EU Dialogues on Smart Grid

Introduction to WADE THAI and the Smart Thai Project

Alan Dale Gonzales
WADE Thai Chairman

Germany, Belgium, France
November 2-8, 2011
Introduction to WADE Thai
WADE THAI Mission

1. To promote the development, implementation and dissemination of DE in Thailand

2. To bring about effective power sector reform which eliminates barriers to DE and creates real market opportunity for DE

3. To provide its Members and supporters with value added market intelligence, information and business opportunities
WADE THAI Objectives

1. To form an Alliance among existing global and local associations/organisations to address shared concerns and enhance networking opportunities

2. To conduct advocacy activities for the enhancement of policies and programs that level the playing field for DE

3. To organise events and activities designed to promote and advance the market for DE technology and showcase member product offerings

4. To conduct cutting-edge research and analysis on energy and the environment and disseminate market intelligence and relevant news to keep members informed of the latest developments in the global DE marketplace

5. To formulate projects and activities that will generate business opportunities for members
WADE THAI Structure

- WADE Global
- Global Alliance
- WADE THAI
  - Board of Directors
  - Executive Director
  - Donors/Sponsors
  - Administration
- Members / Working Groups
Introduction to the

Smart/Intelligent Grid Development and Deployment in Thailand (Smart Thai)
Specific Objective

• Transformation of the generation, transmission and distribution network of Thailand through the enhancement of the capacity of Thai private and public sector organisations in introducing and promoting Smart/Intelligent Grid systems thereby contributing to the national development goals of Thailand in the area of environment, climate change and energy security
Component 1: Mainstreaming Smart/Intelligent Grid systems in the generation, transmission and distribution activities in Thailand

• Result 1.1: Supporting policies and regulatory frameworks for the adoption of Smart/Intelligent Grid systems strengthened

• Result 1.2: Understanding of relevant government agencies on the application of Smart/Intelligent Grid systems enhanced through dialogues with EU counterparts
Component 2: Capacity building, knowledge management and institutional development

- Result 2.1: Knowledge platform for the promotion and implementation of Smart/Intelligent Grid systems established and operational

- Result 2.2: Handbook on Smart/Intelligent Grid systems development and deployment, including EU best practices, completed and disseminated

- Result 2.3: Capacities of relevant public and private organisations on Smart/Intelligent Grid systems developed through workshops, training, corporate exchanges, and public-private partnerships
Component 3: Supporting the introduction of pilot Smart/Intelligent Grid systems

• Result 3.1: Technical and economic feasibility of implementing Smart/Intelligent Grid systems on a pilot basis, including CDM potential, established

• Result 3.2: Simulation system to demonstrate the technical and economic merits of the pilot Smart/Intelligent Grid system developed and tested
Conceptual Framework

Analysis of the Problem

Design and formulation of the Action

Mainstreaming and Policy

Capacity building and Knowledge management

Technology and Piloting

Adaptation and replication of smart grid systems

Transformation of generation, T&D network in Thailand

Contribution to national development goals of Thailand in the area of environment, climate change & energy security
Participants of EU Dialogues
Electricity Generating Authority of Thailand (EGAT)

The Electricity Generating Authority of Thailand was established on May 1, 1969. It presently is the state enterprise under the Ministry of Energy.

EGAT presently builds, owns and operates several types and sizes of power plants across the country with a combined installed capacity of 13,617.10 MW, accounting for about 47.8 percent of the country's 28,479.00 MW generating capacity. EGAT also purchases electric power from private power companies and neighboring countries.
The Provincial Electricity Authority is a government enterprise under the Ministry of Interior. The authority’s responsibility is primarily concerned with the generation, distribution, sales and provision of electric energy services to the business and industrial sectors as well as to the general public in provincial areas, with the exception of Bangkok, Nonthaburi and Samut Prakran provinces. The PEA has expanded electricity supply to all areas covering 73 provinces, approximately 510,000 km², accounting for 99% of the country’s total area.
The Metropolitan Electricity Authority is a government enterprise under the Ministry of Interior.

Established in 1958, this organization was responsible for generating and selling electrical power in the metropolitan area until 1961, when the generating aspect was transferred to EGAT. MEA provides high class service while laying emphasis on sustainable growth of related business as well as responsibility for the society and the environment.
The Energy Policy and Planning Office (EPPO) is a pivotal agency in the formulation and administration of energy policies and planning for the national sustainability.
EPPO is entrusted with the following six missions:
1) Recommend energy policies and integrate/review energy management plans of the country;
2) Recommend national strategies for energy conservation and alternative energy promotion;
3) Recommend measures to solve and prevent oil shortage in both short and long terms;
4) Supervise, monitor and evaluate the effectiveness of national energy policy and energy management plans;
5) Administer the information and communication technology (ICT) with regard to energy issues of the country; and
6) Enhance EPPO to become a strategic organization.
The Energy Regulatory Commission of Thailand is appointed by His Majesty King Bhumibol Adulyadej as the independent regulatory agency. ERC consists of 7 members and aims to work independently and separately from policy framework as to ensure the equality and fairness nested between consumers, producers, and other relevant interest groups. The primary functions and duties are to oversee the regulations that deal with electricity systems of generation, transmission, distribution, and their system operator. Of particular, ERC's main objectives consist of monitoring energy market conditions by tariff review, licensing, approval of power purchase, dispute settlement and fulfilling its mandate, in order to counterbalance each other, to ensure maximum interests of the people and the country.
Committee on Science, Technology and Telecommunications of the Senate

The Committee conducts studies and provides inputs to the law makers in matters related to concepts, technologies and processes so that ultimately the law makers are able to formulate and revise the laws appropriately.
THANK YOU