

INSTRUCTIONS FROM APEC ENERGY MINISTERS
2015 APEC Energy Ministerial Meeting
Cebu, Philippines

We instruct the Energy Working Group (EWG), together with the Asia Pacific Energy Research Centre (APEREC), the APEC Sustainable Energy Center (APSEC), the Experts' Group on Clean Fossil Energy (EGCFE), the Experts' Group on Energy Data and Analysis (EGEDA), the Experts' Group on Energy Efficiency and Conservation (EGEE&C), the Experts' Group on New and Renewable Energy (EGNRET) and the Low-Carbon Model Town Task Force (LCMT-TF) to promote and collaborate on initiatives under the theme: "Towards an Energy Resilient APEC Community" and provide progress reports in the next Energy Ministers' Meeting.

Further, we instruct the EWG to create a Task Force on Energy Resiliency to follow up and implement the Ministers' Instructions.

Disaster Proofing Energy Infrastructure

1. We instruct the EWG to explore the conduct of a vulnerability assessment on energy infrastructure given natural and man-made disasters in the region, in coordination with the Emergency Preparedness Working Group (EPWG) and other relevant APEC fora and international organizations. The vulnerability assessment report shall include, among others, regional geo-hazard maps identifying highly vulnerable regional spots as well as evaluation of best practices that will guide policy and program decisions on the design and location of potential supply chains, interconnections and facilities. The assessment will also determine the costs for the upgrading and retrofitting of energy infrastructure and associated facilities. This will help ensure reliable and sustained production, and conversion and delivery of energy products and services to minimize threats to the region's energy security.
2. We instruct the EWG with the support of APEREC, in cooperation with other international and regional organizations to formulate a document of best practices to enhance the quality of electric power infrastructure in the Asia-Pacific region.
3. We instruct the EWG and its related expert groups and centers to undertake research and development programs on energy sector resiliency to disasters and climate change impacts to guide APEC Member Economies to promote effective policies and institutional mechanisms including appropriate monitoring and evaluation systems. We encourage the EWG, with the support of APEREC and other organizations such as the International Energy Agency (IEA) to strengthen oil and gas emergency response mechanisms in the APEC region through the APEC Oil and Gas Security Initiative (OGSI). We instruct EWG to work with the Member Economies to improve capacity building in oil and gas emergency responses, including strengthening response systems that suit their own individual circumstances; and to conduct oil and gas security exercises on a voluntary basis.

4. We urge the EWG to assist interested Member Economies: to evaluate energy mix policies, ensure energy system redundancy and mitigate the adverse impact of energy supply disruptions during natural and man-made disasters, to consider the use and applicability of distributed generation and micro grids including greater integration of renewables and expanded energy efficiency, supported by portable and/or mobile power systems as well as energy storage as an adaptive mitigating response to disasters to share information on energy infrastructure technology advancements, technological innovations and best practices. These would enhance emergency preparedness and response mechanisms to destructive weather and climatic conditions that threaten the integrity of existing energy infrastructures.
5. We recognize the Philippine initiative to conduct a two-day workshop on improving resiliency of energy infrastructure in off-grid areas within the Asia-Pacific region by early 2016. A major output of this workshop will be the publication of the Best Practices to Improve the Climate Change Resiliency of Energy Facilities in Off-Grid Areas, to be presented in the next EMM. We, therefore, encourage Member Economies to continuously update and adopt the Best Practices within the context of their respective economic and environmental conditions, and to share their experiences.

Advancing Cutting-Edge Energy Efficiency Technologies

6. We encourage Member Economies to help ensure equal and gender-fair human resource capacity development. This is part of our endeavour to support the APEC Policy Partnership on Women and the Economy under the 2014 Beijing Declaration towards the integration of gender work in the improvement of education, skills training and jobs generation, analytical and technical capacity leading to a sustainable supply of a home-grown cadre of professionals in the energy sector. These efforts also support APEC Leaders' broader commitments to advance women's economic participation and integrate gender across APEC fora.
7. We instruct the EWG through the EGEE&C in collaboration with appropriate organizations to undertake an analysis of available energy efficient technologies. This will guide Member Economies to pursue the most cost-effective technology for all energy consuming sectors according to their unique circumstances. Evidence-based studies are useful in formulating policies that will facilitate the entry of cutting-edge energy efficient technologies. We instruct the EWG with the support of APERC to complete the research on energy and economic competitiveness by the end of next year. We instruct the LCMT-TF to move the current LCMT Project into the next stage in order to disseminate Low-Carbon Towns in the Asia-Pacific region. We also encourage Member Economies to continuously share best practices of energy-smart related projects under the APEC Energy Smart Community Initiative Knowledge Sharing Platform (ESCI-KSP).

8. We encourage Member Economies to develop minimum energy performance standards in building codes and energy appliances, industrial equipment and smart metering devices. We instruct the EWG to review progress on harmonization of energy standards and regulations and to address barriers to trade, financing and the promotion of greater mobility of goods and services across our borders. We further instruct the EWG to explore potential opportunities for the co-sharing of testing centers in the region.
9. In pursuit of the 2011 APEC Transportation and Energy Ministerial Conference Action Agenda, we instruct the EWG to collaborate with the Transportation Working Group (TPTWG) to cooperate on best practices for strengthening fuel quality and vehicle efficiency standards and explore potential emissions and efficiency standards for vehicles within the APEC region consistent with other international efforts. Furthermore, we instruct the EWG to conduct extensive studies on increasing the share of alternative fuel and electric-drive vehicle technologies in the public transport sector including the potential impact to end-users.

Promoting Community-based Clean Energy Use in Energy Poverty Stricken Areas

10. We instruct EWG to work with APSEC with the assistance of the LCMT-TF to undertake APEC Cooperation Initiative for Jointly Establishing an Asia-Pacific Urbanization Partnership endorsed by APEC Leaders in 2014. Construction of new buildings is an integral component for sustainable cities, and serves as an effective platform to demonstrate and apply cutting-edge technology. In line with this, we encourage Member Economies to explore strategies to drive the shift towards green buildings including zero energy buildings. This will ensure that new construction designs are incorporated in residential, commercial and even industrial structures including concepts and principles embracing energy efficiency particularly in emerging economic growth areas or second-tiered cities.
11. Cognizant that most energy-poverty stricken areas possess potential to be developed as tourist destinations, we instruct the EWG to work with the APEC Tourism Working Group to come up with an energy eco-tourism development framework.

Improving Energy Trade and Investment in APEC

12. We encourage Member Economies to give importance to energy infrastructure planning and development and share information and ideas, including harnessing the potential of regional energy interconnectivity. This will contribute to the APEC goal of achieving open and transparent energy trade and investment markets among Member Economies. In this regard, we reiterate that the EWG continue its collaborative work such as enhancing quality of infrastructure investment and development with the APEC Committee on Trade and Investment (CTI).

13. We instruct the EWG to conduct capacity building activities to facilitate fossil fuel subsidy reform for interested economies, including the conduct of additional peer reviews and the exchange of best practices, to eliminate wasteful consumption and redirect investment toward cleaner energy alternatives and other measures for sustainable growth across the region.
14. We instruct the EWG to explore the role of renewable energy policies and activities for energy markets, including in relation to the APEC aspirational goal of doubling the share of renewable energy, including in power generation, by 2030 from 2010 level.
15. We encourage Member Economies to adopt Public-Private Partnership to strengthen energy infrastructure development and connectivity, such as oil and natural gas pipelines, grid transmission and interconnection highways, LNG facilities, smart grids and distributed energy systems to boost trade and investment among Member Economies. We further instruct the EWG to work with the APEC Business Advisory Council (ABAC) and the SME Working Group in developing a multi-year approach crucial to stimulate energy investments based on shared interest and mutual benefits.
16. To capitalize on the potential of LNG and to respond to the new picture of energy supply and demand, we instruct EWG to strengthen dialogues on establishing a proper, transparent and flexible LNG trading system under the APEC Regional LNG Trade Facilitation Initiative, to jointly pursue common benefits of LNG suppliers and consumers in the region, and to ensure regional energy security.
17. As global concern on the linkages among energy, water and security increases in use, we hereby instruct the EWG to initiate in-depth studies on challenges stemming from the energy-water nexus and ways to mitigate the vulnerabilities by reducing water-stressed activities and striking a delicate balance for sustaining economic growth with the optimal use of energy and water resources.
18. In order to meet the needs of increasing investment in green economy, we instruct the EWG to implement APEC Green Energy Finance Initiative in support of the financial sustainability of renewable energy and energy efficiency development in the region. We also instruct the EWG to strengthen dialogues and cooperation with related international organizations and multilateral financial institutions on capacity building in financing green energy.