Raising global climate ambition in uncertain times with long-term energy scenario (LTES)

11th Clean Energy Ministerial Meeting Pre-Event

Date/Time: 18 September 2020 15:00 - 16:00
Location: Online

Background

Long-term energy scenarios (LTES) and planning play a crucial role in the clean energy transition and are important tools for countries when raising global ambitions towards COP26 in Glasgow next year. While the ongoing COVID-19 crisis has caused a disruption to the global effort to tackle climate change, integrating long-term energy scenarios in energy planning can support short-term crisis responses from policymakers and financial institutions, while also increasing resilience, new jobs, energy security and environmental sustainability in the long term. It is therefore a vital tool in getting countries back on track to meet the objectives of the Paris Agreement.

This open event aims to discuss how mid- and long-term energy scenarios (LTES) can aid policymakers to navigate through disruptive events and help guide short-term decision making. It will be hosted by the International Renewable Energy Agency (IRENA) and feature the Clean Energy Ministerial (CEM) campaign on “Long-term Energy Scenario for the Clean Energy Transition” (LTES Campaign).

Key Points

- **Long-term energy planning is indispensable for a successful transition from a fossil fuel-based energy system to a green one**. Solid scenarios and planning enable policy makers to make informed decisions to drive an ambitious transition forward. Without them, policy makers are essentially "flying blind," and can only react to situations rather than proactively plan.
- **Long-term energy scenarios can support higher climate ambition**. They provide a foundation for ambitious targets and policies needed to achieve them, secure an enabling environment, and foster innovation and investments in green technology, while also reducing investor risk and private finance for the green transition.
- **Long-term scenarios cannot anticipate disruptive events or game changers but can help gauge the impacts of disruptive events or game changers on the short term.** As exemplified by the COVID-19 crisis, disruptive events or game changers cannot be modelled or otherwise anticipated. Scenarios should be run as often as possible with as much variety as possible to cover as many potential futures as feasible.

Speakers

Francesco La Camera
Director-General, International Renewable Energy Agency

Thomas Anker Christensen
Climate Ambassador, Denmark

Thorsten Herdan
Director-General, German Federal Ministry for Economic Affairs and Energy

Nick Macaluso
Director, Environment and Climate Change Canada

Ged Davis
World Energy Council

Asami Miketa
Senior Programme Officer, International Renewable Energy Agency

Asami Miketa (IRENA) introduced the Long-Term Energy Scenarios (LTES) Campaign, which is being operated by IRENA under the umbrella of the Clean Energy Ministerial and currently has 13 country members and 8 technical partners. Under the framework of the Campaign, IRENA is releasing a report on best practices in the use and development of long-term clean energy scenarios. The LTES Campaign is in its third year and continuing its work on facilitating peer-to-peer learning among energy planners.

Francesco La Camera (IRENA) gave opening remarks in which he highlighted the importance of international collaboration and platforms like the Clean Energy Ministerial's in accelerating the clean energy transition. Long-term energy scenarios help connect short-term measures, like Covid recovery policies, with long-term decarbonization strategies and to reveal challenges and opportunities of the energy transition. To raise global climate ambition, there needs to be a better dialogue between the energy planning community and the climate community.

Thomas Anker Christensen (Denmark) spoke in his opening remarks about the value of long-term energy scenarios and planning, which has been a key component of Denmark's green energy transition since the 1970s, and have formed the basis of political decision-making surrounding long-term energy policy. Long-term energy scenarios are an important tool for governments to explore different pathways to the green transition. They can provide the foundation for ambitious targets and the policy needed to achieve them, secure an enabling environment, and foster innovation and investments in green technology, while also reducing investor risk and private finance for the green transition. Without solid scenarios and planning, policymakers are unable to make the necessary decisions to drive an ambitious transition forward and are essentially "flying blind".

Thorsten Herdan (German Federal Ministry for Economic Affairs and Energy) gave his perspective on using energy scenarios for decision-making. Long-term scenarios have a weakness in that they cannot be fully believed because they cannot model disruptive events or game changers, whether technological or societal. The COVID-19 crisis is a prime example of this, being a game changer that cannot be modelled but that must be adapted to in models. From a broader perspective, the energy transition is a learning process and not a fixed roadmap. Long-term energy scenarios must be continuously improved with new knowledge. Scenarios should be run as often as possible with as much variety as possible to cover as many potential

futures as feasible. Politicians cannot act without long-term energy scenarios and energy planning: they can only react, which is a disaster.

Ged Davis (World Energy Council) discussed the importance of considering the broader global context when making energy decisions. He outlined the World Energy Council's belief that the world has entered an age of disruptions, where technological innovations, societal goals, environmental challenges, and geopolitics are reshaping the energy sector. The World Energy Council's energy scenarios are developed according to three main storylines:

- Modern Jazz, a market-led, innovative, and digitally disrupted world with fast-paced economic growth;
- Unfinished Symphony, a world with strong, coordinated policy-led initiatives and united global action to address challenges, especially those related to a low-carbon future; and
- Hard Rock, a fragmented world characterised by inward-looking policies, lower growth, and less global cooperation.

These scenarios can be used to stress test an organisation's vision, strategy, plans, and projects. They can also be used with tools like the World Energy Trilemma Index, which assesses national policy performance across energy security, energy equity and affordability, and environmental sustainability.

Nick Macaluso (Environment and Climate Change Canada) shared the Canadian perspective on using long-term energy scenarios for policymaking. Their scenarios are focused on achieving net-zero emissions by 2050 and are used to examine the types of energies needed for the energy transition and the potential of electrification. They use a series of models to develop scenarios and triangulate the different scenarios to arrive at a common understanding. The Canadian government possesses a strong internal modeling capacity, using models virtually every day to advise on pathways to achieve objectives. When it comes to the development of the scenarios, ECCC uses both a top-down and bottom-up approach and engages with different stakeholders in the energy sector.