



**Asia-Pacific  
Economic Cooperation**

**APEC WORKSHOP ON SME'S ACCESS TO TECHNOLOGY  
Jakarta, Indonesia, 7-9 February 2012**

**APEC Small and Medium Enterprises Working Group**

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**APEC Small and Medium Enterprises Working Group  
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**FOREWORD**

Small and Medium Enterprises (SMEs) have been recognized as a major contributor to economic growth in many economies of Asia-Pacific Economic Cooperation (APEC) including Indonesia. SMEs are also very important on stabilizing social economy and job creation. Therefore, SMEs should be given high attention to grow and develop. There are many aspects that become barriers to SME development, and lack of access to technology is one important aspect that must be considered.

Related to the above aspects, the Ministry of Cooperatives and SMEs in collaboration with APEC and Study Center for Industry, SMEs and Competition, University of Trisakti, organized APEC Workshop on SMEs' Access to Technology on 7-9 February 2012 at Bidakara Hotel, Jakarta. This workshop aims to share best experiences and knowledges to better access to technology for our SMEs by :

- Increasing the understanding of relevant stakeholders in APEC forum related to the needs of SMEs on technology in order to increase added value,
- Improving the understanding of stakeholders in APEC about the relationship between technological development policy that apply to the institution- existing institutions and how to overcome barriers to SME access to technology. Outcome of the workshop was to reduce the transaction costs faced by SMEs in accessing technology and improve competitiveness of SMEs in the APEC region.

The International Workshop was jointly funded by APEC and the government of Indonesia through the Ministry of Cooperative and SMEs, and was participated by fifty three (53) participants coming from APEC member economies namely China, Indonesia, Malaysia, Mexico, Papua New Guinea, Peru, Philippines, Thailand, Viet Nam and non-APEC economies such as Colombia. Eighteen (18) participants and 5 (five) speakers were funded by APEC. The speakers and participants came from the government officials, Association of SMEs, Universities, and Research Institutions.

A visit to Martha Tilaar Factory was a best-practice to learn the history and technological development of SMEs, and visit to LLP KUKM or SME Promotion Center/SPC was to determine the role of SPC to promote SMEs' products in Indonesia. Last but not least, this workshop was expected to generate further constructive recommendations regarding better access to technology for SMEs in the APEC region.

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This report is intended to present a summary of the APEC Workshop, results of the evaluation as well as comments given by the speakers and participants. It is hoped that this report would serve as a reference for future similar activity.

May I also take this opportunity to express my sincere gratitude and appreciation to APEC economies, APEC Secretariat, and Study Center for Industry, SMEs and Competition, University of Trisakti, for extraordinary participating and contributing in realizing this workshop.



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## I. INTRODUCTION

There are many aspects becoming impediments to development of SMEs, and lack of access to technology is one of the important aspects that should be put into consideration in order to maintain the improvement of their role as an engine for APEC economic growth.

APEC Workshop on SME's Access to Technology is intended to increase broader understanding among APEC economies of the current needs of SMEs' to get into better access to technology. In order to do so, the workshop will improve knowledge of APEC economies of the relationships between current policies and existing institutions and the exiting acces barriers. Internal constraints and limitations by technology and policies or regulations associated with improving SMEs' capability for technology development and innovations and eliminating access barriers for SMEs' to source of technologies, and creating/increasing cooperations between SMEs and universities. R&D institutes and Large Enterprises including multinational companies through interaction and information sharing (e.g. best practices and lessons leardned) among roundtables participants and expert speakers.

### KEY OBJECTIVE & OUTCOME EXPECTED

Key Objective of this workshop would be:

1. To increase broader understanding among APEC stakeholders of the current needs of SMEs for better access to technology.
2. To improve APEC stakeholder's knowledge of the relationships between current policies and existing institutions and the exiting access barriers.

By creating better access to technology for SMEs, it is expected:

1. To reduce the SMEs' transaction cost
2. To improve SMEs competitiveness

## II. WORKSHOP

### 2.1. Program Implementation

The International Workshop on The SMEs' Access to Technology commenced on 7-9 February 2012 was preceded by a short report on the preparation of the event, the participants and the speakers also the content of the program presented by Ir Martono Djohari, MABM, the head of organizing committee, while Mr. I Wayan Dipta the Deputy Minister for Resources Research and Development for Cooperative and small and medium enterprise who is the Project Overseer had officially opened the event. In his opening remarks. Mr. I Wayan Dipta expressed that governments can play an important role in strengthening the competitiveness of SMEs by supporting the development and adoption of better technologies for SMEs. Furthermore, this workshop was expected to be a tool to share policies and best practices between member economies on SME's access to technology and if possible relate to recommendations of ABAC.

The workshop has been a forum consisting of three-day activities, namely: (i) one day roundtable on 7 February 2012, (ii) one-day seminar that organized parallel with the fieldtrip on 8 February 2012, and (iii) one-day panel discussion to produce policy recommendations on 9 February 2012. This workshop has been discussed four issues, namely:

1. How the government does develop technologies policy for SMEs and how to overcome obstacles of SMEs in access to technology. The keynote speakers were DR. Tulus Tambunan (University of Trisakti, Indonesia) and DR. Lewis Chen (Chinese-Taipei). This issue was presented on 7 February 2012.
2. The role of R & D Institutes and Universities in Technology and Innovation to support the development of SMEs including technology transfer to SMEs. The Speakers having addressed these issues are DR. Tatang A Taufik (BPPT, Indonesia) and Mr. Franz Gelbke (Germany). This issue was presented on 7 February 2012.
3. The factors that determine the success story behind the Technological Development of SMEs be addressed by Prof. Shigeo Kagami (Japan), Mr. Franz Gelbke (German), and Mr. Lucas T Prawira(CISCO, Indonesia). This issue was presented on 7 February 2012 and
4. Different experiences in the formulation and implementation of technology development of SMEs had been addressed by DR, Tatang A Taufik (BPPT, Indonesia), DR. Lewis Chen (Chinese-Taipei), Prof. Shigeo Kagami (Japan), Mr. Junghwa Lee (Korea), and Mr. Mike Orgill (Google). This issue was presented on 8 February 2012

The third day of workshop, the forum of workshop had discussed the policy recommendations on better access to technology for APEC SMEs. The Workshop Program is attached as Annex A and presentation from speakers is



Attached as Annex B, and presentation from workshop participants is attached as Annex C. In second day of the workshop, a visit to Martha Tilaar factory and LLP KUKM or SME Promotion Center/SPC was carried out.

## 2.2. Participant

The APEC International Workshop on SMEs' Access to Technology was attended by fifty-three participants (53) coming from nine (9) APEC economies namely China, Indonesia, Malaysia, Mexico, Papua New Guinea, Peru, Philippines, Thailand, and Viet Nam and non-APEC economies such as Colombia. APEC had supported eight teen (18) participants to attend the workshop while thirty five (35) workshop participants were non-APEC sponsored participants. They came from the government officials, Association of SMEs, Universities, and Research Institutions. The list of the participants of the workshop is presented as Annexes D.

## 2.3. Speaker

There were four (4) APEC sponsored speakers from APEC member economies namely from Indonesia, Japan, Korea, and Chinese Taipei,, and four (4) non APEC sponsored speakers from Germany, Indonesia, CISCO Indonesia and Google. The speakers were invited from Advisor for Business and Technology Transfer, Ministry of Research and Technology, Republic of Indonesia; Venture Incubation & Investment Division of Commercialization and Industry Service Center (CIS) of Industrial Technology Research Institute (ITRI); Division of University Corporate Relations, The University of Tokyo; Small Medium Business Administration(SMBA) of Korea; The Center for Industry, SME and Business Competition Studies Faculty of Economics, University of Trisakti; BPPT; CISCO; and google. The list of the speakers is presented as Annex E.

## 2.4. Notes of Workshop Discussion Sessions

Notes of workshop discussion sessions can be found in details in Annex F.

## 2.5. Workshop in Pictures

Pictures of participants and speakers for the whole program during the opening ceremony is illustrated in Fig. 2.1 and 2.2., Activities during the workshop in Fig.2.3. and during the field trip are depicted in Fig. 2.4.



Figure 2.1. Opening remarks by Deputy Minister of Research and Development for Cooperatives and SMEs, Ministry of Cooperatives and SMEs, Republic of Indonesia



Figure 2.2. The Participants and Speakers at the opening ceremony of the APEC International Workshop on SMEs' Access to Technology, Jakarta, Indonesia, 7-9 February 2012





Figure 2.3. Activities during workshop



Figure 2.4. Field visit to Martha Tilaar Factory and LLP KUKM/SPC (SMEs Promotion Center)



### III. OUTCOMES AND RECOMMENDATIONS

Based on the discussion during the two-day workshop, it was agreed among all participants that SMEs is an important factor in economy. A variety of SMEs that are different in nature and development dictate what kind of policy government needs to formulate to enhance SMEs' competitiveness and capabilities, particularly in technology.

It has also been found that access to technology was a common constraint among SMEs in many APEC member economies. As SMEs are market-oriented, they need better access to technology in order to get closer to their customers. Research and development as well as innovation are highly essential and their sources are mainly drawn from their business partners therefore SMEs need a third party, or intermediaries to be able to connect comprehensively to research institutions.

In formulating policy recommendations, nine APEC member economies and a representative of the Business Technology Center, an expert-based institution that focuses on SMEs presented their point of views and shared their economy experience in promoting technology among SMEs. The followings are short conclusion of their presentation:

People's Republic of China states that a sense of innovation must be greatly applied at every aspects of economy without neglecting the importance of quality control. Special fund for technology innovation must be allocated and having learned from past experience, national and local governments must work hand in hand in developing SMEs.

Chinese Taipei suggested that government needs to formulate a policy that encourages large enterprises to invest on SMEs in terms of business innovation and research and development programs that can be implemented through CSR programs or subsidy. It is also important to bear the value of innovation in the mind of entrepreneurs. There have to be strong commitment and consistency by both government and SMEs and technical development must be a combination of each practical area in business.

The Business Technology Center mentioned that the roles of governments has diminished and was taken over by large companies in terms of technology innovation for enterprises. Government needs to convince companies to invest more in technology

as technology transfer is a part of sales that are beneficial for both SMEs and companies.

Mexico shared its programs in enhancing entrepreneurship which eventually generates technology innovation. Through its National Entrepreneurs Program, the government of Mexico gathers a high number of entrepreneurs from around the economy and assists them with incubation, networking, and free training programs for entrepreneur leaders. The government also consolidates all actors in the national system of business incubators, including local governments, businessmen, investors, academic researchers, industrial parks, virtual market places, specialized agencies, industrial clusters, information system, entrepreneurs and financing.

Malaysia suggested some tools to evaluate SMEs' advancement in technology by using four main criteria: technology innovation ability, technology commercialization ability, technology innovation management ability, and technology innovation results. Instead of providing grants, the government supports SMEs by offering them with soft loans thus encourage more responsibilities. In order to get closer to customers, SMEs are also encouraged to improve their branding.

The Philippines explained that despite their government's efforts to make technology more accessible, many SMEs are reluctant to use online marketing and websites as other SMEs may copy their products. In that case, legal assistance and patent laws must be socialized and the establishment of Technology Development Center would be a significant help in encouraging the use of more advanced technology.

Thailand suggested increasing the number of R&D personnel among companies cooperating with SMEs. In developing economies innovation to intermediaries should be established as catalysts and bridging agents of innovation process.

Papua New Guinea shared its economy experience in establishing the Regional Center for Technology and innovation and expanded their networks with major stakeholders such as national government and statutory authorities, provincial governments, research agencies, international technology transfer organization and informal sector representatives.

Peru shared its vision of inclusive growth which incorporating all citizens and economic growth. They also suggested increasing teaching of IT and dissemination of the concept of business and R&D

Indonesia noted the importance of growing culture of techno-entrepreneurs among SMEs and the development of technology and innovation center by APEC.

## **Policy Recommendations**

In improving SME's access towards technology, systemic approach has to be established to encourage all relevant actors to play their parts. The variation of nature and interests of SMEs also have to be taken into account in order to create a proposal that represents a balanced interest of APEC region.

The government also needs to create a conducive business climate which subsequently will build trust among SMEs, business societies and the government itself, in terms of supporting affordable technology for SMEs and creating fair transaction cost for business societies. Collaboration and networking among SMEs across APEC member and non-member economies are hoped to be realized in the long term thus SMEs can take benefits from the global economic trends. Both national and regional government should support all efforts in easing access of technology to SMEs as the impacts and results will be beneficial to economic national and regional growths.

Technology incubation is an important factor which consideration should be determined by the SMEs, research institutions and private sectors. Therefore the workshop also proposed the establishment of SMEs Working Group as a catalyst in APEC networking and it is hoped that workshop would be continued in the future to contribute a concrete recommendation on what would be collaborated projects in the region.



## IV. PROJECT EVALUATION

The APEC questionnaires for participants and speakers were used to evaluate the project. They are addressed separately.

### 4.1. Speaker Evaluation

#### Summary of APEC Project Evaluation

(Part A – Speakers)

Project Code : SME 06/2011A

Project Title : Workshop on SMEs' Access to Technology.

#### 1. General Information

- APEC Workshop on SMEs' Access to Technology was held in Jakarta - Indonesia on 7-9 February 2012.
- The workshop was officially attended by 53 participants from China (2); Indonesia (35); Malaysia (2); Mexico (2); PNG (2); Peru (2); Philippines (2); Thailand (2); Vietnam (2) and Colombia as an observer (2).

Out of 53 participants, 8 speakers/moderators were from Chinese Taipei (1); CISCO (1); Germany (1); Google (1); Indonesia (2); Japan (1), and Republic of Korea (1), all of them are Males.

- From 8 evaluation sheets that distributed to the listed speakers, 5 of them were filled and returned to the committee (62.5%) under the following composition: Chinese Taipei (1); Indonesia (2); Japan (1); and Republic of Korea (1).

#### 2. Status of Activity and Speakers

- All respondents recognized that APEC Workshop on SMEs' Access to Technology was held on 7-9 February 2012 during 3 (three) consecutive days.

Out of 8 respondents, 4 of them justified the APEC Workshop on SMEs' Access to Technology as Seminar/Symposium, 1 justified Conference Forum, and 3 abstain.

The status of speakers originated from the various roles, namely: 4 government officers (DR Tatang A Taufik, Mr Franz Gelbke, DR. Lih- Woe Chen, Mr. Junghwa Lee), 2 researchers (Prof. Tulus Tambunan, Prof. Shigeo Kagami), and 2 executives of Large Enterprises (Mr. Lucas T Prawira, Mr. Mike Orgill).

### **3. Project Accomplishment**

5 respondents confirmed that the project has achieved its objective; and recognized the workshop as a forum for exchange of information on SMEs' Access to Technology.

### **3. Profile of Attendees**

5 respondents justified that the attendees of the workshop were in conformity with the target group.

### **4. Project Assessment**

The question on the overall effectiveness of the project were responded as follows: 1 respondent said "Excellence;" 1 respondent said "Effective;" 1 respondent said "Good;" 1 respondent said "need to increase the outreach to broader audience and 1 respondent said all attendees' can share information for SMEs of each economy.

### **5. Project Improvement**

2 respondents have suggested to improve the workshop, 1 respondent reiterated to invite more key persons; another respondent identified the needs of focus on more specific area and visits to relevant examples discussed in the workshop/seminar.

## 6. Other Suggestions

2 respondents were abstain; 1 respondent want a possible conference that's focus more an "entrepreneurship" rather than SMEs in general, 1 respondent suggested that the next topics must relate to public awareness to political communities; and 1 respondent suggested that this workshop should be follow up by an APEC joint research to obtain evidence on the issue discussed in this workshop.

### 4.2. Participant Evaluation

#### Summary of APEC Workshop Evaluation

(Part B – Participant)

Project Code : SME 06/2011A

Project Title : Workshop on SMEs' Access to Technology.

#### 1. General Information

- APEC Workshop on SMEs' Access to Technology was held in Jakarta - Indonesia on 7-9 February 2012.
- The workshop was officially attended by 53 participants from China (2); Indonesia (35); Malaysia (2); Mexico (2); Papua New Guinea (2); Peru (2); Philippines (2); Thailand (2); Viet Nam (2) and Colombia as an observer (2). Out of 53 participants, 8 speakers/moderators were from Chinese Taipei (1); CISCO (1); Germany (1); Google (1); Indonesia (2); Japan (1), and Republic of Korea (1)
- From 53 evaluation sheets that distributed to the listed participants, 48 of them were filled and returned to the committee (90.56%) under the following composition: China (2); Columbia (2); Indonesia (30); Malaysia (2); Mexico (2); Peru (2); PNG (2); Philippines (2); Thailand (2) and Viet Nam (2).

#### 2. Perception on Workshop's Benefits

- 48 respondents have confirmed that primary benefit of the workshop for the economy is sharing experiences on best practises in SME programs and get various information about technology development, technology access, and the method of implementation of R & D result for SME from another APEC Economy;
- In term of new skills and knowledge gained from the workshop, all respondents recognized at having new knowledge about SMEs' Access to Technology from many angles, such as: policy development, Importance University's power of R & D, transfer of technology to SMEs, new commercialization collaboration between SMEs and LC, innovation system, sharing experiences among member economies.

### 3. Implementation of Workshop's Results

- 40 respondents were keen to pursue workshop's results in their respective home economy through many approaches, such as: proposed to explore new schemes for technology development and financing, new role for university R & D, select focus industry, establishment of a technology/innovation center for SMEs, share the model and knowledge from the workshop, more collaboration and exchange of knowledge among APEC economy, method of transferring technologies, promotion and strength the connection between university and companies. 8 respondents were abstain.
- Respond to question about what to be done next, and how should the workshop be built upon, 48 respondents definitely responded that similar workshop needs to be continuously undertaken, such as: integrate outcomes of workshop to general work of SMEWG, select good practice then each economy select a practice that they want to try/implement, build the technology center, detect new opportunities in technology transfer or the implementation of new support program, the knowledge shared should be the platform to more forward, some real program for implementing innovation/ technology access for SMEs, assisting to implement technology which suitable in SMEs, organizing specific workshop of best practices strategies, discussion between R & D Institutes/University or government officer need more time, and have more discussion on the feedback.

- 8 respondents were keen to link workshop's outcome to the inclusive growth part of the APEC Growth Strategy, 4 participant said it is better if economies linked together to develop and implement the programs for assessing and benchmarking the impact in each economy, 4 respondent said maybe there is a plan if given an opportunity and appropriate funding, 2 respondent said that for the moment is only share with the Mexican companies the best practices in technology access in APEC region, 6 respondent just say yes, 4 respondent will promote the outcomes on the meetings, conferences, or for a which she attend in, 4 respondent will give a report and see what can be adopted from the workshop, 4 respondent said not at the moment but soon, and 12 respondents were abstain.

#### 4. Rating, Effectiveness, and Contents

- In term of workshop's rating, there were 28 respondents provided rating 5 (very good); 8 provided rating 4 (good); 12 respondents gave rating 3 (near good).
- The overall effectiveness of the workshop has been responded as "Effective" by 12 respondents; "Good" by 12 respondents; "Fair" by 4 respondents.

4 respondent commend that the workshop was the great opportunity to share experiences implemented in APEC region about technology and innovation actions, 4 respondents said effective in general but not for special SME, 4 respondent said if the participant have influences in the government or in the sector they belong it will be successful, 4 respondent said it's a very helpful project and successful meeting, and the last 4 respondents said this project is very fruitful and enhanced our understandably and communication.

- Out of 48 respondents, 36 has confirmed that the content of the workshop was "Just Right, and 12 respondents said "Not Detailed Enough."

#### 5. Additional comments

- 12 respondents expressed positive appreciation; and 12 respondents were abstain.
- Additional comments from another 24 respondents were covering the following subjects:
  - (a) Should have a chance to add/comment on the drafted policy recommendations.
  - (b) All participants should be informed about presentation so that good presentation could be prepared.
  - (c) More time should be given to speakers so that more knowledge and experiences gained by participants.
  - (d) More data and statistics should be acquired to make a better analysis.
  - (e) More information related to specified technology for specified SMEs in each APEC Economies.
  - (f) It would be better if there are more representatives from industry to give more successful stories.