



G+ Global Offshore Wind
Health & Safety
Organisation

STAKEHOLDER FORUM 2025

25th September

Oakwood Premier Hotel, Incheon, South Korea

In partnership with
energy
institute



WELCOME

25th September

Oakwood Premier Hotel, Incheon, South Korea

Welcome Remarks

Lisbeth Norup Frømling

G+ Chairperson /
Vice President of QHSE,
Ørsted



25th September

Oakwood Premier Hotel, Incheon, South Korea

Global Overview

Giles Mackey

G+ Vice Chairperson /
Head of Health,
Safety & Sustainability, JERA
Nex bp





G+ OVERVIEW

GILES MACKEY



WHY HEALTH AND SAFETY?

The Korea Herald

Worker found dead in fall from ship at Nakwol offshore wind project

Published : Sept. 3, 2025 - 17:14:27

GERMANY

Diver killed on Riffgat offshore wind farm

15 July 2013 by James Quilter, Be the first to comment

GERMANY: A diver has been killed during the construction of EWE and Enova's 108MW Riffgat wind farm in the German North Sea.



It is the third death of a diver on a German offshore wind farm since 2010.



Fluor, Siemens sentenced to pay £650k after Gabbard fatality

Health and Safety Executive case brought following 2010 accident



02/10/2015



THE SANKEI SHIMBUN

トップ 速報 ランキング 政治 国際 社会 経済 スポーツ エンタメ ライフ オピニオン イベント

事件・疑惑 事故・火災 地震・災害 裁判 訃報

Safety Alert Issued on Accident

海底の地盤調査中に船から転落、男性作業員死亡 長崎・西海

2025/4/9 16:37

✕ ポスト ✕ 反応 f 記事を保存

社会 | 事故・火災



and his recovery will take a considerable amount c



9日午前10時20分ごろ、長崎県西海市の江島周辺海域で、海底の地盤調査中に作業員が船から転落したと通報があった。佐世保海上保安部によると、転落したのは福岡市の会社員、柴田秀人さん（70）で、搬送先の病院で死亡が確認された。

船は当時、別の運搬船を曳航（えいこう）中だったという。海保は、柴田さんが船同士をつなぐロー

Who are the members of G+?

Our member relationships are central to what we do. Collaboration within our community and shared data contributes to more frontline offshore wind workers getting home safely.

Members



Associate Members





GOVERNANCE AND STRUCTURE

G+ Board

- Primary review & decision making
- Demonstrate visible leadership
- To reach key decisions and agreements
- Decide on strategic direction

G+ Focal Groups

- Actions to improve H&S performance
- Share information and data
- Develop learning's from incidents
- Run work programme to develop industry guidance on safety
- Support the Board to demonstrate leadership

Energy Institute

- Provides the Secretariat

BOARD OF DIRECTORS

Ørsted



**Lisbeth Norup
Frømling**



Giles Mackey



Beate Myking



**Pierre-Emmanuel
Guillot**



**Graeme
Paterson**



Karin Borg



Natalia Planillo



**Richard
Pargeter**



**Nicolas
Wawresky**



**Pavlo
Malyshenko**



**Tyrone
Singleton**



**Michelle
Ruane**



Rachel Porto

AGM

EI G+ Secretariat

**G+ Focal Group
US**

**G+ Focal Group
Europe**

**G+ Focal Group
APAC**

G+ SECRETARIAT

Kate Harvey
General Manager



Martin Maeso
EI lead & Co Secretary



The G+ team



Beate Hildenbrand
Head of Americas



Mariana Carvalho
Technical Manager



Mubi Kim
APAC Technical Manager



Edwin Sheppard
Technical Manager - Data



Emma Mills
Technical Officer



Caren Hsiao
APAC Representative



Liam Austin
Technical Officer

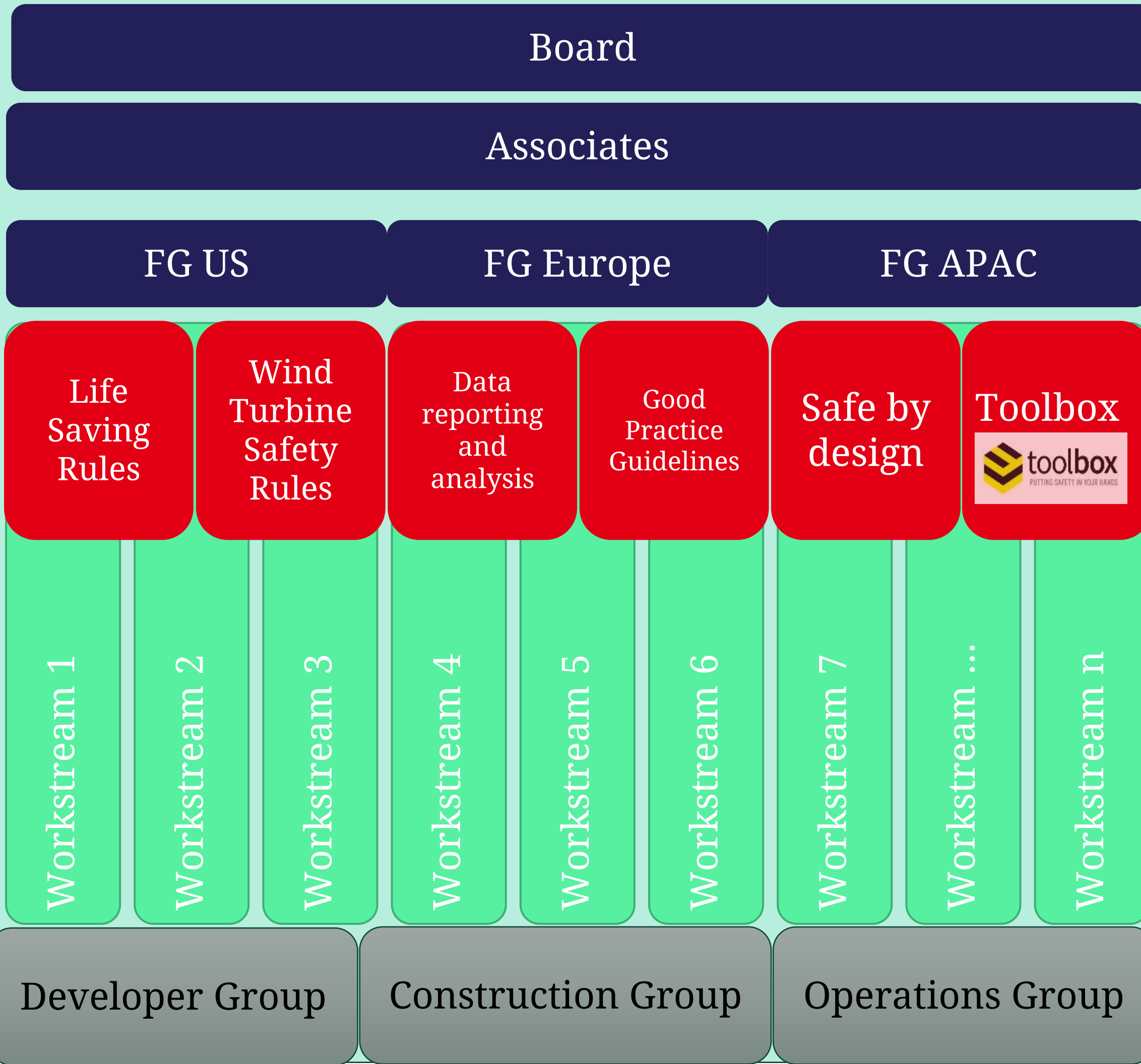


Olivia Burton
Technical Officer



Supported by





- G+ Secretariat
- Kate Harvey
General Manager
 - Martin Maeso
Secretary
 - Bea Hildenbrand
Head of the Americas
 - Mariana Carvalho
Technical Manager
 - Edwin Sheppard
Data Manager
 - Olivia Burton
Technical Officer
 - Liam Austin
Technical Officer
 - Caren Hsiao
APAC Representative
 - Mubi Kim
APAC Technical Manager



Wider Stakeholders



Unlocking the power of data

G+ member data is analysed and shared through six main programmes to give a holistic view of health and safety performance and measurable proof of improvements and performance.



Incident data reports

- Understanding of offshore wind industry risk profile
- Evidence base to inform interventions
- Accurate assessment of industry H&S performance
- Tool for comparison of H&S performance against other comparable industries



Good practice guidelines

- Recommendations for procedures, controls, ways of working at offshore wind farms
- Minimum standard expected for meeting industry H&S expectations
- G+ members self check compliance against GPG content
- Referenced in site and company corporate documents



Safe by Design programme

- Examine the current design controls relating to the topic, discuss where current design has potentially failed, and identify potential opportunities for improvement
- Outputs published and used as a reference by the industry
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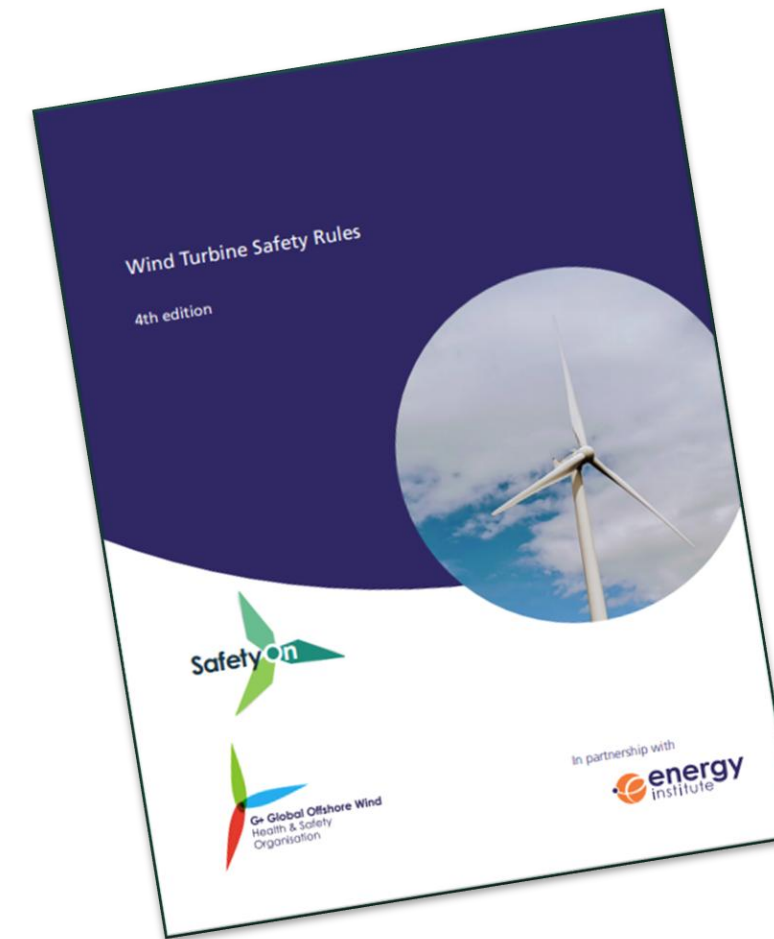
Unlocking the power of data



Sharing incident learnings

- Incident learnings to be shared through Toolbox
- Toolbox is an EI web-based app
- Is accessible to all, anywhere, any place, any time

<https://toolbox.energyinst.org/>



Wind Turbine Safety Rules (WTSR)

- Help formalise a Safe System of Work (SSoW)
- Onshore and offshore
 - Developed in collaboration with SafetyOn
- Safeguards persons from the mechanical plant and LV apparatus and the associated system derived hazards.

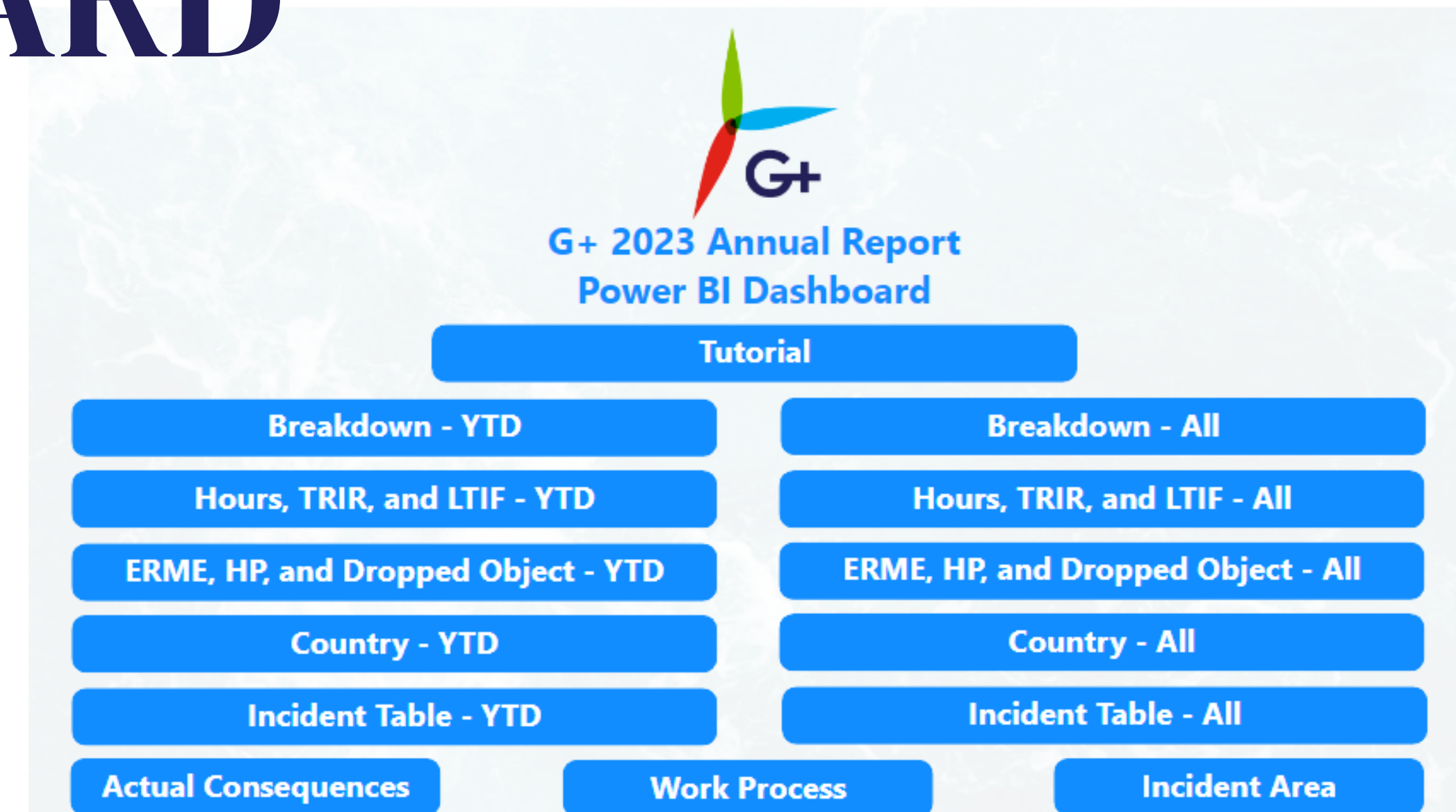


Life Saving Rules (LSR)

- Clear and simple statements to follow, most relevant for offshore wind
- Supports those new to the industry.
- Easy to align with contractual requirements, representing a common denominator
- Includes full implementation starter pack – slides, posters guide, question set and translations.

G+ POWER BI DASHBOARD

- Our new and improved Power BI dashboard is live: <https://www.gplusoffshorewind.com/work-programme/workstreams/statistics>
- Data can be filtered, and graphs show patterns over time
- Presents all our incidents between 2014 to 2023



GOOD PRACTICE GUIDELINES

Current G+ GPGs (*see the G+ website for translations*)

Arc flash labelling

Contractor engagement and behavioural safety in onshore civils
(w/SafetyOn)

DROPS Reliable securing
(w/SafetyOn)

Emergency Response (IOER)

Floating OW HAZID

Helicopter Operations Section A
Section B

Improving compliance workshop: basic lifting operations

Offshore wind farm transfer

Reducing manual handling / ergonomics incidents

Safe by Design implementation guide

Safe management of small service vessels

Steel fabrication

Unmanned Aircraft Systems (UASs)

Working at height



SAFE BY DESIGN PROGRAMME

Current G+ Safe by Design Workshop reports

Blades access/
repair

Davit cranes

Escape from nacelle
(fire)

Floating Offshore
Wind

Hydraulic torqueing
and tensioning
systems

Marine transfer and
access

Material handling
equipment

Walk-to-Work *(w/IMCA)*

WTG access and
egress

WTG access to the
TP (below airtight
deck)

WTG service lifts

WTG service lifts –
follow-up

WTSR AND WIDER RESEARCH

Wind Turbine Safety Rules (4th edn | w/ SafetyOn)

Workshops report: Electrical safe system of work (w/ SafetyOn)

Ladder climbing research

Examining the impact of floating wind turbines on the human operator: A scoping review

Human-Free Offshore Lifting Solutions



Lifesaving Rules – protecting everyone, everywhere in offshore wind

Working Responsibly



Always ensure the required plans and permits are in place before you start a job



Always use tools and equipment that are fit for the intended purpose



Never undertake any job unless you have been trained and assessed as competent



Never work, or operate vehicles or machinery, while under the influence of drugs or alcohol

Working with Electricity



Always verify isolation and zero energy before work begins

Working at Height



Always use fall protection when working at height

Out of harms way



Always secure tools, loose materials and equipment to prevent them from falling



Never place yourself under a suspended load during lifting



Always adhere to barriers and exclusion zones

Transfer Operations



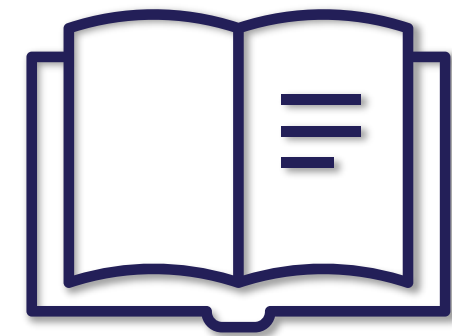
Only transfer from a vessel when you are ready, and permission is provided

Not just a set of rules

1 Set of Life Saving Rules



2 Implementation guidance for companies



*Start safe,
stop if unsure*

3 Slide packs



4 Support the front-line



Ask yourself, your team, your supervisor

5 Launch and communication



Translations include:
Korean, Chinese,
Japanese, German,
and Spanish,

6 Monitor and improve



Collecting data, understanding the impact and improving as needed by the industry

G+ CURRENT WORK PROGRAMME

OW 2502	Incident data reporting	OW 2407	Severe weather preparedness <i>inc. Heat stress</i>
OW 2504	Safety alerts and sharing information – Toolbox	OW 2411	Gap analysis on Korean Medical screening and OEUK
OW 2208	Manual handling – video campaign	OW 2413	Vessel/WTG interaction
OW 2209	Lifting framework	OW 2312	SMS arrangements for OW across life cycle
OW 2406	Welfare	OW 2405	Floating OW
OW 2412	Implementation of GPGs	OW 2408	Surveying buoys
	Wind Turbine Safety Rules	OW 2510	Walk-to-Work
OW 2501	Internationalisation Korea Stakeholder Forum	OW 2505	Safe by Design
OW 2311	Safe System of Work (SSOW) electrical safety	OW 2507	OW Fabrication Safety Collaboration Forum
OW 2210	Marine coordination	OW 2508	Physical capacity assessment
OW 2310	Vessel Safety Guide		



EI TECH MEMBERSHIP

The EI promotes and advances knowledge, skills and good practice in energy for society's benefit

[EI Publishing website](#) hosts technical guidance documents, research papers and standards to support the energy industry

G+ Members can access these technical committees:

- Ageing and life extension
- Carbon capture and storage
- Corrosion management/asset integrity
- Environmental protection
- Fuels distribution
- Health, human and organisational performance
- Learning from incidents
- Hydrocarbon management
- Hydrogen
- Offshore wind
- Onshore wind
- Process safety
- Test methods standardization

AMEI



If you work for a company which holds corporate membership with the EI, you will be eligible for complimentary individual membership as an **Associate Member (AMEI)**

Why join?

Unlock your Associate Member benefits

- Use of AMEI post nominals
- Access to *EI Connect* mentoring platform
- Free and discounted training via *EI Academy*
- *Energy Futures* newsletter and other member updates
- Weekly digital magazine, *New Energy World*
- Free, confidential advice via *EI Assist*
- Support to help you progress to professional membership and chartered status





HOW TO SIGN UP



- 1) Check if your company is a member of the EI [here](#)
- 2) If yes, register for your own online account [here](#) and make sure you use your **company email address**
- 3) After email verification, follow the steps to join as an **Associate Member (AMEI)** [here](#)
- 4) You're in! Spread the word to your colleagues and make the most of your membership

Need a bit of help? Contact us at companies@energyinst.org

25th September

Oakwood Premier Hotel, Incheon, South Korea

Session 1

What the data tells us
G+ Data Workstream

Elena Caja Martin

Sustainability and ESG
Director, Ocean Winds





THE G+ INCIDENT DATABASE AND DATA PROGRAMME

Elena Caja Martin

Unlocking the power of data

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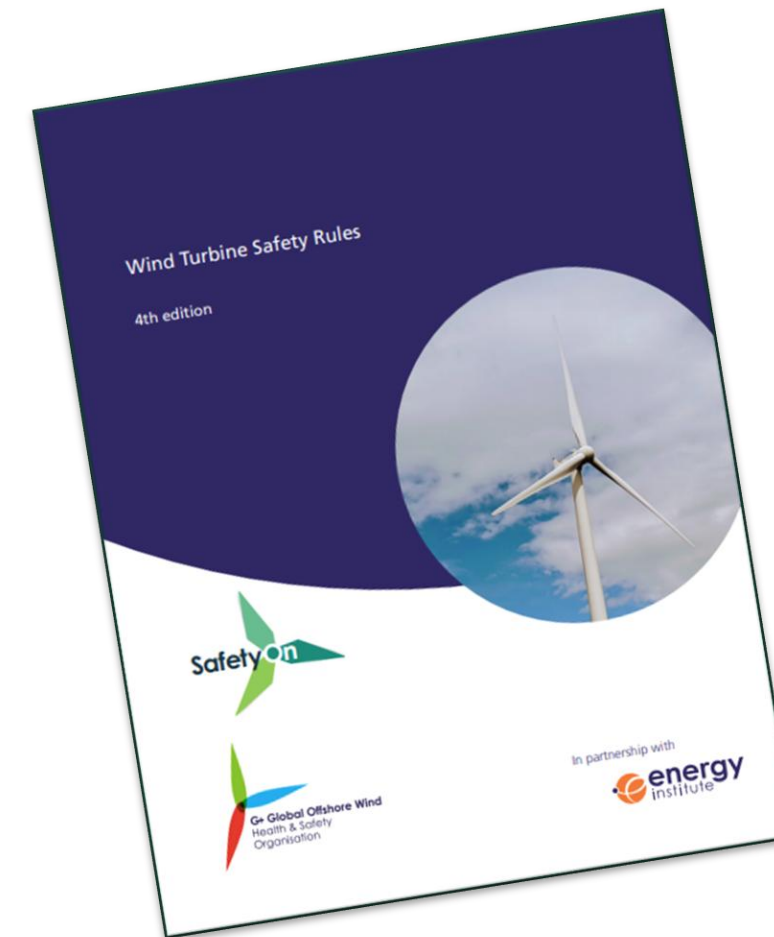
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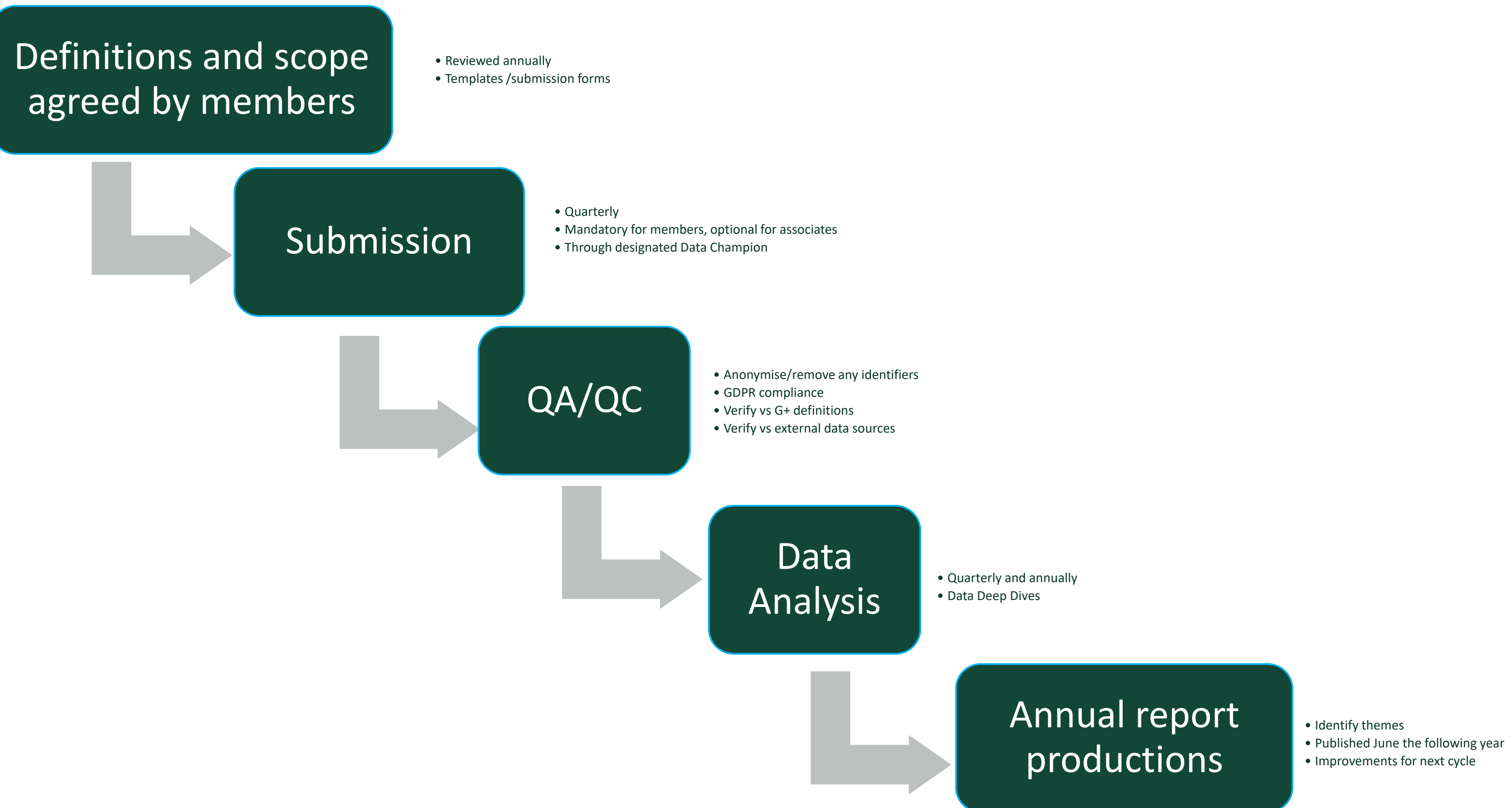
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ANNUAL CYCLE FOR INCIDENT DATA REPORTING



WHAT WE COLLECT

FIGURES FROM 2024 DATA REPORT

Facts							General classification				Consequence				ERME Incident?
Reference number	Date	Originator (Company)	Site	Country	Site type	Description – how it happened, where, what activity was the IP doing, consequence	Incident area	Work process	Loss of hazardous liquids	Dropped Object incident?	Actual consequence	High Potential Incident?	Body Part Injured	Nature of Injury	Did incident result in an Emergency Response or a Medical Evacuation?

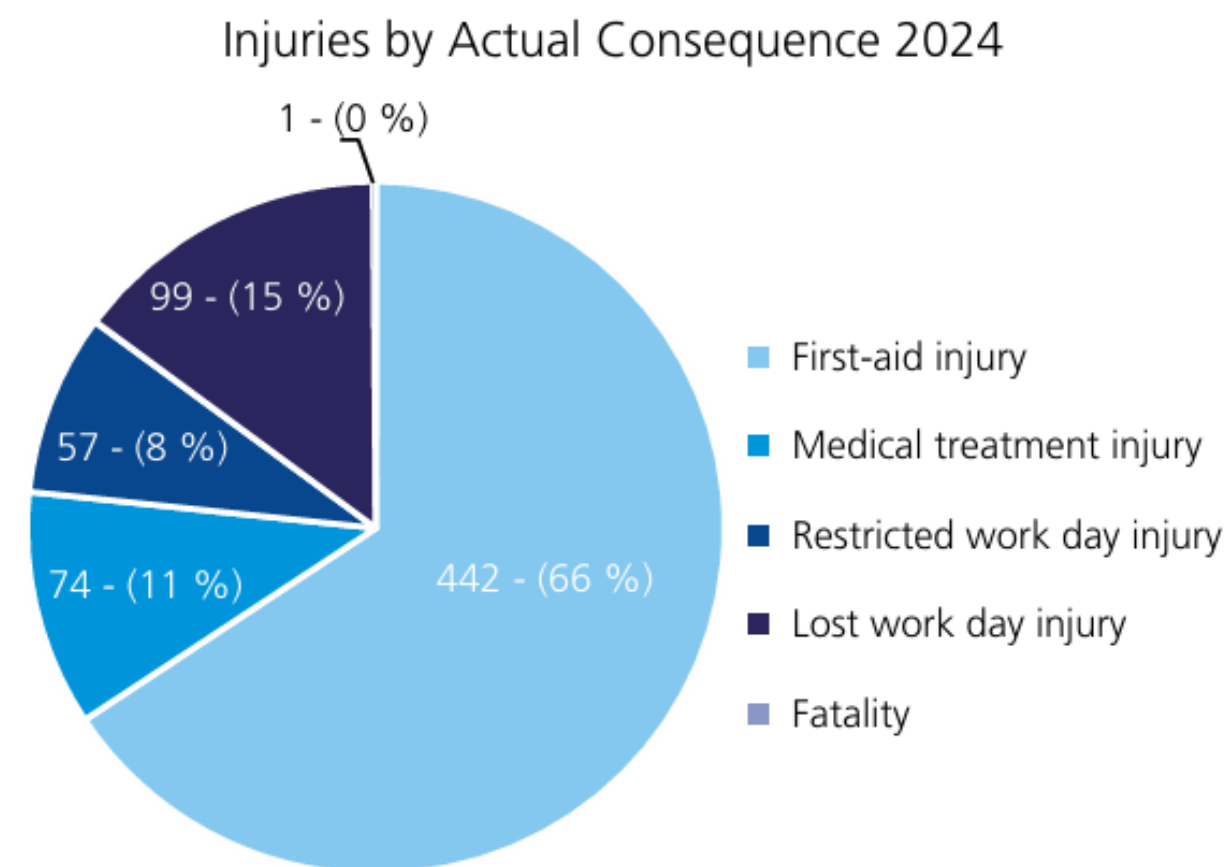


Figure 3: Incidents that resulted in an injury, by actual consequence (2024)

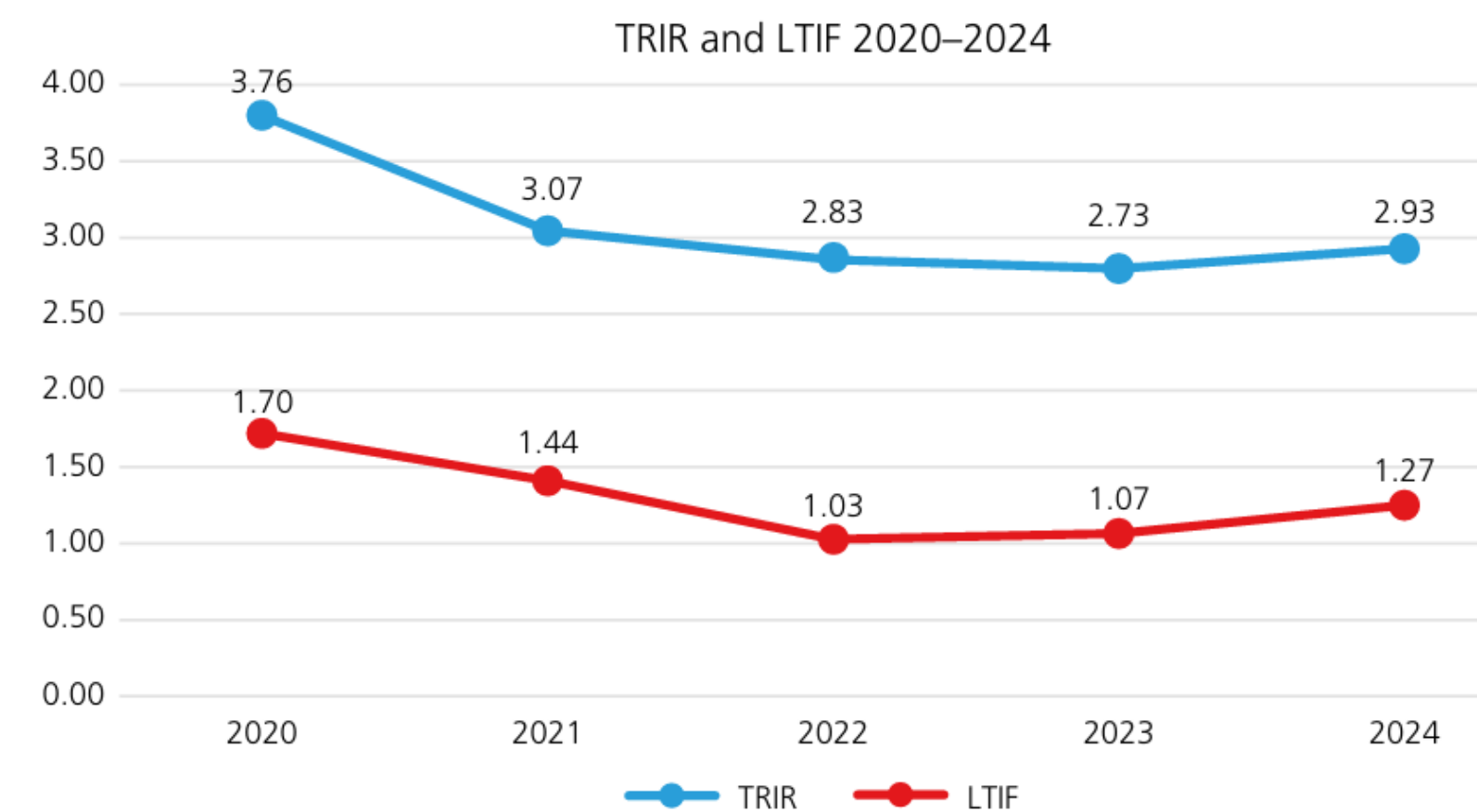
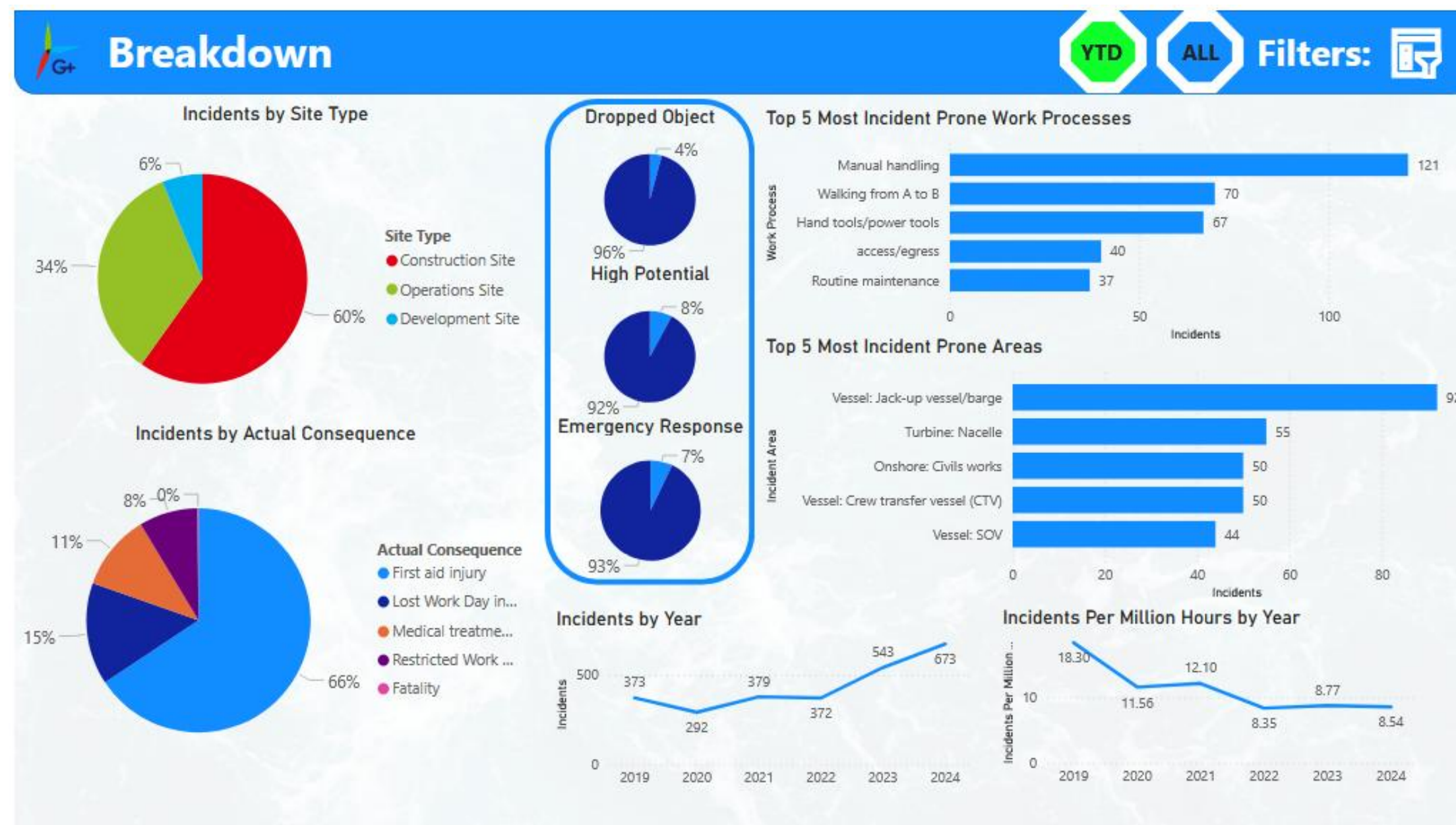


Figure 2: TRIR and LTIF, 2020-2024

HOW CAN YOU ACCESS IT?

<https://www.gplusoffshorewind.com/work-programme/workstreams/statistics>



EI 3591
**G+ Global Offshore Wind
 Health and Safety Organisation**
 2024 incident data report



In partnership with

G+ Global Offshore Wind
 Health & Safety
 Organisation

**energy
 institute**

www.gplusoffshorewind.com



THE POWER OF AN INDUSTRY DATABASE?

Find the patterns that aren't visible in smaller datasets

Better expect the unexpected

Learn together, learn faster

2024 KEY FACTS AND FIGURES



78.8 million workhours

673 injuries, of which:



1 fatality



57 Restricted work day cases



99 Lost work day cases



74 Medical treatment cases



442 First aid cases

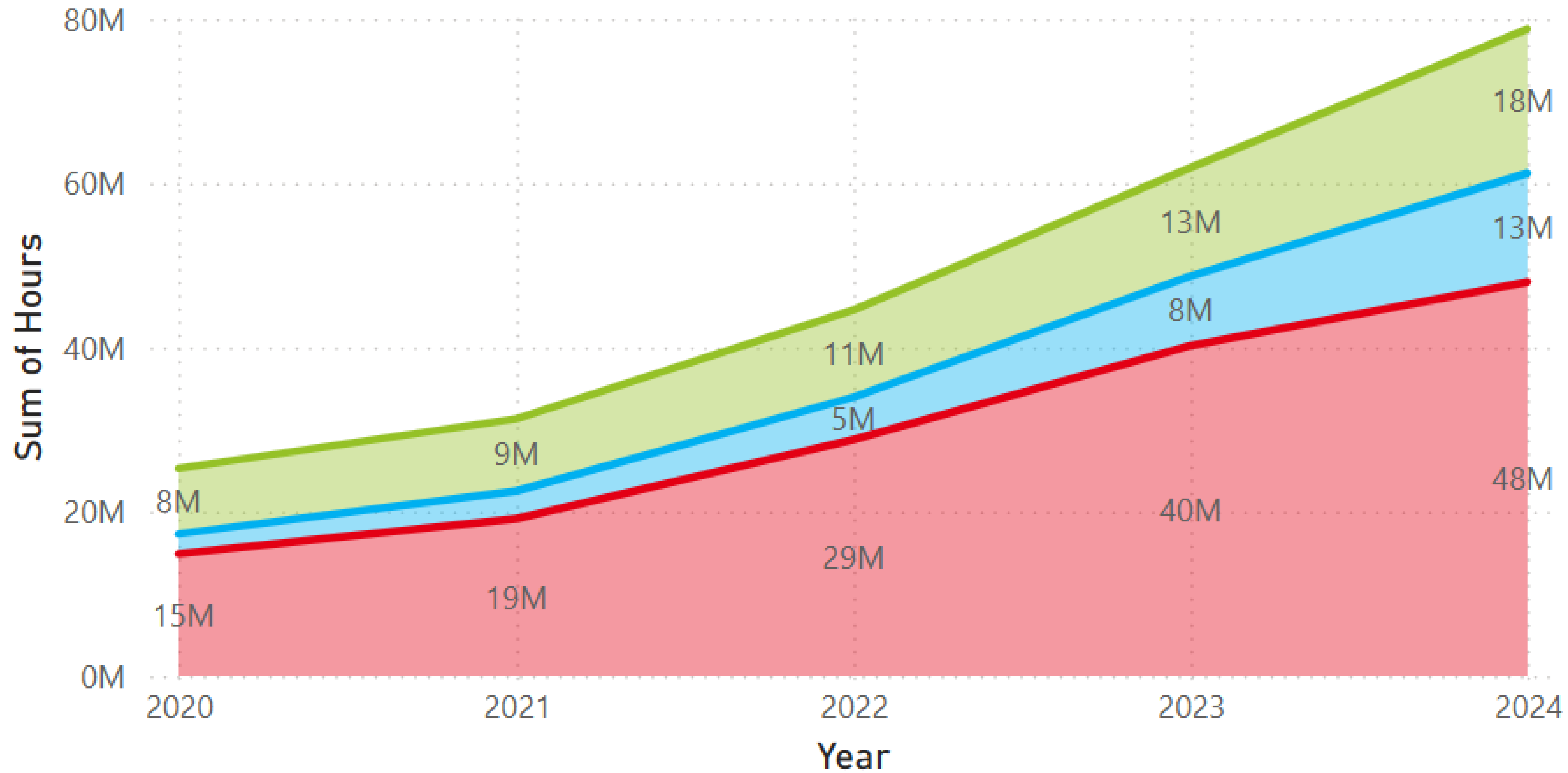


498 Hazards and 421 Near-misses reported

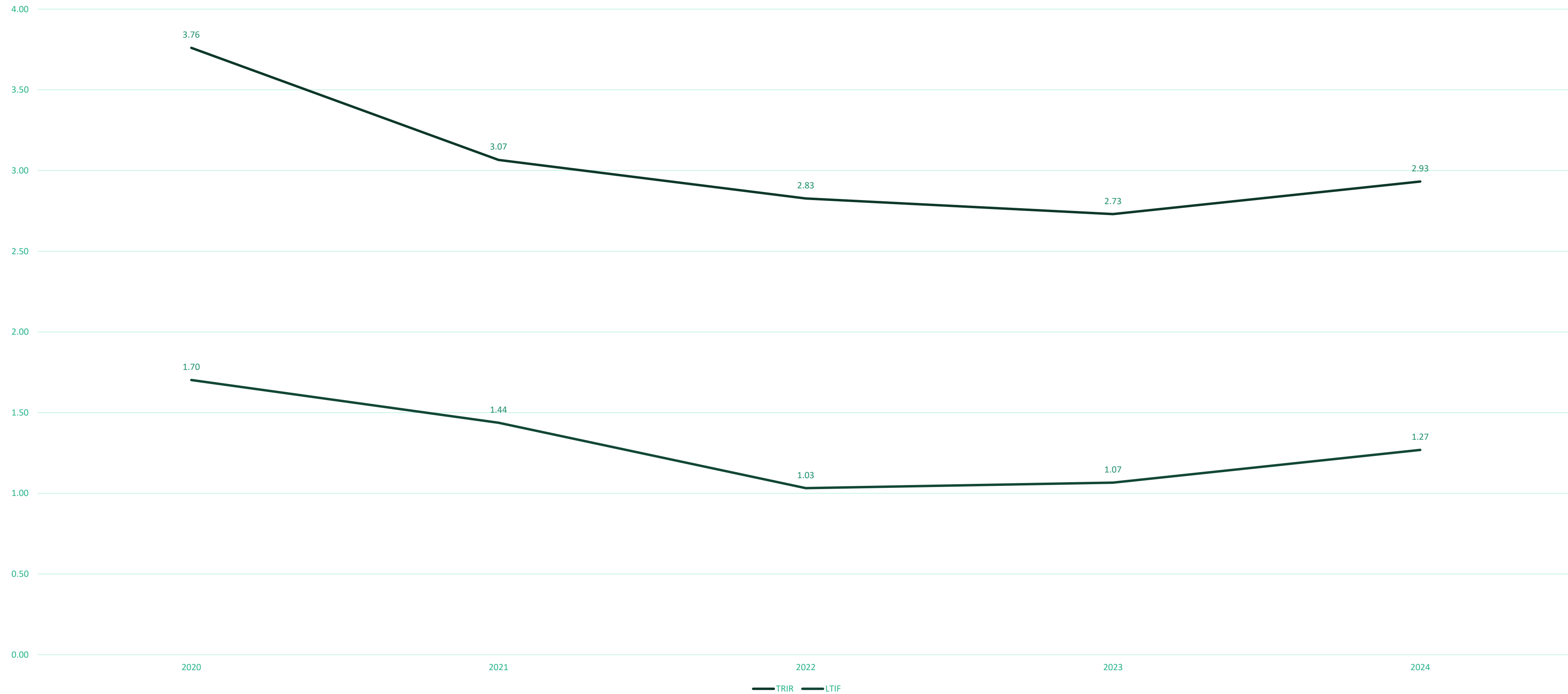
MILLION HOURS WORKED BY SITE TYPE 2020 TO 2024

Sum of Hours by Year and Site Type

Site Type ● Construction Site ● Development Site ● Operations Site



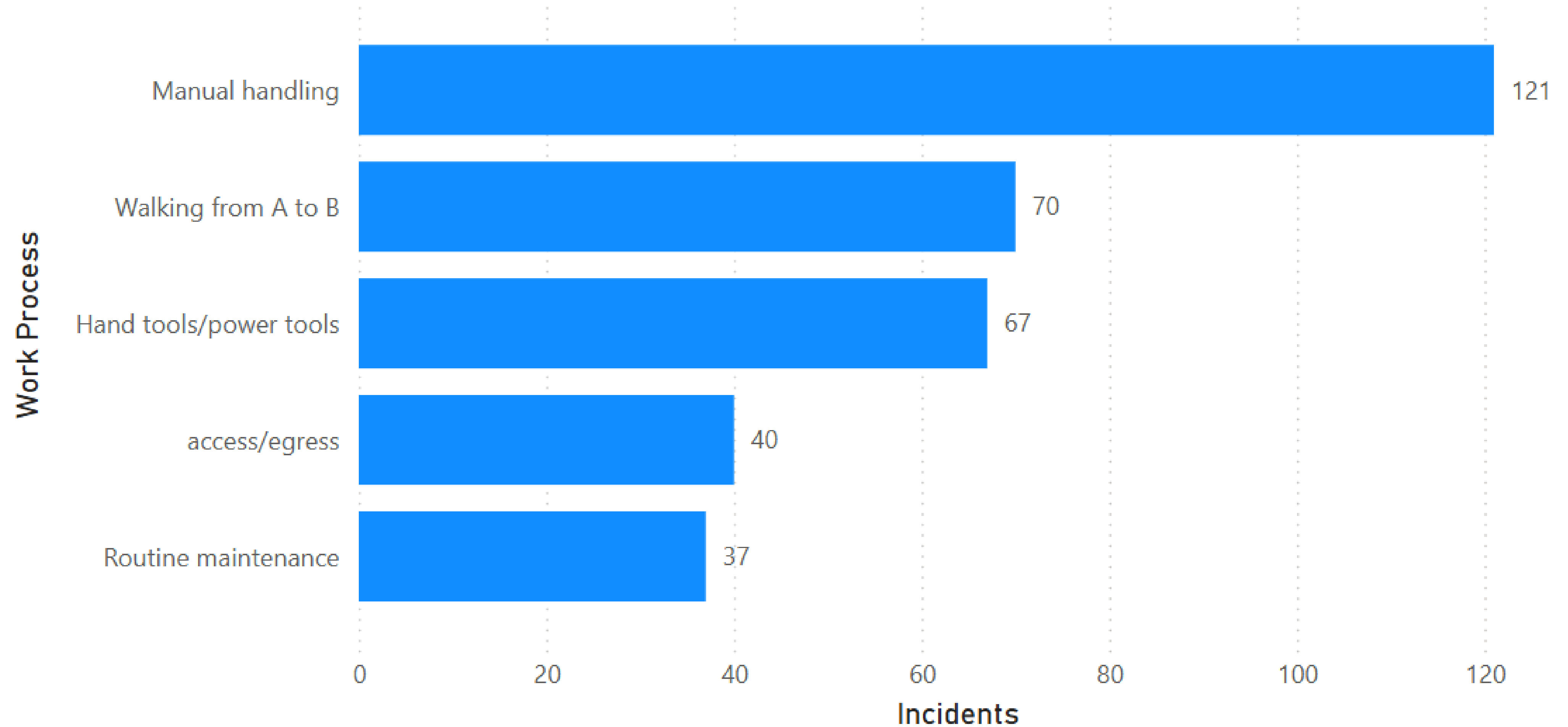
Annual TRIR & LTIF 2020 to 2024



Over 2024, TRIR saw an increase of 7%, while LTIF saw an increase of 19%

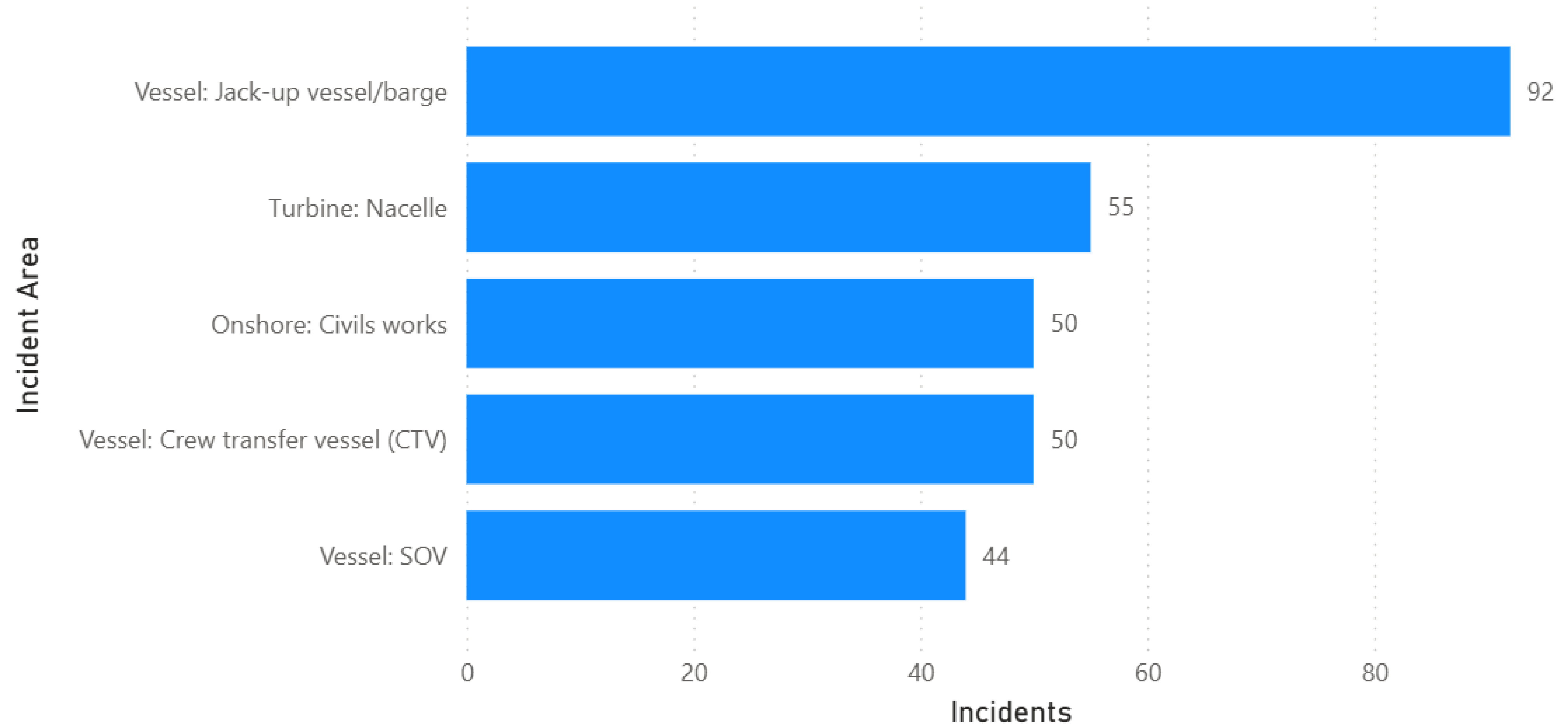
Top 5 Work Processes over 2024

2024 Injuries by Work Process



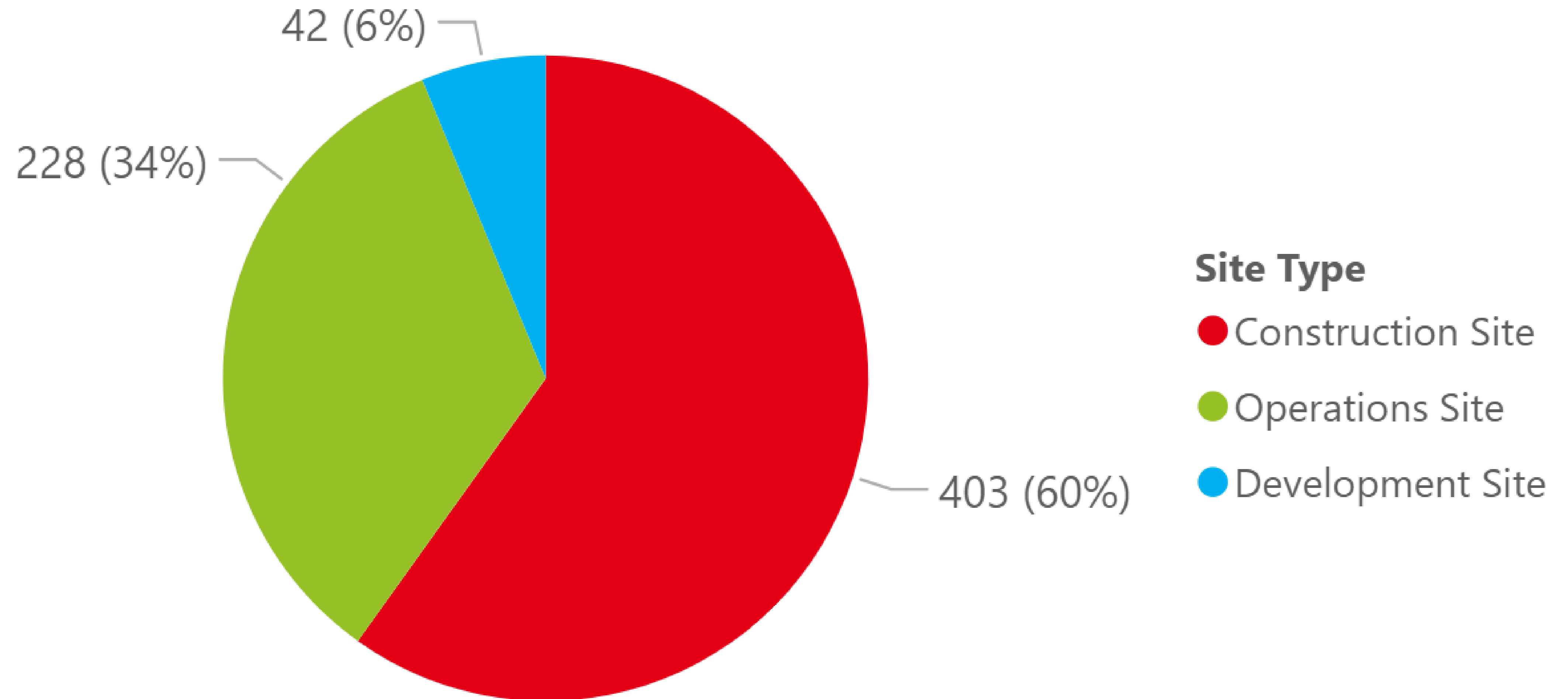
Top 5 Injury Areas over 2024

2024 Injuries by Incident Area



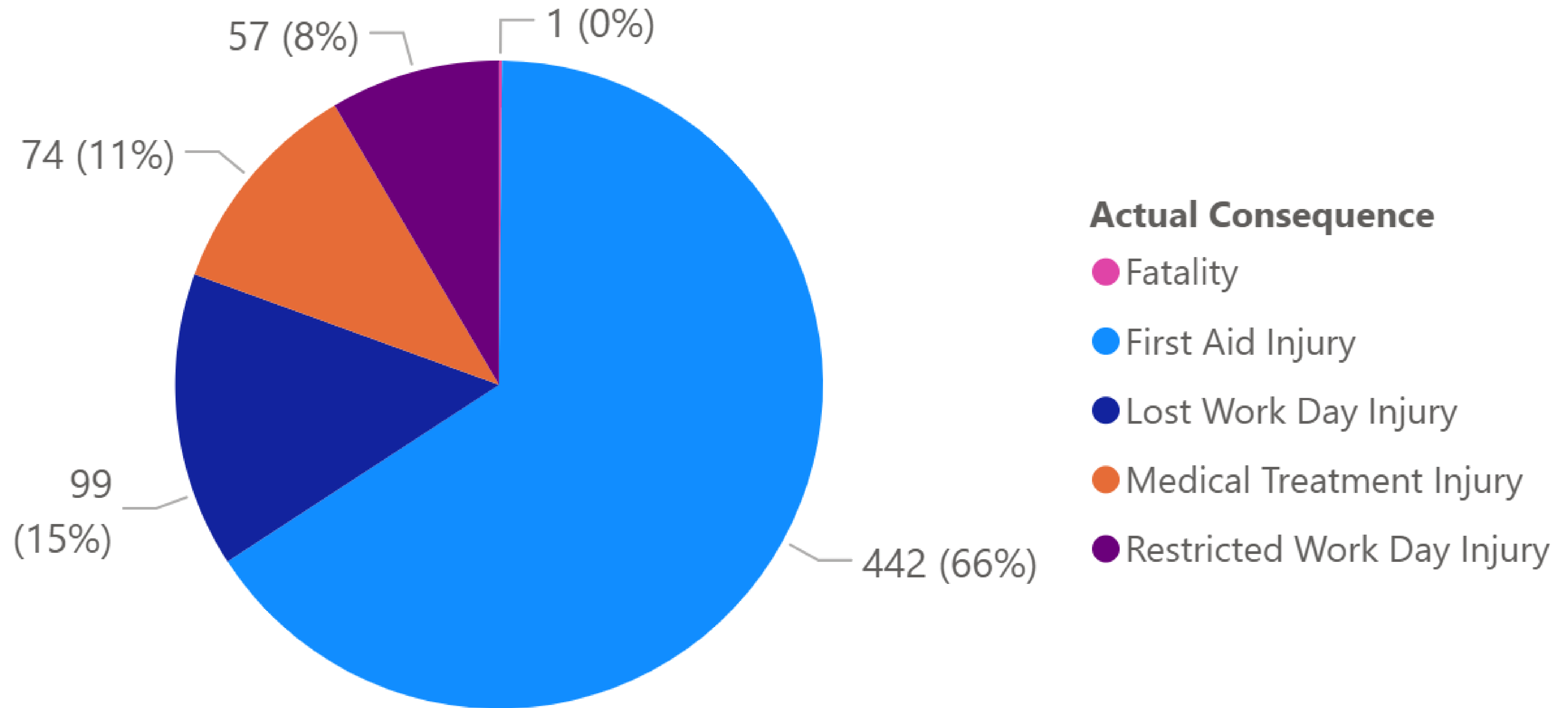
Injuries over 2024

2024 Injuries by Site Type



Injuries over 2024

2024 Injuries by Actual Consequence



HOW ELSE DO WE LEARN & SHARE

- Incident sharing within G+ meetings
- Incident sharing between FG meetings
- ToolBox



<https://toolbox.energyinst.org/home>

Keywords

[Offshore wind \(27\)](#)

Hand injury during craning operations

Date added 28/12/22 1292 Views 3 Likes



 A team of technicians had been working to install a new secondary evacuation retrofit. This task requires manual extension on the nacelle crane (HIAB) to be deployed. One of the technicians pulled out the retaining pin on the crane jib and the manual extension retracted in an uncontrolled manner crushing their hand in the jib.

 Save to My Toolbox  Read offline

Dangerous disassembly, renovation, and reassembly of transition piece crane

Date added 21/12/22 730 Views 0 Likes

 An initial test was being conducted as part of a lifting operation adjoined to a disassembly, renovation and reassembly of transition piece (TP) cranes. One of the brackets broke and lead to

25th September

Oakwood Premier Hotel, Incheon, South Korea

Session 2

Safe Systems of Work (SSoW)

Christy Yohanes
Section Manager, JERA Nex bp

Aamir Shahzad
Electrical Operations Leader, Vestas



SAFE SYSTEM OF WORK

Regional Implementation and Feedback

Christy Yohanes





CONTENTS

Presenter profile

Safe system of work

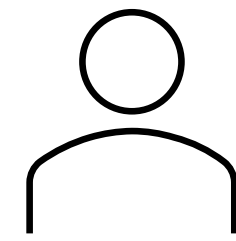
Region profile: Asia Pacific

Offshore wind industry

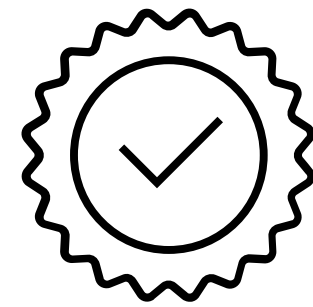
Lessons

Way forward

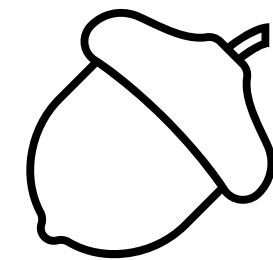
YOHANES CHRISTY



10+ years in Energy Industry (Upstream O&G, Offshore wind)
Born in Indonesia, grew up in Japan, trained in Australia
Majored in Material and Molecular Engineering.



Occupational Health and Safety
Process Safety
HSE Assurance
Supplier HSE Management



Jera nex bp Japan QHSSE, Section Manager
G+ Japan Focal Group Lead

SAFE SYSTEM OF WORK

Do we understand the concept?

explain safe system of work to a 5 year old.

Alright! Let's explain a **safe system of work** like this:

🤖 Imagine you're building a big tower with blocks. You don't want the tower to fall and hurt you or anyone else, right?

A **safe system of work** is like having a set of smart rules to keep everyone safe while building the tower. It tells you:

- 🧱 Where to put the blocks so they don't fall,
- 🧤 When to wear your helmet and gloves (like a builder!),
- 👁️ How to check if the blocks are not broken,
- 👥 And who is helping you, so you're never alone.

It's like a safety plan that says:

👉 "Let's do this the safe way, not the dangerous way!"

So you can have fun, get the job done, and **no one gets hurt.** 🍌

SAFE SYSTEM OF WORK

now explain safe system of work to an HSE professional with 20 years of experience

Certainly. Here's a concise, professional explanation tailored for an HSE professional with 20 years of experience:

🔵 Safe System of Work (SSoW) – A Professional Perspective

A **Safe System of Work (SSoW)** is a formalised, structured procedure resulting from a systematic examination of a task (typically through risk assessment), designed to eliminate or control hazards to an acceptable level. It ensures that work is carried out in a way that is consistent, safe, and legally compliant, especially when elimination of risk is not reasonably practicable.

While the concept is foundational, its practical application varies across industries and evolves with regulatory frameworks, technological advancements, and organizational maturity.

🔴 Key Characteristics of a Robust SSoW:

1. **Task-specific:** Developed based on a detailed risk assessment of the activity, considering the environment, equipment, personnel, and any dynamic variables.
2. **Hierarchy of Control-led:** Reflects the principles of the hierarchy of control — prioritising elimination and substitution before relying on PPE or administrative controls.
3. **Documented & Accessible:** Clear written procedures, permits, or method statements, available to those involved in the task.
4. **Competency-driven:** Requires personnel to be trained and competent in both the task and the associated control measures.
5. **Communication-focused:** Ensures that hazards, control measures, and contingencies are fully understood by all stakeholders involved (toolbox talks, briefings, etc.).
6. **Monitored & Reviewed:** Regular audits, inspections, and reviews to ensure ongoing relevance and effectiveness, especially in dynamic work environments.

⚠️ When SSoWs Are Essential:

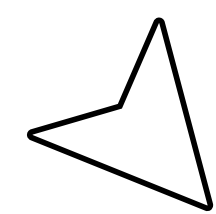
- In non-routine, high-risk tasks (e.g., confined space entry, hot work, working at height)
- Where PPE or procedural controls are the primary means of risk mitigation
- For contractor management and multi-employer worksites
- In maintenance and shutdown operations

SO...WHAT IS AN SSOW?

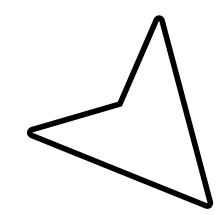
*“A process used to control and manage ‘**Danger**’ to As Low As Reasonably Practicable, to ensure work can be undertaken without causing harm.”*

It involves everything that keeps people safe from harm when working for or on Offshore or Onshore Wind assets.

This includes all documentation, processes, work equipment and access methods.



Its practical application varies across industries and evolves with regulatory framework, technological advancement, and organizational maturity



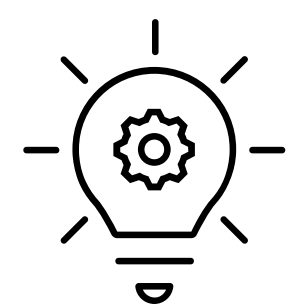
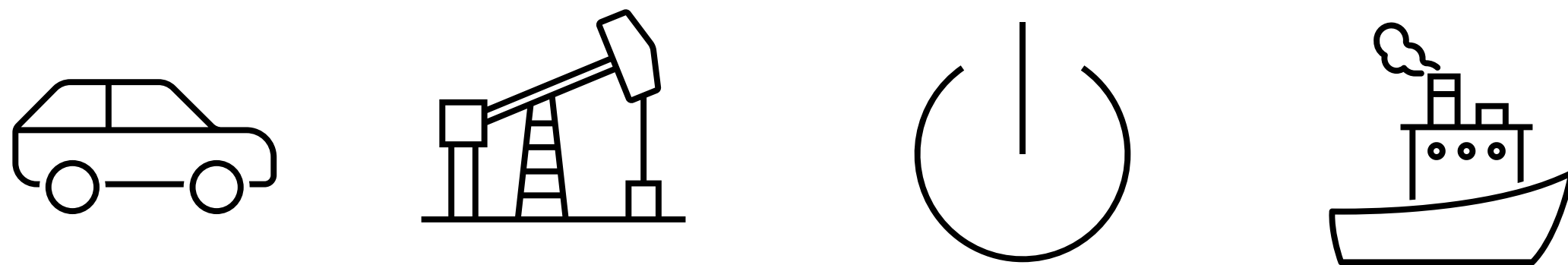
Does having a safety management system equals having a safe system of work?

ASIA PACIFIC – AN OVERVIEW

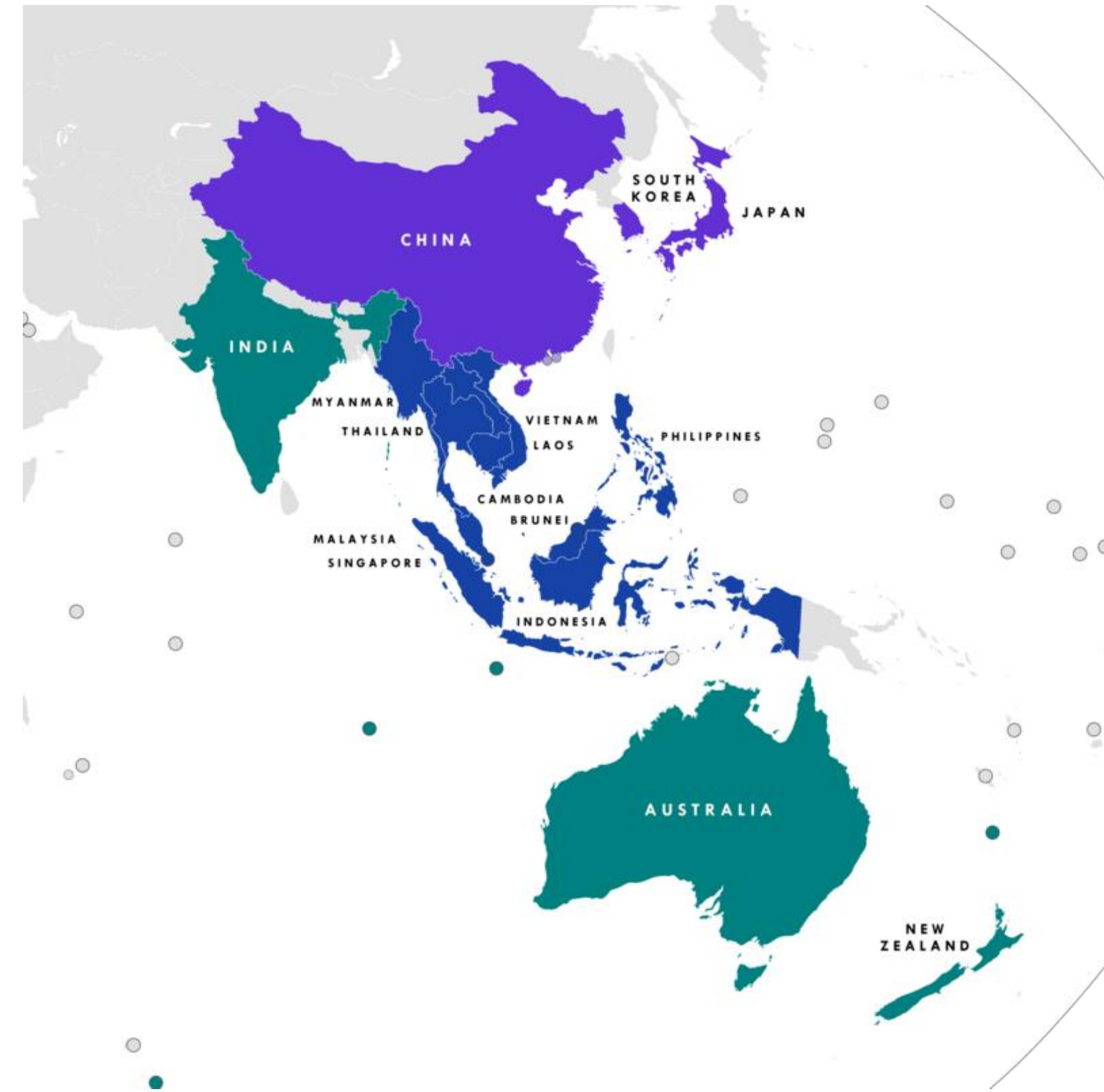
Rich in diversity

- Culture
- Language
- Regulation

Varying degree of exposure to “danger”

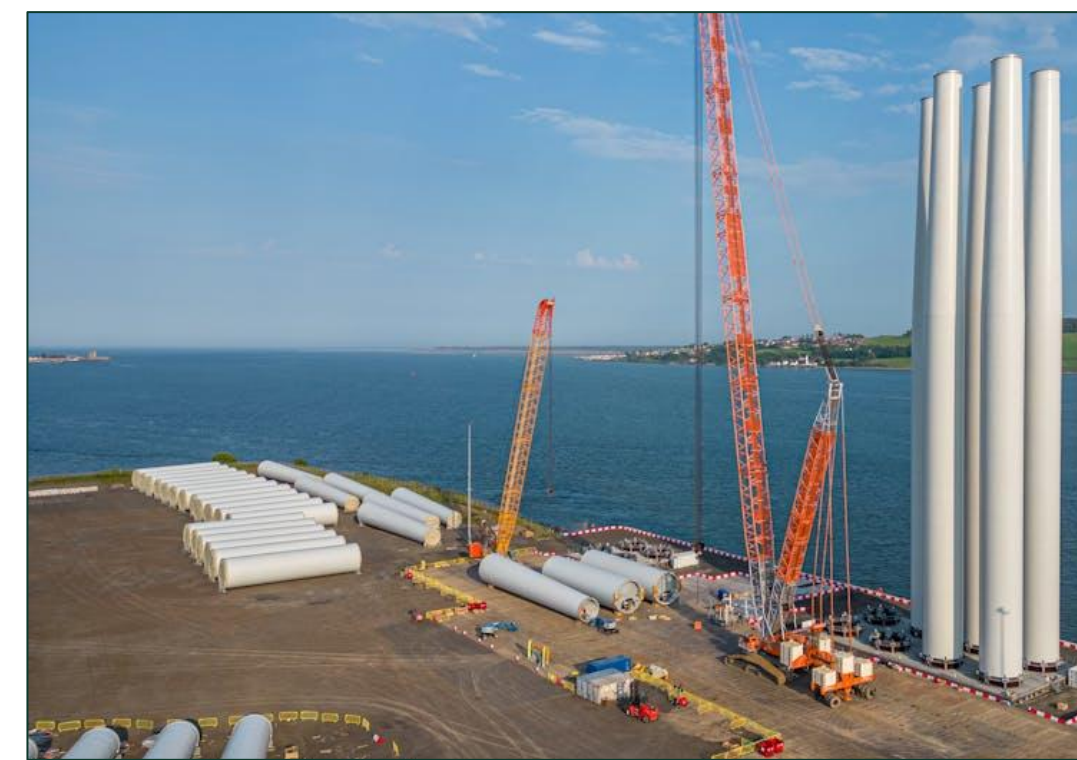


Varying degree of ‘Safe System of Work’



APAC OFFSHORE WIND INDUSTRY: THE PHASES

Project Phases : development, construction, operations, decommissioning



- Each phases has different set of contractor, with different background, culture, and processes.
- As the value chain is interconnected (to an extend), it is imperative for the developer to ensure that a certain standard of safe system of work is implemented across the project.
- Example of the harmonized element may consist of: HSE risk assessment method, personnel roles and responsibilities, work management, event management, management of change, and

THE FORMULA

Regulatory

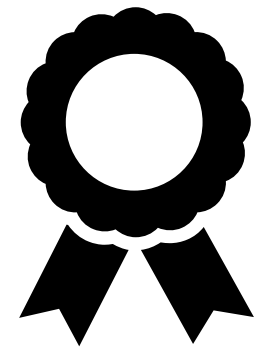


Compatibility

Ensure that the existing regulations are compatible with the offshore wind industry practice.

I.e, Japanese Acts (Electricity, Construction, Industrial H&S), AU/NZ Wiring Rules, OPGGS,

Developer



Compatibility & Readiness

Ensure that the developer has a plan and a clear owner for electrical safety rules for the project (consider contracting scheme).

Ensure that the other contractors are familiar with electrical safety management process.

Turbine OEM

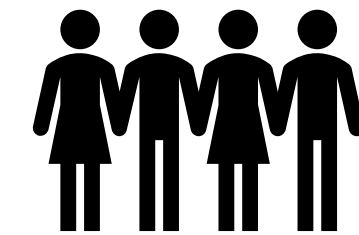


Readiness

Ensure that the developer are aware of the electrical safety rules management process, required resources, and required contractual arrangement to allow success roll-out of the process.

Ensure that their own ESR process is ready.

Other Contractor



Readiness

Ensure that the developer are aware of the electrical safety rules management process, required resources, and required contractual arrangement to allow success roll-out of the process.

THE CASE STUDIES FROM JERA NEX BP



Ishikari Bay New Port, Hokkaido,
In Operation, SGRE DD167

Construction phase: criticality of LOTO was not identified by the developer until later stage of construction, resulting in significantly reduced effectiveness of the LOTO system.

O&M Phase: Marine coordination system needs improvement to ensure that work coordination is performed adequately

THE CASE STUDIES FROM JERA NEX BP

Aomori South

Approximately

615MW



Bid awarded
COD: 2030

Oga Katagami Akita

Approximately

315MW



Bid awarded
COD: 2028

Vestas V236

Early engagement with all stakeholders, ensuring sufficient buy-in and development of the project SSOW.

Development of all elements required in SSOW (roles and responsibilities, hierarchy of controls, management of changes, work procedures, compliance monitoring, and others)



JAPAN KEY CHALLENGES (SSOW)

Industry maturity / safe system of work familiarity

Gap between industries in SSOW competency and limited cross-industry learning.

Gap in HSE concept understanding

Individual vs systematic management approach.

Limited presence of industrial body (such as G+)

To communicate the benefit and the consequence of not having a working SSoW.

THE G+ JAPAN CHAPTER

Japan offshore wind projects (general auction):

Round 2: 4 projects (**Oga Katagami Akita, Murakami-Tainai, Happo Noshiro, Saikai**)

Round 3: 2 projects (**Aomori South, Yuza**)

組織紹介 – Japan Group Members

日本グループで定期的に会合しているメンバーは以下の通り。発電事業者が多いが、地質調査会社、ゼネコン、船会社との会合も定期的に行っている。

Below are some members who are actively participating in Japan focal group. Most are developers, but G+ is collaborating with various companies.

事業者だけでなく、洋上風力業界全関係者と関係を気づき、HSE活動を推進。G+ recognizes that it is critical to build a rapport with all offshore wind industry stakeholders, and promote HSE.



協力者
(Collaborator)



Lessons Learned (Japan)


Title	Near Miss - Dropped object during item transfer
Related Activity	Offshore operations
Life Saving Rules	Lifting, use of tools and equipment 
Event summary	During lifting of tool bags and items from a vessel to an offshore structure, the load got stuck and the sling where the load was attached disengaged. Load was dropped into the sea and nobody was injured. However, drops calculator indicated potential fatality if the load hit people.
Causes	Work planning needs improvement.
Learnings	Ensure that all personnel involved in lifting operations are aware of the risks of dropped object and line of fire. Ensure that the correct rigging practice are performed.



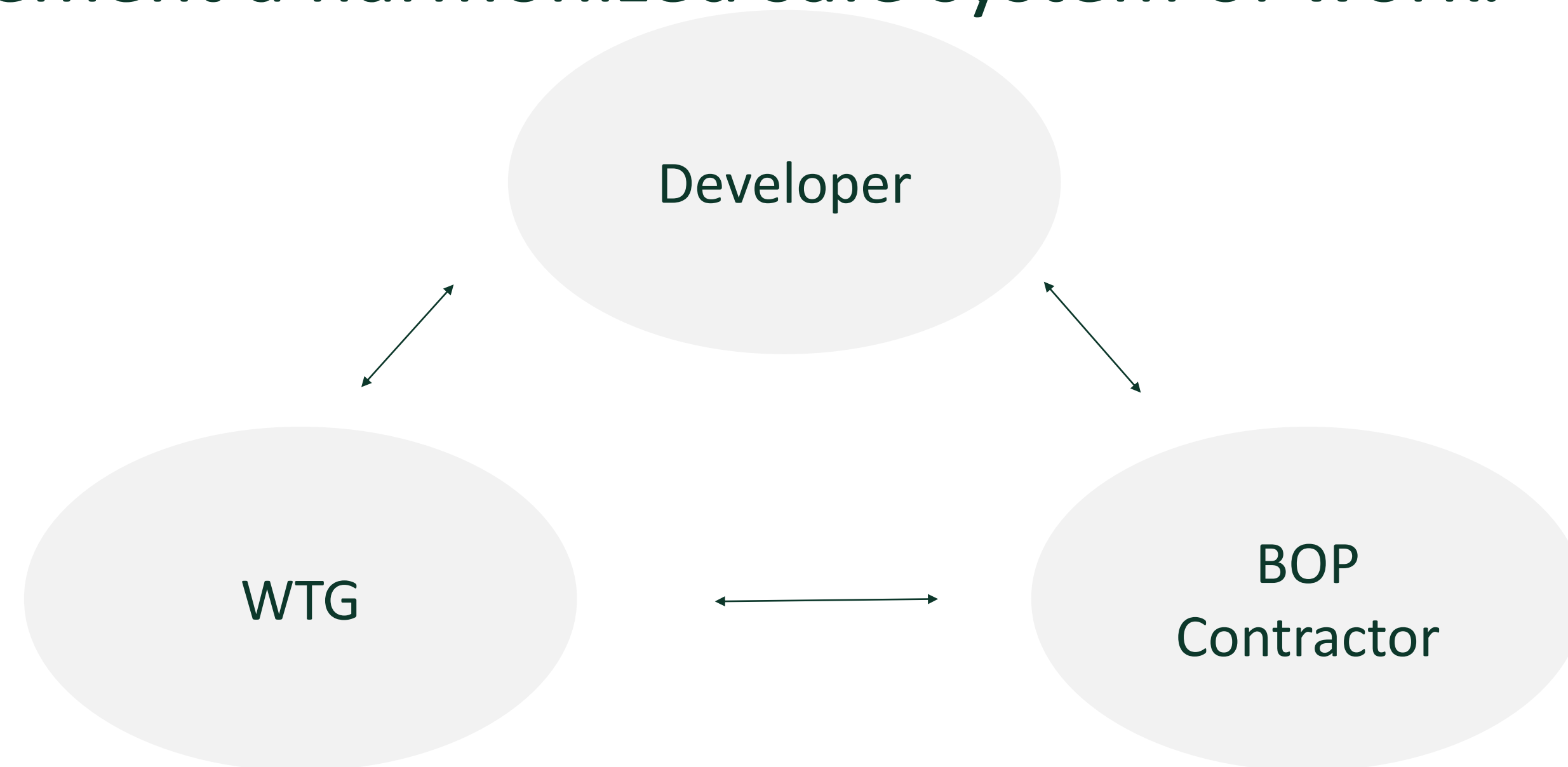
Image of lifting bags



Lifting and rigging slings

CONCLUSION

A proactive and collaborative approach to cultivate the concept of safe system of work is pivotal to ensure that all entity involved can develop and implement a harmonized safe system of work.





Safe System of Work

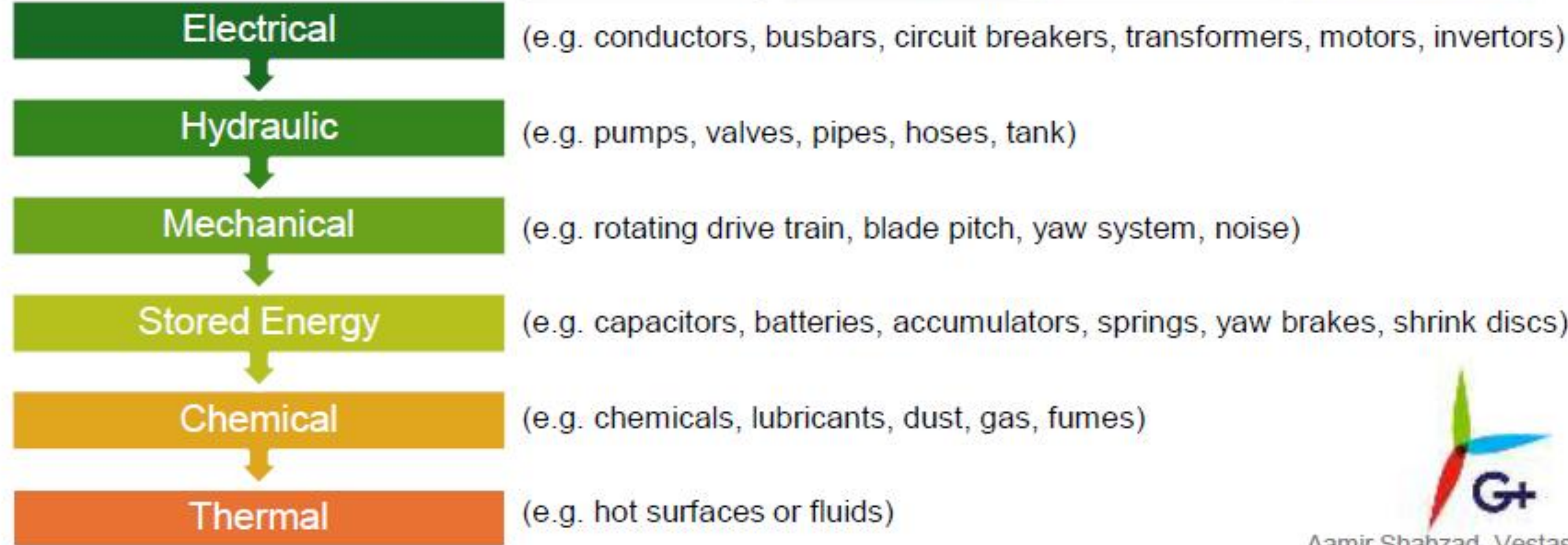
Aamir Shahzad, Vestas

24th September 2025



Safe System of Work

System Derived Hazards





Safe System of Work

Fundamentals of a SSoW

People

The Rules are all about individuals understanding their roles and responsibilities and carrying them out correctly and robustly.



Task Execution under a SSoW



Return of Control

Recorded return of control to the Work Controller.

Documentation

Job Safety analysis and creation of Safety Documents.

Scheduling

Planning with Site Work Control.

Communication

Safety document pack issue and recorded Daily Pre-Task briefing.

Transfer of Control

Recorded release of the turbine for the task from Work Controller.

Task Safety

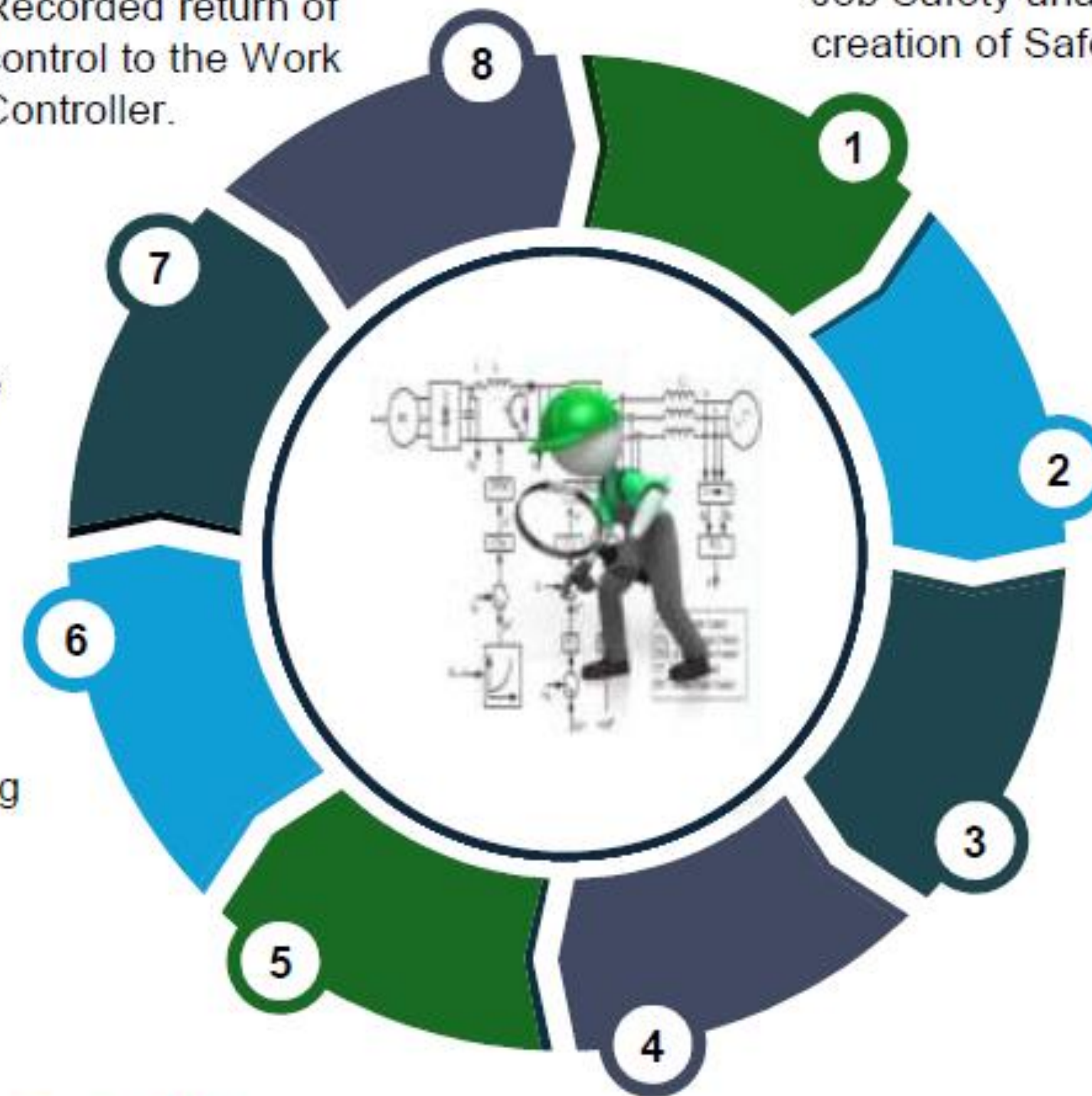
Local control, General Safety and Lockout / Tagout.

Clearance

Personnel, tools etc. Checked to be clear before re-energisation and cancellation of Safety Document (AWP, LOTO, PTW etc.).

Work or Testing

Recorded job safety briefing and the Person in Charge notifies work party Safe to commence work.





Safe System of Work

What is General Safety?

General Safety is established primarily by the person leading the work party, but all persons working in the team have the responsibility for maintaining General Safety.



A safe means of access and egress is available at all times.



The place of work is safe for the work or testing to progress.



Appropriate tools and equipment are available.



Any necessary PPE is available.



A safe method (RAMS) of work is available.



Safe System of Work

What Keeps us Safe from The System?



STEP 01

Disconnect completely



STEP 02

Secure against re-connection



STEP 03

Verify absence of operating voltage



STEP 04

Carry out earthing and short circuiting

(if required)



STEP 05

Provide protection against adjacent live parts

(if required)

The Golden Five Safety Rules!





Safe System of Work

What Keeps us Safe from The System?

WTSR Approved
Written Procedure

LOTO Instruction

HV Switching Schedule

HV Permit



Safety from the System



Safe System of Work

What Keeps us Safe from The System?

- 1 Unique identification and document control
- 2 Revision history and validity
- 3 Scope and system boundary
- 4 Roles, responsibilities and authorisation
- 5 Safety precautions to achieve Safety from The System
- 6 Restoration of supplies
- 7 Limitations or restrictions
- 8 Date, time and signature fields





The Global Landscape of Safe Systems of Work

Different regions, different standards, one goal – safety



NFPA 70E Standard for Electrical Safety in the Workplace - USA



EN 50110-1 Operation of Electrical Installation - Europe



Ordinance on Industrial Safety and Health (Japan)



AS/NZS 4836 Safe Working on LV Electrical Installations



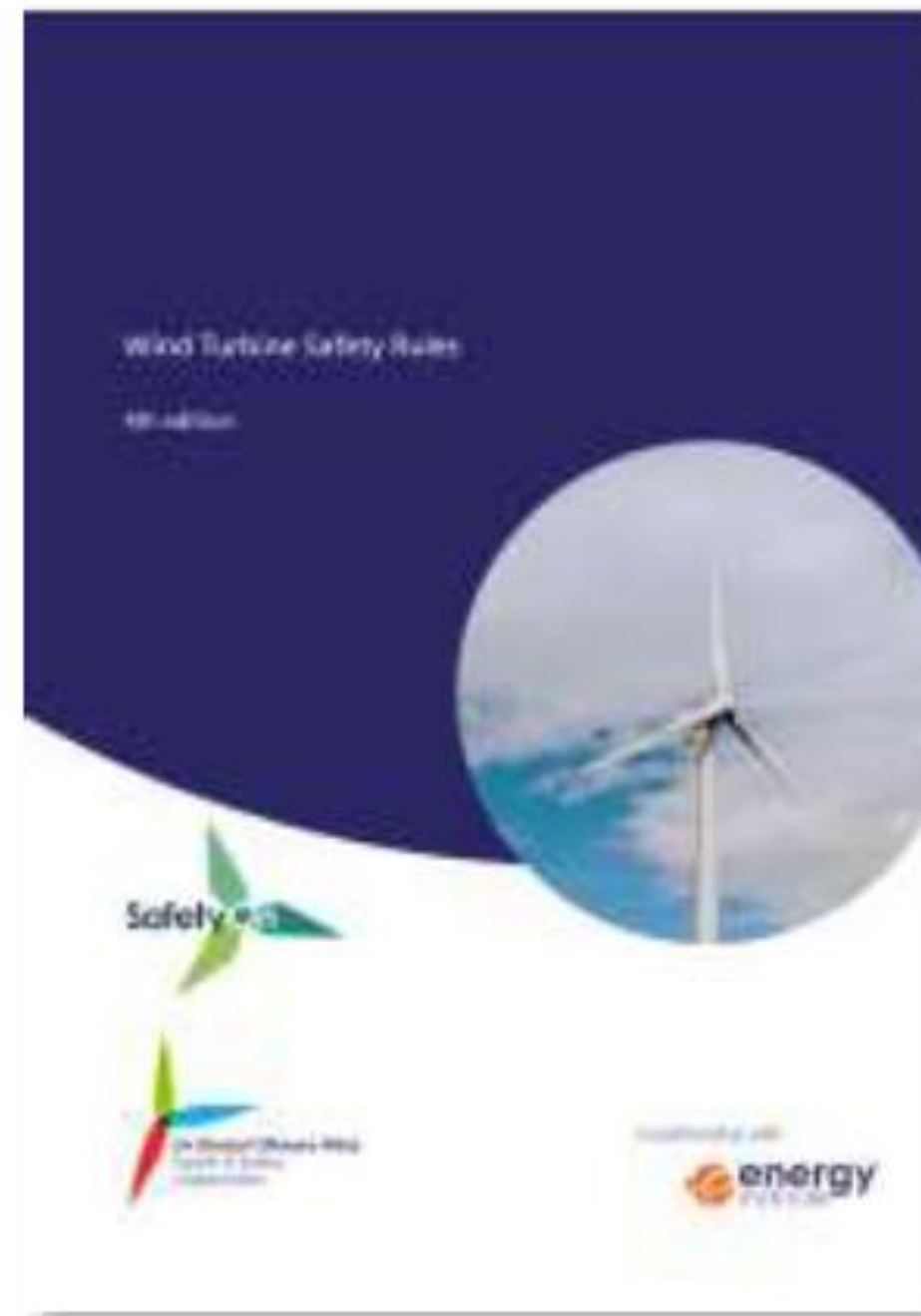
Perception that different regions = very different approaches





The Global Landscape of Safe Systems of Work

Basis of Various Safe System of Work in Offshore Wind Ind.



SafetyOn/G+ Wind Turbine Safety Rules



NFPA 70E Standard for Electrical Safety in the Workplace



ENA Model Distribution Network Safety Rules

Company Specific LV, HV or LV+HV Safe System of Work



LOTO, Training, Field Exposure and Competency are Essential

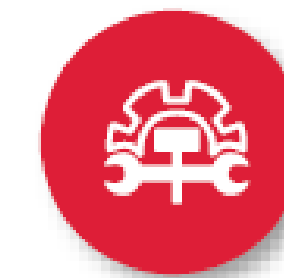
The Common Foundation Across the World



At the heart of every Safe System of Work



Define training requirements



Provide field exposure



Define competency criteria

Employers' obligations



Providing a complete Safe System of Work beyond just LOTO

Why WTSR are Different



Provide a complete Safe System of Work: framework + support procedures



Allow companies to create their own management instructions



Rules remain stable but flexible for different organisations (size, geography, voltage levels, etc.)



Misperception: WTSR is “European only” – now being applied in US and APAC



WTSR in Practice (September 2023): Used globally across onshore and offshore, covering ~50GW of installed capacity, actual figures are higher!



Bridging the Gap Between Local Standards

Aligning WTSR Roles with Local Laws and Regulations

1

Local laws and regulations must always be followed

2

WTSR provide a core Safe System of Work

3

Create bridging documents to align WTSR roles with local standards and regulations

4

Ensures consistency while respecting regional requirements

i

WTSR OSRG is creating an overview of key roles across common offshore wind standards and regulations to support organisations in developing local bridging documents, using input from global operators.





What is a Safe System of Work?

Company's HSE Management System

Wind Turbine Safety Rules or similar

General Safety



System Dangers

Safe System of Work



Wind Turbine System Safety Rules!

Covers Plant and Apparatus (both LV and HV – Single-Feed System)

What's Next?



Wind Turbine System Safety Rules

- SP1** Approval of General Provisions Special Instructions and Similar Procedures
- SP2** Approval of Tools Equipment & Process
- SP3** Objections on Safety Reasons
- SP4** Addition and Removal of Safety Rules to Plant and Apparatus
- SP5** Temporary Addition of Alternative Safe Systems of Work
- SP6** Appointment of Persons
- SP7** Control and Management of Inter-System Safety Precautions
- SP8** Requirements of Electronic Safety Documents
- SP9** Switching Earthing and Testing of High Voltage Apparatus



Finalised, Approved, and Ready for Implementation!



Training material is being updated



Documents are with the publication team



Webinars will be scheduled





The Ask!



As offshore wind grows in APAC, what support do you feel G+ should prioritise to help your region strengthen Safe Systems of Work and Control of Hazardous Energy?

Things to consider



- Do you need clearer guidance on training and competence (e.g. baseline standards, combining classroom learning with field exposure)?
- Would bridging documents that align WTSR/WTSSR with local regulations and practices be valuable?
- How important is audit and compliance guidance for ensuring SSoW is applied consistently across different organisations?
- What other practical challenges do you see in APAC that G+ should be aware of (e.g. workforce capability, supply chain, local regulation gaps)?

Expected Output



- Each group identifies 3 priority areas where G+ could provide the most value for APAC in the next 3 to 5 years.
- Each group explains why these priorities matter for APAC's current stage of offshore wind development.



25th September

Oakwood Premier Hotel, Incheon, South Korea

Session 3

Fabrication Safety

Carla Wellens
Director QHSE, Smulders

Richard Pargeter
Global Health and Safety Director, Ocean
Winds

WHO WE ARE

Smulders ...

... a multidisciplinary construction company with extensive experience in engineering, producing, delivering, and assembling heavy, technically complex structures.

... more than 2,000 employees spread across sites in Belgium, the Netherlands, Poland and the UK.

Carla Wellens
Director QHSE & Sustainability





FABRICATION WORKSHOP

September 24, 2025

FABRICATION WORKSHOP

Learning from Normal Work vs Learning from Incidents

Insights

- **Incidents : 20% equipment failure / 80 % human error**
- **Learning only from incidents reduces the ability to learn as it represents far less than 1% of total working hours**

FABRICATION WORKSHOP (TOPICS)

Good to know for MGT & HSE

- Why people don't follow the rules and use workarounds
 - and we are sometimes 'fine with it'
 - time / procedure / MOC
 - Your beliefs determine what you see - assumed by experience or own beliefs
 - Walk-through/talk-through (WTTT) – go into dialogue
 - Do your questions shut people down?
- Open questions
 - TEDS tell explain describe show
 - AI-bot

SAFETY BY DESIGN

DEALING WITH CHALLENGING DESIGN ISSUES

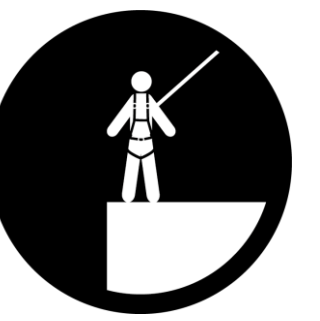
- Unforeseen topics (it did not seem a problem on paper)
- No detailed design well in advance of production
- Last minute changes
 - Late deliveries
 - Unknown FRIM
 - Design changes after “mock up”
 - Delay in planning
 -

SOLUTION(S)

- Collaboration with our partners
- Learning from normal work
- Learning from incidents

FIXED POINT FOR SRL IN TEMP. COVER

WORKING AT HEIGHTS



Pro-active jointly integrated with Equinor and Ramboll

Topic:

- *During work in the TP the fall arrest system (glide rail) is not installed. A temporary SRL is installed to allow access in TP*

Risks:

- *SRL at waist height → increased fall factor*
- *SRL in contact with ladder → damages and wear of SRL & ladder*

Solution:

- *Hook-on point remains in place even without bolts, **fallback principle***
- *Design of temp cover to include a fixed hook-on point above ladder for SRL placement*
- *Use Onshore and Offshore (T&I)*



EARTHING BOSS ON TP

ENERGY ISOLATION



Pro-active jointly integrated with Equinor

Topic:

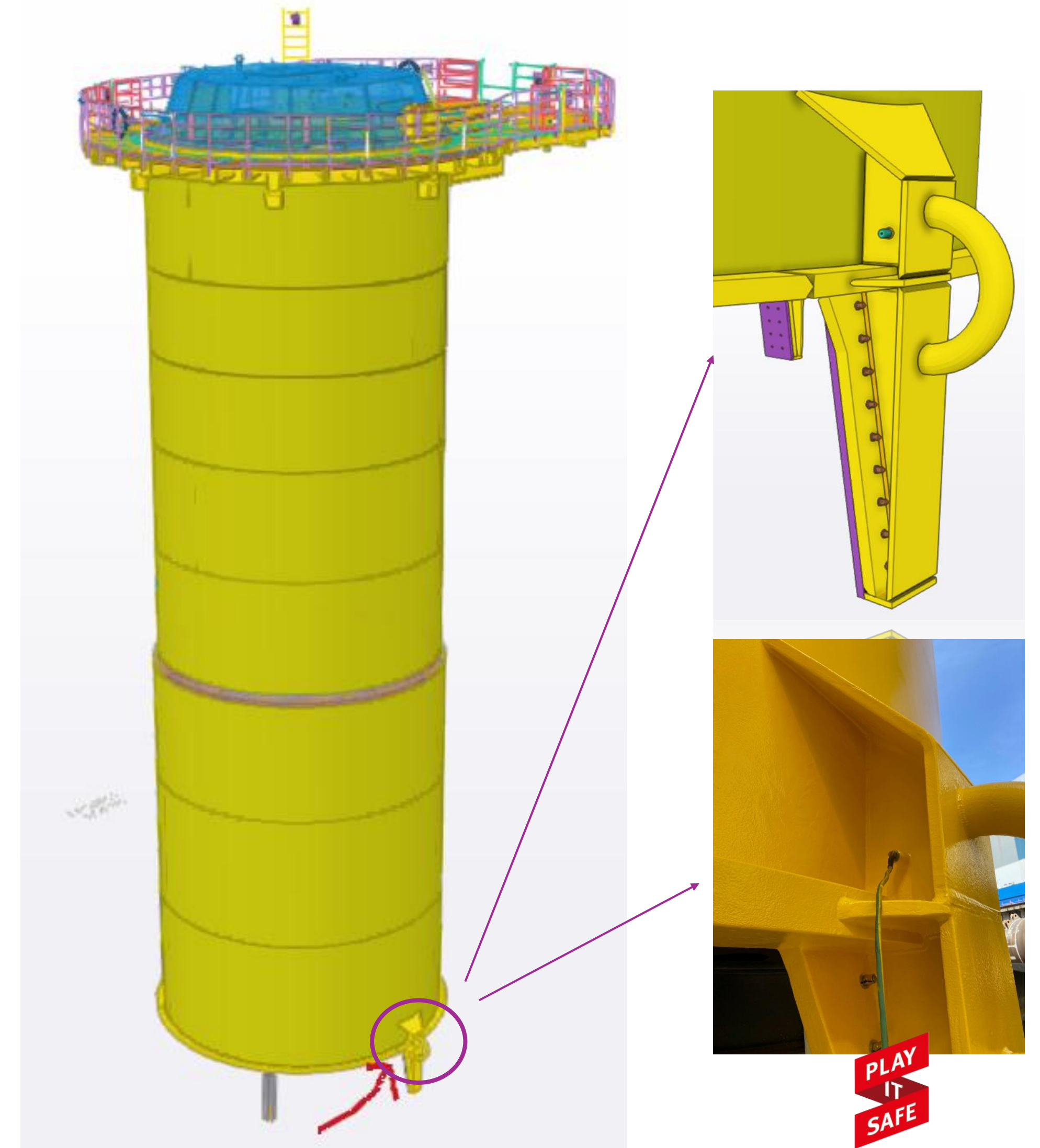
- During works the TP should be earthed. Inaccessible location to connect earthing cable.

Risks:

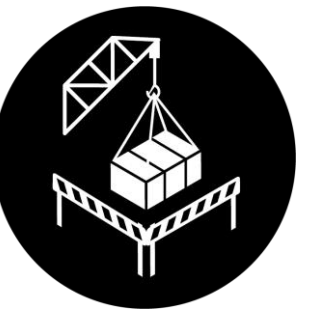
- Electrical static load (electrocution, spark/ignition source)
- Electrical works and functional testing (electrocution)
- Lightning strike (electrocution)

Solution:

- Earthing boss in design, welded to outside bottom of TP.
- Accessible from ground to install and remove earthing cable

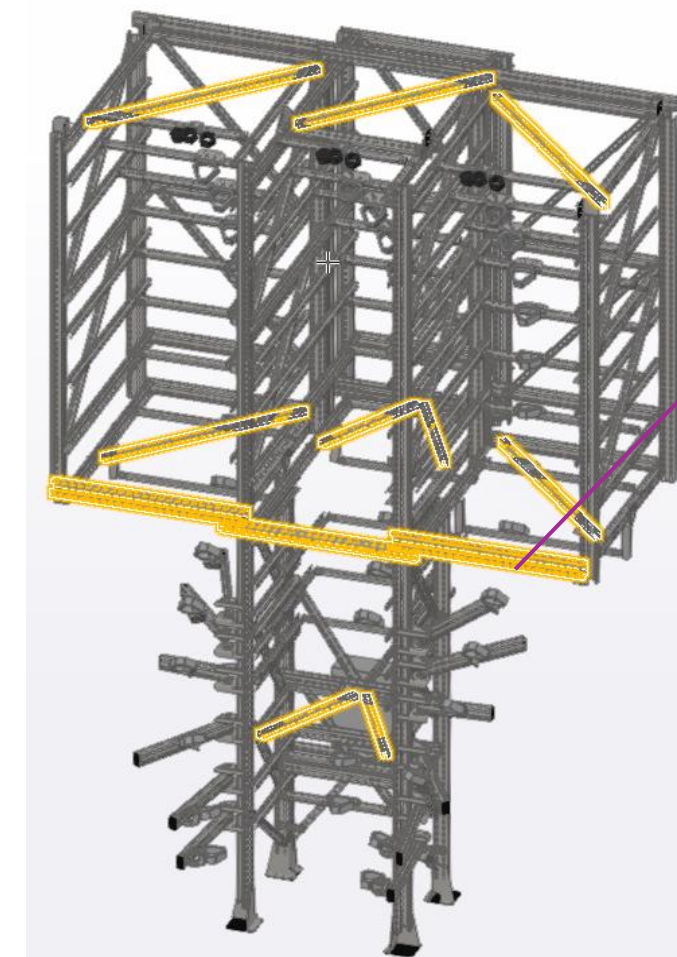
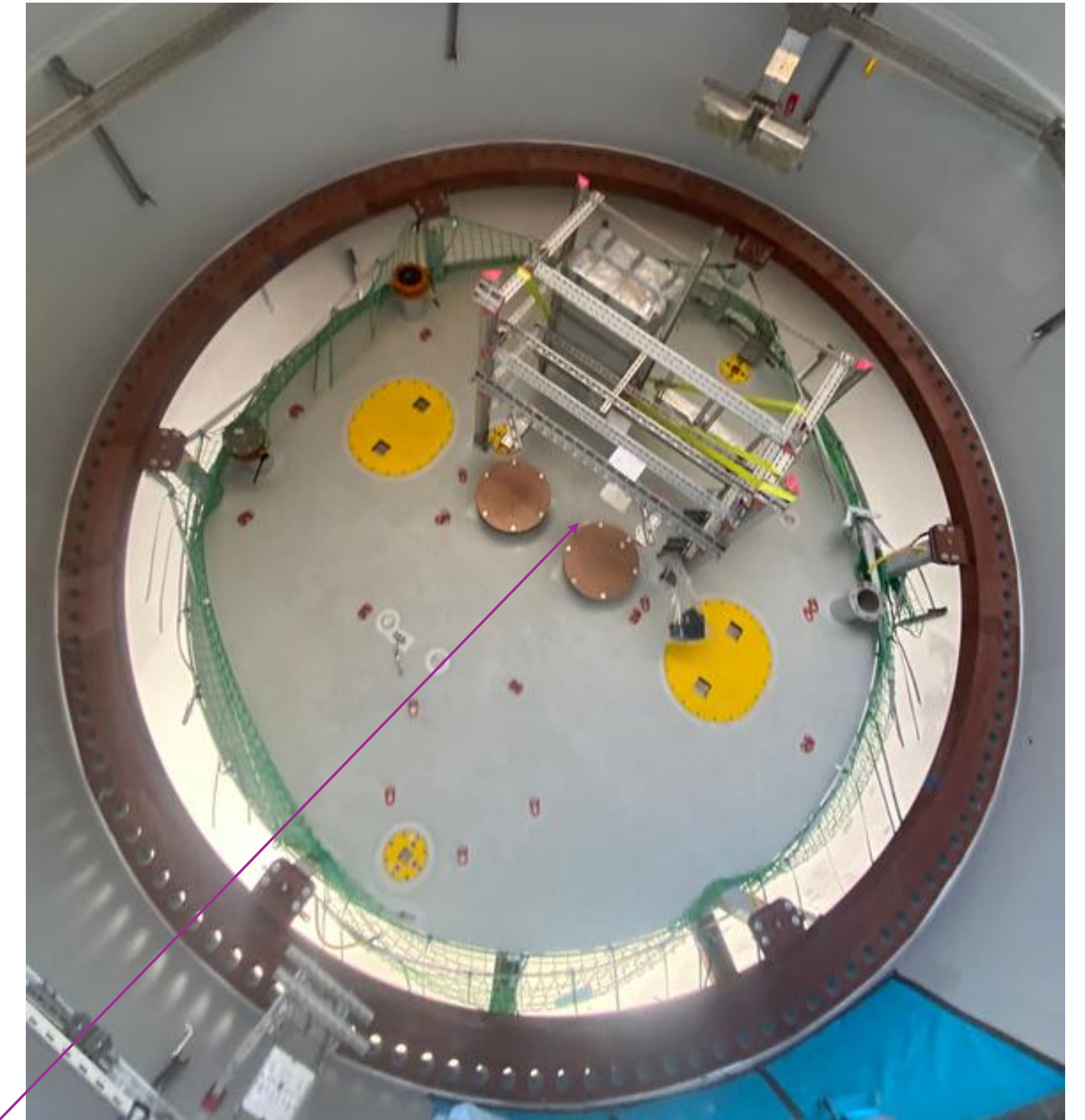


DESIGN HV-RACK FOR HORIZONTAL ASSEMBLY



Pro-active jointly integrated with Scottish Power / Iberdrola

- Topic:
 - HV rack not stable for horizontal installation
- Risks:
 - Falling objects
 - Hand and foot injury
- Solution:
 - Smulders is currently cooperating with ScottishPower and Hyndla to make the HV-rack more suited for horizontal lifting & assembly.

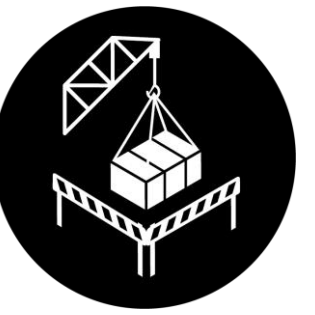


FREE-ISSUED EQUIP. PACKAGING

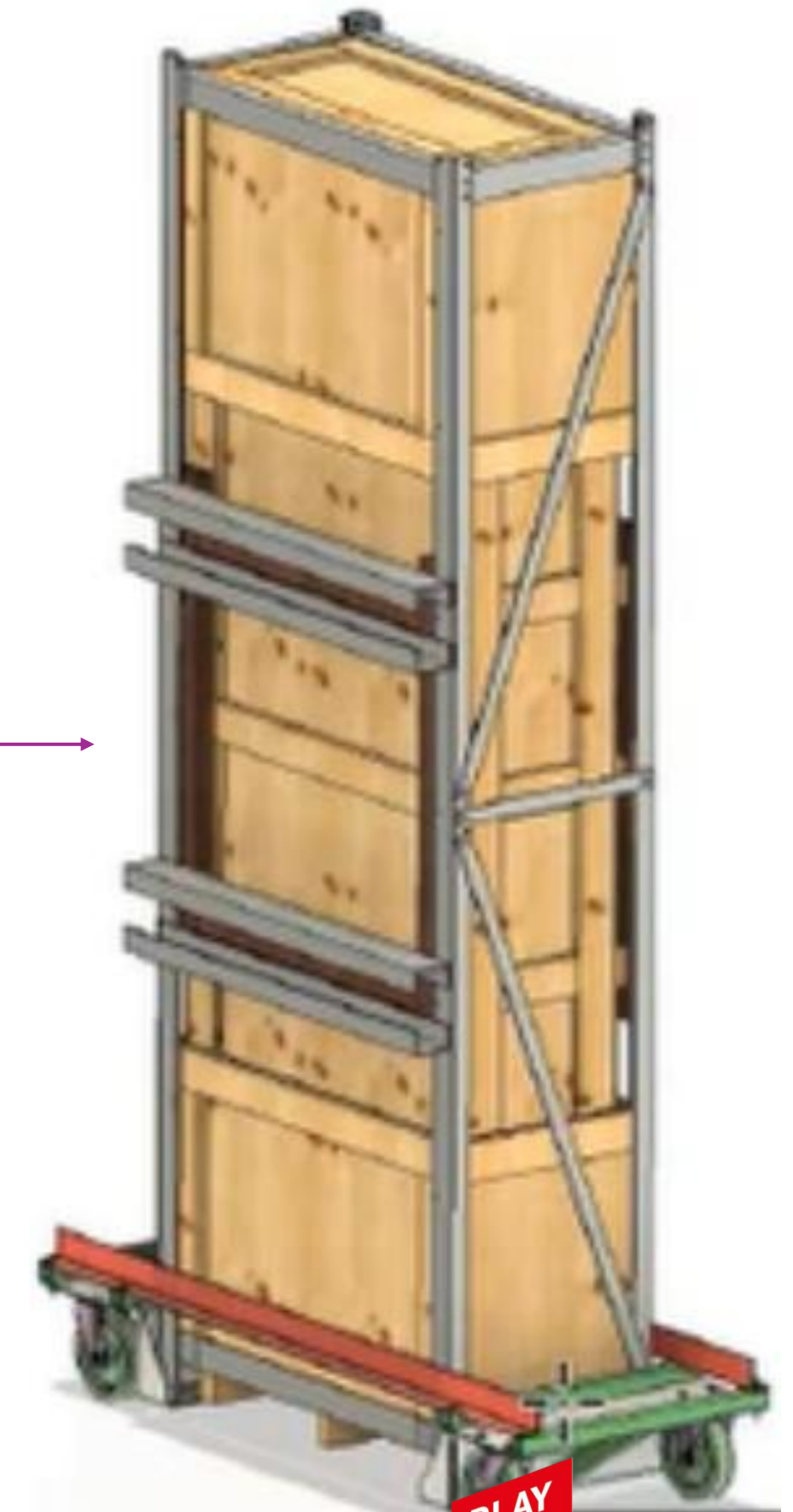
Pro-active collaboration ongoing with Equinor

- Topic:
 - On the Air-tight platform ICCP anodes need to be stored for offshore installation. Wooden crates to be placed vertically and strapped to ATP.
- Risks:
 - Unstable heavy load, lifting risks
 - Space limitation during works and in the line of fire
 - Offshore installation risks
- Solution:
 - Re-design of Free-issued packaging
 - Onshore and Offshore (commissioning)

HOISTING AND LIFTING



KEEP YOURSELF AND OTHERS OUT THE LINE OF FIRE



**PLAY
IT
SAFE**

BL INSTALLATION STUB

KEEP YOURSELF AND OTHERS OUT THE
LINE OF FIRE



Learning from normal work - jointly implemented with Equinor and SSE Renewables

■ Topic:

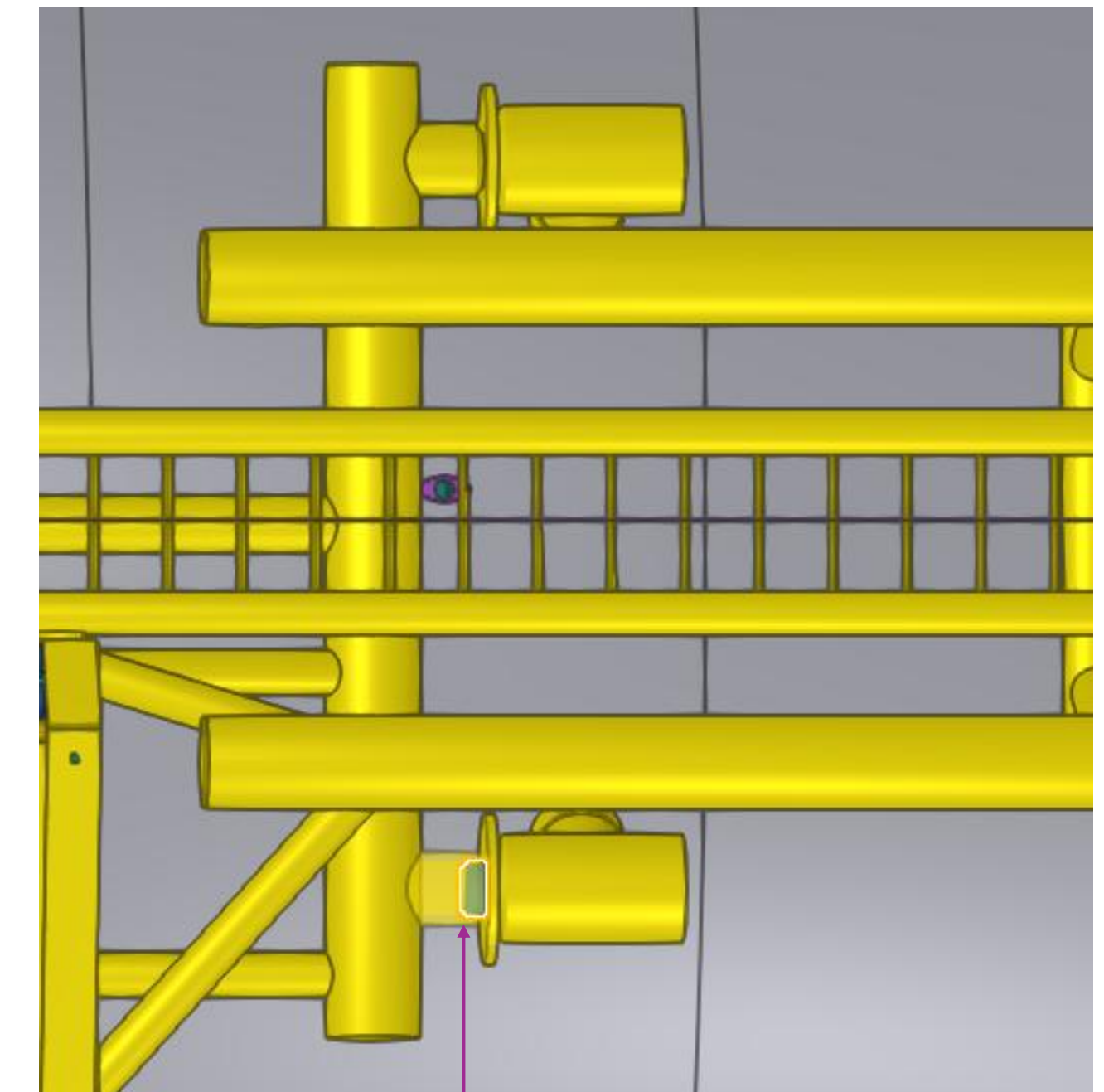
- Boatlanding is installed in horizontal position. After installation the Boatlanding is to be welded. Adding a stub would increase installation safety to avoid workers around the lifted object, physical fixture.

■ Risks:

- Dropped object
- Working in the line of fire

■ Solution:

- Addition of stub to guide and fix the boat landing



Ø203*30

OW SAFETY IN FABRICATION YARDS

Richard Pargeter

A Client's Perspective

OW
OCEAN WINDS

WHO WE ARE

A pure offshore wind player, that goes beyond energy every day to shape an attainable and sustainable tomorrow.

- > Ocean Winds is a pure offshore wind player, leading a new era of clean energy by turning the ocean winds into power that light up homes, businesses, and communities. **From end-to-end**, we make it happen—**building** wind farms at sea and **keeping them running** to deliver reliable, green energy every day.
- > Ocean Winds goes beyond energy to **deliver lasting impacts**. What makes us unique is the expertise of our people, the experience gained through our projects, and the vision from our sponsors, EDPR and ENGIE. Together, we **deliver offshore wind projects** that create value and set new standards for lasting impacts.
- > Ocean Winds is shaping what's next, working with governments, partners, communities and industries to build a world where offshore wind is at the foundation of an **attainable and sustainable tomorrow**. We're here for the long haul—delivering more than energy to **create a legacy that goes beyond today and shapes tomorrow**.



BEYOND ENERGY



OUR GLOBAL FOOTPRINT

Consists of around **19 GW** (gross) with **17 projects** in **8 geographies**



Safety as a core business value

Our guiding philosophy

Influence through:

- > World Class Basics
- > Safety is care in action
- > Leadership
- > Presence

The Client's position (We don't run the yard)

Influence via:

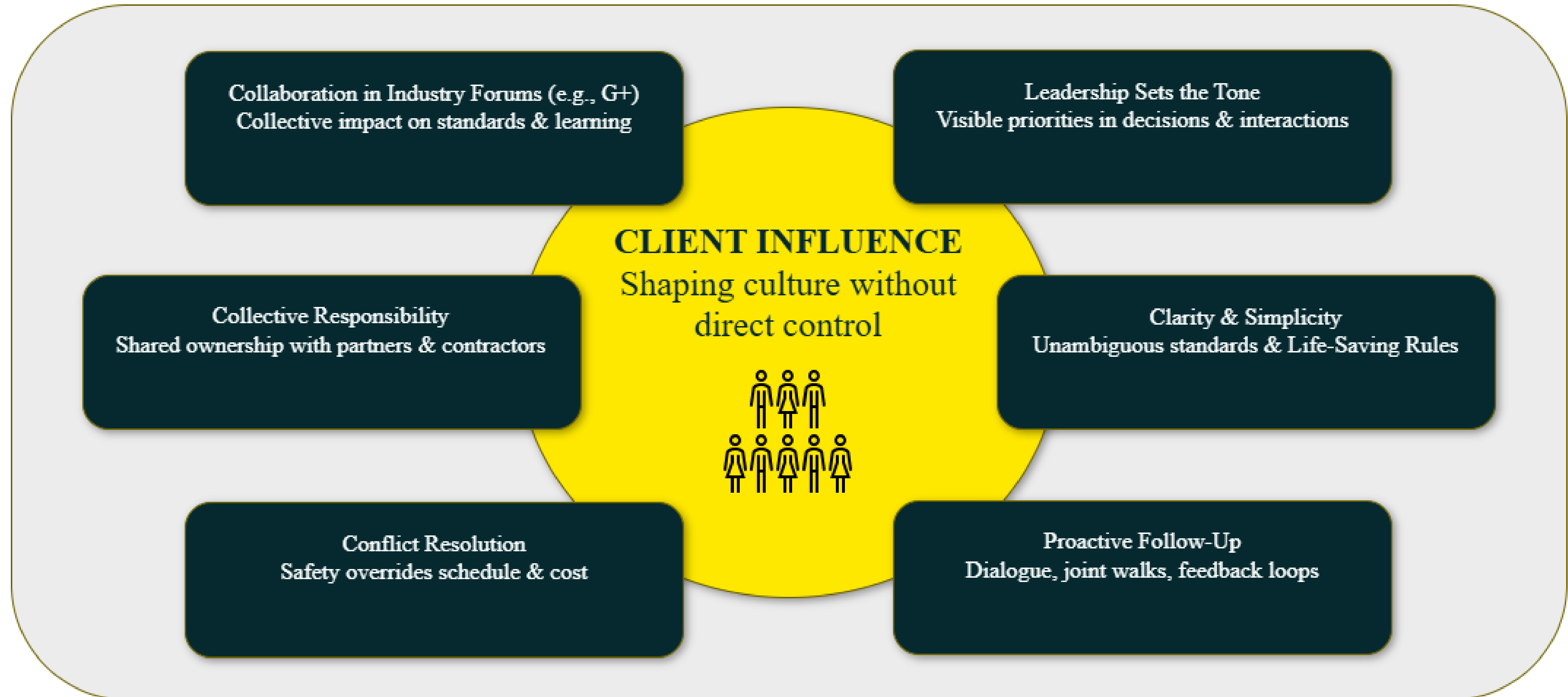
- > Organisational Culture
- > Commercial Framework
- > Precursors and Work Planning
- > Emergent failures and learning

Why Fabrication Yards Matter

Yard safety decisions have long-lasting consequences.

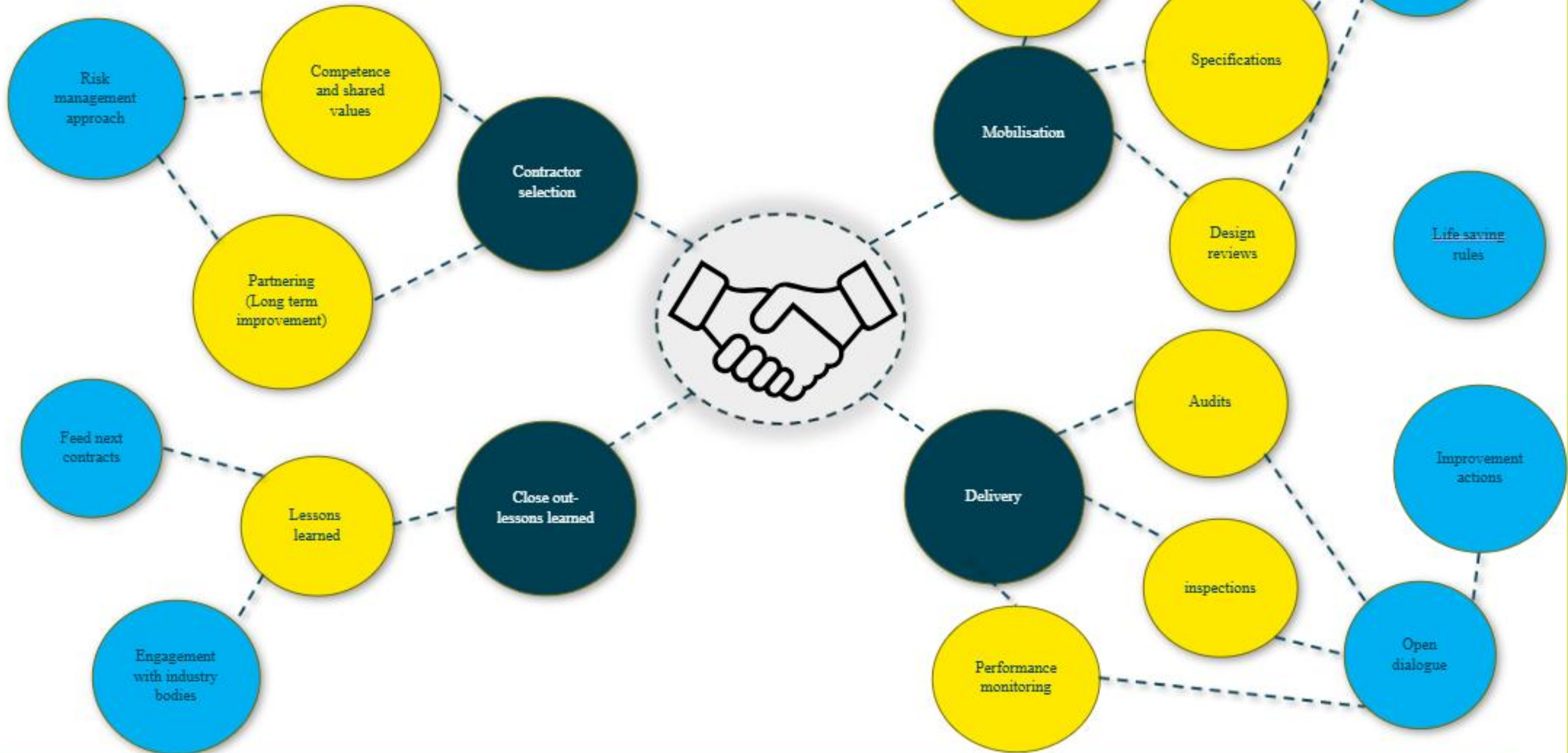
- > Mutual benefit to prevent loss, preserve life, environment and assets, and protect the program
- > Good design and performance here can influence operations offshore
- > Solving problems onshore can assist in 25 years of O&M safety.

SAFETY IN FABRICATION YARDS: The client's role in culture



“When clients act collectively, our influence becomes greater than any contract — it becomes an industry-wide drive for safety.”

SAFETY IN FABRICATION YARDS: Commercial Framework



Result: Safety is a contractual condition not a bolt on

SAFETY IN FABRICATION YARDS: Precursors and Work Planning

Safety in Design



- > **Good design removes hazards before they reach the yard.**
 - Lifting lugs avoid unsafe slinging.
 - Modularisation prevents oversized lifts. Drainage avoids corrosion.
 - Built-in inspection platforms reduce 25 years of rope access.
 - Clients can insist these are in contracts.

Global standards



- > **Differing geographical jurisdictions and regulatory requirements**
 - Standardisation
 - **Fabrication is heavy industry** → so *lifting, hot work, confined spaces* are the “technical” high-risk standards.
 - **It’s also contractor-driven** → so *contractor HSE expectations, Life-Saving Rules, and collective stop-work responsibilities* are the “cultural” standards that have the most influence.

Yard planning



- > **Yard readiness must be visible before fabrication starts and adjusted throughout**
 - Common hazard groups
 - Shifting/ interconnected risks
 - Yard readiness
 - Defining demarcation points- who controls what and where
 - JV common philosophy and objectives

CASE: ACCESS & ESCAPE

- Escape routes often blocked as assets grow
- Differential heights create transfer risks
- Avoid manual transfers; provide gangways to barges
- Consider falls from height and barriers as assembly proceeds
- Design to omit, limit, or safely provide temporary works

Safe access means eliminating unsafe transfers and planning evolving escape



Contractual Control – Setting expectations – Employer Requirements – Inspections – Communications - Collaboration

SPMTs & Transit

- > Bearing capacity & smoothness critical
- > Uneven settlement → load-out delays, weld damage
- > Floods and ponding
- > Disruption to surfaces by wheel movement

- > Client influence: specify surveys & tolerances in contracts

Cranes & Lifting

- > Exclusion zones non-negotiable
- > Blind lifts without zones = high risk

- > Wind cut-offs must be enforced
- > Inspections and audits of arrangements for lifting operations and compliance checks



Storage & Stability

- > Rainwater in tanks causes instability and corrosion
- > Wind loads add to storage hazards
- > Client influence: drainage or covers specified

- > Wind cut-offs must be enforced
- > Inspections and audits of arrangements for lifting operations and compliance checks

Contractual Control – Setting expectations – Employer Requirements – Inspections – Communications – Collaboration



FATs & Energisation

- > FATs bring live power into yards
- > Unsafe energisation = serious incidents
- > Clients are present → require segregation & LOTO

- > Client to verify PTW and LOTOV system.
- > Segregation to be risk assessed for attendance.

Why Ocean Winds participate in G+ Fabrication Yard Safety Work Groups

Short project exposure → individual projects have limited time to influence yard practices.

Global leverage → with a portfolio of projects, we can influence partner yards over the long term.

Industry impact → by collaborating with peers in G+, we raise standards collectively, ensuring safer supply chains worldwide.

Thought leadership → we contribute to shaping best practice for the offshore wind because safety is care through action.



25th September

Oakwood Premier Hotel, Incheon, South Korea

Session 4
Sharing from the OG12
- Australia project

Kelly-Ann Ee
Head of Health, Safety,
and Environment at
Southerly Ten, CIP



Session 4
Sharing from
Jeonnam 1 project -
South Korea

Minsuk Kim
Senior Project
Manager, Siemens
Gamesa





Sharing from Jeonnam 1 project

2025 G+ Stakeholder Forum

25 September 2025

Minsuk Kim, Senior Project Manager

We Made It Happen All Together – Jeonnam 1

“The Inaugural to Korea Offshore”

Agenda

1. Jeonnam 1 Project Introduction
2. Sharing from Jeonnam 1 – HSE perspective
 - I. Unique statutory requirements in Korea
 - II. Installation Vessel
 - III. Emergency Response Plan
 - IV. Best Practice in local - MEWP

Jeonnam 1 Project

Wind Farm specification			
# WTG	10	Type	SG11-200 DD
Total MW	96		
Customer	Jeonnam Offshore Wind Power (JOWP)		
Location	<ul style="list-style-type: none"> The Site is located 300 km South-West from Seoul Located 10 km offshore 		
Scope	<ul style="list-style-type: none"> SG 11-200 DD supplying incl. assembly site parts, transportation to harbor, installation, commissioning, SCADA. 		
Timeline	<ul style="list-style-type: none"> Notice to Proceed : 04 Jan. 2023 Pre-assembly start : 28 May 2024 First WTG energization: 08 Nov. 2024 Windfarm TOC : 21 May 2025 		



1

The First

Commercial-Scale Offshore Wind Project in Korea



Safety Performance

With Zero TRIR



Time Driven

24 months from start till 1st WTG handover

Jeonnam 1 Project



Agenda

1. Jeonnam 1 Project Introduction
2. Sharing from Jeonnam 1– HSE perspective
 - I. Unique statutory requirements in Korea
 - II. Installation Vessel
 - III. Emergency Response Plan
 - IV. CTV challenges
 - V. Best Practice in local

I. Unique statutory requirements in Korea



Minimum number of HSE managers at Site

- Safety and Health managers are defined in KOSHA based on Construction contract amount
- Qualification under the law (local HSE licenses and level of construction HSE experience)

Industrial safety and health management cost at site

- Minimum HSE budget is pre-defined under KOSHA and MOEL notice
- Developer to define to the Contractor the amount of HSE budget for each construction contract
- Contractor to plan and execute the expenses based on the defined category in law only



Hazard prevention plan

- Hazard prevention plan in Korean is required to be approved from authority under KOSHA
- Approval is mandatory before start of site opening

Local certified PPEs

- PPEs (i.e. safety helmets) certified by KR authority are mandatory, but they are not fully applicable for offshore operation activities, especially for working at height.

II. Installation Vessel



Installation vessel specifications

- The IV chartered was not familiar with SGRE team
-

Offshore emergency responses and evacuation

- A first aid trained officer on board who is following the local regulations
 - Taking very long time to align IV ERP
-

The HSE culture and awareness of installation vessel

- Proactive reporting culture and the safety awareness of the vessel crew
 - Proper vessel induction had been emphasized
-

Crane and lifting operation on IV

- New working environment , new crane operator and new crew. Alignment is crucial between all parties
- Language barriers

III. Emergency Response Plan



Bridging of Client's IV and SGRE's ERP

- Lack of bridging of ERPs of both customer and SGRE in early stage
-

Emergency rescue port

- The ERP designated port was identified but not feasible for SGRE CTVs rescue
-

Local authority emergency response resource

- The local authority emergency response services are available for both aviation and marine support under consideration of given information and weather conditions. (verbal discussion)
 - No helicopter rescue from IV as KR Coast Guard was not willing to perform it after their assessment.
-

Cold weather management

- Consideration of cold weather impact and preparation for the scenario.

IV. CTV challenges



The SRL at TP

- Multiple observations had been raised on the SRLs as the type installed at the bottom section of TP are not fit for the purpose
-

The competency of CTV crew

- The experience of CTV push-on operation and familiarization of the OWF sea state creates potential danger to transferee
 - The safety mindset and the awareness level of the crew
-

Competency of representative from the authority

- Concerns about offshore safety competency for some external personnels (i.e. for inspection) who don't have OEUK examination and GWO training but required to join offshore directly for activities
 - The potential consequence/liability to the project if worst case scenario were to happen
-

The design of Boat landing

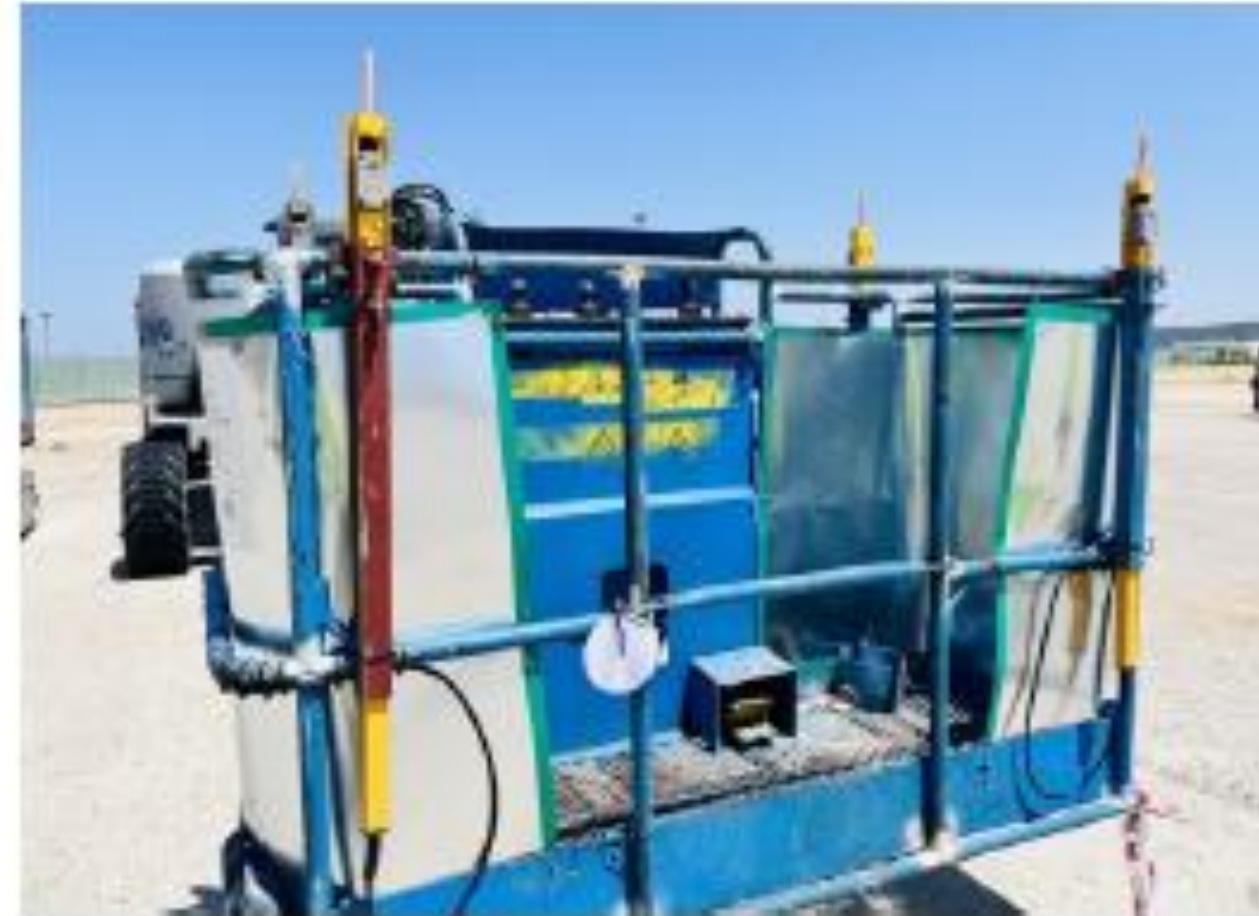
- Boat landing design issues with being a gap in between TP ladder to the bow of CTV.

V. Best Practice in Local



The height adjustable cut-off device installed on MEWP

- The use of height adjustable cut off switches on all work platform for access to work at height.
- It is the local legal requirement which is not commonly seen in other countries.
- The good practice has been deployed in Taiwan's offshore wind project.



The MEWP with height adjustable cut-off switches installed, project Jeonnam 1



The deployment of good practice in CHW2204 project in Taiwan



PROJECT PERSPECTIVES: SHARING FROM OG12 AUSTRALIA PROJECTS



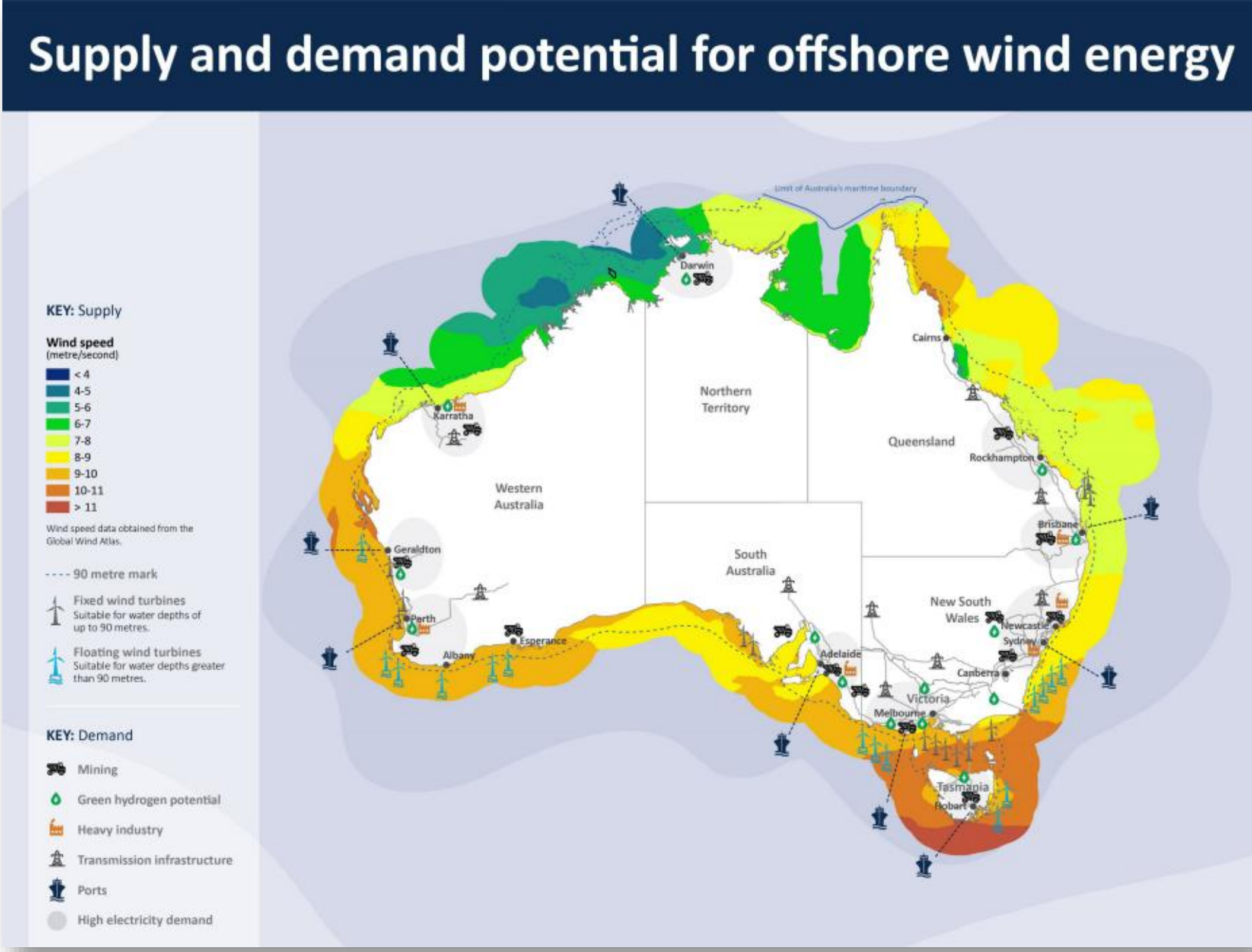
Kelly-Ann Ee

Head of HSE, Southernly Ten (Copenhagen Offshore Partners)

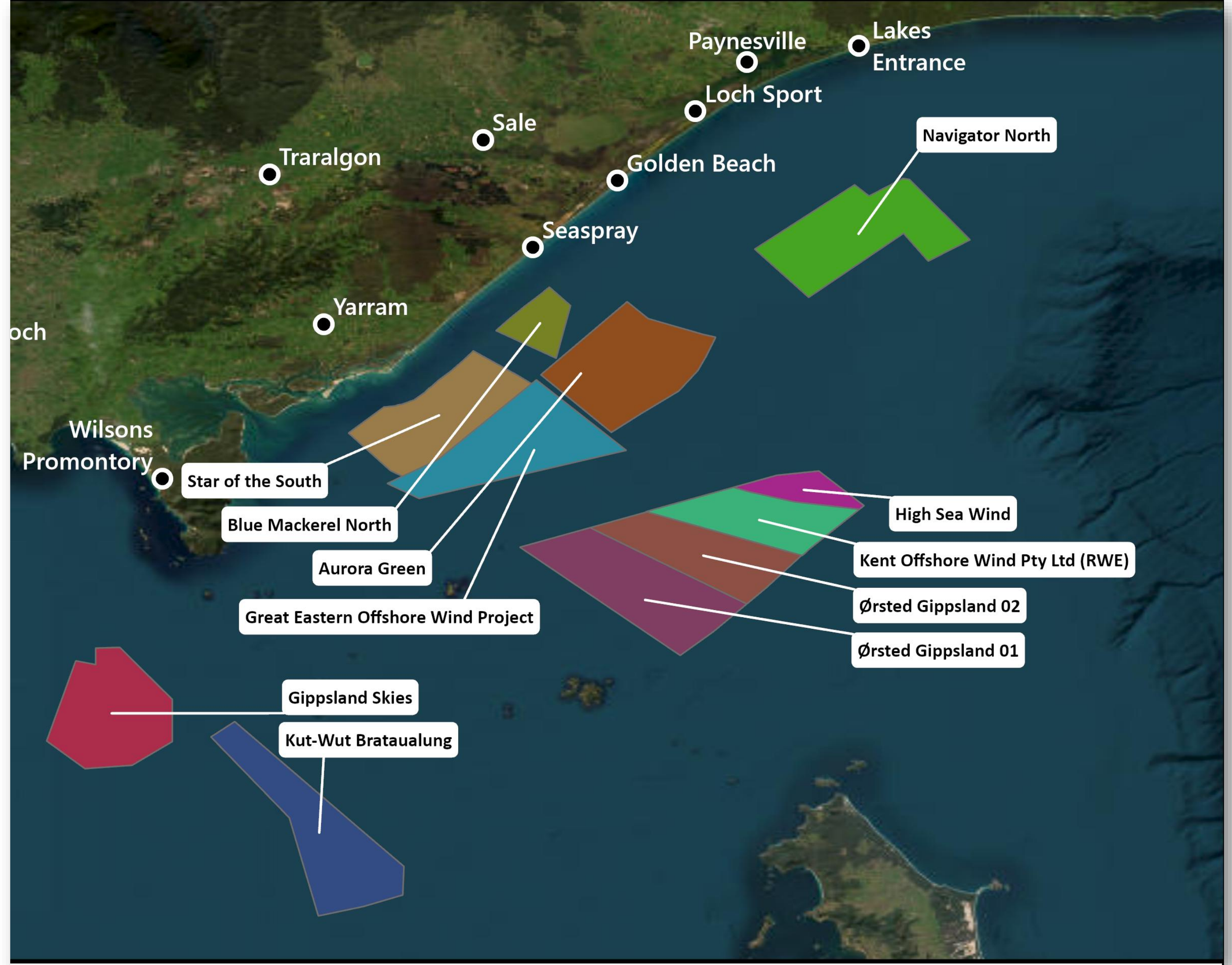
Chair of OG12 HSE subgroup



Offshore Wind in Australia



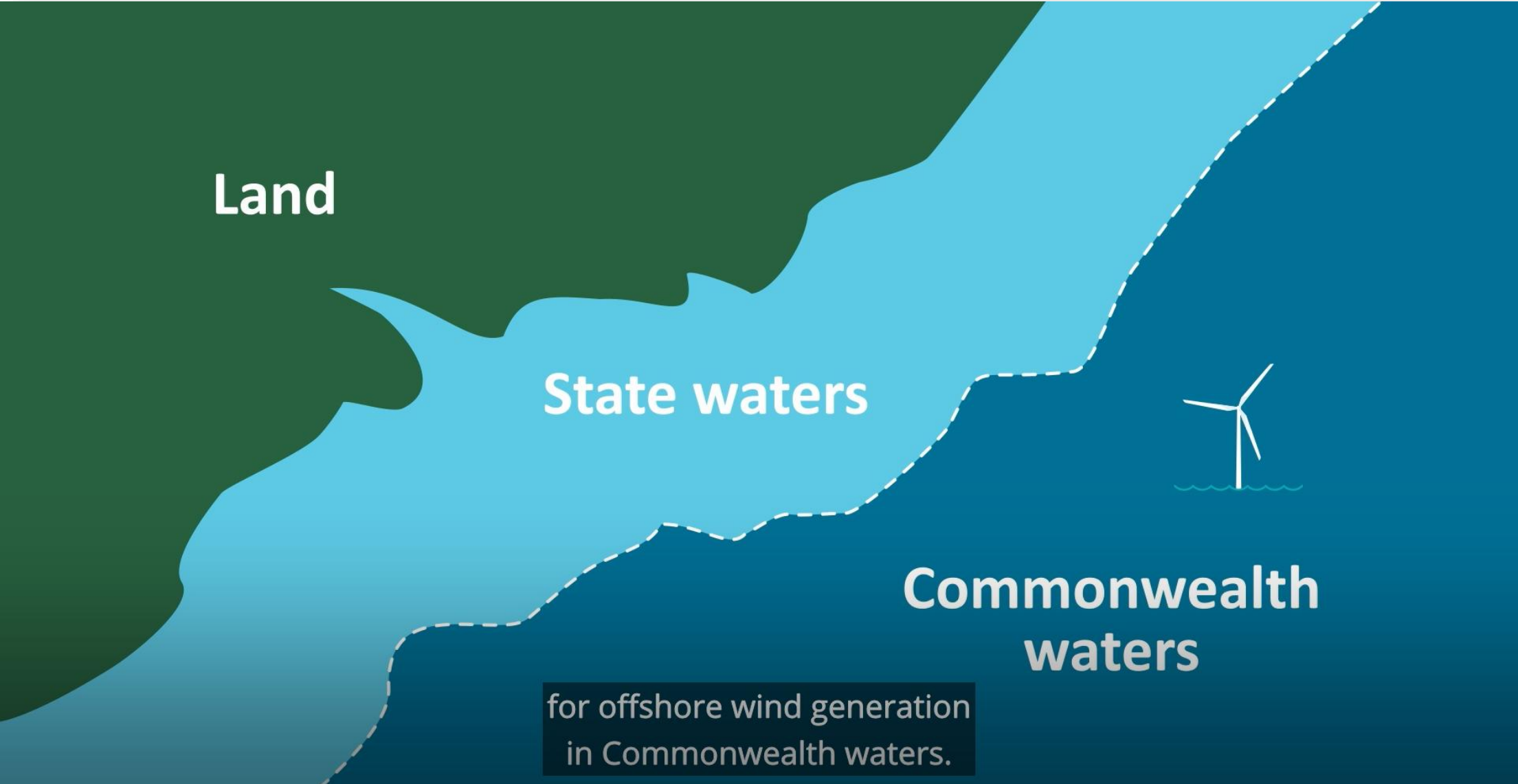
Source: Offshore Infrastructure Regulator



Source: DCCEW



Health and safety challenges in Australia



Source: DCCEEW

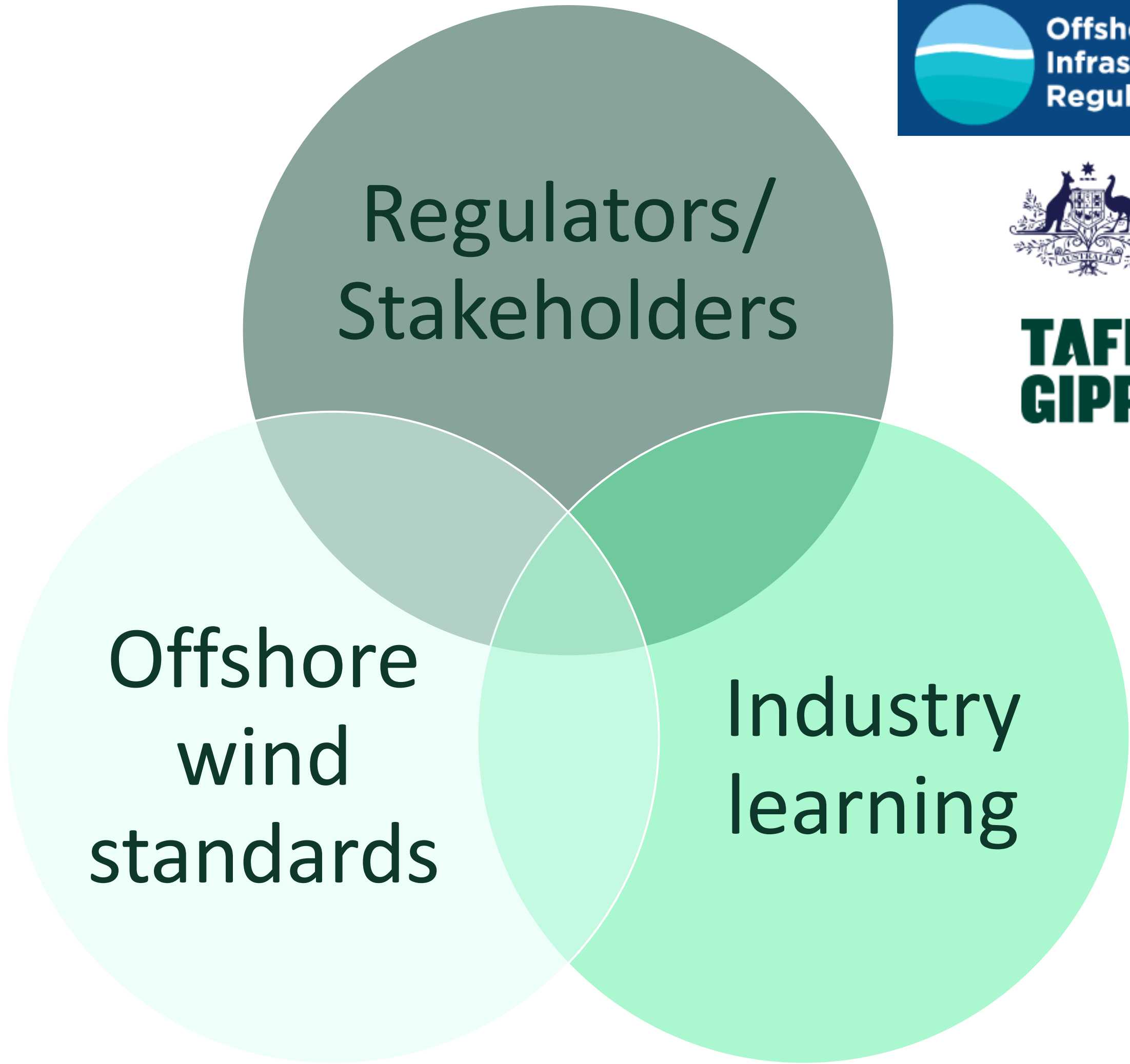
"She'll be right" is a common Australian and New Zealand slang phrase meaning "everything will be okay" or "it will turn out fine", with the "she" referring to a situation or thing, not a person. It's an expression of optimism, conveying the belief that a problem will resolve itself with time, and can also be used to offer reassurance or comfort in a difficult situation. @



Source: The Australian



OG12 HSE subgroup- collaboration and engagement





Together, we're getting the foundations right for strong H&S culture and standards in Australia.

Session 5

New Focus: Mental Health

Martin Maeso
Secretary General, G+ / Energy Institute

Lisbeth Norup Frømling
G+ Chairperson /
Vice President of QHSE, Ørsted



The Energy Institute EI framework on mental health

THE EI'S TRIPLE ROLE



1

Attracting and developing a diverse energy workforce



2

Convening expertise and evidence to inform energy decision making



3

Enabling industry to make energy safer, more efficient and lower carbon

BRINGING THE INDUSTRY TOGETHER

Technical
Innovation



SAMPLE OF RELEVANT/RECENT RESOURCES

Asset Integrity

	<p><u>EI 3551</u> <u>Guidance on ALE for offshore structures supporting wind turbines</u></p>		<p><u>Webinar 30/10</u> <u>Hydrogen Asset Integrity - Management of Change Energy Institute</u></p>		<p><u>EI 3212</u> <u>Guidelines for the management of coatings for external corrosion protection</u></p>
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Environment and sustainability

	<p><u>EI 3546</u> <u>Research Report: Embedding circularity into the construction and decommissioning of assets (Phase 1)</u></p>		<p><u>EI 3540</u> <u>Research report: Environmental impacts of the large-scale deployment of hydrogen</u></p>
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Safety Culture

	<p><u>Hearts and Minds</u></p>		<p><u>Webinar 7/10</u> <u>Improving organisational safety culture using Hearts and Minds Energy Institute</u></p>
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SAMPLE OF RELEVANT/RECENT RESOURCES

Power systems (Solar)



[EI 3539](#)
Guidance on large-scale solar photovoltaic (PV) system design, development and operation



[EI 3486](#)
Minimal staffing and lone working: ensuring employee safety and wellbeing in the power sector

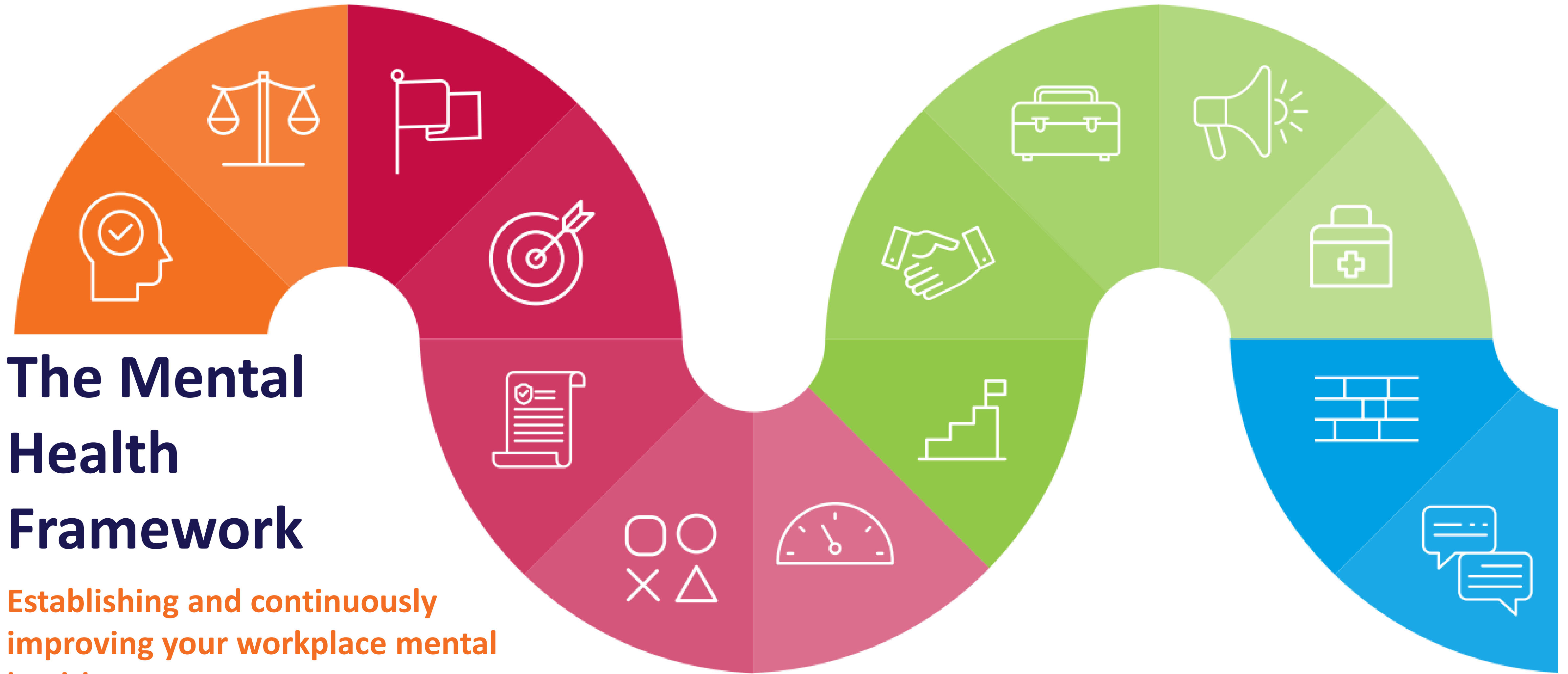
Process safety



[EI 3197](#) High level framework for process safety management

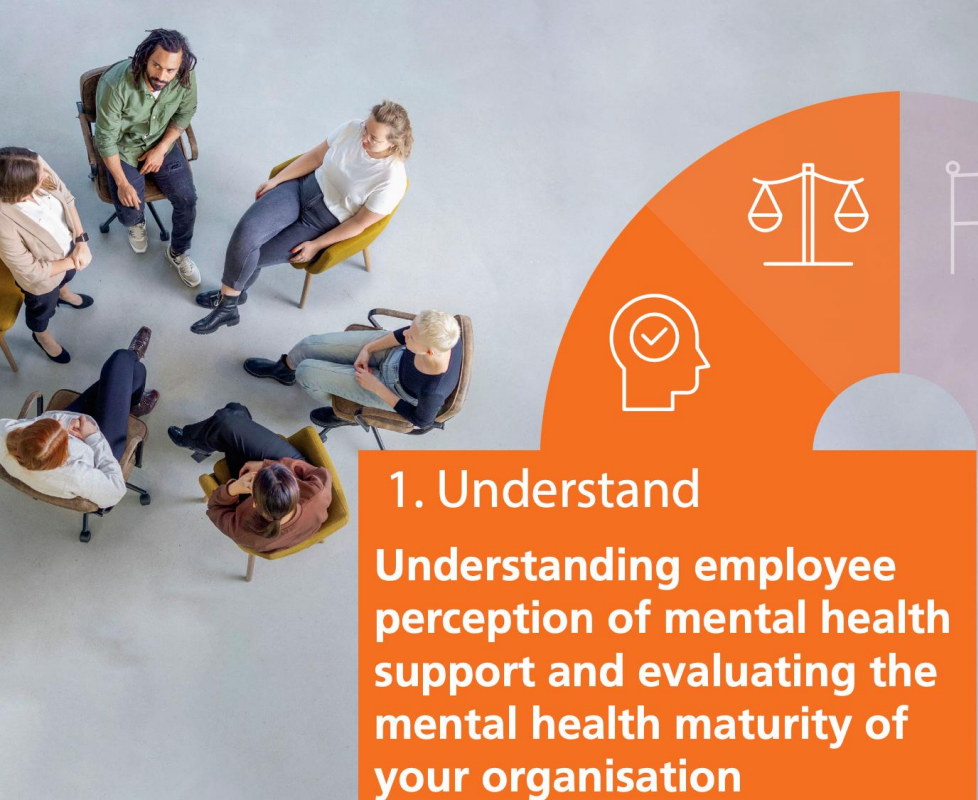


Single user license: oburlin@energyinst.org. Restricted Use - See details <https://www.energyinst.org/technical/publications/pdf-disclaimer>



The Mental Health Framework

Establishing and continuously improving your workplace mental health programme.



1. Understand
 Understanding employee perception of mental health support and evaluating the mental health maturity of your organisation



Next steps: understanding the maturity of your organisation's mental health support

Table 1: Mental health maturity matrix

	Basic	Emerging	Mature	Advanced
Strategic vision and leadership	<ul style="list-style-type: none"> No specific mental health vision, although there may be a generic care of people ambition statement or strategic pillar. Some focus on employee mental health in leadership messaging. 	<ul style="list-style-type: none"> Defined mental health vision with clear connection to culture and people strategy. Exec-level sponsor proactively championing mental health and wellbeing. 	<ul style="list-style-type: none"> Mental health vision a clear priority and closely connected to organisational purpose/culture and people strategy. Majority of Exec and senior leaders are mental health advocates. 	<ul style="list-style-type: none"> Mental health vision integrated into organisational purpose/culture and people strategy. Mental health advocacy and role-modelling across all leadership levels part of the norm.
People policies	<ul style="list-style-type: none"> Health, wellbeing and/or sickness policies comply with legislative requirements on mental health. 	<ul style="list-style-type: none"> Dedicated, if generic, mental health policy. 	<ul style="list-style-type: none"> Detailed mental health policy that covers different mental health needs across the organisation and joins the dots with other relevant policies. 	<ul style="list-style-type: none"> Sector-leading mental health policy, fully integrated with people policies throughout the employee lifecycle.
Skills and resources	<ul style="list-style-type: none"> No dedicated mental health training of leaders/line managers. Some leaders/line managers may have knowledge or experience of mental health support. 	<ul style="list-style-type: none"> Expert external resources available. For instance, an EAP is in place with growing employee take-up. Internal resources (e.g., mental health champions, wellbeing champions, mental health advocates), becoming embedded in organisation. 	<ul style="list-style-type: none"> Range of targeted interventions and internal and external resources cater for the needs of different employee groups and individuals. 	<ul style="list-style-type: none"> Dedicated mental health training for all leaders and employees. Extensive, integrated range of tailored internal and external support available for all employees.
Employee awareness, motivation and action	<ul style="list-style-type: none"> No targeted employee awareness or education campaigns. Employee understanding of issue driven by personal awareness of mental health. Limited advocacy or action on mental health issues outside line manager-employee relationships. 	<ul style="list-style-type: none"> General wellbeing campaigns underpin growing understanding of mental health across employee audiences. Emerging employee mental health advocates opening up conversation across the organisation and role-modelling mental health support actions. 	<ul style="list-style-type: none"> Multiple targeted wellbeing campaigns underpin strong understanding of mental health among majority of employees. Mental health is an established part of the ongoing wellbeing conversation across the organisation. 	<ul style="list-style-type: none"> Year-round targeted wellbeing campaigns underpin strong understanding of mental health across all employee audiences. Open and supportive mental health conversation and advocacy embedded across organisation. Appropriate peer-to-peer and team action to improve mental health part of the norm.
Insight and measurement	<ul style="list-style-type: none"> Generic engagement survey metrics on how employees are feeling, without specific focus on mental health measures. Specific engagement survey metrics and targets on mental health. Qualitative insight into mental health. 	<ul style="list-style-type: none"> Specific engagement survey metrics and targets on mental health. Qualitative insight into mental health. 	<ul style="list-style-type: none"> Integrated range of quantitative measures and targets, including engagement survey metrics, absence and turnover data. Wide range of qualitative insight. 	<ul style="list-style-type: none"> Integrated and holistic quantitative and qualitative insight and targets. Using predictive analytics to identify at-risk parts of the business and inform preventative action.

Staff engagement surveys
 Employee Assistance Programme (EAP) data
 Occupational health data
 Stress survey data
 Management discussions
 Absence data
 Sickness data

Understand

Define

Deploy

Embed

Leadership commitment and voice

Mental health vision

"Our mission for employee health and wellbeing is to add healthy years to the lives of our people, unlocking untapped human potential for our business and our work", Unilever)

Specific considerations Neurodiversity, life-stage, gender, home/hybrid working, travel, shift-working, high stress roles.

Mental health policies Do you need a new encompassing policy, or can the existing policies be amended?

Defining success and measuring outcomes

Is it possible?

Understand

Define

Deploy

Embed

- Appoint/assign a director and a team
- Leaders and manager training
- Line manager training
- Mental Health First Aiders recruitment
- Wellbeing champions
- Involve professional partners (EAP, Mind, Samaritans)
- Digital platforms and Apps

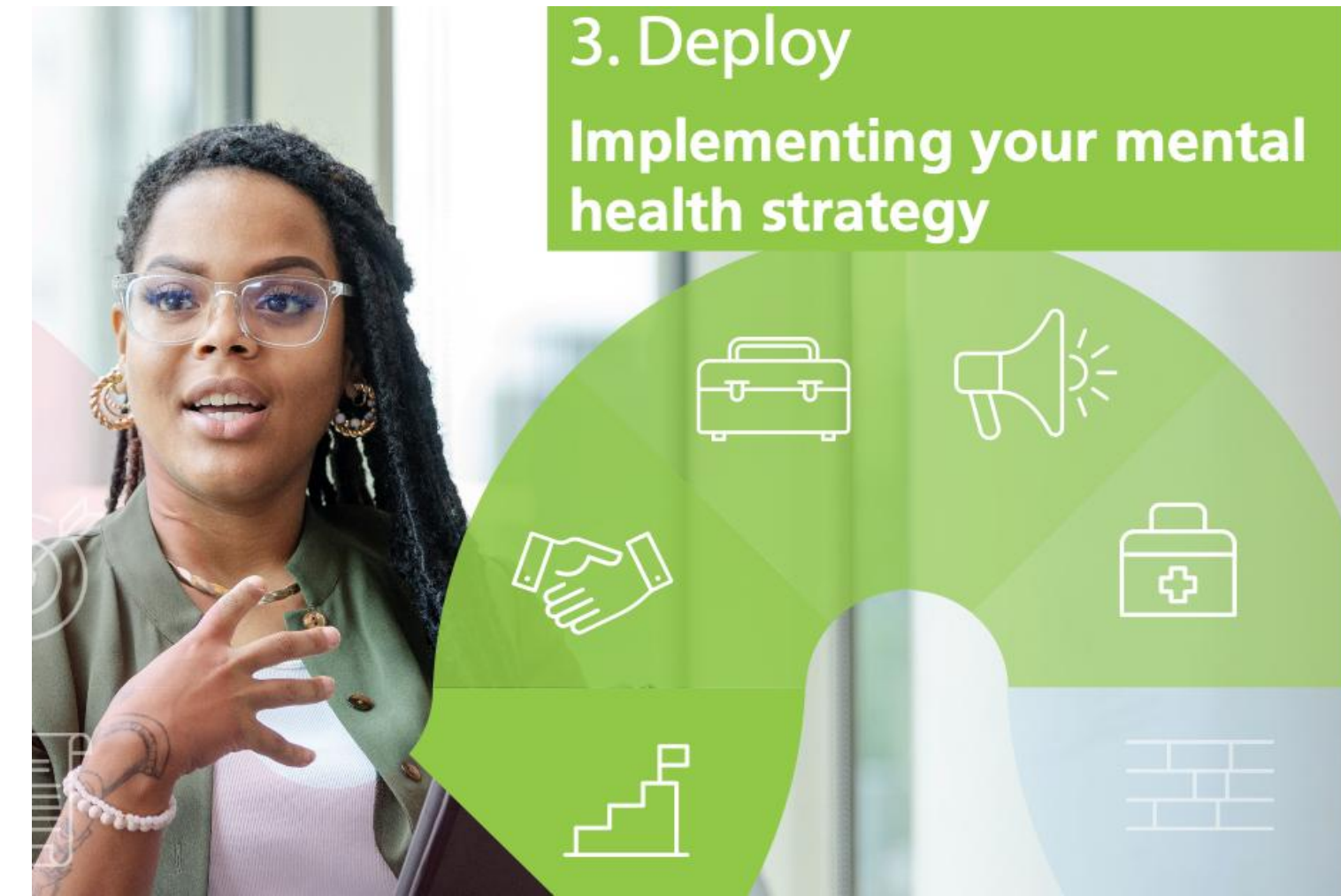


Figure 3 The employee communications change journey

“mental health awareness should be integrated at key touchstones of the employee lifecycle...from induction to retirement”



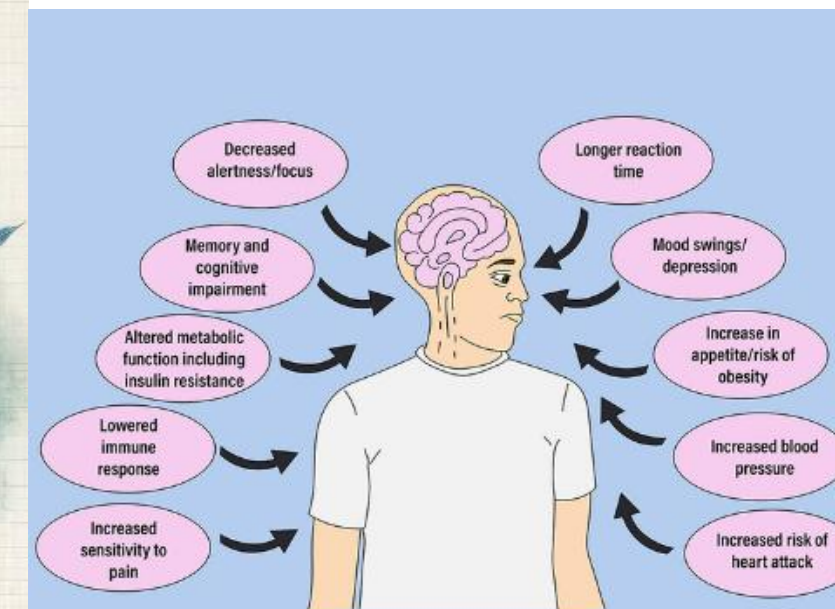


Understand

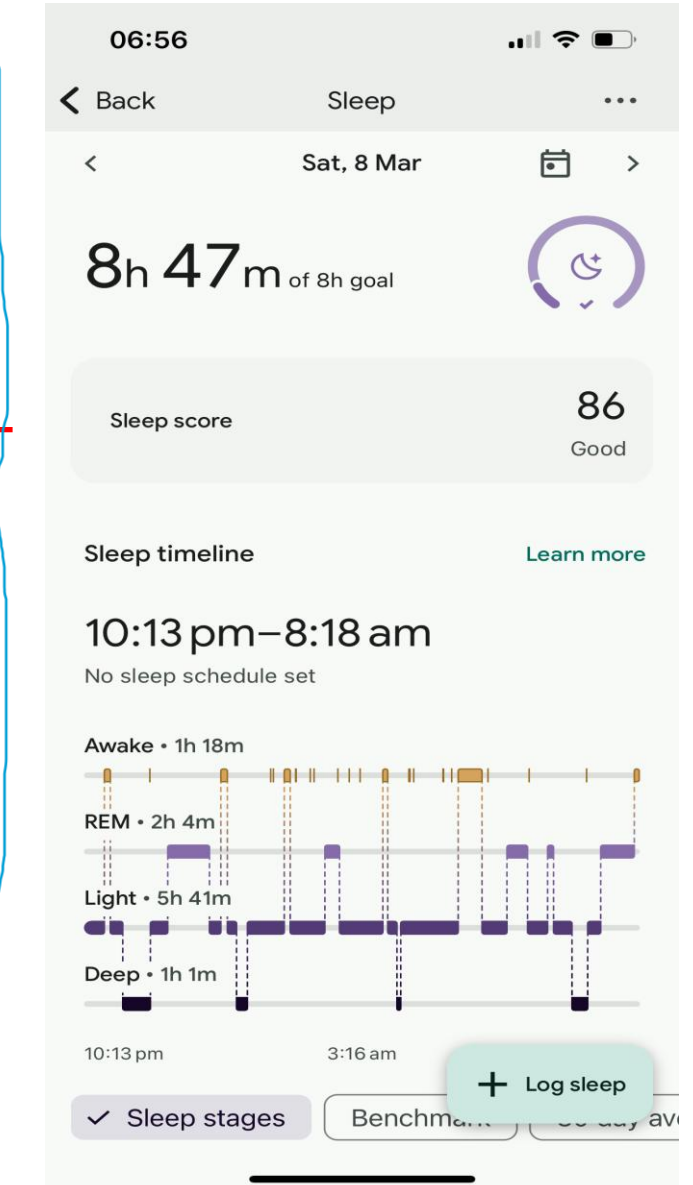
Define

Deploy

Embed



- 1. Prioritize Sleep Duration**
- 2. Optimize Sleep Quality**
- 3. Follow a Smart Pre-Sleep Routine**
- 4. Time Your Meals & Exercise Wisely**
- 5. Wake Up Strategically for Maximum Daytime Performance**



1. Mandatory or voluntary training for employees/managers/leaders
2. Incremental awareness sessions
3. Appropriate and relevant health technology
4. Reporting back on progress and data to leaders, who cascade relevant and timely messages back down, through the managers
5. High profile activities (charity partner/sponsorship, targeted campaigns, public voice of leaders, panel events)
6. Working towards BSI and ISO standards (menopause, suicide awareness)
7. Challenging business-as-usual processes to include knowledge of good mental health (procurement, hiring, contractors)

Useful links for reference



[The Mental Health Framework | Energy Institute](#)

EI technical guidance documents by topic - <https://www.energyinst.org/industry/good-practice>

Toolbox incident lessons - <https://toolbox.energyinst.org>

EI Academy (training courses) - <https://www.energyinst.org/whats-on/training>

Personal membership - <https://www.energyinst.org/membership-and-careers/fellowship>
<https://www.energyinst.org/membership-and-accreditation/company-membership>

Mentoring - <https://www.energyinst.org/membership-and-careers/ei-connect>

Statistical Review of World Energy (2024 report) - <https://www.energyinst.org/statistical-review>

Mental Health & Psychological safety





We all carry an inner voice and reality with us, even at work.

This can stem from many things, like high workload, illness, divorce, children struggling in school, bad relations at work or at home or many other challenges.

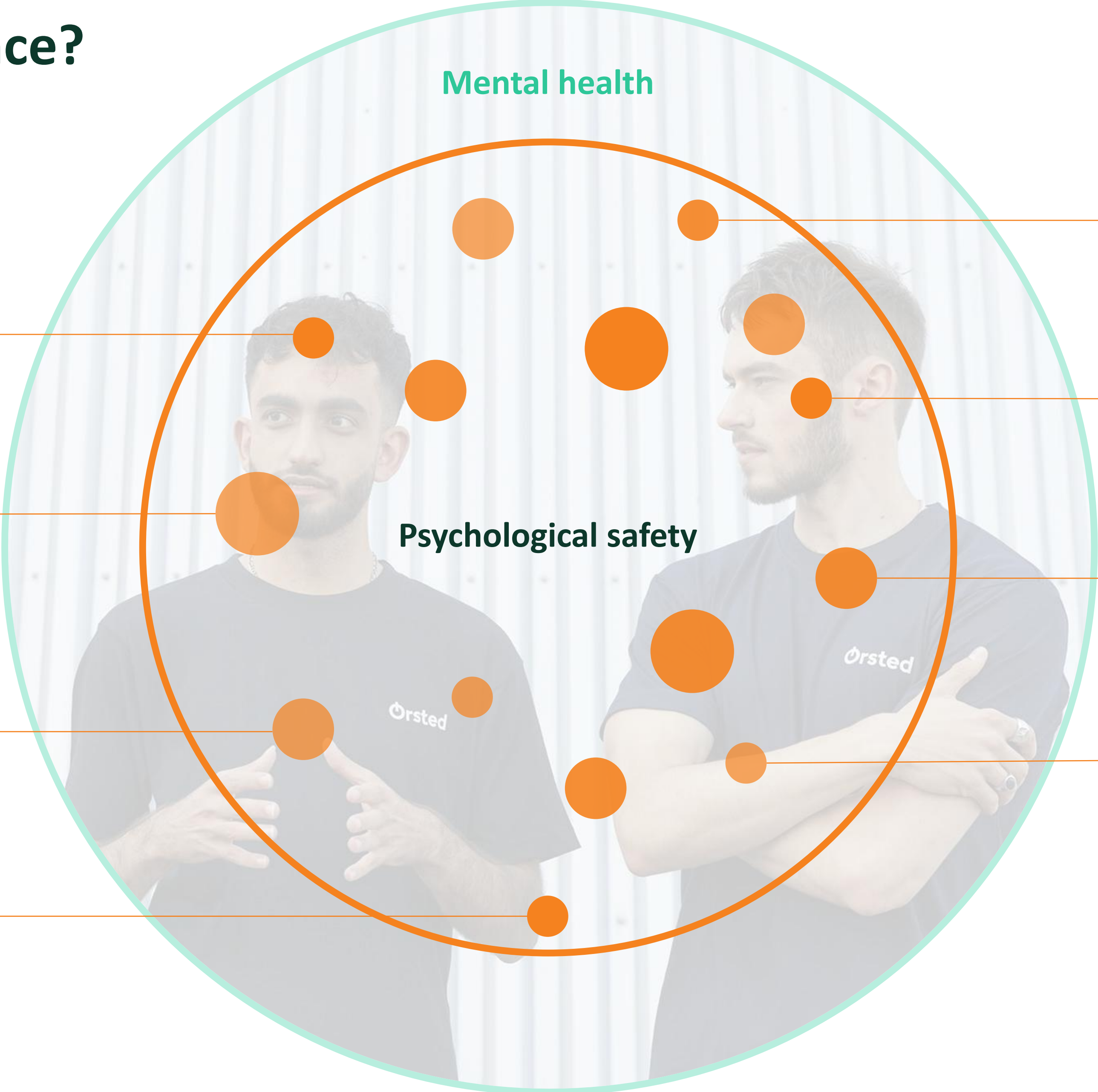
Psychological safety helps us to be open and let each other know if we are struggling. And having someone to count on who listens and cares when things are difficult.

Take care,

Lisbeth Norup Frømling

SVP QHSE Ørsted

What can we influence?



Never stigmatise

Respect different viewpoints

Check-in with your colleague

Listen

Show patience

See mistakes as learning opportunities

Facilitate inclusive discussions

Celebrate differences

What makes you feel safe to share your thoughts at work?





PSYCHOLOGICAL SAFETY IS THE NUMBER ONE INGREDIENT FOR US TO PERFORM.

YOU PERFORM AT YOUR BEST WHEN YOU FEEL SAFE, UNDERSTOOD, ACCEPTED, AND LISTENED TO.

IN AN ENVIRONMENT LIKE THAT YOU CAN CONTRIBUTE WITH ALL YOUR CREATIVITY, INTELLIGENCE, AND TALENT.

RASMUS ERRBOE
CEO & GROUP PRESIDENT



Every voice is valued

NON-JUDGMENTAL ENVIRONMENT.
KNOWING I WON'T BE CRITICISED OR
RIDICULED FOR MY IDEAS.

FEELING HEARD. WHEN MY
CONTRIBUTIONS ARE ACKNOWLEDGED
AND CONSIDERED.

TRANSPARENCY IN COMMUNICATION.
WHEN LEADERS AND COLLEAGUES ARE
HONEST AND OPEN.

COLLABORATIVE DISCUSSIONS. WHEN
BRAINSTORMING AND DISCUSSIONS FEEL
LIKE A TEAM EFFORT, NOT A
COMPETITION.



Psychological safety
and physical safety go
closely hand in hand



25th September

Oakwood Premier Hotel, Incheon, South Korea

Session 6 - Panel Discussion

Regional Collaboration as a Driver of Global Safety

Moderator

Kate Harvey General Manager, G+

Panelists

Jeonghyun (JH) Ye

G+ APAC Focal Group Chair /

Head of APAC QHSE Supplier Management, Ørsted

Watanabe Sayuri

Co-Head Asia Pacific and Japan Representative, WFO

Deokhwan Choe

Head of Communication, KWEIA

25TH SEPTEMBER 2025



WFO (World Forum Offshore Wind) and its global activities

Sayuri Watanabe
Co-head Asia Pacific & Japan Representative

WFO in a Nutshell

2018

Founded

100%

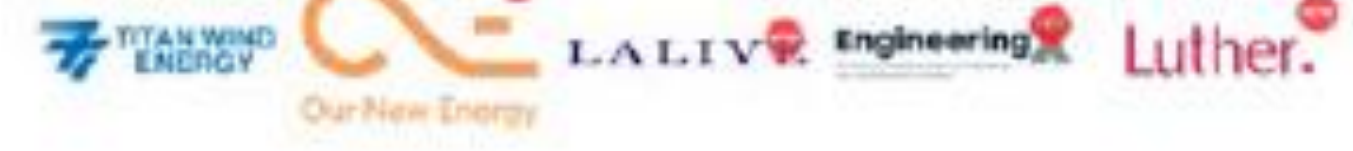
Offshore Wind

110+

Members

Non-profit organisation

Meet our members



Meet all our members



What we offer

1

Insights



2

Committees

Floating Offshore Wind Committee

Offshore Wind to Hydrogen Committee

Offshore Dispute Resolution Committee

Power Purchase Agreements (PPA) Committee

End of Life (EoL) Committee

3

Network & Events

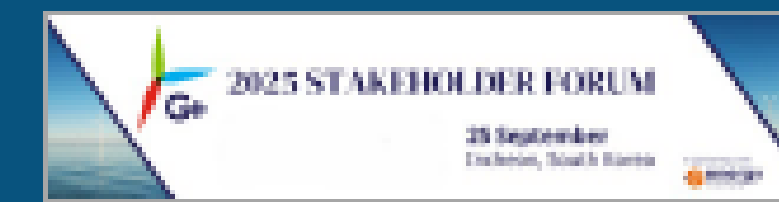


- Date: 20-21 January 2026
- Location: Barcelona, Spain



- Date: 1-2 July 2026
- Location: Tokyo, Japan

WFO Committees



Our Committees address major challenges through open discussions and aim for pragmatic solutions to solve the industry's most urgent issues.

Floating Offshore Wind Committee (FOWC)

Subcommittees:

- Insurance
- O&M
- Moorings
- Environment, Cohabitation & Biodiversity (ECB)
- Cables & Floating Substations
- Serial Production
- Interface Risk

Offshore Wind to Hydrogen Committee (OWHC)

Subcommittees:

- Regulation
- Consenting

Offshore Dispute Resolution Committee (ODRC)

Subcommittees:

- Education

Offshore Wind Power Purchase Agreements (PPA) Committee

New!

Offshore Wind End-of-Life (EoL) Committee

New!

Floating Offshore Wind White Papers



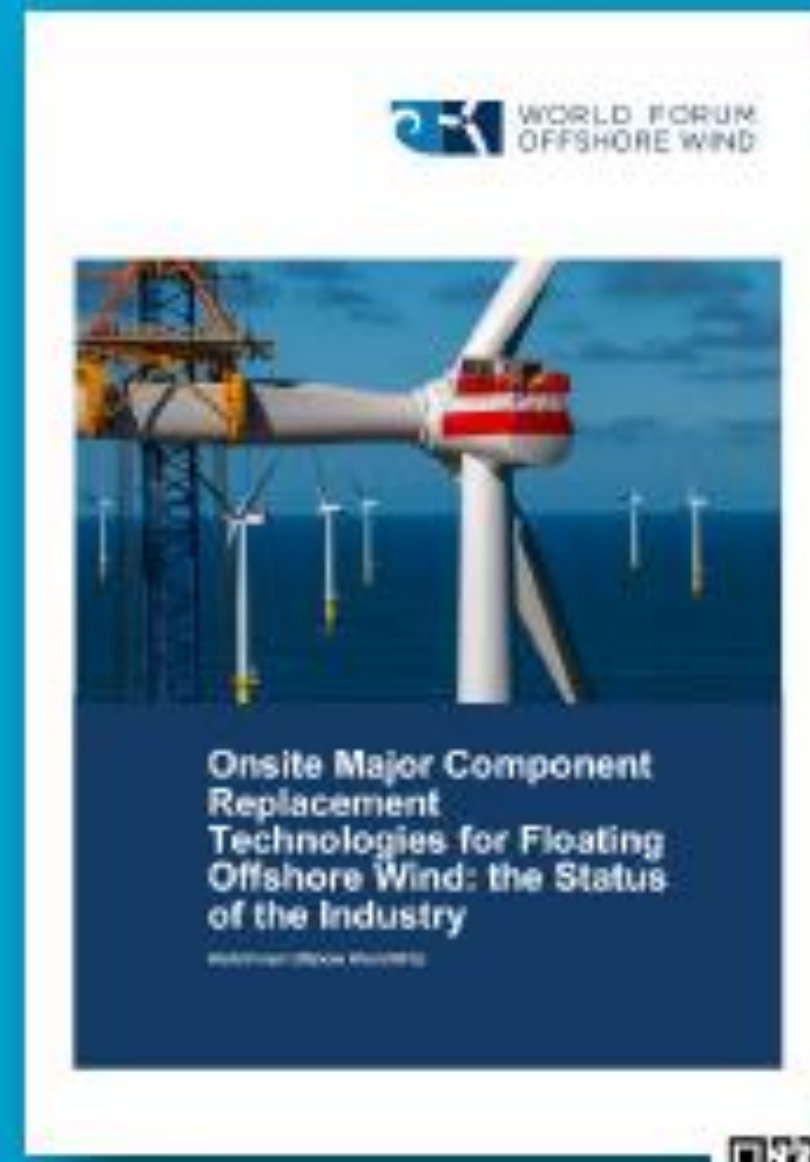
February 2024

Floating Offshore Wind
Dynamic Cables: Overview of
Design and Risks



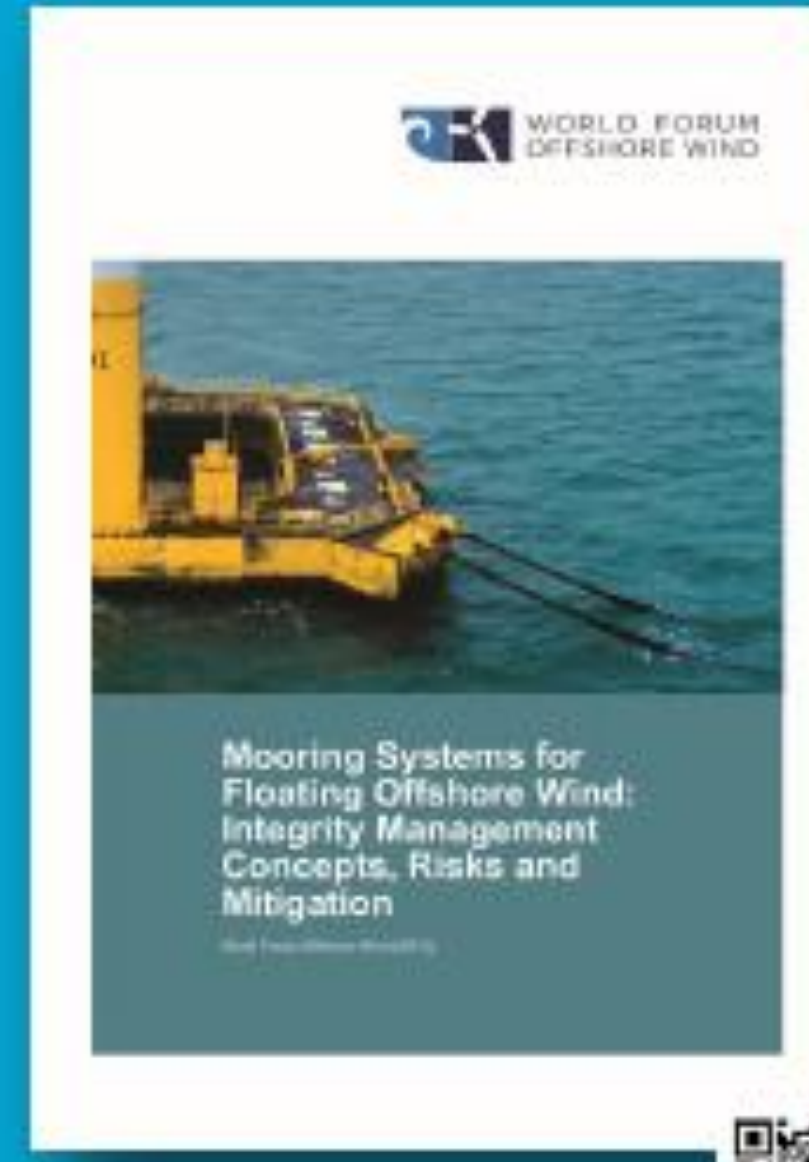
February 2023

Onsite Major Component
Replacement Technologies for
Floating Offshore Wind: the
Status of the Industry



May 2022

Mooring Systems for Floating
Offshore Wind: Integrity
Management Concepts, Risks
and Mitigation



December 2021

Challenges and Opportunities
of Major Maintenance for
Floating Offshore Wind



October 2021

White Paper: Insurability of
Floating Offshore Wind



Floating Offshore Wind Upcoming White Papers



O&M

Three white paper covers for the O&M category are shown, each with a 'First edition' or 'Second edition' or 'Third edition' label and a 'Q4 2025' release date. The covers feature the World Forum Offshore Wind logo and images of offshore wind turbines.

- First edition:** Challenges and Opportunities of Major Maintenance for Floating Offshore Wind
- Second edition:** Major Component Replacement Technologies for Floating Offshore Wind: the Status of the Industry
- Third edition:** (Title partially obscured)

ECB

ECB white paper cover with a 'First edition' label and a 'Q4 2025' release date.

Mooring

Two white paper covers for the Mooring category are shown, each with a 'First edition' or 'Second edition' label and a 'Q1 2026' release date. The covers feature the World Forum Offshore Wind logo and images of offshore wind turbines.

- First edition:** Mooring Systems for Floating Offshore Wind: Integrity Management Concepts, Risks and Mitigation
- Second edition:** (Title partially obscured)

WFO APAC Summit



Asia Pacific Summit 2024

Offshore Wind Energy Industry - "Where We Are" and "Where We are Going"
- For Sustainable, Profitable and Attractive Offshore Wind Industry -

12th. - 13th. June 2024
Tokyo, Japan



Asia Pacific Summit 2025

Accelerating Offshore Wind in APAC

2nd. - 3rd. July 2025
Tokyo, Japan



Asia Pacific Summit 2026

1st. - 2nd. July 2026
Tokyo, Japan

Health & Safety
As a continuing
key theme

How to mitigate Risks and Uncertainties
- Health and Safety



Marubeni
Offshore Wind
Development

丸紅洋上風力開発株式会社



How we should
Manage Safety



+

How to Ensure H&S Culture and
Advance Standards
to Protect Offshore Wind Workers



Thank You!

 www.gplusoffshorewind.com

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 @gplusglobalofw

 [gplus@energyinst.org/](mailto:gplus@energyinst.org)

