



**Asia-Pacific
Economic Cooperation**

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**Best Practices Sharing and Technical Capacity
Building for Measurement and Verification
Standards of Energy Savings (CTI 17 2016A)**

Purpose: Information
Submitted by: Viet Nam



**50th Expert Group on Energy Efficiency and
Conservation Meeting
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Best Practices Sharing and Technical Capacity Building for Measurement and Verification Standards of Energy Savings (CTI 17 2016A)



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Viet Nam

Basic Information



- **Proposing economy: China**
- **Co-sponsors:**
 - **Indonesia, Viet Nam , Hong Kong(China)**
- **Time frame:**
 - **October 1, 2016 – September 30, 2017**
- **Budget: \$ 60,000 + 60,000**

Objectives



To share best practices regarding the M&V standards based activities to increase the reliability of M&V of energy savings.

To improve the capacity to use international M&V standards to guide the M&V activities through exchanging expertise between developed economies and developing economies.

To enhance an understanding of importance of M&V for ensuring credible performance improvement through the public-private dialogue.

Outputs



- **Best practices collection based on the participating APEC economies' review of M&V market, personnel capacity building, R&D and implementation of methodologies, policy and standards, certification program and removal of technical barriers**
- **APEC workshop on Best Practices Sharing and Technical Capacity Building for Measurement and Verification Standards of Energy Savings**
- **Actionable recommendations: participating APEC economies will identify the best practices to promote M&V standards-based activities and capacity building in developing economies.**

Work plan



- **The Preparation** Financial support for the project will be sought from the APEC Support Fund account, co-sponsors and other interested participants.
- **The Review of M&V in APEC region** A questionnaire will be developed and circulated to investigate the M&V market, methodologies, standards, stakeholders etc in APEC economies.
- **Preparation of Workshop** A draft agenda for the workshop will be determined after consulting with co-sponsors.
- **Implementation of the Workshop:** A 1-2 day workshop will be organized, which will provide the stakeholders with an opportunity to share best practices of M&V activities and promote the M&V activities and capacity building.
- **Conclusions and Final Report:** A final report of the project will be produced to offer a list of recommendations to APEC economies for best practices and capacity building regarding M&V standards based activities with successful experiences and action plan.

Results to date (1)

- **The Review of M&V in APEC region (Nov. 2016 – Feb. 2017): A questionnaire was developed and circulated in APEC SCSC and EGEEC to investigate the M&V market, standards, stakeholders in APEC economies and the potential topics for the workshop. The findings of the survey played an important role in determining the topics and activities for the project workshop.**

Savings Standards in APEC region

Energy savings standards include: standards for Measurement and Verification (M&V) of energy savings, process of planning, measuring, collecting data, analyzing, verifying, and reporting energy savings for defined M&V boundaries developed in ISO/TC 301.

Energy management standards include: ISO 50001 and relevant supporting standards developed in ISO/TC 301

Q1. What kind of organization do you represent for?

- A. Standardization bodies
- B. Government
- C. Certification bodies
- D. Test labs
- E. Academy institutes
- F. Universities
- G. Independent expert
- H. Others, please specify _____

Q2. Are you aware of any national standards for energy management and energy savings in your economy?

- A. Yes, we have standards, please specify the number and title of the standards _____
- B. Yes, we will develop national standard
- C. Yes, we will adopt international standard
- D. No, please explain the reason _____

Q3. Are you aware of international standards for energy management and energy savings

- A. Yes, Please specify the number and title of the standard(s) _____
- B. No

Q4. Who are/will be the main users of standards for energy management and energy savings in your economy?

- A. Policy-makers
- B. The third-party evaluators/verifiers
- C. ESCos
- D. Financing institutes
- E. Environment organizations
- F. Test labs
- G. Academy institutes
- H. Universities
- I. Independent expert
- J. Others, please specify _____

Results to date (2)



- **Preparation of Workshop (Dec. 2016 –May.2017):** APEC workshop on Best Practices Sharing and Technical Capacity Building for Measurement and Verification Standards of Energy Savings
 - **Main activities:** Preparation for the workshop had been done including inviting the participants from standardization bodies, verifiers, certification bodies, ESCOs, financial institutions and academic institutes, the energy program implementers and environmental organizations from APEC region and representatives from the related international organizations such as ISO, APEC EGEE&C, EVO, etc. As a result, confirmed agenda was distributed to APEC Member Economies and other stakeholders, lists of participants and speakers and travel arrangements for participants were confirmed before the workshop as planned.

Results to date (3)



- **Implementation of Workshop :** APEC workshop on Best Practices Sharing and Technical Capacity Building for Measurement and Verification Standards of Energy Savings
 - **Venue:** Beijing, China
 - **Date:** June 3-4, 2017
 - **Participants:** 8 experts from China, US, Australia, Japan and international organization of ISO/TC 301, APEC EGEE&C ,EVO presented as speakers and around 20 stakeholders representatives from China, Chile, Philippines, Japan, Indonesia, Malaysia, Thailand, Viet Nam attended as the participants
 - **Main activities:** The presentations were given and discussion were carried out focusing on the topics of progress on internationally accepted M&V standards, international best practices for M&V of energy savings, capacity building of applying international M&V standards, etc, and a technical tour to a smart energy system demonstration project was done.



Next step



- **Conclusions and Final Report (June 2017 –Sep. 2017):** A final report of the project will be produced to offer a list of recommendations to APEC economies for best practices and capacity building regarding M&V standards based activities with successful experiences and action plan. With the contribution of participants, the project is going to build a sustainable platform to fully achieve the objectives of the projects. Further activities may be planned and proposed following discussion in the workshop.

Contact us



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Thank you!

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