



# Introduction of the APEC Energy Resiliency Enhancement Project (EWG 09 2021A)

### APEC Energy Resiliency Enhancement Project Workshop@San Francisco

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Reiko EDA
Agency for Natural Resources and Energy
METI, Japan

# APEC Connectivity Blueprint for 2015-2025 (an annex to the 2014 APEC Leaders' Declaration)

17.We will <u>develop</u>, <u>maintain and renew quality infrastructure</u>, <u>including</u> <u>energy</u>, ICT and transport infrastructure and seek to increase the quality and sustainability of APEC transport networks; increase broadband internet access; <u>promote sustainable energy security</u>; <u>and build resiliency into the energy infrastructure</u>.

### Cebu Declaration (2015 APEC Energy Ministerial Meeting)

- 2. Bearing in mind the 2014 Leaders' commitment made on the APEC Connectivity Blueprint for 2015-2025, we affirm the importance of <a href="energy resiliency in promoting energy security and sustainable development and providing access to the people.">energy security and sustainable development and providing access to the people.</a> This includes in particular, <a href="the ability and quality of energy infrastructure to withstand extreme natural and man-made disasters, to recover and return to normal conditions">to recover and return to normal conditions</a> in a timely and efficient manner and to build back better.
- 7. Consistent with the theme of an energy resilient APEC community we recognize the need to conduct a vulnerability assessment of existing infrastructure and evaluate current infrastructure standards. We encourage members to improve the robustness of their energy infrastructure and policy, through capacity building, sharing of information, and promoting best-practices as appropriate. Furthermore, we reaffirm that resilience to potential energy supply disruptions can be strengthened through effective, well-targeted market and governance response mechanisms. We also encourage Members to promote energy supply diversity and energy efficiency and to reduce barriers to energy trade and investment in advancing resilience of the energy sector.

#### **Cebu Declaration**

- 9. We welcome the new APEC Initiative for Enhancing the Quality of Electric Power Infrastructure taking into consideration not only resilience to extreme weather events but also lifecycle costs, environmental impact, responsiveness to changing market circumstances and business continuity.
- 17. A priority goal in developing a resilient APEC community will be to provide energy access to our people, including in remote communities. We note that clean energy technologies and traditional energy sources, including cleaner use of fossil fuels, are important in addressing energy access challenges. We recognize that significant potential exists to provide energy access to rural communities through the up-take of micro grids, energy storage and their integration with renewable energy resources.

Energy Resilience Task Force (ERTF) was established.

#### **APEC Energy Resiliency Principle (Dec 2015)**

#### APEC Energy Resiliency Principle

I. Background and Purpose of the principle

Description of the background and purpose of the development

- II. Definition of energy resiliency
- III. Respect for diversity among economies, holistic approaches and multi-stakeholder processes

Description of the "diversity principle" relating the contents of the Principle

- IV. Relevant stakeholders and their roles to enhance energy resiliency
  - Governments
  - Energy supply industries
  - Industrial and general energy consumers
  - Financial institutions

Identification relevant stakeholders and description of their roles taking into action for enhancement of energy resiliency

- V. Common approaches among different stakeholders towards energy resiliency
  - Energy resiliency plans
  - Investment and financing to projects towards energy resiliency
  - Proper asset management
  - · Emerging technologies adoption
  - Multi-stakeholder knowledge sharing

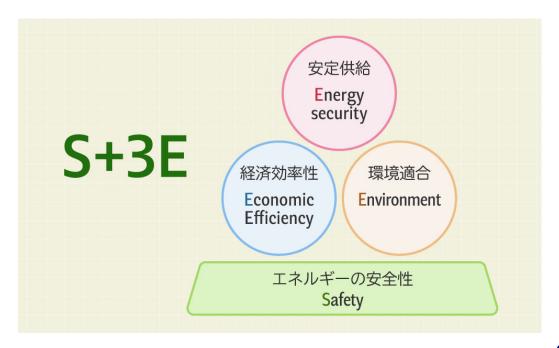
Description of major common approaches for enhancement of energy resiliency

VI. Follow-up actions based on the principle in EWG/ERTF

#### Discussion in Japan (in 2020)

## **Expert Study Committee for Quantitative Assessment of Energy Resilience**

- Japanese energy policy has laid importance S+3Es.
- Indicators already exist for measuring the economic efficiency or environment friendliness (carbon emissions, etc.) of a system, but the missing piece has always been metrics for the security or resilience of an energy system.



#### Discussion in Japan (in 2020)

#### **[Expert Study Committee Report]**

- Background and definition of energy resilience
- Need for common metrics to assess energy resilience
- Direction of specific initiatives
- Shift in societal perceptions
- Indices, quantification, and rules in a form that can be used by the financial community (including specific indexing concepts and dissemination domestically and internationally)
- International rule-making through APEC and ISO, and encouragement of partner economies to create their own systems through dispatching overseas experts, etc., and development of international markets.

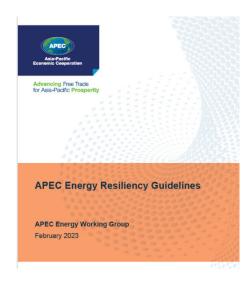
#### Workshop on Energy Resiliency Principle (EWG 07 2020A)

#### **[Key Activities]**

- 1. Conducting 3 virtual workshops to disseminate importance of energy resiliency and to build the capacity of public and private sector in APEC economies for creating resilient energy supply system.
- Developing APEC Energy Resiliency Guidelines based on the inputs gathered through workshops.

#### [Outputs]

- 1. APEC Energy Resiliency Guidelines
- 2. Project Summary Report



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## **APEC Energy Resiliency Enhancement Project** (EWG 09 2021A)

#### [Objective]

Based on the follow-up actions stipulated in the Principles, this project aims to enhance the ability to secure stable energy supply by effectively dealing with disasters through the following three activities;

#### **[Key Activities]**

- (1)Conducting research work including identifying, collecting, and assessing indicators to evaluate energy resiliency in APEC economies,
- (2)Developing an APEC Energy Resilience Sectoral Guideline for Energy Infrastructure Companies
- (3)Holding a workshop for capacity building on energy resilience through dissemination of the Principle.

### Thank you for your attention.

