



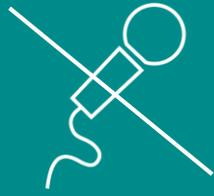
SHIPPERS' FORUM

17 September 2020



WELCOME

Clement Johan Ulrichsen, Energinet Gas TSO



MUTE YOUR MICROPHONE,
WHEN YOU DON'T SPEAK



SWITCH ON YOUR CAMERA, ONLY
WHEN YOU ARE GIVEN THE
WORD TO SPEAK



USE THE 'RAISE HAND'
FUNCTION IF YOU WISH TO
COMMENT OR ASK A
QUESTION...



...YOU CAN ALSO WRITE YOUR
QUESTION USING THE CHAT -
THE HOST WILL ASK THE
QUESTION FOR YOU

PROGRAMME

13.00 **Welcome**

*Clement Johan Ulrichsen,
Energinet Gas TSO*

13.10 **Grid planning approval**

*Sara Andersen,
Energinet Gas TSO*

13.20 **Equinor's climate roadmap**

*Axel Elmelid,
Equinor*

13.45 **Gas Storage Denmark**

*Iliana Nygaard,
Gas Storage Denmark*

14.10 **Security of supply**

The supply situation

*Clement J. Ulrichsen,
Energinet Gas TSO*

The Tyra redevelopment

*Morten Hesselager Pedersen,
Total E&P Denmark*

14.00 **Baltic Pipe**

Project status

*Christian Rutherford,
Energinet Gas TSO*

Tariffs

*Nina Synnest Sinvani,
Energinet Gas TSO*

User Groups

*Nina Synnest Sinvani,
Energinet Gas TSO*

Balancing model 2022

*Julie Frost Szpilman,
Energinet Gas TSO*

15.30 **Closing remarks**

*Clement Johan Ulrichsen,
Energinet Gas TSO*

NEW CHAIRMAN

Mogens Lykketoft is new chairman of Energinet's Board of Directors

- He is a former
 - Danish Minister
 - Speaker of Parliament
 - President of the UN General Assembly
- He replaces Lars Barfoed
 - Chairman since 2017



BALANCING MODEL AND NEGATIVE PRICES

Negative prices will be possible from 1 October 2020. Energinet's balancing model is updated to give correct incentives if prices are negative.

part of eex group	
Clearing Circular 30/2020	2020-09-07
Introduction of Negative Prices on EEX Gas Spot Markets	
ECC and EEX will enable negative prices on the gas spot markets as of 1st October 2020 .	

Afgørelse om gasbalancering ved negative gaspriser

17.07.2020

Forsyningstilsynet godkender et tillæg til Energinet Gas TSO's markedsbaserede balancemodel for balancering af gasengrosmarkedet, som oprindeligt godkendt den 23. september 2014 af det daværende Energitilsyn og senest ændret ved afgørelse af 28. marts 2019. Tillægget til aftalen har til formål at sikre, at den nuværende incitamentsstruktur opretholdes i tilfælde af negative priser på det dansk-svenske gasengrosmarked.

BALANCING 2020/21: ADJUSTMENT STEP 2 PRICES

Updated yearly to reflect Ellund and storage alternatives

Activated if systems end in yellow zone - but there has been no yellow zone trades

Adjustment Step 2	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug	Sep.
Gas Year 2019/2020 (current gas year)	6%	6%	6%	10%	10%	10%	10%	6%	6%	6%	6%	6%
Gas Year 2020/2021 (new gas year)	10%	9%	9%	8%	8%	9%						

Reasoning behind the increase:

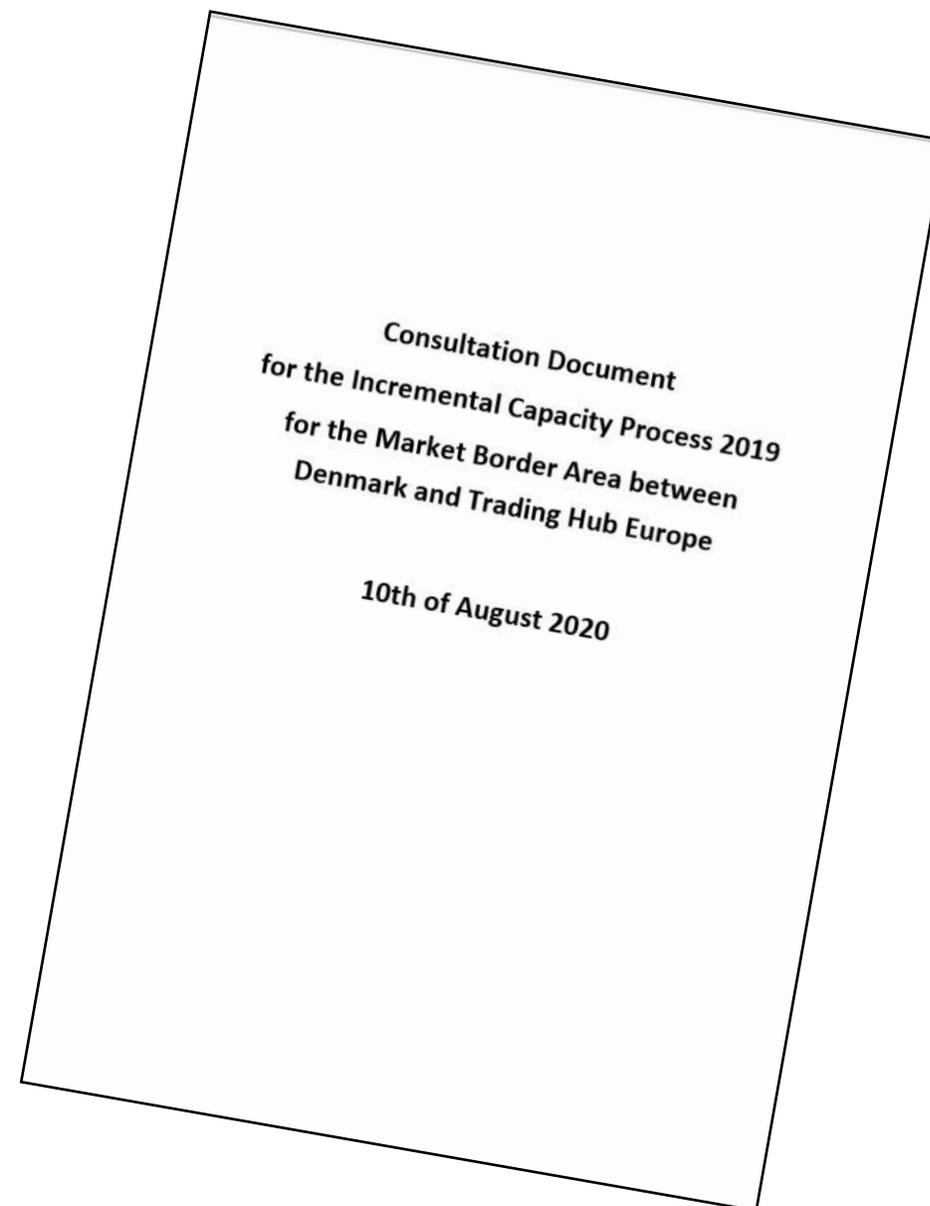
- Lower gas price as basis, compared to last year
- Seasonal tariffs at Ellund included in calculation

GERMAN CONSULTATION ON INCREMENTAL CAPACITY PROJECTS - ELLUND

Energinet Gas TSO choses to participate with the following key messages:

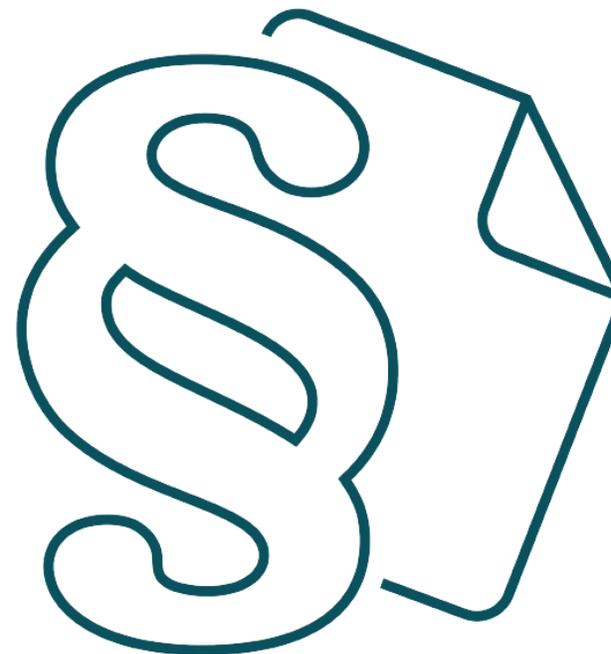
- Disagreement with process leading to capacity reduction to zero at Ellund southbound
- Disagreement with using incremental capacity process as a mean for testing capacity need for southbound capacity
- Energinet Gas TSO should have been involved, before reducing the capacity, in accordance with EU regulation

The consultation ended on 10 September 2020



GREEN GAS LOLLAND-FALSTER

Nothing new to add. Project awaits political process.



QUESTIONS



Contact: cju@energinet.dk



GRID PLANNING APPROVAL

Sara Andersen, Energinet Gas TSO

ASSESSMENT OF FUTURE DEVELOPMENTS IN THE GAS TRANSMISSION SYSTEM

A change in law and a new assessment

Sara Andersen, Energinet Gas TSO

LONG-TERM DEVELOPMENT PLAN 2022

- Energinet's Long-Term Development Plan for Electricity and Gas
- A new task based on a proposed change in law (Act on Energinet, January 2021)
- First plan expected published in 2022 and updated every second year
- Projects (leading to possible investments) must be described in the plan



LONG-TERM DEVELOPMENT PLAN 2022

- Energinet's Long-Term Development Plan for Electricity and Gas
- A new task based on a proposed change in law (Act on Energinet, January 2021)
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- Projects (leading to possible investments) must be described in the plan

ASSESSMENT OF GAS SYSTEM NEEDS 2020

- This year we will publish a "frontrunner" for the long-term plan
- The plan includes:
 - an analysis of expected developments in the transmissions system
 - identification of system needs
 - possible solutions
- The analysis is based on the Danish Energy Agency's outlook 2019 for Energinet, and two scenarios.

IDENTIFICATION OF GAS SYSTEM NEEDS

Identification of gas system needs can be categorized in four main groups

DEMAND AND SUPPLY

Analysis of changes in gas demand and supply: how will this affect how the gas system is used?

SYSTEM USERS

Incremental Capacity-process and other requests

EXTERNAL CLAIMS

Legal requirements and international standards

RE-INVESTMENTS

Forecast total budget for all re-investments

EXAMPLES OF IDENTIFIED NEEDS IN THE 2020 REPORT

Analysis of increased local production of biogas and decreased gas consumption:

- Some areas might experience a biogas surplus before 2040
- Gas flow at some M/R stations may decrease significantly before 2040

These results are examples of situations which can lead to developments in the gas transmission system



PUBLICATION AND STAKEHOLDER INVOLVEMENT

PUBLICATION

The assessment is expected to be published in October

It will be in **Danish**

STAKEHOLDER INVOLVEMENT

We aim at increasing our stakeholder involvement to ensure that the assessment covers the expected future developments also anticipated by the gas system users

WEBINAR

After the publication we are planning to host a webinar

Also in Danish

QUESTIONS



Contact: snd@energinet.dk

A stylized illustration of an offshore energy landscape. On the left, a large offshore wind turbine platform is shown. In the middle ground, several individual wind turbines are scattered across the water. In the background, there are dark green mountains and a light blue sky with white clouds. On the right side, an industrial facility with several red storage tanks and a white building is situated on a dark green landmass. A dark blue ship is docked at the facility. A thin black line runs from the facility down to a cross-section of the seabed at the bottom of the image, which shows a subsea wellhead and various geological layers in shades of orange, blue, and green.

Equinor's Climate Roadmap

Driving long term value creation, in line with the Paris Agreement

The world is changing

and so are we



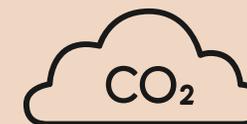
Population growth



Broad energy company



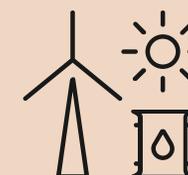
Higher energy need



Low carbon embedded in strategy

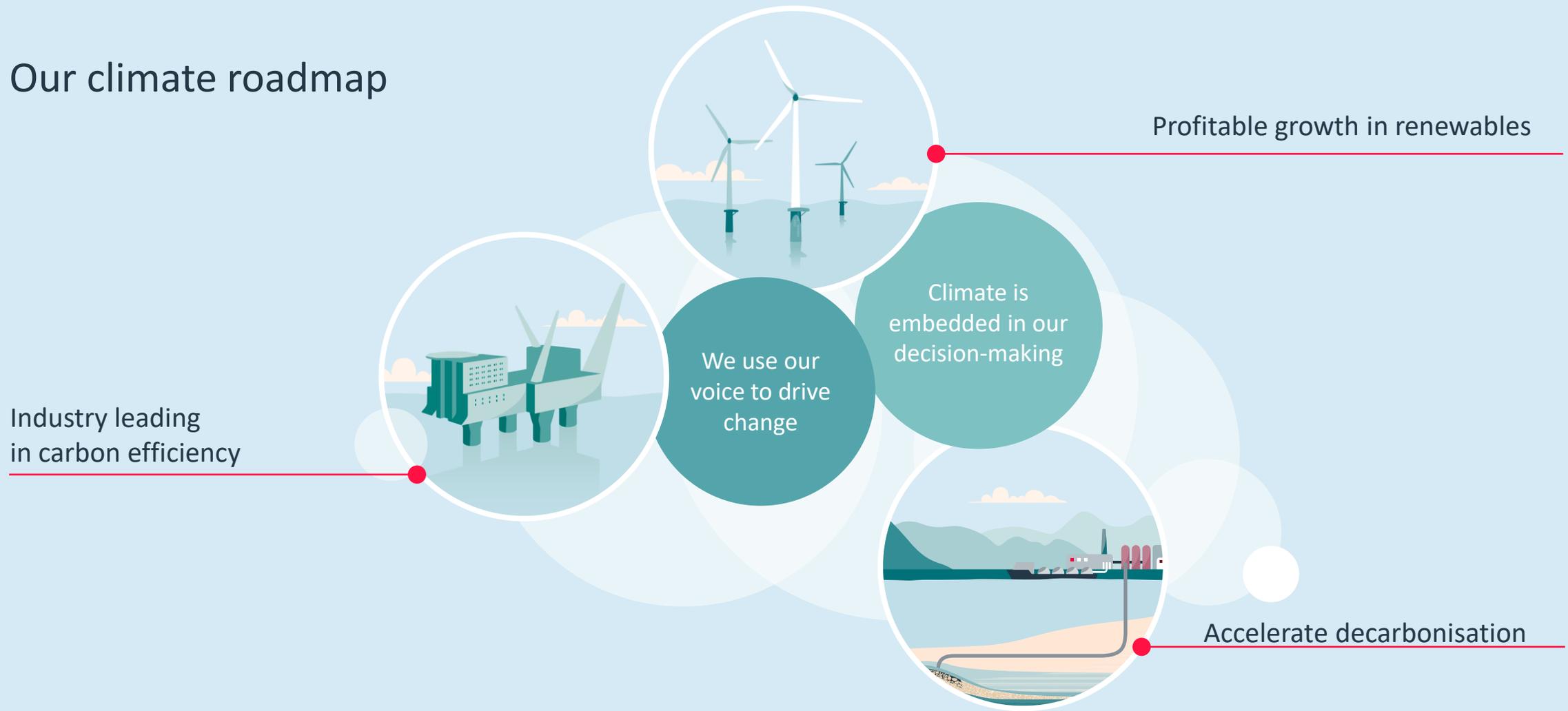


The Paris Agreement



Our climate roadmap

Our climate roadmap





2026

Grow renewable energy capacity tenfold.

2035

Increase capacity from 0,5 today to 12-16 GW.



2025

<8 kg CO₂ per boe.



2030

Carbon neutral global operations.

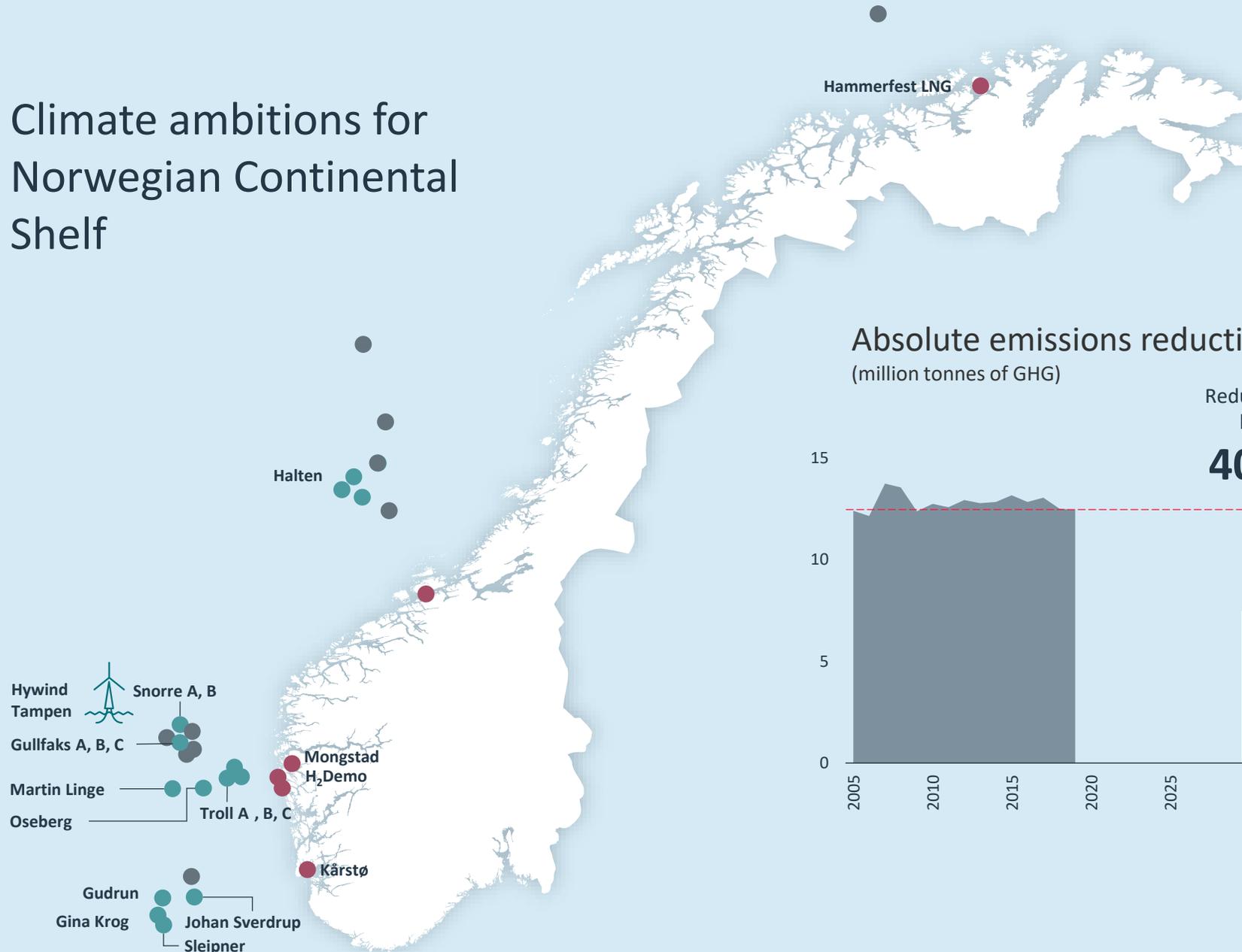


2030

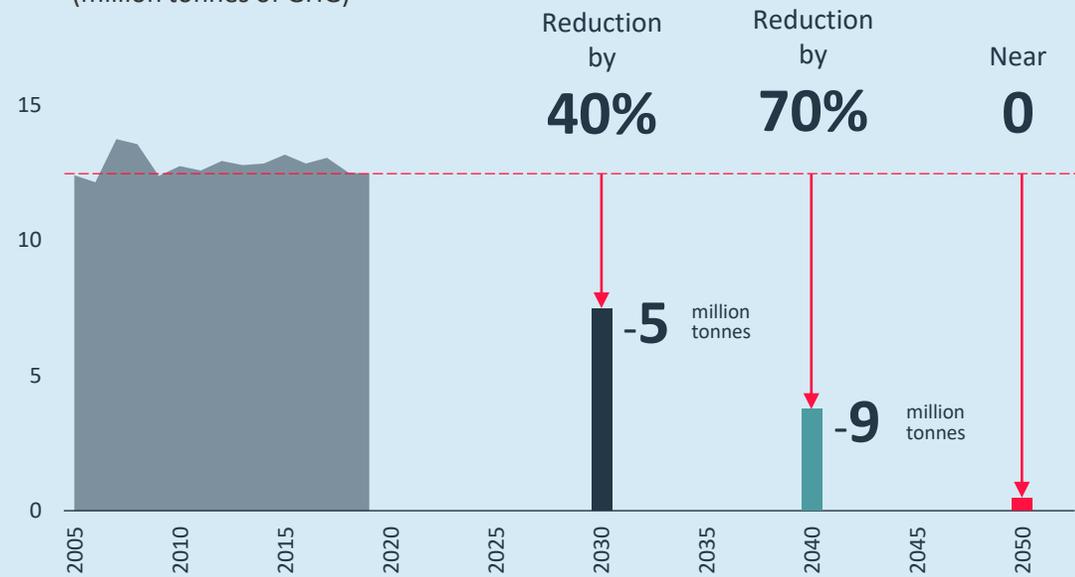
No routine flaring by 2030 and near zero methane emissions intensity.



Climate ambitions for Norwegian Continental Shelf



Absolute emissions reductions (million tonnes of GHG)

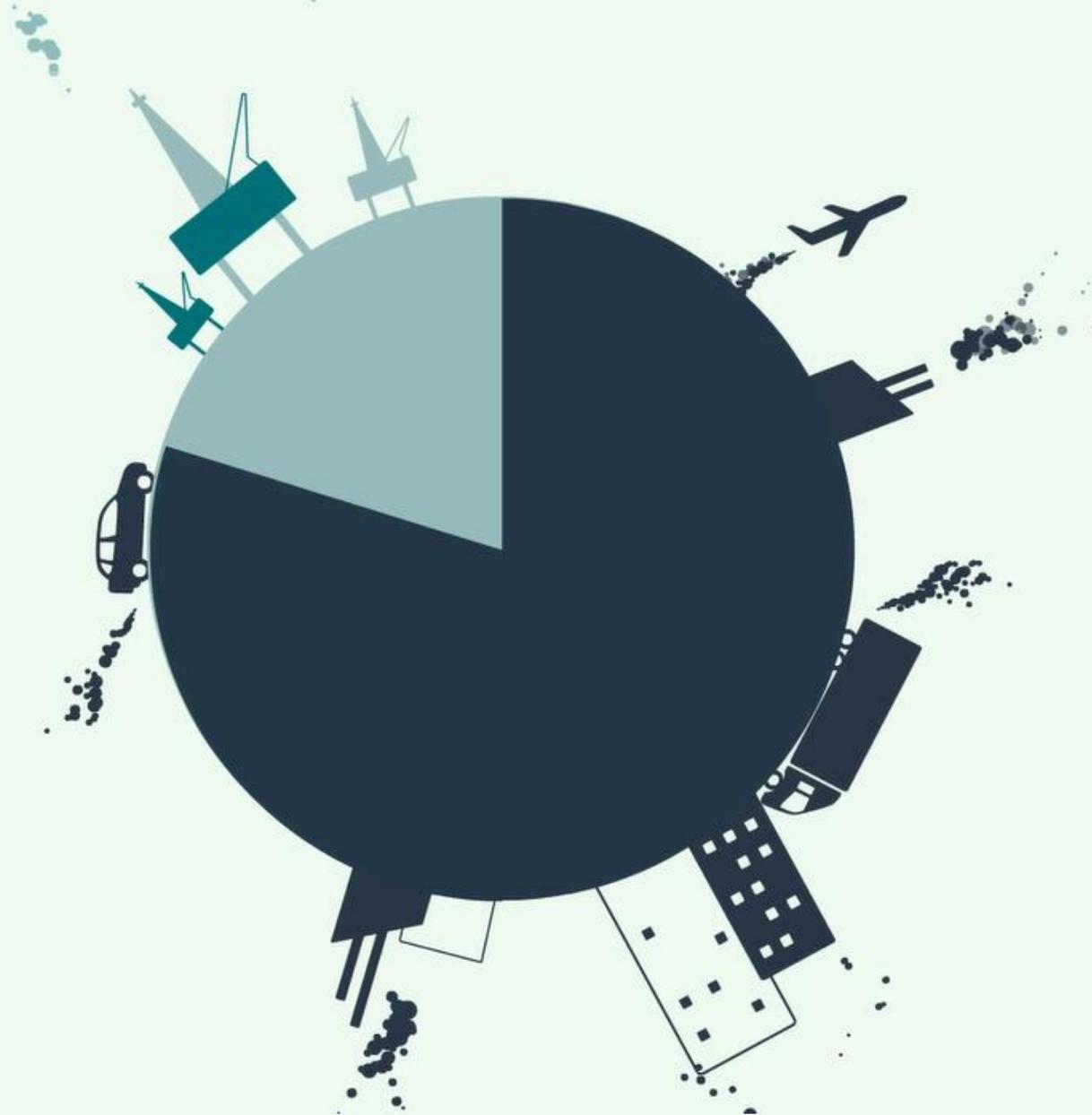


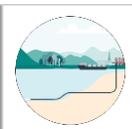


Accelerate decarbonisation

>85%

More than 85% of emissions come from the final use

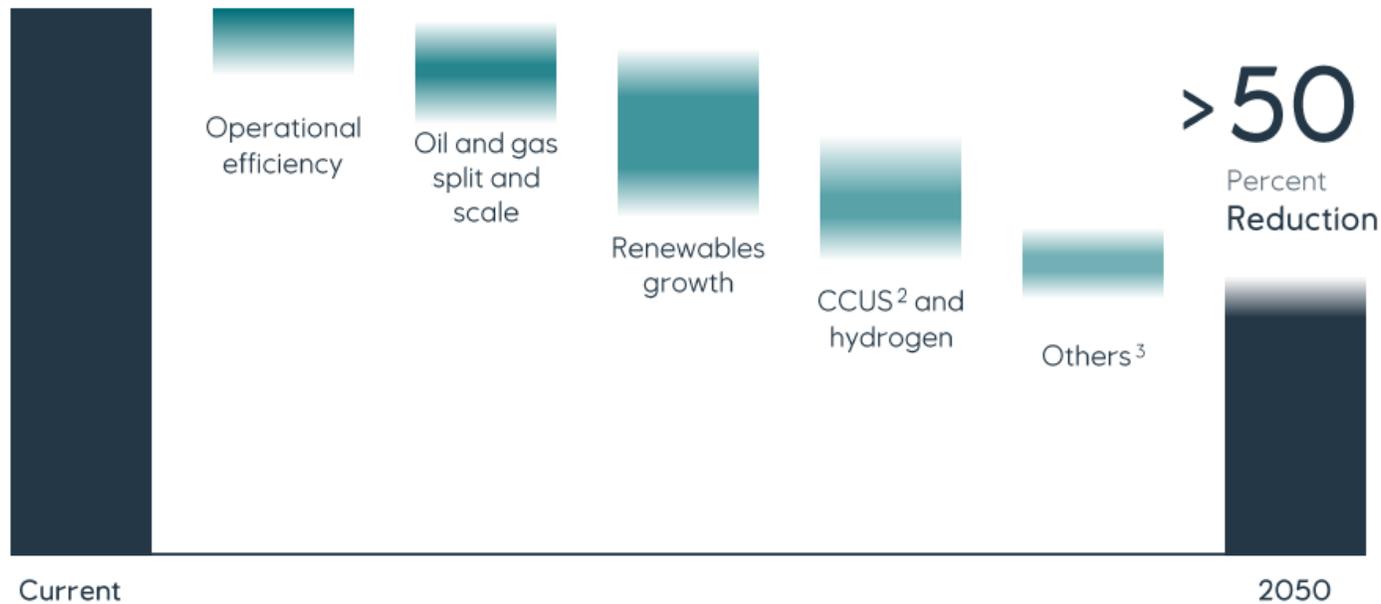




Reducing net carbon intensity by at least 50%

Including scope 1, 2 and 3

Net carbon intensity¹



1. g CO₂e/MJ Including scope 3. More details can be found under "Net carbon intensity methodology" on equinor.com
 2. Carbon capture, utilisation and storage
 3. Natural sinks, biofuels and others

High value, low carbon, competitive at all times



Oil and gas
World class project portfolio



Renewables
Value driven growth



CCUS
Carbon price, scale, technology and demand supporting profitability

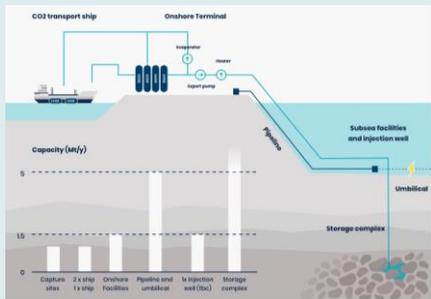


Hydrogen
Decarbonising non-electricity and industrial sectors



Future value creation in CCUS and hydrogen from natural gas

- Hydrogen plays a key role in a low carbon future
- Blue hydrogen technology is available at GW scale today
- H₂ enables solutions for the hard-to-decarbonise sectors



Northern Lights

A Norwegian full-scale CCS value chain, including capture of CO₂ from industrial sources



H₂Demo Norway

Demonstration of natural gas based hydrogen production with CO₂ removal and storage



Zero Carbon Humber

Aim to build the world's first zero carbon industrial cluster in the North of UK



H₂/Ammonia shipping

Replacing diesel/fuel oil in the shipping sector

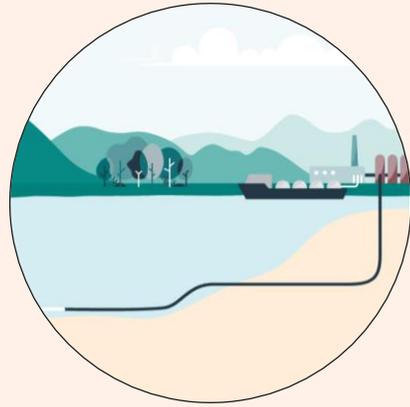
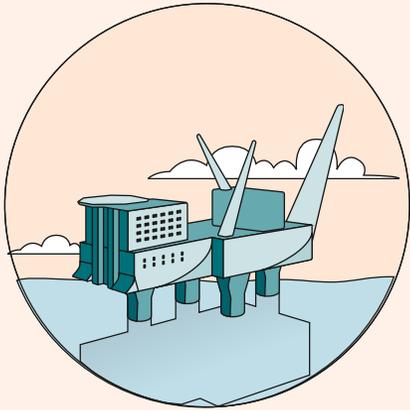


Clean steel

Decarbonisation of the steel industry - replacing coal with hydrogen

Our enablers





Cautionary statement

This presentation contains certain forward-looking statements that involve risks and uncertainties. In some cases, we use words such as “aim”, “ambition”, “continue”, “expect”, “may”, “strategy”, “will”, “in line with”, and similar expressions to identify forward-looking statements. Forward-looking statements include all statements other than statements of historical fact, including, among others, statements regarding Equinor’s ambitions, plans, intentions, aims and expectations with respect to Equinor’s new Climate Roadmap, including with respect to its net carbon intensity, carbon efficiency, methane emissions and flaring reductions, renewable energy capacity, carbon-neutral global operations, internal carbon price on investment decisions, future levels of, and expected value creation from, oil and gas production, scale and composition of the oil and gas portfolio, development of CCUS and hydrogen businesses, use of offset mechanisms and natural sinks and support of TCFD recommendations.

These forward-looking statements reflect current views about future events and are, by their nature, subject to significant risks and uncertainties because they relate to events and depend on circumstances that will occur in the future and are beyond Equinor’s control and are difficult to predict. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied by these forward-looking statements, including societal shifts in consumer demand and technological advancements, levels of industry product supply, demand and pricing; price and availability of alternative fuels; the political and economic policies of Norway and other jurisdictions where we have assets; general economic conditions; political and social stability and economic growth in relevant areas of the world; global political events and actions; changes in, or non-compliance with, laws and governmental regulations; the timing of bringing new projects on stream; an inability to exploit growth or investment opportunities; adverse changes in tax regimes; the development and use of new technology; geological or technical difficulties; operational problems; issues with transportation infrastructure; the actions of competitors; the actions of governments (including the Norwegian state as majority shareholder); natural disasters and adverse weather conditions and other changes to business conditions; an inability to attract and retain skilled personnel; relevant governmental approvals; labour relations and industrial actions by workers and other factors discussed elsewhere in Equinor’s publications, any of which could impair Equinor’s ability to meet its climate ambitions. Although we believe that the expectations reflected in such forward-looking statements are reasonable, we cannot assure you that future results will meet these expectations. Additional information, including information on factors that may affect Equinor’s business, is contained in Equinor’s latest Annual Report and Form 20-F, filed with the U.S. Securities and Exchange Commission (and section Risk review – Risk factors thereof), which is available at Equinor’s website (www.equinor.com).

You should not place undue reliance on these forward-looking statements. Actual results could differ materially from those anticipated in these forward-looking statements for many reasons. Equinor does not assume any responsibility for the accuracy and completeness of any forward-looking statements. Any forward-looking statement speaks only as of the date on which such statement is made. Unless required by law, we will not necessarily update any of these statements.

Equinor is including the emissions from a customer’s product use in its calculation of its net carbon intensity solely as a means to (i) more accurately evaluate the emission lifecycle of what we produce and (ii) to respond to the potential business opportunities arising from shifting consumer demands. Including these emissions in the calculation should in no way be construed as an acceptance by Equinor of responsibility for the emissions caused by such use.

—
**GAS
STORAGE
DENMARK**
—

SHIPPERS FORUM

17 September 2020



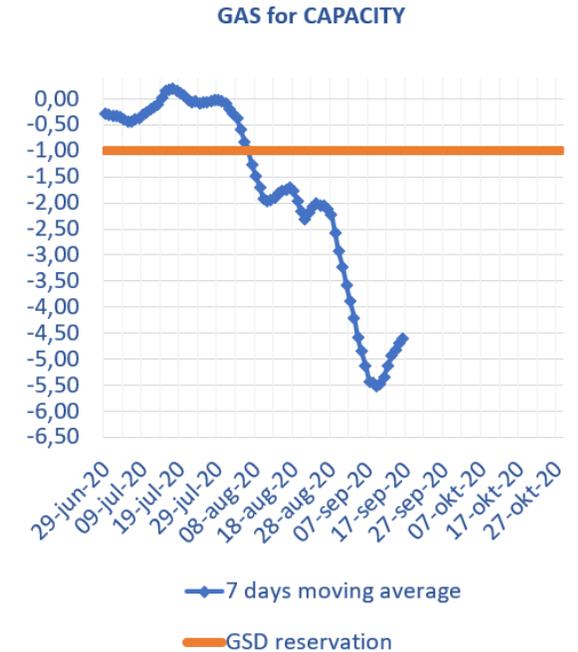
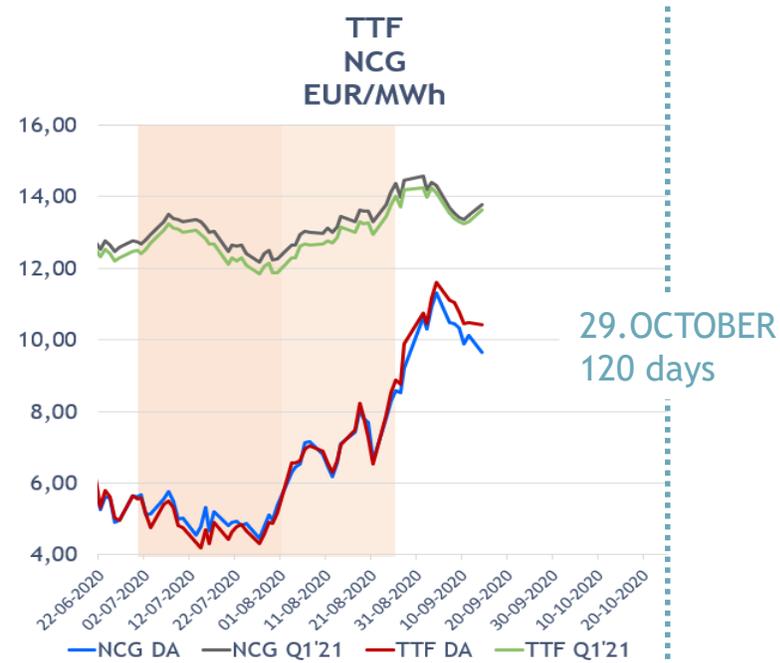
AGENDA

STATUS ON

- the expansion 1st JUL - 29th OCT 2020
- SY2021
- SY2022

STATUS ON THE EXPANSION

57 DAYS INJECTION
21 DAYS ON PAUSE
42 DAYS TO GO



- ☐ SCOPE → injection of 1.2 TWh cushion gas → new-generated capacity of 0.8 TWh
- ☐ 37% completed → 295 GWh capacity sold / 443 GWh cushion gas purchased
- ☐ The injection of cushion gas has now been paused due to “unfavourable market conditions”

STATUS SY21

SY2021

SOLD GWh

Sold capacity (incl. long term capacity)	4862
Expansion completed	295
Call Option 1/12-2020 and 31/1-2021	1920

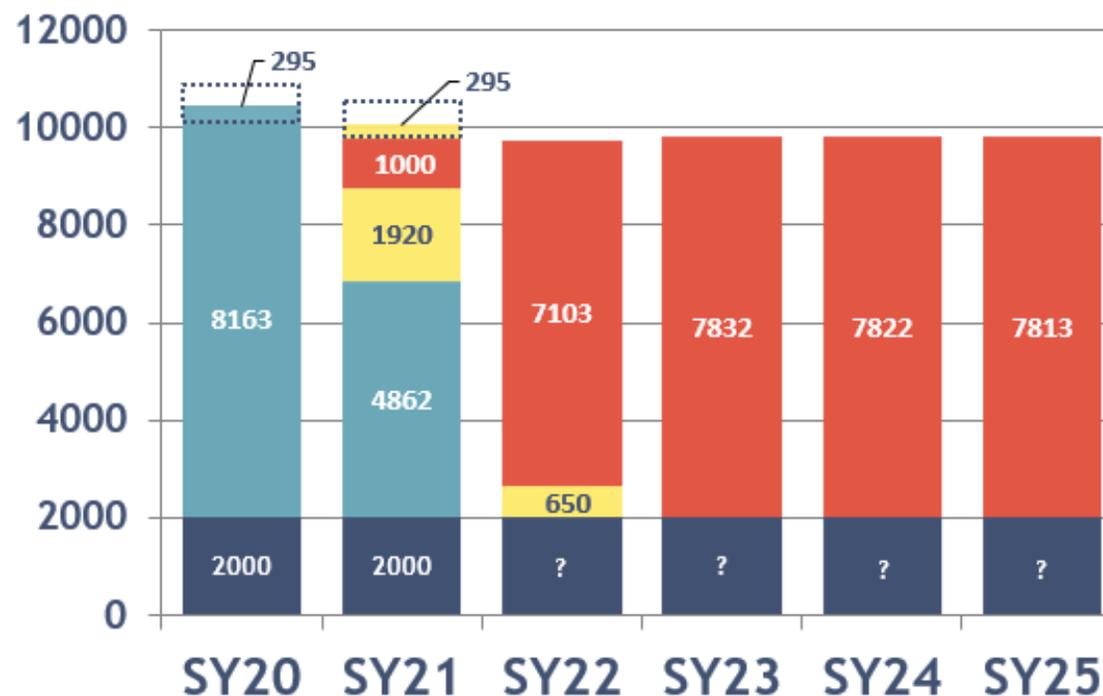
SOLD to TSO

2000 GWh for TSO Emergency	2000
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AVAILABLE FOR SALE

SY2021	1000
SY2022	7103
SY2023	7832
SY2024	7822
SY2025	7813

STORAGE CAPACITY, GWh



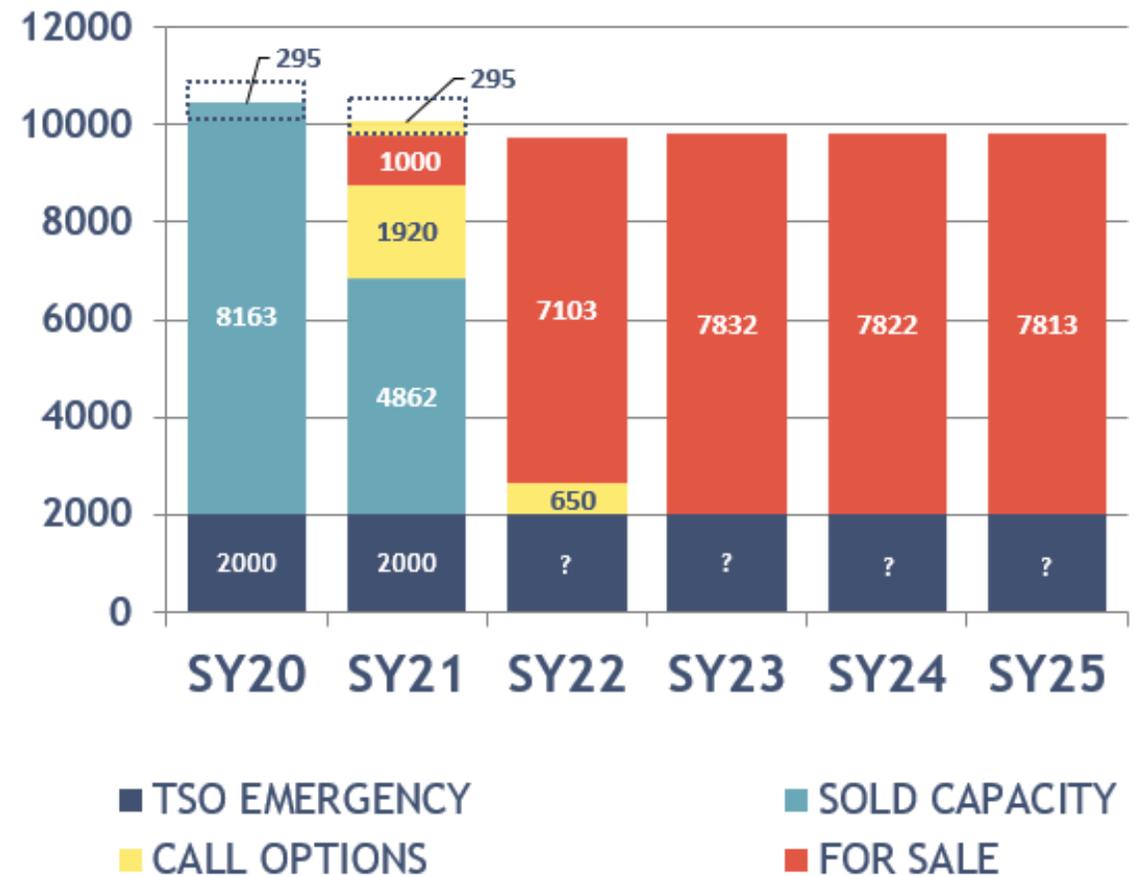
STATUS SY22

Capacity for sale: 7,103 GWh
FOR SALE NOW

PRICING

120/60: 4,0 €/MWh
170/85: 3,5 €/MWh
170/170: 3,0 €/MWh

STORAGE CAPACITY, GWh



QUESTIONS?

You are welcome to contact us



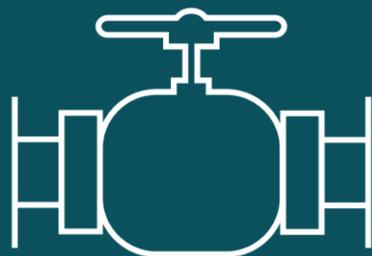
Iliana Nygaard

 iny@gasstorage.dk

 +45 61 24 34 03

BREAK

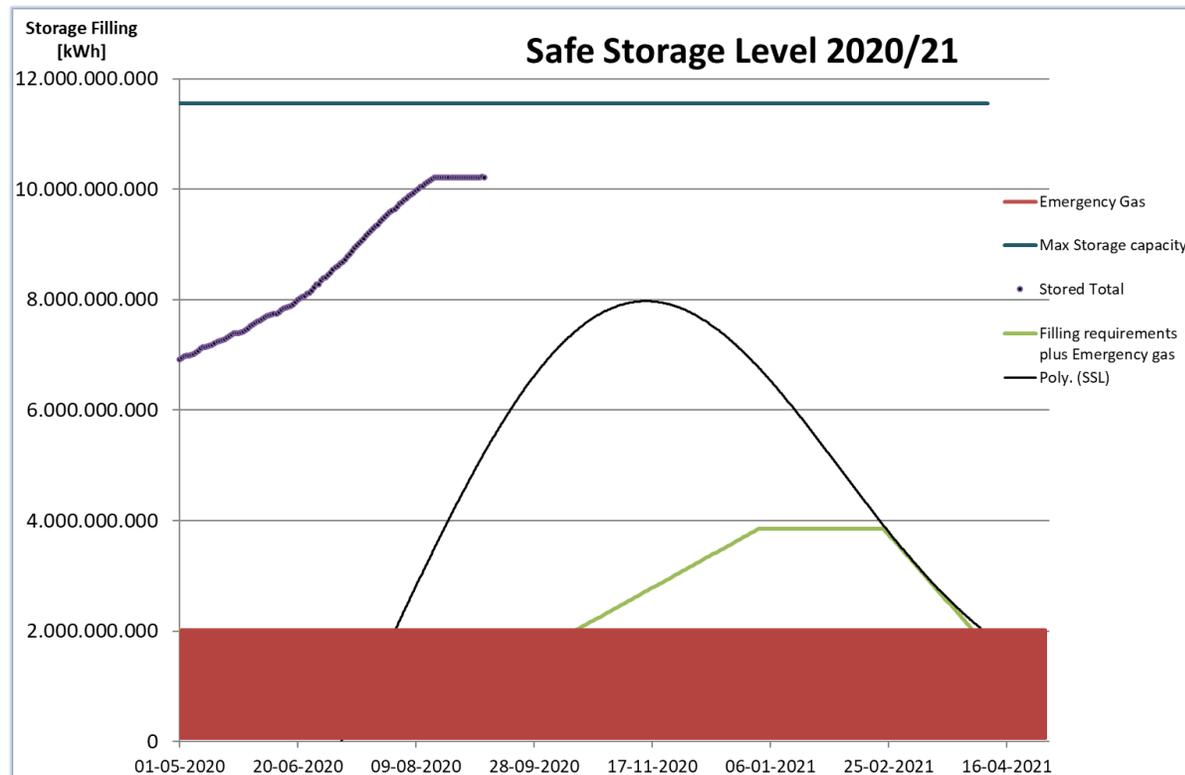




SECURITY OF SUPPLY

Clement J. Ulrichsen, Energinet Gas TSO

SAFE STORAGE LEVEL 2020/21



- Current storage filling 88 %
- Updated version for upcoming winter 2020/21 available on our website in the beginning of October
- Description of curves and principles:

<https://en.energinet.dk/Gas/Tyra/Safe-storage-level>

MARKET BASED ACTIVITY – TENDER RESULT

Tenders for individual filling requirements for 2020/21

Auction Date: 8 September 2020

Amount	Price
1,850 GWh	DKK 11,907,211



Historic results available at:

<https://en.energinet.dk/Gas/Transparency/Market-based-Activity>

INTERRUPTIBLE SUPPLY ON HOLD FOR 20/21 AND 21/22

Energinet Gas TSO will not purchase the product Hyper 3 interruptibility this year and next year

The product does not offer enough value to the security of supply

The product had in earlier years been available:

- for consumption sites connected to the Transmission System east of Egtved, with a minimum consumption of 2 million m³/Year
- to Energinet Gas TSO on crisis level Alert

QUESTIONS



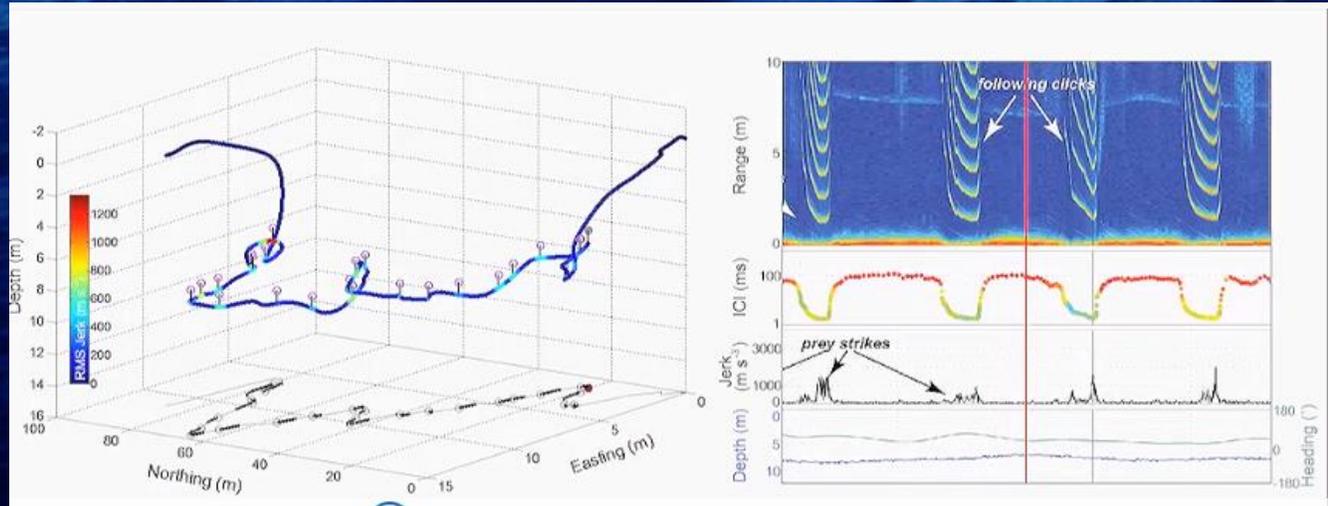
Contact: btr@energinet.dk



TYRA REDEVELOPMENT

Morten Hesselager Pedersen

MONITORING MARINE MAMMALS



TYRA IS BEING REDEVELOPED



Discovered
in 1968



Largest project
investment ever
made in the Danish
North Sea

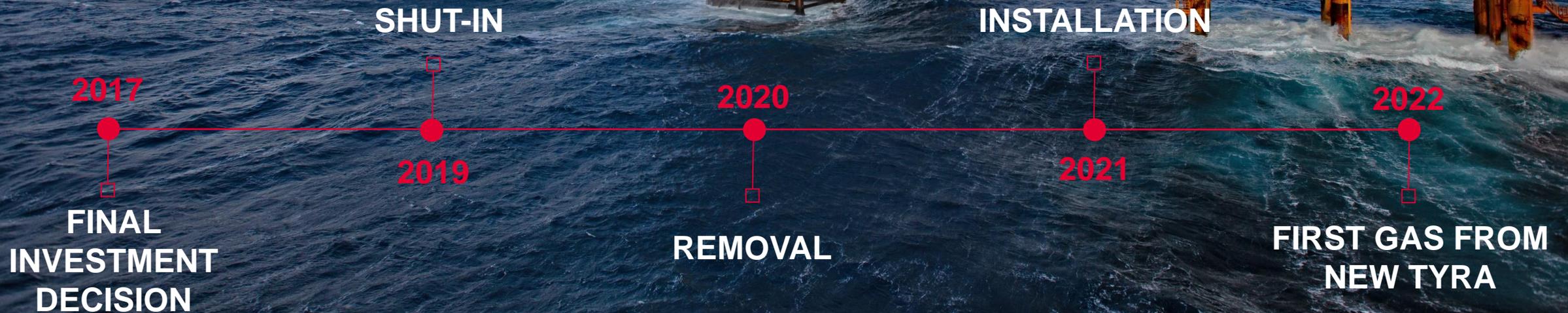


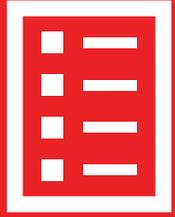
CO₂ emissions will
be reduced by 30%



ONE OF THE WORLD'S MOST COMPLEX DEVELOPMENT PROJECTS

THE PROJECT TIMELINE





5+ years
of planning



800,000+ manhours
spent offshore on
preparations

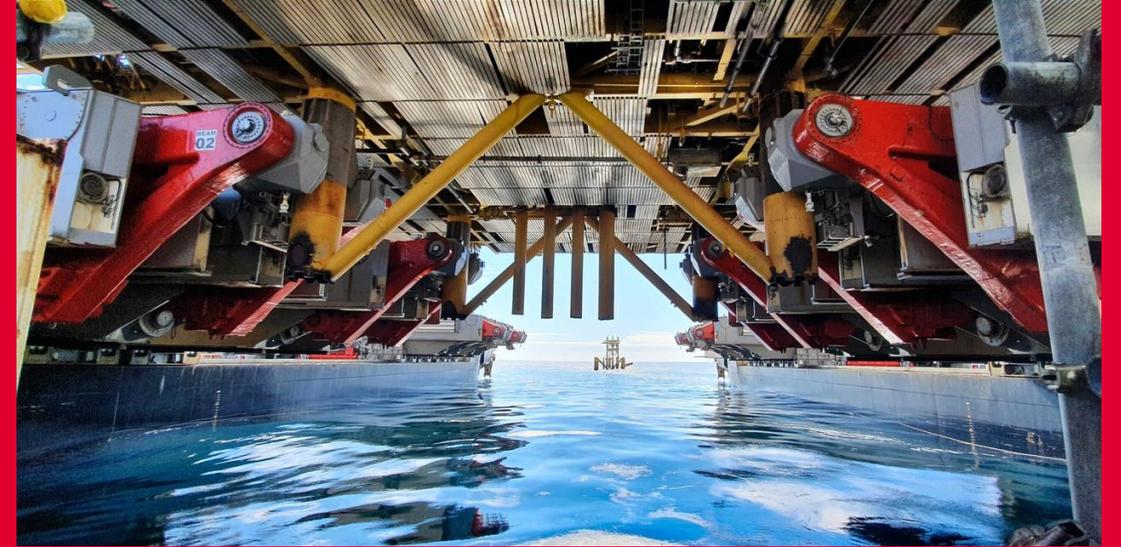


Successful delivery
on tight deadlines

PREPARING FOR REMOVAL

PHASE ONE REQUIRED PRECISION





□ PHASE TWO WAS ABOUT
HORSEPOWER



Spain



Singapore



Italy

TYRA SITES AROUND THE WORLD

MORE THAN 95% WILL BE RECYCLED AND REUSED

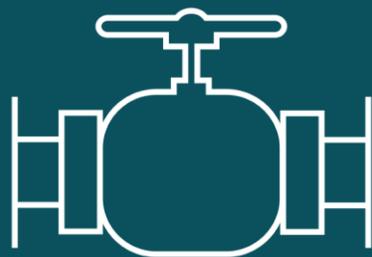


BUILDING TYRA TOGETHER



BREAK





BALTIC PIPE

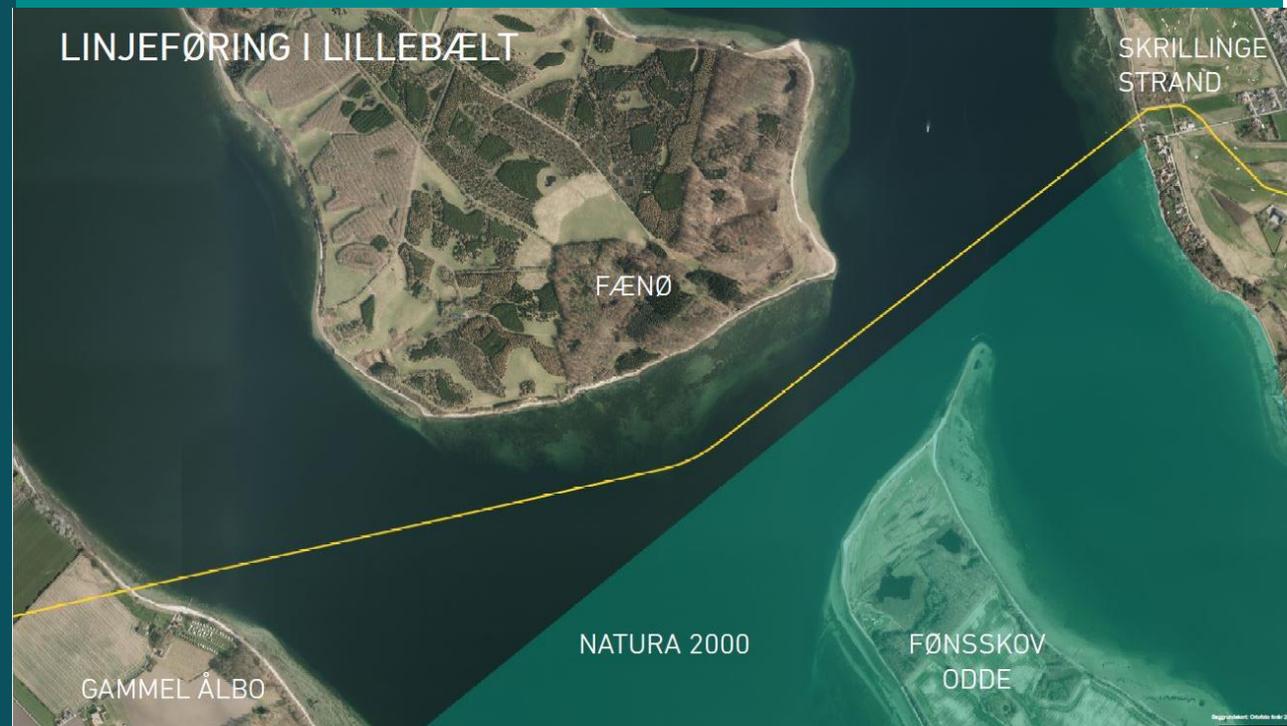
Energinet Gas TSO

PROJECT RIGHT NOW

All major contracts are – or are close to be – signed, and there are activities going on at different sites along the route across Denmark.

Land is expropriated.

Most recently there has been focus on the challenging crossing of Lillebelt.



LILLEBELT – PIPELINE SUCCESSFULLY PULLED ACROSS THE BELT



Digging the space for the pipeline on the seabed



The pipelines are welded together on the Jutland side, and are then pulled across Lillebelt from the Funen side

WEST COAST: DRILLING UNDER HOUSTRUP BEACH



Drilling at Houstrup Beach on the west coast of Denmark...



...where a pipeline of 750 meters is pulled underneath the sand dunes

ACTIVISM WITH LIMITED SUPPORT



Monday the 3rd August, there was a coordinated action towards our sites on Sealand, where activists chained themselves to the machines.

A suggestion on asking the Danish Parliament to discuss cancelling the Baltic Pipe decision has reached 10,000 signatures since 1 May. 50,000 signatures are required by 1 November, for the suggestion to reach the Parliament.

SEALAND:

Pipes are placed into the ground, and the compressor is built.
Gaz-System is preparing the landfall in Denmark



Sidebooms lifting the pipeline in place.



First pipelines on Sealand.

QUESTIONS



Contact: cru@energinet.dk



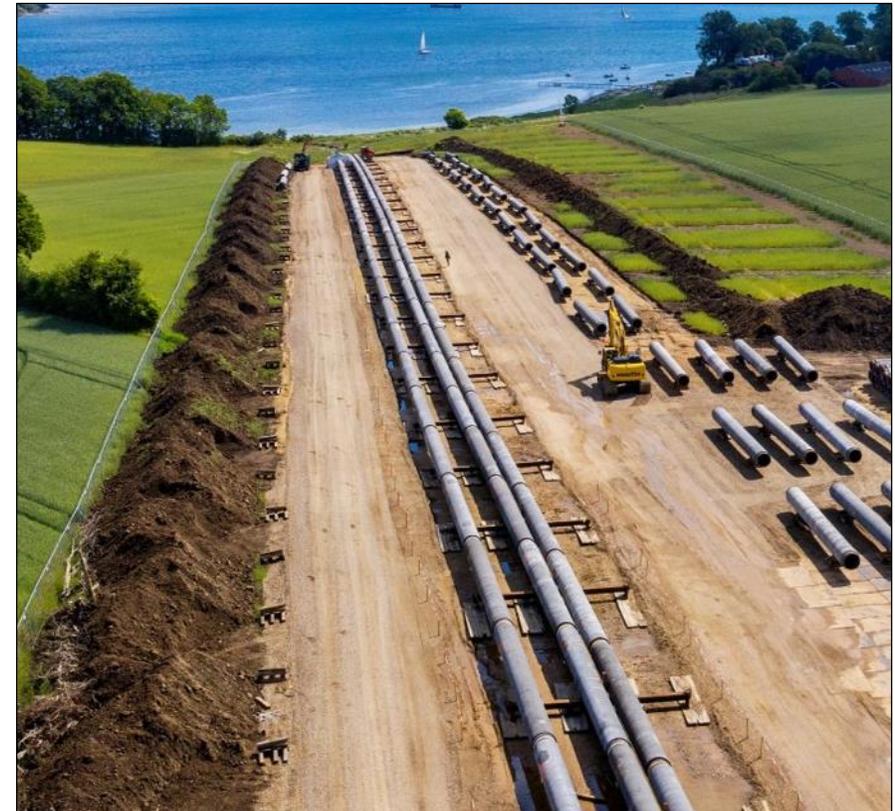
TARIFFS

Nina Synnest Sinvani, Energinet Gas TSO

THE TARIFF FORECAST INCLUDES RECENT BP COST UPDATE

The recent update of Energinet's Tariff Model shows an increase in the forecasted transportation tariff partly due to an increase in Baltic Pipe investment costs upon project tendering

- The Baltic Pipe investment costs used in the Tariff Model were updated to reflect the design maturation made by Energinet prior to the **Final Investment Decision end-2018**
- **By September 2020, the major Baltic Pipe tenders have been** – or are close to being – completed. This has resulted in increased contract prices and a Baltic Pipe budget increase compared to end-2018
- While **estimated Baltic Pipe CAPEX has gone up, other factors help to limit the budget increase**; e.g. lower forecasted interest rate, lower projected power costs, and project reserves decreased as a result of finalized tendering. CAPEX are within the expected interval in the risk assessment
- As the Baltic Pipe project is large and since construction continues for another ca. 2 years, **cost uncertainty remain**. Therefore Energinet will ensure updated information to shippers in relation to future Tariff Model updates



QUESTIONS



Contact: nsy@energinet.dk

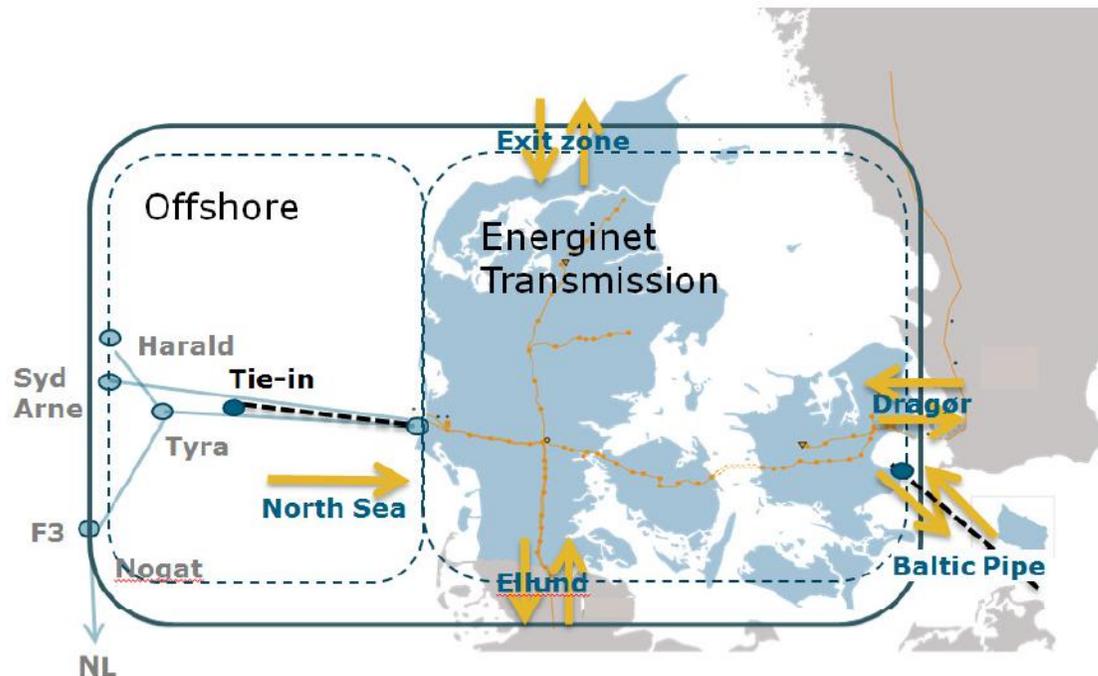


ONLINE USER GROUP ON JOINT MARKET ZONE & TARIFF METHODOLOGY

29 October 2020

JOINT MARKET ZONE – 10:00-12:00

We would like to invite you to discuss the joint market zone between Baltic Pipe offshore and the Energinet Transmission system



[Original figure is from Nov. 2016]

PRINCIPLES

- Energinet will send out a paper with the main principles.
- Present the main topics
- Market comments and ideas

TARIFF METHODOLOGY – 13:00-14:30

We starting the process towards an updated tariff methodology application entering into force on 1 October 2022



TOPICS

- Capacity-/commodity-split. Today 70%/30%
- Long-term multiplier, the possibility for rebate when making long-term bookings (e.g. 5%-10%)
- Gas-year vs. Calendar-year – should we stick to the known?

QUESTIONS



Contact: pjj@energinet.dk and nsy@energinet.dk



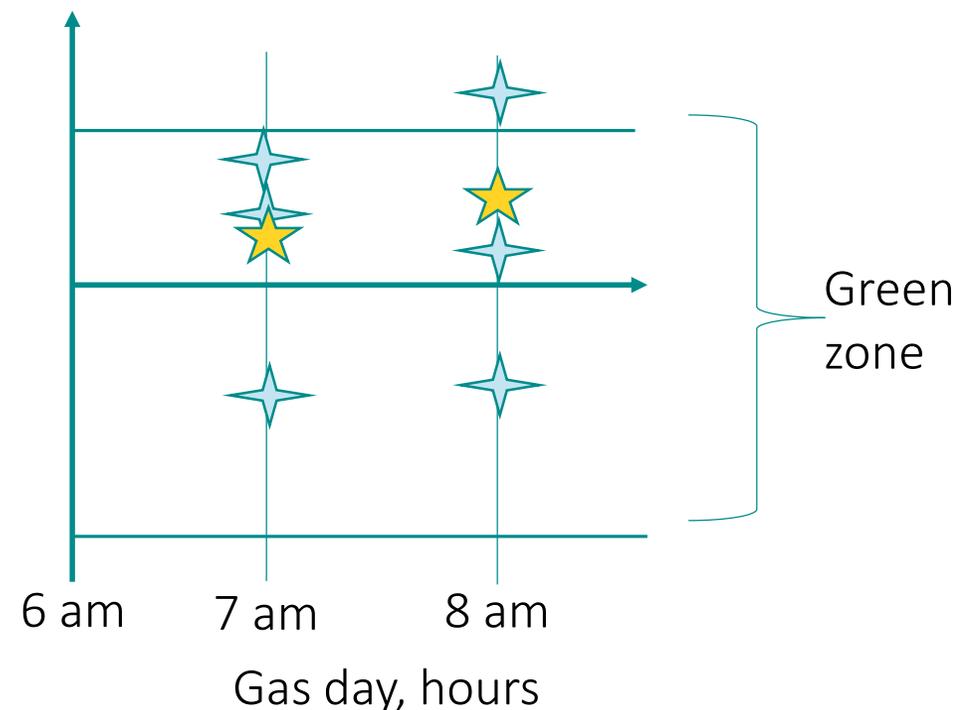
BALANCING MODEL 2022

Julie Frost Szpilman, Energinet Gas TSO

THE CURRENT BALANCE MODEL WILL STILL EXIST....

But 4 new concepts will be introduced:

- System-wide within-day obligation (WDO)
- Helper-causer-methodology
- New flow of data to shippers intraday – the Data model
- Less strict settlement pricing – deletion of adjustment 2 price



★ Accumulated System Balance, ASB

★ Individual Accumulated Shipper Balance, IASB

SINCE LAST TIME.....

- We have further analysed how the model behind the definitions of ASB (Accumulated System Balance) and IASB (Individual Accumated Shipper Balance) could be (the Data model)
- We have had several bilateral meetings with shippers, the distribution company, regulators and other stakeholders



INVITATION TO TASK FORCE MEETINGS

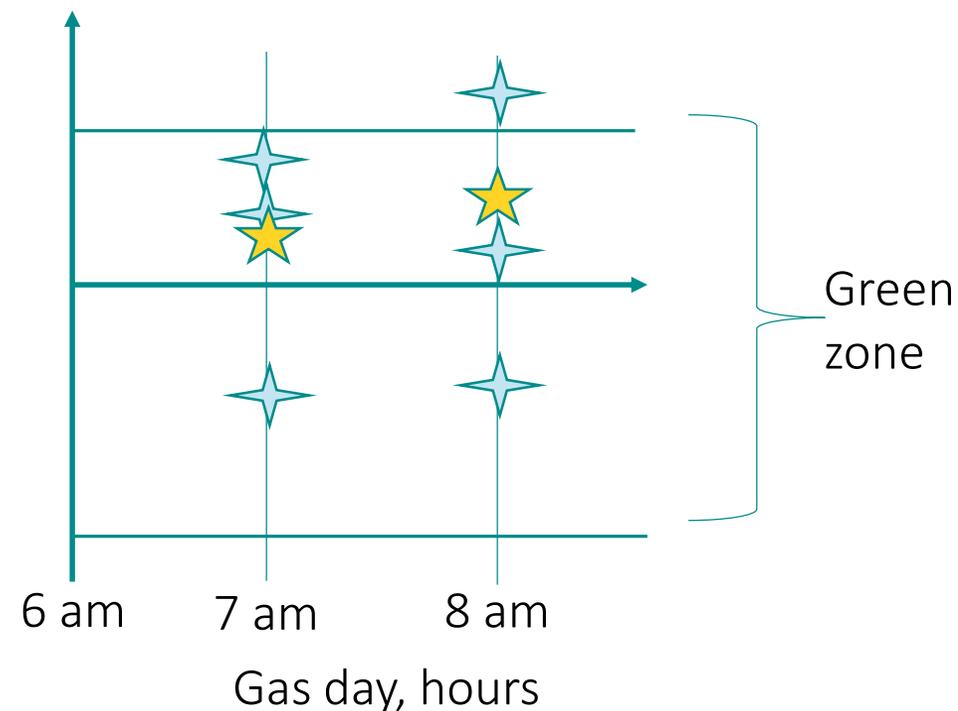
Dates:

6 November and 10 December 2020
from 10 am to 12 pm

Topic: The Data model

Please sign up for participation by
writing to Julie Frost Szpilman,
jfs@energinet.dk

Please be aware that we will make sure
that all types of shippers are
represented. Max 1 representative from
each shipper company



- ★ Accumulated System Balance, ASB
- ★ Individual Accumulated Shipper Balance, IASB

MORE INFORMATION
CAN BE FOUND HERE:

<https://en.energinet.dk/Gas/Shippers/Gas-balancing-model>



QUESTIONS



Contact: jfs@energinet.dk



FINAL REMARKS

Clement Johan Ulrichsen, Energinet Gas TSO

QUESTIONS



Contact: cju@energinet.dk