



## **Smart Buildings** **Materials Testing And Rating** **Centers**

## **Smart Jobs** **Energy Efficiency School Curricula**

- NEED and Thailand
- Vocational Programs

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# Smart Buildings: Materials Testing And Rating Centers (SB-2)

## BACKGROUND

- Accurate, and reliable performance data are essential to the promotion of trade in energy-efficient building materials.
- Accurate labeling program helps in implementing of codes and provides verifiable compliance.
- Establishment of Testing and Rating Center would directly supports the Energy Smart Communities Initiative (ESCI).



## ***APEC Building Materials and Component Testing and Rating Centre Workshop***

3–4 June 2011, BKK

- Initiate plans for the successful establishment of a APEC Building Materials and Component Testing and Rating Centre.
- Demonstrate the practicality of energy-efficient building envelope components.
- Provide guidance on the fundamental infrastructure and related capacity building activities.



# Smart Jobs: Energy Efficiency School Curricula

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# NEED and Thailand: School Curricula on Thai Energy Education

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# Objectives

- Collaborate with NEED, the US-Based NGO
- Promote an energy conscious and educated society by creating effective networks of students and educators in Thailand
- Seeking APEC Partners + Fundings

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# Elements of a Successful Energy Education Program

- Focus on entire energy picture
- Quality resources: Activity-based Learning
- Easily accessible materials
- Continual outreach
- Professional Development



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# Elements of a Successful Energy Education Program

## Quality Materials

- Factual, Non-bias information
- Frequently updated data
- Classroom friendly materials/ activities
- Hands-on science curriculum
- Interdisciplinary activities
- Not just one more thing to fit into an already busy schedule

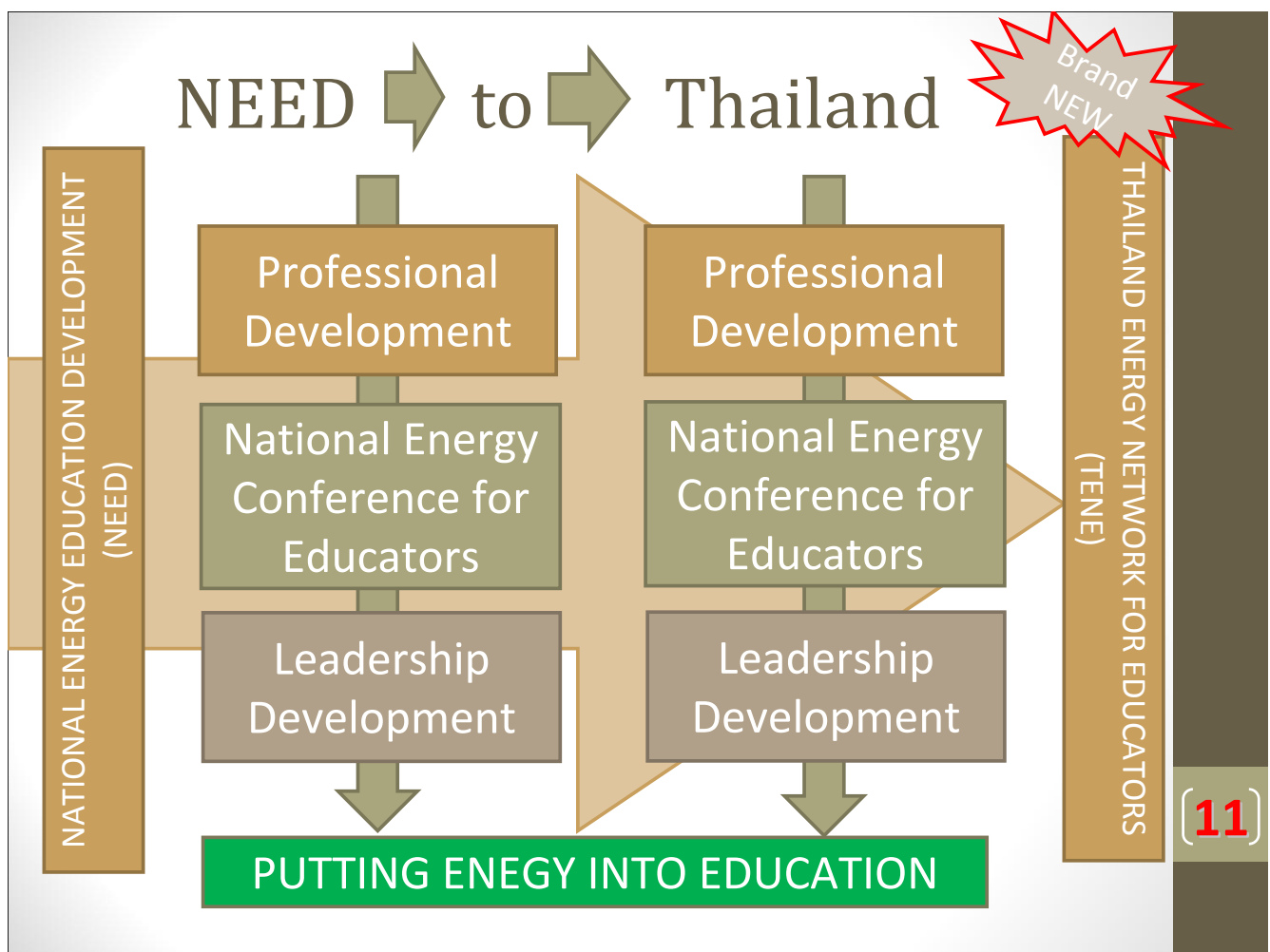


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## Reasons NEED helps THAILAND

- **NEED** to promote the energy conscious and awareness to the educators
- **NEED** to set-up the Energy Education Standards to be a blueprint for educators and Ministry of Education
- **NEED** to support the materials, hand-on kits to the educators for a better learning
- **NEED** to conduct workshops and professional development for the educators
- **NEED** to built up the energy education network in the country
- **NEED** to encourage the educators leadership for energy achievement

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## Mission

- Create School Curricular on Energy Education
- Translate NEED documents into Thai language
- Hold trainings/workshops for Thai Educators
- Set up Energy Education network via a dedicated website/FB
- Thailand Energy Awards for Educators and Students

# Development of Energy Management Curriculum for Vocational Education in Thailand

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## Development of Energy management Curriculum for Vocational Education



- **Purpose**

To generate knowledge in energy conservation and apply in student's real workplace after graduation.

- **4 Curriculums:**

- Thermal Energy Conversation
- Electrical Energy Conservation
- Energy Saving Techniques
- Industrial Energy Management System

- **Trainings**

- T o T
- Student Trainees/Internships

# Energy Technology Display Center: Hands-on Experience



Department of Alternative  
Energy Development and Efficiency  
**MINISTRY OF ENERGY**



**Thank you**