

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

### Transition to efficient lighting -Current situation in selected ECOWAS countries

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# National Initiatives on Efficient Lighting

- Mandatory MEPS and labeling for CFLs in place Ghana
- Completed Draft MEPS for CFLs Nigeria, Senegal
- Plan to prepare draft MEPS Cote d'Ivoire, Cape Verde
- "Banning of importation and production of incandescent lamps Senegal, Ghana
- <sup>"</sup> Awareness raising campaigns on energy-efficiency and conservation Cape Verde, Gambia, Ghana, Senegal
- <sup>"</sup> National bulk procurement and distribution programs for CFLs - Burkina Faso, Cape Verde, Gambia, Ghana, Mali, Nigeria, Senegal and Togo



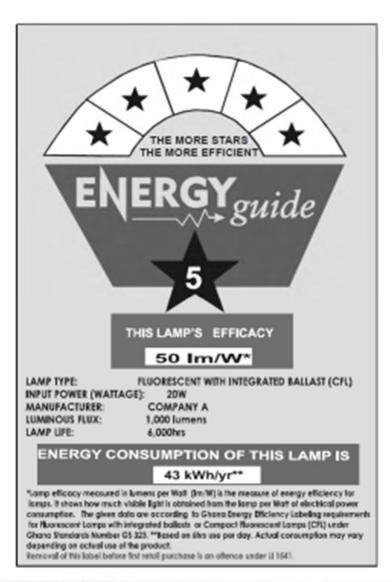
# **Other Initiatives**

- <sup>"</sup> Lighting Testing Facility Nigeria, Ghana
- <sup>"</sup> Development of sustainable markets efficient offgrid lighting technologies e.g. LED (Lighting Africa program)- Ghana, Nigeria, Senegal
- Consumer & retail education campaigns on LEDs (Lighting Africa program) - Liberia, Ghana, Mali, Senegal
- Distribution of off-grid lighting products to rural NGOs) Liberia, Mali, Burkina Faso, Senegal



**ECOWAS Regional workshop on Energy Efficiency** 

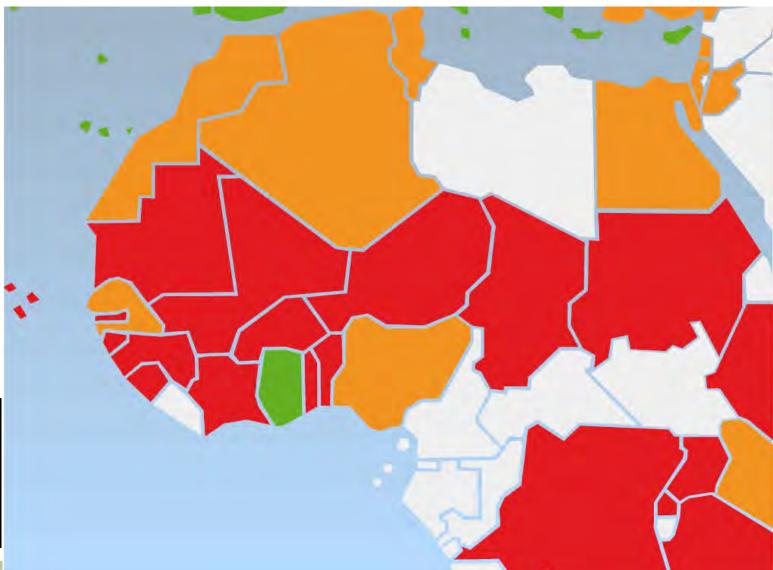
# Label for lamps in use in Ghana





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# Lighting Policy Status - Overall



	KEY	
Colour	Policy Status	
	Advanced	
	In Progress	
	Limited	
	No information	
	available	

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## **Status of ECOWAS Countries - MEPS**

Countries with many or intensive MEPS activities underway or planned	Countries with some MEPS activities underway or planned	Countries with no MEPS activities
	Nigeria	Burkina Faso
		Gambia
		Guinea Bissau
		Mali
		Sierra Leone
	je.	

## Status of ECOWAS Countries - SPM

Countries with many or intensive activities underway or planned	Countries with some activities underway or planned	Countries with no activities
Nigeria	Burkina Faso	Guinea
	Cote d'Ivoire	Sierra Leone
	Guinea Bissau	
	Тодо	

## **Status of ECOWAS Countries - MVE**

Countries with many or intensive activities underway or planned	Countries with some activities underway or planned	Countries with no activities
Nigeria	Cape Verde	Guinea
	Gambia	Liberia
		Niger
		Sierra Leone

# **Status of ECOWAS Countries - ESM**

Countries with many	Countries with some	Countries with no
or intensive activities	activities underway or	activities
underway or planned	planned	activities

# Key stakeholders - Efficient lighting

- " Government
  - Energy Ministry
  - Environment Ministry
  - Trade & Industry Ministry
  - Standards Authority
  - Customs Department
- " Private sector
  - Efficient lighting manufacturers
  - Efficient lighting importers
  - Efficient lighting wholesalers and retailers
  - Financial institutions



# Key stakeholders - Efficient lighting

- Civil society
  - consumer associations
  - community-based organization
  - similar advocacy groups
- " Technical institutions
  - research institutions
  - universities
  - polytechnics



## Influence of Efficient Lighting on Climate Change

	Annual CO <sub>2</sub> reductions, kilotonnes CO <sub>2</sub>		
Country	Efficient On-Grid Lighting	Efficient Off-Grid Lighting	
Benin	25.0	454.4	
Burkina Faso	22.4	774.7	
Cape Verde	31.9	N.A	
Cote d'Ivoire	108.6	820.2	
Gambia	4.6	41.8	
Ghana	91.0	882.5	
Guinea	17.5	215.1	
Guinea Bissau	2.7	34.8	
Liberia	10.6	98.0	
Mali	16.7	339.3	
Niger	17.2	637.1	
Nigeria	580.0	6400.0	
Senegal	76.7	220.0	
Sierra Leone	3.5	136.7	
Тодо	4.0	271.6	
Total	1,012.4	11,326.2	

## **Benefits from Transition to Efficient On-grid Lighting**

Country	Electricity savings, US\$million	Energy savings, GWh	Payback time, months
Benin	5.0	40.0	2
Burkina Faso	7.6	30.0	2
Cape Verde	14.7	37.3	1
Cote d'Ivoire	22.0	250.0	5
Gambia	1.0	10.0	1
Ghana	36.0	430.0	4
Guinea	3.0	30.0	5
Guinea Bissau	1.2	3.1	1
Liberia	4.7	10.0	1
Mali	8.0	30.0	2
Niger	2.0	20.0	3
Nigeria	85.0	1,380.0	7
Senegal	25.0	140.0	3
Sierra Leone	1.3	4.0	1
Тодо	3.5	20.0	3
Total	220.0	2434.4	Average 3 months

#### **Benefits from Transition to Efficient Off-Grid Lighting**

Country	Annual savings*, US\$million	Kerosene savings, million litres	Payback time, months
Burkina Faso	343.9	343.9	7
Cote d'Ivoire	400.6	303.0	6
Ghana	375.6	326.0	7
Guinea Bissau	25.3	4.0	6
Mali	256.1	43.0	6
Nigeria	1400.0	2300.0	14
Sierra Leone	105.3	17.0	6
Togo	99.5	96.0	9

# Strengths of region in transition towards efficient lighting

- Potential positive impact of efficient lighting for end users and public authorities
- Wide social acceptance of efficient lighting products
- "Successful pioneering initiatives on efficient lighting



# Barriers to transition towards efficient lighting in ECOWAS Region

- Limited political awareness of the benefits of efficient lighting
- <sup>"</sup> Regulatory and Institutional obstacles
- <sup>"</sup> Lack of a supporting incentive structure
- <sup>"</sup> Lack of capacities of public and private institutions
- <sup>"</sup> Limited local production of efficient lighting products
- " Absence of metering systems
- " Lack of research and development
- " Market barriers
- User Behavior and awareness



Transition to Efficient Lighting in ECOWAS Region

- <sup>"</sup>Sustainable & effective transition to efficient lighting in ECOWAS Region requires
- "Harmonised strategy MEPS. SPM, MVE, ESM integrated approach
- " Cohesive set of regional activities
  - <sup>"</sup> supporting countries yet to embark on initiatives
  - " strengthening countries already with initiatives
- <sup>"</sup> Cohesive set of national activities





## Thank You.

### www.enlighten-initiative.org

