

# **Innspill i diskusjon om regelverk for Havvind – Risikobilde i bransjen**

Tore Sagvolden, TEKNA, 17.02.2022

# Statement from Dorine Bosman, Vice President Offshore Wind, Shell



## Top Shell executive slams offshore wind over safety record

Industry lagging oil & gas sector that learned hard lessons after Piper Alpha disaster, conference told

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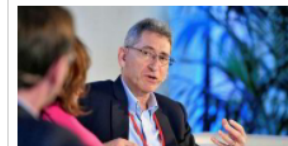
By [Andrew Lee](#)

Offshore wind is lagging well behind the oil & gas industry over safety, with “only luck” preventing a fatality in the sector last year, warned a senior executive from Shell.

Dorine Bosman, Shell’s vice president for offshore wind, said the fast-growing sector quickly needs to follow the lead of oil & gas, which “learned lessons the hard way through tragedies such as Piper Alpha”, the devastating oil rig fire that killed 167 in the UK North Sea in 1988.

Bosman told the WindEurope Offshore industry conference in Copenhagen that offshore wind experienced 256 high-potential incidents – with the possibility of death or life-changing injury – in 2018. “Only luck stood between something worse happening,” she said.

Wind at sea’s rate of total recordable incidents was 4.55 per million hours worked, compared to 0.9 per million in oil & gas, she added.



**Shell chief lifts lid on oil giant's \$2bn-a-year energy transition**

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And Bosman warned that the sector’s steep growth trajectory, and the millions of hours of extra work it will involve, makes the issue even more urgent.

“If you make these numbers work in your head are you still convinced you’ll have zero fatalities? Would you recommend this industry to a friend?”

The figures quoted by Bosman come from 2018 safety data produced by G+ Global Offshore Wind, a sector safety organisation backed by major players such as Orsted, Vattenfall and ScottishPower.

***“Would you recommend this industry to a friend?”***

The data showed the 256 high-potential incidents represented a 13% drop on 2017’s level, with no fatalities in either year. When the statistics were released in June, G+ chairman Paul Cowling said other key safety metrics also saw “a remarkable improvement in 2018”.

The G+ figures cover European offshore wind markets plus the US and Taiwan, but not China. A spokesperson for the group told *Recharge*: “The best possible health and safety performance needs to be pursued in all parts of energy. It’s hard to compare data for oil & gas with that for offshore wind. Offshore wind is of course a newer technology than oil & gas, but we are focused on applying the same robust approach.

“Transparency around the health and safety in offshore wind is important, which is why we publish annual incident data. Our most recent report showed a decrease in the total number of incidents last year, against a backdrop of growing activity in the sector, but there is of course never any room for complacency.”

# Statement from Dorine Bosman, Vice President Offshore Wind, Shell



**'Our goal is an injury-free wind industry'**

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Jakob Lau Holst, chief executive of wind OEM-backed safety training specialist GWO, said it was “remarkable and encouraging” that a senior executive used a major offshore wind speech to highlight safety.

“We’re not doing badly but we could do much better,” he said, pointing out that as a younger industry, offshore wind had joined the safety curve later.

“Training is part of creating a safety awareness in the industry. I appreciate Dorine Bosman’s desire to do more, and that’s a sentiment that’s shared across the industry.

“The principle is that we can do better. We are behind oil and gas in safety, but we are approaching oil and gas in safety.”

Mike Rice, commercial director at Dropsafe, a specialist in safety in industries spanning energy, marine, mining and other sectors, said: “There is still a visible gap between offshore wind and oil & gas in its approach to tackling core safety risks.”



**Oil supermajor Shell buys French floating wind pioneer Eolfi**

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However, Rice added that demand for proven health and safety equipment, and best practices from oil & gas, is growing, “indicating a desire not only to tackle safety and associated financial risks, but also to address the threat to reputation that may be posed by a serious incident.

“Indeed, we have seen markets like Taiwan taking a particularly robust approach to adoption of health and safety solutions as they look to start on a strong footing.”

Bosman appeared at WindEurope Offshore as Shell deepens its footprint in the sector, with a fixed-foundation development portfolio in Europe and the US, and a growing interest in floating wind, where it recently bought French technology pioneer Eolfi.

(Copyright)

# G+ statistics

G+ Global Offshore Wind Health and Safety Organisation 2020 incident data re

## Country profiles

G+ collates incident data from sites situated in Denmark, France, Germany, the Netherlands, Sweden, Taiwan, United Kingdom, and the United States. The incident profile of different countries, in which the G+ operates, varies in accordance with the activities that take place in each country. However, examining the top three work processes by the number of incidents in different countries – Figures 27 to 34, it can be seen that manual handling was the most common top three work process<sup>14</sup>.

To further analyse country profiles, please explore our dataset on the G+ [website](#).

	Number of sites	Asset damage	First Aid Injury	Hazard	Lost Work Day Injury	Medical Treatment Injury	Near hit/miss	Restricted Work Day Injury	Total	Hours (million)*	LTIF/TRIR
Denmark	10	4	23	1	1	1	7	2	39	1.7	0.6 / 2.3
France	1	13	2	0	0	1	1	0	17	0.2	NA / 5.9
Germany	12	8	21	5	13	4	19	10	80	2.4	5.4 / 11.2
Sweden	2	1	0	0	0	0	4	0	5	0.1	NA / NA
Taiwan	3	2	9	36	0	1	7	0	55	1.9	NA / 0.5
The Netherlands	4	0	20	20	5	2	3	4	54	1.3	3.7 / 8.2
UK	47	119	118	36	23	11	149	13	469	15.8	1.5 / 3.0
United States	8	0	8	9	1	2	3	1	24	1.6	0.6 / 2.5

\*Hours worked in offices with multiregional operations cannot be attributed to a specific country.

Figure 27: Country profiles – actual consequence, worked hours, LTIF and TRIR

- Hvorfor så stor forskjell mellom Tyskland og Danmark (faktor 5) ?
  - Ulik praksis og regelverksregime?
  - Ulikt/svakt rapporterings regime?
- Fordeling onshore versus offshore?
- Er maritime operasjoner med i statistikken
- Er kontor aktiviteter blandet med fysisk arbeid?
- Mulig å hente inn mer underlag fra G+ for å skaffe et faktaorientert underlag?

# Caithness Windfarm Information Forum

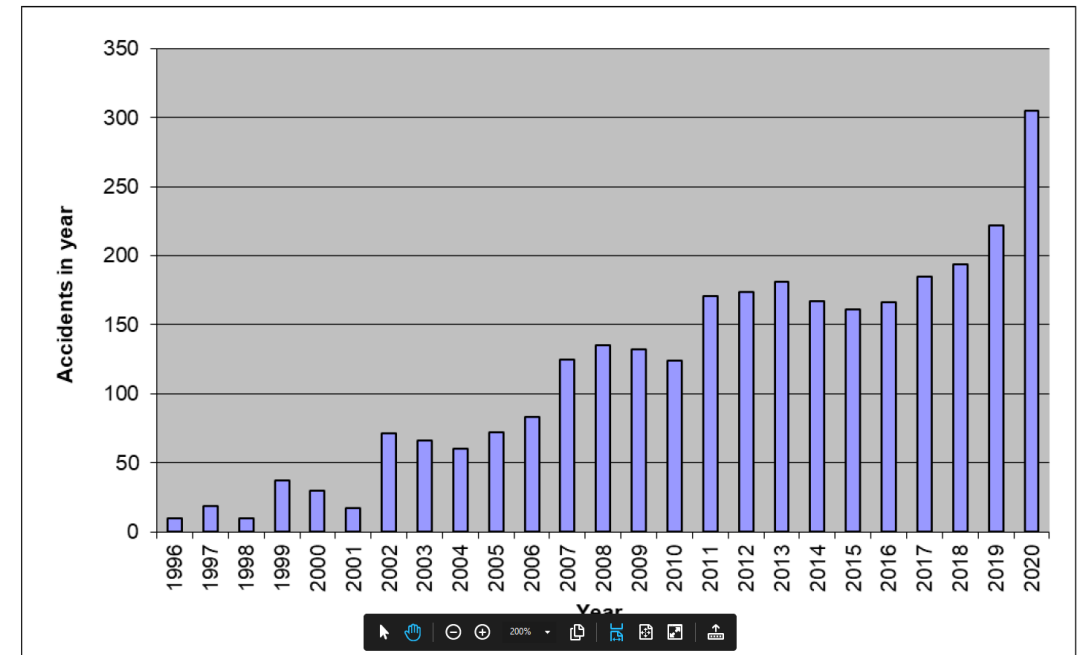
## Summary of Wind Turbine Accident data to 30 June 2021

*These accident statistics are copyright Caithness Windfarm Information Forum 2021. The data may be used or referred to by groups or individuals, provided that the source (Caithness Windfarm Information Forum) is acknowledged and our URL [www.caithnesswindfarms.co.uk](http://www.caithnesswindfarms.co.uk) quoted at the same time. Caithness Windfarm Information Forum is not responsible for the accuracy of Third Party material or references.*

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The detailed table includes all documented cases of wind turbine related accidents and incidents which could be found and confirmed through press reports or official information releases up to 30 June 2021. CWIF believe that this compendium of accident information may be the most comprehensive available anywhere.

Data in the detailed table is by no means fully comprehensive – CWIF believe that it may only be the “tip of the iceberg” in terms of numbers of accidents and their frequency. Indeed on 11 March 2011 the Daily Telegraph reported that RenewableUK confirmed that there had been 1500 wind turbine accidents and incidents in the UK alone in the previous 5 years. In July 2019 EnergyVoice and the Press and Journal reported a total of 81 cases where workers had been injured on the UK’s windfarms since 2014. The CWIF data has only 15 of these (<19%). In February 2021, the industry publication Wind Power Engineering and Development admitted to 865 off-shore accidents during 2019 – CWIF only have 4 of these (<0.5%). Finally, EnergyVoice published a report containing details of over 500 UK onshore wind turbine accidents in 2020 – CWIF only has 5 of these (1%).



# Eksempel – IEC standard under utarbeidelse – “Design requirements for floating offshore wind turbines”



88/846/CD

COMMITTEE DRAFT (CD)

PROJECT NUMBER: <b>IEC 61400-3-2 ED1</b>	
DATE OF CIRCULATION: <b>2021-10-15</b>	CLOSING DATE FOR COMMENTS: <b>2022-01-07</b>
SUPERSEDES DOCUMENTS: <b>88/788/RR</b>	

IEC TC 88 : WIND ENERGY GENERATION SYSTEMS	
SECRETARIAT: Denmark	SECRETARY: Mrs Christine Weibøl Bertelsen
OF INTEREST TO THE FOLLOWING COMMITTEES: TC 114	PROPOSED HORIZONTAL STANDARD: <input type="checkbox"/> Other TC/SCs are requested to indicate their interest, if any, in this CD to the secretary.
FUNCTIONS CONCERNED: <input type="checkbox"/> EMC <input checked="" type="checkbox"/> ENVIRONMENT <input checked="" type="checkbox"/> QUALITY ASSURANCE <input checked="" type="checkbox"/> SAFETY	

This document is still under study and subject to change. It should not be used for reference purposes.

Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

TITLE:

**Wind energy generation systems – Part 3-2: Design requirements for floating offshore wind turbines**

NOTE FROM TC/SC OFFICERS:

In order to assist MT 3-2 when sorting and compiling the given comments on the CD document, it is of great importance that all comments given in the comments form refer to both clause and line numbers in the CD document.

## 6.3 Definition of external conditions at a FOWT site

### 6.3.1 General

A FOWT shall be designed to safely withstand the wind conditions and marine conditions adopted as the basis of design.

The wind regime and marine conditions for load and safety considerations are divided into the normal conditions which occur frequently during normal operation of a FOWT, and the extreme conditions which are defined as having a 1-year or 50-year return period<sup>2</sup>.