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Lamp Sampling Activities in Six Southeast Asian Countries

Sommai Phon-Amnuaisuk

International Institute for Energy Conservation (IIEC) – Asia









Overview

- Objective and scope of the lamp sampling activities in the 6 Southeast Asian countries
- Brief introduction of the activities
- Overview of market characteristics
- Lessons Learned and Recommendations











Objective

The Lamp Sampling activities in the 6 Southeast Asian countries

The Lamp Sampling activities aim to support the 6 SEA countries in their **capacity building** efforts to strengthen their national and regional resources for efficient lighting MVE which are the essential activities to ensure a sustainable transition to efficient lighting.











Scope of Lamp Sampling



- Key activities
 - Identify and sample EE lamps (for indoor applications) in the 6 target countries
 - Pack and ship lamps to the GELC in Beijing for testing.
- Lamp types
 - Only omnidirectional CF and LED lamps for General Lighting Service (GLS)

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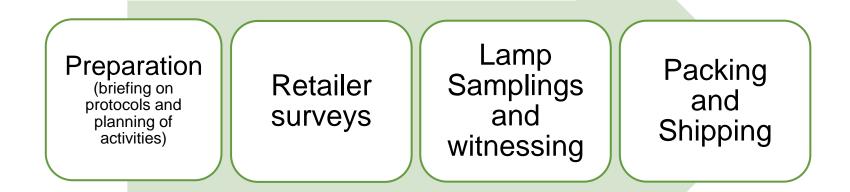
Scope of Lamp Sampling

| CF Lamps | |
|----------------------------|-------------------------------|
| LED lamps | |
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Introduction

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4 major steps in this activity





Preparation

Ensuring common understanding among participating countries

- Designation of country's focal point
- Conclusion questionnaires and Lamp Sampling sheets
- Briefing on protocols and procedures (prepared by GELC)
 - IIEC's representative in each country contacted and provided brief requirements to the country designee
 - GELC and IIEC organized a teleconference meeting prior to an implementation of the activity for each target country
- Conclusion of lamp sampling plan



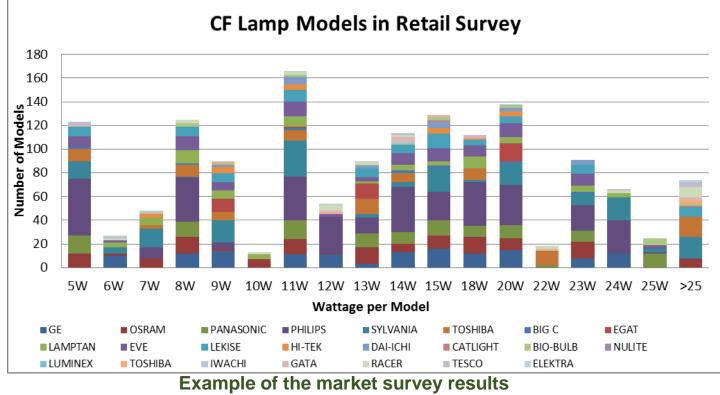






Retailer Surveys

Identifying popular models of CF and LED lamps that need to be purchased in each country



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Lamp Sampling and Witnessing

Purchasing correct lamps and ensuring integrity of the lamp sampling activities

- IIEC's representatives in collaboration with the country designee conducted the lamp samplings
- 80 and 20 models of CF and LED lamps were purchased
 - CFLs = 640 samples
 - LED lamps = 400 samples
- The lamp sampling sheet was used to distinguish the models and ensure the integrity of the program (signatures of the country designee needed)









Packing and Shipping

Ensuring that all goods will be delivered in good condition

- Goods were sent by trustworthy air freight forwarders.
- IIEC provided guidelines and assisted target countries regarding packing and shipping issues.
- IIEC worked in close collaboration with the selected courier companies and the country designees.









CAMBODIA

| Country | Common types of Lamp Retailer* | Availability of Multiple Brands of Lamps | Most common wattage ranges | Most popular models | Most popular Colour Temp. |
|----------|--|---|----------------------------------|---------------------------|------------------------------------|
| Cambodia | Medium-sized electrical hardware shops Specialized lighting shops, small shops | YES | 11 – 18 W (CF) 5 – 9 W (LED) | 11W (CF) 5W (LED) | Day light (6,500K) |



INDONESIA

| Country | Common types of Lamp Retailer* | Availability of Multiple Brands of Lamps | Most common wattage ranges | Most popular models | Most popular Colour Temp. |
|-----------|--|---|-------------------------------------|---------------------------|------------------------------------|
| Indonesia | Medium-sized specialized lighting shops Supermarkets, hypermarkets | YES | 5 – 8 W (CF) 5 – 9 W (LED) | 8W (CF) 7W (LED) | Day light (6,500K) |



*Data collected in Jakarta

LAO PDR

| Country | Common types of Lamp Retailer* | Availability of Multiple Brands of Lamps | Most common wattage ranges | Most popular models | Most popular Colour Temp. |
|---------|--|---|-------------------------------------|---------------------------|------------------------------------|
| Lao PDR | Small retailers Electrical hardware shops, specialized lighting shops | YES | 5–9W (CF) 5–7W (LED) | 5W (CF) 7W (LED) | Day light (6,500K) |

*Data collected in Vientiane



PHILIPPINES

| Country | Common types of Lamp Retailer* | Availability of Multiple Brands of Lamps | Most common wattage ranges | Most popular models | Most popular Colour Temp. |
|-------------|---|---|----------------------------------|---------------------------|------------------------------------|
| Philippines | Hypermarkets Specialized lighting shops | YES | 11 – 18 W (CF) 5 – 9W (LED) | 11W (CF) 7W (LED) | Day light (6,500K) |

*Data collected in Manila



THAILAND

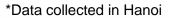
| Country | Common types of Lamp Retailer* | Availability of Multiple Brands of Lamps | Most common wattage ranges | Most popular models | Most popular Colour Temp. |
|----------|---|---|----------------------------------|---------------------------|------------------------------------|
| Thailand | Hypermarkets Specialized lighting shops, Electrical hardware shops | YES | 11 – 20 W (CF) 5 – 7W (LED) | 11W (CF) 5W (LED) | Day light (6,500K) |

*Data collected in Bangkok



VIETNAM

| Country | Common types of Lamp Retailer* | Availability of Multiple Brands of Lamps | Most common wattage ranges | Most popular models | Most popular Colour Temp. |
|---------|---|---|----------------------------------|---------------------------|------------------------------------|
| Vietnam | Small specialised lighting shops Small electrical hardware shops, small shops | NO | 11 – 15 W (CF) 5 – 7W (LED) | 5W (CF) 7W (LED) | Day light (6,500K) |





Summary of Market characteristic

| Country | Most Common type of Lamp Retailers | Most popular models |
|-------------|---|----------------------|
| Cambodia | Medium-sized electrical hardware shops | 11W (CF) 5W (LED) |
| Indonesia | Medium-sized specialized lighting shops | 8W (CF) 7W (LED) |
| Lao PDR | Small retailers | 5W (CF) 7W (LED) |
| Philippines | Hypermarkets | 11W (CF) 7W (LED) |
| Thailand | Hypermarkets | 11W (CF) 5W (LED) |
| Vietnam | Small specialised lighting shops | 5W (CF) 7W (LED) |

The most popular wattage range of CF and LED lamps in these 6 target countries appear to be those for replacement of 25 – 60W incandescent lamps.









Protocol Briefing – Issue

Issue: Most participating countries unable to follow all the requirements specified in the protocols with only one teleconference

Action: Additional visual aids (presentations) prepared to assist the briefing session



Lamp Sampling - Issue

Issue: Small retailers and some large retailers do not carry sufficient number of lamps, which are from the same batch number (same mfg date)

Action: Most samples were purchased from only large retailers. (Protocols suggest samples shall come from large and small retailers.)



Large retailers eventually chosen

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Preparation and Sampling – Lessons Learned & Recommendations

Lessons Learned

Protocol's requirements are relatively complex causing some difficulties to the participating countries in understanding and complying all requirements.

Recommendation

Lamp sampling protocols and procedures should be simplified and made flexible, while maintaining integrity of the sampling process.











Packing - Issue

Issue: Packing a large quantity of lamp samples requires preparation of appropriate materials and approaches.

Action: Specialized shipping/packing companies were chosen to ensure proper packing.



Packages of all samples from each country weigh around 60kg with total volume around 1-2 cu.m.

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Packing – Lessons Learned & Recommendations

Lessons Learned

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Specific packages and packing methods are required for air freight of fragile goods. Packing of these products has to comply with the packing regulations imposed by courier companies.

Recommendation

Professional packing service providers to ensure compliance with requirements for shipments of hazardous materials, such as mercury-added lamps (CF lamps).









Shipping - Issue

Issue: Availability of courier services - many air freight forwarders in Cambodia refused to ship lighting products

Action: Extra efforts and time were mobilized in seeking the shipping companies that are willing to provide services.











Shipping – Lessons Learned & Recommendations

Lessons Learned

Shipping of fragile and hazardous materials by air freight can be complicated, and may not be allowed in some countries.

Recommendation

Prior to implementation of the lamp sampling activities, feasible shipping options should be explored. Sea freight could be included as an option.









Clearance of goods – Issue

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Issue: Air freight forwarders are not familiar with the "customs duty & tax paid by sender" option. As a result, the Chinese customs office quarantined the goods upon arrival in Beijing.

Action: Extra efforts were spent for modification of air way bills, allowing shipping companies to pay all duties and taxes.











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Shipping – Lessons Learned & Recommendations

Lessons Learned

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Requirements on the sender of goods to pay customs duty caused confusion and delay in the whole shipping process.

Recommendation

A budget for customs duty and tax should be allocated to the testing lab (or the recipient of goods), so that the clearance of the goods can be fast track.













Thank you







