

# Annual Review 2019



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### Introduction from the President



It gives me great pleasure to welcome you to the TSA Annual Review 2019.

This is the fourth edition of the review and I hope that you again find it of value. This year I would like to start by thanking Andrew Amos for his excellent Vice-Presidency of the TSA over the past twelve months. I am pleased to say that Adrian Jackson, Chief Executive of the Oil and Pipelines Agency has taken over as Vice-President. The Board, Council and TSA Secretariat very much look forward to working with Adrian going forward.

We are continuing to implement our plan to further develop the TSA and in the past year we have seen thirteen new businesses join our family. We have successfully launched our Technical Committee, which will help us to identify areas in which we can seek to improve our knowledge and performance - please do look at page 7 of this review for further information on all of our technical work.

Recent protests in London, and the release of the IPPC Special Report on Global Warning focuses our attention on climate change. The Paris climate agreement of 2015 made strong commitments to limit global warning and carbon emissions. In the UK the Climate Change Act commits the UK Government by law to reducing greenhouse gas emissions by at least 80% of 1990 levels by 2050. There have been several strategic papers released which set out the Governments ambitions and we have been working hard to respond to these. We have also established the Downstream Oil Industries Forum Trade Association Working Group which seeks to gain alignment with other trade associations in the downstream oil sector on common topics, such as the Governments Road to Zero strategy.

The bulk liquid storage sector is uniquely positioned to assist in decarbonsiation programs by offering the flexibility necessary in any energy transition, and we will continue to work with Government on future strategies and consultations.

At the time of writing, we are no further forward in terms of understanding what our exit from the European Union will look like. It is imperative that this is resolved so that we can move forward as an industry. There are many more issues ahead -decarbonistation, IMO 2020, inconsistent regulation to name just three - we need to focus on these without the distraction of BREXIT.

Please do take the time to read through this review, I am sure that you will agree that our sphere of influence is large. We are continuing to expand and adapt, and this is particularly important in these challenging times.

In conclusion, I would like to thank all those within the secretariat and member companies for their continuing support and involvement in the many different committees and forums that are essential to our success.

Paul Denmead, June 2019

### About us

The Tank Storage Association (TSA) is an industry based organisation whose member companies are engaged in the storage of bulk liquids and the provision of products and services to the sector. Tank storage provides an essential interface between sea, inland barge, road, rail and pipeline logistics.

#### **Board of Directors**



Paul Denmead Director Terminal Operations UK World Fuel Services



Adrian Jackson Chief Executive Oil and Pipelines Agency



Martyn Lyons Chief Executive InterTerminals



Peter Davidson Executive Director TSA

#### Members









































#### Associate Members - Terminal and Port Operators

Our Associate Members play an essential role in Technical, Safety, Health and Environmental matters - sharing and learning operational experience. They work with us on key issues affecting the sector helping us to provide lobbying and advocacy to the UK Government, it's agencies and the European Commission when relevant.























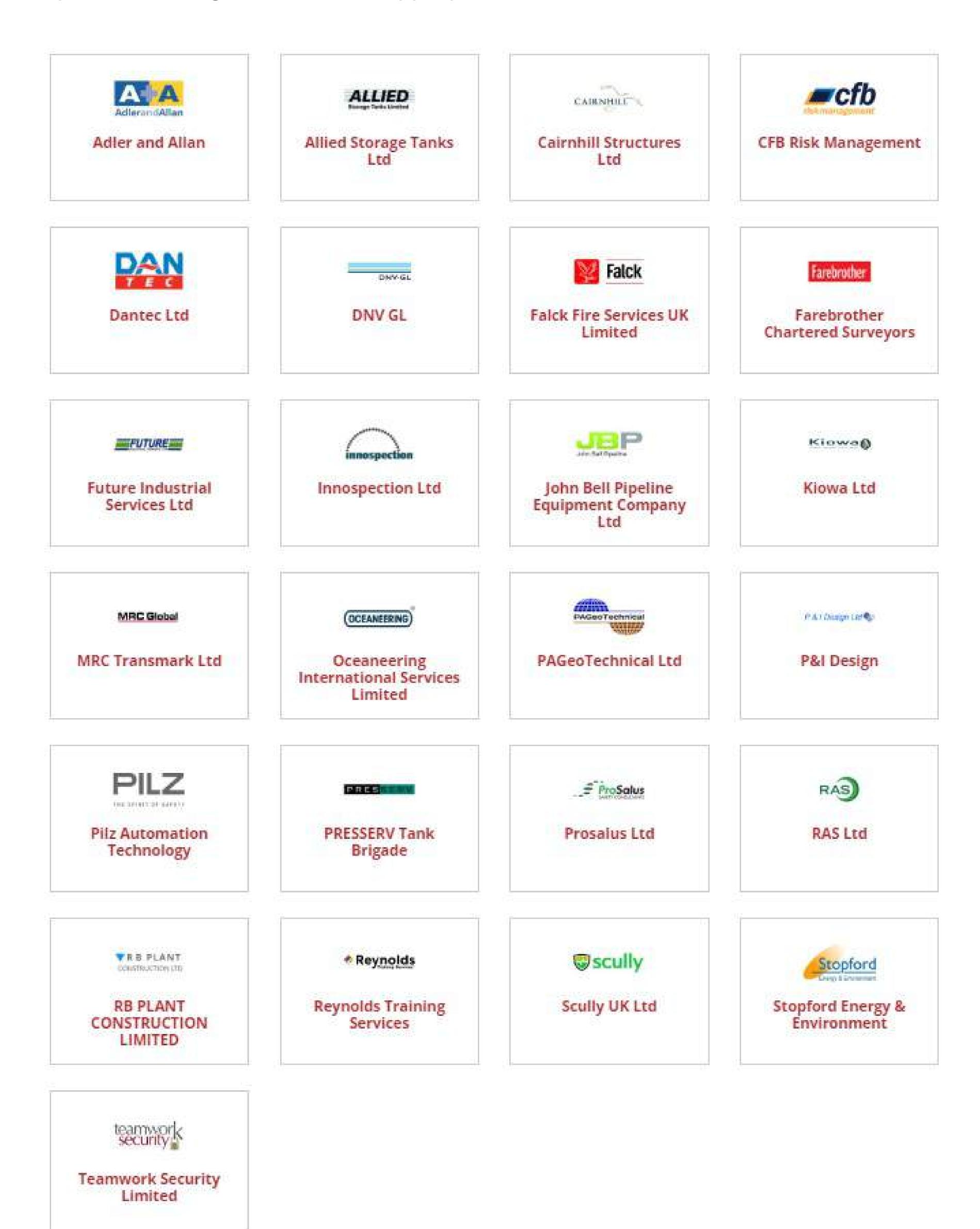
#### Our Aim

To build a strong community of businesses engaged in the storage of bulk liquids, terminal and port operations and those providing equipment and services to the sector.

We believe that in working together we can provide strong and effective lobbying, advocacy and knowledge exchange - helping us to work more effectively, efficiently and safely.

#### Associate Members - Suppliers

Our Associate Members (Suppliers) make a valued contribution to our Technical, Safety, Health and Environmental work - sharing and learning experience, new products, innovation, services and contributing to the development of new guidance where appropriate.



## Contribution to the UK economy



The bulk liquid storage sector in the UK is diverse, providing a critical component in the supply chain for many industries from transport fuels to animal feeds. Our members operate over 290 terminals in the UK and Republic of Ireland, providing 10,371,000 m3 of storage capacity.



revenue in 2018



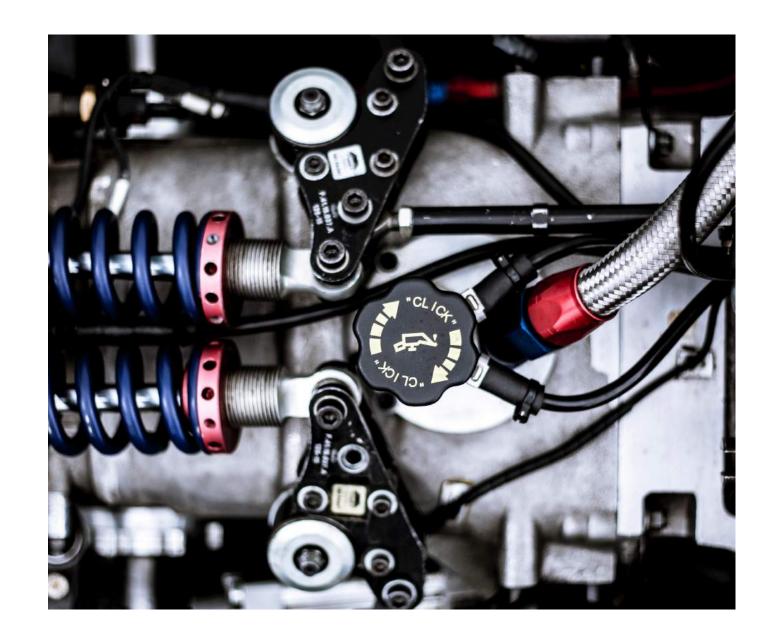
In the UK and ROI, Including long term contractors



planned investment in the next 5 years

In the UK and ROI

### Technical networks



2019 saw the launch of our Technical Committee, it is open to all of our full and associate members. The aim of the group is to draw together the knowledge from within our membership to enable us to work smarter, and to have the opportunity to learn from our peers and the experts that provide equipment and services into our sector.

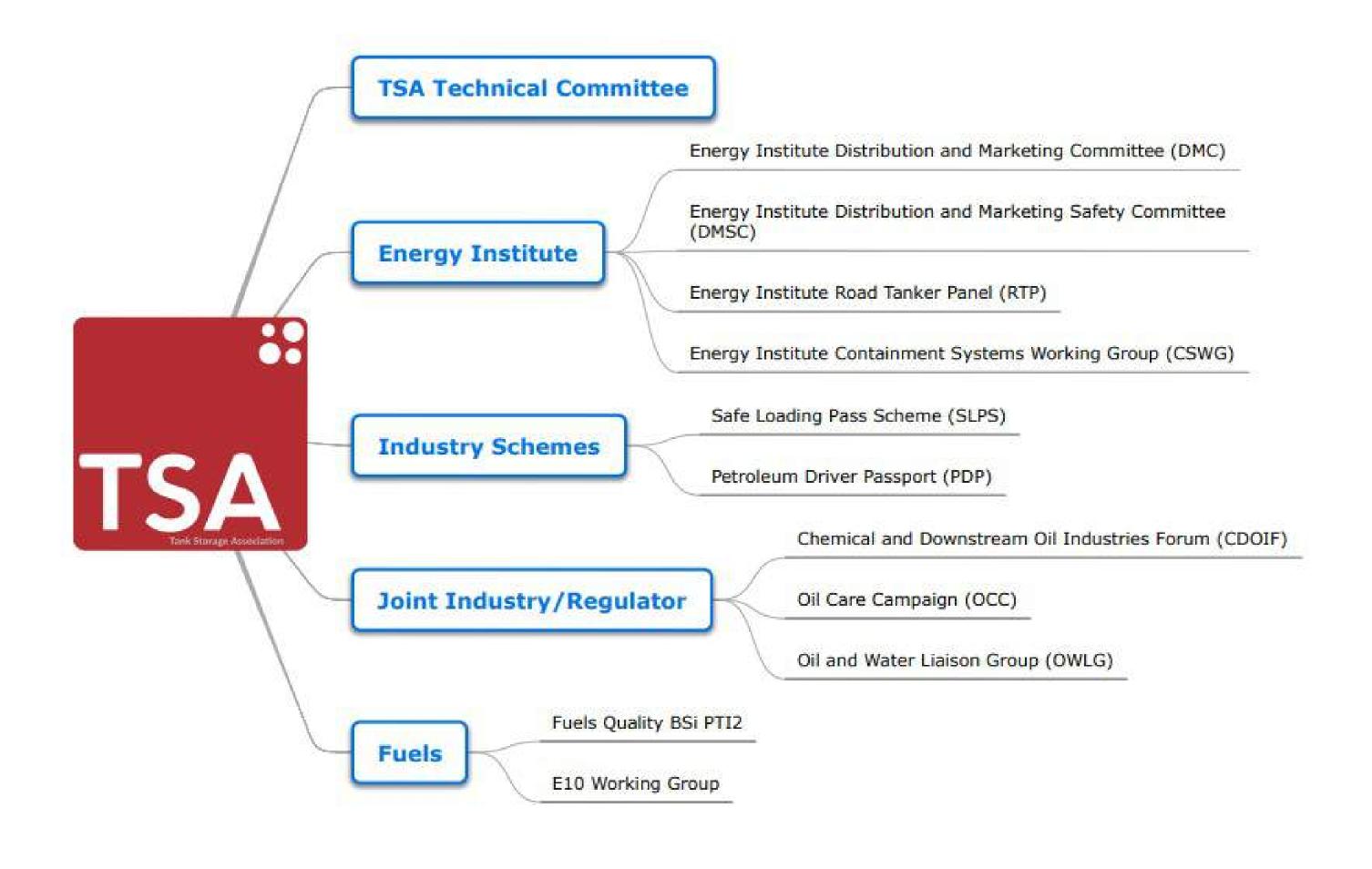
The Technical Committee compliments the other technical work that we do which is led by the TSA Technical Manager, Barrie Salmon.



"Our technical work consists of active representation in a range of working groups to establish current guidance and best practice for technical changes and advances in the bulk liquid storage sector.

The TSA Technical Committee was formed to enable the dissemination of the current programme of technical output from these working groups so that they can be reviewed and discussed by all TSA members. The Technical Committee may also seek to commission new guidance as appropriate"

Barrie Salmon TSA Technical Manager







"Being an associate member of the TSA has always been of benefit to Dantec, keeping us up to date with the news in the industry and giving us a platform to share our own news too.

With the incorporation of the new technical committee, we believe the value of membership has improved even further. By having a place at the table with our peers, it allows us to have a better feel of the industries wants and needs, and a clear opportunity for us to build knowledge while also offering our guidance to others too"

"The TSA provides a great platform for sharing our experiences with industry and the regulator, something that is difficult to do without our valuable trade associations. So far, collaborating on technical issues has proven invaluable; we have been able to engage and share with the regulator issues that impact our clients and their peers, to identify solutions and put forward topics for research that the group has identified necessary to achieve our common goal of consistent regulation, and above all a safer industry"

Jon Loach, Sales Director Dantec

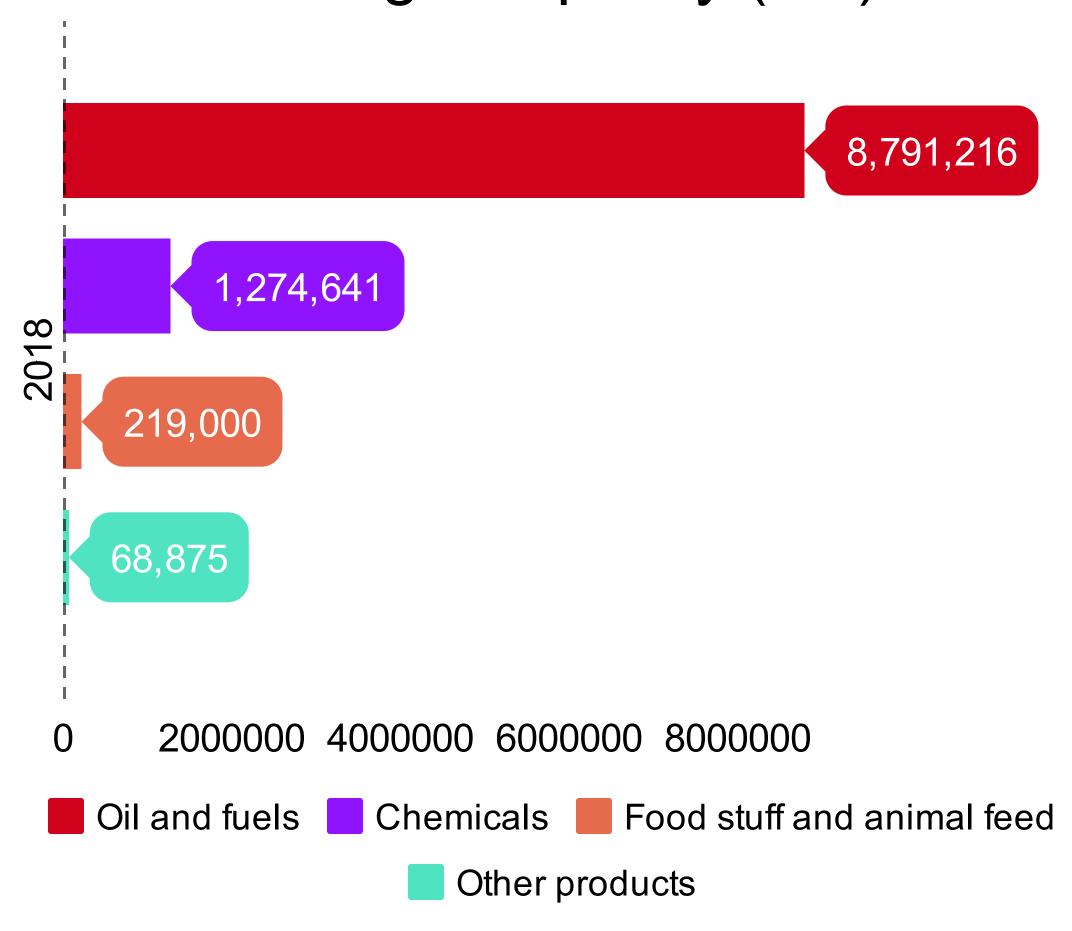
Carolyn Nicholls, Director RAS

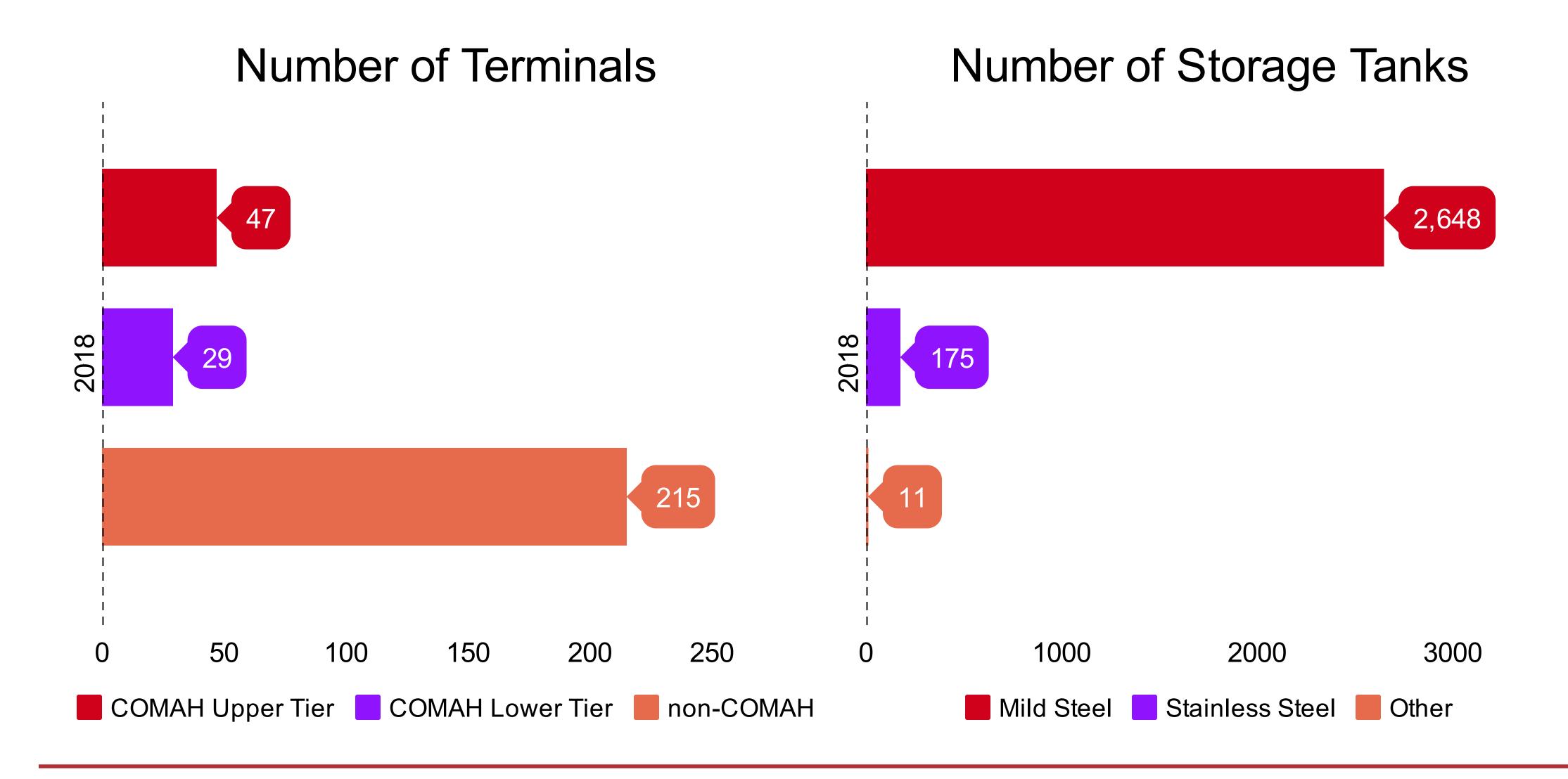
### Terminal statistics



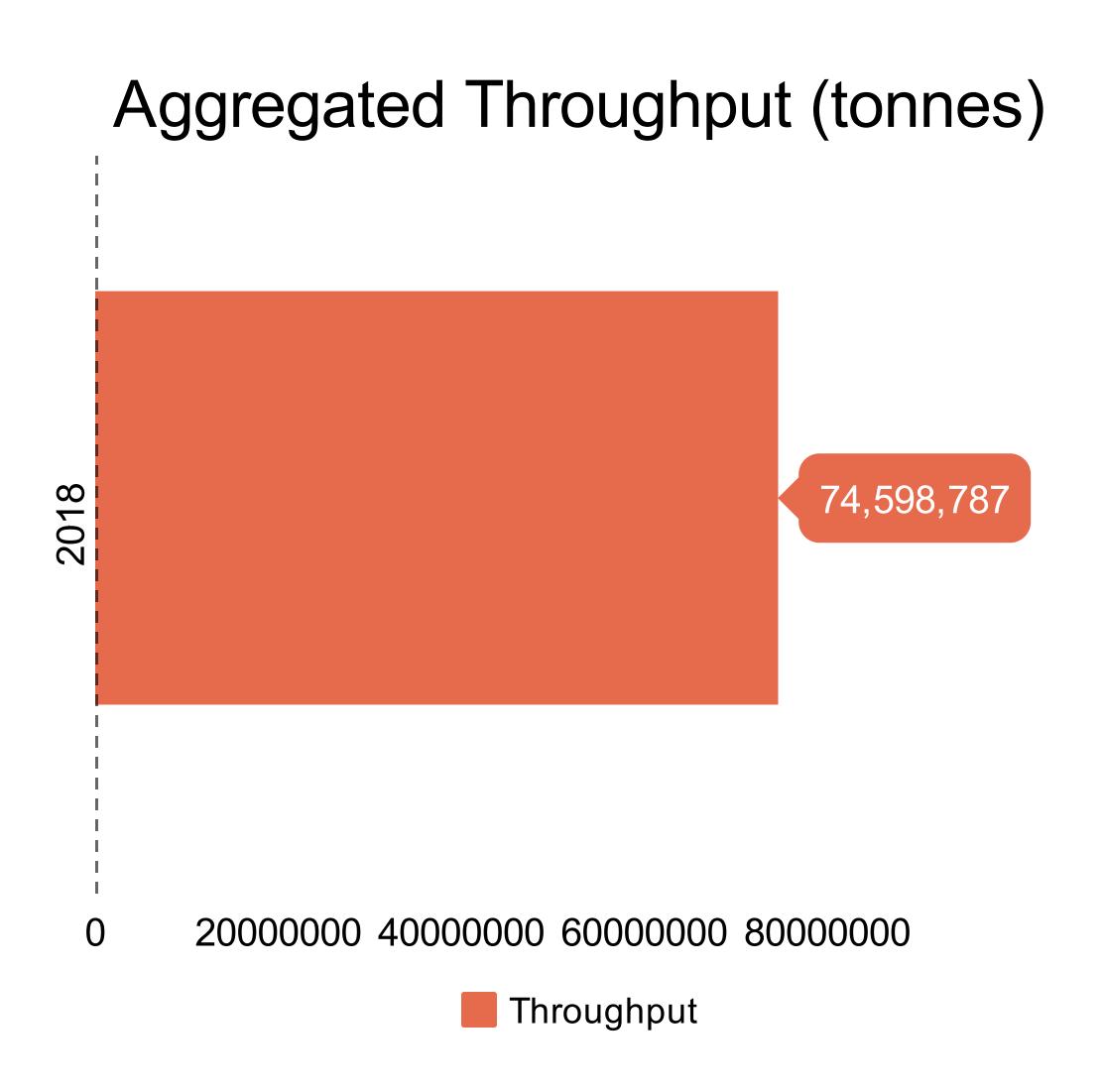
Our members operate a variety of terminals across the UK and Republic of Ireland storing both hazardous and non-hazardous liquids. Depending upon the type and volume of products stored the terminal may be regulated under the Control of Major Accident Hazards (COMAH) regulations, and designated as either upper or lower tier. Equally many of our members are regulated by the environment agencies and hold Environmental Permits.

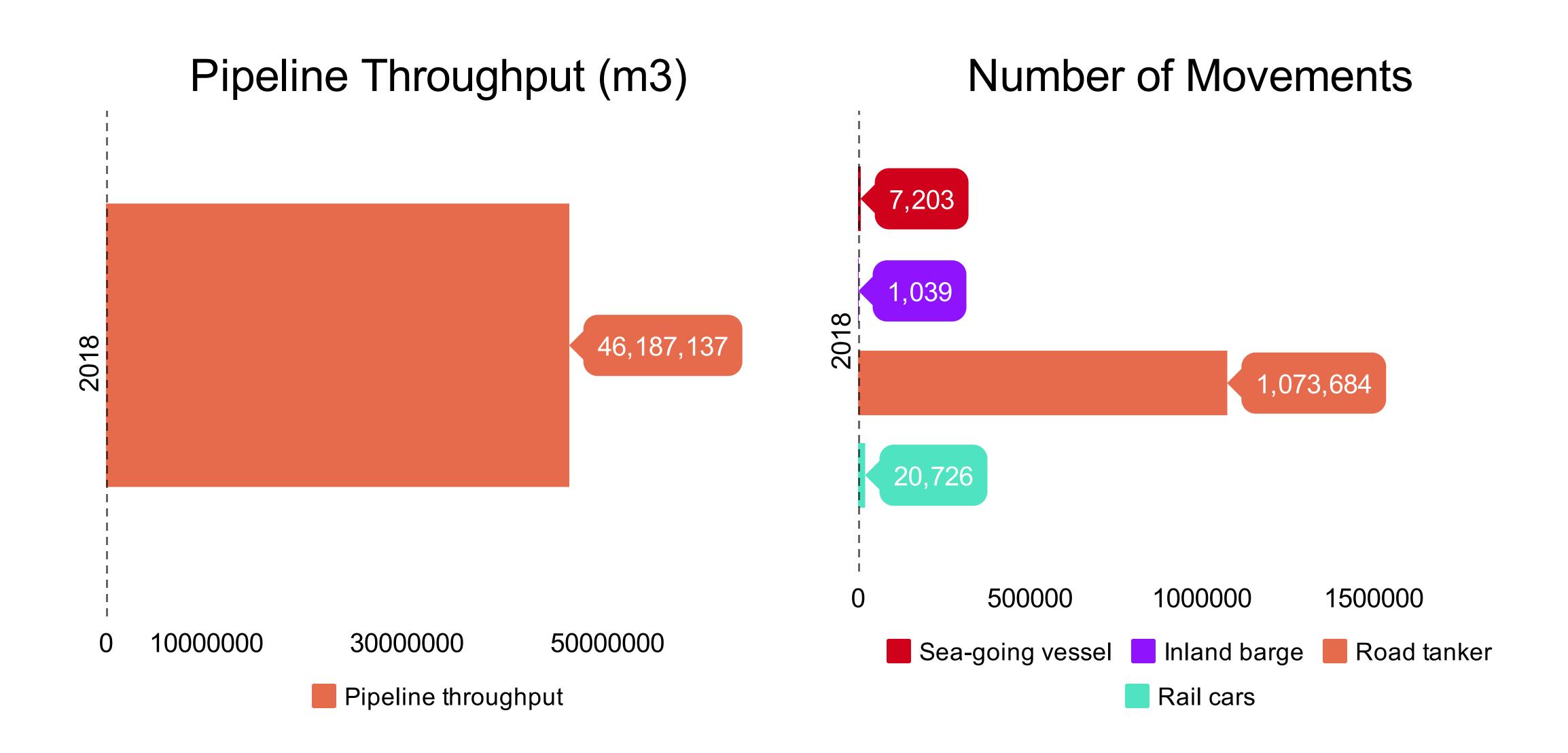
#### Storage Capacity (m3)





Movement of material into or out of terminals is either by sea-going vessel, inland barge, road tanker, rail tanker or pipeline. Our members safely execute over a million movements each year. By far the greatest number of movements are carried out by road tanker, however this is not representative of the volume of product moved by type - for example, there are far fewer movements by ship than road tanker, but the volume of product moved by ship is much higher.





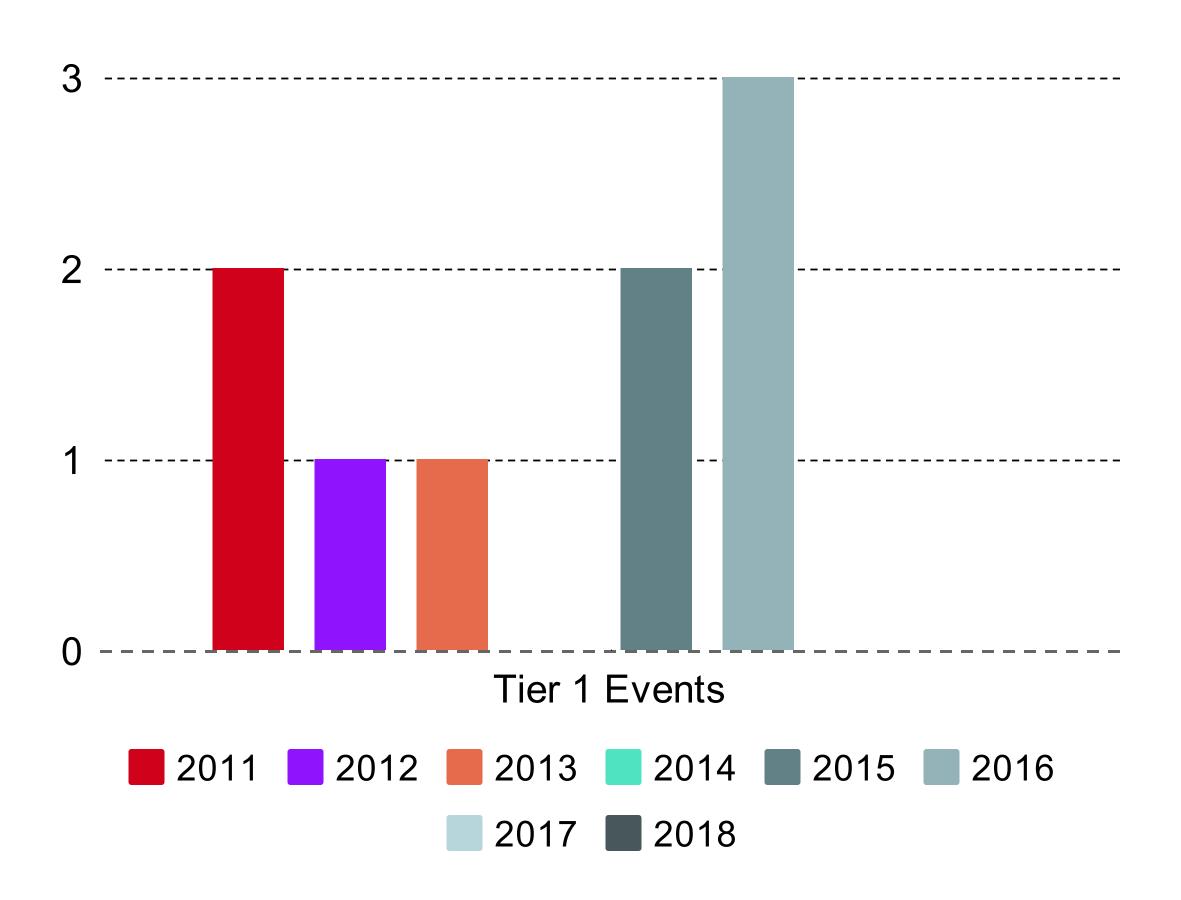
### Process safety



Our members are fully committed to the Process Safety Leadership Group Principles of Process Safety established following the Buncefield explosion and fires in 2005. These principles remain valid today. Our dedicated Safety, Health and Environment committee works closely with our peers, other industry sectors and regulators to share knowledge and good practice relevant to safe operations.

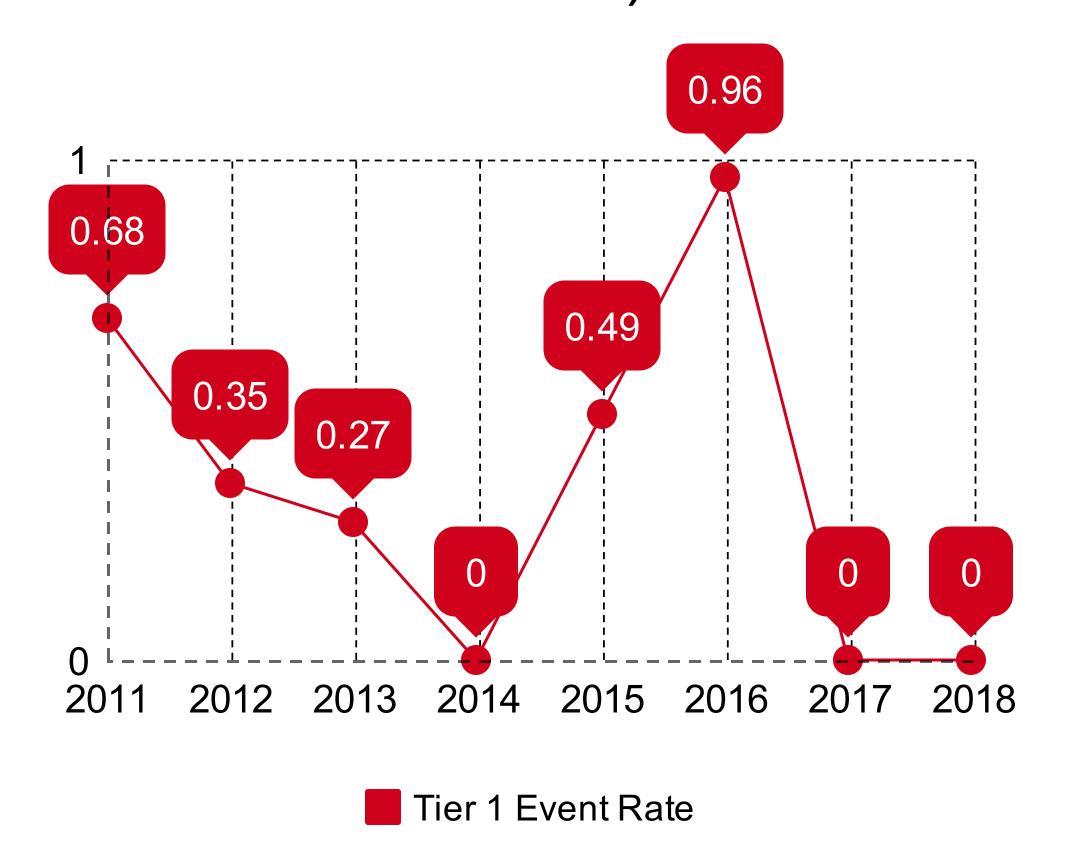
To monitor our performance and highlight potential emerging issues, we collate, share and discuss process safety data quarterly with our members. We use the API RP 754 standard for our process safety performance indicators.

#### Number of Tier 1 Events

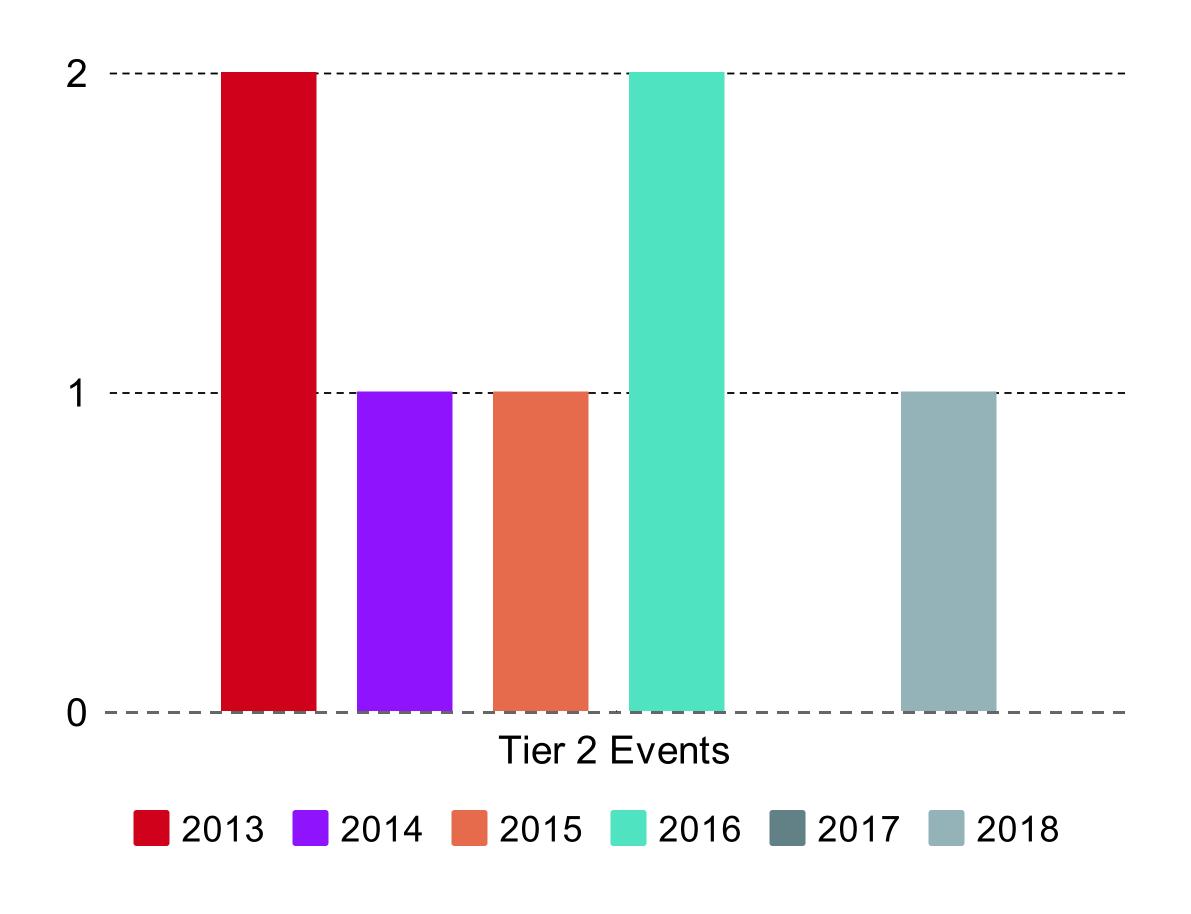


Tier 1 events are significant losses of containment (relevant to the hazard of the product stored). The number of Tier 1 events experienced by our members are very small, with none reported in 2018. The work that the TSA does with the UK regulator helps to ensure that we operate safely.

Tier 1 Event Rate (per million hours worked)



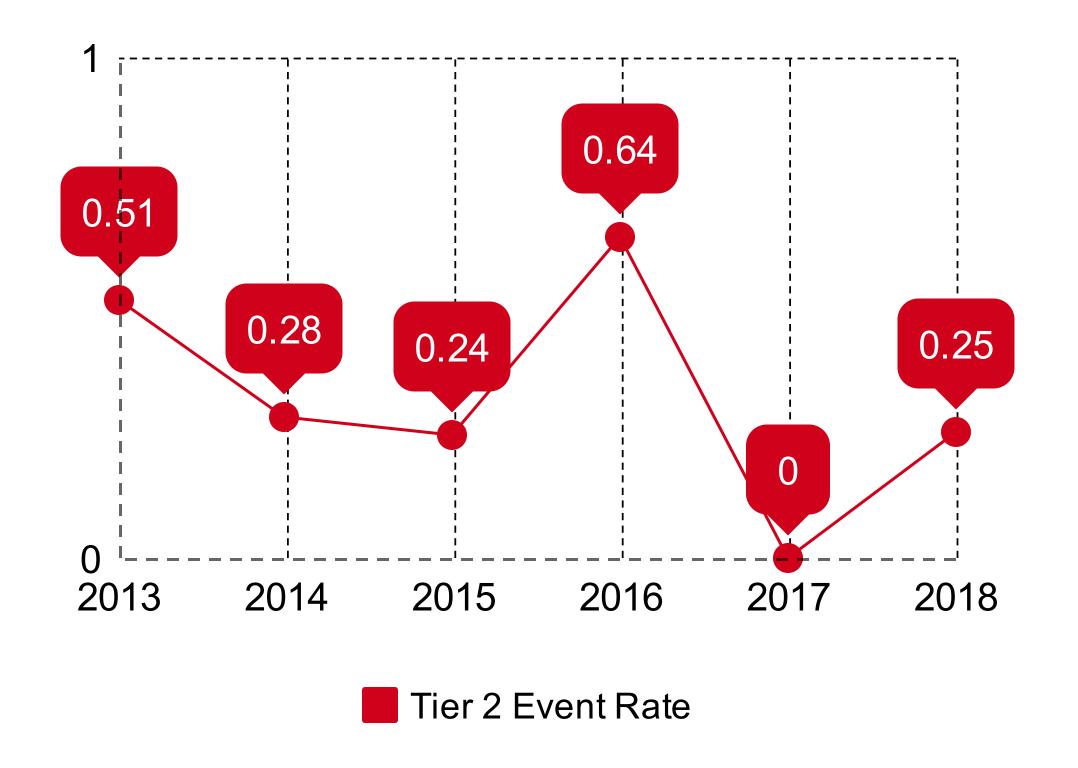
#### Number of Tier 2 Events



Tier 2 events are smaller losses of containment (relevant to the hazard of the product stored). The number of Tier 2 events experienced by our members is very small, and do not highlight any significant trends. One was reported in 2018.

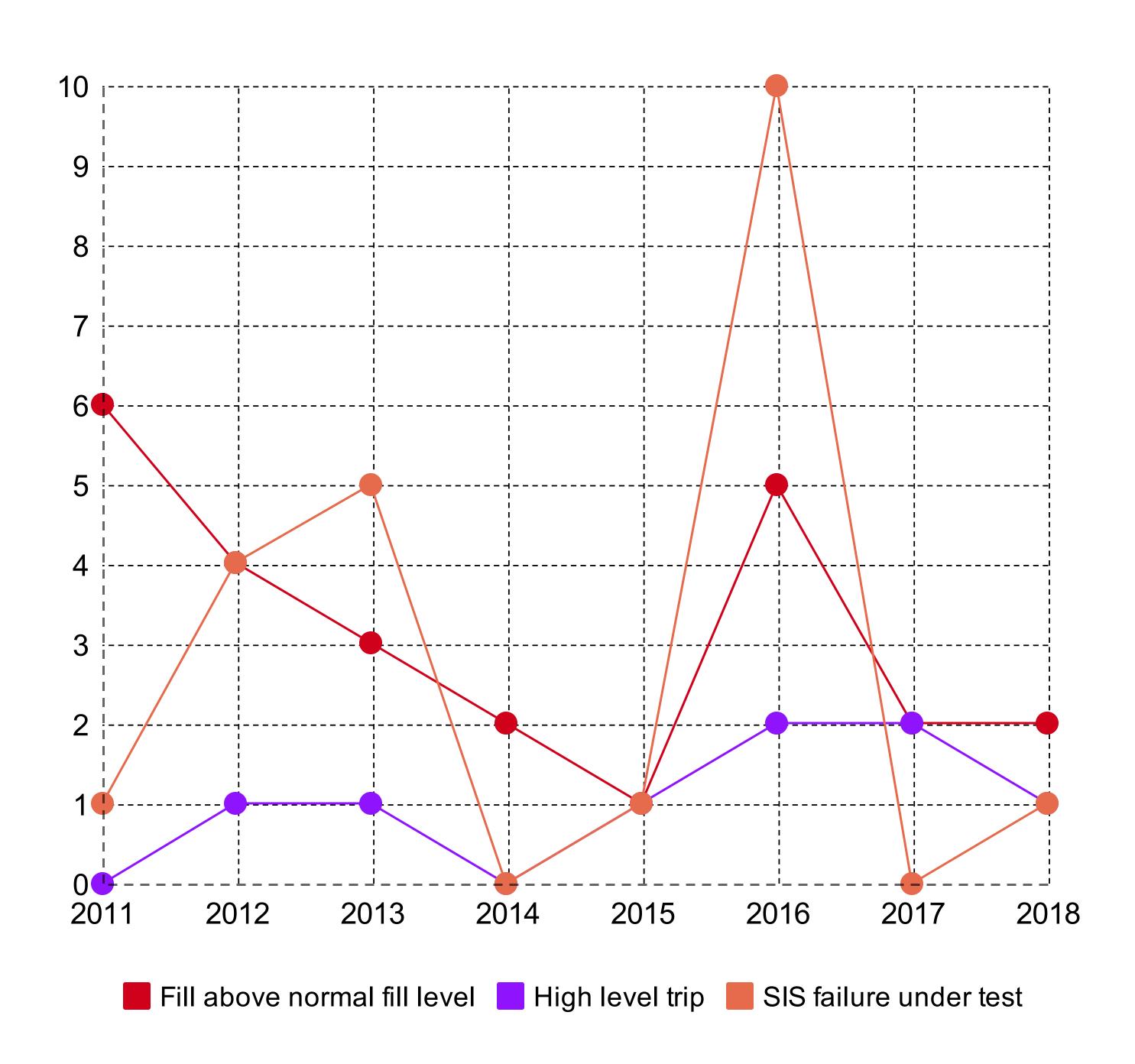
Even though we have no Tier 1 and only one Tier 2 event reported in 2018, this does not mean we are complacent - our members maintain an acute focus on ensuring and maintaining the safety of their people, the environment and their assets.

Tier 2 Event Rate (per million hours worked)



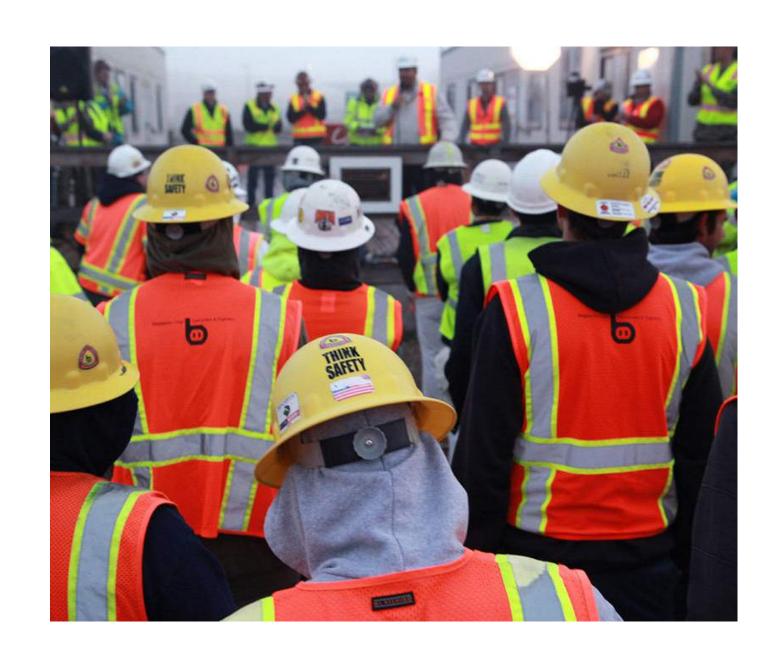
Tier 3 indicators (leading indicators) can be extremely useful in identifying areas of weakness before a more significant Tier 1 or Tier 2 event takes place. The TSA uses this information to determine if any further work is required in improving good practice or knowledge and skills.

Tier 3 Leading Indicators



Throughout 2018 we have been sharing safety messages regarding the Tier 3 leading indicators in our quarterly statistical report to members. The TSA is also leading and contributing to several technical working groups in the Chemical and Downstream Oil Industries Forum (CDOIF) and Energy Institute (EI) which are producing guidance to assist in the design, management and maintenance of process facilities.

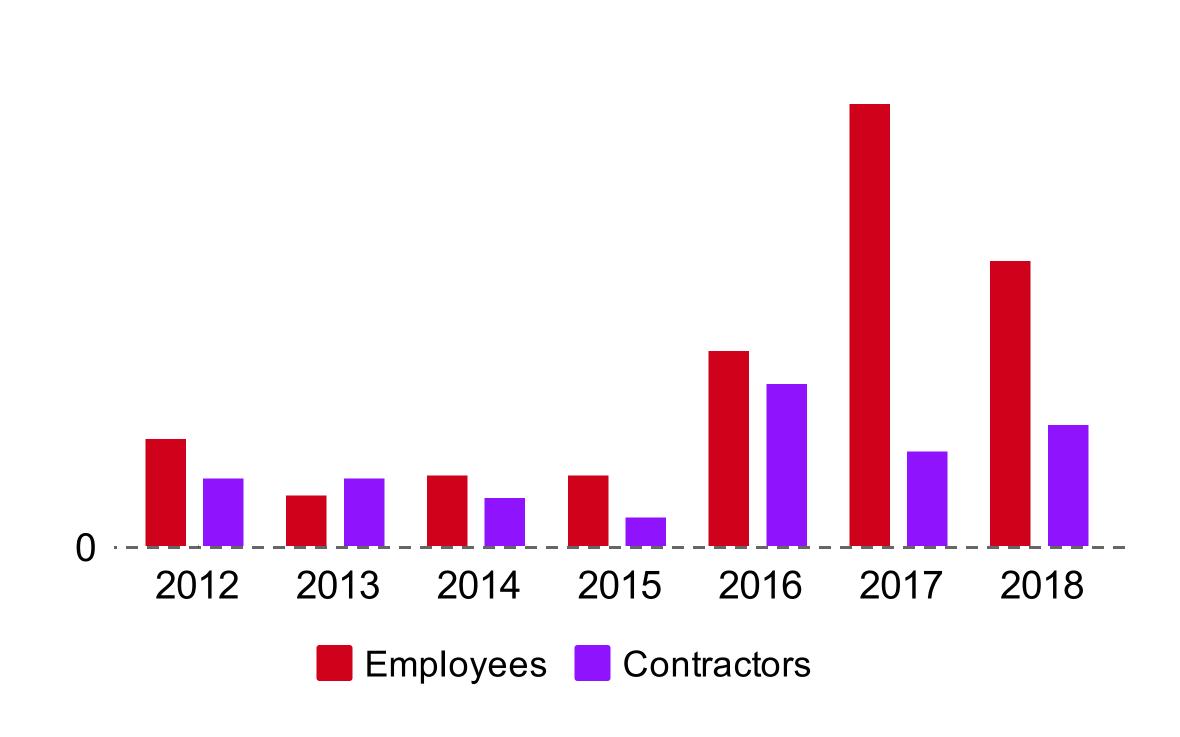
## Occupational health and safety



Our members inform the UK regulator in accordance with the requirements of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR). At the TSA we collate and share this information with our members on a quarterly basis.

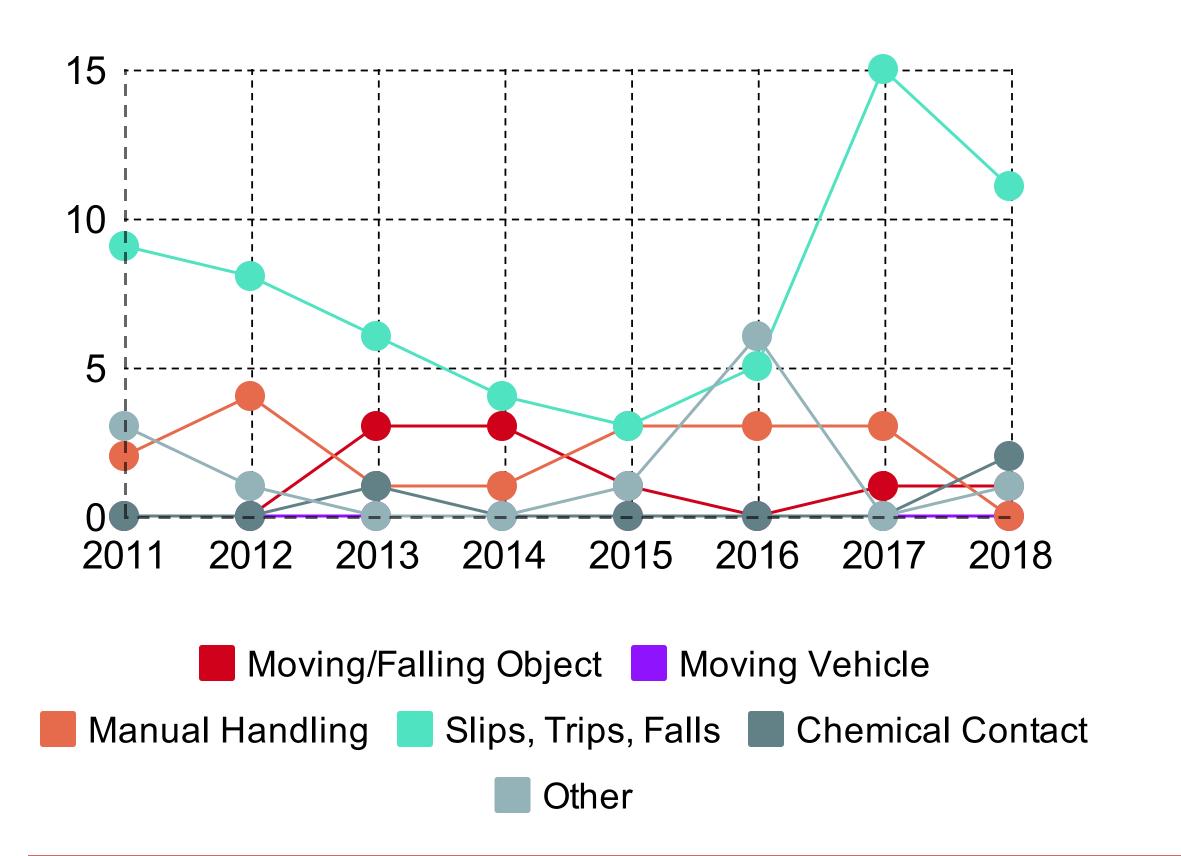
# RIDDOR LTI Rate (per 100,000 hours worked)

Lost Time Injuries (LTI) are those where an employee or contractor has been away from work due to a work place injury, for more than seven days. This is normalised per 100,000 hours worked to give an LTI Rate.

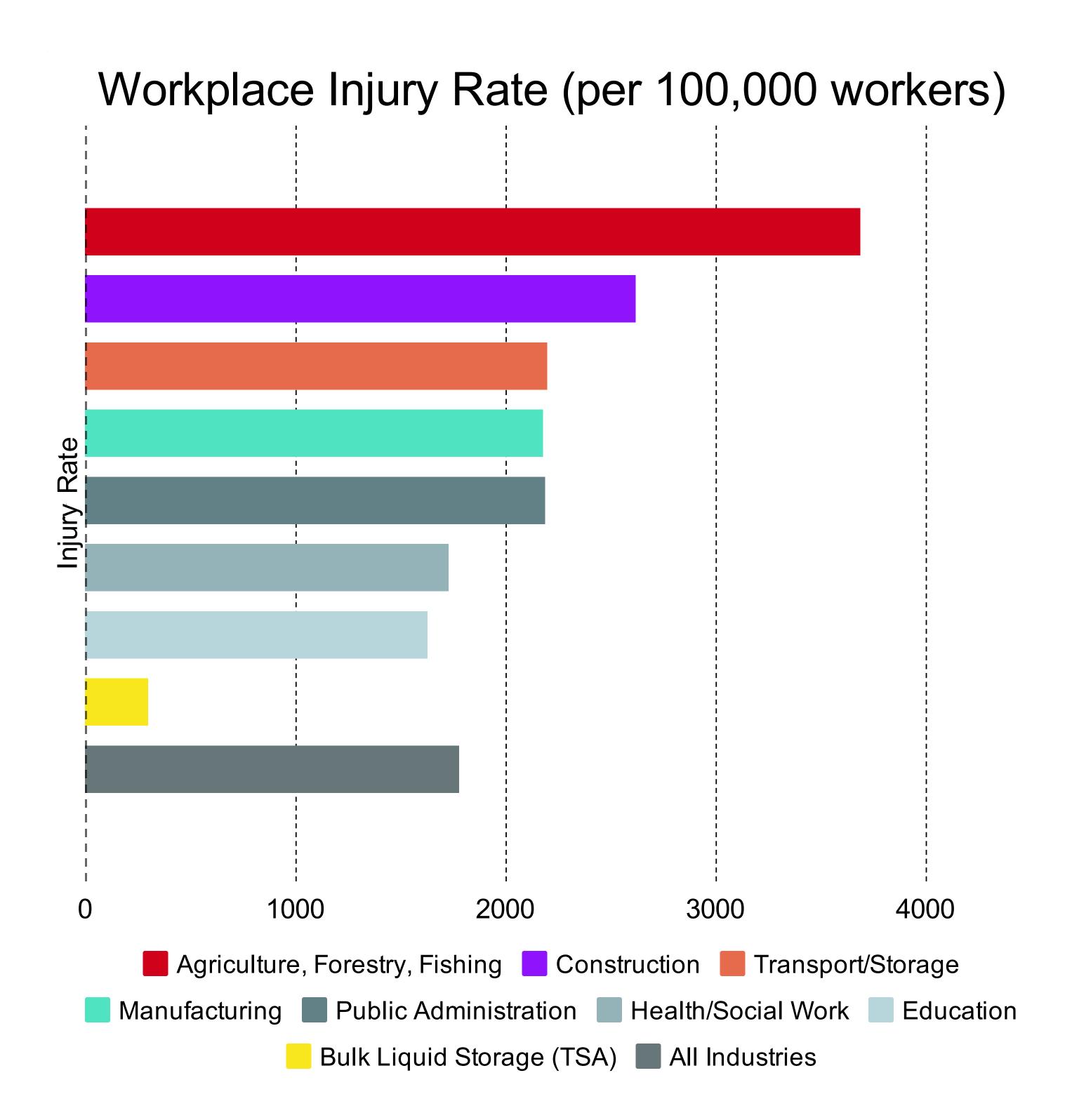


#### LTA Cause Analysis

Lost Time Accident (LTA) causes examine the nature of Lost Time Injuries.



The tank storage sector continued to maintain very high standards of occupational safety during 2018. It remains one of the safest industries in the UK with proportionally fewer injuries than almost all other sectors.



Source: HSE RIDDOR Statistics, http://www.hse.gov.uk/statistics/industry/index.htm

### Our influence

The TSA represents the interests of our members to Government, Regulators and other relevant agencies.

We do this by playing a leading role in many different working groups and committees. We work with other industry sectors and regulators to identify potential areas for improvement or where knowledge and good practice could be extended.



## Join us



We have several membership levels available for businesses storing bulk liquids, port operators and equipment and service providers.

Join us, and influence what matters to you.

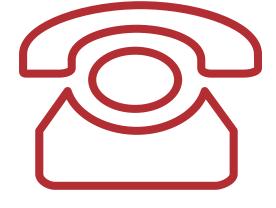
Contact us for more information.

	Full Me	ember Associa	ie Member Asso	ciate Member (s	Supplier	
TSA Committees						
Council						
Annual Networking Lunch						
HR Committee			ماد ماد			
SHE Committee			**			
Technical Committee	$\odot$	$(\checkmark)$	$\langle \rangle$			
External Committees, including*						
Federation of European Tank Storage Associations	$\odot$	$\odot$				
COMAH Strategic Forum	$\odot$	$\odot$				
Refinery and Terminal Operators Forum	$\odot$	$\odot$				
Chemical and Downstream Oil Industries Forum	$\bigcirc$	$\bigcirc$	$\bigcirc$			
Downstream Oil Industries Forum	$\odot$	$\odot$				
Downstream Oil Distribution Forum	$\odot$	$\bigcirc$				
Science Industry Partnership	$\bigcirc$	$\bigcirc$	$\bigcirc$			
Process Safety Forum	$\odot$	$\odot$				
Relevant Institute Technical Committees	$\odot$	$\bigcirc$	$\odot$			
Chemical Industry Liaison Group (Environment)	$\bigcirc$	$\bigcirc$				
Alliance of Chemical Associations	$\odot$	$\odot$				
Publications/Website						
TSA Annual Review	$\bigcirc$	$\bigcirc$	$\odot$			
Quarterly and Annual Safety Statistics	$\odot$	$\bigcirc$				
Website - Council Area	$\odot$					
Website - Members Area	$\bigcirc$	$\bigcirc$			*TSA Secretariat represen members at these commit <sup>e</sup> Members will be invited to	tees.
Website - Supplier Listing	$\odot$	$\bigcirc$	$\bigcirc$	$\bigcirc$	relevant working groups a carry out reviews of any	nd
Use of TSA Logo	$\odot$	$\bigcirc$	$\bigcirc$		proposed legislation, guida or standards produced.	ance
Member Delegate Rate - TSA Conference	$\odot$	$\odot$	$\odot$		**Participation by invitation only.	n



## Contact us

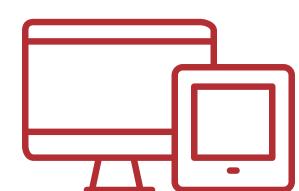




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