



Knowledge Sharing Platform (KSP) Workshop
for the Energy Smart Communities Initiative

The Development Implication of ESCI-KSP for APEC Developing Economies

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Presentation Outline

- I. Introduction of ESCI-KSP
- II. APEC Developing Economies' Participation in ESCI-KSP
- III. Case Studies of APEC ESCI Projects
- IV. Outcomes of the ESCI-KSP

I. Introduction of ESCI-KSP

1. Overview

Background

- In Nov 2010, U.S. President Obama and Japan's former Prime Minister Kan launched the ESCI for the Asia Pacific region
- The Knowledge Sharing Platform (KSP) was endorsed at the EWG41 meeting in Canada in May 2011

Contents

Covering the same topics as ESCI

Four pillars

- Smart Transport
- Smart Buildings
- Smart Grid
- Smart Jobs and Consumers

Cross cutting

- Low Carbon Model Town (LCMT)

Method

Coordinators

Gathering data and information collected by ESCI projects and presenting them in a web-based knowledge management center

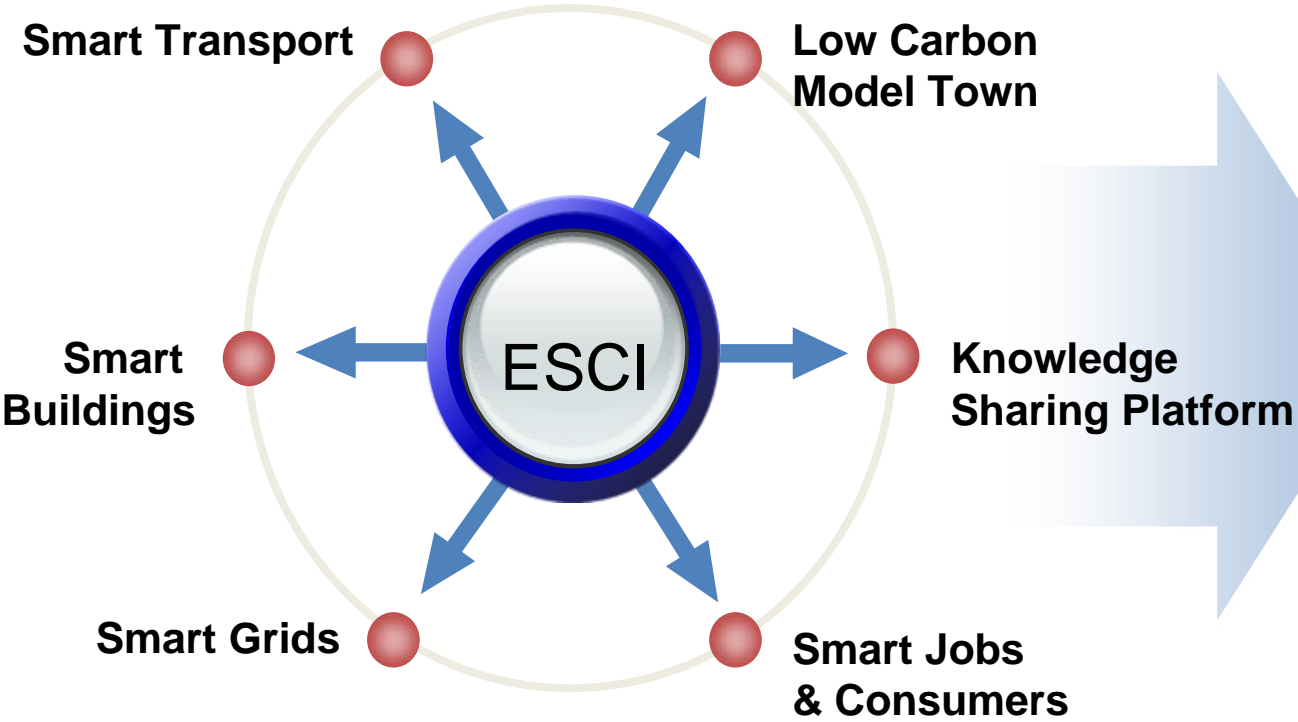
Participants

Contributing data and information to the KSP through its participation in the various ESCI projects

I. Introduction of ESCI-KSP

2. The Effects of ESCI-KSP

ESCI-KSP aims to aid in cataloging and sharing information and best practices that are developed for ESCI.



Sustainable Growth

- Save energy
- Save money
- Reduce pollution
- Create jobs
- Revitalize neighborhoods
- Boost economic development
- Educate next generation

I. Introduction of ESCI-KSP

3. Project Participation (1/2)

(1) Smart Transport

- ST-1: Energy-Efficient Urban Transport Network
- ST-2: Energy-Efficient Freight Transport Network
- ST-3: Electromobility Survey and Road Map
- ST-4: Electric Vehicle Demonstrations

(2) Smart Buildings

- SB-1: Low Energy Buildings Network
- SB-2: Materials Testing and Rating Centers
- SB-3: Cool Roof Demonstrations
- SB-4: Low Energy Window Demonstrations

(3) Smart Grids

- SG-1: Interoperability Survey and Road Map
- SG-2: Smart Grid Test Bed Network

(4) Smart Jobs & Consumers

- SJ-1: Energy Efficiency Training Curricula
- SJ-2: Energy Efficiency School Curricula
- SJ-3: Sister Schools Program

(5) Cross-Cutting

- LCMT: Low Carbon Model Town
- KSP: Knowledge Sharing Platform

	Smart Transport				Smart Buildings				Smart Grids		Smart Jobs & Consumer			Cross-Cutting	
	ST-1	ST-2	ST-3	ST-4	SB-1	SB-2	SB-3	SB-4	SG-1	SG-2	SJ-1	SJ-2	SJ-3	LCMT	KSP
Australia	X	X	X		X	X	X		X	X				X	X
Brunei Darussalam					X										X
Canada	X		X	X	X						X			X	X
Chile															
China						X	X		X	X				X	X
Hong Kong, China			X		X						X	X			X
Indonesia	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Japan			X	X	X	X	X		X			X	X	X	X
Republic of Korea						X	X		X	X					X
Malaysia			X	X	X	X	X	X			X			X	X
Mexico						X									X
New Zealand															
Papua New Guinea															
Peru															
The Philippines				X					X	X			X	X	X
Russia					X	X	X		X	X	X	X	X		X
Singapore	X		X		X	X	X	X	X	X	X				X
Chinese Taipei	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Thailand					X	X			X		X				X
United States	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Viet Nam															

All economies listed as the ESCI projects participants are welcome to participate in the KSP activities.

I. Introduction of ESCI-KSP

3. Project Participation (2/2)

APEC economies	ESCI projects participants	Non ESCI projects participants
Developed	Australia, Brunei, Canada, Hong Kong, Japan, Republic of Korea, Singapore, Chinese Taipei, United States	New Zealand
Developing	China, Indonesia, Malaysia, Mexico, The Philippines, Russia, Thailand	Chile, Papua New Guinea, Peru, Viet Nam

Most of developing economies in APEC region are interested in participating in activities of ESCI projects and have great ambition to create green economic growth.

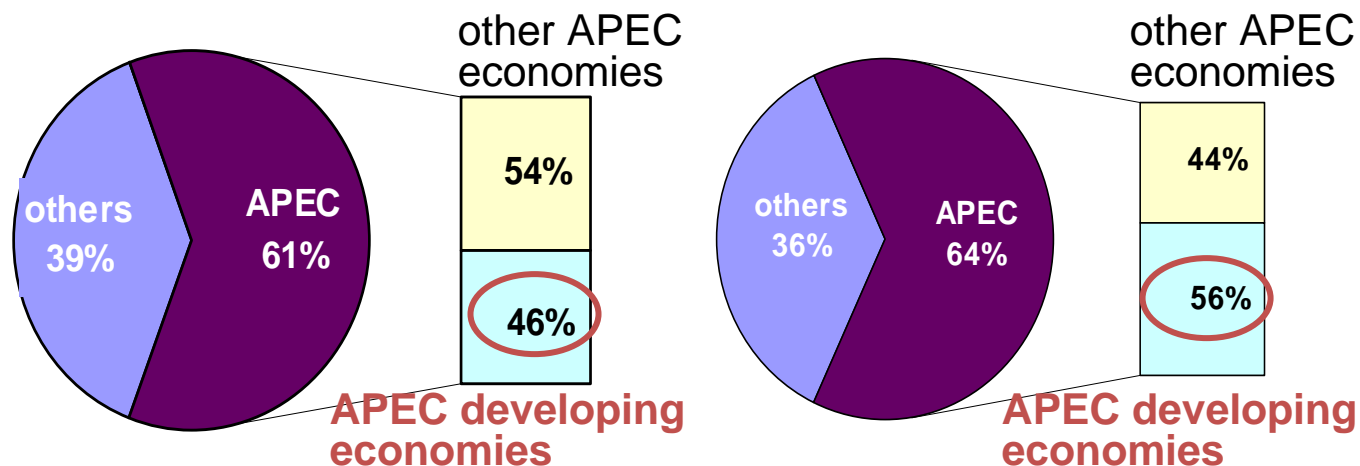
II. APEC Developing Economies' Participation in ESCI-KSP

1. Reasons for Taking Actions toward Green Growth (1/3)

Member Economies:

- Australia
- Brunei Darussalam
- Canada
- Hong Kong, China
- Japan
- Republic of Korea
- New Zealand
- Singapore
- Chinese Taipei
- United States

- Chile
- China
- Indonesia
- Malaysia
- Mexico
- Papua New Guinea
- Peru
- The Philippines
- Russia
- Thailand
- Viet Nam



World Primary Energy Consumption

World GHG Emissions

Source: Energy Information Agency

- APEC economies account for over 60% of energy consumption and GHG emissions of the world.
- Half of the increase in energy use and environmental pressure of APEC region is expected to come from developing economies.

II. APEC Developing Economies' Participation in ESCI-KSP

1. Reasons for Taking Actions toward Green Growth (2/3)

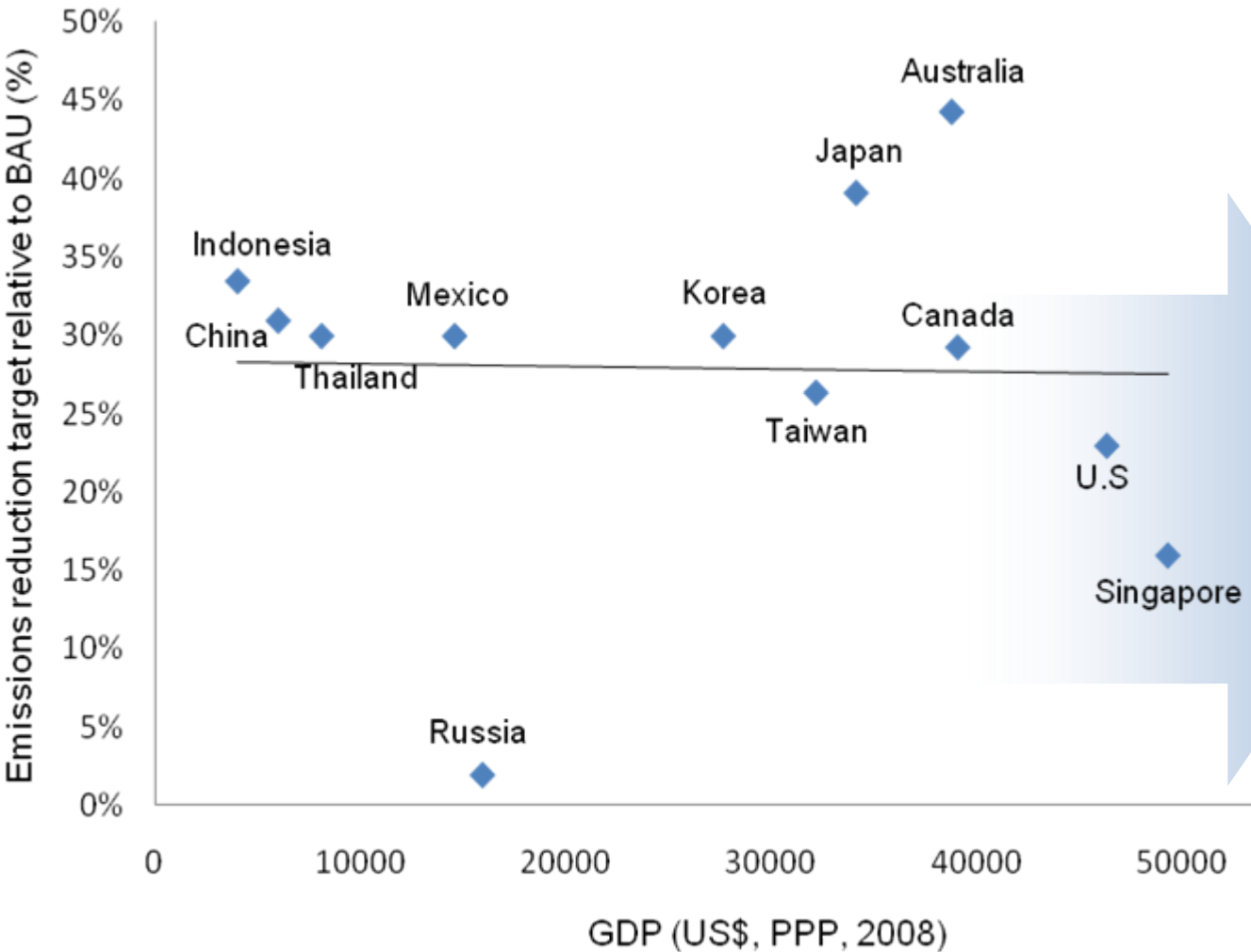
Some Asia economies will also be highly affected top ten countries vulnerable to climate change.

Drought	Floods	Storms	Sea Level Rise
Malawi	Bangladesh	Philippines	All Low-Lying Island States
Ethiopia	China	Bangladesh	Vietnam
Zimbabwe	India	Madagascar	Egypt
India	Cambodia	Vietnam	Tunisia
Mozambique	Mozambique	Moldova	Indonesia
Niger	Laos	Mongolia	Mauritania
Mauritania	Pakistan	Haiti	China
Eritrea	SriLanka	Samoa	Mexico
Sudan	Thailand	Tonga	Mynamar
Chad	Vietnam	China	Bangladesh

Source: World Bank

II. APEC Developing Economies' Participation in ESCI-KSP

1. Reasons for Taking Actions toward Green Growth (3/3)



Most APEC economies, especially the **developing economies**, have established ambitious targets to reduce GHG emissions.

Source: World Bank

II. APEC Developing Economies' Participation in ESCI-KSP

2. ESCI and Green Growth

- ◆ In order to achieve green growth targets, the full range of policies are considered and implemented.
- ◆ ESCI contains the concepts of energy-efficient buildings, transport, and electric power grids that will underpin sustainable development and long-term job creation.
- ◆ It is expected that ESCI is an effective means to the achievement of green growth in the APEC region.

II. APEC Developing Economies' Participation in ESCI-KSP

3. Participating in ESCI-KSP

Benefits to developing economies...

- ◆ As ESCI is regarded as an effective means to the sustainable growth, it is crucial to the achievement of reducing energy and environmental pressure of APEC developing economies.
- ◆ But for this to happen, developing economies will need to build institutional, technical and political capacity to implement ESCI related projects and activities.
- ◆ Based on the structure of ESCI, the **KSP helps share the information and best practices for capacity-building** of developing economies.

II. APEC Developing Economies' Participation in ESCI-KSP

4. Challenges to Face

Adaptation Gap...

- ◆ To KSP coordinators
 - Disseminating the best practices and results of ESCI-related studies and analyses to those who need them most
- ◆ To participants of APEC developing economies
 - Incorporating knowledge and expertise available in their countries
 - Lack of ability to adapt their knowledge to domestic needs

II. APEC Developing Economies' Participation in ESCI-KSP

5. Coordinators' Tasks

● Developing a knowledge sharing platform

- disseminating the information and best practices **through a dedicated website**
- **one-on-one contact** with each member of the ESCI Action Network to brief them on the KSP
- asking members to add the website to their own web pages and to communicate news about it **through their networks**
- **spreading news** through the professional, government, NGOs and private sector networks
- developing **ESCI-KSP related activities** to enhance understanding of current ESCI tasks

II. APEC Developing Economies' Participation in ESCI-KSP

6. Members' Participation

1 Accessing ESCI-KSP website

<http://esci-ksp.org/>

- contributing data and information to the KSP
- gathering resources and tools to support related programs of energy smart communities
- exchanging and sharing opinions through discussion board of the platform
- adding the KSP website to their own web pages and to communicate news about it through their own networks

2 Participating in ESCI-KSP activities

- involving in various ESCI projects (four pillars with fifteen projects)
- participating in ESCI-KSP related workshops, conferences, seminars and forums etc.
- helping providing research materials as database for KSP survey

III. Case Studies of APEC ESCI Projects

1. Sharing ESCI Projects on KSP



All Projects

LCMT: Low Carbon Model Towns		
Title	Category	Date
Ngu Hanh Son District in Danang City, Vietnam	LCMT Low Carbon Model Towns, Viet Nam	06/10/2011
Samui Island Low-Carbon Model Town Project	LCMT Low Carbon Model Towns, Thailand	06/10/2011
San Borja Low Carbon Town	LCMT Low Carbon Model Towns, Peru	06/10/2011
King County Low Carbon Model Town	LCMT Low Carbon Model Towns, United States	06/10/2011
MuangKlang Low Carbon City	LCMT Low Carbon Model Towns, Thailand	04/10/2011
ST-1: Energy Efficient Urban Transport Network		
San Francisco – 2011 Climate Action Strategy for Transportation System	ST-1 Energy Efficient Urban Transport Network, United States	02/10/2011
ST-2: Energy Efficient Train Transport Network		
EarthSmart Solutions	ST-2 Energy Efficient Freight Transport Network, United States	07/10/2011
ST-3: Electromobility Roadmap and Survey		
Electric Vehicle Technology Roadmap for Canada: A strategic vision for highway-capable battery-electric,	Canada, ST-3 Electromobility Survey And Road Map	04/10/2011

Submit Your Post

Please select the type of project that you would like to submit.

- [ST-1: Energy Efficient Urban Transport Network](#)
- [ST-2: Energy Efficient Freight Transport Network](#)
- [ST-3: Electromobility Survey and Roadmap](#)
- [ST-4: Electric Vehicle Demonstrations](#)
- [SB-1: Low Energy Buildings Network](#)
- [SB-2: Materials Testing and Ratings Center](#)
- [SB-3: Cool Roof Demonstrations](#)
- [SB-4: Low Energy Windows Demonstrations](#)
- [SG-1: Smart Grid Survey and Roadmap](#)
- [SG-2: Smart Grid Test Bed Network](#)
- [SJ-1: Energy Efficiency Training](#)
- [SJ-2: Energy Efficiency School Curricula](#)
- [SJ-3: Sister Schools Programs](#)
- [LCMT: Low Carbon Model Towns](#)

Search

ESCI Tasks
 Select Category

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III. Case Studies of APEC ESCI Projects

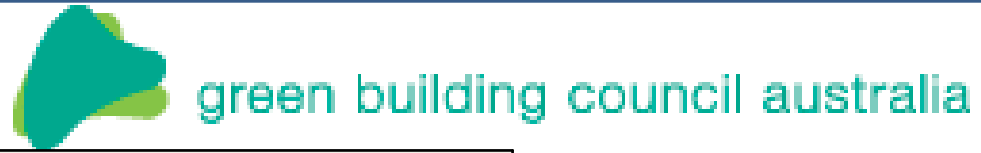
2. Smart Transport

Country	United States
Local Government	San Francisco
Project Title	Climate Action Strategy for Transportation System
ESCI Task	Energy Efficient Urban Transport Network (ST-1)
Goals	<ul style="list-style-type: none"> - to develop and implement strategies for substantially reducing" transportation sector carbon emissions - to meet adopted GHG reduction goals of 80 percent below 1990 levels by 2050
Activities	<ul style="list-style-type: none"> - The Travel Demand Management strategies (Travel Choices & Information, Demand Pricing, Transit-Oriented Development, Transit Improvement) - The Infrastructure Support strategies (Complete streets, Electric vehicles)



III. Case Studies of APEC ESCI Projects

3. Smart Buildings



Country	Australia
Project Title	Green Star Rating Program
ESCI Task	Low Energy Buildings Network (SB-1)
Goals	The Green Building Council of Australia was created to promote sustainable development of the property industry by promoting green building programs, technologies, design practices and operations.
Activities	Green Star was developed to be a comprehensive, national, voluntary environmental rating scheme that evaluates the environmental design and achievements of buildings.

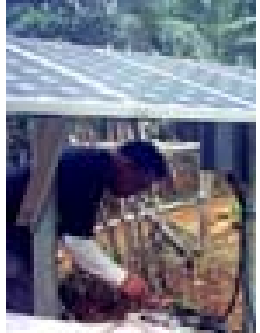


III. Case Studies of APEC ESCI Projects

4. Smart Grids



Country	The Philippines
Project Title	Rural Power Project
ESCI Task	Smart Grid Test Bed Network (SG-2)
Goals	<ul style="list-style-type: none"> - to support the implementation of the Rural Power Development Program - aiming at supporting the reforms and priority investments to improve the quality of life in the rural areas through the provision of energy services
Activities	<ul style="list-style-type: none"> - Total program cost is US\$233 million - The main project components include: <ul style="list-style-type: none"> (a) rural electrification; (b) partial credit risk guarantee; and, (c) capacity building



III. Case Studies of APEC ESCI Projects

5. Low Carbon Model Town

Country	Thailand
Local Government	Muangklang
ESCI Task	Low carbon model town (LCMT)
Goals	<ul style="list-style-type: none"> - to be a green, sustainable and low-carbon city with low levels of waste, high energy efficiency and sustainable levels of consumption by 2020 - to be a learning centre of low carbon city for other local governments
Activities	<ul style="list-style-type: none"> - Waste management - Water quality improvement - Air quality improvement - Educational program - Quality of life promotion - Urban agriculture and greenery - Green public transport



IV. Outcomes of the ESCI-KSP

Through the Platform...

- ◆ Knowledge provision: IT and other media
- ◆ Face-to-face relationship and capacity development
- ◆ Joint-actions

Mutual Reference

Mutual Learning

Practice Diffusion

For developing economies, KSP is not only an effective platform to show their contributions to the sustainability of the world, but a comprehensive database of best practices to assist them in participating relevant ESCI activities.

Thank you for your attention!

