



**United Nations Environment Programme  
en.lighten Initiative**

**Group 3 – Monitoring, Verification &  
Enforcement**

**ECOWAS Workshop on Appliance Standards and Regulations  
Institutional Capacity and Efficient Lighting Policies  
Cotonou, Benin    October, 2013**



**BMZ**



Federal Ministry  
for Economic Cooperation  
and Development



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National Lighting Test Centre  
China

# “PRIORITIZED REGIONAL & NATIONAL ACTIVITIES + KEY STAKEHOLDERS



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# Establish National Registries for on-grid and off-grid lighting products

- “ Create and make functional National Registries for lighting products - **Phase 1: Trade Ministry – Lead, Customs Agency – Co-Lead, Energy Ministry**
- “ Collate data on lighting products – country of origin, importers, quantity, quality, technical data sheets - **Phase 1: Trade Ministry – Lead, Customs Agency, Energy Ministry**



# Monitor on-grid & off-grid efficient lighting products at ports and markets of ECOWAS countries

- ” Conduct regular census of importers, wholesalers and distributors of efficient lighting products - **Phase 1: Trade Ministry – Lead, Customs Agency, Energy Ministry, Manufacturers/importers/distributors of efficient lamps**
- ” Conduct periodic checks on importers, wholesalers and distributors of efficient lamps - covering
  - ” inventory of the types of lamps on the market
  - ” verification of the presence or absence of valid labels
  - ” verification of the technical characteristics of the lamps as registered
  - ” verification of conformity to minimum energy efficiency standards on the lamps
- **Phase 2 : Standards Authority –Lead, Trade Ministry – Co-Lead Customs Agency, Energy Ministry**



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## Monitor on-grid & off-grid efficient lighting products at ports and markets of ECOWAS countries

“Implement regional market surveillance system  
for sampling and random tests of efficient lamps  
in ECOWAS countries - **Phase 2: Standards  
Authority, Lead, Trade Ministry – Co-Lead,  
Customs Agency, Energy Ministry**



# Establish Regional Test Laboratory for on-grid and off-grid efficient lighting

- “ Determine the location of 1st regional test laboratory - **Proposed Country: Ghana; Phase 1: ECREEE – Lead, UNEP/GEF en.lighten**
  - “ based on specific criteria of: level of development of market, accessibility, technical capacity, political stability.
- “ Determine the location of 2nd regional test laboratory - **Proposed Countries: Senegal, Burkina Faso, Nigeria Phase 2: ECREEE – Lead, UNEP/GEF en.lighten**
- “ Develop ToRs, invite bids and select suppliers and procure lamp test equipment and accessories, and office equipment - **Phase 1: ECREEE – Lead, UNEP/GEF en.lighten**



## Establish Regional Test Laboratory for on-grid and off-grid efficient lighting

- “ Install and commission lamp test equipment and accessories, and office equipment - **Phase 2: ECREEE – Lead, UNEP/GEF en.lighten**
- “ Train relevant technical staff on lamp test equipment and accessories - **Phase 2: ECREEE – Lead, UNEP/GEF en.lighten**



# Establish National Test Laboratories for on-grid and off-grid efficient lighting and strengthen selected existing national laboratories

- “ Develop ToRs, invite bids and select suppliers and procure lamp test equipment and accessories, and office equipment - **Phase 1: Standards Authority – Lead, Energy Ministry – Co-Lead**
- “ Install and commission lamp test equipment and accessories, and office equipment - **Phase 2: Standards Authority – Lead, Energy Ministry**
- “ Train relevant technical staff on lamp test equipment and accessories - **Phase 2: Standards Authority – Lead, Energy Ministry**





## Make importers, wholesalers and distributors of on-grid and off-grid efficient lamps & their customers aware of penalties for non-compliance of standards & labelling requirements

- “ Put in place Regulations for the enforcement of requirements of standards and labelling of on-grid and off-grid efficient lamps -  
**Phase 1: Standards Authority – Lead, Trade Ministry – Co-Lead, Energy Ministry, Customs Agency**
- “ Sensitize and raise the awareness of importers, wholesalers and distributors of efficient lamps and their customers of penalties for non-compliance of standards and labelling requirements - on radio, television, posters and in newspapers, and at local events -  
**Phase 2: Standards Authority – Lead, Trade Ministry – Co-Lead, Energy Ministry, Customs Agency**



**Make importers, wholesalers and distributors of on-grid and off-grid efficient lamps & their customers aware of penalties for non-compliance of standards & labelling requirements**

” Organize special training programmes for relevant staff of Standards authority, Customs agency and Trade Ministry on penalties for non-compliance of standards and labelling requirements - **Phase 1: Standards Authority – Lead, Customs Agency – Co-Lead, Energy Ministry, Trade Ministry**



# “MONITORING PROGRESS OF THE STRATEGY



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# National Registries for on-grid & off-grid lighting products established in all ECOWAS countries

“**Indicators** - Physically-present and accessible national register

“**Sources of Verification** - Trade Ministry Annual reports, Inspectors reports

“**Risks and Assumptions** - Registry is resourced with trained personnel and funding



## On-grid & off-grid efficient lighting products monitored at ports and markets of ECOWAS countries

- “**Indicators** - Quantity of monitored products recorded
- “**Sources of Verification** – Inspectors Log Book
- “**Risks and Assumptions** - trained manpower available; adequate funding available; inspectors have high integrity



## Regional Test Laboratory for on-grid and off-grid efficient lighting established

- “**Indicators** - Reports and pictures of commissioning
- “**Sources of Verification** - Media reports, official communications from/to lead Institution, ECOWAS Annual Report
- “**Risks and Assumptions** - Lab resourced with trained manpower and funded



**National Test Laboratories for on-grid and off-grid efficient lighting established in some countries and selected existing national laboratories strengthened**

- “**Indicators** - Reports and pictures of commissioning
- “**Sources of Verification** - Media reports and official communications from/to lead Institution
- “**Risks and Assumptions** - Lab resourced with trained manpower and funded



Promulgate or update laws and regulations where applicable for the purpose of Monitoring, Verification and Enforcement of compliance of standards and labelling requirements

” **Indicators** - Gazetted laws or Regulations

” **Sources of Verification** - Government Gazette

” **Risks and Assumptions** - Lack of political will, bureaucracy





## Financing Options

- “ **Capital Items** – international donors, Public Private Partnership, carbon financing
  - “ Regional Laboratory – US\$0.8-1.0 million/lab
  - “ National Laboratory US\$0.5-0.8 million/lab
  - “ test equipment, office equipment, staff training
- “ **Awareness Creation** – national budget, private sector (lighting products manufacturers, importers and retailers), utilities
- “ **Capacity Building** – national budget, international donors
- “ **Development of Regulatory Framework** - national budget, international donors



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**Thank You.**

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