Special Track
Smart Grid Development: Experiences and Benefits

Introduction to WADE THAI and the Smart Thai Project

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WADE Thai Chairman

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

Funded by:
European Union
Value Propositions

• WADE THAI will be an Alliance of existing associations in Thailand & globally
  – Shared concerns and cross-cutting issues
  – Differentiated solutions
• WADE THAI will be a platform for companies to go ASEAN
• WADE THAI will focus on
  – Financing
  – Technology transfer
  – Climate Change aspects
• WADE THAI will provide access to:
  – Market Intelligence and business opportunities
  – Reports, studies, seminars
  – Global network, members’ experiences
WADE THAI Activities

• Advocacy activities
• Provision of Policy and Regulatory updates
• Market monitoring and intelligence
• Preparation of proposals that will generate business opportunities for, among, and in collaboration with members
• Web-based matching between projects and funders
• Provision of services to members
• Workshops / Seminars / Conferences (Networking Opportunities)
Benefits of Members

• Leveraging of existing set ups to address shared concerns and cross-cutting issues
• Platform for expansion to other ASEAN countries
• Greater access to sources of financing
• Enhancement of market intelligence and business opportunities
• Access to centralised support for information, services and training on DE and Climate Change aspects
• Reports, studies, seminars
• Global network, members’ experiences
Introduction to the

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

Implementing Partner

World Alliance for Thai Decentralised Energy (WADE THAI)

Partner

World Alliance for Decentralised Energy (WADE)

Associate Partner

Full Advantage Co., Ltd. (FA)
Total duration of the action

- Duration: 30 Months (Jan 2011 – June 2013)
- Total Budget: EUR 255,084
- EU Contribution: 72%
General Objectives

• Improvement of the sustainable economic and social development of Thailand through the efficient delivery of sustainable, economic and secure electricity using Smart/Intelligent Grid systems based on EU models and technologies
Specific Objectives

• 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

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# Main Actors/Stakeholders

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<thead>
<tr>
<th>Actor/Stakeholder</th>
<th>Role(s)</th>
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<tbody>
<tr>
<td>1. Small-to-medium-sized industries who are users of energy in Thailand</td>
<td>- Participation in capacity building activities</td>
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<td>- Potential host of pilot smart grid system</td>
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<td>2. Small-to-medium-sized industries supplying energy equipment in Thailand</td>
<td>- Provision of information on components for feasibility study and</td>
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<td>computer simulation</td>
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<td>- Participation in capacity building activities</td>
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<td>3. Utilities and technology suppliers in EU</td>
<td>- Hosting of EU dialogues</td>
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<td>- Provision of experts in corporate exchanges</td>
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<td>- Provision of information on components for feasibility study and</td>
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<td>computer simulation</td>
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<td>4. Private generating companies in Thailand, such as: IPPs; SPPs; VSPPs</td>
<td>- Participation in capacity building activities</td>
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<td>- Identification of potential areas for piloting of smart grid systems</td>
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<td>5. Utilities on generation, transmission and distribution in Thailand, namely:</td>
<td>- Participation in dialogues with EU counterparts and other capacity</td>
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<tr>
<td>EGAT; PEA; MEA</td>
<td>building activities</td>
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<td></td>
<td>- Hosting of corporate exchanges from EU companies</td>
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<td>- Provision of information on components for feasibility study and</td>
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<td>computer simulation</td>
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<td>6. Relevant Government agencies in the energy sector, namely: MoE; DEDE; EPPO;</td>
<td>- Provision of information on components for feasibility study and</td>
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<td>ERC</td>
<td>computer simulation</td>
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<td></td>
<td>- Participation in training-workshops</td>
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<td>- Regular use of computer simulation for planning and decision-making</td>
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<td>related to future energy capacity additions in the country and</td>
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<td>investments in transmission and distribution networks</td>
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THANK YOU