Long-Term Energy Scenarios (LTES) Initiative

Global Best Practices on Energy Planning: Attracting Investment for Clean Energy Transition

Tuesday, October 1, 2024.

Summary

Thiago Barral from Brazil's Ministry of Mines and Energy opened the session by highlighting the importance of this event in connecting the Clean Energy Ministerial and Mission Innovation Agenda with the G20 Agenda. As the presiding country of the G20 Energy Transitions Working Group, Brazil proposed three priorities, with one key focus being accelerating finance for the energy transition.

Barral emphasized the investment gap in energy transition, particularly in developing countries and emerging economies, as identified by institutions such as the International Energy Agency, IRENA, and the World Economic Forum. He presented energy planning as a powerful tool to address this challenge and the higher cost of capital in developing countries.

He defined energy planning as a process of building, modeling, and communicating scenarios, as well as collecting and understanding data. This approach ensures consistency in:

1. Actions and policy implementation
2. Alignment with long-term climate and social development goals
3. Integration of various policy spectrums, including industrial and climate policies

Barral emphasized that energy planning serves as a **de-risking tool for investment** and brings more efficiency to implementation.

Maximilian Schuelling from Germany's Federal Ministry of Economic Affairs and Climate Action acknowledged the critical link between energy planning and finance, as highlighted by Barral. He highlighted Germany's role as co-chair with Denmark in the LTES network, which has evolved into a vibrant and inclusive community over the past years.

Schuelling emphasized that the LTES network brings together governments, academia, technical institutions, and international organizations to exchange knowledge and collaborate. The shared goal is to guide and support energy transition through effective use of long-term energy scenarios.

Schuelling concluded by emphasizing the opportunity to develop an overarching vision for joint energy targets and development strategies, including a just transition dimension. He stressed the importance of adopting an integrated, holistic approach to align policies and regulations for mobilizing investments.

Asami Miketa, IRENA presented the highlights from dialogue sessions of the LTES Network on the critical link between energy planning and investment. LTES Network is a global network of government institutions championing the evidence-based energy planning, and it has grown into a vibrant community for exchanging knowledge on energy planning.

She highlighted the Network's role in exploring the linkage between scenario planning and the finance sector, noting recent developments:

- Central banks and financial institutions are now developing their own scenarios
- Climate risk is recognized as a significant risk factor by financiers
- Networks like the Glasgow Finance Alliance for Net Zero Initiative recommend transition planning for banks

Miketa outlined nine key points for translating energy plans into investments:

1. Develop short-term investment plans and create project pipelines
2. Establish finance strategies and involve financial institutions in planning
3. Implement supportive regulations and policies
4. Address socio-economic impacts (job creation, energy access, GDP impact)
5. Address bottlenecks in the whole value chain
6. Communicate to reduce uncertainty
7. Encourage participation to identify risks
8. Ensure well-coordinated planning governance
9. Build planning capacity

Miketa emphasized that only 9 out of 61 energy planning documents addressed socio-economic impacts, highlighting an area for improvement. She also emphasized the importance of participatory processes in energy planning and the need for strong planning institutions and governance.

Miketa concluded by introducing a briefing note that summarizes preliminary recommendations for effective translation of energy planning into investment. They are broadly categorized into the three main areas: reducing risks, meeting investment requirements, and enhancing planning governance. She invited participants to download the briefing note and welcomed comments and further engagements.

Barral introduced the panel discussion, featuring three distinguished speakers:

1. **Christian Stenberg**, Deputy Permanent Secretary to the Ministry of Climate, Energy, and Utilities in Denmark
2. **Demetrios Papathanasios**, Global Director at the World Bank for Energy and Extractives
3. **Manuela Fulga**, Lead of Sustainable Finance, Financial and Monetary Systems at the World Economic Forum

He posed the opening question to the panel: "*How can energy planning effectively reduce investment risks in practical terms?*"

Papathanasiou from the World Bank emphasized the crucial role of energy planning in de-risking investments and guiding the transition to clean energy. He highlighted that long-term planning consistently demonstrates the cost-effectiveness and lower environmental impact of renewable sources like solar, wind, and hydropower. This trend is making it increasingly difficult to finance fossil fuel projects, particularly coal, due to the risk of stranded assets. Papathanasiou stressed the importance of transparency in planning processes, facilitated by modern cloud-based modeling, which allows for greater scrutiny of assumptions and methodologies.

Papathanasiou also pointed out the need for adaptability in planning, given the rapid pace of technological change. He suggested that energy scenario planning could play a vital role in facilitating the creation of carbon credits, an area where progress has been lacking since the Paris Agreement. Papathanasiou expressed hope for advancements in this field at upcoming COP meetings, with long-term planning scenarios serving as a crucial tool for guiding investments and policy decisions in the global energy transition.

Manuela Fulga from the World Economic Forum offered insights from the perspective of private financiers and investors on energy planning as a tool for de-risking investments. She emphasized that energy planning is viewed as part of a broader package of measures that enable private sector participation in energy transition projects. Fulga highlighted the critical need for mobilizing commercial capital at scale, noting that public funds alone are insufficient to bridge the investment gap, particularly in emerging economies.

Fulga stressed the importance of energy planning in supporting private sector participation by providing a clear roadmap for investors. She explained that energy planning allows financiers to infer government priorities, potential public funding allocations, and future profit opportunities. This information helps guide private investment decisions and optimizes the blending of capital across the investment value chain. Ultimately, Fulga concluded that energy planning serves as a crucial de-risking element and creates an enabling environment for private sector involvement in the energy transition.

Stenberg from Denmark's Ministry of Climate, Energy, and Utilities expressed pride in Denmark's co-leadership of the LTES initiative since 2018 and commended the capacity building and knowledge sharing that has benefited the global energy transition. He praised Brazil's leadership in bringing long-term energy planning to the forefront of the G20 Energy Ministerial agenda and emphasized the importance of establishing a global coalition of energy planners.

Stenberg highlighted the critical role of energy planning in achieving both energy and financing targets, particularly in mobilizing private capital. He provided two examples of Denmark's success with energy planning: domestically, where 63% of electricity comes from fluctuating renewables, and internationally, citing a collaboration with Vietnam that attracted significant private investment from a toy company Lego through off taker agreement with the Vietnamese government. The latter was enabled by Vietnam’s 2050 energy plan, ensuring the certainty for the Lego company to have access to clean energy.

Stenberg stressed that energy planning provides certainty for investors and enables market-driven transitions, concluding that it is essential for ensuring a successful and financially viable green transition.

Barral thanked the speakers for emphasizing the importance of international cooperation in capacity building and efficient energy planning implementation. He then directed the panel towards a final round of discussion, focusing on two key points:

1. How to better integrate the financial sector with the energy planning process
2. Specific comments or insights regarding developing and emerging economies in this context

Papathanasiou from the World Bank emphasized the importance of engaging key financial players, particularly in developing countries, to better integrate the financial sector with energy planning. He highlighted the World Bank's collaboration with the Coalition of Finance Ministers for Climate Change and the International Monetary Fund, noting the need to educate financial decision-makers about the energy sector's crucial role in climate change mitigation. Papathanasiou pointed out that some central banks, such as Japan's, are beginning to offer preferential rate for clean energy investments, which can significantly impact development.

He also presented findings from the World Bank's "Scaling Up to Phase Down" report, which revealed that developing countries (excluding China) spend about half a trillion dollars annually on fuels in the power sector. Papathanasiou suggested that redirecting this recurring expenditure could potentially support up to five trillion dollars in clean energy investments, presenting a significant opportunity for the energy transition.

Fulga from the World Economic Forum focused on the critical need for a bankable project pipeline to connect available private capital with viable clean energy projects. She highlighted the disconnect between project developers citing a lack of funds and private investors claiming a shortage of financially viable projects. Fulga emphasized that energy planning's transformational power lies in its ability to predict where money will flow and which projects will be prioritized.

As a concrete example, she mentioned Egypt's success in mobilizing over 2 billion dollars in private sector investments through clear long-term energy planning and policies that have enabled private sector participation since 2014. Fulga also noted the World Economic Forum's initiative on Mobilizing Impact on Crop and Energy in Emerging Markets, which aims to study and facilitate private capital mobilization in clean energy projects in developing countries.

The session also included brief interventions from:

- Andriana Sukova (European Commission), who stressed the importance of including job impact assessments in energy planning.
- Carlos Toro (Chile), who emphasized the need for centralized, transparent data and the integration of human costs into planning.
- Henri Paillere (IAEA), who highlighted the IAEA's role in supporting capacity building for energy planning in emerging markets and developing economies.