

# ELECTRICITY AUTHORITY OF CAMBODIA

## Regulatory Monitoring Process



**30 May 2013, Phnom Penh, Cambodia**

## A- FRAMEWORK

**For process monitoring:**

- **Determine Purpose and Uses**
- **Develop Measurable Objectives**
- **Develop Evaluation Questions**
- **Collect / gather credible evidence**
- **Analyze Information and Develop Conclusions**
- **Report Findings**

# 1 Main purposes

**Monitoring process is a realtime scrutiny of regulatory activities by measuring and analysing supply performance to identify critical supply issues : reliability and customer experience (fair supply service).**

- **Learn from experiences to improve practices and activities in the future**
- **internal and external accountability of the ressource uses and the results obtained**
- **informed decisions ( on the future)**
- **to promote empowerment of beneficiaries**

# 1 Main purposes

**Monitoring process is a realtime scrutiny of regulatory activities by measuring and analysing supply performance to identify critical supply issues : reliability and customer experience (fair supply service).**

- **Learn from experiences to improve practices and activities in the future**
- **internal and external accountability of the ressource uses and the results obtained**
- **informed decisions ( on the future)**
- **to promote empowerment of beneficiaries**

# 1 Main purposes

**Monitoring process is a realtime scrutiny of regulatory activities by measuring and analysing supply performance to identify critical supply issues : reliability and customer experience (fair supply service).**

- **Learn from experiences to improve practices and activities in the future**
- **internal and external accountability of the resource uses and the results obtained**
- **informed decisions ( on the future)**
- **to promote empowerment of beneficiaries**

# 1 Main purposes

**Monitoring process is a realtime scrutiny of regulatory activities by measuring and analysing supply performance to identify critical supply issues : reliability and customer experience (fair supply service).**

- **Learn from experiences to improve practices and activities in the future**
- **internal and external accountability of the resource uses and the results obtained**
- **informed decisions ( on the future)**
- **to promote empowerment of beneficiaries**

# 1 Main purposes

**Monitoring process is a realtime scrutiny of regulatory activities by measuring and analysing supply performance to identify critical supply issues : reliability and customer experience (fair supply service).**

- **Learn from experiences to improve practices and activities in the future**
- **internal and external accountability of the ressource uses and the results obtained**
- **informed decisions ( on the future)**
- **to promote empowerment of beneficiaries**

# Monitoring Activities

## Monitoring Activities:

- **Collect Data (in efficient, transparent and timely manner)**
- **identify, categorize factors relevant to specific concern (reliability, meter correctness, bill complaint, tariff setting)**
- **report ( display) : report should be clear, meaningful for different use, and easy to use for appropriate actions.**



# Monitoring Aspects

## Monitoring Aspects:

- **Relevance** (supply parameters, infrastructure, scale, geography)
- **Effectiveness** (efficiency, quality of electricity, transparency, fairness)
- **Efficiency**: cost-effective monitoring activities
- **Impacts**:
- **Sustainability** (economic, environment and social aspects)

## 2 Measurable Objective

**Objective of regulatory process are defined step by step through improvement in Power Sector.**

- **No discrimination between big operator (EdC) and small REE.**
- **3 aspects to consider in mind:**
  - **quantity / quality (what do we do and how do we manage)**
  - **Inherent (what were the effects/ change)**
  - **Impacts : longterm effects (on reliability, quality of electricity, and fair and stable tariff, helping the poors)**

# Objectives

## Some objectives (improved over time):

- **Improve Power Sector infrastructures so the supply is 24/24 with balance of cost/quality of electricity.**
- **Meet the demand of electricity while keep the electricity price at affordable level.**
- **Improve reliability of electricity supply in cities and increase electrification rate by grid expansion.**
- **Improve REE management.**
- **Uniform tariff and helping the poors.**
- **Affordable tariff for Industrial Sector.**

## 3 Evaluation Questions

**We ask ourselves.**

-

## 4 Credible evidences

**There are rumors, news in local media.**

- **Office of Customer Affairs is establish for this purposes.**
- **There are evidences on electrocution, on fire hazard. EAC consider improving safety in electricity supply.**
- **There are evidences on meter correctness issue, on unauthorized use of electricity...**
- **Laboratory staffs help licensee to improve metering system.**

## 4 Credible evidences

### **Customer related data.**

- **Demographics in licensee zone, number of household or families, number of connections.**
- **Customer categories: small customer and medium customers, MV customer.**

### **Supply level data.**

- **Sale volume, expenditures, networks components...**

### **Performance related data.**

- **Number of interruptions, number of complaints...**

## B- Tools and Assistance

### **Tools:**

- **GIS software. GIS based monitoring.**
- **Access database develop inside department**
- **SQL database**
- **MME give management tool to REE, but EAC has own planning on REE training.**
- **Later EAC decide to make own tool for REE.**
- **Training for REE are continuous.**

## B- Priorities

### Priorities:

- Grid expansion and standardized network.
- 24 hours service and safety.
- Use of MV line as distribution network and connection to EdC grid.
- Uniform tariff and helping the poors.
- Coverage of distribution network in rural area.
- Customer experience: fairness in electricity supply, safety performance.
- System stability.
- Grid quality.



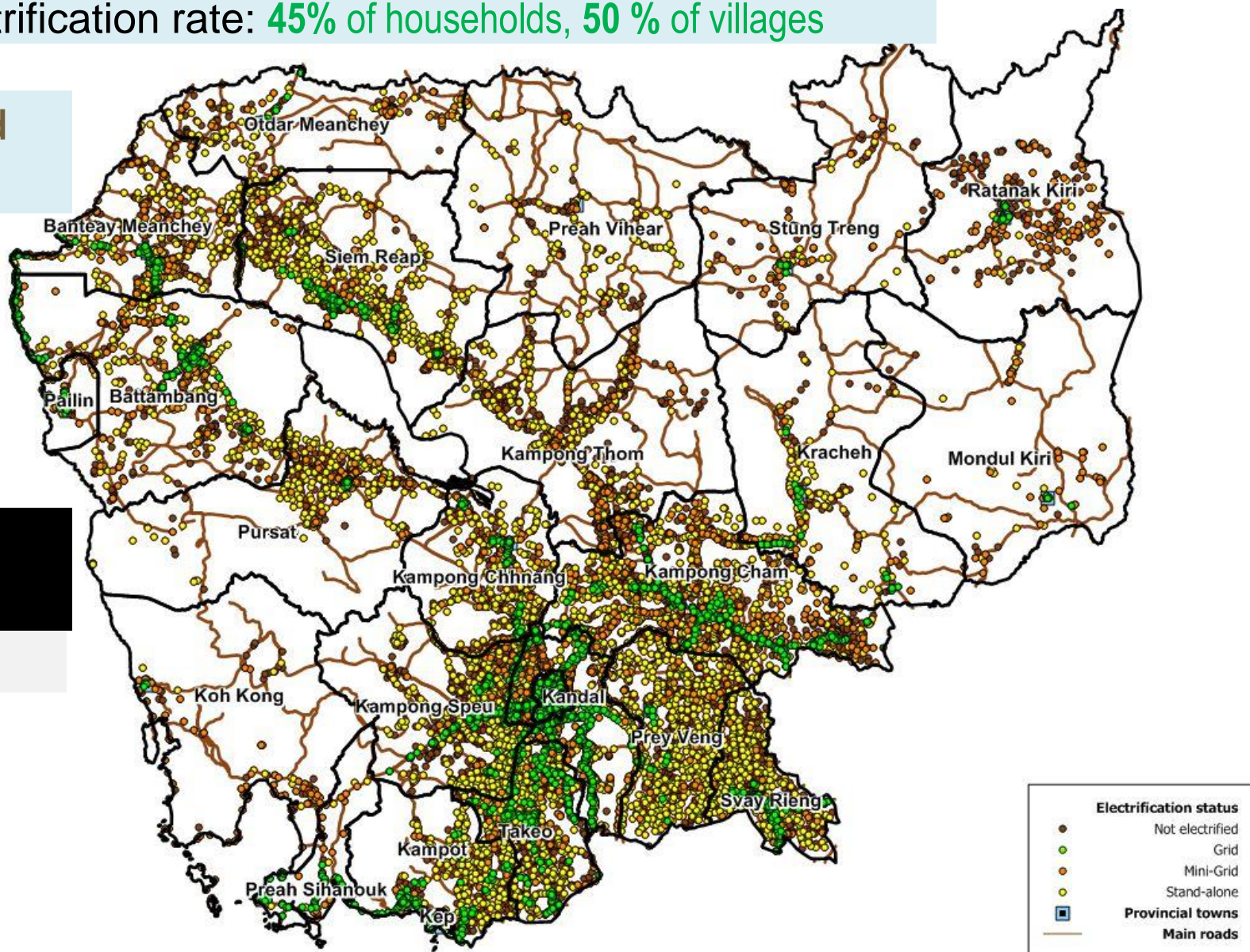
# Status of Access to Electricity in 2012

National electrification rate: **45% of households, 50 % of villages**

**Diesel Mini Grid  
run by REEs**

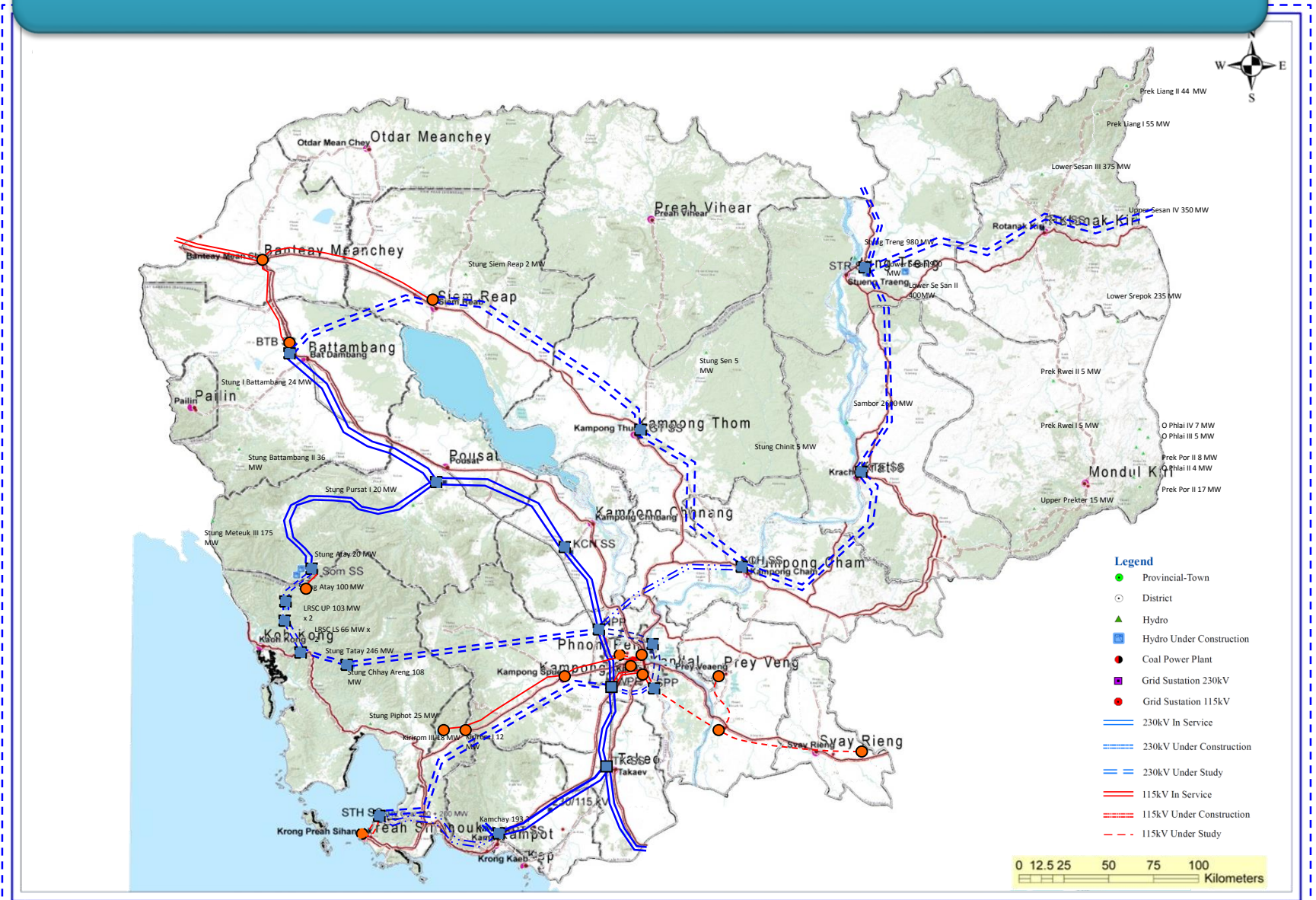
**Not electrified:  
BCS, 25% HH**

**Not electrified**



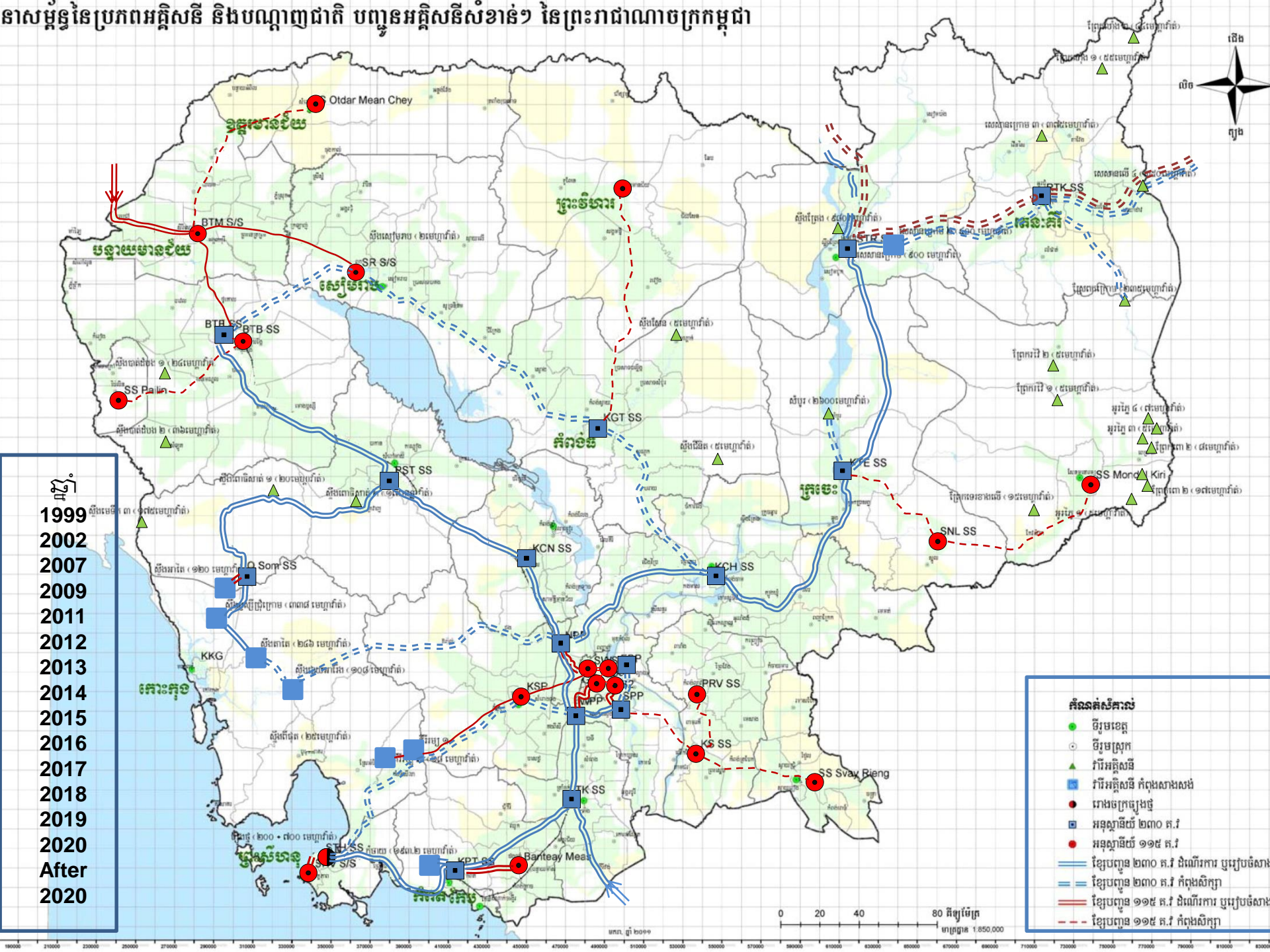


## Situation of Transmission Lines





# ទ្វារសមុទ្រនៃប្រភពអគ្គិសនី និងបណ្តាញជាតិ បញ្ជូនអគ្គិសនីសំខាន់ៗ នៃព្រះរាជាណាចក្រកម្ពុជា



**THANK YOU FOR YOUR KIND ATTENTION**