

15th ENTSO-E Advisory Council Meeting

Date: 6 October 2021
Time: 10h00-13h00
Place: via web-conference

Participants

DICKSON, Giles (Chair)	RES Associations – WindEurope
SCHMID, Eva (Vice-Chair)	NGOs/Germanwatch
ALBA RIOS, Juan Jose	EURELECTRIC
HEMETSBERGER, Walburga (excused)	RES Associations – SolarPower Europe
SCHULZ, Johannes	EFET
HOLM, Inger Kristin	IFIEC
LOFFREDO, Jaume	BEUC (substituting for Monique Goyens)
WEISS, Arnold	Europex (substituting for Rickard Nilsson)
KREUSEL, Jochen	T&D Europe
VILLA, Michael	SmartEn
DE BLOCK, Gert (excused)	DSO Associations
LAFFAYE, Hervé	ENTSO-E President
RYAN, Liam	Vice-Chair of the Board of ENTSO-E (until 11:30)
CORTINAS, Damian	ENTSO-E Board Member (item 6)
KAENDLER, Gerald	Chair, System Development Committee
CHANOTIS, Dimitri	Vice-Chair, System Development Committee (item 5)
ETIENNE, Gilles	Convenor, Market Design RES Group (item 6)
TWOHIG, Sonya	ENTSO-E Secretariat
FORESTI, Marco	ENTSO-E Secretariat (item 6)

CAMUS, Claire	ENTSO-E Secretariat
NENOVA, Stela	ENTSO-E Secretariat

Decisions and recommendations

1. Welcome and introduction, approval of agenda and minutes of 14th iAC meeting

- The agenda of the meeting was approved.
- The minutes of the previous meeting were approved.

2. iAC written advice and updates:

- **iAC Advice on the TEN-E ([here](#)):** ENTSO-E thanked the iAC for the advice and explained it would take it into account for the next steps in developing the TYNDP 2022 scenarios, methodologies and studies. The TYNDP 2022 scenarios were taking into account the Green Deal objectives of climate-neutrality and the EC's Long-Term Strategy; they were consistent with COP21 and the EU Climate Law ambitions, provided detailed explanations of the different drivers and assumptions, and considered some alternative scenarios/data from other sources as a comparison for example regarding the carbon budget estimates etc.
- ENTSO-E had also been working on a first assessment and categorisation of non-infrastructure solutions as an alternative and/or complement to traditional grid reinforcements. The assessment would focus on TSO system planning process and would explore the role of alternative solutions for non-frequency related use cases (e.g. congestion management, voltage stability), providing an overview of their benefits and potential for scalability.
- ENTSO-E further highlighted that greater cooperation with the EU DSO associations and the EU DSO entity were foreseen as part of the work on the next TYNDP editions and in compliance with ENTSO-E's legal mandates.
- Regarding system integration objectives, the joint Interlinked Model (ILM) for electricity & gas took into account the interlinkages between gas and electricity systems and infrastructure projects, including Power-to-Gas (P2G), Gas-to-power (G2P), hybrid technologies, etc. and helped facilitate energy system integration in a cost-efficient manner. The ENTSO-E TYNDP also took into account the development of hydrogen production assets in the infrastructure planning, and TYNDP 2022 scenarios were further modelling hydrogen and low carbon fuels at EU level.
- ENTSO-E explained it was committed to further implement the sector interlinkages in the future TYNDP editions through the innovation of the planning procedures and methodologies, and through its Multi Sectorial Planning Support roadmap, toward an optimized energy system.

- The iAC welcomed ENTSO-E's response to the advice.

3. TYNDP 2022: short presentation and exchange of views

- ENTSO-E provided an update on the state of play of TYNDP 2022 development as well as highlights from the scenarios, the new methodological and data improvements for the scenario building, and the forthcoming work on the integration of offshore in the planning procedures in view of the need to ensure a holistic approach across time, space and sectors. The TYNDP 2022 scenarios demonstrated inter alia that: net zero objectives could be achieved by 2050 while ensuring the security of energy supply, and energy efficiency was key to achieve the EU climate and energy objectives. The scenarios further highlighted the need for ambitious development of renewable energy and further interconnectedness across Europe, for development of a fully integrated energy system through sector integration, as well as the key role of innovation.
- The iAC welcomed the update and highlighted its appreciation on the latest TYNDP progress, and the significant improvements in transparency, efficiency of the process and structure of the TYNDP work done by ENTSO-E. iAC members highlighted inter alia the need to consider further: the sources of hydrogen beyond EU borders, clean hydrogen production and impacts at local level, the challenges of hydrogen conversion/transport from abroad, the possibility for alternative solutions to infrastructure, cooperation with the DSOs, the future challenges of baseload power needs and profiling costs, alignment with new EU climate and energy objectives (e.g. the Fit for 55 package), as well as more extreme scenarios for the long-term (e.g. full renewable scenario).

4. Gas/hydrogen decarbonisation and energy system integration

- ENTSO-E explained that for the TYNDP 2022 scenario building, ENTSO-E and ENTSOG had implemented for the first time new enhancements to the sector coupling methodology and modelling to try to capture better the possible new dynamics at their interface with other energy consuming sectors, at various geographical scales, and with other energy carriers.
- ENTSO-E explained that future network planning would require a more integrated and cross-sectoral approach and this would be taken up through further enhancements of the Interlinked Model to capture gas and electricity interactions at the appropriate levels. Common full-energy scenarios jointly developed by ENTSO-E and ENTSOG were a cornerstone of the Interlinked Model and helped identify interactions between gas and electricity systems while the project assessment was carried out separately by ENTSO-E and ENTSOG by applying the metrics as defined in the respective Cost-Benefit Analysis Methodologies. ENTSO-E's Multi-sectorial planning support approach was complementary to TYNDP in facilitating the integration of important actors and sectors beyond gas and electricity into the scenario development process in order to facilitate the most efficient solutions at system level.
- iAC members noted that more public support would be needed to scale up renewable hydrogen production as investments were not commercially viable yet due to the high

costs of production. Given the increasing interdependencies between electricity, gas, hydrogen, the questions of how markets could manage volatilities, the need for appropriate price signals to be integrated in the wholesale power market were important to consider in the future. Other important aspects to consider in the discussion included cost allocation as well as the need to avoid increasing dependence on gas imports for the production of hydrogen while ensuring renewable hydrogen was there for the sectors that need it for decarbonisation.

- iAC members also noted that in the context of the current high energy prices' developments, it was important to consider the impacts on consumers and to avoid market distortions by various measures taken across the EU. In this context, the iAC encouraged ENTSO-E to support the importance of the internal energy market and its proper functioning for the benefit of consumers.

5. Public engagement

- ENTSO-E explained that public acceptance of infrastructure was a key challenge for implementing projects: local acceptability issues were often generating delays and expensive redesigning of projects. Timely infrastructure development was key to ensure overall project costs would be kept at the lowest possible level. It was also important to ensure that projects were relevant from an overall system perspective and to ensure that permitting remained on track for both renewables' projects and for grids in order to avoid stranded assets and support the energy transition.
- ENTSO-E's assessment of TYNDP projects every two years provided data about the causes for delays of grid projects, with lack of public acceptance identified as the cause of 17% of project delays for Projects of Common Interest (PCIs).
- Grid investments were key to support the energy transition and especially the EU ambitions for large-scale offshore wind integration. However, the financial profile of TSOs and their attractiveness as capital raisers was deteriorating in recent times in terms of equity driving investments. The regulatory framework should evolve to ensure necessary grid investment with particular emphasis on performance and innovation through meaningful incentives.
- iAC members noted it was important to understand better the origins of negative public perceptions regarding grid development and how that lead to public acceptance issues, to help local communities understand what the TYNDP's purpose was, and to ensure transparency regarding grid developments and the need for grids for the energy transition, among others. Streamlined processes and strong public engagement were equally important to increase acceptance for grid projects. Sharing knowledge and best practices at EU level regarding the processes in different countries could also be of value to help increase public acceptance. In addition to discussions on supporting new infrastructure solutions, it would also be important to discuss how to allow demand-side response to participate in balancing markets.
- ENTSO-E thanked for the feedback and noted it would take these ideas into account in its forthcoming work regarding best practices/methodologies for supporting public engagement, as well as further dialogue with stakeholders at all levels and with regulators regarding the costs of innovative solutions.

- The iAC agreed to discuss again the topic of financing for TSOs and raising capital for new investments at a next meeting.

6. iAC written advice and updates

- As a follow-up to the iAC advice on the Market Design 2030 consultation ([here](#)), ENTSO-E thanked for the inputs of the iAC and explained it took into account the iAC suggestion to discuss future market design through more targeted debates in a forthcoming webinar on flexibility platforms and market-based redispatch.
- ENTSO-E explained that in addition to the focus on CEP implementation which was a priority for the association, it was important to explore possible further evolutions of electricity markets from a long-term perspective for a seamless transition to a climate neutral energy system.
- The 2030 Market Design Consultation gathered responses from more than 50 stakeholders and helped ENTSO-E and TSOs to understand which priority areas were considered important for further analysis. As next steps, ENTSO-E would finalise the work on the market design 2030 by end 2021 with a discussion paper summarising main elements.
- iAC members welcomed the market design work by ENTSO-E, which highlighted a number of important topics to be supported at European level, and welcomed ENTSO-E's commitment to organise more workshops on dedicated topics and targeted discussions with individual stakeholders.
- Vision 2050: ENTSO-E explained its ongoing work on developing a vision for 2050 for the power system from a TSO perspective, including trends, scenarios, challenges, technology and innovation developments for the future. The iAC welcomed the initiative and looked forward to providing further inputs to this work.

7. AOB:

- Meeting dates in 2022 would be agreed through a doodle.