



**Asia-Pacific
Economic Cooperation**

2013/EWG46/006

Agenda Item: 5a

APEC Transportation and Energy Ministerial Conference: Action Agenda

Purpose: Information
Submitted by: TPTWG/EWG



**46th Energy Working Group Meeting
Da Nang, Viet Nam
18–21 November 2013**

	<p align="center">APEC TRANSPORTATION AND ENERGY MINISTERIAL CONFERENCE (TEMC)</p> <p align="center">ACTION AGENDA</p> <p align="center">WORKPLAN – 2011-2013</p>	
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Item No.	Ministerial Taskings	Working Group	Lead Economy(s)	Activities	Deliverables	Progress	Notes
STRENGTHENING TRANSPORTATION'S ROLE IN A CLEAN-ENERGY FUTURE							
1.2	We instruct the Energy Working Group (EWG) to intensify analysis of the potential for further energy intensity improvement with a view to recommending an enhanced goal to APEC Leaders in November	EWG	ALL	A variety of projections and analyses were performed by the Asia Pacific Energy Research Centre (APEREC) in Tokyo. These were discussed in depth at EWG-41 in Canada and EWG-42 in Chinese Taipei.	A summary paper on EWG discussion and findings was presented to senior officials and Leaders in Honolulu in November 2011. Leaders adopted a goal to reduce regional energy-intensity by 45 percent by 2035.	Economies will work towards the energy intensity goal individually and collectively, sharing information on smart transport, buildings and power grids through the Knowledge Sharing Platform website of the Energy Smart Communities Initiative (ESCI).	
1.3	We direct the EWG and Transportation Working Group (TPTWG) to assess the measures APEC economies could take in the transportation sector to be more energy efficient, and to identify additional areas of collaboration	EWG TPTWG	All APEC economies	Continue to progress work on electric vehicle safety and greenhouse gas reduction including through the UNECE's Working Party 29. Ongoing avenues for collaboration include APEC studies and ESCI. APEC studies are completed or	EWG and TPT-WG to consider follow-up APEC studies. Intermodal Experts	Additional areas of collaboration to be identified by the working groups. Developed Searchable online dynamic database of over 300 international case	This work will be progressed through the Vehicle Standards Harmonization Sub-group of the Land Experts Group.

LAST UPDATED: June 13, 2013

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				underway on bus rapid transit, transit-oriented development, and intermodal freight. ESCI tasks relate to energy-efficient urban transport, energy-efficient freight transport, and electric vehicle demonstrations and electro-mobility.	Group and Expert Group on Energy Efficiency and Conservation to be consulted.	studies, publications, interviews and other material from 18 APEC economies - ESCI Knowledge Sharing Platform (www.esci-ksp.org)	
1.4	We direct the EWG to develop a voluntary reporting mechanism on reduction and phase out of inefficient fossil fuel subsidies to be presented to APEC Leaders in November, consistent with approaches in the G20	EWG	United States, New Zealand, all other APEC economies that wish to make voluntary reports on fossil fuel subsidy reduction.	EWG developed a voluntary reporting mechanism at EWG - 42 in Canada and EWG-43 in Chinese Taipei that was endorsed by Senior Officials and Leaders in Honolulu.	Voluntary reports by APEC economies. Goal should be to have several economies report in 2012.	EWG Lead Shepherd will encourage economies to volunteer, discussion to take place at EWG-43.	

DEVELOPING ENERGY EFFICIENT TRANSPORT SYSTEMS FOR LIVABLE LOW-CARBON COMMUNITIES

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2.1	We direct the TPTWG and EWG to develop performance measures for gauging the impact of livability-driven interventions to reduce transport times, energy use and carbon emissions, and to have initial measures available for review by Energy Ministers in 2012 and Transportation Ministers in 2013.	TPTWG EWG	Canada and United States (possibly Singapore and Thailand)	<p>Discussion and analysis of candidate performance measures by TPTWG and EWG.</p> <p>Gathering of examples of impacts of livability-driven interventions according to the performance measures agreed.</p>	<p>Initial deliverable would be an agreed list of performance measures. Candidates might include reductions in energy use, carbon emissions, and emissions of criteria pollutants like sulfur dioxide, nitrogen oxide, and particulates.</p> <p>Subsequent deliverables would be a set of examples of improved performance according to the measures agreed, followed by assessment of best practices.</p>	<p>TPTWG and EWG should initiate discussion of candidate performance measures at TPTWG-35 in Thailand and EWG- 43 in Malaysia.</p> <p>ESCI task on energy-efficient urban transport has started to post U.S. examples of energy use and emissions reductions from TIGGERS – Transit Investments for Greenhouse Gas and Energy Reductions. Other economies will be encourages to post similar examples.</p>	ESCI tasks on energy-efficient urban transport and freight transport include elements to gauge the impacts of specific measures on energy use, pollutant emissions, and carbon emissions.
2.2	We look for further development of activities under the Energy-Smart	EWG	Japan, United States	Energy-Smart Communities Initiative (ESCI) has tasks relating to energy-	Best practices for energy efficient urban transport, energy-efficient	Information developed and posted on the ESCI Knowledge Sharing	Outreach is needed to major freight transporters to encourage their

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	Communities Initiative (ESCI) to be reported to Leaders in 2011.			efficient urban transport, energy-efficient freight transport, electric vehicle demonstrations and electro-mobility,	freight. Shared information on electro-mobility and electric vehicle demonstrations. Network of energy-efficient freight transporters.	Platform (KSP) website (www.esci-ksp.org)	participation in the APEC energy efficient freight transport network.
2.3	<p>We direct the EWG and TPTWG to develop best practices for reducing energy consumption and carbon emissions in the APEC region.</p> <p>We direct the EWG and the TPTWG to consider additional activities based on the results of the Ministerial Conference and related meetings</p>	<p>EWG TPTWG</p> <p>EWG TPTWG</p>	Japan, United States	<p>APEC Low-Carbon Model Town (LCMT) Project.</p> <p>Energy-Smart Communities Initiative (ESCI) work on energy-efficient urban transport and freight transport.</p> <p>Cooperative Energy Efficiency Design for Sustainability (CEEDS) project on energy efficient urban transport.</p>	<p>Work on smart grids. Key deliverables are best practices to advance the promotion of energy efficient urban and freight transport, interoperability of power grids and electric vehicle charging infrastructure.</p> <p>CEEDS workshops on energy-efficient urban transport in San Francisco in September 2011 and Singapore in January 2012.</p>	<p>Information developed and posted on the ESCI Knowledge Sharing Platform (KSP) website (www.esci-ksp.org)</p> <p>CEEDS workshop presentations and conclusions are being made available on the ESCI website.</p>	Significant effort will be required to generate examples from a variety of economies that can be compared and contrasted to develop APEC-wide best practices. APEC support may be needed for studies to assess the examples and draw conclusions.

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				Continue to progress work on electric vehicle safety and greenhouse gas reduction including through the UNECE's Working Party 29.	EV workshop report.	EV Workshop report drafted 2/2012. Report to be made available on ESCI website.	
2.4	We direct the TPTWG to study the expanded use of TOD, Bus Rapid Transit (BRT), bicycle lanes and walkways which can be incorporated into an assessment of the potential for reduced intensity of energy use in the transportation sector.	TPTWG		<p>TPTWG-EWG cooperative projects already underway on the energy, transport and environmental benefits of TOD and BRT and encourage follow-up activities.</p> <p>Road safety measures are to be pursued by economies including through national road safety strategies and as initiatives in support of the <i>Decade of Action for Road Safety 2011-2020</i>.</p>	Project reports on TOD and BRT.	Report on BRT was completed in September 2011 and is available on the APEC website. Report on TOD is in progress, should be completed in mid-2012. BRT report shows significant reductions in carbon emissions and energy use can be achieved.	TPTWB may wish to consider follow-up analyses to develop more detailed information and case studies.

POWERING LOW-CARBON TRANSPORT

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3.1	We direct the EWG and TPTWG to identify and study appropriate strategies, approaches and best practices for promoting efficient and alternative-fueled vehicles, including electric drive vehicles, based on life cycle assessments	EWG TPTWG	Japan United States LEG-VSHG	<p>Projects on electromobility roadmaps and electric drive vehicle demonstrations that are included under the ESCI.</p> <p>Continue to progress work on electric vehicle safety and greenhouse gas reduction including through the UNECE's Working Party 29.</p> <p>APEC workshop on Energy and Green Transport Benefits of Electric Vehicles (Hong Kong, October 2011)</p>	<p>Information on electromobility roadmaps in APEC with focus on strategies for expanding EV charging infrastructure.</p> <p>Information on EV demonstration projects, including estimates of improvements in range, charging time, performance and efficiency.</p>	<p>ESCI task leaders to develop templates for information sharing on electromobility roadmaps and EV demonstrations.</p> <p>EV Workshop report drafted 2/2012. Report to be made available on ESCI website.</p>	<p>This work will be progressed through the Vehicle Standards Harmonization Sub-group of the Land Experts Group.</p> <p>ESCI Knowledge Sharing Platform may help to elicit required information, with impetus from ESCI task leaders.</p>
3.2	We call on officials to identify common elements of procedures and regulations to	APEC Auto Dialogue	All APEC economies	Discuss effective procedures and regulations to facilitate the introduction of energy-efficient	Elements of procedures and regulations to facilitate the introduction of	Elements were developed and presented to Leaders in 2011.	Includes the importation of small numbers of non-salable advanced and

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	<p>facilitate the introduction of energy-efficient vehicles throughout the APEC region by the November Leaders' Summit</p> <p>We encourage the development of harmonized approaches to addressing the safety of electric vehicles.</p>			vehicles	energy-efficient vehicles		alternative fueled demonstration motor vehicles with adequate level of safety
3.4	We recommend that the EWG and individual APEC economies consider and assess in greater detail second-generation biofuels, while ensuring carbon-reduction, stable supply and cost-effectiveness according to life cycle assessments	EWG		EWG Biofuels Task Force has found that second-generation biofuels from farm and forest residues could potentially displace two-fifths of gasoline use and one-fifth of crude oil imports in the APEC region while generating substantial employment opportunities.	Follow-on studies to assess the cost-effective resource potential of second-generation biofuels in detail for individual economies and APEC as a whole.	Follow-on studies not yet agreed or funded. EWG-43 and Expert Group on New and Renewable Energy Technology (EGNRET) may discuss options.	EWG Biofuels Task Force found 2nd-generation biofuels from farm and forest residues could displace up to two-fifths of gasoline use and one-fifth of crude imports in APEC.

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				EWG Biofuels Task Force completed a six-year effort in 2011 on biofuel resource potential, cost, infrastructure, and sustainability, to assess the biofuel resources			
3.5	We direct the EWG and TPTWG to cooperate on best practices for both the modernization of air traffic management and the development of aviation biofuels, in coordination with ICAO, to limit or reduce the environmental footprint for all phases of flight, from gate to gate	EWG TPTWG	AEG	<p>Assessment of best practices for modernizing air traffic management.</p> <p>Assessment of best practices for the development of aviation biofuels.</p>	<p>Best practices for modernizing air traffic management.</p> <p>Best practices for the development of aviation biofuels.</p> <p>Production and distribution of</p>	<p>The AEG-SAF is conducting a program on Modernization of ATM to include Traffic Flow Management and Collaborative Decision Making. Initial study with Thailand and Malaysia</p> <p>TPTWG AEG is checking with member economies on a possible biofuel workshop/Conference</p>	Measure benefits and provide guidance for fuel savings as result of ATFM and CDM implementation in Thailand and Malaysia

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					aviation biofuels		
GREENING THE SUPPLY CHAIN: ENERGY EFFICIENT FREIGHT TRANSPORTATION							
4.1	We direct the EWG and TPTWG, in consultation with industry, to consider strategies and best practices for energy efficiency improvement in freight transportation	EWG TPTWG	APSN Secretariat United States	<p>APEC Port Services Network</p> <p>Task on energy efficient freight transport under the ESCI.</p> <p>Cooperative project on intermodal freight transport.</p>	<p>Promotion of collaboration and communication among ports and related sectors.</p> <p>Network of energy-efficient freight transporters, best practices on energy-efficient freight transport.</p>	<p>MEG requested economies that have not yet nominated their Council member to the APSN to consider doing so at the earliest possible date.</p> <p>Information has been developed in the ESCI energy efficient freight transport task, in cooperation with the Intermodal Transport Institute at the University of Denver (USA).</p> <p>Intermodal freight report finalized in 2012.</p> <p>Economies are seeking</p>	<p>Outreach is needed to major freight transporters to encourage their participation in the APEC energy efficient freight transport network.</p>

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			China	<p>The LEG of TPTWG has completed the project Road Safety Measures for Heavy Vehicles in APEC Transport Supply Chains which includes recommendations for eco driving.</p> <p>Study on the Reduction of Energy Consumption and Prevention of Harmful Exhaust Emissions from International Shipping in the APEC region</p>	<p>A Compendium on road safety measures for heavy vehicles in transport supply chains, including recommendations for eco driving.</p> <p>Identify solutions and best practices regionally to prevent and reduce harmful emissions from international shipping</p>	<p>LEG to develop initiatives for economies to uptake project recommendations.</p> <p>Project approved by APEC in 2012, to be completed in December 2013.</p>	
			Canada	<p>Environmental Performance and Energy Efficiency of Supply Chains – Carbon Footprint Project to develop methodology for OGVs to improve energy efficiency of the marine</p>	<p>Joint TPTWG-EWG study to develop a methodology to measure carbon emissions and energy intensity of ocean-going vessels (OGVs).</p>	<p>Project approved by APEC in 2013, to be completed in December 2014. Two workshops scheduled to take place in July 2013 and 2014.</p>	

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				transportation sector			
4.2	We direct the TPTWG to develop best practices for promoting intermodal freight in APEC such as infrastructure expansion and planning to facilitate intermodal freight connectivity	TPTWG	<p>Japan</p> <p>Japan</p> <p>United States and Korea</p> <p>APEC</p>	<p>Bottlenecks in freight transport focusing on port sectors</p> <p>Workshop on “Enhancing Visibility of Maritime Container Transportation for Advancing Supply Chain Connectivity”.</p> <p>Ongoing project to develop multmodal transportation models that address sustainability and the reduction of greenhouse gas emissions in intermodal Short Sea Shipping operations.</p> <p>Ongoing project to</p>	<p>Provision of possible solutions to eliminate bottlenecks in the transport and logistics chain</p> <p>Sharing information inevitable to optimize supply chain such as customs clearance, vessel status and traffic congestion among logistics players.</p> <p>Document outlining models that address sustainability and greenhouse gas emissions in intermodal Short Sea Shipping operations.</p> <p>Document outlining effective intermodal freight strategies upon completion of</p>	<p>Final report was adopted at MEG, TPTWG-35</p> <p>APEC fund approved</p> <p>Final Project Report to be completed in mid-2013.</p> <p>Several APEC</p>	

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			economies	highlight intermodal freight strategies to reduce the energy intensity & environmental impacts of freight transport by encouraging freight shippers to shift where practical from energy-intensive transport modes like trucks to energy-efficient modes like rail, barge & ship. Develop intermodal freight strategies to reduce the energy intensity and environmental impacts of freight transport.	<p>Project. Workshop to be conducted to discuss implemented and proposed strategies.</p> <p>Implement intermodal freight strategies.</p>	<p>economies have implemented intermodal freight strategies being analysed in the Project. Workshop to be conducted in late 2012 to discuss implemented and proposed strategies. Final Project Report to be completed in late 2012.</p> <p>Several APEC economies have implemented intermodal freight strategies to reduce the energy intensity and environmental impacts of freight transport by encouraging freight shippers to shift where practical from energy-intensive transport modes like trucks to energy-efficient modes like rail, barge and ship.</p>	

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4.3	We recommend implementing the Global Navigation Satellite System Implementation Team's 2010 – 2015 "Strategy for the Adoption of Measures to Include GNSS Technologies in the Development of Seamless Transportation Systems"	TPTWG	<p>All APEC Economies</p> <p>Russia</p>	<p>APEC GIT adoption and implementation of the "Strategy for the adoption of Measures to Include GNSS Technologies in the Development of Seamless Transportation Systems." Related work programs also to be implemented.</p> <p>A workshop on GNSS Application for Seamless Transportation Supply Chain Connectivity in APEC has been conducted and hosted by Russia.</p>	<p>Document entitled, "Strategy for the adoption of Measures to Include GNSS Technologies in the Development of Seamless Transportation Systems" prepared by the APEC GIT and submitted to the APEC Secretariat.</p> <p>Final report and recommendations on the GNSS workshop have been submitted to the APEC Secretariat.</p>	<p>Related projects such as PBN Regulatory Review and Evaluation Program and Regional RAIM Prediction have received APEC endorsements and necessary funding and are now being implemented.</p> <p>Other relevant Concept Notes for future projects, such as Joint Multi-GNSS Demonstration for the Applications on Transportation Field in the Asia-Pacific Region; and Automatic Transport Management Systems Implementation for Optimizing Logistics with an Emphasis on ITS and GNSS Applications, are being</p>	

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						developed and reviewed by the APEC GIT.	
4.4	We direct the EWG and TPTWG to work with the APEC Business Advisory Council (ABAC) to establish a network of freight transporters who will work to develop best practices for reducing their energy use and to document their cost-saving, energy-saving and carbon-reducing strategies	EWG TPTWG		ESCI outreach to major freight transporters through ABAC to elicit information about their strategies as input for best practices.	Network of energy-efficient freight transporters, best practices on energy-efficient freight transport.	Many companies in APEC economies have implemented green logistics strategies to ensure that their trucks, rail cars, ships and planes are more optimally loaded on each trip they make, thereby increasing the overall fuel efficiency of freight transport operations. Candidate companies were identified at the Transportation & Energy Ministerial in 2011. Additional candidates need to be identified to participate.	Many companies have logistical strategies to ensure that their trucks, rail cars, ships and planes are optimally loaded on each trip, increasing fuel efficiency of freight transport operations