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Future of our Grids
Accelerating Europe's energy transition

Discussion and Conclusions of the High-Level Forum
7 September 2023, Brussels

Thematic Session 1: How to secure the necessary investment for future-proof grid infrastructure to enable a decarbonised economy?

Key Themes covered:

1. Access to Finance for Network Operators
2. Financing Investments in Grid Manufacturing Capabilities
3. Overcoming Non-Financial Barriers to Grid Investments

Opening remarks

The need to significantly ramp-up growth in transmission and distribution investments, including digitalisation was a key opening remark of this session.

ENTSO-E outlined the main transmission investment corridors in its Ten-Year Network Development Plans (TYNDPs) and the upcoming dedicated Offshore Network Development Plans (ONDPs). European TSOs project 220bn€ investments up to 2030, and 700bn€ up to 2050 already projected and probably more in offshore expected. This is a high double-digit growth in TSO investments.

DSO Entity highlighted that the decentralisation of the energy system with increasing numbers of EVs, PVs and heat pumps directly connected to the distribution grid necessitates significant investments not only in the smartening (flexibility), but also the expansion of the distribution grid. Currently, DSOs are integrating 70% of renewables and see a 50-70% growth of investments to almost 40bn€ per year in the EU. While scaling-up of investments in electricity grids is pivotal for electrification of powers systems and the low carbon transition there is a significant positive societal return on investment in transmission and distribution grids.

It was highlighted how the problems of long-term grid development are not unsurmountable, and thus most importantly there is a need for a pathway through these challenges. In addition, the industry and policy makers need a clear visualisation of energy corridors in the future European energy landscape.

In case of regulated assets, which must be scaled up significantly, financing schemes for investments need to be deployed as effectively as possible. More equity is required including the need to look at longer-term debt to be financed to better reflect the longer investment horizons of TSOs and DSOs.

EU funding exists to support innovative and cross border investment projects (e.g., Connecting Europe Facility for Energy, Innovation Fund) and to catalyse private financing, but these funds are finite.

The need for smarter financing solutions as yield is not always visible and returns uncertain in case of investments in new innovative solutions and technologies. Also, such investments need to be de-risked to crowed-in private capital and in this case EIB and EU blended financial instruments can help.

The EIB as EU Climate bank is already active in funding projects for transmission and distribution with 3.9bn EUR on average annually over 2020-2022 period. The EIB increased commitment to support *RePowerEU* with up to 45bn€ until 2027 is expected give a further boost to these volumes.

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Discussion

The session discussed all the themes based on the common view that timely grid extension is needed for Europe and should be at the centre of the debate.

Participants acknowledged a need to mitigate the higher risk profile of grid developers driven by need for higher investment rates and calls on institutions to reaffirm the essential need for grids as a signal to investors and financial markets.

Participants confirmed that anticipatory investments become the norm in grid development, but also in the supply chain. Participants recognised the critical needs of TSO/DSOs to finance upfront payments to reserve grid technology and equipment production (supplier) capacity, especially for large physical network projects.

Participants underlined that there is a balancing exercise in accelerating investments in grid expansion/reinforcement whilst ensuring affordability for consumers. Forward looking regulatory regimes need to consider network operators' financing capabilities, elevated investment uncertainties for which a fair risk/reward balance for grid investments is necessary, and the role of external funding opportunities (e.g., grants). Strategies to manage elevated uncertainties in areas like cost, timing, and output (intelligent adaptability) should be explored.

Participants commented that with the large amount of equity and loans needed, and increased leverage combined with higher financing costs, may constrain access to funding. The rules and requirements of the capital markets, including the criteria of Rating Agencies, must be met to retain access to diverse funding sources. The framework should be supportive to sustainable capital structure to satisfy the requirements of the capital market and to curtail financing costs for TSOs and DSOs and thus importantly allow to keep the costs for customers affordable.

Concluding Remarks

Participants asked to explore the availability of further public funding at EU and national level. With constraints on the availability of EU funds for infrastructure investments (e.g. CEF), additional efforts are needed to enable access for network operators to existing EU mechanisms and programs (e.g. Cohesion Policy Funds, InvestEU, Innovation fund, etc.) to facilitate the adaptation of the grid to disruptive technologies. There is a need to consider having specific funds and programs for smaller and medium-sized DSOs.

Participants recognised the important role that the EU Taxonomy (with its delegated acts) will play in the coming years as an enabler of electricity network investments and welcomes recent TSO and DSO initiatives to issue green bonds. Knowledge-sharing in the industry is key since the reporting and implementation might be a challenge to meet for smaller TSOs and DSOs.

Participants recommended to continue engagement in the Copenhagen Forum on Energy Infrastructure and the Investors' Dialogue on Energy.

The participants confirmed their full support for the points and welcome next steps.