

Transformation of the E&P through implementation of new technology

Pedro Nunes



The E&P company of the future

Reserves & Resources

2.8 bn

barrels oil equivalent Production growth

~400

mboepd in 2022, ~525 mboepd in 2028 Industry-leading low production cost

<\$7

USD/boe targeted from 2023 Industry-leading low carbon emissions

<4 kg

CO₂/boe Net zero by 2030 Sustainable dividend growth

\$2.0

USD/share in 2022

Our world faces challenges ... energy industry needs to provide the solutions

We MUST embrace smart business models, new technology & the power of data to transform our industry





Business transformation is our journey to become the leading E&P company





Data volumes expanded

VOLUME OF DATA/INFORMATION CREATED WORLDWIDE FROM 2010 TO 2019 Source: Statista





And that data rose from the basement to the cloud

CLOUD COMPUTING & HOSTING MARKET SIZE OVER TIME





And it transformed AI

THE RACE FOR AI



CBINSIGHTS

ChatGPT Sprints to One Million Users

Time it took for selected online services to reach one million users



* one million backers ** one million nights booked *** one million downloads Source: Company announcements via Business Insider/Linkedin





New technology implementation to transform the E&P industry



New ways of working

- Production management
- Inspection & maintenance
 - Field development

Data

Contextualization
Quality and availability
Liberation from proprietary software





Hardware technology

- Drones & robots
- Sensor technologies
- Additive manufacturing

Selected Aker BP examples:







Topside check & report

Operations twin

Subsea inspection



Example: subsea inspection

Autonomous Inspection Drone System

Development of tethered inspection drone capable of parallel operation



- Reduced IMR vessel days* due to parallel activity sets
- Reduced offshore manning as drone is managed from shore
- ✓ High quality data from stereo cameras

Management of Digital Assets

Aspiration to have representative & easy accessible 3D models for mission planning, data comparison



- Condition based inspection & intervention plans
- Mission planning & simulation



Subsea wireless communication

Development of dual channel acoustic protocol supporting increased interoperability







Potential for subsea mesh network covering subsea infrastructure



Example: topside check & report

Introducing robots to reduce OPEX by allowing certain key functions be autonomously or remotely operated from shore.

Key functions include:

- 1) Operator rounds Autonomous operation/reporting
 - Record/report planned inspection points.
 - Monitor/report unusual heat/noise/vibration development.
 - On-demand inspection.
 - RBI information gathering.
- 2) First responder Automatic movement, remote controlled inspection.
 - Unconfirmed F&G alarm.
 - Operational alarm.
 - Autonomous inspection.
 - ESD2, ESD1, Black start: Verify valve and equipment status.





Operations twins





Leading the transformation of E&P

- Our world faces challenges E&P must respond and transform
- Value is created when we succeed in combining new technologies, new ways of working and intelligent use of data
- Aker BP is taking decisive steps to be a front runner in the E&P transformation





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