

Sustainable Growth Working Group Matrix

Highlighted cells indicate U.S. Action

	Agenda Item	US Member	US ABAC position/action	USG Position if known or applicable	Other economy positions
2.	Food Security				
	Experience in reducing post-harvest losses – Case of Rice in Japan	Deb Henretta	<ul style="list-style-type: none"> ABAC USA is very supportive of efforts to reduce post-harvest loss. 		
	Report on the outcomes of the PPFS	Deb Henretta		USG is supportive of the PPFS forum.	
	Review of the Work Program on food security for 2012		<ul style="list-style-type: none"> No document at this time. 		
3.	Energy Security				
	Energy ring project	Deb Henretta	<ul style="list-style-type: none"> No document at this time ABAC USA should monitor 		
	Review of the work program on energy security for 2012	Deb Henretta	<ul style="list-style-type: none"> ABAC USA should monitor 		
4.	Tech Transfer and Cutting Edge Technology Investment				
	Update on Research Initiative on TT	<ul style="list-style-type: none"> Alex Parle 	<ul style="list-style-type: none"> ABAC USA feels that all technology dissemination should be voluntary and market driven and would like ABAC to engage the discussion through a broad framework focused on trade and investment ABAC USA feels that the core issue ABAC should try to resolve is the technology gap between APEC economies and believe that APEC can be effectively leveraged to make progress in promoting the diffusion of technology throughout the region in a manner that is consistent with its 	USG is not supportive of this proposal	
	Technology Transfer Partnership	<ul style="list-style-type: none"> 			
	Review of the Work Program on TT&TI for 2012/preview of 2013	<ul style="list-style-type: none"> Alex Parle 			

			mission and purpose.		
5.	SDWG Agenda for 2013		<ul style="list-style-type: none"> • ABAC USA is supportive of the overall themes for 2013 but will need to monitor closely. <ul style="list-style-type: none"> ○ Food Security ○ Green Growth (including Environmental Goods and Services) and Blue Economy ○ Energy Security ○ Technology Dissemination ○ Infrastructure Development 		
6.	Review of SDWG input and recommendations to the Report to Leaders	<ul style="list-style-type: none"> • Alex Parle 	<ul style="list-style-type: none"> • If there is a push for Technology Dissemination to be the key message to leaders, the issue to be resolved should be expressed in the following manner: A leading source of innovative growth and economic development is the rapid adoption of leading edge technologies. Many leading technology companies, especially venture-backed SMMEs, which are the engine of much innovative technology development in the most advanced economies, lack the capacity and resources to fully commercialize and exploit their technology on a global basis. As a result, the most advanced technologies are often commercially exploited in only the most advanced economies for a long period of time. 		
7.	Other Issues	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 		

Sustainable Development Working Group
1015 - 1215, Tuesday, 4 September 2012

Draft Agenda

Agenda Item No.	Issue	Lead Economy/ Speaker	Doc. No.
1	Welcome, approval of the minutes of last meeting and the agenda of this meeting - 3 mins	Chair/Mr. Frank Gaoning Ning	
2	Food Security – 45 mins		
2a	Experience in reducing post-harvest losses– Case of Rice in Japan -10 mins	Japan/ Mr. Hideki Oyama, Manager, Foods Division, Mitsubishi Corporation	
2b	Report on the outcomes of the PPFS Management Council Meeting and open discussion -25 mins	PPFS Chair /Mr.Sergey Aleksashenko	
2c	Review of the Work Program on food security for 2012 and preview of the proposed priorities for 2013-10mins	Chair/Mr. Frank Gaoning Ning	
3	Energy Security –20 mins		
3a	Energy ring project-10mins	Russia /Mr. Artem Volynets, CEO of En+ Group	
3b	Review of the Work Program on energy security for 2012 and preview of the proposed priorities for 2013-10mins	ABAC Canada	
4	Technology Transfer and Cutting Edge Technology Investment– 30 mins		
4a	Update on Research Initiative on Technology Transfer and Cutting Edge Technology Investment(final version)- 15mins	ABAC Chinese Taipei/ Mr. Steven Lee	
4b	Technology Transfer Partnership-10mins	ABAC Russia /Mr. Maxim Golovinov	
4c	Review of the Work Program on TT&TI for 2012 and preview of the proposed priorities for 2013-10mins	ABAC Chinese Taipei/ Ms. Cher Wang	
5	SDWG Agenda for 2013 -10mins <ul style="list-style-type: none"> Members are requested to indentify issues and topics they would like to see be included on the SDWG work plan for 2013 	Chair	

6	SDWG Input to Leaders dialogue - 10mins <ul style="list-style-type: none">• Discussion on SDWG's input to the Leaders Dialogue and main issues to be raised	Chair/Mr. Frank Gaoning Ning	
7	Other Issues -2 mins <ul style="list-style-type: none">• Other Business• Closing Remarks	Chair/Mr. Frank Gaoning Ning	

Document: SDWG 32-042 Draft: FIRST Source: ABAC Japan Date: 27 August 2012 Meeting: Vladivostok, Russian Federation
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Meeting Document Summary Sheet Template

Document Title: Experience in reducing post-harvest losses– Case of Rice in Japan- (Power Point Presentation)
Purpose: For information only
Issue: To share the experience of how Japan has reduced the post-harvest losses by mechanization.
Background: When the presentation on “Strengthening food security through technology dissemination and infrastructure development” was endorsed at ABAC HCM meeting, ABAC China proposed to exchange and share best practices of Japan at 4 th ABAC meeting 2012. In response to that proposal, ABAC Japan will introduce Japan’s experience in improving the post-harvest loss in rice production. Experience in Japan’s rice production workflow from seeding to polishing suggests that, mechanization, especially the introduction of multifunctional machines, enables to reduce the workflow and maintain the quality control which as a whole improves the post-harvest losses significantly. Furthermore, it also improved the labour productivity by reducing the labour hour per 10a by 80% and improving yield by 27% in the past 40 years. Given the experience stated above, it is vital to share the good practice to assist developing economies to develop food market infrastructure to minimize the food losses.
Proposal /Recommendations:
Decision Points:

Experience in Reducing Post-Harvest Losses

- Case of Rice in JAPAN -

4th Sep, 2012
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Agenda

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1. Food Security Agenda at ABAC

2. Rice Production Flow in Japan

2.1 Seeding

2.2 Harvesting & Threshing

2.3 Storing & Drying Paddy

2.4 Hulling & Storing Brown Rice

2.5 Transporting Brown Rice

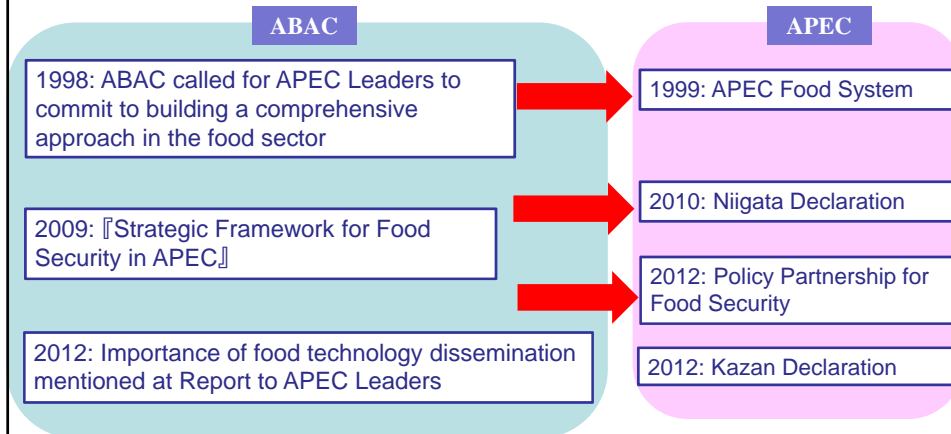
2.6 Polishing from Brown Rice to White Rice

3. Conclusion

(Ref.) Where the Food-Losses Occur?

1. Food Security Agenda at ABAC

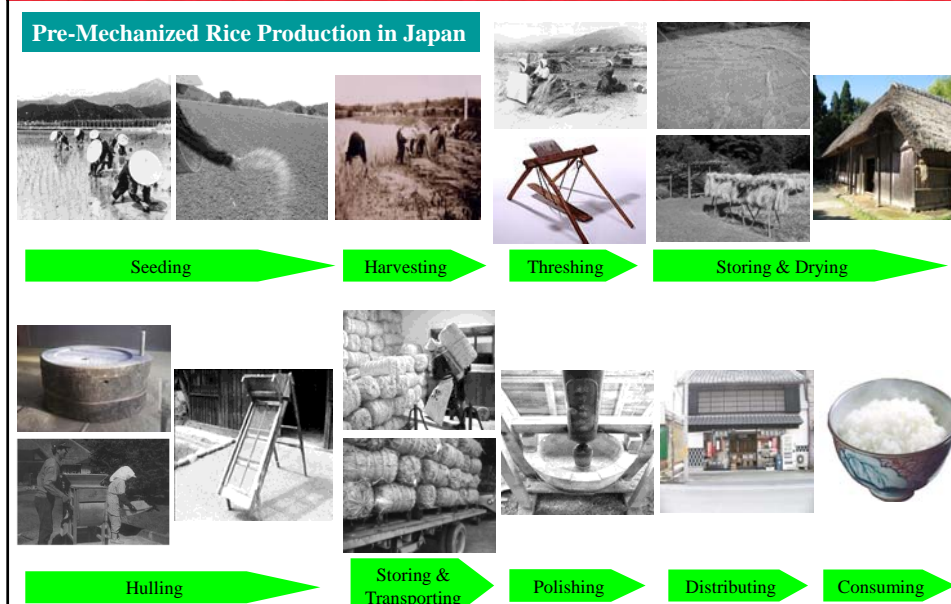
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Food Security is One of the Priority Initiatives at APEC and ABAC in 2012

2. (Pre-Mechanized) Rice Production Flow in Japan

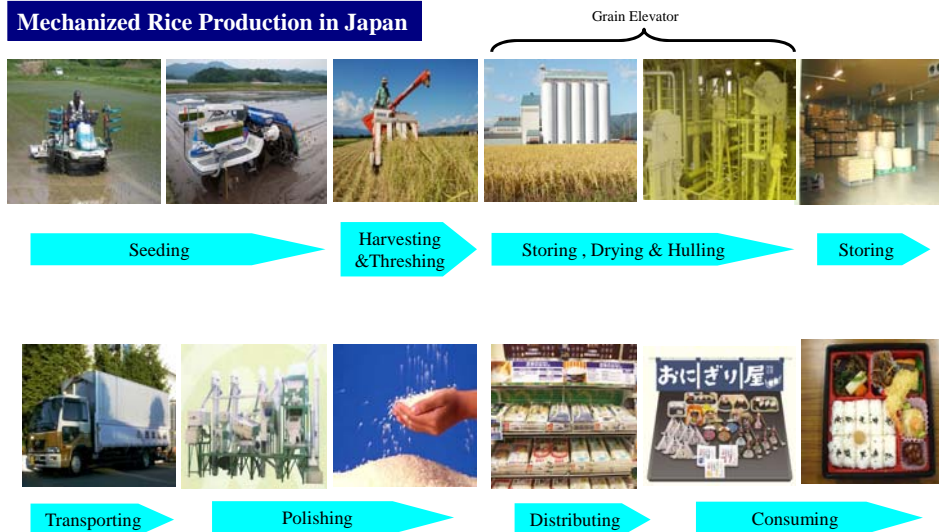
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2. (Mechanized) Rice Production Flow in Japan

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Mechanized Rice Production in Japan

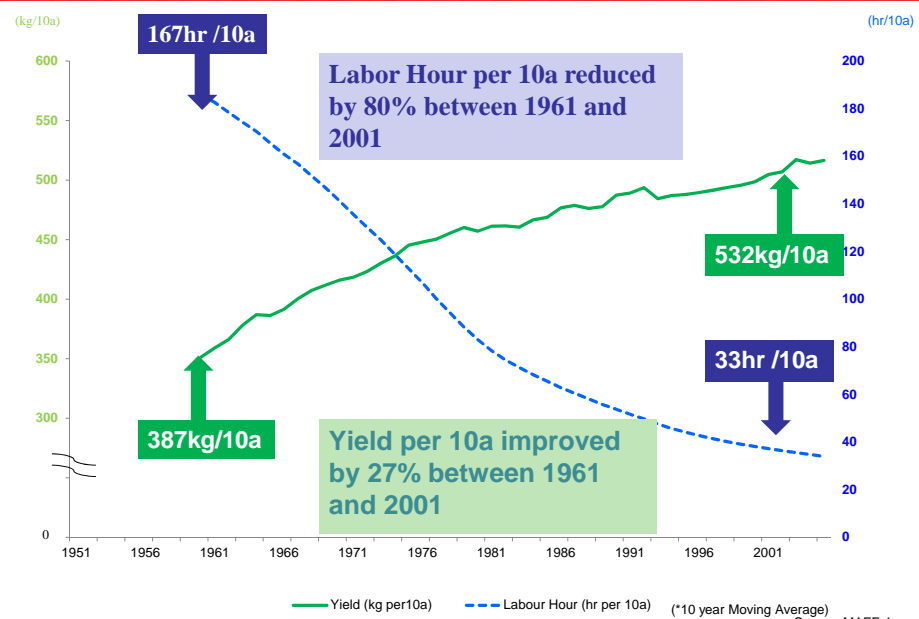


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2. Effect of Mechanization in Rice Production

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2.1 Seeding

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Pre-Mechanized Seeding

Seedling planting



Direct seeding



【Main Causes of Decreased Yields】

- Seedling Planting by hands
- Direct Seeding

Mechanized Seeding



【Main Method to Improve Yields】

- Seedling Planting with Rice Planter Machine

2.2 Harvesting & Threshing

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Pre-Mechanized Harvesting & Threshing



【Main Cause of Decreased Yields】

- Use of Sickle and Thresher

Mechanized Harvesting & Threshing



【Main Method to Improve Yields】

- Use of Rice Combine Harvester to separate straw and paddy automatically

2.3 Storing & Drying Paddy

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Pre-Mechanized Storing & Drying Paddy

【Main Causes of Decreased Yields】

- Dry by sunlight (with bundled paddy)
- Farmers store at their own warehouse



Mechanized Storing & Drying Paddy

【Main Methods to Improve Yields】

- Dry with Rice Drying Machine
- Use of Grain Elevator to process from drying to storage in one place

Rice Drying Machine



Grain Elevator



2.4 Hulling & Storing Brown Rice

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Pre-Mechanized Hulling & Storing Brown Rice

【Main Causes of Decreased Yields】

- Use of Hulling Stones and Sorters to separate chaff and brown rice
- Store at straw-made bags

Hulling Stones



Sorter - by wind



"straw-made bags"



Mechanized Hulling & Storing Brown Rice

【Main Methods to Improve Yields】

- Threshing Machine incorporated within Grain Elevator
- Store in Paper Bags or in Flexible Container Bags
- Store at temperature controlled Warehouse with regular moisture inspection

Threshing Machine



Grain Elevator



Warehouse -Flexible Container & Paper Bags



2.5 Transporting Brown Rice

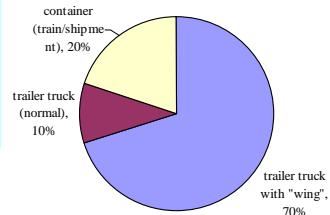
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Current Transportation Methods

**【Adjustable Transportation Methods
depending on the Quantity and the Distance】**

- Trailer Truck
- Trailer Truck with Wing
- Container (Train/Shipment)

Transported with Flexible Container or paper bag.



Trailer Truck (normal)
10,000-13,000kg loading



Trailer Truck with "wing"
10,000kg- 13,000kg loading



container (shipment)
5,000kg- 6,000kg loading



container (train)
5,000kg- 6,000kg loading



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2.6 Polishing from Brown Rice to White Rice

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Pre-Mechanized Rice Polishing

【Main Cause of Decreased Yields】

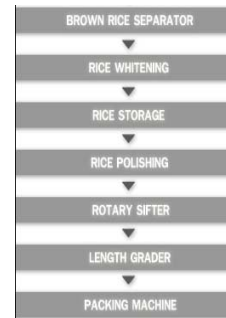
- Polish rice with Mortar and Pestle



Mechanized Rice Polishing

【Main Method to Improve Yields】

- Layered polishing process at Specialized Milling Factories



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3. Conclusion

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- To Ensure the Food security: One of the top priority agenda at both APEC and ABAC.
- FAO(2011) report: More than 40% of food losses occur at post harvest and processing levels in developing economies.
- Experience in Japan: Mechanization, especially the introduction of multifunctional machines, contributes significantly to minimize the post harvest losses. It also improves the labour productivity and land yield.
- It is vital to share the good practice to assist developing economies to develop food market infrastructures to minimize food losses.



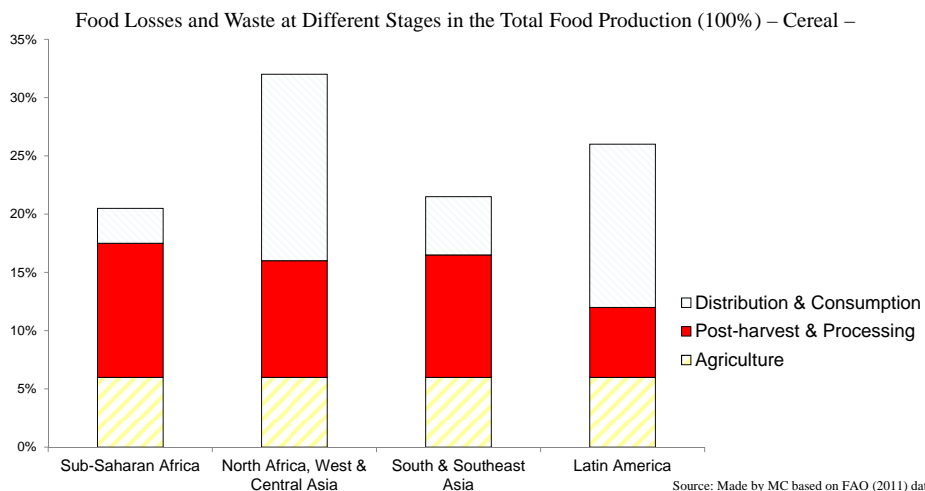
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(Ref.) Where the Food-Losses Occur?

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In developing economies, more than 40% of food losses occur at post harvest and processing levels, while in developed economies, the same percentage of losses occur at retail and consumer levels.

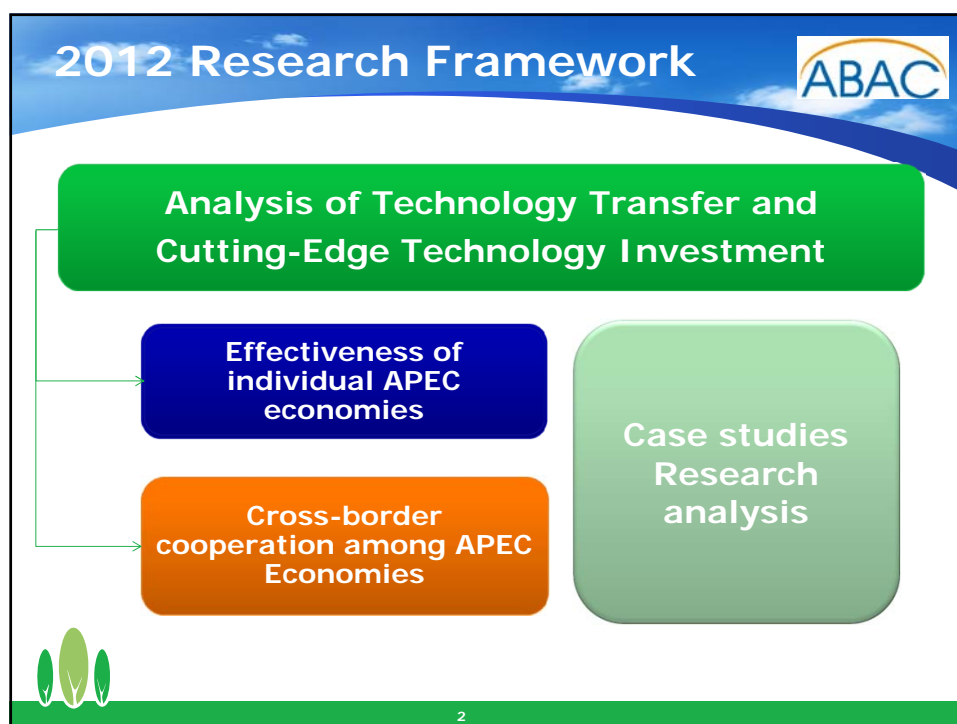


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Sustainable Development Working Group
ABAC Chinese Taipei Research Initiative on Technology Transfer Summary Sheet

Document Title: Research Initiative on Technology Transfer and Cutting Edge Technology Investment
Purpose: For consideration and endorsement
Issue: Numerous barriers to technology transfer and investment in cutting edge technologies still exist across the APEC region.
Background: A joint study by ABAC Chinese Taipei and ABAC China assessed factors relating to technology transfer and cutting-edge technology investment, with the aim of identifying and recommending policies to APEC Leaders that can help to encourage technology transfer. The research looked into various types of technology transfer and investment. This update at ABAC IV offers the findings from the research study and a summary of the policy recommendations given to APEC leaders on related issues. It also features an overview of proposals for further research in 2013.
Proposal /Recommendations: ABAC Chinese Taipei has made the following policy recommendations to APEC leaders: <ul style="list-style-type: none">• Eliminate barriers and create a business environment conducive to FDI• Endorse the establishment of a Technology Information Exchange Platform under APEC• Assist developing economies to reform their domestic Technology Transfer system through ODA ABAC Chinese Taipei proposes to build on this research through the implementation of studies in the following areas of Cutting-Edge Technology Development and Dissemination in 2013 with these key objectives: <ul style="list-style-type: none">• Identify opportunities for cross-border technology partnerships• Engage APEC developing economies in the process of establishing common industrial standards• Investigate the feasibility of creating an APEC Open Innovation Platform• Formulate an APEC Blueprint for cutting edge technology development
Decision Points: <ul style="list-style-type: none">• Endorsement of the 2012 ABAC China Taipei Research Initiative report• Endorsement of the 2013 research study proposal.



2012 Research Findings

- 1 Domestic technology transfer more common than cross-border technology transfer
- 2 Technology transfer in developed economies more efficient than in developing economies
- 3 Lack of favorable domestic technology transfer mechanisms in developing economies hampers cross-border technology transfer activities
- 4 Transnational corporations play important role in cross-border technology transfer through FDI
- 5 Importance of government research institutes and cooperation between academia & business in facilitating technology development and transfer


3

Policy Recommendations

- 1 Eliminate barriers & create a business environment conducive to FDI
- 2 Establish Technology Information Exchange Platform under APEC
- 3 Assist developing economies to reform their domestic Technology Transfer system through Official Development Assistance

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Research Proposal for 2013



Cutting-Edge Technology Development & Dissemination

- 1 Identify opportunities for cross-border technology partnerships
- 2 Engage APEC developing economies in the process of establishing common industrial standards
- 3 Investigate feasibility of creating an APEC Open Innovation Platform
- 4 Formulate an APEC blueprint for cutting-edge technology development

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Technology Partnerships



Objective

- Identify opportunities for cross-border technology partnerships

Research Scope

- Identify key barriers to innovation in the current IP environment
- Identify opportunities for the creation of a common platform to enable more favorable conditions for innovation across the region

6

Common Industrial Standards

Objective

- Investigate how developed and developing APEC economies can cooperate to formulate common industrial standards in order to promote efficient cutting-edge technology dissemination

Research Scope

- Evaluate potential benefits of implementing common industrial standards within APEC
- Identify appropriate models for establishing common industrial standards within APEC

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APEC Open Innovation Platform

Objective

- Investigate key global innovation trends to identify opportunities for facilitating open and collaborative innovation between governments, universities, research institutions, and companies in developed and developing APEC economies

Research Scope

- Analyze external initiatives, eg EU implementation of Innovation Union Initiative as part of its "Europe 2020" growth strategy
- Determine the feasibility of applying a similar model to APEC

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Blueprint for Technology Development

Objective



- Investigate the potential of implementing an APEC blueprint for technology development to promote cutting-edge technology development and dissemination

Research Scope


- Analyze external initiatives, including experience of EU in developing & implementing "Europe 2020" growth strategy
- Identify appropriate models for development of APEC blueprint



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Thank you



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