Driving innovation: The role of governments in the future of energy

Serge Colle, EY Global Power & Utilities Advisory Leader

As pressure to find new energy solutions increases, government has a key role to play in creating frameworks that encourage innovation. But are they getting it right or putting in roadblocks on the journey to change? Just one of the questions I'll be discussing as part of a plenary session at the 24th World Energy Congress in Abu Dhabi, 9-12 September.

As I write this, more than 60 countries have committed to decarbonizing their energy sectors and almost 180 have national or state level clean energy targets. Government, and regulatory action to cut carbon emissions, has been a crucial driver of the energy transition to date and achieved significant milestones on our journey towards a decarbonized world.

In the last ten years, the growth in renewables has been dramatic, now accounting for a quarter of global power generation. Technological advances and rapid cost reductions mean renewables are cost competitive with fossil fuels in most markets. In parallel, dramatic shifts have begun in the way that energy systems operate, driven by trends such as increased digitization and the decentralization and growing electrification of end-use sectors.

But we have a long way to go. The energy transition has entered a new, more urgent phase, as time runs out to keep global warming below 2oC. Fossil fuels are still subsidized in a number of markets, despite pledges to tackle climate change. Carbon emissions are rising again, and despite significant progress, renewables still face persistent financial, regulatory, and sometimes technological barriers. Electrification with renewable power is the way forward, but we need to accelerate the pace.

Energy companies are leading the charge, pioneering breakthroughs in battery storage, electric vehicles and solar PV, but this is a challenge that won't be met by industry alone. Governments need to rethink their role in the energy transition and act as a catalyst for innovation by:

•Implementing policy changes that enable energy companies to invest in smarter energy systems and infrastructure that supports the energy transition (such as EV charging stations) and achieve accelerated electrification across industries.

Providing regulatory initiatives that encourage companies to shift from selling electricity, oil and gas, to offering energy solutions.

Collaborating with industry to pool investment and expertise to fast-track innovation.

Around the world, we see both examples of governments taking positive steps to shape changes and failures to act. So I'm interested to hear my fellow panellists' views at <u>WEC</u> and explore questions such as: what is the role of government in creating an enabling environment for innovation? Are the right frameworks and policies in place to put governments at the forefront of the innovation challenge? Who is leading the way and what can we learn from their success stories?

I have no doubt that innovation will be one of the most hotly debated energy topics at WEC – I'm also part of another <u>panel session</u> to discuss what it takes to create a successful innovation culture within large and complex global organizations. You can share your views with me by visiting the EY Stand (Stand C-002). To find out more, visit <u>www.ey.com/energy</u> and join the conversation using #EYEnergy and #WEC2019.