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

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





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 (Oct. 2016): Financial support for the project will be sought from the APEC Support Fund account, co-sponsors and other interested participants.

wells.

- The Review of M&V in APEC region (Nov. 2016 Jan. 2017): A questionnaire will be developed and circulated to investigate the M&V market, methodologies, standards, stakeholders etc in APEC economies.
- **Preparation of Workshop (Dec. 2016 Apr. 2017):** A draft agenda for the workshop will be determined after consulting with co-sponsors.
- Implementation of the Workshop (March/April 2017): 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 (May 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.

Results to date (1)

- The Review of M&V in APEC region (Nov. 2016 – Jan. 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.
- By 17 Feb., we received positive responses from China, Canada, Chile, Hong Kong (China), Indonesia, Korea, Peru, Thailand, USA, Viet Nam.
- Based on the feedback, best practices will be collected and therefore case study will be conducted. The findings of the survey and the case study will support the development of workshop.

Survey for Best Practices Sharing and Capacity building of Energy

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 –): APEC workshop on Best

Practices Sharing and Technical Capacity Building for Measurement and Verification Standards of Energy Savings

- Proposed venue: Beijing, China
- Proposed date: June 3-4, 2017

Participants: Workshop Participation will be open to all APEC member economies and relevant stakeholders. We will also ensure the participation of the APEC EGEE&C. The key external stakeholders including EVO, IEA, ISO/TC 301 will be invited to join the plan and implementation of the workshop.

Results to date (2)

- Preparation of Workshop (Dec. 2016): APEC workshop on Best Practices Sharing and Technical Capacity Building for Measurement and Verification Standards of Energy Savings
 - Main activities:
 - (1) A 1.5 day workshop is planned to be organized, which is supposed to provide the stakeholders with an opportunity to share best practices of M&V activities, the information and ideas on using internationally accepted standards/protocols as a basis to promote the M&V activities and capacity building. The workshop will consist of key-note speakers and panel discussions, and separated sessions.
 - (2) A 0.5 day technical tour to a smart district energy system demonstration project somewhere near Beijing.

Results to date (2)



Event	ISO/TC301 meetings	Workshop for this project (APEC CTI 17-2016A)	
Date	May 29-June 2	June 3	June 4
Morning	Meetings	M&V workshop	M&V workshop
Afternoon	Meetings	Technical tour	M&V workshop
Input to us	Experts · ISO standards · practices		

 ISO/TC 301 "Energy management and energy savings" Technical Committee, the most important ISO/TC for energy, developed/ing 20 ISO standards for M&V and EnMS, it is expected more than 100 experts from ~ 40 contries/regions to participant the series meeting including (WG meetings and plenary meeting) in Beijing during May 29-June 2.

Next step

- Preparation and implementation of Workshop (Mar. 2017 June. 2017):
 - To determine the topics, agenda of the workshop based on the findings of the survey and feedback from stakeholders

well

- **To circulate the notification of workshop as soon as possible**
- To contact international organization (ISO/TC301, EVO, etc.) and experts for inviting keynote speakers and co-sharing of international best practices
- 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.



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