



Major hazard leadership - embedding the principles of process safety leadership (PSLP)

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List of Abbreviations

Abbreviations	Definitions
AITG	Asset Integrity Task Group
CM	Corrective Maintenance
CMMS	Company Maintenance Management System
DESNZ	Department of Energy Security & Net Zero
EMM	Enforcement Management Model
FM	Fabric Maintenance
HCR	Hydrocarbon Release(s)
HSE	Health & Safety Executive
HVAC	Heating, Ventilation & Air Conditioning
KPI	Key Performance Indicator
MBR	Maintenance Backlog Reduction
MBRTFG	Maintenance Backlog Reduction Task Finish Group
MSO	Maintaining Safe Operations
NSTA	North Sea Transition Authority
OEUK	Offshore Energies UK (formerly OGUK, UKOOA)
OITG	Operating Integrity Technical Group
OPRED	Offshore Petroleum Regulator for Environment and Decommissioning
ORA	Operational Risk Assessment
PM	Preventative Maintenance
PSLP	Process Safety Leadership Principles
PSIP	Process Safety Improvement Plan
SECE	Safety & Environmental Critical Element
TAR	Turnaround
TFG	Task Finish Group
UKCS	United Kingdom Continental Shelf
W2W	Walk to Work
WO	Work Order(s)

1. Introduction

Process Safety is the practice of controlling risk in industrial processes, usually associated with gases or liquids, fluids that can cause fire, explosion or toxic release.

Process safety as a concept is well established. Following significant incidents in the UK and abroad in 2005, a greater emphasis was placed on the importance of good leadership as a key enabler of process safety performance. The offshore oil and gas industry adopted the Process Safety Leadership Principles (PSLP) in 2019, and it has been developing a comprehensive response in partnership with stakeholders, industry, and regulators. That work led to the development of this strategy.

The PSLP are high level and represent good leadership and hazard management in all high hazard industries. They are also relevant for non-process risks common in industrial settings such as structural failure, vessel collision, installation fire, environmental releases, loss of stability and mooring, decommissioning hazards, large lifting operations, severe weather and emergency responses.

The PSLP outline the role that leadership and the workforce play in promoting and achieving good process safety management, through their engagement and vigilance. Publishing performance metrics and sharing good practice are key to transparency.

This strategy describes the extent of OEUK's technical and policy work related to process safety, PSLP and high hazard risk management across our workstreams. It ensures that progress can be measured against the deliverables.

2. Process Safety

2.1 Overview

Each of the eight principles have been derived from the report into the fire and explosion at the Buncefield Oil Storage Depot in 2005.

The Buncefield explosion was the UK's biggest onshore explosion since the Second World War. Buncefield was one of the most destructive in a series of industrial accidents and prompted thorough detailed investigation.

The Final Major Incident Investigation Board emphasised the critical importance of embedding a sound process safety leadership, safety culture and organisational learning. This was developed by the Process Safety Leadership Group into the Principles of Process Safety Leadership which were subsequently adopted for the offshore oil and gas industry.

The eight principles are:



1. Clear and Positive Process Safety Leadership is at the core of managing a major hazard business and is vital to ensure that risks are effectively managed.



2. Process safety leadership requires senior leadership team involvement, understanding and competence.



3. Good process safety management requires constant active engagement and vigilance.



4. Senior leadership team visibility and promotion of process safety leadership is essential to set a positive safety culture throughout the organisation.



5. Engagement with the workforce is needed in the promotion and achievement of good process safety management.



6. Robust and regular auditing of the safety management system and associated major accident hazard barriers, is essential to ensure that system weaknesses are identified, and process safety risks are being effectively managed.



7. Publication of process safety performance information provides important assurance about the management of risks by an organisation.



8. Sharing good practice across industry sectors to learn and implement lessons from relevant incidents occurring internally and externally to the organisation, is important to maintain the currency of corporate knowledge and competence.

To apply the PSLP successfully, signatories also identified the following needs that an organisation might have.

1. Process safety accountabilities should be defined and championed at the senior leadership team level, and all should be held accountable for process safety leadership and performance.
2. At least one senior leader should be fully conversant in process safety management to advise the leadership team of the status of process safety risk management within the organisation. All board members should be sufficiently aware of the process safety risk created by their company and how their decisions can influence performance.
3. Appropriate resources should be made available to ensure a high standard of process safety management throughout the organisation and staff with process safety management responsibilities should have or develop an appropriate level of competence.
4. Organisations should develop a programme also known as a process safety improvement plan (PSIP) for the promotion of process safety by active senior management engagement with the workforce, both direct and contract staff, to underline the importance of process safety leadership and to support the maintenance of a positive process safety culture within the organisation.
5. Systems and arrangements should be in place to ensure the active involvement of the workforce in the design of process safety controls and in the review of process safety performance.
6. Business risks relating to process safety should be assessed and reviewed using an appropriate business risk analysis methodology.

7. Leading and lagging process safety indicators should be set for the organisation and reviewed to ensure they remain appropriate for the needs of the business. Information on process safety performance should be routinely reviewed by the senior leadership team and relevant information made available to OEUK for inclusion in their annual Health and safety report.
8. Companies should actively engage with others within their sector and elsewhere to share good practice and information on process safety incidents that may benefit others. Companies should have mechanisms and arrangements in place to incorporate learning from others within their organisation.
9. Systems and arrangements should be in place to ensure the retention of corporate knowledge relating to process safety management. Such arrangements should include information based on safety design concept of the plant and processes, plant and process changes, and any past incidents that impacted on process safety integrity and the improvements adopted to prevent a recurrence.

Application of the PSLP and organisation and resource requirements will vary across each company. But OEUK is committed to supporting the oil and gas industry and its members as they implement these principles.

2.2 Progress to date

OEUK has always had a strong technical process safety offering within its safety and operational guidelines. Written by experts, these guidelines spell out good practice. Following them will enhance process safety performance. OEUK's [Good Practice Guidelines](#) are recognised by regulators in the UK and abroad.

The Health & Safety Executive and OEUK have worked together to promote good practice in PSLP since 2022. This was when regulatory inspections began to test compliance with the principles. OEUK held industry workshops focusing on these inspections. They also explained what companies can do to be confident that they are aligned with the principles. In addition to the general workshops there have been specific targeted workshops where companies have openly discussed potential shortcomings which, identified through formal assessments against the principles. These include process safety improvement plans; contractor management; and how corporate knowledge is retained.

The industry has come together to develop a strategy to reduce the risks associated with the maintenance backlog – a key leading process safety performance indicator which led to a reduction of over almost a third of all safety critical backlog from its post-Covid-19 peak. OEUK's Health & Safety Conferences in 2023 and 2024 both majored on process safety through technical presentations, regulatory keynote speeches and thought leadership. The publication of this broad strategy incorporates the Maintenance Backlog Reduction Strategy and ensures a long term focus on the topic.

OEUK workgroups across various disciplines have a sharp focus on PSLP in areas such as asset integrity, operational integrity and major hazard management. Guidelines are reviewed, refreshed, drafted and published with a focus on process safety.

The strategy on the following pages is designed to signpost the continuing prioritisation of PSLP across all offshore energies this year and next (2025-26).

3. Strategic Plan

The strategic plan focuses on engagement with a wide range of stakeholders in a structured manner to ensure that the industry's approach and plans are understood.

3.1 OEUK Leadership Commitment

In 2025 the signatories of the PSLP, OEUK, the HSE, Offshore Petroleum Regulator for Environment and Decommissioning (OPRED), International Association of Drilling Contractors (IADC) and British Rig Owners Association (BROA) will meet as a leadership group which will ensure that all signatories are active in implementing the PSLP and ensure that each organisation is working to its strengths without overlapping with any other. OEUK's HSE & Operations Director will coordinate this group.

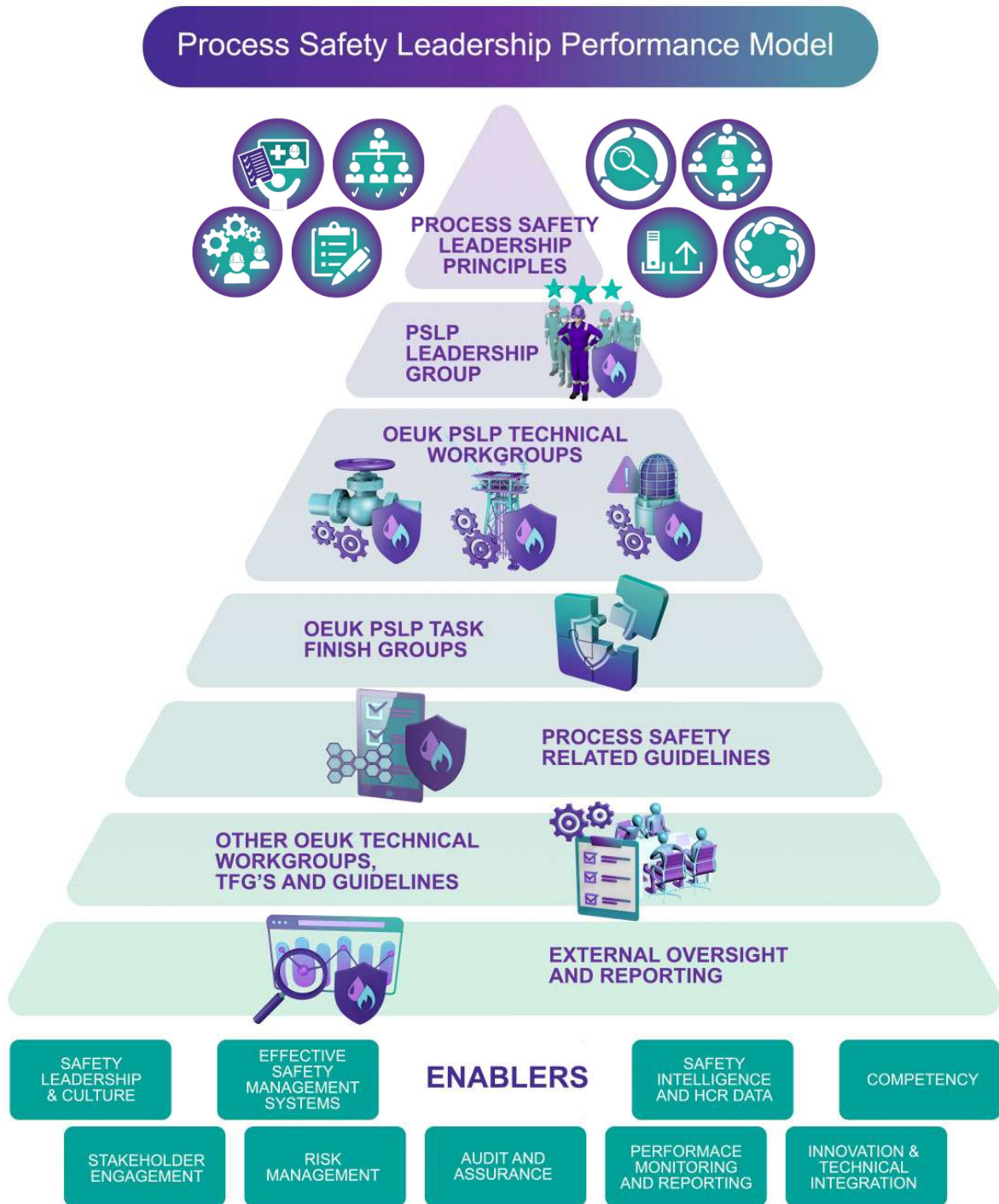
OEUK's role in the multi-party agreement is predominantly technical with a focus on safety management systems, safety cases, senior leadership and broad policy engagement with government.

OEUK's board and the wider Operator and Contractor Councils will take a leading role in overseeing the progress against this strategy in 2025 and provide performance updates before each meeting. This will include details of any reported HCR.

3.2 OEUK Process Safety Performance Model

In line with the broad application of the PSLP, OEUK has identified multiple work streams which deliver elements of the PSLP and contribute to the industry response. Members are requested to ensure that they have nominated appropriate subject matter experts to the various working groups and that they are permitted to share company learnings, contribute to good practice and return to their own companies to embed those learnings. Effective organisational engagement with OEUK is a strong demonstration of leadership engagement, promoting the principles and, of course, the sharing of good practice. The OEUK Process Safety Performance Structure is shown on the next page.

Figure 1



3.3 Data collation, analysis & transparency

OEUK has been collating lagging data on safety performance for many years and actively collaborating with the HSE to share HCR data with industry to facilitate learnings.

Recently OEUK has requested that leading data indicators including quarterly sharing of process safety events should be submitted along with personal injury data. So far very few operators have been submitting data. But all are encouraged to do so to help with benchmarking performance.

The Operational Integrity Technical Group (OITG) will be the primary group for sharing incidents and lessons learned. Operators are encouraged to share learning within this group. The OITG will continue to work with HSE to gain more robust learnings from the HCR database.

3.4 Core OEUK Workgroup Plan

Technical workgroups contribute to good practice and their members return to their own companies to embed those learnings. Effective organisational engagement with OEUK is a strong demonstration of leadership engagement, promoting the principles and, of course, the sharing of good practice. The OEUK Process Safety Performance Structure is shown on the next page.



1. Operational Integrity Technical Group (OITG): With a close focus on process safety and process engineering this group is the primary vehicle for action on PSLP.



2. Asset Integrity Technical Group (AITG): a significant proportion of process safety incidents occur due to poor asset integrity and overdue maintenance. This group aims to reduce the proportion of incidents related to asset integrity while also sharing good practice generally around asset integrity.



3. Major Hazard Management Technical Group (MHMTG): this group focuses on the management system and risk management aspects contained within the PSLP. It captures developments in good practice related to risk management, safety cases and management of change processes.

Companies that attend these technical groups and actively contribute to them fulfil both compliance with the Safety Case Regulations 2015 Regulation 32 Standards and the PSLP. However, companies will gain most when a formal process is implemented to embed the lessons learned from these groups into their own company's business systems



3.4.1 OPERATING INTEGRITY TECHNICAL GROUP

The OITG will deliver a programme of work that is derived from the PSLPs steering committee, regulatory findings, members issues and learning from other industries.

The ever-green tasks of the group will be:

- Sharing information about technical and organisational causes of process incidents.
- Review of guidelines associated with the OITG.
- Ownership of actions within the OEUK Process Safety Strategy including any actions assigned to other OEUK groups.
- Quarterly review of HCR.
- Report on performance to the PSLP Steering Committee.

Short term actions within OITG (2025)

- Oversee the creation of a competence standard for the safe isolation and reinstatement of plant (SIRP).
- Work with OEUK and the HSE to share lessons learned from the PSLP inspections.
- Assist OEUK to develop the Process Safety Strategy.
- Review the sourcing of competent technical advice from third parties.
- Promote OEUK audit and assurance toolkit.
- The OITG work with members to ensure that process safety improvement plans (PSIP) are in place in line with HSE expectations and share expectations on the format and content of these plans via the OITG. Where appropriate guidelines will be adjusted or amended.

Medium term actions (2025+)

- Review the role of the Technical Authority (TA) within organisations and more broadly resourcing of middle management.
- Consider the implications of normalisation of deviance around risk management practices.

Long term actions (2026)

- Review HCR database and develop a plan to extract meaningful insight from the resource.



3.4.2 ASSET INTEGRITY TECHNICAL GROUP

The AITG will deliver a programme of work that has been derived from a combination of work by the Process Safety Leadership Principles steering committee, regulatory findings, members' issues and learning from other industries.

The ever-green tasks of the group will be:

- Sharing information about technical and organisational causes of process incidents.
- Regular Review of guidelines associated with the AITG.
- Ownership of actions within the OEUK Process Safety Strategy assigned to the AITG.
- Continued strategic attention to monitoring of maintenance backlog data on behalf of industry.
- Report performance of the technical group to the PSLP Steering Committee annually.

Short term actions within AITG (2025)

- Develop a strategy to review and revise the 'Late Life' Guidelines documents to include consideration of the existing value and relevance.
- Work with OEUK and the HSE to share relevant lessons learned from the PSLP inspections, on-going programmes of regulatory inspection, and any incidents.
- Promote OEUK's audit and assurance toolkit.

Medium term actions (2025+)

- Develop a detailed proposal for asset integrity data sharing for the development of insights that will benefit individual operators and provide cross industry insight with a view to improving efficiency and reduce costs of asset integrity while improving the application and effectiveness of risk-based inspection. The probable final vehicle for this will be a JIP.
- Elevate the visibility of Asset Integrity as a discipline at senior leadership level including a 'questionnaire' for board members to distribute to their respective organisations.
- Ensure that good practice is shared, and lessons are learned for Surface Preparation on Live Lines (SPOLL) and Non-Intrusive Inspection (NII). Loss of Process Containment (LOPC) incident lessons learned in line with regulator concerns.

Long term actions (2026)

- Reduce the proportion of HCR incidents that are attributable to asset integrity and/or the maintenance backlog.



3.4.3 MAJOR HAZARD MANAGEMENT TECHNICAL GROUP

The MHMTG will deliver a programme of work that is devised from Process Safety Leadership Principles steering committee, regulatory findings, members' issues and learning from other industries.

The ever-green tasks of the group will be:

- Discuss technical safety and major hazard management issues affecting the industry in order that members can better manage these hazards and advise others on how to do so.

- Monitor and evaluate industry's performance in major hazard management.
- Be aware of and positively influence HSE intervention priorities.
- Influence and provide input to HSE research proposals and consider the practical implementation of that research.
- Share information and learn lessons from the international oil and gas industry and other major hazard industries.
- Respond to relevant regulatory consultations.

Short term actions within MHMTG (2025)

- Conclude review and redraft and publish, Risk-Based Decision Making Guideline and Cumulative Risk Guideline.
- Promote recently published Vent and Flare Guidelines.
- Begin to review existing industry guidance and good practice with a view to drafting guidance on the Management of Change.

Medium term actions (2025+)

- Engage in issues related to the effects of extreme weather including inundation of fixed installations, air gap on semi-sub installations and any other developments. Support the development of a proposal for a JIP to look at the cross-company sensitivities and geological challenges in execution of installation Severe Weather Action Plans (SWAPs).
- Support a multidiscipline TFG to review aspects of Big Persons Offshore (BPO) focussing on the health and safety implications of our offshore workforce, with the purpose of ensuring with industry alignment and management system considerations.

Long term actions (2026)

- To be confirmed during 2025.



3.5 OEUK Technical Expertise and Publication Library

OEUK technical groups share good practice and develop technical guidance which does not have a direct focus on safety but does ensure high levels of overall operational integrity. This includes the work carried out for environmental reasons, operational guidance for marine operations, well integrity and decommissioning. Activities carried out in the Supply Chain and People directorate can ensure that contractual arrangements do not undermine safety but ensure that the workforce is suitably skilled for their tasks. OEUK's events are also a forum for sharing strategies for good practice.



3.6 External Groups and Forums

OEUK represents the offshore energy industry at the Process Safety Forum, a cross-sector group focused on sharing good practice and developing guidance to support all high-hazard industries.

OEUK participates in the International Association of Oil and Gas Producers (IOGP) Safety Committee. It ensures that initiatives developed by the committee and subject-matter experts are promoted to members.

OEUK will continue to support workforce engagement efforts delivered via the Step Change in Safety Process Safety Leadership work group.

3.7 References

Buncefield Major Incident Investigation Board Report

Volume 1 [Buncefield MIIB Final Report \(Volume 1\)](#)

Volume 2 [Volume 2 of the final report of the Major Incident Investigation Board](#)

Process Safety Leadership Group Principles of Process Safety
[PSLG Principles of Process Safety Leadership](#)









Offshore Energy Joint Agreement Principles of Process Safety Leadership
[Health and Safety poster A3 FINAL.indd](#)

3.8 Signed Principles of Process Safety Leadership

Principles of Process Safety Leadership for the offshore UKCS Energy Industry

Good process safety is at the heart of everything. As industry leaders, we acknowledge our role in ensuring continuous improvement in this area. In pursuit of this challenge, we have established the following principles of process safety management for our industry:

PRINCIPLES :

 <ul style="list-style-type: none"> • Clear and positive process safety leadership is at the core of managing a major hazard business and is vital to ensure that risks are effectively managed; 	 <ul style="list-style-type: none"> • Engagement of the workforce is needed in the promotion and achievement of good process safety management;
 <ul style="list-style-type: none"> • Process safety leadership requires senior leadership team involvement, understanding and competence; 	 <ul style="list-style-type: none"> • Robust and regular auditing of the safety management system and associated major accident hazard barriers, is essential to ensure that system weaknesses are identified and process safety risks are being effectively managed;
 <ul style="list-style-type: none"> • Good process safety management requires constant active engagement and vigilance; 	 <ul style="list-style-type: none"> • Publication of process safety performance information provides important assurance about the management of risks by an organisation;
 <ul style="list-style-type: none"> • Senior leadership team visibility and promotion of process safety leadership is essential to set a positive safety culture throughout the organisation; 	 <ul style="list-style-type: none"> • Sharing good practice across industry sectors in order to learn and implement lessons from relevant incidents occurring internally and externally to the organisation, is important to maintain the currency of corporate knowledge and competence.

We regard these principles as fundamental to the successful management of a major hazard industry. We will work with all stakeholders to establish them as foundations to effective management of risks via the following arrangements:

ORGANISATION AND RESOURCES:

1. Process safety accountabilities should be defined and championed at the senior leadership team level and all should be held accountable for process safety leadership and performance;
2. At least one senior leader should be fully conversant in process safety management in order to advise the leadership team of the status of process safety risk management within the organisation and of the process safety implications of their decisions;
3. Appropriate resources should be made available to ensure a high standard of process safety management throughout the organisation and staff with process safety management responsibilities should have or develop an appropriate level of competence;
4. Organisations should develop a programme for the promotion of process safety by active senior management engagement with the workforce, both direct and contract staff, to underline the importance of process safety leadership and to support the maintenance of a positive process safety culture within the organisation;
5. Systems and arrangements should be in place to ensure the active involvement of the workforce in the design of process safety controls and in the review of process safety performance;
6. Business risks relating to process safety should be assessed and reviewed using an appropriate business risk analysis methodology;
7. Leading and lagging process safety indicators should be set for the organisation and reviewed to ensure they remain appropriate for the needs of the business. Information on process safety performance should be routinely reviewed by the senior leadership team and relevant information made available to OEUK for inclusion in their H&S annual report;
8. Companies should actively engage with others within their sector and elsewhere to share good practice and information on process safety incidents that may benefit others. Companies should have mechanisms and arrangements in place to incorporate learning from others within their organisation;
9. Systems and arrangements should be in place to ensure the retention of corporate knowledge relating to process safety management. Such arrangements should include information on the basis of safety design concept of the plant and processes, plant and process changes, and any past incidents that impacted on process safety integrity and the improvements adopted to prevent a recurrence.

OUR COMMITMENT

Implementation of the above process safety leadership principles and arrangements may vary in both detail and time in different organisations. However, in recognition of the essential role these principles and arrangements play in the management and sustainability of our major hazard industry, we commit to working to establishing them as foundations of effective process safety management and the prevention of major accidents.

Signed:

					
Sarah Newton Chair	Tom Child Chief Executive	David Whitehouse Chief Executive	Steve Rae Executive Director	Darren Sutherland Chair North Sea Chapter	Peter Aylott Director of Policy
Health & Safety Executive	Offshore Petroleum Regulator for Environment and Decommissioning	Offshore Energies UK	Step Change in Safety	International Association of Drilling Contractors	British Rig Owners' Association
					

Working together, we are a driving force of the UK's energy security and net zero ambitions. Our innovative companies, people and communities add value to the UK economy.

Join us today and help strengthen the UK offshore energy industry and your business.

membership@OEUK.org.uk

OEUK.org.uk

info@OEUK.org.uk

 @OEUK

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