Asia-Pacific
Economic Cooperation

Advancing Free Trade
for Asia-Pacific Prosperity

Best Practices on Standards and Conformity Assessment Implementation for Eco-Design Products in the APEC Region

Beijing, China | 1 June 2018

APEC Sub-Committee on Standards and Conformance

June 2018

APEC Project: CTI 35 2017A (SCSC)

Produced by
Dr ZongJianfang
China National Institute of Standardization
No.4 Zhichun Road, Haidian District, Beijing, China
Tel: +86-10-58811130
Fax: +86-10-58811714
Email: zongjf@cnis.gov.cn

For
Asia-Pacific Economic Cooperation Secretariat
35 Heng Mui Keng Terrace
Singapore 119616
Tel: (65) 68919 600
Fax: (65) 68919 690
Email: info@apec.org
Website: www.apec.org

APEC#218-CT-04.6

TABLE OF CONTENTS

PART I. GENERAL INFORMATION

Project information

Project No: CTI 35 2017A (SCSC)
Project Title: APEC workshop on Best Practices Sharing of Standards and Conformity Assessment Implementation on Eco-Design Products in APEC Region

Objectives

- To create the network and an ad hoc group to share and discuss best practices in terms of standards and conformance together focusing on eco-design products among member economies that have experiences on implementing eco-design products.

- To identify the opportunities and challenges for implementation of standards and conformity assessment to set up strategies for promoting eco-design products standards and trading among APEC economies.

- To share the opportunities to all APEC member economies to promote eco-design products practice so that APEC economies can benefit from the achievements and outcomes of this project such as using the standards and conformity assessment methods.

Workshop location

The workshop was held in Xiaojiao Hotel, No.18 Wangzhuang Road, Haidian District, Beijing on 1 June 2018.

PART II.

Key stakeholders and organizations

There were 48 experts from 12 economies who have attended the workshop. They came from different organizations: 1 expert from ISO, 1 expert from IEC, 24 experts from the government agencies, 4 experts from academia, 18 experts from private sectors. And regarding the economies that the experts came from: There was 1 expert from Chile, 31 experts from People's Republic of China, 2 experts from Indonesia, 2 experts from Malaysia, 1 expert from Mexico, 1 expert from the Philippines, 2 experts from Thailand, and 2 experts from Viet Nam.

The policymakers/government regulators (such as Ministry of Industry and Information Technology of the People's Republic of China, State Administration for Market Regulation, Standardization Administration of the People's Republic of China) and eco-design products program implementers (such as China National Light Industry Council, China Petroleum Chemical Industry Federation) within APEC economies who will be implementing or have already been implementing eco-design products have been invited to give input into workshop agenda, to attend workshop, and to participate in the survey. By participating in all these activities, they have improved the integrity of their work plan, programs or schemes through adopting eco-design products standards.

The standardization bodies, academic institutes (such as China National Institute of Standardization, China Household Electrical Appliance Research Institute, Hefei University of Technology, etc) have been invited to give input into workshop agenda, to attend workshop, and to participate in the survey, and their speeches have focused on eco-design products area. Investment on eco-design products equipment or services have increased because of correct understanding and effective implementation of related standards and conformance.

The manufacturers, suppliers of eco-design products equipment within APEC economies have had the opportunity to give input into the workshop agenda, to attend workshop, and to participate in the pre and post-workshop collaboration. The manufacturers and suppliers have been engaged to provide input to workshop agenda through introducing their experience in implementing eco-design according to the evaluation standards, and practice cases of indicator verifications and assessment cases on Life Cycle Assessment (LCA). As a result, trade of eco-design products equipment and service has been expected to be expanded in future based on correct understanding and effective implementation of eco-design products standards, conformance and related policy.

Indirect beneficiaries have included general consumers who have benefitted from eco-design products with improved quality services and financial/time savings within the APEC economies.

Resource database for eco-design products standards and best practices in the APEC region

International Organization for Standardization (ISO)

ISO/TC 207: Environmental Management Committee

- ISO14000 system mainly involves six aspects: environmental assessment standard, environmental management system, life cycle assessment, environmental labeling, environmental auditing, and product environmental standard.
- So far, ISO has made 20-30 technical documents and standards with global influence. Nearly 10 of them have entered the stage of international draft standard.

  - ISO 14020:2000 Environmental labels and declarations -- General principles
  - ISO 14021:2016 Environmental labels and declarations -- Self-declared environmental claims (Type II environmental labelling)
  - ISO 14024:2018 Environmental labels and declarations -- Type I environmental labelling -- Principles and procedures
  - ISO 14025:2006 Environmental labels and declarations -- Type III environmental declarations -- Principles and procedures
  - ISO 14026:2017 Environmental labels and declarations -- Principles, requirements and guidelines for communication of footprint information
  - ISO 14027:2017 Environmental labels and declarations -- Development of product category rules
  - ISO TR 14062:2002 Environmental management - Integrating environmental aspects into product design and development
  - ISO 14006:2011 Environmental management systems - Guidelines for incorporating ecodesign (Revision expected 2019)
  - ISO 19991:2019 Environmental Conscious Design (ECD) - Principles, requirements and guidance
  - ISO 14009: 202X Environmental management systems - Guidelines for incorporating redesign of products and components to improve material circulation

International Electrotechnical Commission (IEC)

IEC/TC 111: Environmental standardization for electrical and electronic products and systems

Standardization of environmental aspects concerning:

- To prepare the necessary guidelines, *basic and horizontal* standards, including technical reports, in the environmental area, in close cooperation with product committees of IEC, which remain autonomous in dealing with the environmental aspects relevant to their products;
- *To liaise with product committees* in the elaboration of environmental requirements of product standards in order to foster common technical approaches and solutions for similar problems and thus *assure consistency in IEC standards*;
- *To liaise with ACEA and ISO/TC 207*;
- To monitor closely the corresponding regional standardization *activities worldwide* in order to *become a focal point for discussions concerning standardization*;
- EMC and EMF aspects are excluded from the scope.

Standardization of environmental aspects concerns:

- To prepare the necessary guidelines, basic and horizontal standards, including technical reports, in the environmental area, in close cooperation with product committees of IEC, which remain autonomous in dealing with the environmental aspects relevant to their products;
- To liaise with product committees in the elaboration of environmental requirements of product standards in order to foster common technical approaches and solutions for similar problems and thus assure consistency in IEC standards;
- To liaise with ACEA and ISO/TC 207;
- To monitor closely the corresponding regional standardization activities worldwide in order to become a focal point for discussions concerning standardization;
- EMC and EMF aspects are excluded from the scope.

- IEC 63031 ED1 : Definition of Low Halogen Materials used in Electronic and Electrical Products
- IEC 62959 ED1 :Environmental Conscious Design (ECD) - Principles, requirements and guidance
- IEC 62474 ED2 : Material declaration for products of and for the electrotechnical industry

International Telecommunication Union (SG5)

This organization aims to build an open platform for stakeholders on eco-design products to share knowledge related to identify the standardization frameworks, which is necessary to support the integration of electronic and electrical appliances.

Speakers and presentation list

Criteria to select speakers:

- Has vast experience in one of the sectors related to the workshop (Eco-design products, eco-design experience, standards & conformance as well as relevant activities)
- Come from APEC economies or international, regional organization (ISO, IEC and etc.)
- Have good capabilities in presentation and fluency in English

No.	Name	Economy	Title	Presentation
1	Daniel Trillos	Colombia	ISO /TC 207 Vice Chair	ISO standards supporting international acceptance of Eco-design product
2	Dr Yoshiaki ICHIKAWA	JPN	Visiting professor	International Standardization on Eco-design and New Ideas for Future Work(Japan
3	Dongfeng Gao	PRC	Associate professor of CNIS	Evaluation standards and implementation progress of China's ecological design products
4	Mr LAM Siu-kay, Junkers	HKC	Official member	Government's Effort in Promoting Green Buildings in Hong Kong, China, The Buildings Department of Hong Kong Government
5	Xun Gong	PRC	Manager of Lenovo	Lenovo Environmental Sustainability & Eco-design Practices
6	David Morris	UK	General	Sustainable portfolio management

			Manager of DSM China	approach to eco-design
7	Juan Carlos Rivera Guerra	MEX	Official member	Progress on Voluntary Sustainability Standard Granting and use of the Environmental Seal in products - Technical Specifications
8	Dr JianfangZong	PRC	Assistant professor of CNIS	Comparison and analysis of domestic and foreign mechanism of product ecological evaluation and labeling
9	Mr. Supakit Pakdeesrisakda	THA	Official member	Thai Industrial Strategies on Supporting Eco-design Products
10	Kate Harris	AUS	Official member	A positive global future through the power of eco-design and the importance of certification, co-operation and collaboration across the APEC economies
11	Mr AsirawathanaPhothiphan	THA	Official member	Thai Industrial Standards and Certification for Eco-design Products
12	Ling Hu	PRC	Manager of Huawei	The evaluation method of the eco-design of mobile products and the practice of the industry
13	Guoguo Liu	PRC	Manager of Schneider electric	Green industry transition of Schneider electric

The project's gender balance

The APEC member economies are expected to encourage their regulators and business stakeholders particularly SMEs and women to attend as participants and speakers at the workshop. Women have actively participated in the planning, management, allocation of resources and implementation of the project and have played key decision making roles in planning the workshop.

Among the 48 experts who have attended the workshop, 24 experts were female who accounted for 50% of the total experts, and 24 experts were male who have also accounted for the other 50% of the total experts, so there was a good balance regarding gender issue for the workshop. When we were sending the invitations to different stakeholders, we had kept the gender issue in mind, so that we can encourage and help more female experts to attend the workshop, and play a good role in the workshop, and also gain good knowledge and increase capacity building from the workshop. And the workshop accomplishment was fruitful.

Workshop agenda

APEC workshop on Best Practices Sharing of Standards and Conformity Assessment Implementation on Eco-Design Products in APEC Region (CTI 35 2017A)

June 1, 2018

Xijiao Hotel, Beijing, China

June 1, 2018

8:30 – 9:00 Registration

MODERATOR: Dr. Geng Wang, Deputy director of CNIS

9:00 – 9:40 Overview and Introductions, Keynote speeches by government leaders
Mr. Jianping Han, Deputy director, Department of international cooperation, State Administration for Market Regulation
Mr. Chengguang Guo, Deputy director, Department of international cooperation, Standardization Administration of China
Dr. Yoshiaki ICHIKAWA, IEC TC111 Chairman
Mr. Daniel Trillos, ISO TC207, Vice Chairman
Mr. Lian Duan, Deputy president, CNIS

9:40-9:50 Group photo

9:50 – 11:25 SESSION 1

Progress on internationally accepted Eco-design product standards

MODERATOR: Dr. Yoshiaki ICHIKAWA

9:50 – 10:10 Daniel Trillos, ISO standards supporting international acceptance of Ecodesign product

10:10 – 10:30 Dr. Yoshiaki ICHIKAWA, International Standardization on Eco-design and New Ideas for Future Work(Japan, IEC TC111 Chairman)

10:30 – 10:45 BREAK

10:45 – 11:05 Dongfeng Gao, Evaluation standards and implementation progress of China's ecological design products(CNIS)

11:05 – 12:05 SESSION 2

Best Practices Sharing of Eco-Design Products in APEC Region

MODERATOR: Dr. Yoshiaki ICHIKAWA

11:05–11:25 Mr. LAM Siu-kay, Junkers , Government's Effort in Promoting Green Buildings in Hong Kong, The Buildings Department of Hong Kong Government

11:25 – 11:45 David Morris, Sustainable portfolio management approach to eco-design (DSM)

11:45 – 12:05 Guoguo Liu, Green industry transition of Schneider electric(Schneider electric)

12:05 – 13:00 LUNCH BREAK

13: 40 – 16:30 SESSION 3

Practical application and general certification in Eco-Design Products

MODERATOR: Kate Harris

13:40-14:00 Xun Gong, Lenovo Environmental Sustainability & Eco-design Practices (Lenovo)

14:00-14:20 Dr. Jianfang Zong, Comparison and analysis of domestic and foreign mechanism of product ecological evaluation and labeling (CNIS)

14:20-14:40 Mr. Supakit Pakdeesrisakda, Thai Industrial Strategies on Supporting Eco-design Products, (Thailand)

14:40-15:00 Kate Harris, A positive global future through the power of eco-design and the importance of certification, co-operation and collaboration across the APEC economies (Good Environmental Choice Australia)

15:00 – 15:30 BREAK

MODERATOR: Dr. Jianfang Zong

15:30-15:50 Mr. Asirawathana Phothiphan, Thai Industrial Standards and Certification for Eco-design Products (Thailand)

15:50-16:10 Ling Hu, The evaluation method of the eco-design of mobile products and the practice of the industry (Hua Wei)

16:10-16:30 Juan Carlos Rivera Guerra , Progress on Voluntary Sustainability Standard Granting and use of the Environmental Seal in products - Technical Specifications (Mexican case)

16:30-17:00 SESSION 4

Discussion and Q&A
MODERATOR: Dr. Yoshiaki ICHIKAWA

17:00 -17:30 Conclusion & Closing Remarks

Issues discussed at the workshop

- The workshop was organized with the attention of representatives from different economies with 13 speakers and 13 presentations on topics related to Eco-design products.

- Coming from ISO TC207, Mr. Daniel Trillos introduced the structure of ISO TC 207, and the ISO standards established by TC 207, and the relationship among management systems, design and development and environmental aspects, potential future work on Eco identified by TC 207/WG10.

- The second speaker is Dr Yoshi ICHIKAWA, he is the IEC TC111 Chairman. He explained the International Standardization on Eco-design and New Ideas for Future Work. There are three Major Standardization Bodies and Environmental TCs: IEC TC111, ISO TC 207 and ITU SG5. He also explained the outline and scope of IEC TC111, the IEC meetings that have been held, the term ECD, how to develop ECD standards, Industry 4.0 and Society 5.0.

- The third speaker is Mr Dongfeng Gao from China National Institute of Standardization. He explained the background of green production and consumption, the basis of eco-design product evaluation in China, research on evaluation standards of eco-design products, and the evaluation progress of eco-design products.

- The fourth speaker is Mr LAM Siu-kay, Junkers from Hong Kong, China Buildings Department. He explained the background of the sustainable development and current status/challenges in promoting green buildings in Hong Kong, China. He expounded the introduction of the New Gross Floor Area (GFA) Concessions Mechanism; the Sustainable Building Design (SBD) Guidelines: 3 key design elements including Building Separation; Building Setback and Greenery; Tightening of Heat Transfer Value Standard of Building Envelope: Reduce Energy Consumption etc.

- Mechanism : Control Building Bulk; Sustainable Building Design (SBD) Guidelines: Control Building Design ; Tightening of Heat Transfer Value Standard of Building Envelope: Control Energy Consumption

- The fifth speaker is Mr David Morris from DSM and his topic was on Sustainable portfolio management and eco-design. He introduced DSM Sustainability Strategy, DSM Sustainable portfolio management Brighter Living Solutions. And he explains that Life Cycle Assessment is a decision support tool, Challenges and experiences to use in innovation and product design

- The sixth speaker is Ms Guoguo Liu from Schneider electric. Her topic was on Environmental Offer- Schneider electric Sustainable Environmental Offer Overview. She introduced the Schneider Commitments, Compliance & transparency, Eco-Design Way, and Circular Economy.

- The seventh speaker is Ms Xun Gong from Lenovo. Her topic was on Lenovo Environmental sustainability and Eco-design practices, including introduction of Lenovo, Lenovo sustainability, eco-design in Lenovo and Lenovo eco-design practice.

- The eighth speaker is Dr Jianfang Zong from China National Institute of Standardization, and her topic was focused on Comparison and analysis of domestic and international mechanism of Product Ecological Assessment and Labeling. She explained the significance of the topic, comparison and analysis of domestic and international mechanism

of Product Ecological Assessment and Labeling, typical assessment methods of Product Ecological Design.

- The ninth speaker is Mr Supakit Pakdeesrisakda from Thailand, and his topic was on Thai Industrial Strategies on Supporting Eco-design Products. He explained the 20 years industry practices, green industry, 3R and eco-labeling.

- The tenth speaker is Ms Kate Harris from Australia. Her topic was on A positive global future through the power of eco-design and the importance of certification, co-operation and collaboration across the APEC economies. She explained about ASBEC, Better Building Partnership, Green Building Council of Australia, Office of Environment and Heritage, Infrastructure Sustainability Council of Australia (ISCA).

- The eleventh speaker is Mr Asirawathana Phothiphan from Thailand, and his topic was on Thai Industrial Standards and Certification for Eco-design Products. He explained about the introduction to Thai Industrial Standards, Institute (TISI), TISI MISSION, Eco- Design Standardization, TIS Product Certification and Surveillance, and Green Label.
- The twelfth speaker is Ms. Ling Hu from Hua Wei. Her topic was on Eco Smart: Green Product Design in Huawei. She explained about Huawei Sustainability Strategy, Introduction of Eco-design Method, and Eco-design Evaluation of Smart phone.

- The thirteenth speaker is Mr. Juan Carlos Rivera Guerra from Mexico, and his topic was on the Progress on Voluntary Sustainability Standard Granting and use of the Environmental Seal in products - Technical Specifications (Mexican case). He explained the scope of Mexico eco-design product standards and environmental label, benefits of eco-label, and the status of eco-label.

Thus, the speakers from the economies shared detailed and various information of best practices sharing of standards and conformity assessment implementation on eco-design products topic which is in accordance with the current situation and meets the needs of the future.

Facilitating networking of speakers and involved organizations

- Research and find out what speakers and involved organization are available;
- Choose the right format where expectations are met.
- Check speakers and organizations whenever possible to connect to each other.
- Select a right venue;
- Pick a regular day, date and time: There are many speakers and organizations from different economies that cannot set a same day and time to discuss. So I need to plan a time duration and require everyone to follow up;
- Find ways to follow up and get more people involved;
- Systemize the processes;
- Make sure a venue, location and time that suits all of the above with effective administration, before the event, at the event and after the event.

- All the participants agreed that this workshop was a starting point to systematically understand the eco-design products and relevant issues. This project has achieved the first objective, creating a network and ad-hoc group. The members include all the speakers and participants that have attended the workshop on 1 June 2018. And if the future trainings and communications are permitted by APEC SCSC, the project team could propose further workshops and discussions, to gain further progresses on eco-design projects. If possible, we could involve more experts from the government agencies, academic field and industry of each economy, so that our achievements would give the guidance on how to carry on eco-design products and relevant issues such as eco-labeling, sustainability strategy, etc.

Recommendations on the best way to implement the project

The presentations and cases presented in the workshop gave insights on the relation between standardization and innovation in general terms and in specific sectors, and clearly proved why these are closely related and how standardization impact positively on eco-design products. According to the workshop survey results, 100% agreed that the workshop had achieved the objectives. The project had three objectives: (1) To create the network and an ad-hoc group to share and discuss best practices in terms of standards and conformance focusing on eco-design products between member economies that having experiences on implementing eco-design products, as have been stated in the above section; (2) To identify opportunities and challenges for implementation of standards and conformity assessment to set up strategies for promoting eco-design products standards and trading among APEC economies. And we find that the opportunities come from the respective industries, and the government agencies of some economies. Sometimes the top runner enterprises in eco-design product area can implement the standards and conformity assessment and they can devote great efforts to ensure that their products meet the standard requirements and assessment tools. And the government agencies, for example, the Thailand government, the Chinese government (Ministry of Industry and Information Technology), can give support to the relevant organizations to implement the standards and conformity assessment to setup up strategies for promoting eco-design products.; The challenges for implementing standards and conformity assessment are the efficiency in adopting and transforming the advanced ISO standards to the domestic standards, for example, in China the standards and conformity assessment still need to be established further to make the standards meet the requirements of the development of eco-design products. And (3) To share the opportunities with all APEC member economies to promote eco-design products practice so that APEC economies can benefit from the achievements and outcomes of this project such as using the standards and conformity assessment methods. This workshop had invited experts from 6 economies and ISO, IEC organizations, and the private sectors with good reputation in eco-design product. And the participants were able to get the broad knowledge both from standard point of view, and from the practice point of view. Private sectors such as DSM, Schneider electric, Lenovo, Huawei, have given the excellent examples on implementing the eco-design practice and the sustainability strategy. Experts from Thailand, Mexico, Australia, China and Hong Kong, China, have illustrated in details on how to develop the eco-design product standards, and the eco-

labeling standards and practice. All of the participants have very high comments on the contents of the workshop.

Experiences were shared in the 13 presentations from 6 different economies and 2 international organizations (ISO and IEC) in a 1-day workshop, which was held in Beijing, China on June 1st, 2018.

The knowledge about eco-design products standards, eco-labeling and other assessment tools was improved. The workshop received 48 participants from the following 12 APEC economies: Australia; Chile; China; Hong Kong, China; Indonesia; Japan; Malaysia; Mexico; the Philippines; Singapore; Thailand; and Viet Nam. In the workshop survey results, participants indicated that prior to the presentation, they had some knowledge on the topics presented, compared to after the workshop, in which participants indicated that it was mostly understood by them.

The information regarding this project has been shared to the PPSTI through SCSC Program Director. The workshop received speakers and participants from APEC economies, ISO, IEC, governmental agencies, academic, private and industry sectors.

And in the future work of APEC SCSC, the following contents were highlighted:

- To continue sharing the best practices regarding Eco-design products standards support to innovation in specific fields.
- To conduct case studies of good practices in which standards and conformance support the implementation of Eco-design products in the region.
- To develop communication network in order to adequately involve and engage stakeholders in this kind of projects.
- To organize more trainings on eco-design products, eco-labeling, Product Environmental Footprint (PEF), Life Cycle Assessment (LCA), etc, as this workshop is a starting point to give a systematic knowledge structure on eco-design product standards and assessment tools.
- To have more international communications and discussions between enterprises, NGOs and organizations on eco-design products in the APEC region.
- To bring a common platform of eco-design exchange, to expand and harmonize different schemes of eco-design to get an overall picture of eco-design products.
- To involve more economies and relevant standard or government bodies or regulators to discuss how to ensure eco-design products to be globally implemented, and if possible, establish APEC eco-design products committee to have more systematic knowledge on eco-design products, give guidance to the APEC economies on the future work of eco-design product area.
- To develop strategies to collaborate with other governmental agencies relevant with eco-design products.
- To push for the mandatory unification based on international standards for highly traded eco-design products and more importantly products with greater impact in the environment in APEC region, as well as the capacity of developing economies to implement such standards, since environmental protection is a global concern.

- To encourage each APEC economy to actively participate in the IEC and ISO standard formulation on eco-design products and relevant topics, and to transform the IEC and ISO standards to the domestic standards and to implementing the standards, so that the technologies in eco-design products standards and assessment tools could be improved.
- The APEC economies could learn from the contents shared in this workshop, and increase the cooperation and communication among the APEC economies, so that the work regarding eco-design product could become mature later on, and the APEC SCSC could provide a good platform for this kind of conversation.
- In the APEC economies, the work on eco-design product is still in progressing, even in the developed economies such as US and EU, the technology is also progressing, and they haven't come to the mature stage. And for most APEC economies, the work is very meaningful and promising. This workshop is a good starting point to encourage the future work on eco-design products to be done.

Summary of the workshop and surveys

The workshop received replies from 28 participants out of 48 participants that attended to the workshop. An analysis of the survey results as shown in the above tables from the event indicates four conclusions:(1) 100% of the respondents agree and/or strongly agree that gender issues were sufficiently addressed during implementation; (2) Workshop survey respondents acknowledged of the speakers and moderators' high level. In this sense, 100% agree and/or strongly agree that the speakers and moderators were well prepared and knowledge about their topics and 96% agree that the materials distributed were useful; (3) 100% of participants affirmed that increased high or very high that their knowledge and skills after participating in the workshop. Regarding new skills and knowledge gained and participants recognized that it was fruitful to know the different experiences from economies in the field of innovation and how standardization, measurement impact positively innovation. In addition, the workshop gave to participants an overview of best practices developed from some experience economies on Eco-design products (Japan, Thailand, Mexico, Australia, China), the importance of develop eco-design and eco-labeling and sustainability as important keys to promote and support the development of eco-design products; (4) Regarding what actions participants will do in their economies: the proposals were to develop: trainings, new initiatives of policies, strategies, projects and work plans related to the importance of standards and conformance in the field of eco-design products.

From the replies received, it is important to highlight: (1) All of the participants consider that the workshop content and materials were useful and clear. They hope that they can get the documents later; (2) Regarding actions than participants have done or planning to do the principal action prioritized is to share information with and/or stakeholders, followed by using information exchange for bilateral; (3) projects or initiatives and to apply in their economies any initiative learning; (4) In the same line, participants were asked for future steps and initiatives that SCSC should take into account for promoting the use of Eco-design standardization activities, which includes conformity assessment. Interesting proposals were received such as: Using Product Environmental Footprint(PEF) and Life Cycle Assessment(LCA) to promote the

innovation, make cross-economies studies; make more workshops in this topic applied in specific concrete sectors such as environmental management, sustainability, Eco-labeling, eco-design and etc. to make awareness of government agencies in order to create government policies that promote the use of SC standards in all economic sectors, to emphasize the importance of SC standards and innovation to support and play the essential role of science and technology, among others; (5) As this workshop is a starting point to sort out the work under eco-design products, the participants wished that APEC will continue the training and knowledge sorting and sharing more in the future.

Pre-workshop survey and results analysis

In order to measure the impacts of the project, an economy survey was given to all APEC economies. The following questions were asked regarding the content of the eco-design product standardization activities. The economies survey has three main issues: (1) Domestic level standardization activities (policy, strategy, standard development and conformance); (2) Economies' involvement in international standardization activities (ISO, IEC and etc.); (3) Identify the future challenges.

The POs have sent the survey to 21 economies via APEC Secretariat and received altogether 8 surveys. The surveys came from Hong Kong, China; Japan; Malaysia; Mexico; New Zealand; Singapore; Thailand and Viet Nam.

From 8 economies who participated in the survey, 100% confirm that their economies have established standards for eco-design products to some extent (such as consumer goods (electrical and electronic products), building materials, and environmental management, energy efficiency, water efficiency, and waste management, green buildings, environmental assurance systems, organic products, footprint control, etc.), these standards were developed in adopted/harmonized with international standards such as ISO, IEC…And the analysis of the survey results shows that: (1) 87.5% confirmed that they have experts involved in standards development of international organization in the field of eco-design products such as ISO TC 207, IEC TC111…(2) 75% of the economies answered that their existing standards could evaluate the eco-design products; (3) 62.5% of the economies reported that they have not any certification or accreditation schemes for eco-design products or certification for products, services related to eco-design products area; (4) 87.5% of the economies reported that they have domestic policies/strategies/programs for developing the Eco-design products in sectors such as consumer goods, building materials and environmental management.

Conclusion

The analysis of the pre-workshop survey results indicate four conclusions: (1) The eco-design product standardization activities have been interesting and have been implemented in most economies but with different ways and particular sectors due to their own situation and domestic demands; (2) The APEC developing economies such as Viet Nam, Indonesia and etc. are in

the initial period of implementing eco-design product models. Therefore they want to create a regional experts network for regular sharing information and experiences of Eco-design product implementation among members. (3) 50% of the economies answered that their existing standards could not evaluate the eco-design products. (4) The eco-design products implementation is highly focused on consumer goods (electrical and electronic products), building materials, and environmental management, energy efficiency, water efficiency, and waste management, green buildings, environmental assurance systems, organic products, footprint control.

To sum up, this project and the workshop have been a good starting point to give a systematic knowledge structure on eco-design standards and assessment tools. And as eco-design product research is still in the infancy stage for most APEC economies, APEC SCSC could have the mission to support more future workshops and trainings, inviting more government agencies and private sectors that are doing well in eco-design products, eco-labeling and sustainability strategies to share their experiences. And the network that has been formed through this workshop, and could continue the communication whenever it is needed, and could continue the cooperation in the future.

We want to thank APEC SCSC to support this workshop and this project, and we feel fruitful from this workshop in gaining the broad knowledge regarding eco-design products, standards and conformity assessment, best practices sharing. And we are expecting the future progresses regarding eco-design products, and it is meaningful and promising. There is still more work to be done, and APEC SCSC could play an important role in this process, as have been discussed in this report.