

## **Updates on EWG 13 2012 A: Energy Saving Window Thermal Performance Simulation Training**

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**42<sup>nd</sup> Meeting of the APEC Expert Group on Energy Efficiency & Conservation  
11 November 2013  
Queen Sirikit National Convention Center, Bangkok, Thailand**

### **Background**

- Building energy efficiency plays a vital role in reducing green house gas emission.
- Effective regulations on both mandatory and voluntary measures would drive a green economy.
- The APEC Energy Working Group (EWG) has initiated the program so called 'Materials Testing and Rating Center for Smart Building.'
- Thailand has proposed this project and committed to setting up a testing, rating and certification center. It could be said it is a pilot project and it can be replicated after successful completion.

Department of Alternative Energy Development and Efficiency  
MINISTRY OF ENERGY

APEC Asia-Pacific Economic Cooperation

King Mongkut's University of Technology Thonburi



**Project overseer:**  
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Executive Director of International Energy Cooperation Bureau  
Office of Permanent Secretary,  
Ministry of Energy, Thailand



**Project organizer:**  
School of Energy, Environment and Materials  
King Mongkut's University of Technology Thonburi

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## Major activities

- **APEC Policy Workshop for Energy Efficient Building Envelope**
  - 22 October 2013 at Eastin Grand Hotel, Sathorn
  - Three sessions include
    - Building Envelope Energy Efficiency Policy in APEC Economies (UNDP, Thailand, US, Mexico and New Zealand)
    - Building Envelope Components Energy Efficiency Testing and Rating Systems (China, Thailand, Singapore, US, Korea, Australia and Russia)
    - Industries Initiatives Towards Green Economy of Building Construction Materials (AGC Flat Glass (Thailand) and Guardian Industries Corp Ltd.)
  - 58 participants joined the workshop






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## Major activities


- **APEC Training Workshop for Window Thermal Performance Testing and Rating**
  - Instructor: Mr. Bipin Shah (WinBuild, Inc.) and Dr. Charlie Curcija (LBNL), USA.
  - 23-25 October 2013 at SEEM, KMUTT
  - Training on Optics 6, Window 7 and THERM 7 (a software adopted by National Fenestration Rating Council for determining window thermal performance)
  - 37 participants joined the workshop








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### Number of participants

Country		Policy workshop	Training workshop
1	Australia	1	-
2	Republic of China, The	3	2
3	Hong Kong	1	-
4	India	1	1
5	Indonesia	2	2
6	Japan	3	-
7	South Korea	1	-
8	Mexico	1	2
9	New Zealand	1	1
10	Peru	1	1
11	Philippines, The	1	2
12	Russia	3	2
13	Singapore	2	2
14	Thailand	26	19
15	USA	4	-
16	Vietnam	3	3
<b>Total</b>		<b>58</b>	<b>37</b>

## What have we got?

- Knowledge and experience sharing
- Networking
- Capacity building
- Momentum that drives the establishment of BMTCC at SEEM-KMUTT

Phase 1 [2014]

- Get ISO 17025 certified
- Critical equipment required for the glazing system
- Necessary infrastructure
- Material database system
- Development of rating and labeling processes

Phase 2 [2015]

- More equipment to serve other material/construction properties
- Start operating the center at full scale`





## Thank you...























**Thank you for your attention ...**

**Q & A...**

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