SUPPLEMENTARY GRAPHICS: INFORMATION ABOUT GAS SUPPLY AND DEMAND 2021-2022

Updated in October 2021

Energinet

 $(\hat{\mathbf{x}})$

Content



- 1) General information (links)
- 2) Possible supply and demand situation for **2021** in kWh
- 3) Possible supply and demand situation for **2022** in kWh

(1) GENERAL INFORMATION

(links)

RELEVANT LINKS

- 1. Analysis Assumptions 2021 from the Danish Energy Agency (DEA) <u>https://ens.dk/service/fremskrivninger-analyser-modeller/analyseforudsaetninger-til-energinet</u>
- 2. Oil and gas resources from DEA. Resources and forecasts, published September 2021 https://ens.dk/ansvarsomraader/olie-gas/rapporter-om-olie-og-gasaktiviteter
- 3. Information about the supply situation during the redevelopment of the Tyra platform on Energinet's homepage https://en.energinet.dk/Gas/Tyra/Supply-situation
- 4. Energinet's homepage (Gas Market Message REMIT) https://en.energinet.dk/Gas/Transparency/REMIT-Communication
- 5. Total homepage <u>https://www.dk.total.com/total-denmark/better-energy-projects-denmark/tyra-redevelopment-tyra-gas-field-processing-90-nations-gas-production</u>
- 6. Gas Storage Denmark's homepage https://gasstorage.dk/
- 7. ENTSOG Transparency platform https://transparency.entsog.eu/
- 8. PRISMA https://corporate.prisma-capacity.eu/
- 9. Safe Storage Level in the Danish gas storage facilities on Energinet's homepage https://en.energinet.dk/Gas/Tyra/Safe-storage-level

(2) POSSIBLE SUPPLY AND DEMAND 2021

In energy units [kWh]



POSSIBLE DEMAND 2021



Figure 1 Possible scenario for the monthly demand incl. export, in GWh, in 2021 as of October 1st 2021.

POSSIBLE SUPPLY 2021



Figure 2 Possible scenario for the monthly amounts, in GWh, supplied to the Danish system in 2021 as of October 1st, 2021.

POSSIBLE SUPPLY AND DEMAND 2021



Figure 3 Possible scenario for the monthly supply and demand, in GWh, in 2021 as of October 1st 2021. Areas indicate supply, whereas bars indicate demand.



POSSIBLE DAILY NET IMPORT FROM GERMANY AND STORAGE VOLUMES 2021



Figure 4 Possible storage filling and import from Germany in 2021 assuming that the storage filling will stay above the SSL curve primo and ultimo each month in Q4. The yellow curve and bars relate to the left y-axis, whereas the red curves and area relate to the right y-axis.

(3) POSSIBLE SUPPLY AND DEMAND 2022

In energy units [kWh]

POSSIBLE DEMAND 2022



Figure 5 Possible scenario for the monthly demand incl. export in 2022 based on yearly amounts in the Analysis Assumptions 2021 and expected storage filling ultimo 2021.

POSSIBLE SUPPLY 2022



Figure 6 Possible scenario for the monthly amounts, in GWh, supplied into the system in 2022 based on yearly amounts in the Analysis Assumptions 2021 and expected storage filling ultimo 2021.

POSSIBLE SUPPLY AND DEMAND 2022



Figure 7 Possible scenario for the monthly supply and demand, in GWh, in 2022 based on yearly amounts in the Analysis Assumptions 2021 and expected storage filling ultimo 2021. Areas indicate supply, whereas bars indicate demand.

POSSIBLE MONTHLY SUPPLY IN 2022 PER ENTRY POINT

Note that the absolute values on the y-axes differ for the four figures.









POSSIBLE MONTHLY DEMAND IN 2022 PER EXIT POINT

Note that the absolute values on the y-axes differ for the four figures.











POSSIBLE DAILY NETTO IMPORT FROM GERMANY AND STORAGE VOLUMES 2022



Figure 8 Possible storage filling and import from Germany for 2022 assuming that the storage filling will stay above the SSL curve primo and ultimo each month in Q1. The yellow curve and bars relate to the left y-axis, whereas the red curves and area relate to the right y-axis.

SAFE STORAGE LEVEL AND STORAGE FILLING 2021-2022



Link to updated Safe Storage Level: Safe storage level in the Danish gas storage facilities | Energinet

BASIC ASSUMPTIONS BEHIND THE CALCULATION OF SSL

- Maximum supply in Ellund to the Danish system for the rest of the storage year.
- Biogas production increases as forecasted
- Delivery from the South Arne pipeline remains at the present level
- The temperature in Denmark will follow the same statistical behavior as the past 30 years
- The consumption is a function of the temperature based on data from 2016 to 2018 (3 years)
- Consumption in a cold year in Denmark and Sweden is based on consumption figures in 2018
- No technical incidents occurring affecting the supply