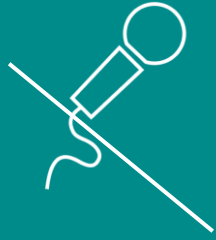


DANISH BACKBONE WEST

Webinar about user commitment

01.03.2024

CRU@energinet.dk; KKN@energinet.dk



PLEASE KEEP YOUR
MICROPHONE MUTED



PLEASE RAISE YOUR HAND TO
ASK A QUESTION OR MAKE A
COMMENT

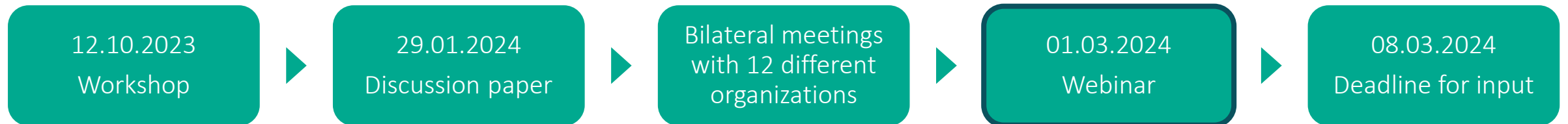


THE WEBINAR IS NOT BEING
RECORDED



THE PRESENTATION WILL
PUBLISHED ON OUR WEBSITE
AFTERWARDS

USER COMMITMENT MARKET DIALOGUE:



AGENDA



- Energinet's objectives
- Summary of concept in our discussion paper
- Feedback received so far
- Alternative concept
- Q&A

OBTAIN MANDATE TO BUILD

"A concrete construction project will have to be approved by the Ministry of Climate, Energy, and Utilities [...] The approval will, among other things, depend on the hydrogen infrastructure company being able to demonstrate a concrete demand from future users of the system – a long-term need and willingness to pay."

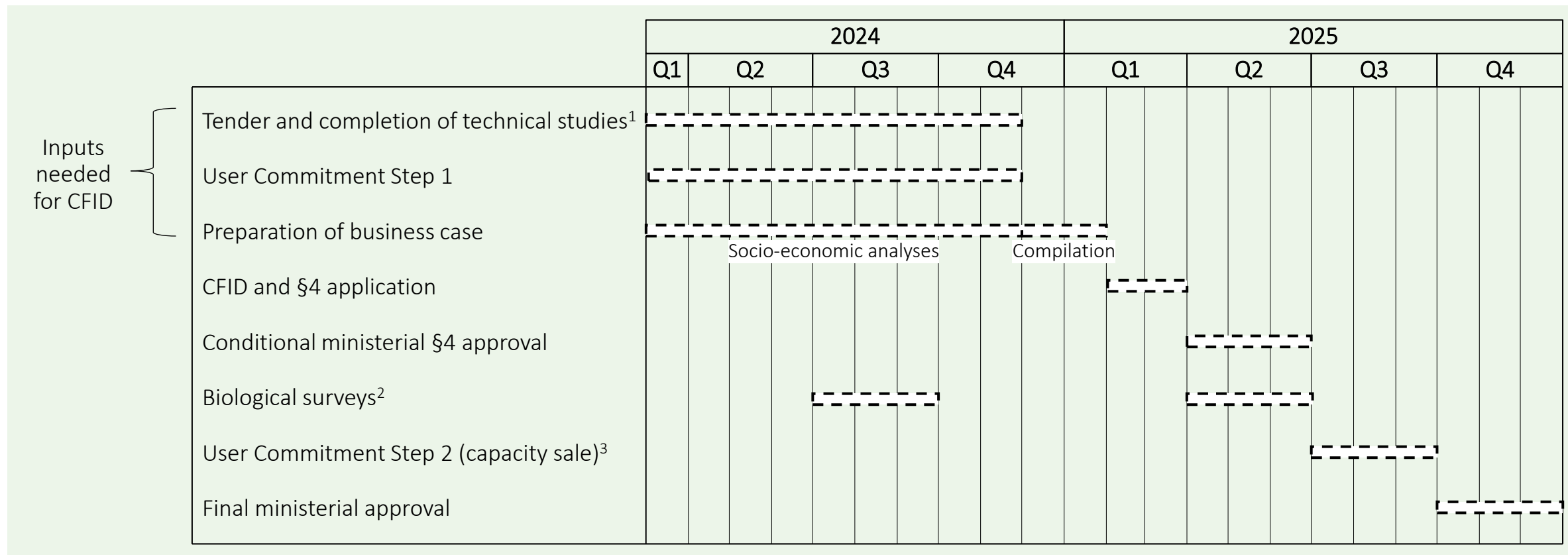
MAKE A RESPONSIBLE DECISION

Energinet's feasibility study estimated significant socio-economic value in establishing hydrogen infrastructure in Denmark, but Energinet's decision-makers must also see a positive business case for Danish Backbone West.

SOLVE PROCESS & TIMING ISSUES

Energinet's aim to deliver Danish Backbone West by 2028, and links to other processes (both in Denmark and in Germany), mean that we have to do some work in parallel instead of in the "right," sequential order.

PROCESS & TIMING CONSIDERATIONS



To start construction on Danish Backbone West, Energinet needs a positive business case – our technical studies support the cost side, and our user commitment process supports the revenue side. We have proposed a two-step user commitment process because based on market input, we do not believe that a capacity sale can be executed successfully in 2024, but we want to increase certainty.

1. Technical studies are currently being tendered, but everything else is subject to uncertainty/change
2. Scientific inventory of flora and fauna along Danish Backbone West’s route
3. Exact timing depends on offshore wind tender results and coordination with Gasunie

ORIGINAL CONCEPT

- Two-step process
- Step 1 (H2 2024): Market participants express how much (entry/exit) capacity they want to commit to at transportation cost levels provided by Energinet, for a given point and time-period
- Incentive to participate in Step 1 could be ability to influence connection points
- Step 1 informs CFID and allows Energinet to increase certainty about Danish Backbone West in the market
- Step 2 (H2 2025): Sale of capacity contracts triggers FID
- Penalty up to 10-20 mil. DKK per market participant if Step 2 purchase does not match Step 1 commitment – subject to conditions and scaled down if partially matched
- Penalty element gives Energinet management confidence in their ability to secure political mandate and achieve a positive business case

FEEDBACK SO FAR

- Step 1 template is difficult to fill out - PtX market is still too immature to give detailed information about willingness-to-pay
- Penalty element is problematic for reasons differing depending on type of market participant:
 - For project-financed (predominantly onshore-powered) market participants, offtake contracts are necessary to secure financing, and certainty about Danish Backbone West is needed to secure offtake contracts
 - Offshore-focused market participants require that the penalty be dropped in case they do not succeed in the coming tenders, but such a condition may be discriminatory – this could instead be solved in the offshore wind tender conditions managed by the Danish Energy Agency
- A statement from Energinet after Step 1 does not give enough certainty and CFID timing is too late compared to e.g., first hydrogen tenders in Germany and the offshore wind tenders

ALTERNATIVE CONCEPT

- Two-step structure and timing remains, but Step 1 is converted into a market survey wherein participants are asked to provide evidence of the maturity of their projects
- Energinet's management will not take CFID based on a "free lunch," so if market participants are unwilling or unable to make a financial commitment in Step 1, then we need to investigate another way to demonstrate "concrete demand, long-term need, and willingness-to-pay."

QUESTIONS FOR YOU

(You do not have to answer these questions during today's webinar, but we would appreciate input by our 8/3 deadline)

- In what format or to what degree of detail would you be able to express your demand and willingness-to-pay in Step 1?
- What types of quantitative and qualitative information (e.g., legal, permitting, technical) can you share with Energinet (on a confidential basis) to support Step 1?
- Would you be able to justify your need for hydrogen infrastructure even if the maturity you can demonstrate is for a small project?
- If Energinet's management rejects this alternative concept, are there other concepts that you would like to suggest, which fulfill the criteria on p. 6?
- Given that Energinet's technical studies and business case will not be complete until the end of 2024, it is unlikely that CFID can be taken before Q1 2025 – are there issues related to this that Energinet should raise to e.g., German offtakers or Danish authorities?
- What views do you have on a reduced scope (e.g., "Lower T" to start with) in case it could increase the likelihood of an investment decision?

QUESTIONS OR
COMMENTS?



Before Step 1 opens, Energinet will inform on the following subjects (during Summer 2024):

1. Overview of the physical project, overall expected geography, pipeline sizes, etc.
2. Expected capacities, points, etc.
3. Information on German project and process.
4. Tariff methodology application (for approval by the Danish Utility Regulator) including inter-temporal cost allocation mechanism.
5. Transportation cost estimations.
6. User commitment application (for approval by the Danish Utility Regulator) based on final Terms & Conditions for user commitments.
7. Balancing model concept (for later application and approval by the Danish Utility Regulator).
8. Expected framework for network connections.
9. Expected framework for gas quality.
10. Paper on general market conditions, including:
 - a. Entry exit model, third party access, expected points, etc.
 - b. Expectations for future capacity allocation, capacity products.
11. Information on first filling of the pipeline (cushion hydrogen, to ensure pressurization of the pipeline).
12. Overall overview and timeline of necessary method applications and approvals, towards commissioning.