



ANNUAL REVIEW 2021

Annual Review of the UK's bulk liquid storage sector



TSA is an industry based organisation whose members are engaged in the storage of bulk liquids and the provision of products and services to the sector.

THE VOICE OF THE BULK LIQUID STORAGE SECTOR



CONTENTS

A MESSAGE FROM OUR PRESIDENT	4
ABOUT US	6
INSPIRING THE NEXT GENERATION OF TALENT	10
CONTRIBUTION TO THE UK ECONOMY	12
TERMINAL STATISTICS	13
PROCESS SAFETY	15
OCCUPATIONAL HEALTH AND SAFETY	17
JOIN US	19

A MESSAGE FROM OUR PRESIDENT

Welcome to the sixth edition of the TSA Annual Review.

The Annual Review serves as a valuable resource for the bulk liquid storage sector. It provides useful insights and data on terminals, process safety, occupational health and safety as well as on the industry's contribution to the UK economy.

This past year has been uniquely challenging. As with other segments of the economy, bulk liquid storage has also felt the impact of the coronavirus (COVID-19), compelling us to marshal our strength and resilience to keep liquid supplies flowing, and managing our inventories to provide safe storage while demand was reduced. During this extraordinary period, our purpose as an Association has never felt more relevant, whether it is in the way we have supported our membership through the delivery of our core services and novel initiatives or the wider tank storage community with up-to-date information, data and intelligence.

Our sector's focus has also been firmly set on leading the way to seize the opportunities of tomorrow. The bulk liquid storage sector is uniquely positioned to help deliver the UK's decarbonisation targets and provide the essential expertise that will be needed to succeed. In making the journey to a net-zero future, career prospects in the sector are expanding and new and exciting opportunities are opening up. Against this background, this year's spotlight presents an overview of careers and apprenticeships in the industry. Above all, it highlights our commitment to attract, develop and retain the next generation of talent. As we look ahead, our message is clear: now is the time to join a growing and exciting industry and play a part in shaping the future.

I hope you enjoy reading our 2021 Annual Review of the bulk liquid storage sector. As always, thank you to the companies and individuals who have supported its production.

Adrian Jackson, June 2021



ADRIAN JACKSON

Chief Executive
Oil and Pipelines Agency



THE BOARD OF DIRECTORS

The Tank Storage Association is the voice of the bulk liquid storage sector. We represent the interests of over 60 member companies engaged in the storage of bulk liquids and the provision of products and services to the bulk liquid storage sector. Through our work, and collective voice, we champion the needs of our members in safety, health, environmental and technical matters.



ADRIAN JACKSON

TSA President

Chief Executive

Oil and Pipelines Agency



WILMA KELLY

TSA Vice President

HSE Director

Certas Energy



PETER DAVIDSON

TSA Executive Director

Tank Storage Association

MEMBERS

Tank Storage Association's members provide and support an essential interface between sea, road, rail and pipeline logistics for a diverse range of essential products, including transport and heating fuels, chemicals, animal feed and foodstuffs. In the process, they are responsible for the direct employment of around 4,000 highly trained, specialised people. The association also takes a leading role in safety, encouraging cross-sector cooperation and knowledge transfer via a number of fora including the COMAH Strategic Forum and Process Safety Forum.



ASSOCIATE MEMBERS

TSA plays a leading role in several industry, regulatory and Government forums and works to ensure that members' interests are at the top of the agenda. We tackle a wide scope of issues relevant to the bulk liquid storage sector and our committees are critical mechanisms for highlighting the most pressing matters facing businesses in our sector. Our Associate Members play an essential role in Technical, Safety, Health and Environmental matters, sharing and learning operational experience, and work with the association on a variety of sector specific issues.



ASSOCIATE MEMBERS (SUPPLIERS)

The Tank Storage Association is the voice of the bulk liquid storage sector to Government, Parliament, Regulatory Agencies and in the media. We provide a wide range of support and services for our membership, including technical guidance and standards, insights, comprehensive monitoring, weekly updates and a quarterly digital magazine. Our Associate Members (Suppliers) make a valued contribution to our Technical, Safety, Health and Environmental work, by sharing learnings, experience, new products, innovation, services and contributing to the development of new guidance where appropriate.



Our aim is 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.



Through our work and collective voice, we champion the needs of our members in safety, health, environmental and technical matters. TSA facilitates dialogue in key policy-making forums producing solutions on issues of interest to the sector.

TSA is a founding member of several industry safety groups, including the COMAH Strategic Forum which helps to set the UK's regulatory strategy. It also adheres to an Environmental, Social and Governance (ESG) Charter affirming the sector's shared commitment to environmental, social and governance principles.

WE SHAPE PRIORITIES AND CONNECT INDUSTRY

TSA is tailored to serve its membership so that member organisations can have direct input on the issues most important to them. TSA's membership enables effective and dynamic industry-wide interaction, driving valuable connections across the sector in the UK and abroad.

INSPIRING THE NEXT GENERATION OF TALENT

The tank storage sector is the pulse of our day-to-day life, providing an essential link in the supply chain for a large variety of liquid products, from transport and heating fuels to chemicals, animal feeds and food-grade products such as fats, oils and molasses. These logistics hubs are central to the UK economy, supporting our domestic commerce in bulk liquid products and connecting it with overseas markets. Indeed, terminals are an essential part of global infrastructure networks, ensuring that bulk liquids are supplied when they are needed and in the quantities required. Currently, this dynamic and growing industry supports over 4,000 direct UK jobs and draws on the expertise and talent of a highly skilled, innovative and resourceful workforce. It also places great emphasis on training and development to give employees at all levels the opportunity to learn and grow.

Reflecting a strategic and progressive vision of the future, TSA members are committed to attracting, developing and retaining the next generation of talent. Our world now is in an almost constant state of change with technology, processes and systems all evolving and transforming day by day. In today's fast-evolving landscape, career prospects in the sector are expanding and new and exciting opportunities are opening up. As national and international efforts to tackle climate change by reducing carbon emissions become ever more important, the bulk liquid storage sector will continue to grow in the coming years and invest in innovation and knowledge as critical inputs for change. From helping to unlock the potential of hydrogen to the scale up of sustainable biofuels, the industry will have a key role to play in the energy transition by facilitating access to the broad mix of energy solutions that will be needed to succeed. With a firm focus on the next generation of talent, the Tank Storage Association has recently launched a new career drive to increase awareness of the exciting and unprecedented opportunities that this exciting and growing sector affords. It has also published two new career guides which explore what an apprenticeship in the sector involves and detail career options and prospects in the bulk liquid storage industry.

For more information on careers and apprenticeships in the bulk liquid storage sector, visit www.tankstorage.org.uk/publications.





The tank storage sector is the pulse of our day-to-day life, providing an essential link in the supply chain for a large variety of liquid products.



Terminals are central to the UK economy, supporting our domestic commerce in bulk liquid products and connecting it with overseas markets.



The bulk liquid storage sector supports over 4,000 direct UK jobs and draws on the expertise and talent of a highly skilled, innovative and resourceful workforce.



In today's fast-evolving landscape, career prospects in the sector are expanding and new and exciting opportunities are opening up.



The industry offers a diverse range of career opportunities in business, operations, engineering, safety, marketing, science, IT, supply and trading and many other disciplines. The sector is also important for environmental science, chemical and engineering graduates, related vocational skills as well as training and apprenticeships.

CONTRIBUTION TO THE UK ECONOMY

REVENUE IN 2020

+ **£4.3bn**

EMPLOYEES IN THE UK AND ROI

INCLUDING LONG TERM CONTRACTORS

+ **4,057**

PLANNED INVESTMENT IN THE NEXT 5 YEARS

IN THE UK AND ROI

+ **£674m**

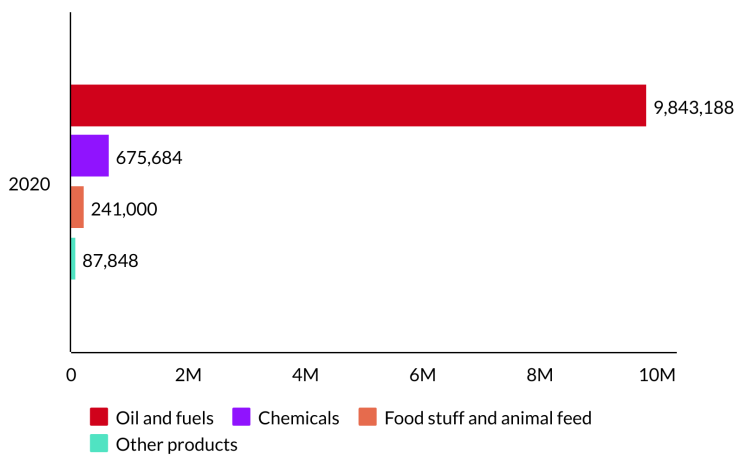
The bulk liquid storage sector in the UK is diverse, providing a critical component in the supply chain for many industries from transport fuels to animal feeds.

Our members operate 302 terminals in the UK and Republic of Ireland, providing 10,847,720 m³ of storage capacity.

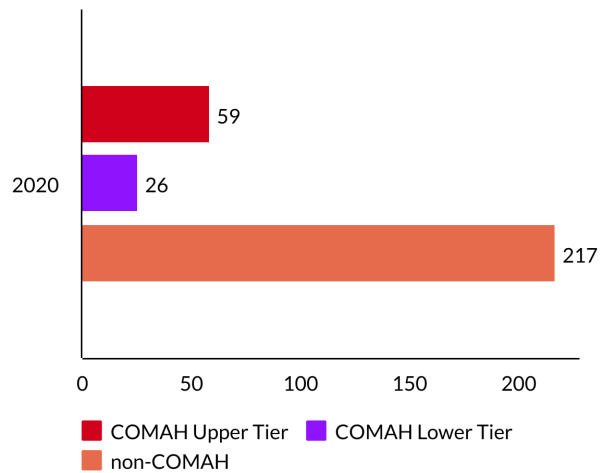


TERMINAL STATISTICS

STORAGE CAPACITY (m³)



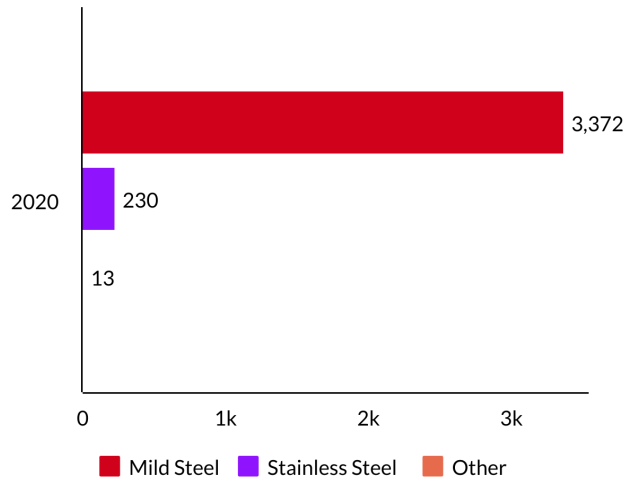
NUMBER OF TERMINALS



OVERVIEW

Our members operate a variety of terminals across the UK and Republic of Ireland storing both hazardous and non-hazardous liquids. Around twenty-two of these terminals are designated by HM Government as Critical National Infrastructure (CNI). 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.

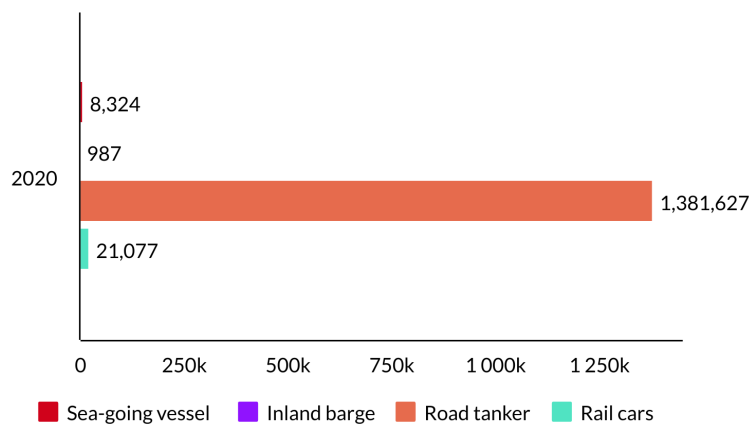
NUMBER OF STORAGE TANKS



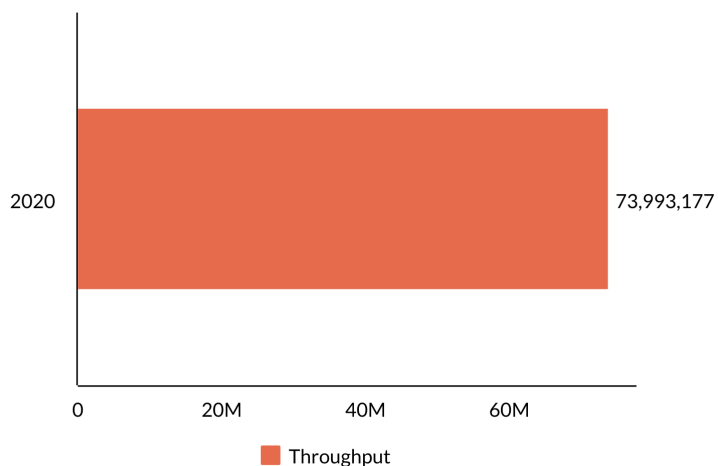
Movement of material into or out of terminals is either by seagoing vessel, inland barge, road tanker, rail tanker or pipeline.

Our members safely execute over a million movements each year. By far the greatest number of movements is 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.

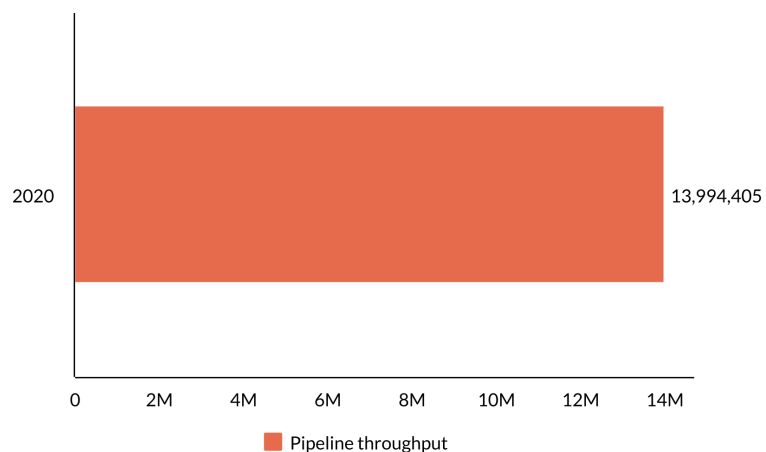
NUMBER OF MOVEMENTS



AGGREGATED THROUGHPUT (tonnes)



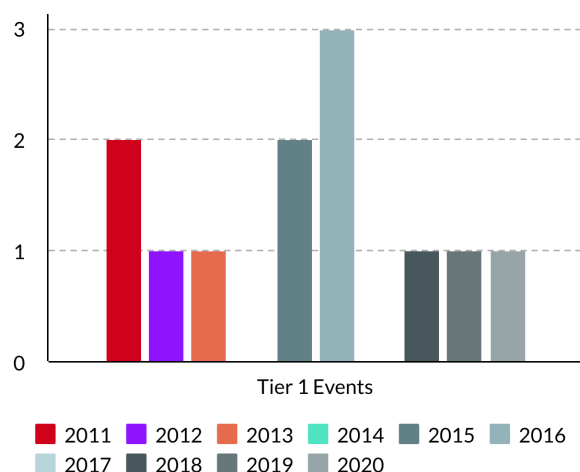
PIPELINE THROUGHPUT (m³)



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 and, in 2020, our members reconfirmed their commitment by signing a commitment to good major hazard leadership, an initiative we have been leading on behalf of the COMAH Strategic Forum. 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.

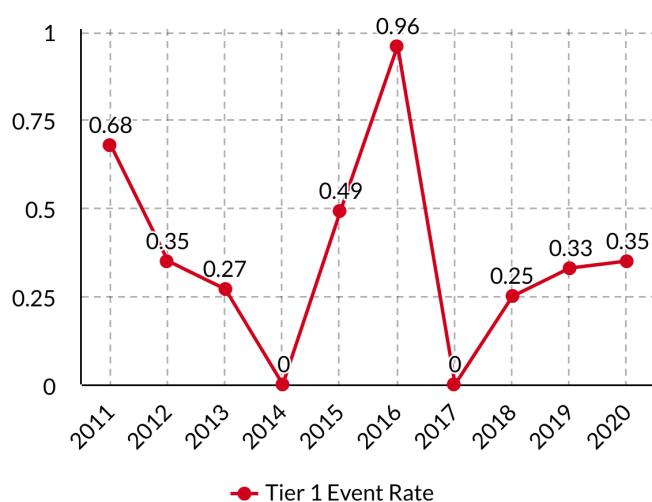
NUMBER OF TIER 1 EVENTS



Tier 1 events are significant losses of containment (relevant to the hazard of the product stored).

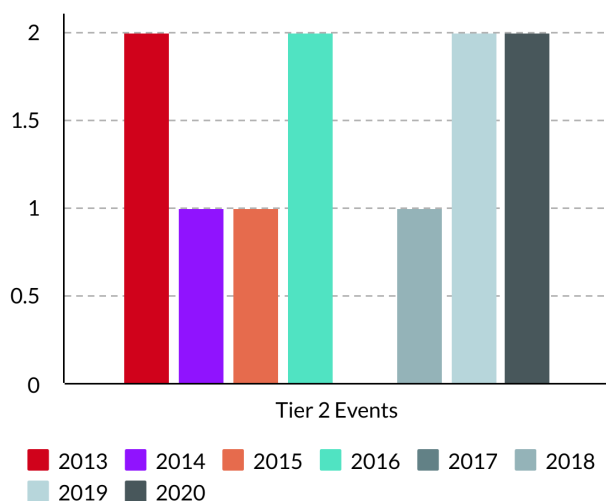
The number of Tier 1 events experienced by our members are very small, with one reported in 2020. The work that the TSA does with the UK regulator helps to ensure that we operate safely.

TIER 1 EVENT RATE (per million hours worked)

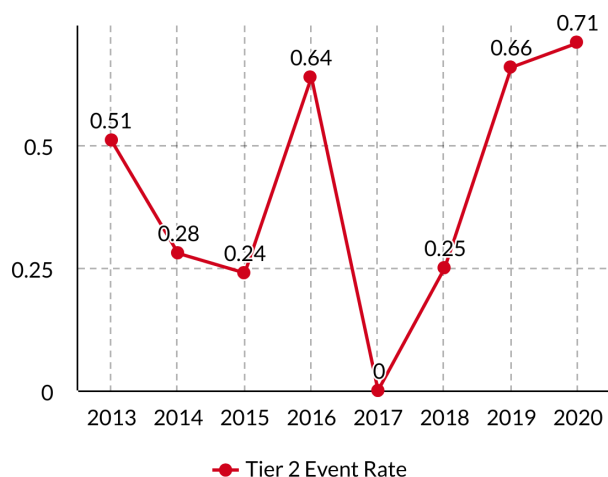


Tier 2 events are smaller losses of containment (relevant to the hazard of the product stored). Even though only one Tier 1 and only two Tier 2 events were reported in 2020, this does not mean we are complacent. In 2020, we launched our *Significant Indicators* programme and, from January 2021, we have been collecting detailed data on individual barrier failures that cover receipt, storage, processing and export of bulk liquids, highlighting where we need to focus our efforts in the future.

NUMBER OF TIER 2 EVENTS

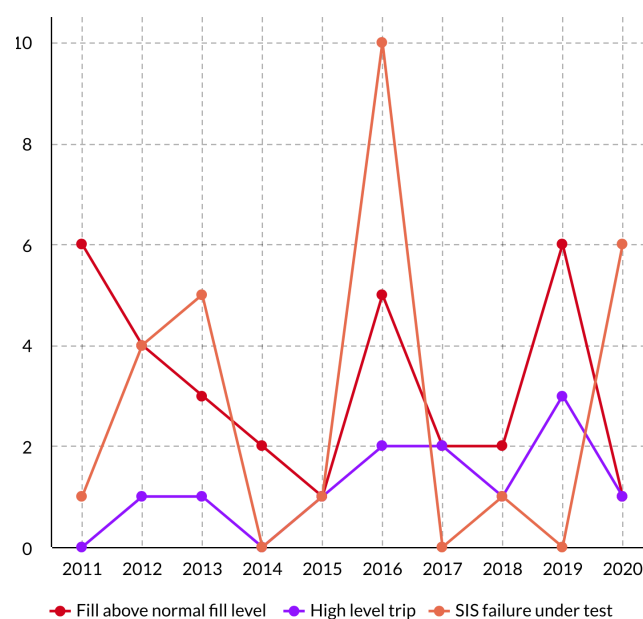


TIER 2 EVENT RATE (per million hours worked)



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 2020, we have been sharing safety messages regarding the Tier 3 leading indicators in our quarterly statistics 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 & SAFETY

Our members inform the UK regulator in accordance with the requirements of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).

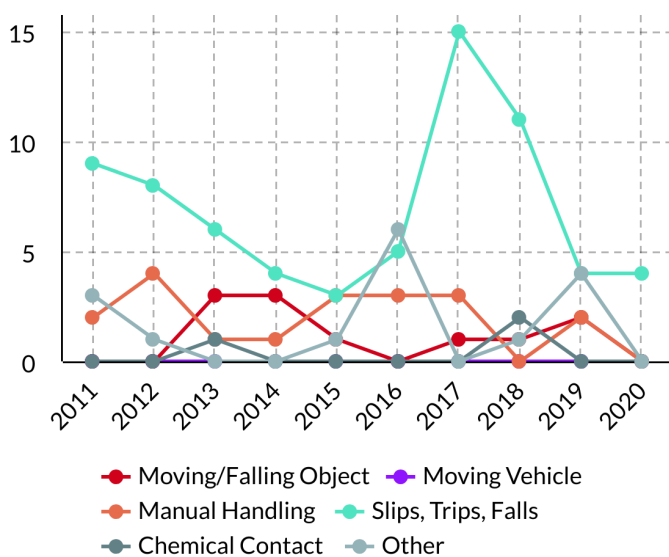
The Tank Storage Association collates and shares this information with its membership on a quarterly basis.

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 workplace injury, for more than seven days. This is normalised per 100,000 hours worked to give an LTI Rate.

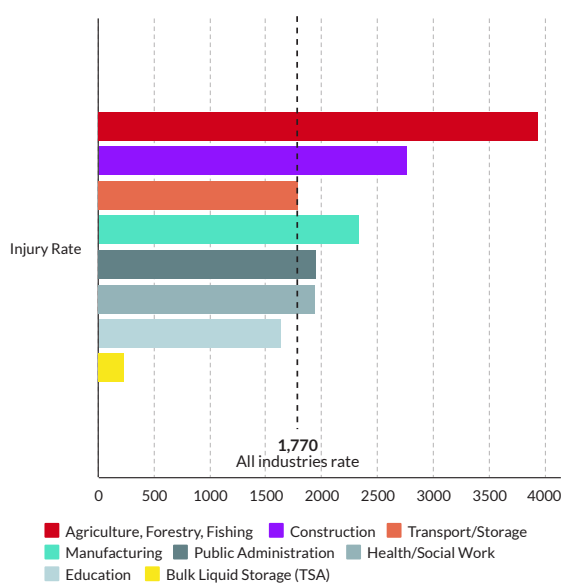
LTA CAUSE ANALYSIS



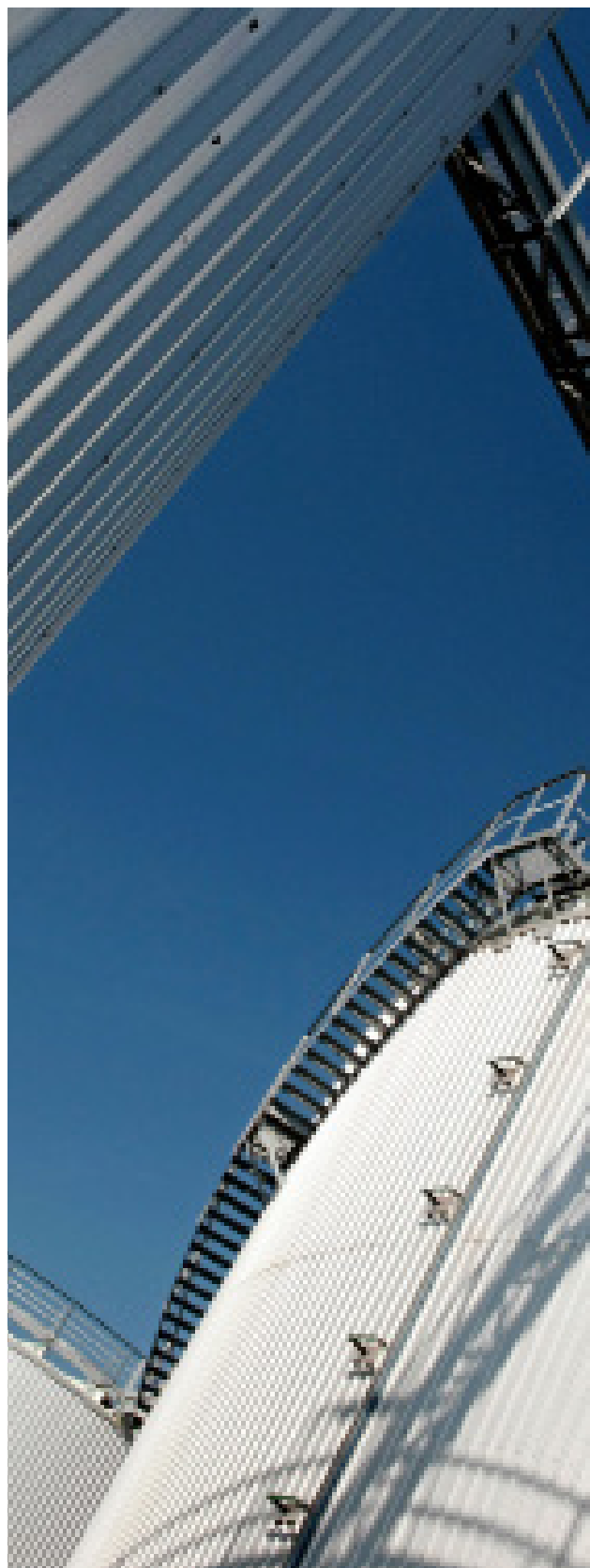
Lost Time Accident (LTA) causes examine the nature of Lost Time Injuries.

The tank storage sector continued to maintain very high standards of occupational safety during 2020. It remains one of the safest industries in the UK with proportionally fewer injuries than almost all other sectors.

WORKPLACE INJURY RATE (per 100,000 workers)




Source: HSE RIDDOR Statistics.
See <https://www.hse.gov.uk/statistics/>



JOIN US

TSA is the voice of the bulk liquid storage sector to Government, Parliament, Regulatory Agencies and in the media. We tackle a wide scope of issues relevant to the bulk liquid storage sector and our committees are critical mechanisms for highlighting the most pressing matters facing businesses in our sector. We provide a wide range of support and services for our membership, including technical guidance and standards, insights, comprehensive monitoring and weekly updates. We offer three types of membership: **Full Membership**, **Associate Membership** and **Associate Membership (Supplier)**.



TSA plays a leading role in several industry, regulatory and Government forums and works to ensure that members' interests are at the top of the agenda. We champion the UK's bulk liquid storage sector and its role in supporting growth and prosperity.

Join us. Choose your membership at
www.tankstorage.org.uk/join-us



ANNUAL REVIEW

2021

Annual Review of the UK's bulk liquid storage sector

Contact us

www.tankstorage.org.uk
T. +44 (0)1462 488232
info@tankstorage.org.uk

Tank Storage Association
Devonshire Business Centre, Works Road
Letchworth Garden City, Herts. SG6 1GJ
United Kingdom

