Casualty Market Update

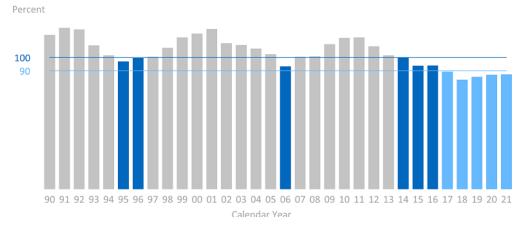


Akil Harris
Managing Director,
Energy and Power,
Marsh

Historical Profitability of Workers Compensation

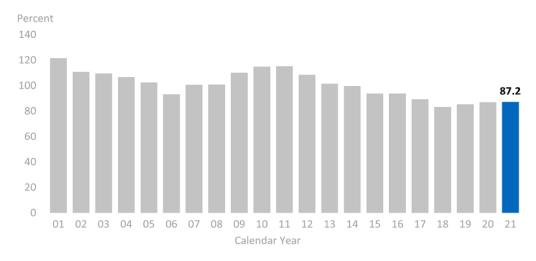
WC Private Carrier Combined Ratio

Less Than 100%, Less Than 90%



WC Combined Ratio

Private Carriers-All States

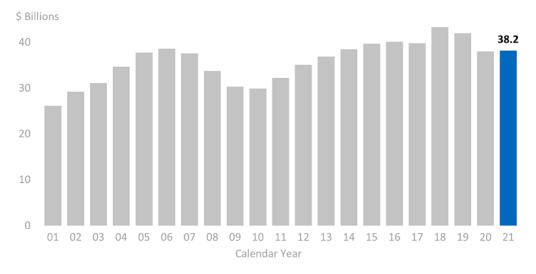


Source: NAIC's Annual Statement data.

- The private carrier market for workers compensation wrote approximately \$38.2B in premium in 2021 net of reinsurance.
- 87.2% combined ratio reported by NCCI for workers compensation in 2021.
- 2021 represents 8 straight years of underwriting profitability
- 2021 also represents 5 straight years if underwriting combined ratios that are below 90%

WC Net Written Premium

Private Carriers-All States



Source: NAIC's Annual Statement data.



2023 Workers Compensation Trends and Expectations

Medical Inflation

 Medical Inflation historically has out paced economical inflation. With economic inflation approximately around 7%, we can estimate medical cost above that level.

Class Code Rate Reductions

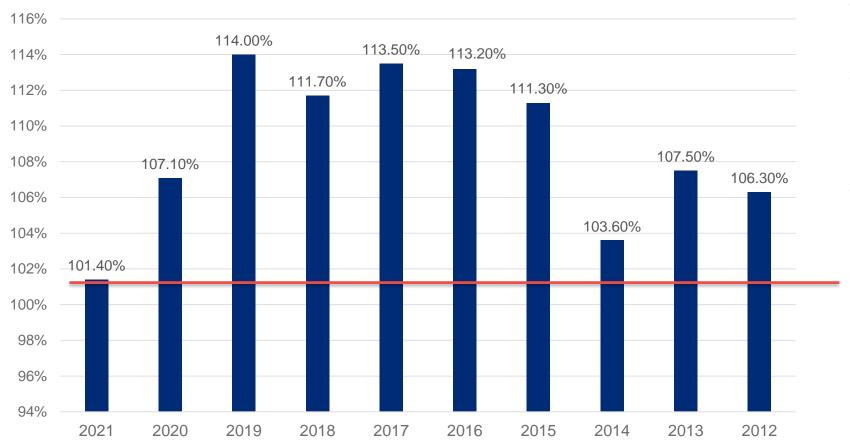
 The National Council on Compensation Insurance has recommended a 3% overall average reduction in workers' compensation premium rates for the voluntary market in 2023.

WFH Injuries on the rise

 Frequency increase in work related injuries generated from Working From Home in the past 18 months.



Historical Profitability of Automobile Liability and Current Pricing Trends



*2021 National Association of Insurance Commissioners Report. For US Property and Casualty

- According to Fitch Rating, the commercial automobile liability market wrote approximately \$46B in premium in 2021.
- 101.4% combined ratio reported by NAIC (National Association of Insurance Commissioners) for 2021 is the lowest combined ratio for commercial automobile liability in the past 10 years.
- 2021 was the 10th straight year of combined ratio exceeding 100%

Loss sensitive rate trends

	Avg Q3 '22	Trend	
Auto Liability	+7.5%	•	
Guaranteed cost rate trends			
	Avg Q3 '22	Trend	
Auto Liability	+9.0%	A	



US Automobile Liability Oil Patch Accidents and Nuclear Verdicts

Auto Accidents in the Oil Patch

The following was part of annual release provided by the Texas Department of Transportation around auto accidents in the Energy Sector:

Crash Data

In 2020, nearly 70,000 traffic crashes occurred in the state's five major energy production areas resulting in 932 fatalities and 2,791 serious injuries. The leading contributors to those crashes were failure to control speed and driver inattention Below is a breakdown of crashes per energy region for 2020:

Barnett Shale: 17,921 traffic crashes resulted in 223 fatalities and 797 serious injuries.

Eagle Ford Shale: 11,275 traffic crashes resulted in 138 fatalities and 409 serious injuries.

Anadarko Basin: 639 traffic crashes resulted in 8 fatalities and 21 serious injuries.

Haynesville/Bossier Shale: 16,490 traffic crashes resulted in 243 fatalities and 757 serious injuries.

Permian Basin: 23,100 traffic crashes resulted in 320 fatalities and 807 serious injuries.

TRAFFIC FATALITIES IN THE FIVE ENERGY ZONES
ACCOUNTED FOR ALMOST ONE IN FOUR OF ALL
TRAFFIC DEATHS IN THE STATE.

September 2013

- Minor fender bender between a tractor-trailer and a pickup in Texas
- \$101 million jury award against an oilfield service contractor
- Award was reduced to \$32 million by the trial judge

November 2021

- Jury rendered a total award of \$730 million dollars to the survivors of Toni Combest
- Combest was a 73 year old greatgrandmother who was killed in a 2016 collision in TX



2014

- Single fatality in inclement weather.
- \$90 million dollar verdict awarded in Texas

November 2021

- A Florida jury awarded a landmark \$1 billion dollar verdict
- The jury awarded \$100 million dollars for pain and suffering, and \$900 million dollars in punitive awards for negligent hiring practices.



Notable US Pipeline Incidents of the Past 5 Years (not incl. 2022)

Underwriter Concerns Around Pipeline Operators

- Pipeline construction contractors and/or Pipeline maintenance contractors that do not carry sudden and accidental pollution coverage.
- Insufficient limits of contractors that do work inside the pipeline easements/right of ways of pipeline operators
- Not contacting 8-1-1 for marking of existing lines and pipelines before conducting digs.
- Appropriate cyber security parameters
- Use of pipeline inspections tools and pipeline maintenance that exceeds the standards required by PHMSA and FERQ so not seen as doing the bare minimum.

2017

- Pipeline explosion in LA resulting in 1 death 1 severely burned employee, and the release of over 13K bbls of product.
- Natural Gas explosion killing 2 people, injured 9 and caused \$30M in property damage.
- Pipeline failure in Colorado resulting in the release of approx. 10K bbls of crude oil.
- Keystone pipeline releases approximately 6,500bbls of crude oil in South Dakota.

2019

- Gas leak causes explosion resulting in the death 2 individuals and 5 injuries.
- 8,000 bbls of refined product released in to a creek in TX.
- Keystone pipeline releases approximately 4,500bbls of crude oil in North Dakota.

2021

- Natural gas pipeline explosion in Arizona resulting in 2 deceased and 1 burned.
- Natural gas pipelines explosion in Texas resulted in the death of 2 workers and 2 others injured.
- Subsea pipeline off the coast of Huntington Beach, California released approx. 25,000 gallons of crude oil

2018

- Nat Gas pipeline explosion in Greater Boston causing over \$1B in total damage
- Excavation contractor struck line causing explosion and releasing approx. 48K bbls of product.

2020

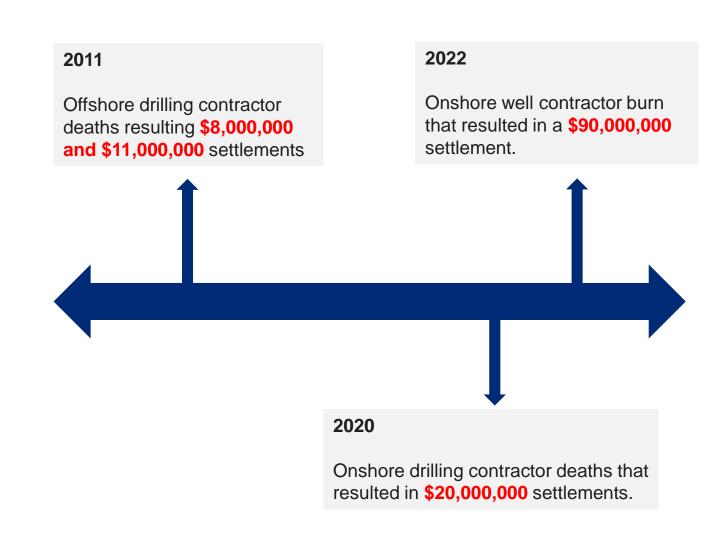
- Underwater natural gas pipeline struck and killed 5 people and injured 4 others.
- Approx. 2,000,000 gallons of refined product released due to an underground leak on a pipeline.



US General Liability Oil Patch Nuclear Verdict Timeline

Underwriter Concerns Around Oil Field Operations

- Insufficient limits and coverages in master service agreements and operating agreements.
- Unpredictable losses despite strong contractual indemnities as well as insurance provisions in states with Anti-Oil Indemnity Statutes.
- Limited or lack of adequate pipeline maintenance, inspections, and monitoring.
- Concerns around PFAS utilization in hydraulic fracturing operations in shale areas.
- Litigation funding of severity claims that can lead to defense cost concerns

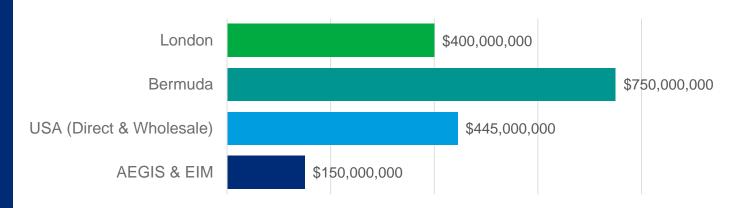


Excess Liability Capacity and Pricing Trends for 2023

Factors Affecting Capacity and Pricing Trends in 2023

- 2021 and 2022 saw a vast increase in capacity and utilization from the US wholesale markets offsetting vacated outside of the US.
- Difficult reinsurance market for 2023 has caused a tightening of capacity for those that use heavy amounts of reinsurance.
- Heightened focus on diversifying energy casualty book with clean/green risk has driven more competition around the renewable energy sector.
- Inflationary impact on business interruption and payrolls that gave a direct correlation with higher indemnity values.
- ESG initiatives have altered underwriting strategies for several companies as well as created new profit centers for others.

Global Excess Liability Limits for Energy Risk



*Available limits will vary based on the class of business, aggregation, losses, attachment points, coverages, and price per mil of the respective risk

US Energy & Power Pricing Trends for Excess Liability

CLASS	RATE	TREND
Upstream – Onshore	+5% to +10%	A
Upstream - Offshore	+5% to +7.5%	▼
Midstream	+5%	•
Downstream	+7.5%	
Power & Utility	+10% to +15%	_
Renewables	FLAT	•
		_



Excess Liability Coverage Concerns Going Into 2023 – Oil and Gas Operations

Underwriter Concerns Around Oil Field Operations

- **1. Climate Change Exclusion** now apart of JH Blades and JL London Form
- **2. PFAS** apart of latest JL London form
- 3. Punitive Damages Awards Excluded in latest JL London form
- **4. Property damage cover from Cyber Events** Hesitancy extending resultant coverage beyond bodily injury. London currently excludes Malicious Acts.
- **5. Defense Outside of Policy Limits** Hesitancy in providing with exposure to heavy litigation.

Top 5
Coverage
Concerns
for 2023

Excess Liability Coverage Concerns Going Into 2023 – Power and Renewables

Underwriter Concerns Around Power Gen and Renewables

- **1. Wildfire Liability** increasingly difficult to secure coverage for reasonable rates based on the state of operations
- 2. PFAS apart of latest JL London form
- **3. Failure to Supply** AEGIS has expressed intent to limit coverage to rate-regulated utilities that own electric, gas or water distribution systems which distribute to end user customers, and has indicated it will not apply arising out of in whole or in part from a Natural Hazard.
- **4. Punitive Damages Awards** Excluded in latest JL London form

Top 4
Coverage
Concerns
for 2023

Marsh Specialty US Energy & Power Casualty Brokers

