APEC Energy Resiliency Task Force

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APEC Energy Resiliency

Energy resiliency is the ability and quality of energy infrastructure and facilities to withstand extreme natural and man-made disasters and other climate change impacts, to recover and return to normal conditions in a timely and efficient manner and to build back better.

Ten ERTF related projects have been undertaken by the EWG

- 1. APEC Workshop on Promoting Resiliency in the Energy Sector (EWG 09 2017A) USA
- 2. Energy Sector Resilience Webinar, 24 June 2016 (USA)
- 3. Asia Pacific Energy Leaders Forum "Delivering Resilient Energy Infrastructure" (EWG 09 2015S) (New Zealand)
- 4. Workshop on Improving Energy Resiliency in Off-Grid Areas in APEC Member Economies (EWG 09 2015A) (Philippines)
- Developing Solar-Powered Emergency Shelter Solutions (SPESS) as an Energy-Resilience Tool for Natural Disaster Relief in APEC Communities (EWG 22 2015A) (China)
- 6. APEC Initiative for Enhancing the Quality of Electric Power Infrastructure (EWG 06 2015S) (Japan)
- 7. APEC Oil and Gas Security Initiative (Japan)
- 8. Energy Workforce Resilience Workshop (EWG 01 2017S) Singapore
- 9. Cyber-Energy Nexus Study: Best Practices, Opportunities, and Challenges for Smart Energy Technology (EWG 02 2014S) USA
- Clean and Efficient Use of Energy and Water Resources Initiating an APEC Road Map and Best Practices for the Energy-Water Nexus (03 2014S) USA



Five ERTF related projects are being proposed in 2018

- Establishment of a Cloud-based Sharing Platform of Multi-Energy Microgrids for APEC Economies, China --Tianjin University, Self-funded
- Lessons Learned: Promotion Focused on Boosting Energy Solutions in Remote Areas--Chile
- Distributed Energy Resources Regulation and Rate Design--Chile
- Technological Challenges and Opportunities to Supply Flexibility to Electric Systems--Chile
- APEC Workshop on Integrated Energy-Water Planning and Policy Formulation-- USA

The ERTF has identifies four worstreams

- ▶ Grid resilience
 - Lead: IEA considering leadership
- Strengthening Infrastructure
 - Lead: Japan
- Energy-Water nexus
 - Lead: USA
- Energy Access
 - Lead: China



APEC Workshop on promoting resilience in the energy sector Cebu, Philippines July 31-August 2, 2018

- Build Understanding: Participants will build an understanding of:
 - Methodologies for evaluating climate change risks to power system resources, infrastructure, and demand
 - Integrated resource and resiliency planning (IRRP), and how IRRP can incorporate climate risk screening and support climateresilient planning and decision-making
 - Climate risk screening for hydropower resources
- Build capacity: The workshop was designed to help participants build capacity through interactive exercises, and bring in experiences from power sector practitioners engaged in climate resilient planning.