IR Autumn Seminar 2019
26 November 2019
Oslo
Forward-looking statements

This presentation contains certain forward-looking statements that involve risks and uncertainties. In some cases, we use words such as “ambition”, “continue”, “could”, “estimate”, “expect”, “believe”, “focus”, “likely”, “may”, “outlook”, “plan”, “strategy”, “will”, “guidance” 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 plans, intentions, aims and expectations with respect to Equinor’s start-up of projects through 2025; intentions regarding the wind business and development as a broad energy company; market outlook and future economic projections and assumptions; production growth in 2020 and in 2025 and production guidance for 2019, including plans and expectations to deliver 200,000 barrels per day from Trestokk, Utgard Snelfrid Nord, Mariner and Johan Sverdrup in 2020; CAGR for the period 2019 – 2025; organic capital expenditures for 2019 intention to mature its portfolio; estimates regarding exploration activity levels; ambition to keep unit of production cost in the top quartile of its peer group; scheduled maintenance activity and the effects on equity production thereof; expected dividend payments and dividend subscription price; share buy-back programme, including expectations regarding the timing and amount to be purchased using the remaining part of the first tranche of the programme, and the redemption of the Norwegian State’s shares; clean-up costs relating to the damage caused to the South Riding Point oil terminal by Hurricane Dorian; expected lease commitments through 2024; planned and announced acquisitions and divestments, including the timing and impact thereof, including the acquisition of 100% of the shares of Danske Commodities and the share-sale transaction with Lundin.

You should not place undue reliance on these forward-looking statements. Our actual results could differ materially from those anticipated in the forward-looking statements for many reasons. 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. 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 levels of industry product supply, demand and pricing, price and availability of alternative fuels, currency exchange rate and interest rate fluctuations; the political and economic policies of Norway and other oil-producing countries; EU developments; general economic conditions; political and social stability and economic growth in relevant areas of the world; global political events and actions, including war, political hostilities and terrorism; economic sanctions; security breaches; changes or uncertainty in or non-compliance with laws and governmental regulations; the timing of bringing new fields or wells on stream; an inability to exploit growth or investment opportunities; material differences from reserves estimates; unsuccessful drilling; an inability to find and develop reserves; ineffectiveness of crisis management systems; adverse changes in tax regimes; the development and use of new technology; geological or technical difficulties; operational problems; operator error; inadequate insurance coverage; the lack of necessary transportation infrastructure when a field is in a remote location and other transportation problems; the actions of competitors; the actions of field partners; the actions of governments (including the Norwegian state as majority shareholder); counterparty defaults; natural disasters and adverse weather conditions; climate change; and other changes to business conditions; an inability to attract and retain personnel; relevant governmental approvals; labour relations and industrial actions by workers and other factors discussed elsewhere in this report. Additional information, including information on factors that may affect Equinor’s business, is contained in Equinor’s Annual Report on Form 20-F for the year ended December 31, 2018, filed with the U.S. Securities and Exchange Commission (and section 2.11 Risk review - Risk factors thereof). Equinor’s 2018 Annual Report and Form 20-F is available at Equinor’s website www.equinor.com.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot assure you that our future results, level of activity, performance or achievements will meet these expectations. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of these forward-looking statements. Any forward-looking statement speaks only as of the date on which such statement is made, and, except as required by applicable law, we undertake no obligation to update any of these statements after the date of this report, whether to make them either conform to actual results or changes in our expectations or otherwise.
Macro and market update

Eirik Wæreness, SVP Macro and Market Analysis and Chief Economist

Oslo | 26 November 2019
Enormous uncertainty, in many dimensions – we need scenarios!
Elevated economic uncertainty
... and the US economy expanding into new territory

Global economic policy uncertainty index

US economic expansion
(number of months, trough to peak)

From June 2009 to September 2019

Source: policyuncertainty.com, NBER (The National Bureau of Economic Research)
China’s slowdown filters through
... and hampers sentiment

China: cyclical indicators
(% change y/y, 3 months rolling average)

Total investments (nominal)
Retail sales (real)
Industrial production (real)

Manufacturing business sentiment
(indexes)

Source: Thomson Reuters Datastream, IHS Markit
Oil market highlights for 2019

Weak economic indicators weigh on oil demand and offset a risky supply picture

- Record-growth in US shale oil
- OPEC+ alliance cutting production
- Venezuela collapse and US sanctions
- Iranian sanctions
- Middle-East tensions
- US-China trade war/Oil demand
Risk of significant oversupply of oil into 2020
... but uncertainties are plentiful and hard to predict

Global Oil Balance
(Growth Y/Y Mbd)

Brent historical and futures
(USD/Bbl)

-3.0  -2.0  -1.0  0.0  1.0  2.0  3.0  4.0
2017  2018  2019  2020  2021  2022

\begin{itemize}
  \item OPEC
  \item US
  \item Other
  \item Demand
\end{itemize}
Oil fundamentals will improve in the medium to long term
...as shale growth rates ease off and demand growth improves

<table>
<thead>
<tr>
<th>Key drivers</th>
<th>Impact on price</th>
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<tbody>
<tr>
<td></td>
<td>2019</td>
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<tr>
<td>US shale oil</td>
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<tr>
<td>Demand</td>
<td></td>
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<tr>
<td>OPEC</td>
<td></td>
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<td>Geopolitics</td>
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<td>Supply cost</td>
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Gas market highlights for 2019

Global gas fundamentals are weak due to increased supply

- 5th year of LNG capacity addition
- LNG capacity +12%
- LNG import to Asia +3%
- LNG import to Europe +77%
- European demand +3%
- Record year of new FIDs
Regional imbalances
Import needs are growing in Europe and Asia

EU28 growing import needs
bcm

North American growing export needs
bcm

Asia growing supply gap
bcm

Legend:
- Domestic
- NCS
- Russia
- North Africa
- LNG
- Indigenous Production
-Demand
- LNG
- Pipeline
- Indigenous Production
- Demand

IMPORT

IMPORT
Weak market conditions in 2019 lead to low gas prices globally

... anticipated market rebalancing from 2022

<table>
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<th>Key drivers Europe</th>
<th>Impact on price</th>
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<tr>
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<tr>
<td>Global LNG supply</td>
<td><img src="image1" alt="Graph" /></td>
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<tr>
<td>Global LNG demand</td>
<td><img src="image2" alt="Graph" /></td>
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<tr>
<td>Domestic production</td>
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<tr>
<td>Pipeline imports</td>
<td><img src="image4" alt="Graph" /></td>
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<tr>
<td>Storage inventories</td>
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<tr>
<td>Demand</td>
<td><img src="image6" alt="Graph" /></td>
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![Graph](image7)
NGL Markets

Luis Alfredo Ruiz, Manager Market Analysis Liquids

Oslo | 26 November 2019
## NGL Overview

<table>
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<tr>
<th>NGL</th>
<th>Applications</th>
<th>End use products</th>
<th>Primary Sectors</th>
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<tbody>
<tr>
<td>Ethane</td>
<td>Ethylene for plastics production, petrochemical feedstock</td>
<td>Plastic bags, plastics: anti-freeze, detergent</td>
<td>Industrial</td>
</tr>
<tr>
<td>Propane</td>
<td>Residential and commercial heating, cooking fuel, petrochemical feedstock</td>
<td>Home Heating, small stoves and barbeques, LPG</td>
<td>Industrial, Residential, Commercial</td>
</tr>
<tr>
<td>Butane</td>
<td>Petrochemical &amp; refinery feedstock, blending with propane or gasoline</td>
<td>Synthetic rubber for tyres, lighter fuel, alkylate for gasoline, refrigerant, LPG</td>
<td>Industrial, Transportation</td>
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<tr>
<td>Natural Gasoline</td>
<td>Blowing agent for polystyrene foam, blending with vehicle fuel, bitumen production in oil sands</td>
<td>Gasoline, polystyrene, ethanol blends, oil sands productions</td>
<td>Transportation</td>
</tr>
</tbody>
</table>

Source: EIA
Equinor’s profile

2.11
MMboe/d
Oil, NGL and gas equity production 2018
(total equity volumes)

51%
Share of Oil and NGL 2018
(vs total production)

17%
Share of NGL 2018
(vs Oil and NGL production, exclude natural gas)

~800 voyages per year
Markets Overview
Majority of supply growth the next years will be in light crudes
Current tightness in the heavy grades impacts product prices, overall balances and refinery margins
LPG Supply Growth
Driven by O&G production in the US & refining capacity addition in Asia

LPG supply by source

LPG supply by region

Source: Equinor, IHS Markit, Wood Mackenzie
Global LPG demand outpaces overall energy demand growth rate

Growth driven by biomass displacement in emerging markets and petchem demand

Global LPG demand

<table>
<thead>
<tr>
<th>Year</th>
<th>Res./comm.</th>
<th>Petchem</th>
<th>Industrial</th>
<th>Others</th>
<th>Automotive</th>
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<tr>
<td>2015</td>
<td>26</td>
<td>23</td>
<td>27</td>
<td>71</td>
<td>131</td>
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<td>2018</td>
<td>25</td>
<td>27</td>
<td>79</td>
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<td>149</td>
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Global CAGR* Indicators (2015-2018)

- GDP: 2.9%
- Energy demand: 3.5%
- Gas demand: 3.6%
- Oil demand: 4.5%
- LPG: 3.2%
- (LPG) Petchem: 4.5%
- (LPG) Res./comm.: 2.5%
- (LPG) Others: -0.3%
- (LPG) Industrial: -1%
- (LPG) Automotive: -0.1%

*Cumulative Average Growth Rate

Source: Equinor, IMF, BP Statistical Review of World Energy, IHS Markit, WLPG
Global LPG flows shifts with the emergence of US LPG exports
Supply constrains in the Middle East and the Trade War further stirs the global trade

Legend
2012 2018 2025 2030
Long Short
Unit: Million tons

Source: Equinor, IHS Markit
Crude and NGL/Gas prices start to decouple in the US
Abundant NGL from light crude production

- Prices are stable compared to today and linked to oil
- Volatile prices and beginning of the shift from heavier to lighter feedstock
- Abundant NGL production keep prices at historical low level

Source: Equinor, Argus, Platts
The future of LPG market is a tale of bridging Asia demand while finding new markets for incremental US exports

**Key points to watch**

- US-China Trade War
- Risk of supply disruption in the Middle East
- Global economy slowdown and impact over LPG consumption by petrochemical plants
- The pace of biomass displacement by LPG in developing markets in Asia and Africa

**Equinor’s response**

- Build flexible supply - Length in all global pricing hubs
- Develop flexible outlets - Latin America, MED, Southeast Asia
- Maintain competitive advantage in NWE on LPG. Protect market share on Ethane
Sample price quotes relevant for NGL pricing

- Propane CIF ARA (Large Cargoes)
- Butane CIF ARA (Large Cargoes)
- Naphtha CIF ARA
- Argus Far East Index (Propane)
- Argus Far East Index (Butane)
- Propane CP Middle East
- Butane CP Middle East
- VLGC Ras Tanura-Chiba
- Other quotes by S&P Platts, OPIS, and CME are also relevant
Digital@Equinor: Creating value from data

Torbjørn F. Folgerø, Chief digital officer

Oslo | 26 November 2019
Use data to improve safety
Reduce development & operating cost
Increase recovery & discovery
Reduce greenhouse gas emissions
Digitalisation drives the next wave of improvements

Safety and sustainability in Equinor is strengthened through leveraging digital technologies.

- **Value creation producing fields**
  - >2 Billion USD
  - 3% increase in production – 2020 to 2025
  - Equinor share pre-tax

- **Field of the future – Capex reduction**
  - >30 Percent
  - New facility concept compared to conventional

- **Automated drilling – Costs reduction**
  - ~15 Percent
  - Automated drilling compared to conventional

- **Field of the future – Opex reduction**
  - >50 Percent
  - New facility concept compared to conventional
OMNIA – Equinor’s cloud based data platform

Solutions
- Operational planning tool
- Echo – digital twin
- Reservoir exp. platform
- Fusion
- Omnia Prevent (IOC/ROCS)
- Digital field worker

Users

External partners

Data sources and capture from existing systems
- Safety data
- Production data
- Drilling data
- Asset equipment data
- External data
- Subsurface data
- Supplier data
- Financial data
- Procurement & logistics data

OMNIA – Equinor data platform
DATA, ANALYTICS AND SOLUTIONS FOR THE FUTURE

API
Scaling the first wave of digital initiatives

<table>
<thead>
<tr>
<th>Operation centres</th>
<th>Integrated operation centre Norway</th>
<th>Integrated operation centre – US onshore</th>
<th>Geo operations centre</th>
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<td>Operation centres</td>
<td>Integrated operation centre Norway</td>
<td>Integrated operation centre – US onshore</td>
<td>Geo operations centre</td>
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<tr>
<td>Operations,</td>
<td>Digital field worker</td>
<td>Echo – Digital twin</td>
<td>Operational planning tool</td>
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<tr>
<td>maintenance &amp;</td>
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<tr>
<td>project development</td>
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<tr>
<td>Subsurface,</td>
<td>Reservoir experience platform</td>
<td>Automatic drilling control</td>
<td>Digital well planning</td>
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<td>drilling &amp;</td>
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<td>well</td>
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Johan Sverdrup and Mariner – Digital frontrunners

Johan Sverdrup

New digital way of working contributed to

1 month

Earlier start-up of production

Mariner

Applying

30

First-use technologies
1. End user involvement right from the start

2. Embracing the digital learning journey

3. Innovation together with our ecosystems
Equinor’s Integrated Operations Centre

Bernt E. Tysseland VP Integrated Operations Centre
Oslo | 26 November 2019
The use of Industrial Internet of Things to deliver

Always safe
High value
Low carbon
Digitalisation drives the next wave of improvements

Safety and sustainability
Strengthened through leveraging digital technologies

Digitalisation & innovation
Potential connected to the Integrated Operations Centre

Above 2 bn USD
Value creation producing fields
Integrated Operations Centre – What and how

**What**
- Production potential (barrels of oil equivalent per day)

**How**
- Stream and visualize live data to gain new insight
- Work in multidisciplinary teams
- Using advanced analytics and accelerate technology implementation

1. Avoid unplanned losses
2. Produce to the limit
3. Increase maximum production potential
4. Energy efficient production
Integrated Operation Centre – How does it work?

Field

- Time Series Data from Equipment
- Maintenance, Alarms and event data
- Production data
- Local, regional or global external data (e.g. satellite data)

Data transfer from installations to Equinor’s cloud based data platform

Decision support to field

Integrated Operation Centre

- Cloud based architecture
- Dashboard for monitoring and support
- Machine learning
- Multidiscipline work force
- Clear, common targets
Operating model Integrated Operations Centre

Producing facilities
- Operational support services
  - Production optimization
  - Energy and Low Carbon
  - Predictive Maintenance

Integrated Operations Centre
- Monitoring
  - Bergen
- Operational support
  - Bergen, Stavanger & Stjørdal
- Development of New Tools
  - Bergen & Stavanger
- Suppliers

Prepare & Complete, tasks, maintenance & modifications

Wider Equinor
- Interdisciplinary collaboration
- Maintenance Management
- Technical Discipline Owners
- Others

Others
Integrated Operations Centre

Delivering on safety, security, sustainability and cash flow targets

Roll out according to plan

16 Assets supported by new Production Optimization tools – creating value
Energy & Low Carbon unit established
Most Norwegian offshore and onshore assets, supported with Condition Monitoring of selected equipment
Further roll out to international assets

Digital transformation

Think big – Start small – Scale fast
Working to onboard more data sources, equipment types, disciplines and suppliers
Developing Common functionality across delivery areas
First Machine Learning solutions implemented and continuous improvement

New ways of working

Personnel allocated from resource owners across Equinor
Agile development of new tools
Locations in Stavanger, Stjørdal and Bergen
Multidisciplinary teams, with easy access to data, generate bottom line results
Targets, Delivery and Examples

Value Creation Areas

- Production potential (barrels of oil equivalent per day)
- Actual Production
- Time

Value Creation Areas:
1. Avoid unplanned losses
2. Produce to the limit
3. Increase maximum production potential
4. Energy efficient production

Yearly build up to deliver on target
In 2019 IOC together with partners have delivered above internal target

Examples

Loss prevention:
- **Asset X** Data analysis used to identify reduced effect of turbine avoiding unplanned loss.

Increase maximum production potential:
- **Asset Y** Gas production restricted to 23 MSm3/d. Safely lifted capacity to 25.8 MSm3/d without modifications.

Produce energy efficiently to the limit:
- **Value Chain A-B** Increasing production without increased energy use improving CO₂ intensity.
Leveraging our strengths to become an offshore wind major

Pål Eitrheim | Executive vice president for New Energy Solutions

Oslo | 26 November 2019
New Energy Solutions – 2019 highlights

- Empire wind – 816 MW award
- Dogger Bank – 3 600 MW award
- Hywind Tampen FID
- Arkona farm-down €500 mill.
- MoUs in China and South Korea
Offshore wind outlook – decades of growth ahead

Offshore Wind installed capacity, MW

- United States
- India
- South Korea
- Japan
- Taiwan
- China
- European Union

2018 • 2030 (BNEF) • 2040 (IEA)

BNEF Global OW Outlook (2030 projections)
IEA OW Global Outlook 2019 (2040 projections), stated policies scenario
Why renewables and low carbon?

Capturing new opportunities in the energy transition

### Business drivers

- Transition
- Growth
- Capabilities
- Resilience

### Challenges

- Scale
- Returns
- Competition
- Culture
Leveraging our core competence

- Safety culture
- Project management and Supplier relations
- O&M excellence
- Financial and risk management
- Local presence in key markets
- Technology innovation

Ambition to be a world-class operator

- High availability
- Ca. 2GWh production
- Top quartile performance
- Profit-based operations in future

1. Average portfolio in operation Equinor and partner-operated
## A strong portfolio of offshore wind projects

### In production

<table>
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<tr>
<th>Bottom fixed</th>
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<tbody>
<tr>
<td>Sheringham Shoal</td>
<td>Hywind Scotland</td>
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<tr>
<td>317 MW</td>
<td>30 MW</td>
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<tr>
<td>Dudgeon</td>
<td></td>
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<tr>
<td>402 MW</td>
<td></td>
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<tr>
<td>Arkona</td>
<td></td>
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<tr>
<td>385 MW</td>
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### Project pipeline

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<tbody>
<tr>
<td>Dogger Bank, UK</td>
<td>Hywind Tampan, Norway</td>
</tr>
<tr>
<td>3.6 GW</td>
<td>88 MW</td>
</tr>
<tr>
<td>US East Coast</td>
<td></td>
</tr>
<tr>
<td>~3.5 GW</td>
<td></td>
</tr>
<tr>
<td>Baltic I, II &amp;III, Poland</td>
<td>~2.5 GW</td>
</tr>
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</table>
A top five player in key clusters – the North Sea, Baltics and U.S.

Participation\(^1\) in North Sea, Baltics and North America offshore wind capacity

1. Ownership shares considered. 2. ‘In operation’ also includes experience acquired from decommissioned parks. 3. Includes projects under construction. 4. Includes portfolio of Innogy and E.ON. 5. Equinor including Massachusetts (800 MW) and Boardwalk (1000 MW). 6. Polska Grupa Energetyczna. 7. Copenhagen Infrastructure Partners.

Source: 4COffshore, BCG analysis, 2019
Dogger Bank – strategic asset at the heart of the North Sea

- Creyke Beck A
- Creyke Beck B
- Teesside A
- Dogger Bank Round 3 Zone
- Teesside converter station
- Creyke Beck converter station

3 projects - Combined capacity of 3.6 GW (3x1.2GW)

Planning for 12 MW Wind Turbine Generators

Expected to cover 5% of UK’s energy generation

Located +130 km east of the Yorkshire Coast in the UK North Sea

50/50 joint venture between Equinor and SSE
Empire Wind - Offshore wind farm off the coast of New York

- 60-80 wind turbines
- Combined capacity of 816MW
- Project development starting in 2021
- Production equivalent to 1 million US households
- 24-50km southeast of Long Island, spans 323km², and covers water depths between 20-40m
Floating offshore wind – leverage our position and deploy at scale

Technology development

Hywind demo
2009
2.3 MW

Cost reduction
60-70%

Hywind Scotland
2017
30 MW

Cost reduction
40-50%

Hywind Tampen
2021-22
88 MW

Industrialization

Floating wind, commercial
2025-26
300-500 MW

Scotland, Spain, Greece, France

USA, East-Asia, Europa
12-15 GW developed by 2030
LCOE 40-60 €/MWh by 2030
Q & A
IR Autumn Seminar 2019
26 November 2019
Oslo
## Investor Relations in Equinor

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<thead>
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<th>Position</th>
<th>Email</th>
<th>Phone</th>
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