## The Workshop on facilitating the JCM implementation in Asia and Pacific 28 February -1 March 2017, Tokyo, Japan

#### FLAGSHIP MODEL PROJECTS IN CAMBODIA

## INSTALLATION OF LED STREET LIGHTING SYSTEM WITH WIRELESS NETWORK CONTROL OF MINEBEA CO., LTD

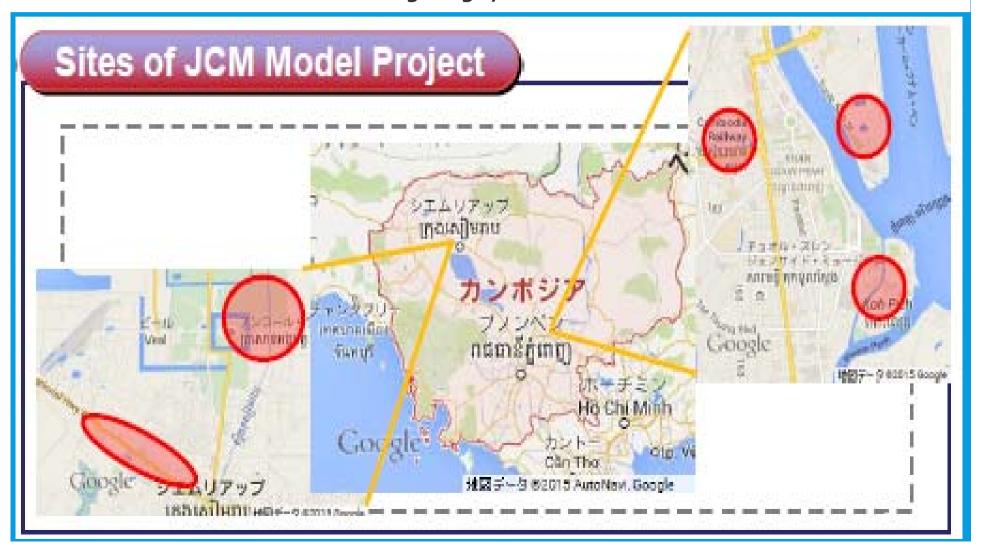
By Uy Kamal

Deputy Director

Department of Climate Change, GSSD, Cambodia

## **PROJECT SITE**

Installation of LED street lighting system with wireless network control



#### Formation of Minebe's JCM Project

Installation of LED street lighting system with wireless network control

**International Consortium** 

Minebea

OCIC (priv. company)

Siem Reap (Public inst.)

**APSARA (Public Inst.)** 

#### Low carbon technologies from Japan



Teamwork



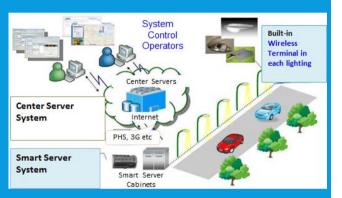
Iwasaki LED street light



Minebea wireless

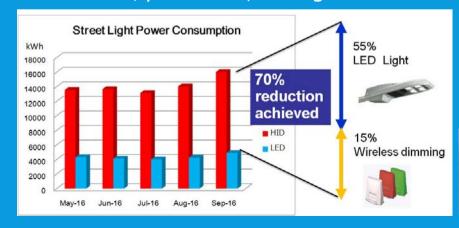


NTT Comm. network and cloud service



#### 70% energy (=GHG) saving

- •100USD/year/lights saving
- ●800KUSD/year for 8,000 lights







#### **Quantity of lights**

Consortium	PLAN
OCIC	2,804
SIEM REAP	1,994
APSARA	2,936
TOTAL	7,734

## PROJECT STATUS AND SCHEDULE

Work Name/Month	<b>Current Status</b>	Planned Schedule
Announcement of selection	Jun 30, 2015	
<b>Contract of financing</b>	Sep 30, 2015	
Design & Manufacturing	Started Jan 2016	Expected to complete in Nov 2017
Installation	Started in March 2016	Expected to complete in Jan 2018
Commissioning	Partly Started in Jun 2016	Expected to complete in Jan 2018

### **CHALLENGES**

### 1. The installation plan delay

- External issue related with settlement of residents
- External issue related to road construction
- Need to carrying over FY15 budget for 1 year, so that COs can install FY15 lights in FY17 with applicable budget.

### 2. Overall CO organizational preparation is not good enough to prepare for the scheduled installation

- Execution plan including government budget and report
- Internal project management of each CO i.e. delay in pole procurement, wire shortages, pole modification
- Thow can MoE-C get deeper involvement with Minebea's COs?
  - MoE-C may follow up with CO's progress more frequently and closely communicate with them about the current status, may help. 5

### **CHALLENGES**

#### 3. Documentation is a concern

- Access to the required documentations is not easy as it vary from one to another in term of type and availability.
  - i.e. For private company, sharing documents is fine, but public institution is still considering as subject to be discussed.

#### 4. No national and sectoral GHG emission reduction targets

- Government level approach for enhance the GHG mitigation projects still base on voluntary approach,
- MoE-C assisted Minebea to import JCM materials LED devices and accessory with free of import tax. No clear incentive policy for all JCM projects. Need further discussion with MoEF.
- No carbon credit policy at the moment.
- We have INDC/NDC, but no concrete strategy and action plan to achieve it yet.

## CONCLUSION

Form the first JCM model project implementation, we find some key messages:

- Partially sharing budget by COs/project participants is a key to engage them in the project implementation activity effectively,
- Capacity Building of COs/project participants is key to success JCM project implementation,
- Understanding well about the context of individual local institutional and management structure is key information for preparing a successful JCM project,
- JCM secretariat of Cambodia should extend its role in coordination/facilitation activities widely.

# OTHER POTENTIAL JCM PROJECTS IN THE PIPELINE

- 1. Introduction of Ultra-lightweight Solar Panels for Power Generation at International School
  - ➤ The proposed Methodology KH\_AM002 approved by electronic means
- 2. Introduction of 1MW Solar Power System and High Efficiency Centrifugal Chiller in Large Shopping Mall
- 3. Introduction of 0.8MW Solar Power Generation in International School
- 4. Introduction of Inverter for Reducing Energy Consumption at Phum Prek Water Treatment Plant

# OTHER POTENTIAL JCM PROJECTS IN THE PIPELINE

5. Agreement between
MoE-C and MITSUI for Prey
Lang Forest Conservation
Project (REDD+) as a JCM
Project was officially signed
on 9 January 2017



#### 6. MoE-C

Accepted the request of extension of the validity of JCM on Low Carbon Growth Partnership between Cambodia side and Japanese side until 2030.



## FEASIBILITY STUDY IN FY2016

## City to City Cooperation initiative

- Action Plan for Phnom Penh City
- Energy Saving Phnom Penh City
- Solar in Siem Reap
- Biomass in Siem Reap

## THANKYOU!

