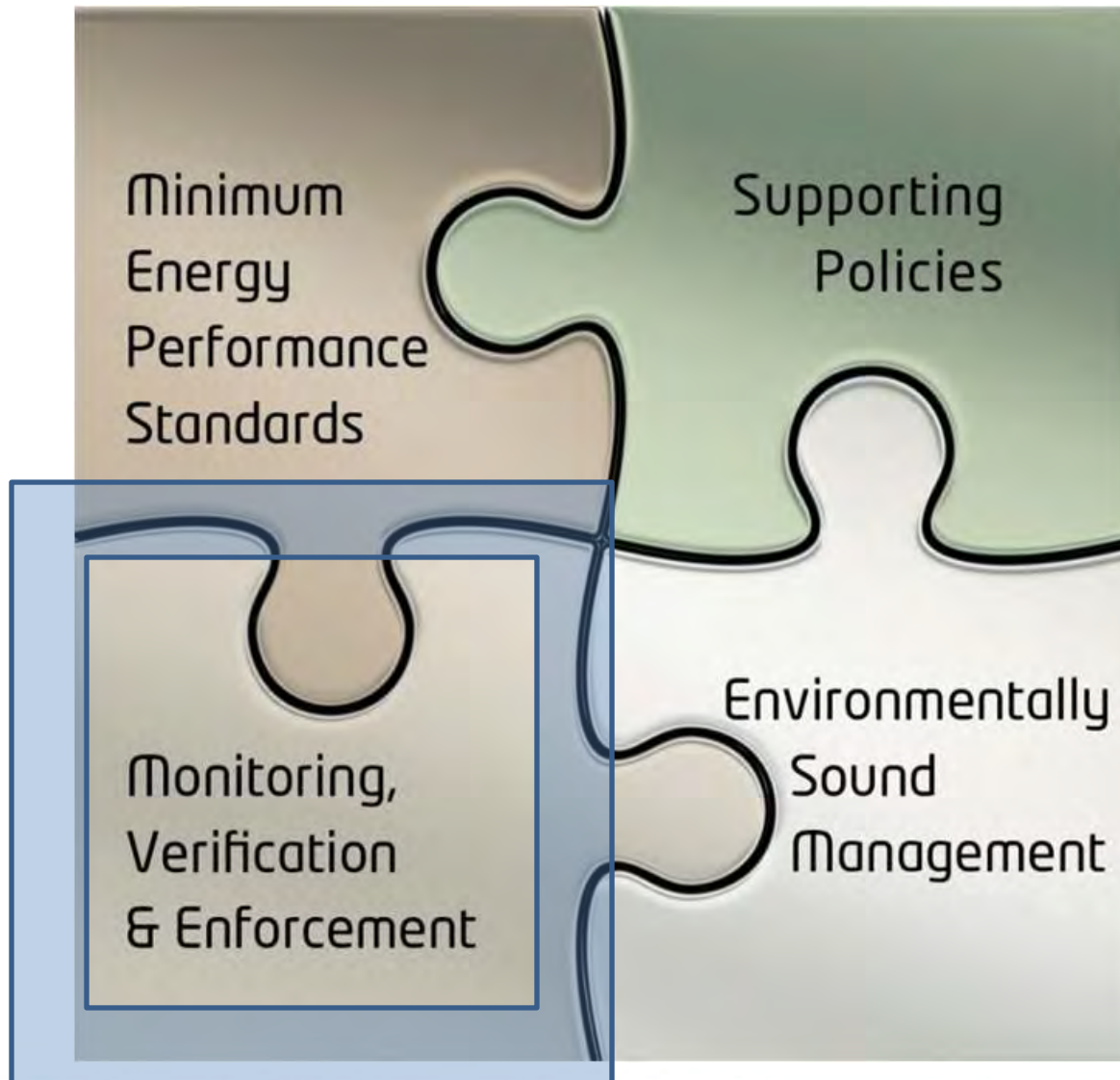
Global threat associated with proliferation of low-quality goods

- Contravenes fair competition
- Can threaten human health objectives
- Impedes attaining optimal energy and environmental benefits and savings

Monitoring, verification and enforcement schemes & activities support MEPS objectives



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Ensuring Product Availability & Conformance

MVE policies and schemes include:

- Rationale, value and objectives
- Program entry requirements
- Procedures and practices for handling of non-compliance
- Alignment with standards and labelling programs
- Regional collaboration on standards and testing capacity



Ensuring Product Availability & Conformance: Monitoring, Verification and Enforcement (MVE)

- Suppliers and manufacturers are subject to same rules
- Gives policy makers, regulators, investors and administrators feedback on how well MEPS are working, and, can suggest areas for improvement
- Schemes help to identify and remove non-compliant products from the marketplace
- Consumer protection and confidence in efficiency will increase



Section 5: Safeguarding the Environment & Health

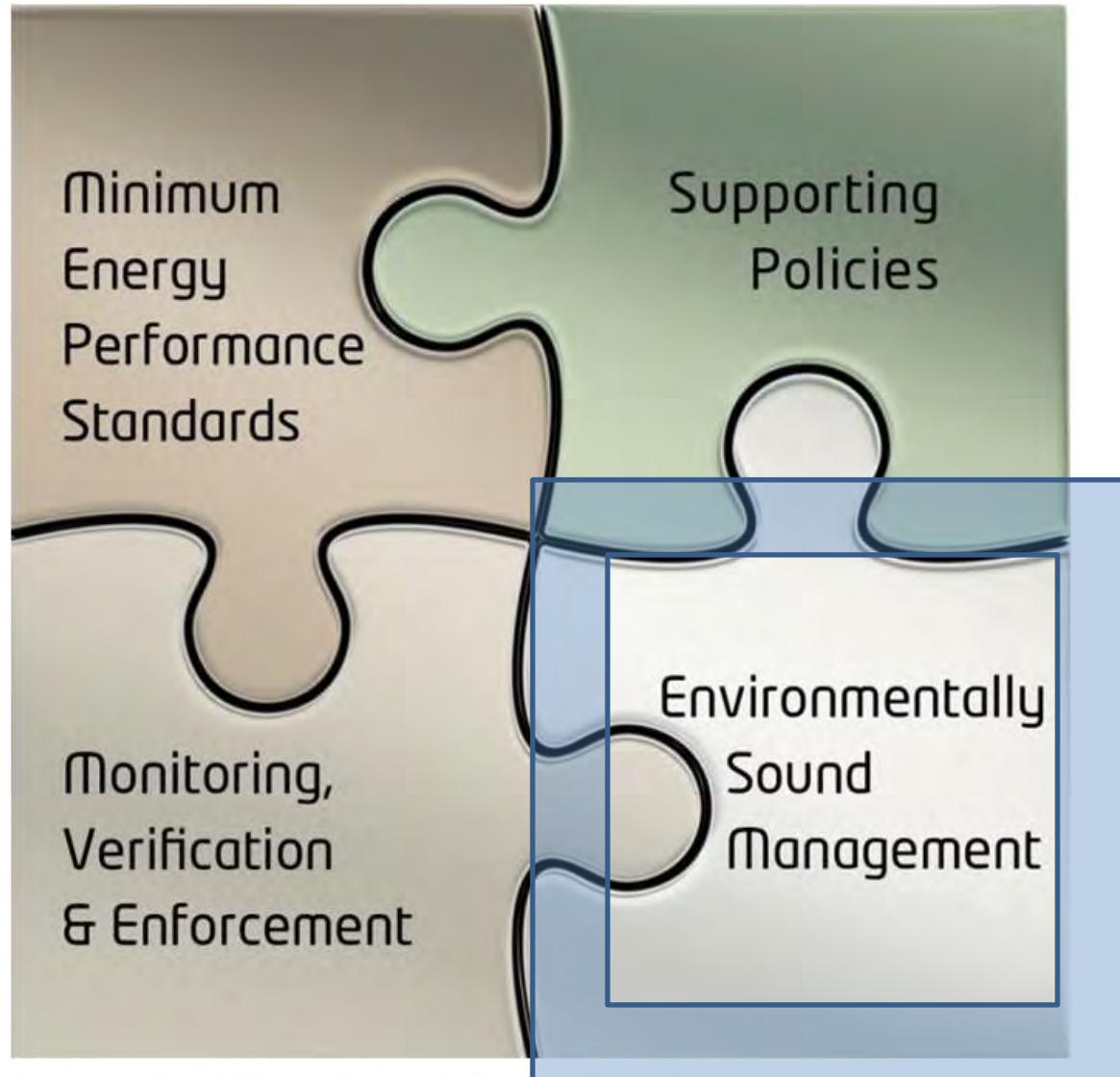


Product life-cycle management

- Production, manufacture, usage, end-of-life
- Carbon, material and water-consumption footprints
- Explains how mercury in lamps differs from mercury emissions from fossil fuel combustion
- Suggests how to explain technical issues to consumers



Elements of an Integrated Policy Approach



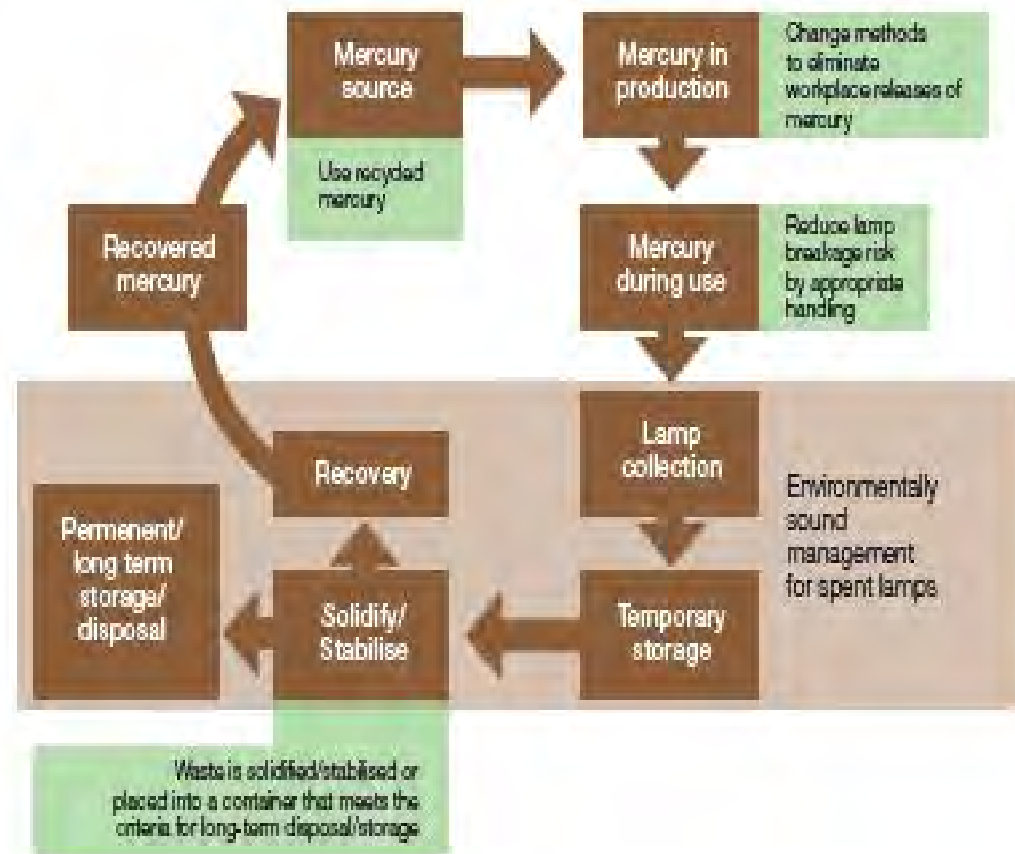
Safeguarding the Environment & Health

- Mercury management
 - Mercury-added lamps do not release mercury unless the lamp is broken
 - Collection and recycling
 - Enforcing maximum product mercury content limits
 - Viable methodologies and good practices for environmentally sound management of spent lamps
 - Encouraging manufacturers towards progressively lower amounts required in lamps, without compromising quality and longevity
 - Extended producer responsibility in life-cycle of products

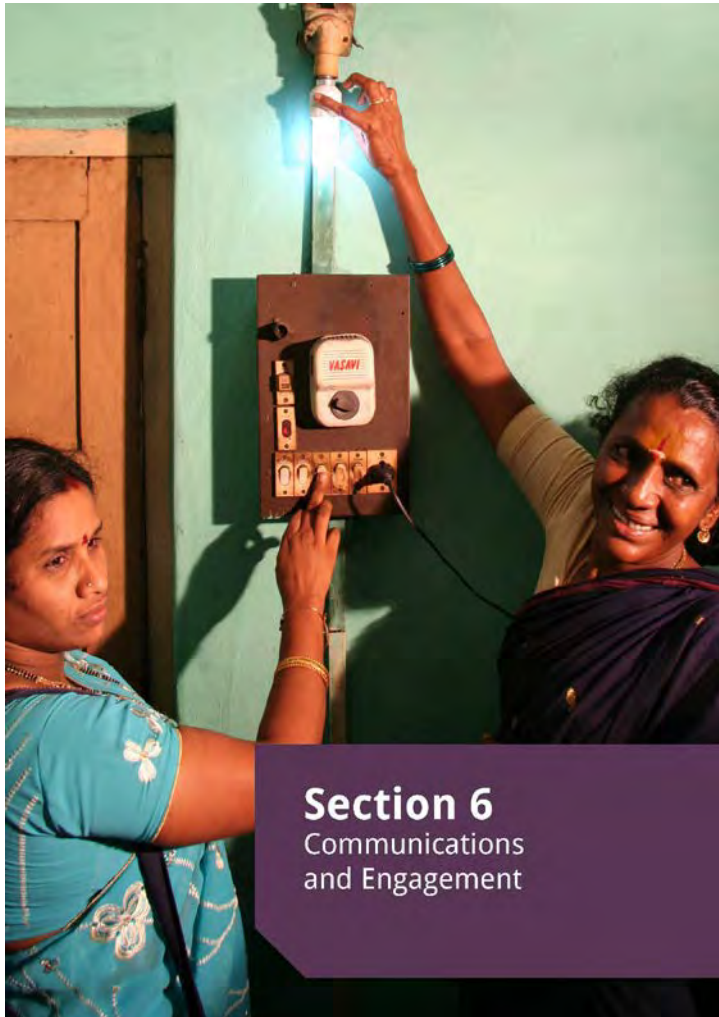


Collection and Recycling of Spent Lamps

- Consumer management of breakage
- Recovery of mercury from spent lamps
- Job creation in collection and recycling
- Requirements
 - Sustainable funding
 - Community cooperation
 - Adequate legislation
 - Enforcement



Section 6: Communications and Engagement



Section 6
Communications
and Engagement

Communications campaign objectives:

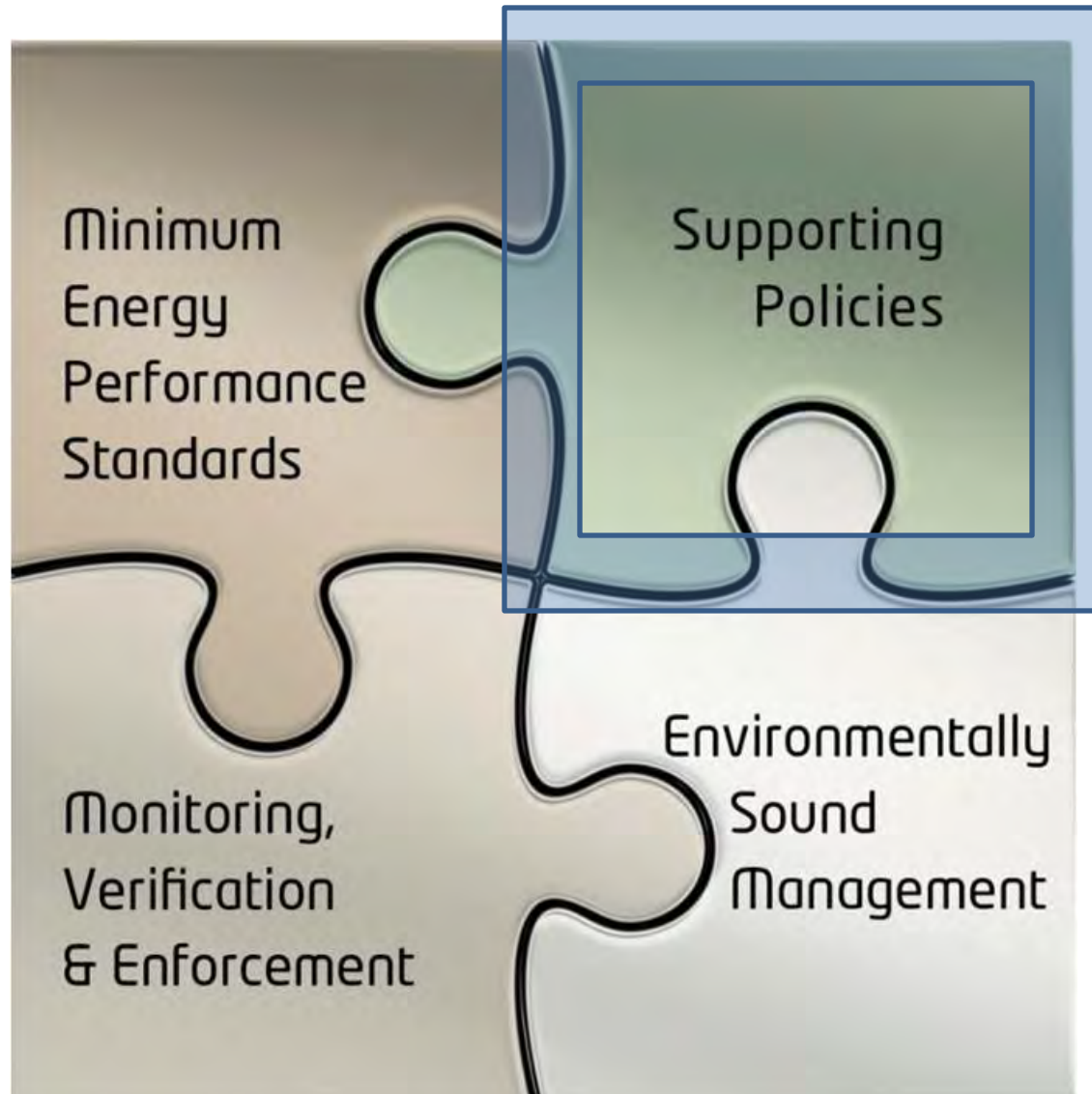
- Awareness, education
- Changes in end-user behaviour
- Promote general public acceptance
- Address sellers and service providers

Campaign elements:

- Understanding the target audience
- Design, objectives, duration, timing
- Consultation with industry stakeholders
- Budget and resources
- Implementation, monitoring, evaluation



Elements of an Integrated Policy Approach



Communication and Engagement: Campaign Considerations

- Customized information, education and training
- Credible, understandable and authoritative messaging
- Consider cultural and social attitudes
- Sensitivity to local market needs and driving forces
- Market segment specific messages
- Extended campaigns and repeated messages versus singular campaigns
- Collaboration with partners, manufacturers, trade associations, distributors and retailers
- Message needs to reach all socio-economic groups





Questions?

www.enlighten-initiative.org



PHILIPS



nLTC National Lighting Test Centre
China