



From hindsight to insight : HOP in Practice

SÄKU 16.01.25

Kristian Gould - Corporate Safety and Security

2023 PERFORMANCE

Always safe

0.4

SIF

Serious incident frequency

Per million hours worked

1

WCI

Serious well control incidents

2.5

TRIF

Total recordable injury frequency

Per million hours worked

Our license to operate

Safeguarding our people

- Always safely home
- Major accident prevention
- Working safely with suppliers

Protecting our assets

- Secure critical infrastructure
- Strengthen cybersecurity
- Collaborate with governments and industrial partners

Committed to net zero and a just transition

- Create local value
- Respect human rights
- Protect the environment

SAFETY • SECURITY • SUSTAINABILITY

In a nutshell

Norsk:

https://youtu.be/LdNLewce_F4

English:
https://youtu.be/QvrStnUxBGE

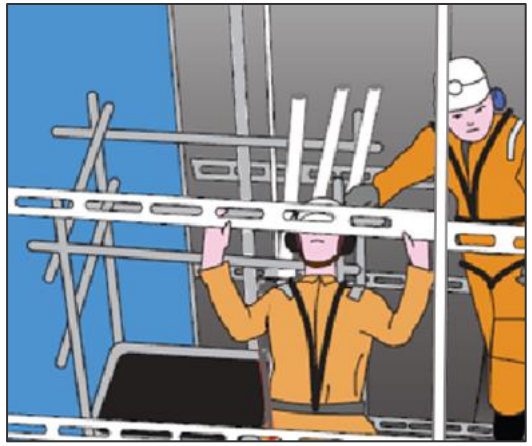
equinor

Basic concepts

Part 1

Hammerfest, September 2020

Fall from 24m during scaffolding teardown at Mongstad 18.01.2023



Where can we learn the most?

What do we see in major incidents?

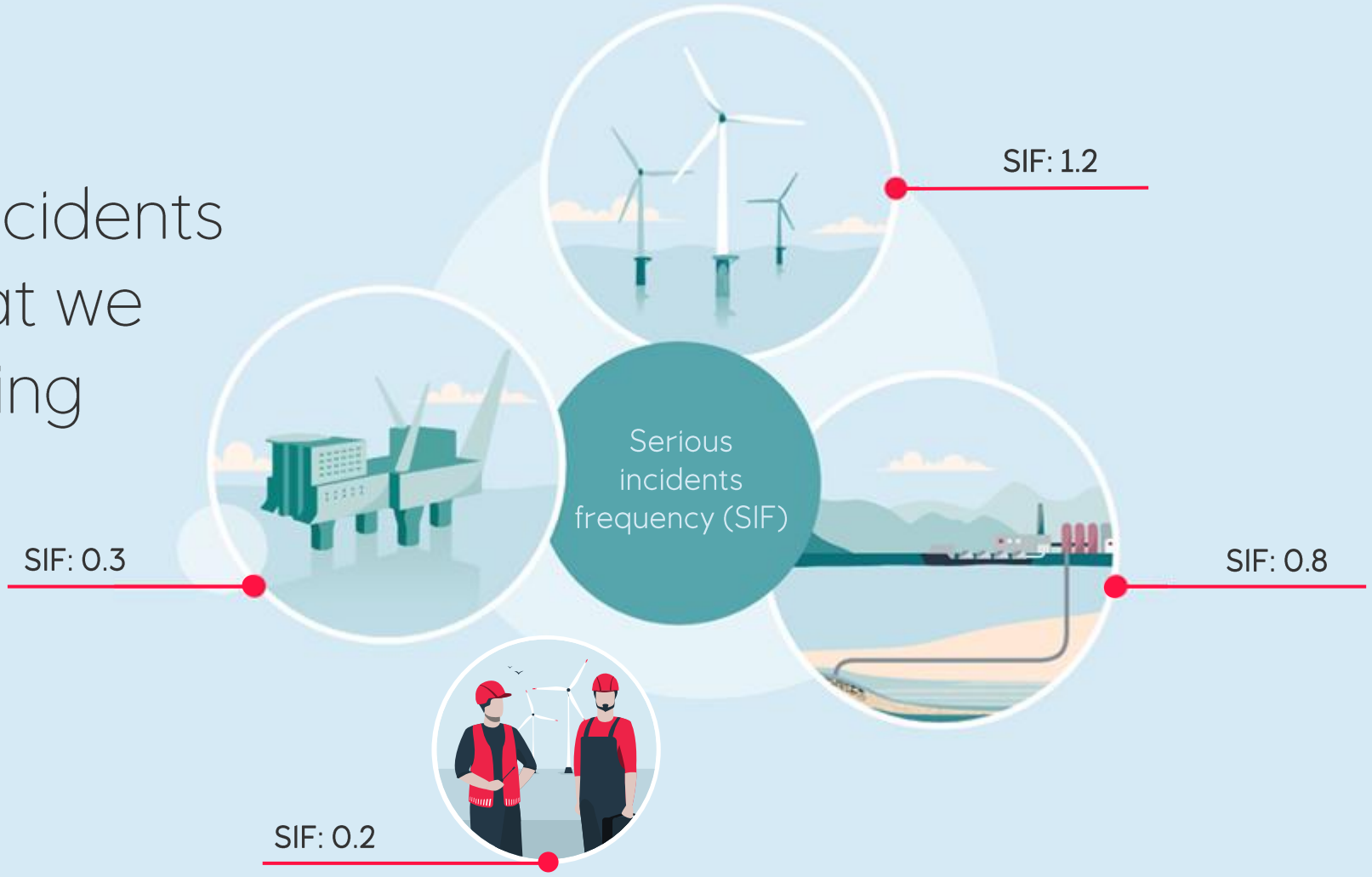
- Shortcuts
- Improvised solutions
- Normalisation of deviance
- Lack of people, time and resources
- Cumbersome systems
- Unclear roles and responsibilities
- Disagreement with management

What do we see in normal work?

- Shortcuts
- Improvised solutions
- Normalisation of deviance
- Lack of people, time and resources
- Cumbersome systems
- Unclear roles and responsibilities
- Disagreement with management

Antonsen, S. (2009). Safety culture assessment: A mission impossible? *Journal of Contingencies and Crisis Management, 17*(4), 242-254.

Do few incidents mean that we are working safely?



Safety is not only the absence of incidents,

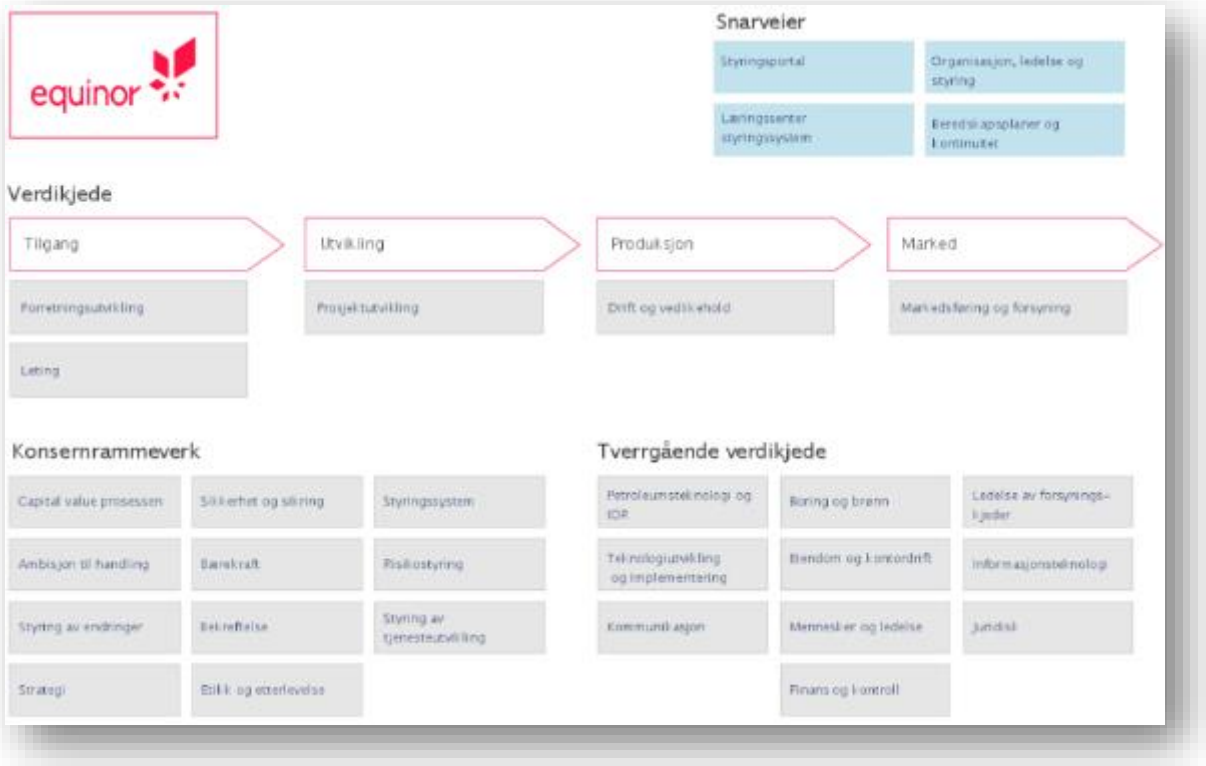
but also the presence of capacity

How can we «build capacity?»

Two ways of thinking about bad outcomes

	Individual perspective	System perspective
Assumptions:	Bad judgement and noncompliance are the cause of accidents.	Bad judgement and noncompliance are symptoms of underlying weaknesses.
	↓	↓
	Fix behavior	Fix what shapes behavior

Rules create safety, but they also have limits



Behavior-based safety

- Highly focused on controlling the behavior of the worker
- If only the front line worker would follow the rules, everything would be fine
- Observing the front line workers to make sure they follow the rules, reacting to nonconformance
- Works well for observable behaviors with unambiguous requirements
- **In reality, there are always many variables you cannot anticipate, some degree of uncertainty, and requirements that are ambiguous**

Rules are not always the same

Clear cut

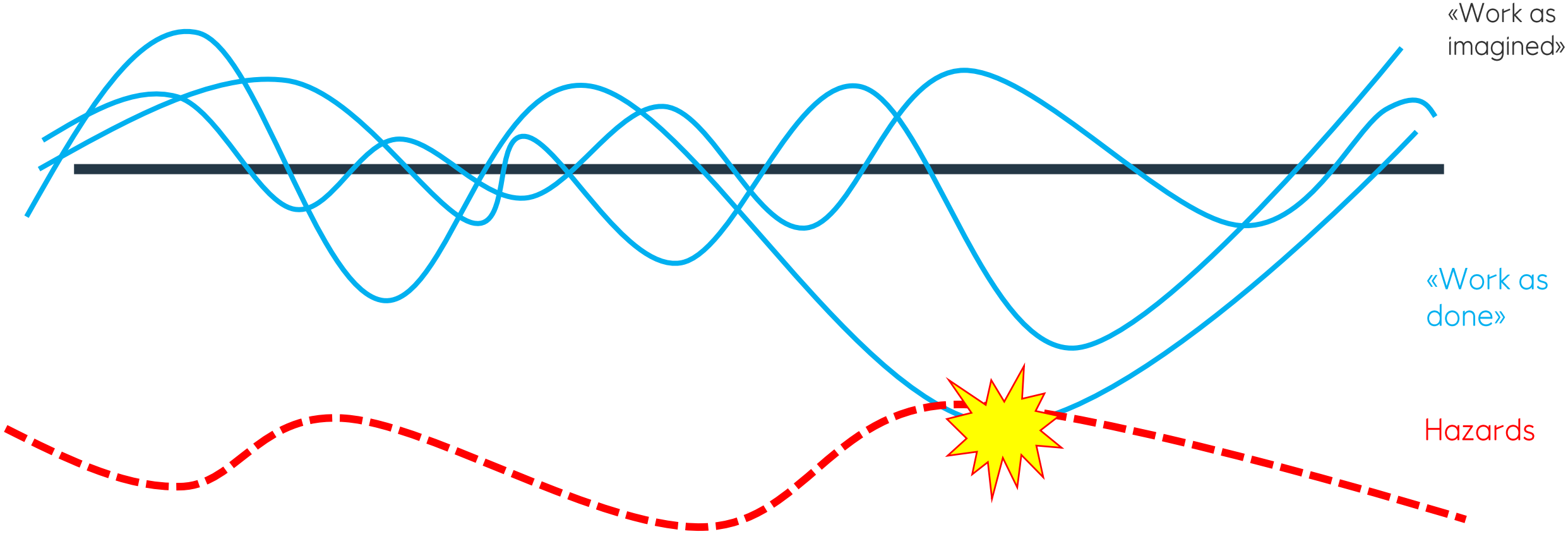
- Not holding the handrail
- Not wearing PPE
- Drunk driving and breaking the speed limit
- Working at height without fall protection
- Walking under a suspended load
- Bringing ignition sources in an Atex classified area

Less so

- Prioriting maintenance, e.g. for degraded barriers,
- Assessing severity of corrosion
- Use of overrides
- Aborting operations due to weather changes
- Handling loss of drilling fluid
- Assessing means of access

No days are the same

«Mastering the blue line»



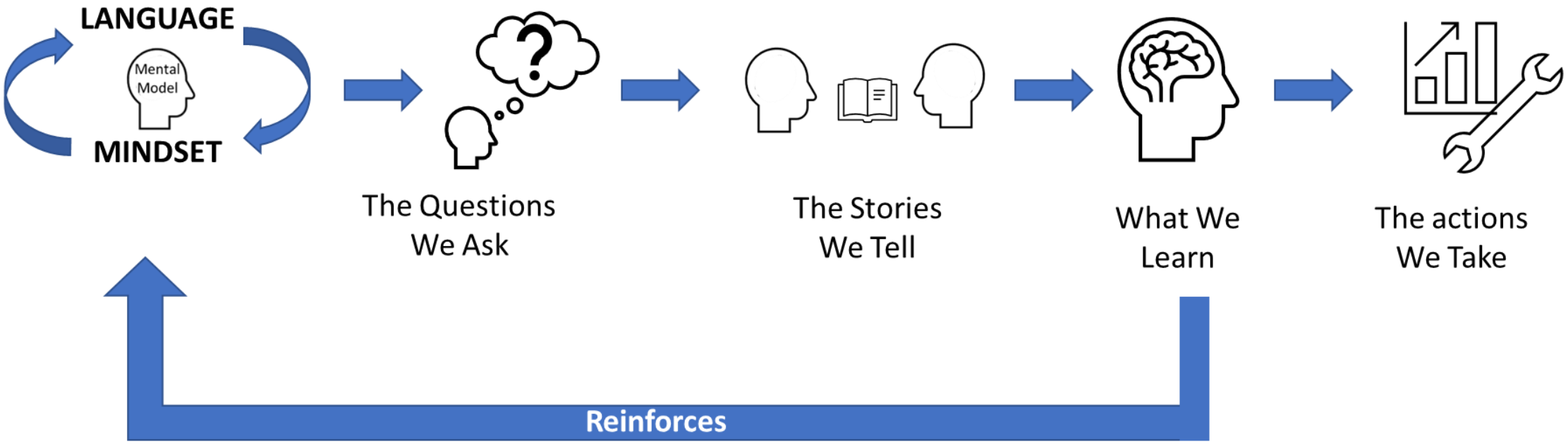

CREATIONS
MILLENIUM FOODS

How is work *really* done?

Five principles

1. Errors are normal
2. Blame fixes nothing
3. Learning is the key to improvement
4. Context shapes behavior
5. Our response to failure matters

Improvement is about the stories we tell



Questions for learning - Understanding what shaped decisions

Individual

Reasoning
- What was the desired goal?
- What was perception of situation?
- How did we imagine the plan would achieve that goal?

Knowledge and Beliefs
- What was known about the situation?
- What was experienced in the past?
- What would the consequences

System

Resources
- What information was provided?
- What time was available?
- Which people were available?
- Which resources helped overcome challenges?

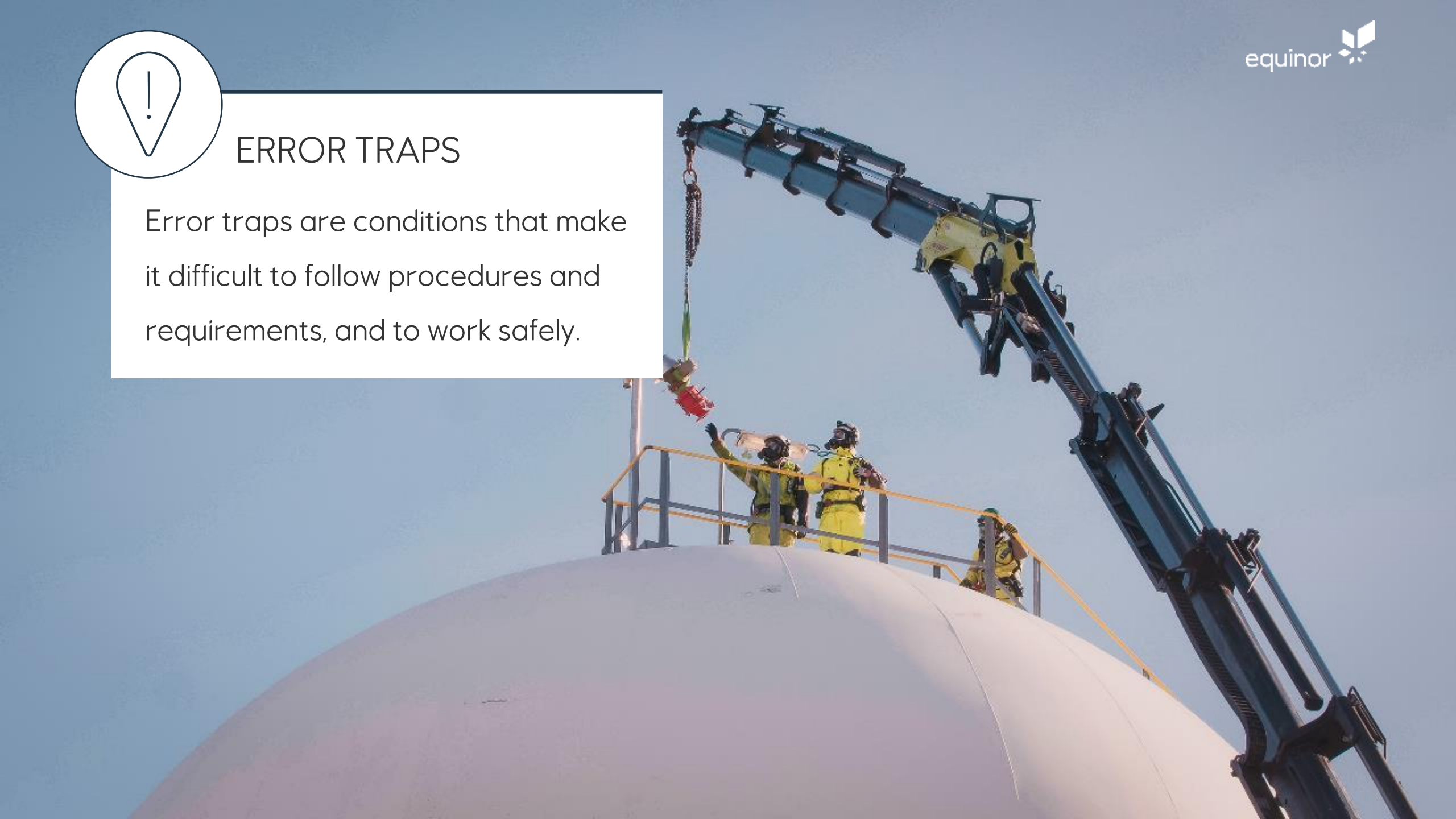
Motivators
- What was the perceived benefit? (Reward)
- What behavior was the rewards system expected to create?(Incentive)

Structure
- What were the relevant requirements, e.g. in contract?
- What role, policies, procedures were relevant?

Expectations
- What was expected? (leader/group/team norms)
- What were recognized practices? (local normal ways of working)

ERROR TRAPS

Error traps are conditions that make it difficult to follow procedures and requirements, and to work safely.



Examples of error traps

Organisational error traps

- Unclear roles and responsibilities
- Task conflicts
- Problems with communication/collaboration
- Staffing and resource management
- Organisation of work (e.g. workload and planning)

Task-based error traps

- Unknown tasks
- Unpredictable tasks
- Complex tasks
- Too little time
- Trivial or repetitive tasks

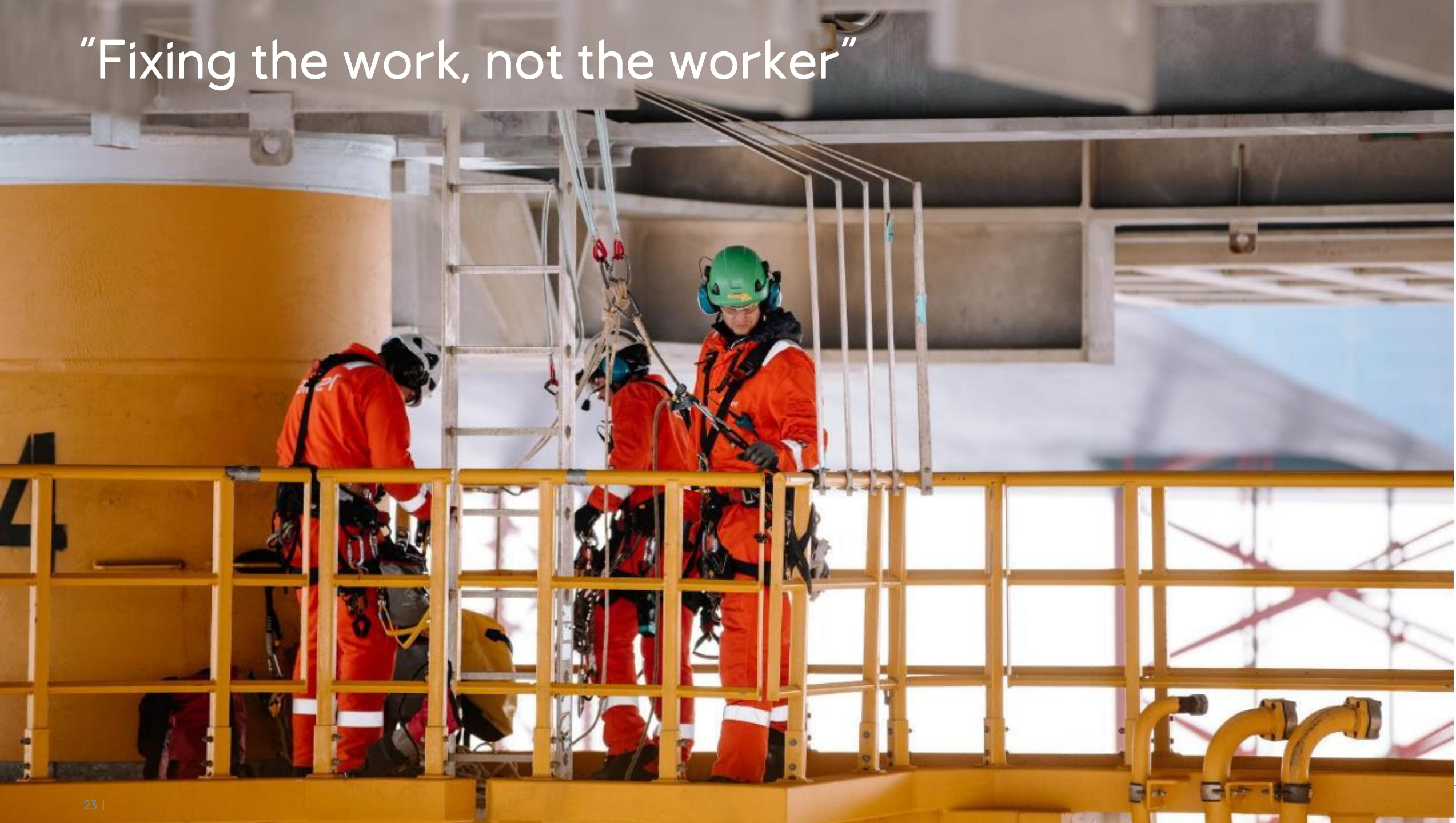
Technical error traps

- Equipment or system failure
- Deficiencies in documentation (e.g. incomplete, outdated)
- Unclear instructions, labelling or signals
- Unsuitable equipment
- Poor access
- Noise, lighting conditions, temperature, air quality

Individual error traps

- Lack of training/competence
- Lack of experience
- Lack of rest
- Health problems
- Stress

“Fixing the work, not the worker”



Summary

- Incidents happen under the same circumstances as successful work
- Variation is normal. Everyone makes mistakes
- Systems are never perfect
- People adapt to situations
- Only those who do the job can tell us how
- Blame stands in the way of learning. Make it safe to speak up
- Those who do the work usually know it best. Use their insights.

Successful work is the goal, not just the prevention of incidents.

Implementation

Part 2

Human and Organisational Performance – A proactive approach to strengthening safety

HOP:

The way people, technology, work processes and organizations interact as a system

"Fixing the work, not the worker"

Key elements

Main drivers

- Plateau in safety performance
- Understanding that compliance and individual commitment alone are not enough to improve
- Major industry trend

HOP principles

- Error is normal
- Blame fixes nothing
- Learning is essential for improvement
- Context drives behavior
- Responses matter

Implementation philosophy

- Use what we already have as basis for improvement
- Local adoption in different parts of the business, based on core principles

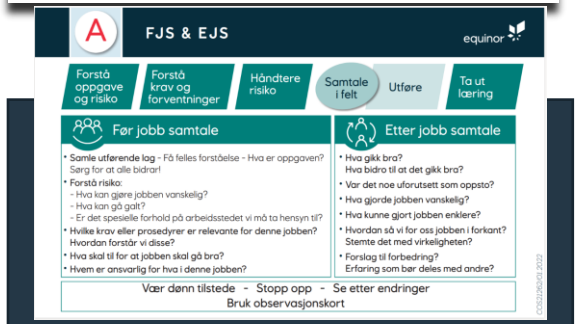
Ongoing implementation activities

Safety learning methodology in Equinor

Pre-incident learning (learning from normal work)

Incident based learning

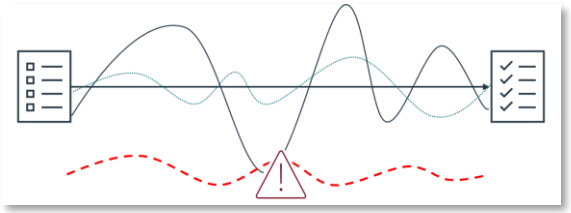
C&L/A-standard



«Running the mill»

Continous

Learning teams



«Deeper insight – into normal work»

On demand

Formal investigation

«Learning from serious incidents»

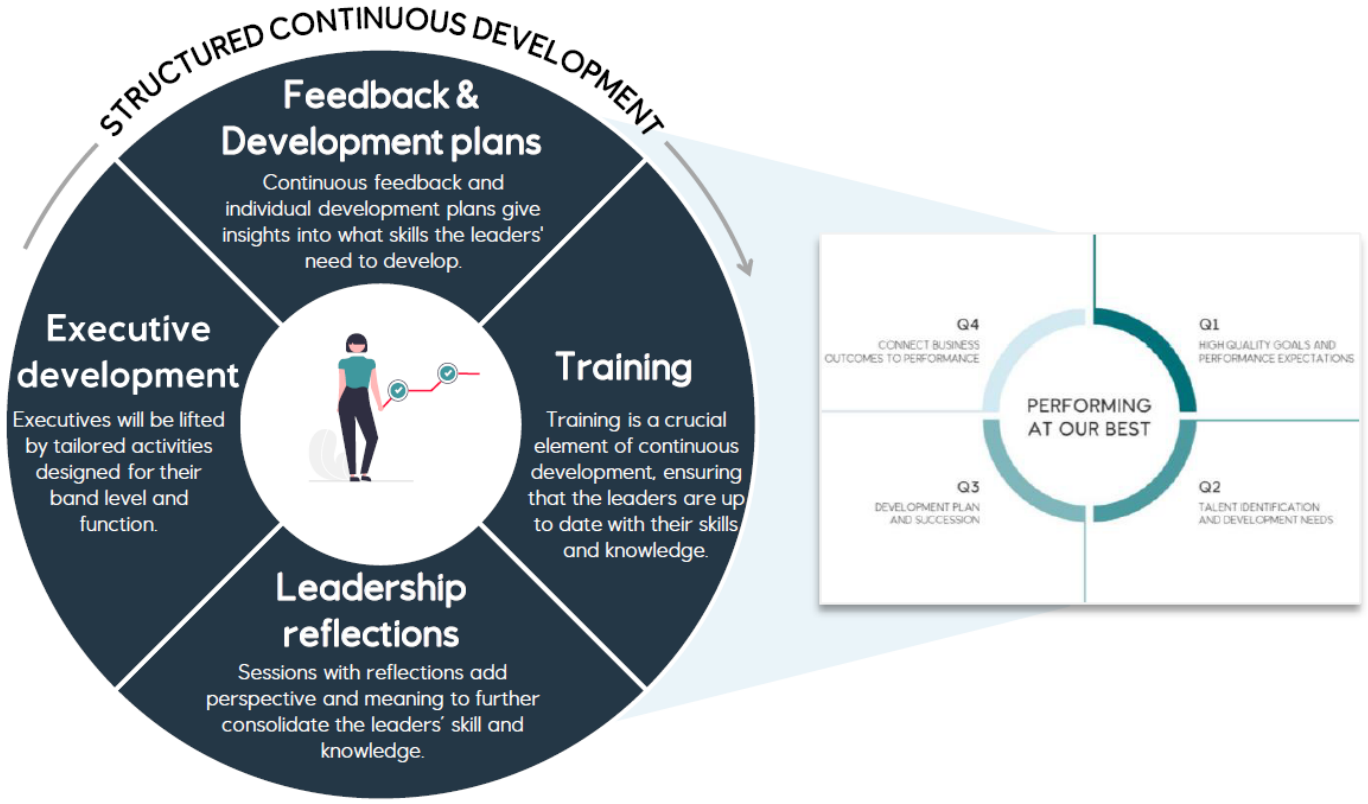
Incident driven/
relatively-frequent

SSU – learning panel

«Institutional learning »

Few - cyclical

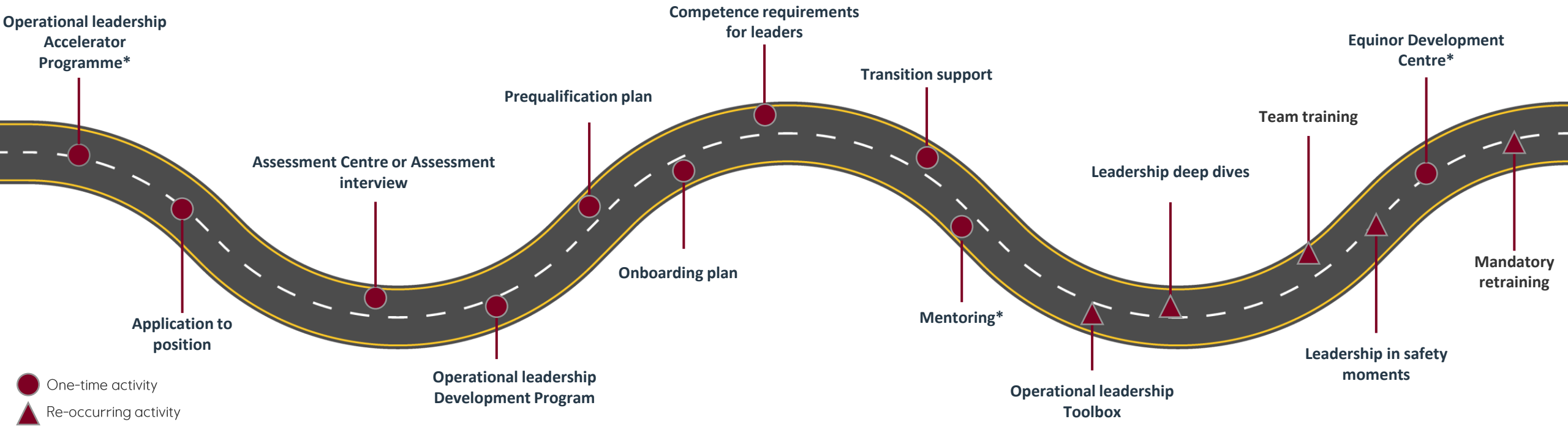
Stepping Up Operational Leadership (SUOL)



SUOL #Step-Up Operational Leadership
- Total overview of initiatives




1. Selection	2. Prequalification	3. Onboarding	4. Continuous development



Continuous feedback and development planning together with line manager in accordance with "Performing at our best"

*Not applicable to all

How to talk so employees will open up?

Questions that close people down

- **Unspoken belief: I know better**

- *"I noticed you used a wrong tool"*
- *"Did you follow this procedure"*
- *"Why did you make this mistake"*

Questions that open people up

Unspoken belief: They know better

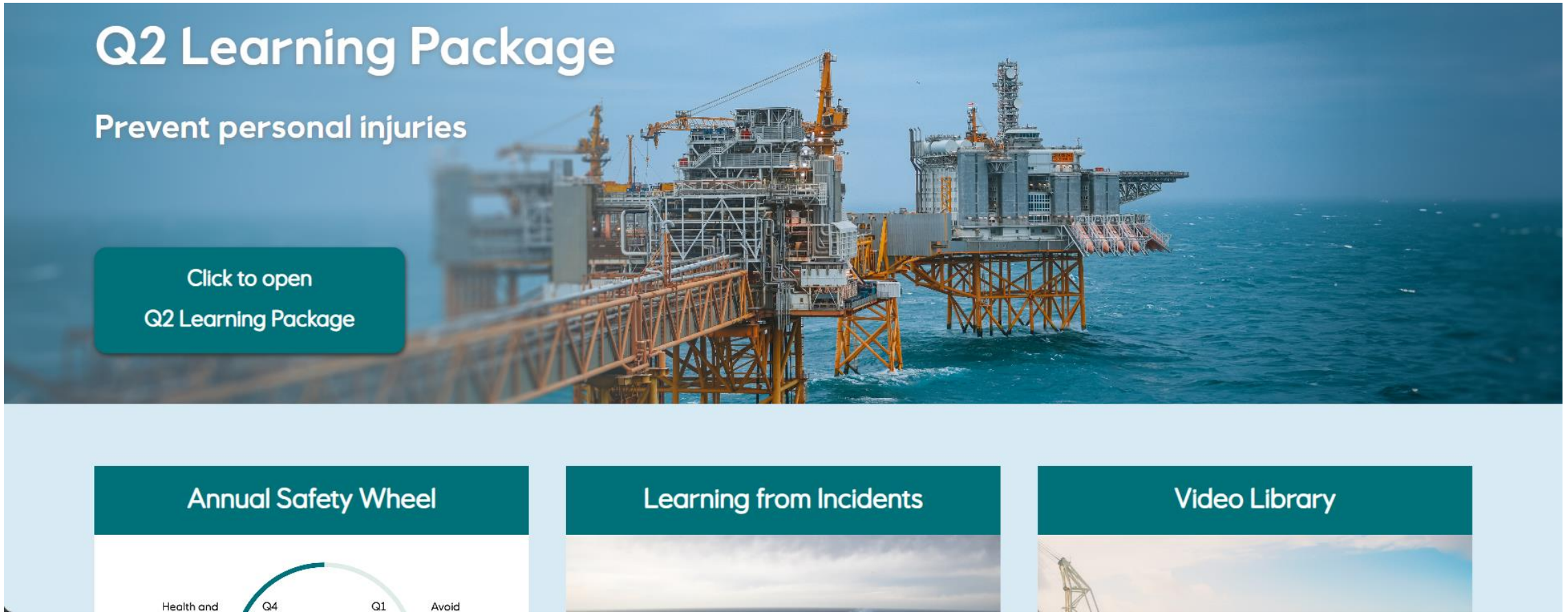
- *"Help me to understand your task"*
- *"What makes this job difficult?"*
- *"How would you improve this process?"*

This simple shift puts people at ease and makes it much easier to reveal what lies beneath.

Industry collaboration

Part 3

alwayssafe.no



Identifying and understanding error traps

Error traps are conditions that make it more difficult to work safely and which increase the likelihood of errors. Many of the challenges that become visible after an incident are also present when things are going well, i.e. during normal work. By identifying and understanding error traps in normal work we can work more safely and prevent incidents.

Organisational error traps:
e.g. unclear roles/responsibilities, goal conflicts, issues with communication/collaboration etc.

Task-related error traps:
e.g. unknown, unpredictable or complex tasks, too little time etc.

Technical error traps:
e.g. equipment or system failure, inadequate documentation, unsuitable tools, poor access etc.

Individual error traps:
e.g. lack of training or experience, lack of rest, etc.

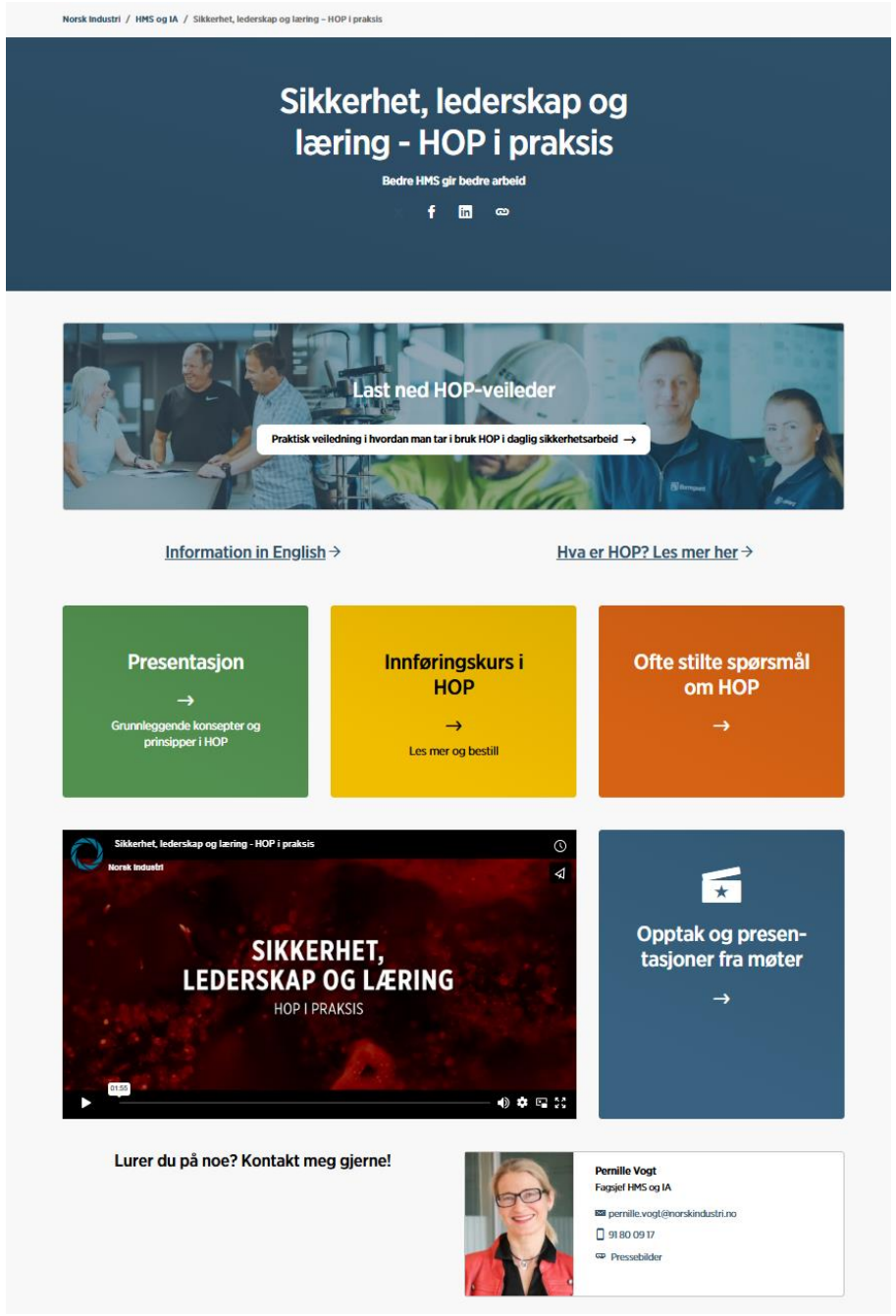
equinor

How to identify and understand error traps?

To identify and understand error traps we have to talk about the job, ask each other good questions and observe the work in the field.

Examples of questions to ask:

- What experiences do we have with this type of job from previous work?
- What are common challenges in this type of job?
- Are the requirements for the job easy to comply with? (If not: Why?)
- Is there anything about the job that is new, unknown or unpredictable?
- Is there a particual part of the job where it may be easy to make mistakes?


Norsk Industri / HMS og IA / Sikkerhet, lederskap og læring – HOP i praksis
Sikkerhet, lederskap og læring - HOP i praksis
Bedre HMS gir bedre arbeid
Last ned HOP-veileder
Praktisk veiledning i hvordan man tar i bruk HOP i daglig sikkerhetsarbeid →
Information in English →
Hva er HOP? Les mer her →
Presentasjon
→
Grunnleggende konsepter og prinsipper i HOP
Innføringskurs i HOP
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Les mer og bestill
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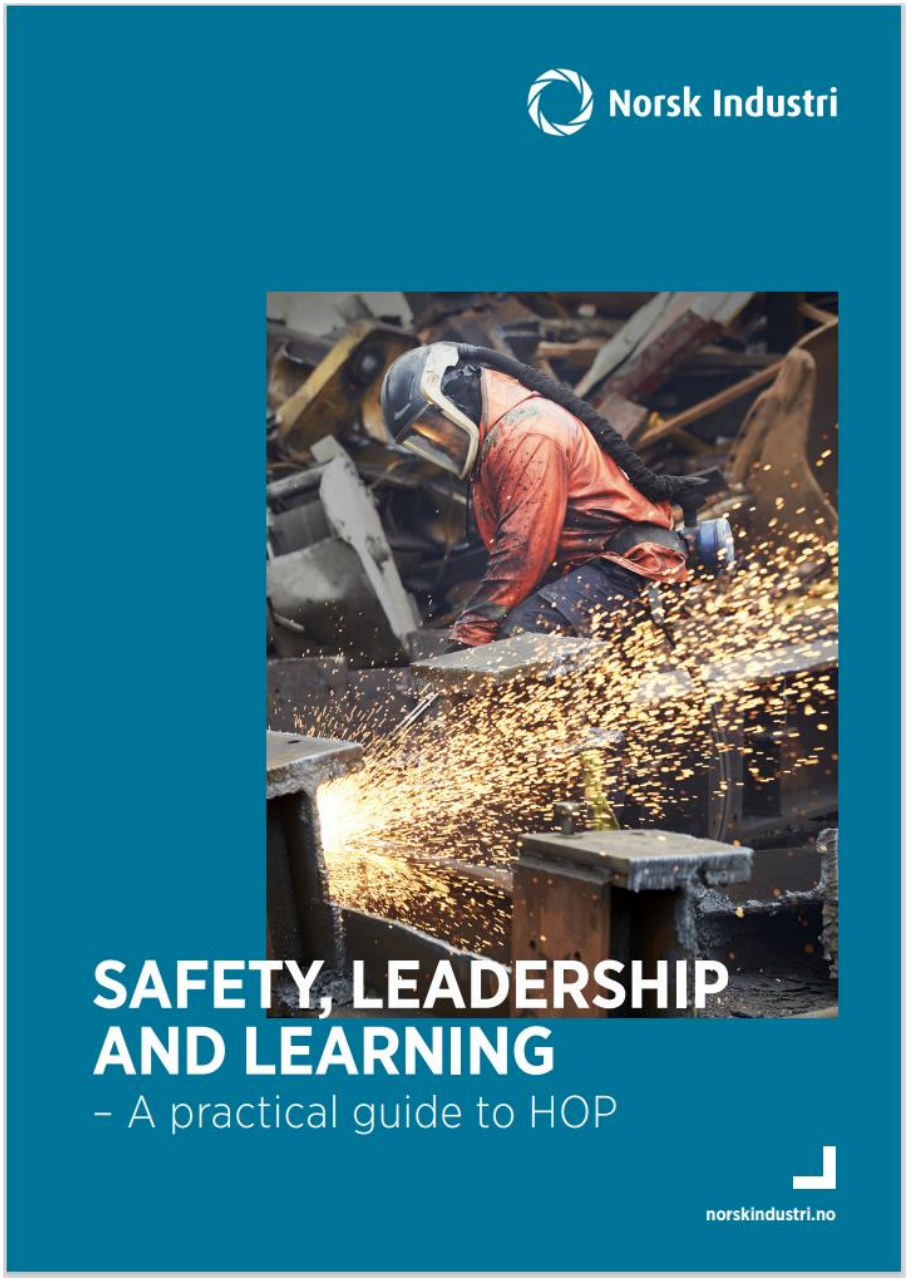
Norsk Industri
SAFETY, LEADERSHIP AND LEARNING
– A practical guide to HOP
norskindustri.no


Improvement starts with curiosity


Thank you!

References and further reading/viewing

References

https://www.norskindustri.no/hms-og-ia/human-organisational-performance-hop/safety-leadership-and-learning--a-practical-guide-to-hop/

Conklin, T. (2019). *The 5 Principles of Human Performance: A contemporary update of the building blocks of Human Performance for the new view of safety*. Pre-Accident Investigation Media.

Conklin, T. (2019). *Pre-accident investigations: An introduction to organizational safety*. CRC Press.

Dekker, S. (2017). *The field guide to understanding 'human error'*. CRC press.

Provan, D. (2022). *A Field Guide to Safety Professional Practice*. Safety Futures

Videos (can also be used as safety moments)

https://youtu.be/LdNLewce_F4
EN: https://youtu.be/QvrStnUxBGE

Human performance - what does it mean? | Toolbox (energyinst.org) (From BP)

Being human | Toolbox (energyinst.org) (From Shell)

The modern view of incident causation | Toolbox (energyinst.org)

Other useful information

Human Performance Oil & Gas › HPOG Human Performance Oil & Gas

Are you implementing Human Factors / Human Performance as per the industry guidance? HF / HP per Industry Guidance (spehfts.org)

Human and Organizational Performance | HOP Hub

Fundamentals of Human and Organizational Performance

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