CONCEPT PAPER

POLICY DIALOGUE MALAYSIA – APEC 2020

Renewable Energy Transition for Sustainable Growth

PREAMBLE

Capitalising on current global commitments and emerging trend for sustainable development, the utilisation of alternative source of energy including renewables is the current game changer for an energy transition, and this is expected to continue and gain momentum into the future. Such development is evidence with societies around the world embarking on a profound yet urgent and necessary transformation in energy production and consumption, moving away from a fossil fuels centric energy mix to cleaner renewable forms of energy. Nonetheless, the envisaged energy transformation cannot happen by itself without the needed enablers and drivers.

CONTEXT SETTING

IRENA in its latest publication on Global Energy Transition Roadmap 2050 highlighted that Renewable energy needs to be scaled up at least six times faster for the world to start meeting key decarbonisation and climate mitigation goals. The findings of IRENA augurs well with the UN Sustainable Development Goals, which seek to drive and propel the development of clean, efficient and accessible energy, as well as APEC's energy intensity and renewable energy doubling goals, aimed at keeping pace with rising energy demand and to ease the environmental impact of economic development across the Asia-Pacific region.

ADDRESSING THE DRIVERS AND BARRIERS

As the world's largest producers and consumers of energy (collectively, APEC economies account for 55 per cent of global energy production and 60 per cent of total energy consumption) it is impetus for APEC member economies to take the needed effort in mainstreaming sustainability and accelerating the deployment of renewable energy in the region, to significantly contribute towards the rapid changing landscape of the global energy system. This is imperative in ensuring sustainable and continuous economic growth within the Asia-Pacific region.

To date, renewable energy accounted for 6.3% of the region's energy supplies, compared to the 2010 baseline of 4.8% and the doubling target of 9.6% in 2030. Hence, commitments include inter and intra economies collaboration between state and non-state actors need to be undertaken to effectively address the needed drivers and

underlying challenges in furthering and advancing the development and deployment of renewable energy for sustainable growth in the region.

a. Enabling Renewable Energy Development

Globally, the rapid deployment of renewable energy has been driven mainly by a wide range of objectives (drivers), which include advancing economic development (job creation), improving energy security (fuel diversification), enhancing energy access (electrification) and mitigating climate change (GHG reduction). These drivers can be described in totality as the pursuit of sustainable development, where economic prosperity is advanced with minimal negative impacts on the environment.

Furthermore, the advancement of renewable energy technologies and related ancillary energy services such as lighting and electricity, heating and cooling, mechanical energy and mobility has enabled and provided a variety of additional socio-economic benefits to spur economic growth and to improve the quality of life in across the region. In most economies, these socio-economic benefits are a major force driving policymakers to adopt renewable energy targets and support policies. From a systematic perspective, the drivers (benefits) to renewable energy transition are commonly being discussed from the aspect of environment, economy and politics. Thus, the strategic actions to enable such transition need to address the different perspectives. Among the salient questions that need to be addressed includes:

a. How to strengthen & mainstream RE planning & governance to provide certainty?
b. How to create a business conducive environment for RE development less government intervention?
c. How to optimise, enhance & facilitate existing RE Initiatives to Encourage Greater RE Uptake?
d. How to further deploy & develop new Initiatives to increase RE in electricity generation mix and to catalyst socio-economic growth?
e. How to ensure Development of Reliable & Futuristic Electricity Supply System to meet the demand for affordable & environmentally responsible energy
f. How to expand and accelerate energy innovation?
g. What are the best means to entice investment of clean & green industry to create greater demand for sustainable energy?
h. How to position businesses from APEC economies as reputable global RE players?

b. Barriers to Renewable Energy Development

While there are a plethora of associated environmental, social and economic benefits from the deployment of renewable energy, there are still many teething issues that need to be addressed in the deployment of renewable energy as follows:

a. How to overcome the high initial CAPITAL cost and the lack of financing for RE projects?
b. As coal is still a dominant fuel source in most developing economies in supplying affordable electricity, how to address the issue price-conscious consumers?
c. How to cost-effectively address the impact of variable RE in the power supply system?
d. How to move RE developers away from a subsidised mentality?

WAY FORWARD

Renewable Energy Transition is one of the crucial cornerstones for energy development within the APEC economies. In moving forward, economies might like to ponder on the following questions:

a. How should we support cooperation among economies?
b. Are there other innovative ways to promote the adoption of RE in APEC economies?