

**Demand assessment report
for the incremental capacity process
starting 2019
for Energinet Gas TSO**

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1. Non-binding demand indications

Energinet Gas TSO has received non-binding demand indications for firm capacity from market players within eight weeks after this year's yearly capacity auction. These indications have been used as a basis for this demand assessment.

The market players have submitted indications as stated in the table in appendix 1. Three indications can be categorised as non-binding demand indications:

- RES Entry (440,000 MWh/year),
- Joint Exit Zone "New Denmark" (828,000 MWh/year),
- Entry "New Denmark" (62,098,829 MWh/year).

The other indications are dependent on each other and describes different flow scenarios, which can all be managed with the current capacity in the system, and therefore will not be further exploited in this report. These are indications for:

- Entry "Europipe 2"
- Storage DK (Entry and Exit)

2. Demand assessment

2.1 Ellund

Please see the joint Demand Assessment Report for Ellund, between Energinet, Gasunie Deutschland and Open Grid Europe at our website: <https://en.energinet.dk/Gas/Shippers/Incremental-capacity>

2.2 RES Entry and Joint Exit Zone "New Denmark"

The two indications Entry RES 440,000 MWh/year and Joint Exit Zone "New Denmark" 828,000 MWh/year are related to supply to customers and for potential biogas production on the Danish islands Lolland and Falster.

Today Lolland and Falster are not connected to the Danish gas grid. However, there is a potential for some large and small companies to convert their current fuel (typically coal and oil) to gas. Furthermore, there is a large biogas potential on the islands, which could be exploited, if the gas grid was expanded to this area.

2.3 LNG

Entry "New Denmark" 62,098,829 MWh/year is related to construction of a LNG terminal, directly connected to the gas transmission grid.

3. Conclusion for the initiation of incremental capacity projects

3.1 Ellund

Please see the joint Demand Assessment Report for Ellund, between Energinet, Gasunie Deutschland and Open Grid Europe for more information, at our website: <https://en.energinet.dk/Gas/Shippers/Incremental-capacity>

3.2 RES ENTRY and Joint Exit Zone "New Denmark"

As the relevant points are not defined as interconnection points, the further process will not follow the European incremental process defined in CAM NC¹.

¹ Capacity Allocation Mechanisms Network Code

Based on the submitted non-binding demand indications received, Energinet Gas TSO is in the process of establishment of a development project that in the end shall result in binding commitment from market players by means of long term capacity bookings. This process will take place towards March 2020. If sufficient bids are received and thereby a positive business case is made, Energinet Gas TSO will commence an engineering project in collaboration with Evida (the Danish gas distribution).

Below is listed an indicative timeline for the main steps of collecting binding investment signals, by means of an Open Season Process, for development of a gas network on Lolland and Falster:

- October-November 2019: Energinet Gas TSO develops rules for collecting binding investment signals
- December 2019: rules in market consultation
- January 2020: Energinet Gas TSO revise rules, based on consultation
- February 2020: market participants to forward binding investment signals
- March-April 2020: Energinet Gas TSO investment decision

3.3 LNG

As the relevant point is not defined as an interconnection point, the further process will not follow the European incremental process defined in CAM NC².

The opportunity of a new entry point for LNG in the Danish transmission grid is at an early development stage, and the possibility is still being assessed by relevant market players. Therefore, it is still uncertain if the demand indication will materialise into a development project. Energinet Gas TSO will inform of the progress at relevant future Shipper Fora.

4. Contact information



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² Capacity Allocation Mechanisms Network Code

5. Appendix 1 – Table of non-binding demand indications:

| ID no. | Point in Danish gas transmission system | Explanation | Total capacity (GWh/h) | Booked capacity (GWh/h) | Available capacity (GWh/h) | Start (year/month) | End (year/month) | Annual (MMWh/year) |
|--------|---|--|-------------------------|-------------------------|----------------------------|--------------------|------------------|--------------------|
| 1 | Entry "Europipe 2" | Imports from Norway | 20.3 | 10.6 | 2.8 | 10/2022 | | 10,000,000 |
| 2 | Entry "Danish North Sea", Nybro | Danish North Sea (Tyra-Nybro and South Arne-Nybro) | | 0 | 9.7 | 10/2019 | | |
| 3 | Entry "Faxe" | Imports from Poland | 3.8 | 0 | 3.8 | | | |
| 4 | Entry Ellund | Imports from Germany | 7.7 | 3 | 4.7 | 10/2023 | | 20,000,000 |
| 5 | Entry RES | Renewable Energy Source injection in gas transmission in Denmark | technically "unlimited" | 0 | technically "unlimited" | 01/2022 | 01/2042 | 440,000 |
| 6 | Entry Storage DK | Withdrawal from Danish storage facilities | 8.2 | 0 | 8.2 | 05/2022 | | 2,500,000 |
| 7 | Entry "New Denmark" | Any new Entry point in Denmark apart from RES (i.e. LNG or onshore gasfield) | 0 | 0 | 0 | 01/2022 | 01/2042 | 62,098,829 |
| 8 | Exit "Faxe" | Exports to Poland | 13.4 | 10.6 | 2.8 | | | |
| 9 | Exit Ellund | Exports to Germany | 10.0 | 0 | 10.0 | 10/2022 | | 25,000,000 |
| 10 | Exit Storage DK | Injection to Danish storage facilities | 4.2 | 0 | 4.2 | 05/2022 | | 2,500,000 |
| 11 | Joint Exit Zone (Sweden) | Part of Joint Exit Zone (Denmark + Sweden) | 3.0 | 0 | 3.0 | 10/2022 | | 9,000,000 |
| 12 | Joint Exit Zone "New Denmark" | Any new Market demand in Denmark (i.e. large industrial area/municipality) without connection to gas transmission system | 0 | 0 | 0 | 01/2022 | 12/2032 | 828,000 |