



# United Nations Environment Programme en.lighten Initiative

**Supporting Policies and Mechanisms (SPM)**  
*Report Back to plenary session*

*Kofi Adu Agyarko*  
*3 October 2013 – Cotonou, Benin*



BMZ



Federal Ministry  
for Economic Cooperation  
and Development



Future-makers.  
Building the futur  
Let's join forces.

**PHILIPS**

**OSRAM**

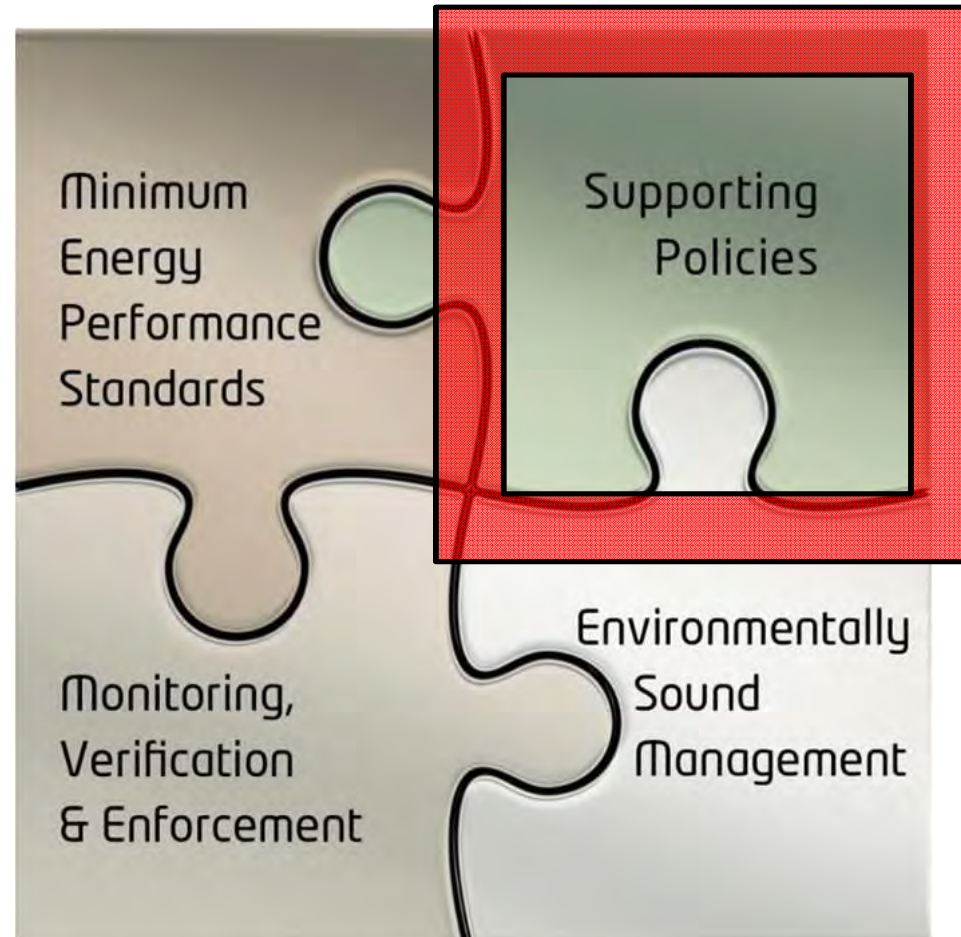


nLtc

National Lighting Test Centre  
China

# Four Pillars of the Integrated Policy Approach

## Our Focus is Supporting Policies



en.lighten



UNEP

# Summary of Breakout group discussions

## Meeting Participants (18)

“Clement Bill Akouedenoudje (Direction generale de l’Energie, Benin), Antonio Baptista (Ministry of Tourism, Industry and Energy, Cap Verde), Modou Manneh (Ministry of Energy , The Gambia -FP ECREEE), Kofi Agyarko (Energy Commission, Ghana), N’Faly Yombouno (Direction Nationale Energie, Guinee – FP ECREEE), Gambo Saidou (Ministere finance, Niger), Isibor Simeone (Association of Illumination Professionals, Nigeria), Mame Coumba Ndiaye (SENELEC, Senegal), Unisa Samura (Utility Company, Sierra Leone), Matthew Carr (SNV, Netherlands Development Organisation), FEOU Bilakimwé (Direction de l'Industrie, Ministère de l'Industrie, de la Zone franche et des Innovations Technologiques, Togo), NAYMADOR Yaovi (PURISE, Togo), Leonardo Barreto (Austrian Energy Agency), Secou Sarr (ENDA- Energie), Charles Miller (Global off-grid lighting Association/SolarAid), Olola Vieyra (UNEP/GEF en.lighten initiative), Benoit Lebot (UNDP), Jenny Corry (SEAD/CLASP)



en.lighten



UNEP

## Core objectives

To make key stakeholders aware of the benefits of on-grid and off-grid efficient lighting

To implement harmonized mandatory labelling and certification for on-grid and off-grid efficient lighting products in all ECOWAS countries



# IMPLEMENTATION PHASES

Phase 1: July 2014 to  
December 2015

Phase 2:  
January 2015 to  
December 2016

Phase 3:  
January 2017 to  
December 2020



en.lighten



UNEP

# Global Off-Grid Lighting Association perspective

- “ Presentation made by Charles Miller from Solar Aid on behalf of GOGLA
- “ **Key points of recommendations:**
  - “ Flexible financing mechanisms should be encouraged
  - “ Distribution should rely on roles of trusted opinion leaders
  - “ Mechanisms to support Entrepreneurs need to be considered
  - “ The Off-grid lighting market needs to grow further before considering the creation of more manufacturing and recycling plants. Recycling needs to be considered at a later stage.



***Enabling framework for integrated policies + Roles of  
Key Stakeholders and Expected Outcomes of their  
Actions***



en.lighten



UNEP

## Key Activity – 2.1.1 Create public awareness of the advantages and benefits of the minimum energy performance standards (MEPS) on-grid and off-grid efficient lighting

		Time Frame	Implementing Parties
<b>Objective 2 – Make key stakeholders aware of the benefits of on-grid and off-grid efficient lighting</b>			
<b>Expected Outcome 2.1</b>	Key stakeholders are aware of and appreciate the benefits of on-grid and off-grid efficient lighting		
<b>Priority Activity 2.1.1</b>	Create public awareness of the advantages and benefits of the minimum energy performance standards (MEPS) on-grid and off-grid efficient lighting		
<b>Tasks</b>	1. Organize public education and awareness campaigns on the rationale behind the MEPS and the advantages and benefits of efficient lighting in national and local languages on radio and television, on posters and in newspapers, and at local events	Phase 1	Energy Ministry – Lead Rural Electrification Agency Trade Ministry Customs Agency Community-based Organizations NGOs
	2. Organize special education programmes for the youth in schools on the advantages and benefits of efficient lighting through radio and television programmes, and posters.	Phase 1	Energy Ministry – Lead Rural Electrification Agency Community-based Organizations NGOs

### “ **Consensus:**

- “ **The list of key stakeholders should include Ministry of Education**
- “ **All participants agreed that activities 2.1.1 reflects the Regional and National aspirations**



en.lighten





## Key Activities- 2.1.2 Demonstrate to stakeholders the advantages and benefits of efficient lighting (compared to incandescent lamps)

Priority Activity 2.1.2	Demonstrate to stakeholders the advantages and benefits of efficient lighting (compared to incandescent lamps)		
	1. Implement free distribution of on-grid and off-grid lighting products or at subsidized cost to carefully selected communities (with retrieval and destruction of replaced incandescent lamps)	Phases 1-2	Energy Ministry – Lead Electricity Distribution Company Rural Electrification Agency Community-based Organizations NGOs
	2. Facilitate development of financing schemes to cover the upfront cost of on-grid and off-grid lighting products (e.g. on-bill financing)	Phase 1	Energy Ministry – Lead Electricity Distribution Company Rural Electrification Agency Financial Institutions Community-based Organizations NGOs
	3. Facilitate bulk procurement of on-grid and off-grid lighting products through bulk procurement (e.g. through reducing import duties)	Phases 1-2	Trade Ministry - Lead Energy Ministry – Co-Lead Electricity Distribution Company Rural Electrification Agency Financial Institutions Community-based Organizations NGOs
	4. Promote installation of efficient lighting in all new social housing projects of national governments	Phases 2-3	Works & Housing Ministry –Lead Energy Ministry – Co-Lead Finance Ministry Electricity Distribution Company Rural Electrification Agency Community-based Organizations NGOs

### Consensus:

“ All participants agreed that activities 2.1.2 reflects the Regional and National aspirations

“Participants underlined the fact that the giveaway strategy between on-grid and off-grid lighting products should be distinguished. The issue lies within the gratuity of the distribution. This priority should not only consider free distribution but incorporate other financing mechanisms.



## Additional Regional Priority within Objective 3

“ Definition of a process to design a harmonized mandatory labelling and certification for on-grid and off-grid efficient lighting .

“ **Consensus:**

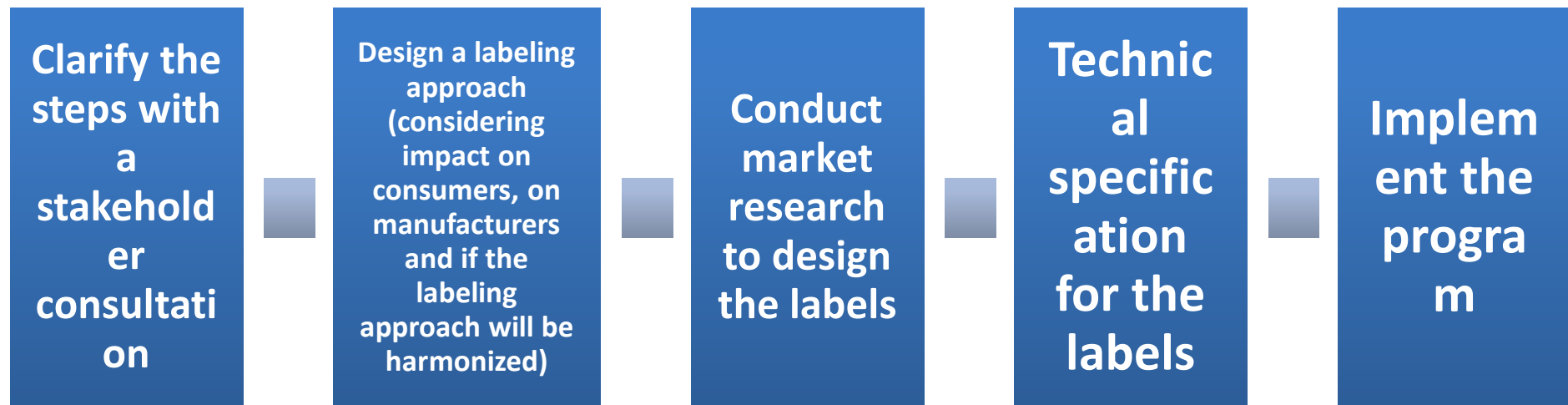
“ All participants agreed that an activity 3.1.0 should be included to design the Labeling and certification at Regional.

“ All participants agreed that ECOWAS should prepare a draft Labeling and Certification for Proposal. ECOWAS will define the system for Labeling that could be implemented for Lighting. The labeling for lighting products should be done in continuity with the Energy Efficiency Policy. The countries should be engaged in deep brainstorming for the label.



# Additional Regional Priority within Objective 3 (cont'd)

- “ Definition of a process to design a harmonized mandatory labelling and certification for on-grid and off-grid efficient lighting
- “ **CLASP Process proposal to Design a Label online tool available**



en.lighten



## Key Activities – 3.1.1 Create public awareness of the mandatory labels of on-grid and off-grid efficient lighting products

		Time Frame	Implementing Parties
<b>Objective 3 – Implement harmonized mandatory labelling and certification for on-grid and off-grid efficient lighting</b>			
<b>Expected Outcome 3.1</b>	Harmonized mandatory labelling and certification for on-grid and off-grid efficient lighting products implemented in all ECOWAS countries		
<b>Priority Activity 3.1.1</b>	Create public awareness of the mandatory labels of on-grid and off-grid efficient lighting products		
<b>Tasks</b>	1. Educate the public and explain the information displayed on the mandatory labels of on-grid and off-grid efficient lighting - in national and local languages on radio and television, on posters and in newspapers, and at local events	Phase 1	Standards Authority - Lead Energy Ministry – Co-Lead Rural Electrification Agency Community-based Organizations NGOs
	2. Organize special training programmes for relevant staff of Standards authority and Customs agency on the interpretation of the mandatory labels of on-grid and off-grid efficient lighting	Phase 1	Standards Authority - Lead Customs Agency – Co-Lead Energy Ministry Rural Electrification Agency
	3. Organize special training programmes for relevant staff of Standards authority and accredited institutions on the test methods for on-grid and off-grid efficient lighting	Phase 1	Standards Authority - Lead

### Consensus:

- “ Public awareness should help to control the informal sector Market
- “ Labelling and Certification will be implemented at the Regional level
- “ All participants agreed that activities 3.1.1 reflects the Regional and National aspirations.



en.lighten



## Key Activities – 3.1.2 Develop and adopt national legislation to give political backing to mandatory labelling and certification for on-grid and off-grid efficient lighting

<b>Priority Activity 3.1.2</b>	Develop and adopt national legislation to give political backing to mandatory labelling and certification for on-grid and off-grid efficient lighting		
<b>Tasks</b>	1. Conduct consultations with policy makers and other stakeholders on the development of national legislation on mandatory labelling and certification for on-grid and off-grid efficient lighting	Phase 1	Energy Ministry – Lead Standards Authority – Co-Lead Rural Electrification Agency Community-based Organizations NGOs
	2. Draft national legislation on mandatory labelling and certification for on-grid and off-grid efficient lighting products	Phase 1	Energy Ministry – Lead Standards Authority – Co-Lead Attorney-General's Office
	3. Adopt and implement national legislation on mandatory labelling and certification for on-grid and off-grid efficient lighting products	Phase 1	Energy Ministry – Lead Standards Authority – Co-Lead Customs Agency

### Consensus:

- “ The list of key stakeholders should include Ministry of Justice
- “ Need legislation first before moving into public awareness activities and before effective implementation.
- “ Need a mechanism to control the implementation of the define laws.
- “ ECOWAS should draft the legislation on mandatory labelling and certification for on-grid and off-grid efficient lighting products and propose it for adoption at the countries level. A Directive will be adopted in each countries.



enlighten



## Additional Regional Objective

### *“ Fiscal instrument and Incentives: VAT reduction for efficient lighting products*

From the participants perspective VATs are strong instruments to direct the Market. Countries need to develop baseline studies with convincing data to present to decision makers supported by cost benefit analysis for the politician to take a decision.

### **Consensus:**

- “ Countries need to conduct baseline studies with convincing data to present to decision makers.**
- “ Countries will consider reducing taxes on CFLs thinking of affordability and mass deployment to get the technology well deployed.**



## Additional Regional Objective (cont'd)

*“ Fiscal instrument and Incentives: VAT reduction for efficient lighting products*

Proposal for baseline studies with convincing data

*“ En.lighten tools available – **NOT DISCUSSED:***

*“Country grid-lighting and off-grid lighting assessment*

*“ECOWAS Lighting Policy Economic Analysis*

*“Toolkit*



# Country Lighting Assessments



## ON GRID

Benin



The transition to energy efficient lighting in the residential, commercial, industrial and outdoor sectors for all major lamp types would result in the following benefits:

### Financial Benefits

**5.2 million USD**  
annual savings



**2 months**  
payback period

### Energy Saving Benefits

Potential Savings:

35.5 Gwh in annual electricity consumption



Equivalent to:

Annual electricity consumption of 17.8 thousand households

4.2% of total national electricity consumption



3.1 kilotonnes of crude oil

29.2% of electricity consumption for lighting

### Climate Change Mitigation Benefits



25.0 kilotonnes annual reduction of carbon dioxide emissions



## OFF GRID

Nigeria



A full transition to energy efficient off-grid lighting would result in the following benefits:

### Economic and Energy Benefits

**1.4 billion USD**  
annual savings\*



**14 months**  
payback period

2.3 billion litres of kerosene,  
1.3 billion candles and  
314 million batteries annual savings\*



17.3 million barrels of crude oil energy equivalent

### Climate Change Mitigation Benefits

Potential Savings:

6.4 million tonnes of carbon dioxide emissions reduction annually



Equivalent to:

1.6 million mid-size cars off the road

### Environmental, Health and Social Benefits



Annual savings of 66.1 USD per household per year

19.1 million households with better quality light

Reduction or elimination of fuel-related health issues, fire hazards and toxic fumes



## Additional Regional Objective

- “ *Define a scheme to support local manufacturers*
- “ From the participants perspective the current strategy is too oriented towards promoting importation of products. It should instead facilitate the support of Manufacturers.
- “ **Consensus:**
  - “ **All participants agreed that support to local manufacturers should be considered as a key priority objective.**



# Key barriers and risks towards the implementation of the Strategy

“Dealing with multiple countries with different cultures, traditions and aspirations



## ***Session B: Timeframe and Measuring Progress***

*"All participants' submitted proposals for completing the Indicators within the Logical framework"*



# Milestones, indicators and means of verification for monitoring and measuring

Strategy	Indicators	Baseline (2014)	Target (2020)	Sources of Verification	Risks and Assumptions
<b>GOAL:</b> To establish an integrated policy approach for a sustainable and rapid transition to on-grid and off-grid efficient lighting in the ECOWAS Region	ECOWAS directives regarding transition to efficient lighting implemented at national level				
<b>PROJECT OBJECTIVE 1:</b> To make key stakeholders aware of the benefits of on-grid and off-grid efficient lighting	Domestic: % of households using on-grid and off-grid efficient lighting technologies  Commercial: % of efficient lighting equipment in market  Industrial: % of efficient lighting equipment in market	%	80% (?)		
<b>OUTCOME 1:</b> Key stakeholders are aware of and appreciate the benefits of on-grid and off-grid efficient lighting					
<b>Output 1.1:</b> Awareness created on the advantages and benefits of on-grid and off-grid efficient lighting products in all ECOWAS countries	Overall increase in efficient light use?				
<b>Output 1.2:</b> Advantages and benefits of efficient lighting (compared to incandescent lamps) demonstrated to stakeholders	Reduction in energy consumption?  X Franc CFA amount of energy saved?  Reduction in household expenditure on lighting?				

## Milestones, indicators and means of verification for monitoring and measuring

<p><b>PROJECT OBJECTIVE 2:</b> To implement harmonized mandatory labelling and certification for on-grid and off-grid efficient lighting products in all ECOWAS countries</p>	<p>Number of countries have introduced mandatory ECOWAS labelling and certification</p> <p>All member countries able to set up a system of labelling and certification?</p>				
<p><b>OUTCOME 2:</b> Key stakeholders are using mandatory labels of on-grid and off-grid efficient lighting products</p>	<p>Number of key stakeholders using labels as guides in procurement of products &amp; equipment?</p>				
<p><b>Output 2.1:</b> Awareness created on of the mandatory labels of on-grid and off-grid efficient lighting products in all ECOWAS countries</p>	<p>Number of importers that use or require services of standards organisations?</p> <p>Number of public awareness materials (e.g. flyers, newspaper adverts) relating to labelling distributed across countries.</p> <p>Retailers &amp; manufacturers using labelling in their promotional</p>				



**Thanks  
Merci  
Obrigado**

[www.enlighten-initiative.org](http://www.enlighten-initiative.org)



**BMZ**



Federal Ministry  
for Economic Cooperation  
and Development



**Future-makers.**  
Building the futur  
Let's join forces.

**PHILIPS OSRAM**



**nLtc**

National Lighting Test Centre  
China