



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.

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

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.

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



Graeme
Patersen

RWE



Karin Borg



Natalia Planillo



Richard
Pargeter



Nicolas
Wawresky

VATTENFALL



Pavlo
Malyshenko

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



The G+ team



Beate Hildenbrand
Head of Americas



Mariana Carvalho
Technical Manager



Caren Hsiao
APAC Representative



Liam Austin
Technical Officer



Olivia Burton
Technical Officer



Edwin Sheppard
Technical Manager - Data



Mubi Kim
APAC Technical Manager

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

Liam Austin
Technical Officer

Caren Hsiao
APAC Representative

Mubi Kim
APAC Technical Manager



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.

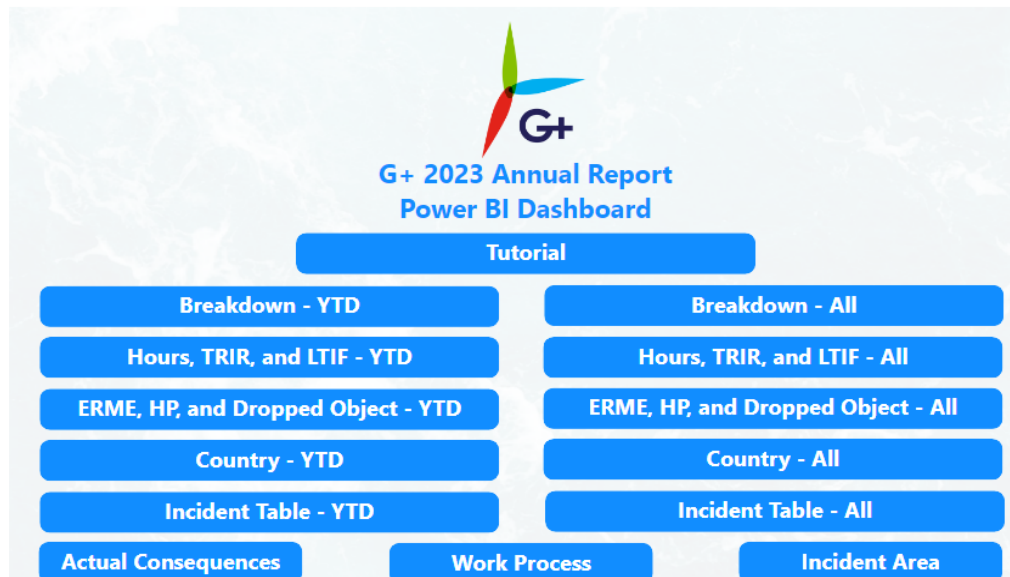


Life Saving Rules (LSR)

- 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 (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 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

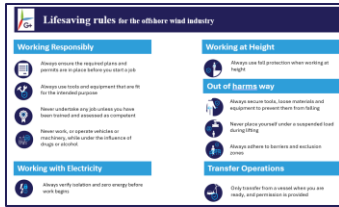


Only transfer from a vessel when you are ready, and permission is provided

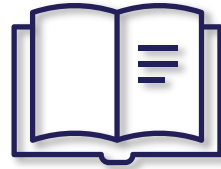


Not just a set of rules

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

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

The background of the slide features a photograph of an offshore oil rig. In the foreground, a worker wearing a white hard hat, a red safety vest, and a dark long-sleeved shirt is looking towards the camera. Behind him, the yellow metal structures of the rig are visible against a backdrop of blue water. The image is partially obscured by large, semi-transparent geometric shapes in red and green.

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



Contact Details



www.gplusoffshorewind.com



@gplusglobalofw



@G+ Global Offshore Wind Health and Safety Organisation



gplus@energyinst.org