TYNDP 2024
Scenario Building

Stakeholder Roundtable on the Demand Inputs

ENTSO-E & ENTSOG 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

- Request for more clarity on the process:
  - how the different assumptions among countries are decided and to what extend the scenarios are contrasted?
  - Which parameters are the inputs to the model, and which are the outputs of the model? How will the selection of these parameters limit the model?
  - How are the storages (battery and salt caverns) modelled?
  - Why only Hybrid Heat pumps are modelled, what about other heating technologies?
  - How is demand side flexibility considered and differentiated in the model? (explained in the methodology slide)

Discussion Points and stakeholders' views

- Need for higher/more granular geographical resolution (e.g., to capture the hotspots in industrial demand inside a country, how the scenarios build on DSO planning)
- Timely network development is necessary to transit decarbonized gases to the industry sector. Concerns raised that the network development is already behind their demand.
- Some participants perceive the role of direct electrification in certain sectors (building, households, and transport) as too low.
- Some participants perceive the role of hydrogen and biomethane in the DE scenario as too low (building, households).
- Some participants perceive the role of the data centres as too low.
- Some participants think the scenarios are not differentiated enough.
- Some participants think the assumptions on the H2 steel tanks are unrealistic.
- Some participants think the H2 share in steel subsector doesn’t seem realistic.
- What if we miss the renovation targets in the buildings and households? Renovation is a key driver and therefore might require a sensitivity.

Clarification from the moderators

- The TYNDP 2024 Demand Scenarios are quantified with Quintel's Energy Transition Model (ETM) tool, which is open source and available for the general public.
  - 20230704 – Draft Demand Scenarios TYNDP 2024 spreadsheet ('*ETM Scenario Links*') provides all the country links where interested stakeholder can transparently see all relevant input, output parameters; all underlying assumptions and their results. Please check the links to see all the explanations on the inputs (market shares, technologies definition and shares, sizes etc).
  - All heating technologies are already modelled within this ETM tool, however in order to explicitly determine the share of electricity/gas among hybrid heat pumps; we are modelling them within Plexos (*the number of hybrid heat pumps are coming from ETM tool, and the share of electricity and gas is determined within Plexos. Please see modelling methodology slides for more details*).

Clarification from the moderators

- The process of developing the demand parameters for Distributed Energy and Global Ambition is as following. For National Trends+ Scenario, all inputs are directly and jointly provided by the electricity and gas TSOs according to their upcoming NECPs (as TSOs best estimate). As all scenarios are reviewed and adjusted according to the national policies, it is normal to have discrepancies among countries.
  - The transfer of 2022 Scenarios Demand Figures to the ETM
  - Adjustment on the figures with respect to new EU targets (e.g., renovation & efficiency rates according to the REPowerEU) and adjustment of the population according to the latest Eurostat datasets
  - Electricity and gas TSOs review and adjust the figures with respect to their national targets according to the storylines (e.g., high/low ranges on the technologies)

Clarification from the moderators

- To understand what is input to the model and what is output from the model, please carefully read the explanations provided within the published datasets/presentations:
  - 20230704 – Draft Supply Inputs for TYNDP 2024 Scenarios for consultation
    - Trajectories: please check Sheet.1
    - Cost and Prices are inputs.
    - Extra EU Import Potentials: please check Sheet.4
  - 20230704 – Draft Demand Scenarios TYNDP 2024
    - The outputs of the ETM are based on the inputs that are modelled and you can find the details in the country links.
    - These outputs are the inputs to the Plexos model (demand is fixed in the model).
  - 20230704 – Modelling Methodologies & Draft Assumptions & 20230711 – Draft H2 Steel Tank Methodology
    - Please check the presentation to see which are the assumptions (inputs) to the model.
  - 20230704 – Electricity and Hydrogen reference grid and investment candidates
    - Please read methodology sheet. The reference grids will be input to the model, whereas the network (including H2 storage) extension will be possible among investment candidates.

Conclusions

- How to integrate more granular resolutions within the model will be further investigated (for the next Scenario editions).
- A list will be provided to clarify what is input to the model and what is output from the model.
- The assumptions on the H2 steel tanks will be double checked.
- We expect stakeholders' feedback on the level of contrast among scenarios. If desired, please explain why & where the additional differentiation is required.
- 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.

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
- September: First meeting of the Stakeholder Reference Group (ETAG)
- End-year: Second public consultation with focus on electricity and hydrogen modelling results

Thank you for your attention

Location: Brussels

Date: 13.07.2023