

TYNDP 2024

Scenario Building

Stakeholder Roundtable on the Supply Inputs

ENTSO-E & ENTSG Event

13 July 2023 15:25 – 17:20 CEST



Agenda

No	Subject	TIME	WHO
1.	Introduction	15.25-15.30 5 min	Moderator
2.	Tour de table & Presenting the main points	15.30 -16.25 55 min	Each stakeholder presenting themselves and main points for 2 minutes
2.	Discussions	16.25-17.15 50 min	All
3.	Next Steps	17.15-17.20 5 min	Moderator

Discussion Points and stakeholders' views

- Ammonia & Hydrogen import routes for potentials & costs
- Hydrogen prices
- Wind Capacity Trajectory (MS Non-binding agreements for offshore). Capacity factors for the newest wind turbines should be higher.
- Alignment of RES trajectories with latest NECP updates.
- Mistake on the cost assumptions of technologies in 2050 Global Ambition Scenario.
- Wind best estimate capacities alignment with non-binding MS agreements.
- Cost of H2 CCGTs
- Electrolyser capacity corresponding to the hydrogen demand
- Some participants asked for higher electrolysers efficiencies in the future
- Some participants asked for consideration of various H2 production technologies (in addition to electrolysis and SMR)

Discussion Points and stakeholders' views

- Interlinkages of the prices (natural gas + CO2 + hydrogen + e-methane) is necessary.
- Nuclear capacities should be higher to reflect nuclear alliance aiming 150 GW in EU by 2050.
- Dunkelflaute effect is considered as an important part of scenario building.
- Need for higher/more granular geographical resolution to avoid missing curtailments at smaller level. Curtailment is key for sector integration.
- The datasets and methodology for H2 storage capacities & expansion candidates.

Clarification from moderators

- Within the RES trajectories, the best estimate capacities reflect the NT+ capacities according to the TSO data submission. These data collection have been concluded a while ago, as the team needed to perform quality data checks, aggregation and analysis. As it is mentioned in the documents, these capacities are not part of the consultation, they are provided for information. The team will investigate further in what extent the draft NECPs can be considered, given the timeline pressure.
- The model doesn't invest in nuclear technology, they are taken as ex-ante according to the capacities provided by the TSOs.
- The H2 storage is modeled in a same way as batteries.

Conclusions

- The mistake in the global ambition 2050 technology costs will be corrected.
- Wind offshore trajectories will be aligned (to the extent possible) with non-binding MS agreements.
- RES trajectories alignment according to the draft NECPs will be investigated.
- Consideration of the UK as a potential extra-EU H2 supply source.
- The electrolyser capacities resulting from the modeling will be cross-checked with corresponding hydrogen demand.
- Possible higher electrolyser efficiency will be investigated.
- The H2 CCGT cost will be removed as the model doesn't invest in H2 CCGTs (they are defined ex-ante).
- The consistency between hydrogen import costs vs import assumptions will be double-checked.
- For the next scenario building cycles:
 - Consideration of higher/more granular geographical resolution will be investigated to avoid missing curtailments at smaller levels.
 - Consideration of other H2 production technologies (in addition to electrolysis and SMR).
- We expect reliable sources together covering the time horizons with the explanations for the comments on the figures rather than too low and too high to be able to implement in the scenarios. Please comment within the consultation, till 8th of August, how and where these changes should be implemented according to the provided sources.

Thank you for your attention

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Next Steps

- Early August: The summary of the stakeholder roundtable will be published
- 8 August: Deadline for submissions to the public consultation's online survey
- August: Establishment of the Stakeholder Reference Group (ETAG)
- End-year: Second public consultation with focus on electricity and hydrogen modelling results