

Energy Smart Communities Initiative Knowledge Sharing Platform

Presented to the APEC Energy Working Group

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Overview

- A Brief History
- Navigating the ESCI-KSP
- Contributing New Content
- “Taking Stock” One Year Out
- Next Steps

Concept approved
EWG 41
Vancouver
Spring 2011

Chinese Taipei
provides
intellectual and
financial support
Summer, 2011

ESCI-KSP
Launched EWG 43
Kuala Lumpur
Winter 2012

Purposes

- ✓ Help APEC economies meet energy intensity reduction goals of 45% by 2030 from 2005 levels through exchange of **best practices, research and development of new products, demonstration projects and metrics**
- ✓ Foster the growth of **communities of practice**: networks of individuals with common interests and goals
- ✓ **Provide information to the public** about smart transport, buildings, grids jobs and low carbon model towns

ESCI Official
Logo



Knowledge
Sharing
Platform

Main site
navigation links



APEC EWG
Logo

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Pillar and task
navigation built
into header



Smart Transport



Smart Buildings



Smart Grids



Smart Jobs



Low Carbon Model Towns

Welcome to the ESCI's
Knowledge Sharing
Platform. Browse and share
case studies, best practices
and innovations in the field
of smart energy from the
partners in the Asia-Pacific
Economic Cooperative.

[Read More About ESCI >](#)



Slideshow informs
users of recent
events and news
and ties in
APEC.org brand
recognition

Featured Projects



smart for two Electric Drive Vehicle
Smart Transportation: Electric Vehicle
Demonstrations
Non-APEC Economy
smart is producer of one of the
world's most economical and
environmentally friendly cars:
the sma...



Microgrid: Exploring Business
Scenario Models for APEC
Economies
Smart Grids: Interoperability Survey and Road
Map
Russia
In December 2011, APEC Budget
and Management Committee
approved a project proposal under

Featured Interview



Sam Schwartz Engineering

Penn Institute for Urban Research talks with Sam
Schwartz of Sam Schwartz Engineering (SSE). SSE
focuses on transportation challenges in urban
environments, where density makes open space a
premium.

Featured content ties
together all ESCI pillars
and gives visitors a
'snapshot' of what ESCI
is all about

Action
Network
Coordinators

25

Smart Transport Tasks



Smart Transport



ST-1



ST-2



ST-3



ST-4

Smart Buildings Tasks



Smart Buildings



SB-1



SB-2



SB-3



SB-4

47

Smart Grid Tasks



Smart Grids



SG-1



SG-2

26

Smart Jobs Tasks



Smart Jobs



SJ-1



SJ-2



SJ-3

29



Low Carbon Model Towns

Energy Smart Communities Initiative

Knowledge Sharing Platform

APEC Energy Working Group

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Smart Transportation

Energy Efficient Urban Transport Network

Select a Task

Projects | Interviews | Events | Publications

The APEC Smart Transport Energy Efficient Urban Transport Network effort (ST-1) was established under the Energy Smart Communities Initiative (ESCI) that was launched by Japanese Prime Minister Kan and U.S. President Obama on the occasion of the APEC Leaders meeting in Yokohama in November 2010. Six APEC economies have joined the effort: Australia, Canada, Indonesia, Singapore, Chinese Taipei and the United States. These economies will contribute examples of energy-efficient urban transport strategies.

Read More

Contact Task Leaders

Submit a Project

Download Press Kit

Sub-tasks

ST-1.1 Energy-Efficient Vehicles

This folder includes projects that reduce energy consumption and greenhouse gas emissions of transit vehicles. This may include the use of alternative fuels, as well as improvements in fleet logistics leading to more efficient scheduling and route optimization, and other enhancements.

ST-1.2 Transit-Oriented Development

Projects involving land development strategies that maximize access to public transportation, encourage transit ridership, and enable higher density mixed-use development, leading to reductions in energy consumption and greenhouse gas emissions.

ST-1.3 Bus Rapid Transit (BRT)

This folder includes a variety of public transportation projects involving the provision of highly reliable, fast, and more efficient bus service, compared to ordinary bus line. BRT projects can range from traffic signal prioritization, provided to public transportation vehicles, to dedicated lanes used exclusively by transit buses.

Featured Interview

Michael Replogle, Institute for Transportation and Development Policy

A conversation with internationally renowned transportation expert, Michael Replogle, co-founder of the Institute of Transportation and Development Policy and an adviser to Environmental Defense Fund.

View All Interviews

Recent Events

Energy Working Group 45th Meeting
2013-03-18, Samui Island

Clean Energy Ministerial 3 (CEM3)
25-28 April, 2012, London, UK

Navigate to other tasks from any part of the site

Contact information easily accessible

Users can submit their own content

Projects are grouped into folders of sub-tasks

Featured Interview

Recent and upcoming events listing. References listed below

Projects may
be case studies,
products,
policies, etc.

Projects can be
sorted by task,
economy, tags,
and key words



The screenshot shows the ESCI-KSP Project Page for 'Ames Transit Agency Hybrid Buses in Iowa'. The page is part of the 'Smart Transportation - Energy Efficient Urban Transport Network: ST-1.1 Energy-Efficient Vehicles' category. It features a 'Projects' tab, a 'Share this page' button, and a 'Download Project Files' button. The main content area includes a description of the project, a photo of the buses, and a list of related projects.

Ames Transit Agency Hybrid Buses in Iowa
United States

When Ames Transit Agency, or CyRide, needed to replace 10 older diesel buses at the end of their service life, the transit agency looked to the TIGGER Program to cover the incremental cost of upgrading its new buses with hybrid electric propulsion systems. Thanks to \$1,600,000 in TIGGER funding, CyRide recently started operating its new hybrid buses in and around Ames, Iowa.

Manufactured by Gillig, the 40-ft buses feature hybrid drive systems made by Voith, a seasoned transmission producer new to the growing hybrid market. This marks the transit agency's first venture into hybrid technology and alternative fuels—the new buses run on biodiesel fuel blends, between B2 and B20, depending on seasonal requirements and pricing.

By replacing older, inefficient buses with new hybrid buses that run on biodiesel, CyRide is realizing significant fuel savings and greenhouse gas emission reductions while maintaining its high quality service.

Fuel savings from each hybrid bus are estimated at 1,489 gallons a year—a 20% reduction in fuel consumption—which corresponds to 14.4 tons fewer carbon dioxide emissions compared to other buses in the fleet. The new buses also reduce the average age of the CyRide fleet by four years, ensuring reliability as well as sustainability. CyRide is paving the way for other transit agencies interested in adding such vehicles to their fleets. Based on its real-world operating experience, CyRide is compiling a how-to manual for other transit agencies and is also working with InTrans to monitor, analyze, and document its emissions reductions.

CyRide's unique three-party funding agreement—between the City of Ames and Iowa State University and its students—provides for a seamless community-wide transportation system. This intergovernmental agreement also allows for the advancement of sustainability initiatives, including this TIGGER project as well as biodiesel fuel use and numerous green building projects. In 2008, CyRide's administrative office building was the first public building in the state to receive LEED gold certification. The Ames Intermodal Transportation facility, scheduled to open in June 2012, is expected to achieve LEED gold status as well.


Metrics:
CO2 Reduction: 144 metric tons per year
Diesel Displaced: 14,890 gallon equivalents per year

Related Projects:
Flint MTA Fuel Cell Bus in Michigan
United States
AC Transit HyRoad
United States
Flyer hydrogen fuel cell bus
United States
Compound Fuel Cell Hybrid Bus for 2010
United States
Milwaukee Hybrid Vehicle Project in Wisconsin
United States

Metrics allow
users to easily
compare
projects


Project files and
links are shown

Registered users
can submit new
projects



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Submit Your Project

ST-4: ELECTRIC VEHICLE DEMONSTRATIONS

Name of Electric Vehicle Technology *

APEC Economy *











- ☐ Australia
- ☐ Brunei
- ☐ Canada
- ☐ Chile
- ☐ China
- ☐ Chinese Taipei
- ☐ Hong Kong
- ☐ Indonesia
- ☐ Japan
- ☐ Korea
- ☐ Malaysia
- ☐ Mexico
- ☐ New Zealand
- ☐ Non-APEC Economy
- ☐ Papua New Guinea
- ☐ Peru
- ☐ Philippines
- ☐ Russia
- ☐ Singapore
- ☐ Thailand
- ☐ United States
- ☐ Viet Nam

Managing Organization *

Please enter the name of the responsible organization.

Overview of the Electric Vehicle Technology *

Visual
HTML

B
I











Private sector members are
encouraged to contribute and
share their publicly available
research and innovations

"Taking Stock" One Year Out



ALLIANCE TO
SAVE ENERGY
Creating an Energy-Efficient World



Australian Government
Department of Resources
Energy and Tourism



Natural Resources
Canada



Your logo here



or here



AMERICAN
PUBLIC
TRANSPORTATION
ASSOCIATION



National Fenestration
Rating Council



經濟部能源局
Bureau of Energy,
Ministry of Economic Affairs

ESCI- KSP Content Inventory

Pillar	Tasks	# Subtasks	# Economies Represented	# Projects	# Publications
Smart Transport	ST-1 Energy Efficient Urban Transport Network	9	14	112	40
	ST-2 Energy Efficient Freight Transport Network	4	4	6	11
	ST-3 Electromobility Survey and Road Map	2	6	10	9
	ST-4 Electric Vehicle Demonstrations	3	3	26	8
Smart Buildings	SB-1 Low Energy Buildings Network	3	16	53	7
	SB-2 Materials Testing and Rating Centers	1	2	2	2
	SB-3 Cool Roof Demonstrations	3	6	10	7
	SB-4 Low Energy Window Demonstrations	2	2	4	3
Smart Grid	SG-1 Interoperability Survey and Road Map	8	10	26	18
	SG-2 Smart Grid Test Bed Network	1	2	17	2
Smart Jobs	SJ-1 Energy Efficiency Training Curricula	2	2	4	0
	SJ-2 Energy Efficiency School Curricula	2	3	5	0
	SJ-3 Sister Schools Program	1	5	3	0
Low Carbon Model Towns	LCMT Low Carbon Model Towns		6	7	10

18 economies

Nearly
300
entries

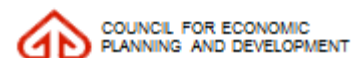
Knowledge
Sharing
Platform

ESCI-Knowledge Sharing Platform

USER GUIDE

<http://www.esci-ksp.org>info@esci-ksp.org*Produced by*

&

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“Taking Stock” One Year Out

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knowledge platform

The Green Growth Knowledge Platform is a global network of researchers and development experts that identifies and addresses major knowledge gaps in green growth theory and practice. Through widespread consultation and world-class research, GGKP provides practitioners and policymakers with better tools to foster economic growth and implement sustainable development.



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Several GGKP partners have already issued major reports

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Join the conversation!

Global Green Growth Initiative, OECD,
World Bank and UNEP

U.S. Department of Energy Innovation
Cluster: University, Public and Private
Sector Partnership



Thank You

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