Clean Energy Ministerial 14

Shaping the Future of Energy Systems: Strategic Agenda of the Long-Term Energy Scenarios (LTES) Initiative.

July 19, 2023; 15:00 - 16:30 (IST); Room: Salao 3, Grand Hyatt Goa, India.

Side event proceedings



Background

The side event at CEM 14 served as an engaging platform for a high-level discussion between government representatives from Canada and Denmark and representatives from Hitachi Energy Company and Fortescue Future Industries to exchange ideas and perspectives concerning the challenges and strategic drivers that should be incorporated into the discussion agenda of the LTES Initiative to accelerate the clean and just energy transition.

The primary objective of the side event was to obtain insights from the panelist's perspective on the critical aspects of developing and using national Long-Term Energy Scenarios (LTES) to speed up the clean energy transition. Those insights will further support shaping the future strategic discussion agenda of the LTES Initiative.

Panel discussion summary

The panelists highlighted the unique and shared challenges they face in their respective regions and sectors, bringing light to the complexities of integrating socio-economic, technological, and climate considerations into energy scenarios and long-term planning strategies. The discussion highlighted the need for broader and more diverse dialogues to ensure the creation of more impactful and relevant work in the field of long-term planning.

The discussion also emphasized the importance of technological innovation, noting its insufficient representation in current scenarios and strategies. There was a shared vision about the importance of using long-term energy scenarios to create trust and foster investment in the innovation ecosystem for the energy transition.

The panelist shared their perspectives from the government and private sector point of view, discussing aspects such as the importance of considering regional impacts, meaningful engagement with diverse groups, the importance of including long-term network planning, and the relevance of private and political sides working together.

The importance of cross-disciplinary dialogue was stressed, and the significance of incorporating societal behavior, public-private partnership dialogues, and climate-energy-society interfaces into long-term scenario planning was emphasized. There was a consensus on the need for better representation of technological innovation in energy models and long-term scenarios. The role of the innovation ecosystem was underlined, with a call to invest more in it and have greater confidence in its potential.

Frank Des Rosiers from Natural Resources Canada provided valuable insights into Canada's approach on using LTES. He explained how every policy in Canada undergoes scrutiny to discern its potential impacts on the population. Additionally, he stressed the importance of communication and data visualization of energy scenarios for policymakers, suggesting the relevance of considering as part of the conversations in the LTES Initiative. Des Rosiers also emphasized the need to improve the representation of resources and supply chains in energy scenarios. Lastly, he underscored the significance of fostering meaningful engagement across regions to determine the impacts of energy-related measures on communities.

Loui Algren, representing the Danish Energy Agency, shared insights based on Denmark's experiences and best practices in energy scenario development. Algren highlighted the importance of using long-term scenarios for directional guidance rather than as precise predictions. He outlined several key elements for developing energy scenarios: sector coupling (for heat and power planning, transport, and hard-to-abate sectors), consumer behavior, carbon negative solutions, land use, and data transparency. Algren stressed the importance for governments to understand and employ these scenarios effectively.

Harmeet Bawa from Hitachi Energy emphasized the urgency of incorporating power grid planning insights into the LTES discussions to improve the development of energy scenarios, underscoring that robust investments in transmission and distribution grids are essential to avoid bottlenecks for the energy transition. Bawa also highlighted the potential of new business models and argued for transformative actions over merely incremental shifts.

Allard M. Nooy of Fortescue Future Industries brought forward the industrial standpoint. Nooy emphasized the importance of dialogues between government and private sector as enabling condition to create more robust energy scenarios, arguing that the private sector's feedback can give indications on what actions can be more feasible. He also pointed out that for international bodies to provide tangible support, they must deeply understand each party's unique dynamics and needs.

Feedback from attendees: Barbara Kauffmann of the European Commission emphasized not only the need to consult stakeholders about the impact of the energy transition on people but also to integrate these considerations into energy models. She proposed that this aspect be incorporated into the LTES Initiative discussions.

Key takeaways

- Long-term scenarios must consider societal and supply chain constraints, including land use, permitting, and social behavior.
- A productive dialogue between the public and private sectors is essential for accelerating the implementation of energy-transition-enabling activities and successfully implementing energy projects.
- The relationship between energy, climate, and society must be better addressed in LTES planning, highlighting the importance of a just transition.
- Better representation of technological innovation is needed in energy models and long-term scenarios, as it currently falls short.
- The innovation ecosystem holds the potential for revolutionary breakthroughs in energy technology, deserving more confidence and investment.

Next steps

Based on the key takeaways and aspects discussed in this side event, the following are the recommended elements to incorporate into the strategic agenda of the LTES Initiative.

- Holistic and transparent energy planning perspectives: Enhance long-term scenarios by factoring in comprehensive elements such as societal behaviors, supply chain constraints (land use, permitting), socio-economic impacts, sector coupling, and transparency in data to address the intricate complexities of the transition.
- Strengthen Public-Private Collaboration: Foster a collaborative environment for open dialogue between the public and private sectors for developing and communicating energy scenarios. This aspect could significantly impact accelerating the implementation of energytransition-enabling activities and execution of energy projects. The aim would be to align governmental objectives with private sector capabilities and insights.
- Address Energy-Climate-Society Nexus: Prioritize discussions that bridge the relationship between energy, climate, and society. By addressing these intersections, the LTES Initiative can emphasize the importance of a just and inclusive transition, ensuring that energy strategies benefit all societal strata.
- Boost Technological Innovation Representation: Recognize the underrepresentation of technological innovation in current energy models and scenarios. Initiate comprehensive research and discussions focusing on the latest technological advancements in the energy sector, ensuring that long-term energy scenarios remain relevant.
- **Investment in the Innovation Ecosystem**: Recognize the role of long-term energy scenarios in highlighting the game-changing potential of the innovation ecosystem. Motivate discussions around using energy scenarios for investment in the innovation ecosystem to speed up the energy transition.

Note: these additional aspects are subject to internal discussion among members and partners of the LTES Initiative.