

Question text	Answers
<p>If national approaches do not collectively reach EU targets, how will the ENTSOs tackle the process of adapting the scenario? Will there be discussions with MS?</p>	<p>ENTSO-E and ENTSO-G will publish the datasets as they are collected according to the upcoming NECPs, whose draft versions to be published by end of June 2023, as TSOs best estimate together with a methodology to bridge any potential gap. We can only assess any potential gap after all datasets are collected and analysed. The gap closing methodology will be consulted in July 2023 and this process will be performed in close alignment with the member TSOs in order to properly reflect national views.</p>
<p>The Scientific Advisory Board is expected to publish its quantitative recommendation for the EU carbon budget in H1-23. Will this be taken into account?</p>	<p>The carbon budget methodology will be published for first public consultation in July 2023. Additionally, a dedicated stakeholder roundtable is planned for this topic to gain detailed feedback from interested stakeholders (the ones registered to the session).</p>
<p>I'm not so into the abbreviations here, could you please explain what the NECPs that you were referring to are (if I heard correctly)?</p>	<p>NECP refers to National Energy and Climate Plan. The Regulation on the governance of the Energy Union and Climate Action ((EU)2018/1999) introduced the obligation for each member state to submit such a plan and amend this based on the results of an assessment by the European Commission. These plans should be updated every two years.</p> <p>The TYNDP Scenarios began using NECP data as part of its National Trends scenario already in the TYNDP 2020 Scenario process.</p>
<p>Can the Ministry of Energy in a non-EU country participate in the stakeholder reference groups?</p>	<p>Under the updated TEN-E Regulation ((EU)2022/869) and the Scenario Framework Guidelines published by ACER, the participation of non-EU member states in the Scenarios External Technical Advisory Group (SETAG - new name for the Stakeholder Reference Group) is not foreseen.</p> <p>After its creation (which is foreseen during summer 2023), participants in the group will be determined by the group itself. Therefore, we encourage interested parties</p>

	<p>– included non-EU member states – to reach out directly to the Scenarios ETAG at this time and state their reasons for wishing to participate.</p> <p>For those wishing to merely gain greater insight into the group’s activities, the Scenarios ETAG will be required to produce and publish minutes of its meetings.</p>
Do You share the presentation after the webinar has finished?	Yes. All materials presented during the Stakeholder Process Update Webinar will be uploaded to the Scenarios website. This includes the presentation, the full recording of the event and the full list of all questions asked by participants together with written answers by the Scenarios Team.
When SRG (<i>Scenarios ETAG</i>) will start engaging in the TYNDP 2024 scenario process?	<p>The Scenarios ETAG will begin to engage with the TYNDP 2024 scenarios process as soon as the group is founded.</p> <p>In addition to this, on our own initiative, the Scenarios Team is organising a series of Stakeholder Roundtables after completion of the first public consultation (July 2023) in which we will invite stakeholders to help us <i>deep-dive</i> into specific and detailed topics. We expect that the majority of Scenarios ETAG members will also be involved in these roundtables.</p>
Will you include scenarios which do not reach the EU climate goals?	<p>No. Achievement of EU climate goals is considered a minimum requirement for our scenarios.</p> <p>We recognise that there have been requests from some stakeholders for “behind-the-targets/delayed-transition” scenarios. We reject this view. The TYNDP Scenarios are of great importance for the planning and development of EU energy infrastructure. To this end they should reflect EU energy and climate goals. Therefore, the Scenarios Team believes it would be inappropriate to develop scenarios that speculate on the achievement of EU energy and climate policy.</p>
Who should be participating in these Scenarios work according to plan?	<p>All stakeholders are invited to participate in the scenario building process. The Scenarios Team has developed a range of stakeholder activities to facilitate this:</p> <p>Public Consultation: All stakeholders are invited to take part in the two public consultations during each scenario cycle (this cycle in Q3-2023 and Q4-2023). To support and encourage participation, the Scenarios Team ensures a large window</p>

	<p>for commenting (usually either 5 or 6 weeks) and organises a detailed Consultation Workshop to present the scenarios and answer stakeholder questions.</p> <p>Scenarios External Technical Advisory Group: This group was conceived by the recast TEN-E Regulation ((EU)2022/869) and details on its tasks and membership were further elaborated on by ACER in its Scenario Framework Guidelines. The membership of the group is limited. The Scenarios Team initiated the first call for candidates for the Scenarios ETAG in May-June 2023 and will propose the initial membership list (ensuring fulfilment of the criteria set out in ACER’s Scenario Framework Guidelines). Thereafter, membership of the group will be determined by the group itself.</p> <p>Stakeholder Roundtables: On its own initiative, the Scenarios Team will hold a series of stakeholder roundtables in July 2023 to gain detailed feedback on specific topics for scenario development.</p>
<p>what is the link between stakeholder roundtables and stakeholder reference group (<i>Scenarios External Technical Advisory Group</i>)? Do you have the same type of participants?</p>	<p>There is no direct link between the Stakeholder Roundtables and the Scenarios External Technical Advisory Group (Scenarios ETAG), although it seems likely participants in both groups will overlap.</p> <p>The Scenarios ETAG will be a permanent group exchanging with the Scenarios Team on a regular basis also beyond the current 2024 scenarios cycle. After facilitating its creation and initial participant list, the Scenarios Team will not be directly involved in the governance or processes of the Scenarios ETAG and will participate in Scenarios ETAG meetings merely as an observer.</p> <p>The Stakeholder Roundtables are a one-off event that has been planned by the Scenarios Team. The goal of the Scenarios Team in this case is to focus on a small selection of topics requiring more detailed responses and to ensure that feedback on such topics is received in a transparent manner. The Scenarios Team will, of course, make the conclusions of the Roundtables publicly available and discuss</p>

	these with the Scenarios ETAG. Indeed, it is likely that several Scenarios ETAG members will be in Stakeholder Roundtables.
When should the power generation project developers send away their information?	If your question refers to the submission of infrastructure projects for assessment in the electricity TYNDP 2024, please note that concerned projects include transmission projects (including offshore hybrid generation+transmission projects) and storage projects. The submission window will open from mid September to mid October 2023.
Will electricity DSR be fully addressed in the innovation part of 2024 cycle? If so, when/where will be possible to see data/modelling assumption?	DSR units are modelled in the 2024 TYNDP Scenarios, but the model does not yet support their expansion, I.e., the capacities that exist in 2030 will be kept until the last target year, 2050. We do plan to enhance the DSR modelling for the 2026 cycle, though, as one of the main areas of improvement. The modelling methodologies and the draft assumptions will be published as part of the public consultation (planned in July 2023).
Regarding the communication on innovation, did you take into account the use of flexibility in the electrical grid development plan?	There are a couple of modelling features used in the 2024 TYNDP Scenarios that reflect flexibility resources. First, storage is available in four different shapes: batteries, pumped-hydro units, H2 storage tanks and H2 salt caverns. Then, EV demand is explicitly modelled therefore the market modelling tool (I.e., PLEXOS) can decide to shift the charging requirements within time windows if the economic signals support it. Third, we also represent DSR units that shift demand in time (but do not reduce it), yet these units are not expandable in this cycle.
How is multi-day energy storage being integrated into the scenarios?	There are two multi-day energy storage resources in the model. The first one is connected to the electricity grid and is represented by pumped-hydro units. The second one is connected to the hydrogen network and reflects H2 storage in salt caverns. While the former cannot be expanded, the second one can.
Since not all the full/observer members of ENTSO-E are in EU-27, what are the Targets in 2030 for those countries to be considered for NT+?	The 2030 targets will be calculated and reported only for the EU countries, as required by the REGULATION (EU) 2022/869; ‘... <i>the Union’s 2030 climate and energy targets and its 2050 climate neutrality objective...</i> ’

2024 Innovations. Domestic H2 production of synthetic fuels. How much are you foreseeing for road transport?	We are currently developing the scenarios including the demand for each energy carrier in each sector. As of today, we haven't determined this number yet.
Do you consider some sort of heat storage for flexible heating?	No, heat storage flexibility is not modelled in this cycle.
Which software ENTSO-E is using for energy planning and also for power system analysis?	The market modelling tool used for energy system planning within the TYNDP Scenarios process is PLEXOS. The power system analysis is conducted within the Cost-Benefit Analysis phases of the TYNDPs, with tools like PowerFactory.
What is the reason for only focusing on energy imports via NG, NH3 and e-fuels - and excluding imports of gaseous hydrogen via pipelines?	The TYNDP 2024 scenarios will cover a wide range of possible import routes and carriers. Next to energy imports via NG, NH3 and e-fuels, we consider the import of H2 and CH4 via pipelines.
Innovations in 2024 cycle, what about utility-scale battery storage?	The utility scale battery storage is included in the Scenarios modelling, the underlying assumptions will be shared for the public consultation, currently planned in July, 2023
Do you also consider super capacitors, flywheels, thermal storage in the process?	No, the only storage technologies available in the model are: Li-Ion batteries, pumped-hydro units and H2 storage (steel tanks and salt caverns).
When building a common EU-wide scenario based on input from separate TSOs, how do you secure that this results in a coherent scenario across countries?	This is indeed a challenging task. In a first step, the data from all EU27 member states will be aggregated to grasp the EU-wide picture of this dataset. In a second step the compliance with EU targets will be checked and any necessary changes will be done in close cooperation with the TSOs to maintain a coherent scenario.
Do you plan to use an explicit CO2 price for the Expansion loop?	Yes, the CO2 price will be consulted during the first publication planned to take place in July 2023.
Are there any plans to better calibrate hydro generation for the PLEXOS simulations? Significant difference between hydro outputs with ENTSOE transparency data	This is something that the modelling team is aware of and is trying to improve in every cycle. However, it should be stated that, on the one hand, TP data is historical generation data provided by operators while, on the other hand, the data used in the studies hydro modelling is derived from climate data provided by the Copernicus Climate Change Service. This climate data currently relies on reanalysis models that have their own limitations and cannot accurately capture the hydro dynamics that operators see in real operation.

