



G20 Saudi Arabia Presidency

Abstract submission

Energy Systems Security and Energy Market Stability

Submitted by
International Gas Union

March 2020

The International Gas Union (IGU) wishes to thank the G20 Kingdom of Saudi Arabia Presidency for the invaluable opportunity to contribute to the important discussion of the Energy Sustainability Working Group.

Energy security is pivotal to the success of both the energy transition and economic agenda of the G20.

The IGU would like encourage the G20 ESWG to continue to build on the progress of the work to date on incorporating and further defining a G20 position, vis-à-vis the important principle of energy systems security and energy market stability within the ongoing energy transition and beyond it.

In the official Communique from Karuizawa, Japan, the G20 Energy Ministers' stated that "energy security is a guiding principle for the transformation of energy systems", and as such, the Ministers attached importance to:

1. the resilience, protection, and development of reliable energy infrastructure to prevent energy supply disruptions;
2. diversification of energy sources, suppliers, and routes, facilitation of open, flexible, transparent, competitive, stable, and reliable markets, increasing energy efficiency; and,
3. the need to facilitate the proper conditions to continue and increase energy investments to ensure in sustainable, affordable, reliable, resilient and cleaner energy systems

As such, the IGU would like to offer its commentary along two tracks: 1) general, pertaining to the principle of energy security, and 2) specific, pertaining to the role of gas in supporting this principle.

IGU Recommendations to the ESWG and G20 Leaders

1. G20 Energy Ministers should consider agreeing to a set of parameters of what "energy security" is (and is not. i.e. it is access, affordability, abundance, and *sustainability* & it is not always self-sufficiency). Some guiding parameters that should be considered, include:
 - a. Having a secure energy system means that everyone has access to the amount of energy they want, when they want it.
 - b. Markets over politics
 - c. Fair Balanced regulation and accountability

2. Energy and market security require a holistic, well-planned, flexible, outcome-based policy.
 - a. When implementing energy security principles, policy-makers should consider all of the various energy options open to them and assess each in regard to the three key criteria that should be used when making energy policy decisions: energy and market security, cost, and sustainability.
 - b. A wide variety of technologies, applied across all sectors and fuels, will be necessary to achieve the required energy transition.
 - c. Setting the right price signals will play a critical role in driving efficient market responses and innovation; however, market alone will not be enough and sustained investment frameworks to ensure the needed infrastructure is supported and high-paced innovation is enabled

3. Lessons from real life transition experiences: a case study from Ontario, Canada.

Case studies provide real life learnings that can be useful to guiding policy. The IGU would like to draw on the example of how Ontario, Canada has managed to successfully ensure the security of electricity supply and reliability, using a diversified mix of resources, with a number of globally relevant policy lessons.

Key Energy Security & Reliability Policy Considerations

1

Diversity of tools, including sufficient dispatchable capacity helps to ensure power system reliability

2

It is critical to ensure that price signals are balanced with overall system resiliency needs.

3

While strong policy is important for decisive transitions, it should be backed with independent system planning and fair regulatory framework

4

Sufficient natural gas pipeline and storage infrastructure to deliver peak loads to gas generators on demand, while also serving high heating loads, is critical for reliability

5

Demand side measures can be highly effective in reducing energy use and act as a valuable reliability resource.