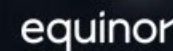


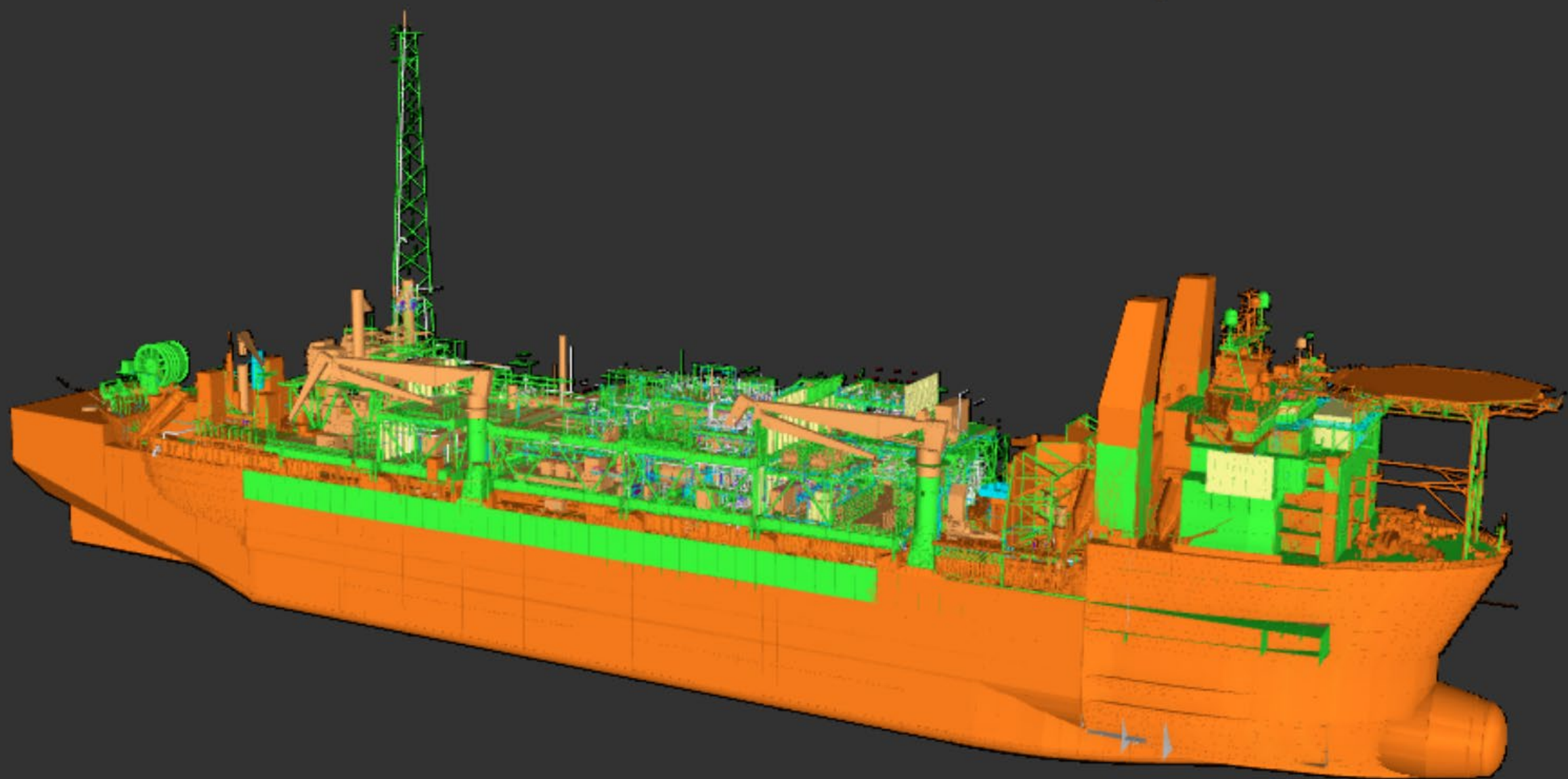


Ine Dolve

Asset Manager Alvheim – Aker BP

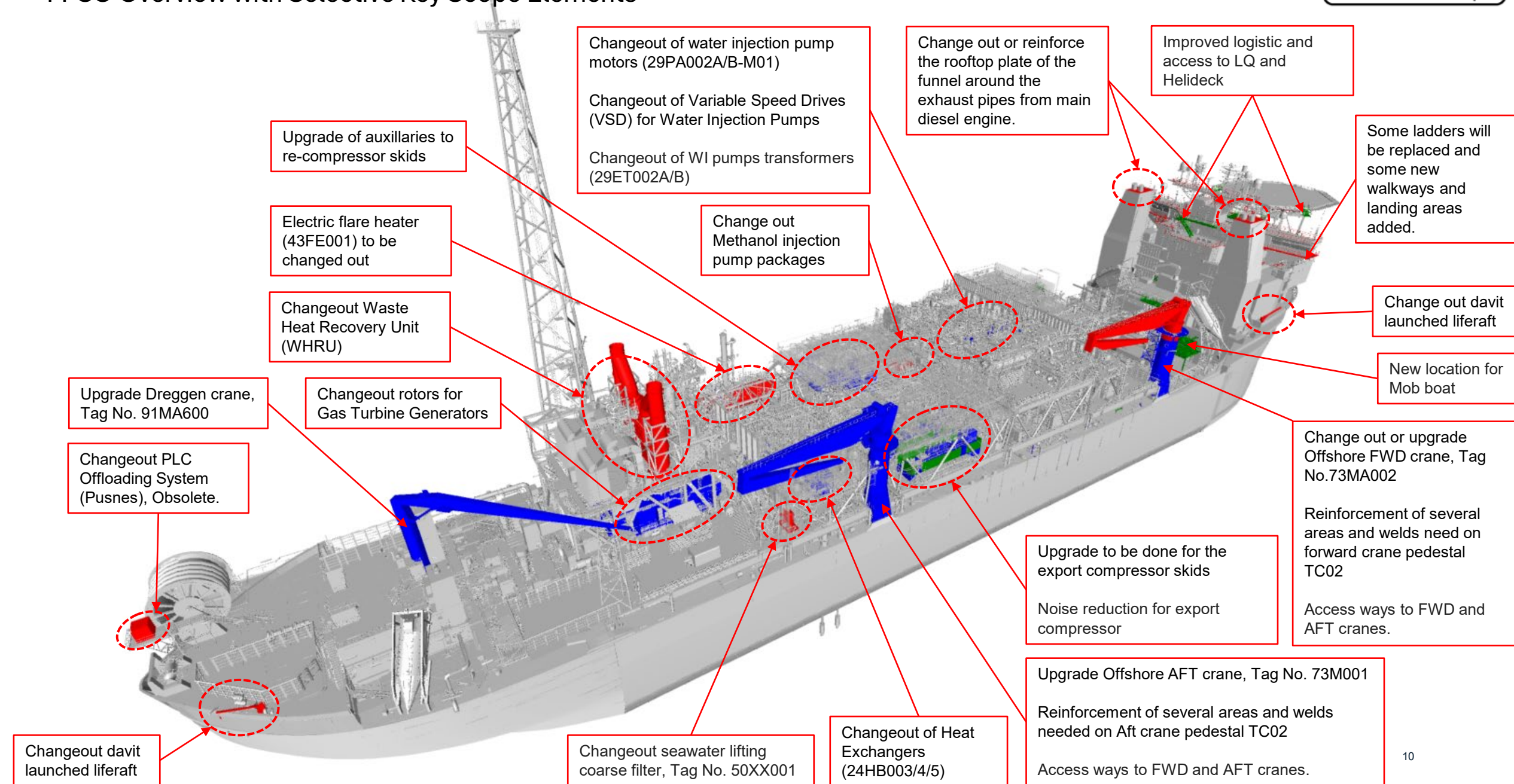
Why and how to get started - Call to Action





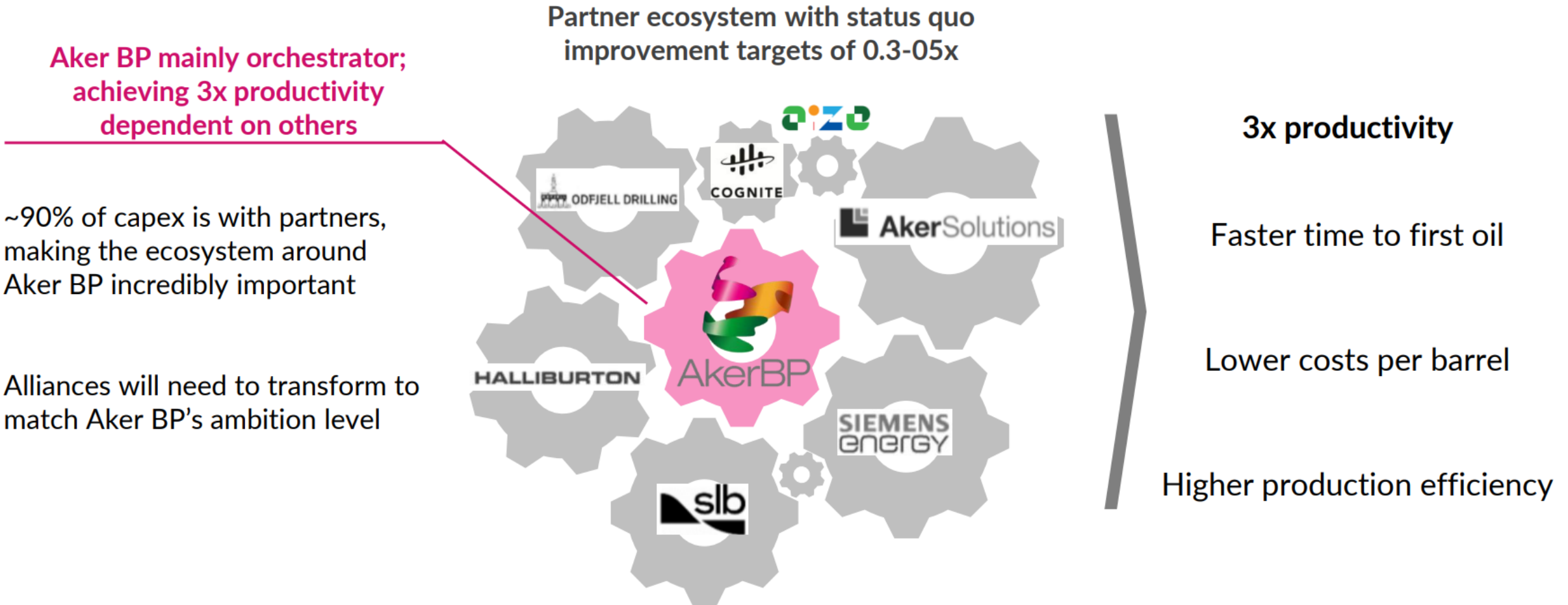


FPSO Overview with Selective Key Scope Elements



Transforming ourselves and our partner ecosystem

Whole ecosystem must have the same ambition level to truly impact value realisation for Aker BP



We are creating the future of operations



We deliver safe, reliable and effective operations through the assets



Move offshore work onshore and centralize functional deliveries



Achieve data-driven optimization of facilities, production, and activity sets



Strengthen the delivery of functions through standardized processes, digital tools, and active learning

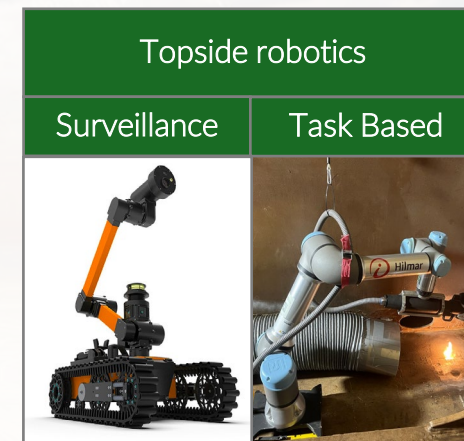
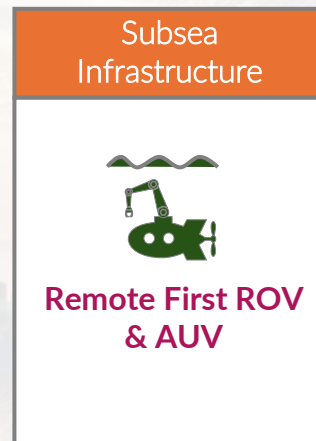
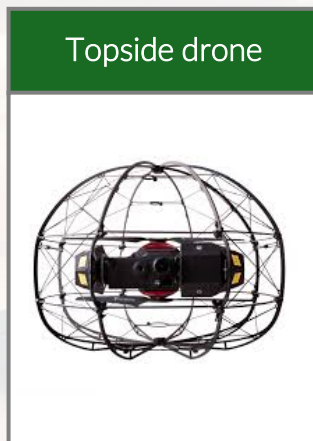


Strengthen organizational interfaces and strategic supplier relationships



Technology | Focus areas for Future Operations

- The six governing pillars



Remote - Autonomous - Digital

Aker BP Operations' Strategy



Strategic Supplier Relationships and Collaboration

All contracts shall optimize operational costs (OPEX) and safety. **On-time delivery with the necessary quality shall be promoted. Contracts shall facilitate data and information sharing to enable data-driven optimization and performance-based incentive models.**

Operations shall ensure that suppliers understand the operational strategy to guarantee that contract deliveries and performance align with operational goals.

- **Digital Delivery Models:** Suppliers must be able to share data within Aker BP's data structure. Equipment delivered (brownfield) must support the use of remote sensors and alarm monitoring.
- **Standardized Data Formats:** Operations shall require a common, standardized format for input to integrated plans. The format shall be independent of tools.



Alvheim Asset KPIs

HSE	0
Liftingcost	9 usd/boe
Production efficiency	>97%
CO2/boe	-50%
Volume additions	+25 mmboe



Need to work smarter in the ecosystem to be able to stay competitive and deliver value

• WHY?

AGING ASSETS

increased cost and reduced PE

- Alvheim is working on Lifetime Extension until 2040
- 90% of modifications are planned and executed by contractors
- A window of opportunity to improve Alvheim basis documentation and data!

MATURE FIELDS

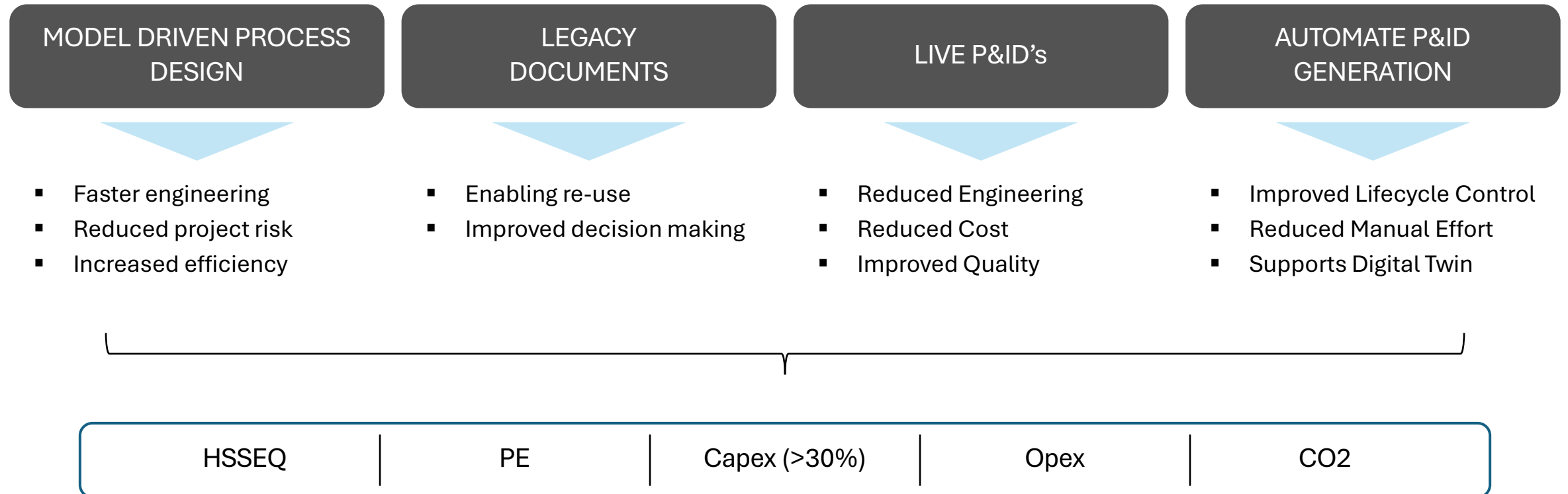
more complex and challenging field development

- Approximately 200 modification projects will be executed on the FPSO over the next years, meaning:
 - Cost challenge
 - POB challenge
 - HSE challenge
 - Execution challenge



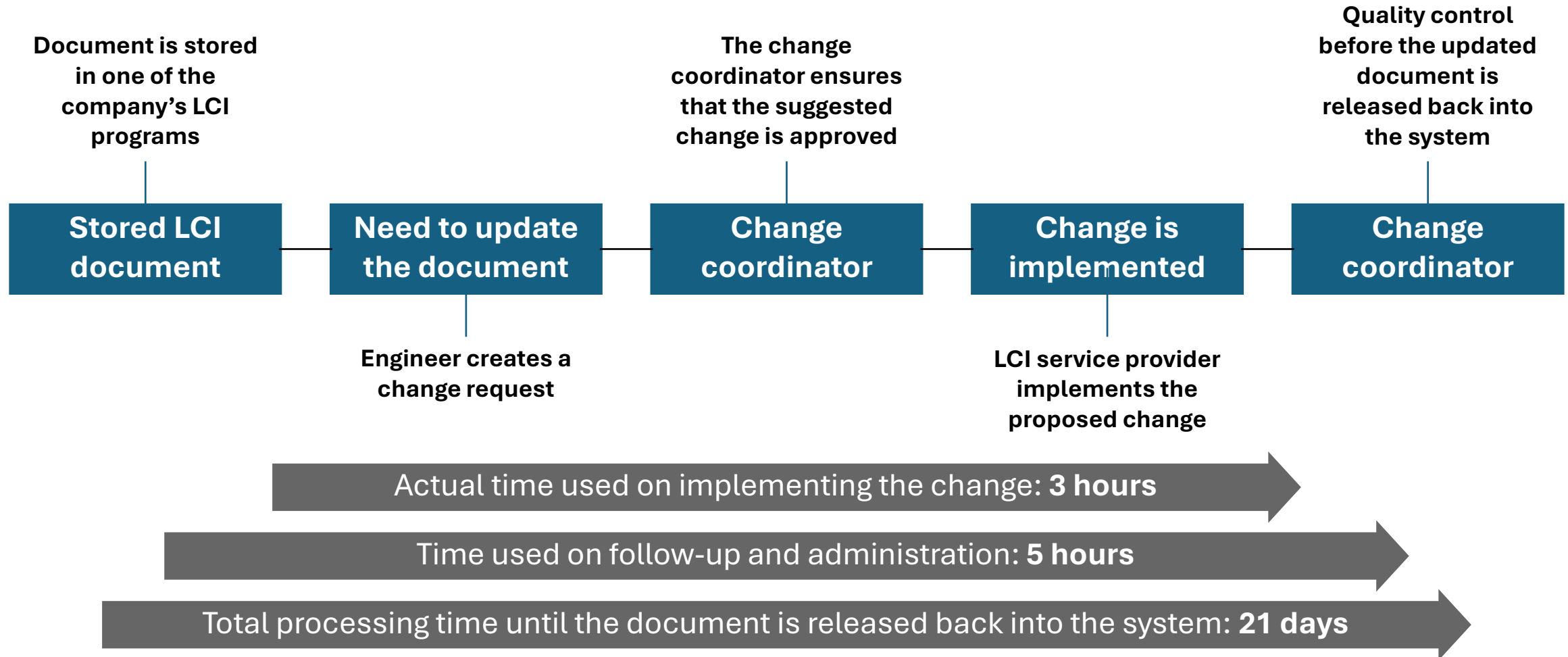
Improve Information Flow and Avoid Proprietary Solutions

Shared data models and industry-managed standards create a **COMMON DIGITAL LANGUAGE** enabling reuse of verified information across the entire asset lifecycle and value chain.



A workday for an engineer today

- Time spent on searching for P&ID`s and update P&ID`s





Operations into the 2030's

- Urgent need for a step change in productivity and catch up with
- marginal business!

➤ Need to **collaborate on real time data** across disciplines and companies
No time to send manual data and datasheets across companies

➤ Need to **share data** (plans, learnings, historical documents, etc.)
Enables optimise use of both human resources and assets, like vessels and helicopters

➤ Need to set up our organisations to use **Agentic AI**
(Autonomy, Goal-Oriented, Adaptive, Proactive, Reasoning)



SUMMARY OF INE PRESENTATION AT DISC SHOW & TELL 2025

Background & Context

The presentation, delivered by Ine Dolve, Asset Manager for Alvheim at Aker BP, focusing on the theme:

“Why and how to get started – Call to Action”

SUMMARY OF INE PRESENTATION AT DISC SHOW & TELL 2025

Key Themes & Insights

A. The Need for Change and Collaboration

- Ine reflects on the past decade's slow progress in transforming logistics and data sharing on the Norwegian Continental Shelf (NCS), mainly due to lack of trust and technical ability to share data.
- Today, there is both willingness and ability to share data, which is crucial for future competitiveness.
- The Alvheim FPSO (Floating Production Storage and Offloading unit) is a rebuilt tanker facing lifetime extension to 2040, requiring massive upgrades and modifications (approx. 200 projects)

B. Digitalization and the Vision of Alvheim

- The current 3D model of Alvheim allows for some remote planning, but the vision is to stream live, real-time data into this model, enabling fully digital management of operations, maintenance, and modifications from shore.
- This digital transformation is essential due to limited offshore capacity (only 70 beds) and the scale of upcoming work

SUMMARY OF INE PRESENTATION AT DISC SHOW & TELL 2025

Key Themes & Insights

C. The Importance of Ecosystem Cooperation

- 90% of CapEx is spent externally; thus, suppliers and sub-suppliers are critical to success.
- Achieving future targets is impossible without deep cooperation across the ecosystem.
- As fields mature, the benefits of competition decrease, making collaboration even more vital.

D. Operational Strategy & Standardization

- The strategy is to move as much work as possible from offshore to shore, optimizing use of resources and reducing risk.
- Data-driven optimization is a must for facilities, production, and activities.
- Fewer, deeper supplier relationships are preferred - partners must share the vision, be willing to share data, and work with standardized formats and processes.
- Standardization is the only way to drive efficiency and improvement across merged assets.

SUMMARY OF INE PRESENTATION AT DISC SHOW & TELL 2025

Key Themes & Insights

E. Technology, Data, and Digital Delivery

- Heavy investment in hardware (robotics, drones, IIoT, etc.) is only valuable if underpinned by high-quality data.
- Contracts must facilitate data and information sharing, enabling data-driven optimization and performance-based incentives.
- Suppliers must deliver equipment that supports remote monitoring and standardized data formats.

F. Key Performance Indicators (KPI) and Challenges

- Alvheim's KPI
 - ✓ Lifting cost: USD9/boe
 - ✓ Production efficiency: >97%
 - ✓ CO2/boe: -50%
 - ✓ Volume additions: +25 mmboe
- Current performance is strong (98.5% efficiency, \$7.2/boe), but production will halve in 2–3 years, raising costs and threatening competitiveness.
- Adding new volumes is challenging due to smaller, costlier finds

SUMMARY OF INE PRESENTATION AT DISC SHOW & TELL 2025

Key Themes & Insights

G. Information Flow, Digital Twins, and Model-Driven Processes

- Shared data models and industry standards are needed for a “common digital language,” enabling reuse of information and faster, higher-quality engineering.
- Model-driven process design, live P&IDs, and automated document generation are highlighted as solutions to legacy problems of manual, unstructured, and locked data.
- Example: Updating a P&ID document currently takes 21 days, with only 3 hours spent on actual change and 5 hours on administration—the rest is waiting and coordination.

H. Operational Strategy & Standardization

- There is an urgent need for a step change in productivity to stay competitive.
- Real-time data sharing and collaboration across companies and disciplines are essential.
- Organizations must prepare to use “Agentic AI” (autonomous, goal-oriented, adaptive, proactive, reasoning agents).
- Fewer, more digitally advanced suppliers will be chosen; open, non-proprietary solutions are preferred.
- Legacy documentation must be digitized and integrated into digital twins.

SUMMARY OF INE PRESENTATION AT DISC SHOW & TELL 2025

How the Slides Support the Talk

- The slides reinforce the need for massive upgrades, standardization, and digital transformation on Alvheim.
- They visualize the scale of modification projects, the operational strategy, and the importance of supplier collaboration.
- KPIs and operational challenges are clearly presented, supporting the urgency for change.
- Slides on information flow and model-driven processes illustrate the benefits of digitalization and the inefficiencies of current manual workflows.
- The final slides call for collaboration, data sharing, and adoption of advanced digital and AI-driven solutions.

SUMMARY OF INE PRESENTATION AT DISC SHOW & TELL 2025

Takeaways & Recommendations

- **Radical change and digitalization are essential** for Alvheim and similar assets to remain competitive as fields mature and costs rise.
- **Collaboration across the ecosystem**—with suppliers, sub-suppliers, and partners—is critical; no company can succeed alone.
- **Standardization and high-quality data** are the foundation for efficiency, digital transformation, and successful use of advanced technologies.
- **Contracts and supplier relationships** must be structured to enable data sharing, digital delivery, and performance-based incentives.
- **Adoption of Agentic AI and digital twins** will be key to future productivity and operational excellence.
- **Legacy documentation and processes** must be digitized and integrated into modern, model-driven workflows.



DISC