



# G+ Overview



# Why health and safety?

## Update: Worker On Board Wind Pioneer Injured by Fire Hose



British and Danish authorities have started an investigation to determine the root cause of **the accident** in which a worker on board the jack up vessel Wind Pioneer was injured on Saturday, 20 February, while the vessel was carrying out maintenance work at the 172MW Gunfleet Sands offshore wind farm.

The injured worker suffered a laceration to his right shin, seemingly caused by a fire hose being pressurized, DBB Jack-Up, the owner of the Wind Pioneer, said in a statement.



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

Health and Safety Executive case brought following 2010 accident



02/10/2015

## Company fined after worker is fatally crushed in trench

Date:

5 May 2016

A company has been fined £2.6 million after an employee was killed when the trench he was working in collapsed on him in Lancashire.

James Sim, a 32-year-old worker, from Barry, South Wales, a sub-contractor working on behalf of Balfour Beatty Utility Solutions Limited. On the 14 April 2010, Mr Sim was working in a trench, laying ducting for new cable for an offshore windfarm that was being built off the coast by Heysham, Lancashire. The trench was dug to a depth of 2.4 metres, without any shoring. Mr Sim was killed when he became trapped in the trench after it collapsed on him.

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.

## Safety Alert Issued on Butendiek OWF Accident



A serious accident occurred in the night of Sunday 6 July 2014 at the German offshore wind farm Butendiek. The victim, a Danish employee hired by Ballast Nedam, was admitted to the hospital in critical condition.

Due to the seriousness of his injuries, he spent 6 weeks in hospital. He will need further surgery

and his recovery will take a considerable amount of time.



# 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

## Energy Institute

- Provides the Secretariat

## 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



# Board of Directors

Ørsted



Lisbeth Norup  
Frømling



Giles Mackey



Beate Myking



Arianna Marinello

SIEMENS Gamesa  
RENEWABLE ENERGY



Clark  
MacFarlane

RWE



Karin Borg



Natalia Planillo



Elena Caja  
Martin



Nicolas  
Wawresky

VATTENFALL



Pavlo  
Malysenko

Vestas



Tyrone  
Singleton



Michelle  
Ruane

CORIO

*tbc*

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



**Beate Hildenbrand**  
Head of Americas



**Mariana Carvalho**  
Technical Manager



**Caren Hsiao**  
APAC Representative



**Jak Currie**  
Technical Officer



**Olivia Burton**  
Technical Officer



**Edwin Sheppard**  
Technical Manager - Data

Supported by





Board

Associates

FG US

FG Europe

FG APAC

Life  
Saving  
Rules

Wind  
Turbine  
Safety  
Rules

Data  
reporting  
and  
analysis

Good  
Practice  
Guidelines

Safe by  
design

Toolbox  


Workstream 1

Workstream 2

Workstream 3

Workstream 4

Workstream 5

Workstream 6

Workstream 7

Workstream ...

Workstream n

Developer Group

Construction Group

Operations Group

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

Caren Hsiao  
APAC Representative

Jak Currie  
Technical Officer



Industry Collaboration Committee (ICC)

GWO

IMCA

VGBE

RUK

OPITO

WE

BNOW

ACP

Wider Stakeholders

Technical and  
Innovation

Events

External Affairs

Knowledge

Membership  
and  
Accreditation

EI Academy



energy  
institute



# 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
- Act as a catalyst for further discussion and research within the industry



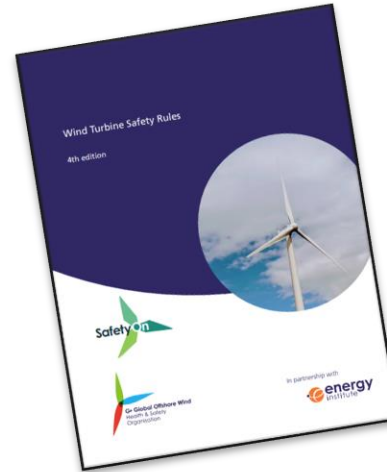
# Unlocking the power of data



## 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.



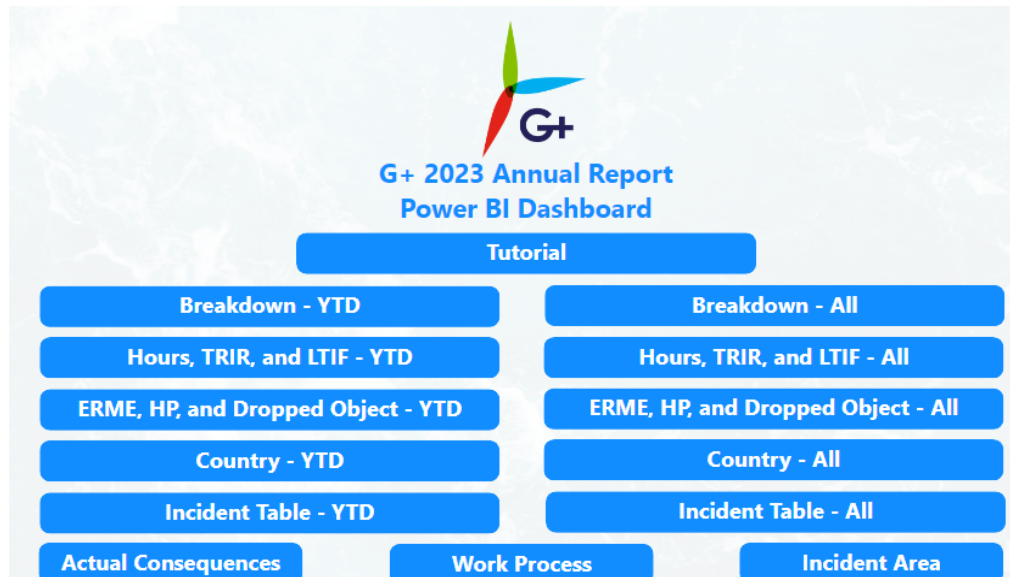
## Life Saving Rules (LSR)

- 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 (4<sup>th</sup> 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 for the offshore wind industry

## 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

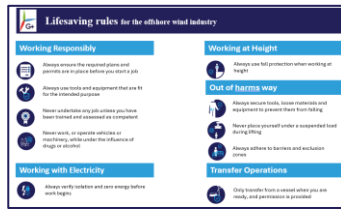


Only transfer from a vessel when you are ready, and permission is provided

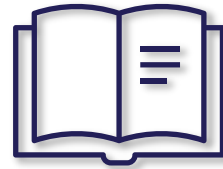


# Not just a set of rules

## 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: Chinese, German, Spanish, Japanese and Korean

## 6 Monitor and improve



We will collect the data to understand the impact and applicability of the rules, and commit to adapting our rules as needed by the industry.



# G+ current work programme

OW 2502	Incident data reporting	OW 2310	Vessel Safety Guide
OW 2504	Safety alerts and sharing information – <b>Toolbox</b>	OW 2407	Severe weather preparedness   <i>inc. Heat stress</i>
OW 2208	<b>Manual handling</b> – video campaign	OW 2413	Vessel/WTG interaction
OW 2209	<b>Lifting</b> framework	OW 2312	SMS arrangements for OW across life cycle
OW 2406	<b>Welfare</b>	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



# EI Tech Membership

A not-for-profit registered charity, 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.

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](mailto:companies@energyinst.org)





# Contact Details



[www.gplusoffshorewind.com](http://www.gplusoffshorewind.com)



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@G+ Global Offshore Wind Health and Safety Organisation



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