

TDI OIL & GAS

# Accelerating technology implementation and unlocking longevity of the NCS

Arne Gürtner

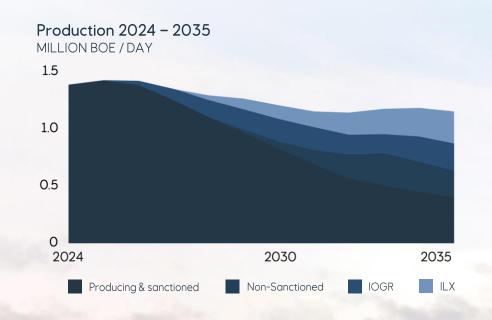
Senior Vice President Technology, Digital and Innovation

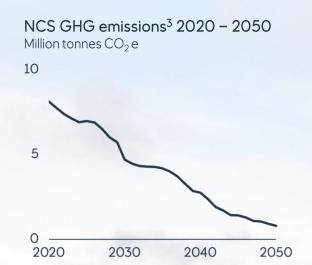




### HIGH VALUE BARRELS FROM THE NCS

## Strong long-term production and cash flow to 2035









<sup>2.</sup> Organic capex, see appendix for key assumptions and definitions

2 | Capital Markets Update 2025 Open 05 February 2025

<sup>3. 100%</sup> GHG emissions from Equinor operated offshore fields, see appendix for more details on our climate ambitions for NCS



### FUTURE OF THE NCS

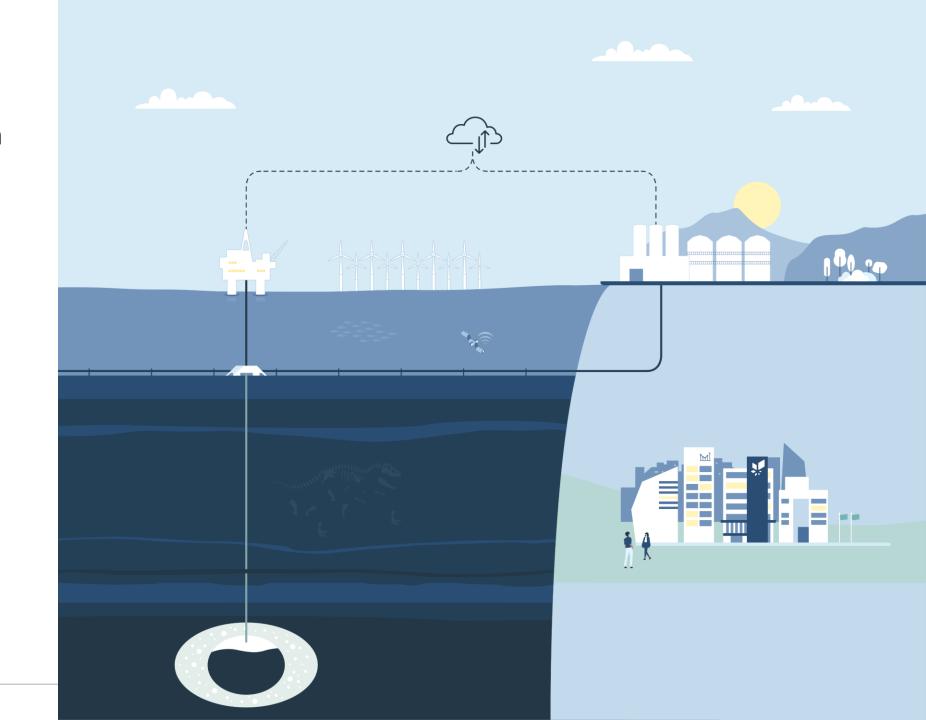
Our plan for the Norwegian Reduce by half Maintain **Continental Shelf Production** Investments towards 2035 towards 2035 250 600 75 **Exploration wells** Increased recovery wells Tie-backs

NOD Technology Day

## DIGITLISATION

## Al in the value chain

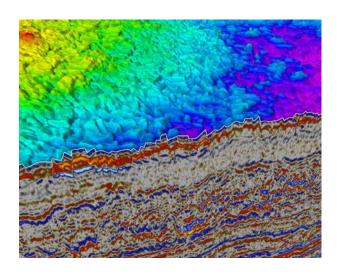
- Industrial Al@scale
- Leveraging 50 years of experience and data collection
- 200 MUSD in value realisation



## DELI

# Using machine learning to interpret more acreage

- 70+ petabytes seismic data from NCS
- >10x efficiency gains when interpreting seismic
- 600,000km² interpreted so far in 2025

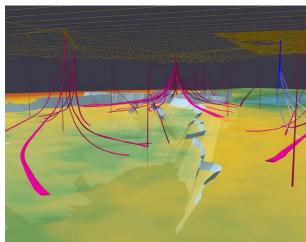




AIM

## Planning drilling operations

- Simulating millions of alternatives, recommending a few for further analysis and selection
- From months to hours in planning well alternatives, with Al
- 144.7USD\* realised value so far...

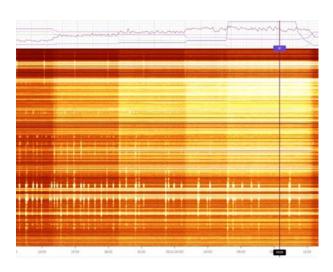


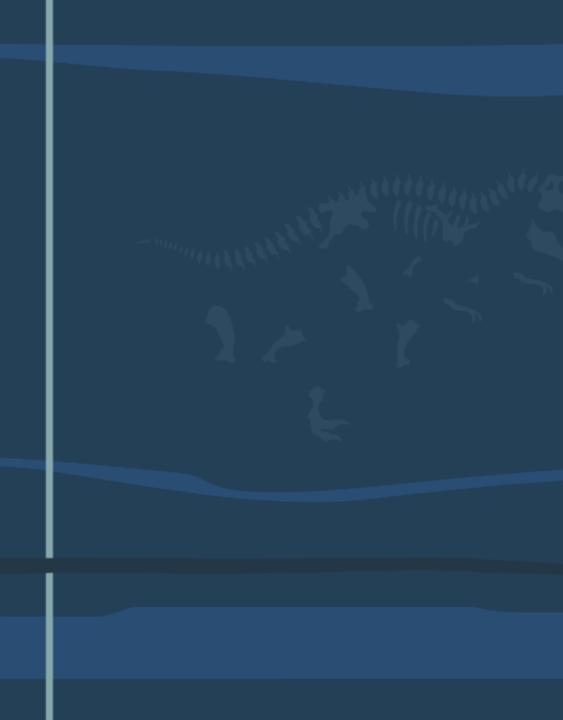
\*Equinor share

## FIBER OPTICS

## A streaming service from the wells

- Fiber to monitor temperature, sound etc.
- Like streaming 10,000 'movies' per sec
- Binge and tell: The ML algorithm will notify when the engineer should take a look

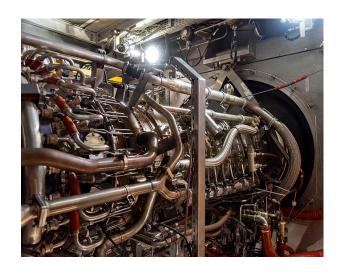


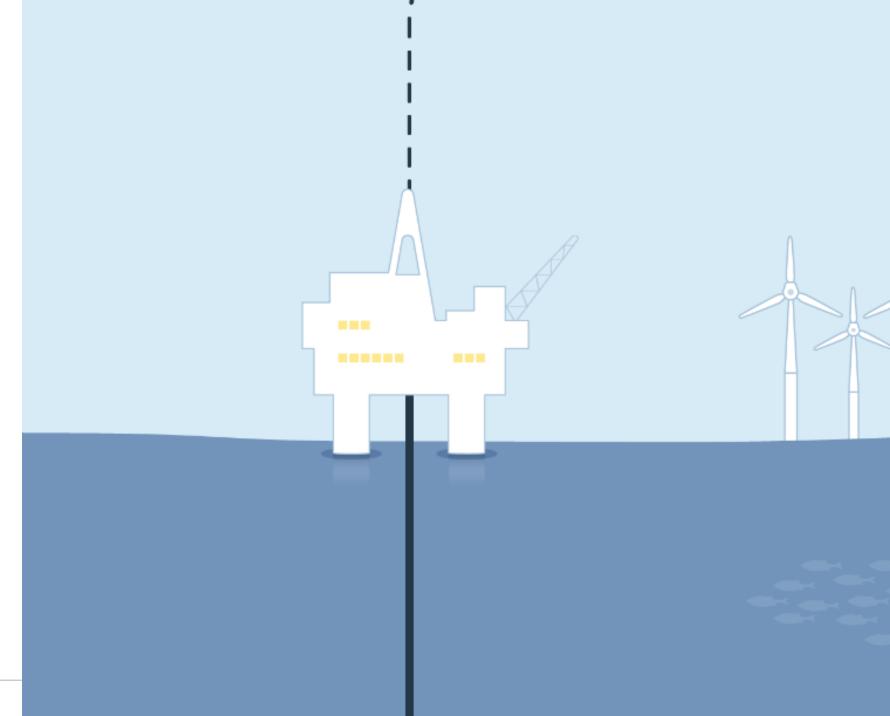


## CONDITION MONITORING

## Predictive maintenance in oil and gas

- Heavy rotating equipment
- All installations
- Value realization: 65 MUSD



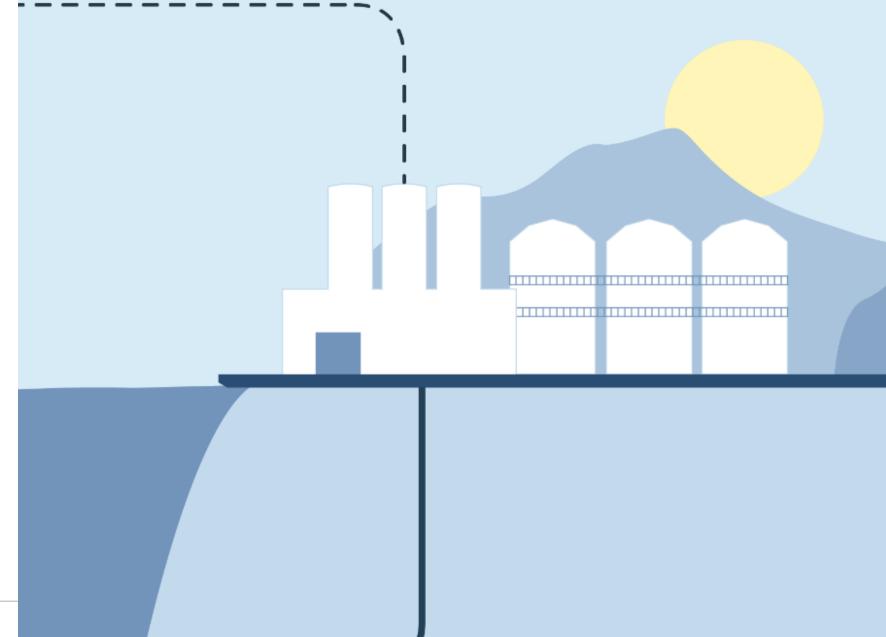


AUTONOMOUS ROBOTS

## Robots doing safety rounds

- Roberta can see and sense
- Tool for operators on plants
- Monitors air, surroundings
- Al Analysis to detect gas-leaks





## DRONES

## **Underwater drones**

- Autonomous inspections
- Looking for pipeline corrosion
- Security and safety of infrastructure





### OPERATION CENTRES

## Faster Implementation via centres

- Receive data from all assets
- Faster, better decision-support
- Data utilization at scale
- Implementation hub



#### TOP PROBLEMS TO SOLVE

## Strategic Projects

## Oil & Gas Strategic Projects

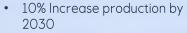
#### Well Delivered

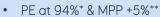


- Reduce planning time by 30%
- Increase number of drilling targets identified per year
- Increase number of wells drilled per year (Goal 125+)



## **Production Optimisation**





- Reduce planned and unplanned production losses < 3,5%</li>
- Reduce GHG emissions by 50%\*\*\*



### (P)P&A

- Reduce operation days for plugging operations to 20 days
- Enable shorter, fewer, faster barriers/ plugs

#### Subsea Tiebacks



- Radical cost reduction
- Re-imagine industry collaboration
- Simplify interfaces & processes

### SWIP (OSDU)



- One-stop shop for subsurface interpretation
- Enable use of Al and ML
- Prepare Equinor SUB for cloud native applications

SAFETY • SECURITY • SUSTAINABILITY



\*PE = EPN PE

\*\*MPP = Maximum production potential

\*\*\* CO2 Equivalent



#### THE FUTURE OF THE NORWEGIAN SHELF

The Norwegian shelf's path towards a broad energy

province

Stable energy production with 50 % lower emissions



**30 GW** Governments ambition



2 million tonnes CO<sub>2</sub> storage capacity awarded Per 2025

16 billion € contracts for difference

German licence rounds

Maintain value creation from oil and gas

Industrialise offshore wind



Commercialise transport and storage of  $CO_2$ 

**Net Zero** by 2050

Upscale hydrogen production

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