APEC MINISTERIAL CONFERENCE ON TRANSPORTATION AND ENERGY September 13, 2011 San Francisco, California, United States of America

ACTION AGENDA TO MOVE APEC TOWARD AN ENERGY EFFICIENT, SUSTAINABLE, LOW-CARBON TRANSPORT FUTURE

1. STRENGTHENING TRANSPORTATION'S ROLE IN A CLEAN-ENERGY FUTURE

1.1 We, the APEC Energy Ministers and Transportation Ministers, met in San Francisco on September 13, 2011 in a Public-Private Dialogue with members of the APEC business community, non-profit organizations, municipal planning authorities and academia to consider measures for making transport in the APEC region cleaner and more energy efficient. Cleaner and more energy efficient transportation can help to reduce energy use, oil imports and carbon emissions in our transport networks, in our rapidly growing urban areas, in the movement of goods and people both within and between our economies, and in air travel across the region.

1.2 APEC Leaders agreed in 2007 to reduce the energy intensity of economic output across the region by at least 25 percent between 2005 and 2030. This aspirational energy intensity reduction goal will be far surpassed if recent trends continue. Yet energy demand in the APEC region is growing even faster than we anticipated. We therefore instruct the Energy Working Group to intensify analysis of the potential for further energy intensity improvement with a view to recommending an enhanced goal to APEC Leaders in November.

1.3 Since transportation accounts for a substantial share of total energy use and greenhouse gas emissions, we direct the Energy Working Group and Transportation Working Group to assess the measures APEC economies could take in the transportation sector to be more energy efficient, and to identify additional areas of collaboration.

1.4 APEC Leaders and Energy Ministers committed in 2009 "to rationalize and phase out over the medium term fossil fuel subsidies that encourage wasteful consumption, while recognizing the importance of providing those in need with essential energy services." Since many existing fossil fuel subsidies encourage wasteful consumption of fuel for transport, we acknowledge the Energy Working Group's cooperation with the International Energy Agency to analyze the economic costs associated with fossil fuel subsidies in APEC and to consider best practices for eliminating such subsidies while protecting the poor. Building upon this activity, we direct the Energy Working Group to develop a voluntary reporting mechanism on reduction and phaseout of inefficient fossil fuel subsidies to be presented to APEC Leaders in November, consistent with approaches in the G20.

2. <u>DEVELOPING ENERGY EFFICIENT TRANSPORT SYSTEMS</u> FOR LIVABLE LOW-CARBON COMMUNITIES

2.1 Livable communities with Transit-Oriented Development (TOD), expanded mass transit corridors, wide use of information and communications technology (ICT), intelligent transportation systems (ITS), bicycle paths and walkways can improve safety and quality of life in the rapidly urbanizing APEC region while also reducing energy use, carbon emissions and travel times. We therefore direct the Transportation Working Group and Energy Working Group 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.

2.2 We welcome the decision by a number of member economies to support and participate in the Energy-Smart Communities Initiative (ESCI), which was jointly launched by the leaders of the United States and Japan on the occasion of the APEC Leaders' Meeting held in Yokohama in 2010. We look for further development of activities under this initiative to be reported to Leaders in 2011. We also underline the successful progress of the APEC Low-Carbon Model Town (LCMT) Project, which was proposed by Japan and endorsed by the Ninth Energy Ministers Meeting (EMM-9). In order to realize a low-carbon economy, it is vital that we implement low-carbon technologies in a comprehensive manner to target an entire town. We expect best practices obtained by this APEC project to serve as models to the world.

2.3 We direct the Energy Working Group and Transportation Working Group to develop best practices for reducing energy consumption and carbon emissions in the APEC region, building upon the LCMT Project, working through and further promoting the ESCI, and obtaining expert advice through the Cooperative Energy Efficiency Design for Sustainability (CEEDS) project. We note the cooperative project already begun under ESCI on energy efficient urban transport networks. We also note the ESCI work on smart grids to advance the interoperability of power grids and electric vehicle charging infrastructure. We direct the Energy Working Group and the Transportation Working Group to consider additional activities based on the results of the Ministerial Conference and related meetings.

2.4 We further direct the Transportation Working Group 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. We look forward to the results of the cooperative projects already underway on the energy, transport and environmental benefits of TOD and BRT and encourage follow-up activities.

3. POWERING LOW-CARBON TRANSPORT

3.1 A key strategy for reducing the energy and carbon intensity of transport is to promote the introduction of biofuels, natural gas vehicles, and electric drive vehicles, within a comprehensive framework that also includes measures to improve the efficiency of vehicles and traffic systems. We note that an increasing number of APEC economies are introducing automotive fuel economy and greenhouse gas regulations. We direct the Energy Working Group and Transportation Working Group 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. In this regard, we note the projects on electromobility roadmaps and electric drive vehicle demonstrations that are included under the Energy Smart Communities Initiative.

3.2 We support and welcome efforts to facilitate the introduction of energy-efficient vehicles throughout the APEC region by streamlining procedures and regulations related to the importation of small numbers of non-salable advanced and alternative fueled demonstration motor vehicles with adequate level of safety, and call on officials to identify common elements of procedures and regulations in this regard by the November Leaders' Summit.

3.3 We note that the increasing reliance on electric vehicles to meet the fuel economy and greenhouse gas standards and the need to maintain consumer confidence in these vehicles requires taking precautionary steps to ensure that their introduction onto the public roads is accomplished safely. In taking such steps, we encourage the development of harmonized approaches to addressing the safety of electric vehicles.

3.4 The Energy Working Group's Biofuels Task Force has found that secondgeneration 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. We therefore recommend that the Energy Working Group and individual APEC economies consider and assess in greater detail this resource and employment potential that could practically be developed over time, while ensuring carbon-reduction, stable supply and cost-effectiveness according to life cycle assessments.

3.5 APEC economies note the efforts of the International Civil Aviation Organization (ICAO) and International Maritime Organisation (IMO) to address the impact of international aviation and shipping on climate change. These include the ICAO Assembly Resolution A37-19, which set a global goal of 2 percent annual fuel efficiency improvements through 2020 while laying a roadmap for measures to limit aviation emissions; the industry's goal to keep the level of global net carbon emissions from international aviation the same after 2020; and the IMO's recent efforts to address energy efficiency for ships. We therefore direct the Energy Working Group and Transportation Working Group 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. As part of the ongoing negotiations under the United Nations Framework

Convention on Climate (UNFCCC), APEC economies are discussing how best to address emissions from international transport with the relevant international bodies.

4. GREENING THE SUPPLY CHAIN: ENERGY EFFICIENT FREIGHT TRANSPORTATION

4.1 Freight transportation accounts for a substantial share of energy use in the APEC region. We therefore direct the Energy Working Group and Transportation Working Group, in consultation with industry, to consider strategies and best practices for energy efficiency improvement in freight transportation. We note the project on energy efficient freight transport under the Energy Smart Communities Initiative. We look forward to the results of the cooperative project underway on intermodal freight transport, and to follow-up activities.

4.2 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. We therefore direct the Transportation Working Group to develop best practices for promoting intermodal freight in APEC based on the strategies that have been implemented to date, such as infrastructure expansion and planning to facilitate intermodal freight connectivity.

4.3 We also 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".

4.4 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. We therefore direct the Energy Working Group and Transportation Working Group 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, in cooperation with ESCI.