

User Commitment process - Q&A list - first version 30 April 2024

The following list represents the questions Energinet has received during the user commitment process, that have general interest for all market participants.

Questions about the user commitment process:

Question: What is the purpose of having two steps in the user commitment process?

- **Energinet answer:** The overall reason for having two steps is that on one hand, Energinet needs to collect market information to support the purpose of Step 1 described above, and on the other hand, the user commitment process also needs to take the market's general maturity into account. Based on input from market players and other relevant stakeholders, it is Energinet's opinion, that it is not possible to collect long-term capacity bookings already in 2024, as such contracts would be conditional on too many outstanding decisions.

Question: Why are user commitments needed?

- **Energinet answer:** The political agreement from May 2023 states that hydrogen infrastructure must be constructed on market terms, based on a plausible and concrete demand, together with the long-term development plans for the relevant company (Energinet or Evida). The approval of hydrogen infrastructure will partly be based on concrete demands from future users of the system, who must demonstrate a long-term need and willingness to pay.

Question: Why is the state financing dependent on a booking requirement?

- **Energinet answer:** The booking requirement has been determined based on a political decision. The purpose of the booking requirement is to mitigate the risk that the state incurs a financial loss if the pipeline ends up being underutilized.

Question: Is it possible that by isolating the project to the Lower T that you would be able to proceed with a smaller commitment level than is anticipated for the full backbone project?

- **Energinet answer:** This may be possible but depends on the results of Step 1.

Question: What happens if the booking requirement is not achieved in Step 2?

- **Energinet answer:** The project may be restructured with a new scope, postponed, or cancelled.

Questions about Step 1 of the User Commitment process:

Question: What is the purpose of Step 1?

- **Energinet answer:** Step 1 has two main purposes:
 - To support political discussions in Q3 2024 about possible rescoping of the infrastructure project in case this appears necessary to achieve the booking requirement established in the financing agreement.
 - To support Energinet's conditional investment decision (CFID) in Q1 2025.

Question: Does my company have to participate in Step 1 in order to participate in Step 2?

- **Energinet answer:** No, however participating in Step 1 supports Energinet's conditional business case decision and how the backbone project should be scoped, hence market participants strongly support the general process by participating in Step 1.

Question: What are the benefits of participating in Step 1?

- **Energinet answer:** The signal from Step 1 will have significant importance, both in terms of supporting Energinet's own investment decision and supporting the political process.

Question: Why is Gasunie Deutschland not a part of Step 1?

- **Energinet answer:** The German process is different from the Danish process¹, which means that Gasunie Deutschland does not have the same need for concrete market signals at an early stage. Energinet is working closely together with Gasunie Deutschland, and have signed a corporation agreement in November 2023, which supports the process of establishing capacity from Denmark to Germany. Gasunie Deutschland supports the stepwise approach in Denmark.

Question: When assuming 9 EUR/MWh for all years in the Excel sheet for Step 1 (related to question 16 in the questionnaire), do you mean nominal or real?

- **Energinet answer:** The 9 EUR/MWh represents an estimated average transportation cost based on Energinet's feasibility study. For the purpose of question 16, please consider 9 EUR/MWh as a representation of the real value (not nominal) of the cost of transport for the years 2028-2050.

Question: Is it possible to indicate a need for shorter-term contracts (less than 10 years)?

- **Energinet answer:** yes, the single market players can indicate a need for shorter-term capacity contracts down to 1 year. Energinet will test the booking requirement up against the aggregated result from all market players.

¹ There is a political decision in Germany to establish a hydrogen coregrid (kernnetz). The different Gas-TSO's in Germany is planning to apply for approval of construction of parts of the Kernnetz. Different sections of the Kernnetz will go into operation from 2026 until 2037. The gas TSO's are required to establish the parts of Kernnetz going into operation before 2028. Hydrogen infrastructure being established later shall have demonstrated needs in the German network development plan.

Question: How should the energy unit MWh/h be understood, and how is this related to tons of hydrogen?

- **Energinet answer:** We use the energy unit MWh/h, to express how much energy the transport capacity can move per hour. So, the booking requirement means that future users of the system need to book a capacity of 1.4 GWh/h, or 1,400 MWh/h, for every hour for 10-15 years. Converting this into tons, this means that with the booking requirement capacity, you would be able to move approximately 42 tons of hydrogen every hour (converting 1,400 MWh/h into tons by dividing with 33.33, with reference to lower calorific value of hydrogen).

Question: Do we have to submit documentation of our projects' maturity in Step 1?

- **Energinet answer:** Yes. Per Energinet's market dialogue about the user commitment process in Q1 2024, submitting documentation about your projects' maturity was selected as an alternative to the originally proposed penalty scheme. If you do not submit documentation, Energinet cannot see whether you have a mature project or not, and this may impact the scoping discussions. Documentation must be submitted by May 5 as per the instructions in the market survey.

Question: Is it possible to sign a Non-Disclosure Agreement (NDA) with Energinet?

- **Energinet answer:** Yes, Energinet has prepared a standard NDA. Special terms for individual market players are not possible. Please note that the NDA does not change Energinet's obligation in terms of Access to Documents (Aktindsigt) under the Danish Publicity Act (Offentlighedslov). The NDA gives the market players better terms, if Energinet discloses confidential data or material.

Question: The political agreement about financing requires 1.4 GW capacity booking. Is this related to the input power, or the output hydrogen?

- **Energinet answer:** The 1.4 GW booking requirement is on the hydrogen capacity side, so this corresponds to approximately 2 GW power on the input side.

Questions about tariffs and transportation costs:

Question: What will the transportation cost be for transporting hydrogen in Denmark?

- **Energinet answer:** Energinet will include transportation cost indications as part of the Information Package 2 in September 2024, based on figures from the Feasibility Study.

Question: Will there be a limit to how high the tariff can be?

- **Energinet answer:** Energinet will include the so called “inter-temporal cost allocation” methodology stated in the coming economic regulation for hydrogen, to safeguard early system users against tariff levels based on full cost allocation per year. The “inter-temporal cost allocation” methodology gives the possibility to move costs further into the future, to ensure that the first users of the system do not bear the full cost, if/when the volumes are low.

Questions about terms and conditions for user commitments:

Question: Is there any financial security needed in terms of the user commitment process?

- **Energinet answer:** Yes, this is relevant for Step 2, which is anticipated in second half of 2025. The user commitment process will include credit line conditions, based on Energinet's financial exposure. The credit line conditions will be part of the General Terms & Conditions for the user commitments, subject to market consultation prior to Step 2.

Question: What are the conditions if the commencement of the backbone is delayed?

- **Energinet answer:** Delay will be part of the General Terms & Conditions for the user commitments, subject to market consultation.

Question: Are there any up-front payments (in 2024)?

- **Energinet answer:** No, the Step 1 does not include up-front payments. Also, if a sufficient result is reached in Step 2, there are no direct payment elements until the capacity is commenced.

Questions about market information:

Question: How and when will Energinet disclose information on market related and technical topics, to support market players in the user commitment process?

- **Energinet answer:** Energinet will release two information packages, in June and September 2024, see overview below. Additional information may be released when relevant.

Information Package 1 topics (June 24):

- Overview of the physical project
- General market conditions
- Expected capacities
- Balancing model concept
- Hydrogen quality

Information Package 2 topics (September 24):

- Information on German project and process
- Expected overall market framework
- Tariff design concept

- Transportation cost estimations
- Framework for network connections
- Information of the first filling of the pipeline

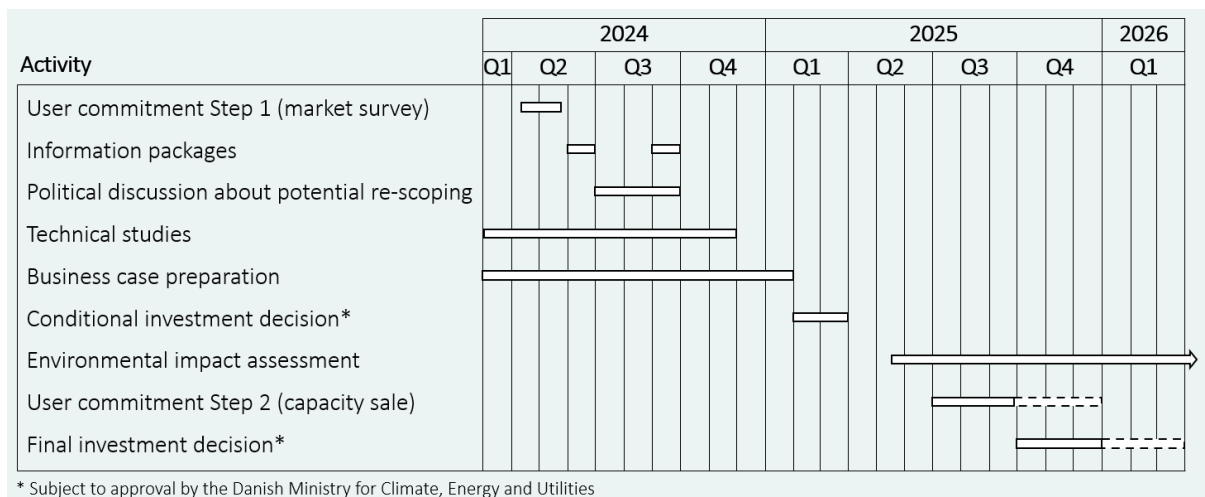
Question: How much capacity will be offered?

- **Energinet answer:** Energinet will inform on possible capacity scenarios in the backbone system via the information package 1 in June 2024.

Questions about process:

Question: Will the first capacity be ready for 2028?

- **Energinet answer:** Please see our latest timeline until end-2026 below. The length of the subsequent construction phase, and thereby the final commissioning date of the pipeline, which is currently in 2028, depends on the outcome of the user commitment process. Demand for transport capacity and the project’s risk profile will influence the timeline, as could new knowledge from the environmental impact assessment process, alignment with Gasunie Deutschland, etc.



Question: Why can Energinet not take an investment decision before the deadline for the offshore wind tenders end-2024?

- **Energinet answer:** Energinet’s maturation project timeline is already as optimized as possible. Energinet will receive the results of our technical studies, including updated costs estimates, in November 2024. Without these figures, our business case would not be sufficiently supported, and Energinet would not have an appropriate basis for an investment decision.

Question: Would narrowing the technical studies to the Lower T mean that Energinet could reach CFID faster?

- **Energinet answer:** No, the scope of the technical studies in the maturation phase is not proportional to the total length of the pipeline. Energinet would still need to perform the same technical studies for Lower T as for the full project.

Question: Does the FEED study only reflect the Danish case, or will Energinet collect knowledge from other countries?

- **Energinet answer:** We are in dialogue with the Dutch TSO to learn from their experience on repurposing natural gas pipelines for hydrogen, and with our German counterpart Gasunie Deutschland, to ensure technical alignment.