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# Cargo Stock Throughput

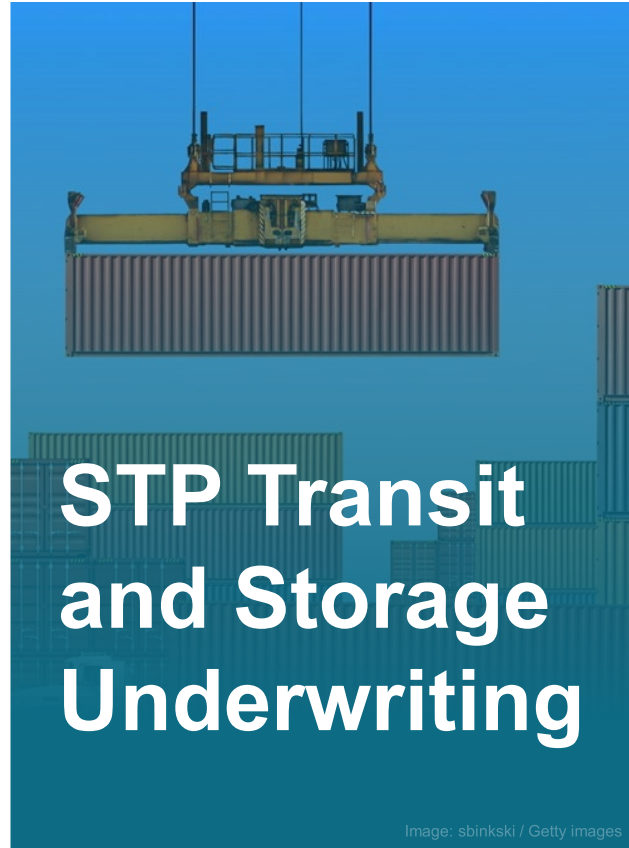
Munich Re Global Marine Solutions

5 Sep, 2024



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# Cargo Stock Throughput

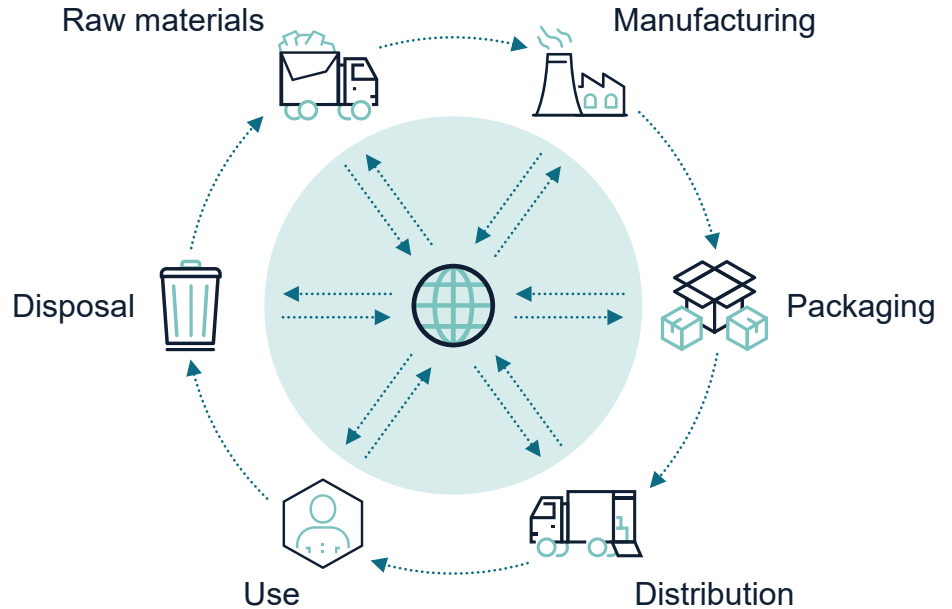
## Traditional Definition



### Insurance coverage

**for goods**, in which the insured has an insurable interest, through all stages of transportation, processing and storage through all stages of production, ranging from raw materials, components, semi-finished goods to the final finished product.

### “Cradle to Grave”



## Traditional Cargo Exposures

- Goods in due course of transit including by vessel, air, rail, truck, mail/parcel post, and connecting conveyance
- Coverage for Goods at temporary storage locations such as warehouses, distribution centers (3PLs), processing locations, etc.



## Expanded Property Exposures

- Blanket limits covering contents on large property schedules
- Coverage for goods at retail locations
- Furniture, fixtures and machinery (FFE), EDP, and Real Property
- Business interruption and time element coverages (extra expense)



# Benefits for Buyer of Cargo Stock Throughput

- ✓ Continuous coverage
- ✓ Claims and Risk Engineering services
- ✓ Broader coverage
- ✓ NAT CAT coverage and capacity
- ✓ Lower Deductibles
- ✓ Competitive pricing



- Significant property contents exposure that represent both risk, occurrence and NAT CAT issues
- Breadth of coverage versus property and quantum of loss for transit versus storage loss
- Underpriced property contents risks
- Lack of property underwriting expertise in Cargo Market
- “Knowns” versus “Unknowns” and underwriting both
- Primary “Stock” cover in cargo market is compressed and significantly underpriced from a technical basis



# Cargo Transit Training Resources

IUMI, GDV, AIMU, IMUA

<https://iumi.com/education/online-tutorials/iumi-cargo-tutorials>

[https://www.tis-gdv.de/tis\\_e/inhalt-html/](https://www.tis-gdv.de/tis_e/inhalt-html/)

[https://www.tis-gdv.de/tis\\_e/ware/inhalt-htm/](https://www.tis-gdv.de/tis_e/ware/inhalt-htm/)

<https://www.aimu.org/amim-program.html> ..... Chapters/Webinars 1–8

<https://www.cii.co.uk/search-results?q=cargo>







Goods Insured, susceptibility to loss, damage or theft, packing/shipping, average and maximum per shipment, container, and conveyance.  
Major areas of trade (any high risk).

## Resources:

<https://www.imo.org/en/OurWork/Safety/Pages/CargoSecuring-default.aspx>

<https://www.ukpandi.com/loss-prevention/carefully-to-carry/>

<https://www.ttclub.com/loss-prevention/cargo-integrity/>

<https://www.cia.gov/the-world-factbook/>

- Gross Annual Sales per insured's annual report (if publicly traded) or audited financial statements
- Description of Goods Insured
- Top 5 Regions of Trade for Imports and Exports
- Shipment valuation:
  - Cost, Insurance and Freight (C.I.F.) +10%
  - Selling Price, If Sold
  - Replacement Cost
  - Actual Cash Value
  - Other



Estimated annual insured value of shipments  
(for which insured is responsible to insure/  
at insured's risk):

- Imports
- Exports
- Cross Shipments  
(shipments originating and terminating  
outside country of insured)
- Domestic Transit Shipments
- Foreign Overland Transit Shipments

Estimated annual insured value of  
shipments for Contingent Interest DIC /  
GOC exposure

(for which insured is not responsible to insure,  
at other's risk):

- Imports
- Exports
- Cross Shipments  
(shipments originating and terminating  
outside country of insured)
- Domestic Transit Shipments
- Foreign Overland Transit Shipments





Schedule of locations (SOVs).  
Average and maximum amount  
at risk per location.

Construction, Occupancy, Protection,  
and Exposure (COPE).



Underwrite to Property  
(contents/personal property) standards.

Is there a formal Loss Control/Risk Engineering Plan in place?

Have all locations been surveyed? How frequently are they reinspected?

Are there any locations with critical recommendations outstanding?

If any locations that are non-owned or operated by insured, what are 3<sup>rd</sup> Party Contractual Risk Transfer procedures?



# Information Schedule/SOV

## Should Contain for Inventory

- Complete address
- Inventory and how valued
- Building construction (ISO Construction Class)
- Occupancy
- Year Built
- Last Inspection and status of any outstanding recs.
- Sprinklered
- Number of fire divisions
- Security (alarms, guard service)





# Example Schedule/SOV

Property Name	Complete Street Address	City	State/Province	Postal Code	Country	Latitude	Longitude	Goods Insured Description	Inventory USD	Inventory Including Markup USD	Construction Class	Constr. Year	RMS Occupancy	Area Occupied	Alarm System	Sprinklers
...	...	...	...	...	...	...	...	...	\$128.513.896	\$311.050.025,60	Non Combustible	2016	ATC-6 - Wholesale Trade, Warehouse	warehouse	...	1 Present
...	...	...	...	...	...	...	...	...	\$71.086.336	\$197.462.044,44	Joisted Masonry	2012	ATC-6 - Wholesale Trade, Warehouse	warehouse	...	1 Present
...	...	...	...	...	...	...	...	...	\$49.436.676	\$110.823.558,32		2015		37414.84m <sup>2</sup>	...	
...	...	...	...	...	...	...	...	...	\$24.291.967	\$67.477.686,69					...	
...	...	...	...	...	...	...	...	...	\$32.840.715	\$58.304.932,00	RMS-0 - UNKNOWN		ATC-6 - Wholesale Trade, Warehouse	warehouse	...	0 Unknown
...	...	...	...	...	...	...	...	...	\$19.898.065	\$55.272.403,64			ATC-6 - Wholesale Trade, Warehouse	warehouse	...	
...	...	...	...	...	...	...	...	...	\$14.527.748	\$34.979.469,94	Steel Deck on Steel Frame	2018	ATC-6 - Wholesale Trade, Warehouse	warehouse	...	1 Present
...	...	...	...	...	...	...	...	...	\$23.140.500	\$23.140.499,91	Non Combustible	1978	ATC-6 - Wholesale Trade, Warehouse	1200.0	...	2 Absent
...	...	...	...	...	...	...	...	...	\$18.338.449	\$31.746.146,78	RMS-0 - UNKNOWN		ATC-6 - Wholesale Trade, Warehouse	warehouse	...	0 Unknown
...	...	...	...	...	...	...	...	...	\$14.794.176	\$14.794.175,70	RMS-0 - UNKNOWN		ATC-6 - Wholesale Trade, Warehouse	1507.0	...	Yes
...	...	...	...	...	...	...	...	...	\$13.687.035	\$13.687.034,94	Non Combustible	1980	ATC-6 - Wholesale Trade, Warehouse	3069.0	...	2 Absent

# STP Cargo Storage Information Resources

<https://www.psbfireengineers.com/post/warehouse-fires-an-underwriter-s-guide-to-containing-the-risks>

<https://www.ul.com/resources/security-alarm-service-certification>

<https://www.damotech.com/blog/effects-of-natural-disasters-and-weather-on-racks>

<https://www.osha.gov/warehousing/hazards-solutions>

<https://www.fmglobal.com/research-and-resources/tools-and-resources/property-protection>

<https://safetyculture.com/topics/warehouse-safety/>

<https://www.korteco.com/construction-industry-articles/understanding-different-types-warehouses/>



- NAT CAT Pricing, Capacity, Broad Coverage and Deductibles / Retention Levels are all drivers of STP purchase for buyers.
- Compression and writing primary storage. Often Cargo STP deductibles are significantly lower than property and set/priced below the insured's expected cost of loss
- Amount of CAT coverage is substantial with multiple towers and lack of clarity how aggregate limits apply
- Primary insurers typically consider 1:250 return period in their underwriting and pricing while reinsurers consider much larger return period. Drives different views of severity (AAL) and pricing.



- NAT CAT capacity, pricing, and retention levels that are not presently available in Property Insurance/Reinsurance Market
- Valuation (selling price on unsold goods)
- Control of Damaged Goods (aka Brand Protection, Fear of Loss, etc.)
- Misappropriation (Expansion of Cargo Policy to cover Crime)
- Strikes, Riots and Civil Commotion property cover



Thanks to Howard Potter and Matthias Kirchner, please refer to 2018 IUMI in CapeTown:

[https://iumi.com/document/view/Cargo\\_Panel\\_Static\\_Risk\\_5ba4aeaa5252b.pdf](https://iumi.com/document/view/Cargo_Panel_Static_Risk_5ba4aeaa5252b.pdf)

# Cargo Inflationary Impacts

## Policy Valuation – Selling Price on **Unsold** Goods



- Over indemnification, Increased Claims Handling Expenses (forensic accountants)
- Common Markups

Clothing	100–350%
Shoes	100–500%
Furniture	200–400%
Cosmetics	60–80%
Prescription Medicine	200–5,600%
Eyeglasses	800–1,000%
Jewelry	100% average
Books	300% average
Electronics	750% average

### The whys behind retail price hikes

59%

Inflation



53%

Supply chain



63%

Warehousing



Percentage of retailer's citing these factors as the reason for raising prices.



In their standard form, the marine cargo policies used in international freight transport only cover property damage. While brand protection clauses offer extended cover, loss potential for insurers has increased as some of these clauses considerably restrict insurers' rights when settling claims.

If a control of damaged goods clause has been agreed, a total loss is a great deal more likely, as the policyholder can decide for itself whether the damaged goods may be salvaged and utilized further. In other words, the policyholder can determine at its own discretion whether a product involved in a loss may be marketed so that the insurer can realize the salvage proceeds.

<https://www.munichre.com/topics-online/en/mobility-and-transport/transportation-of-cargo/high-price-brand-protection.html>



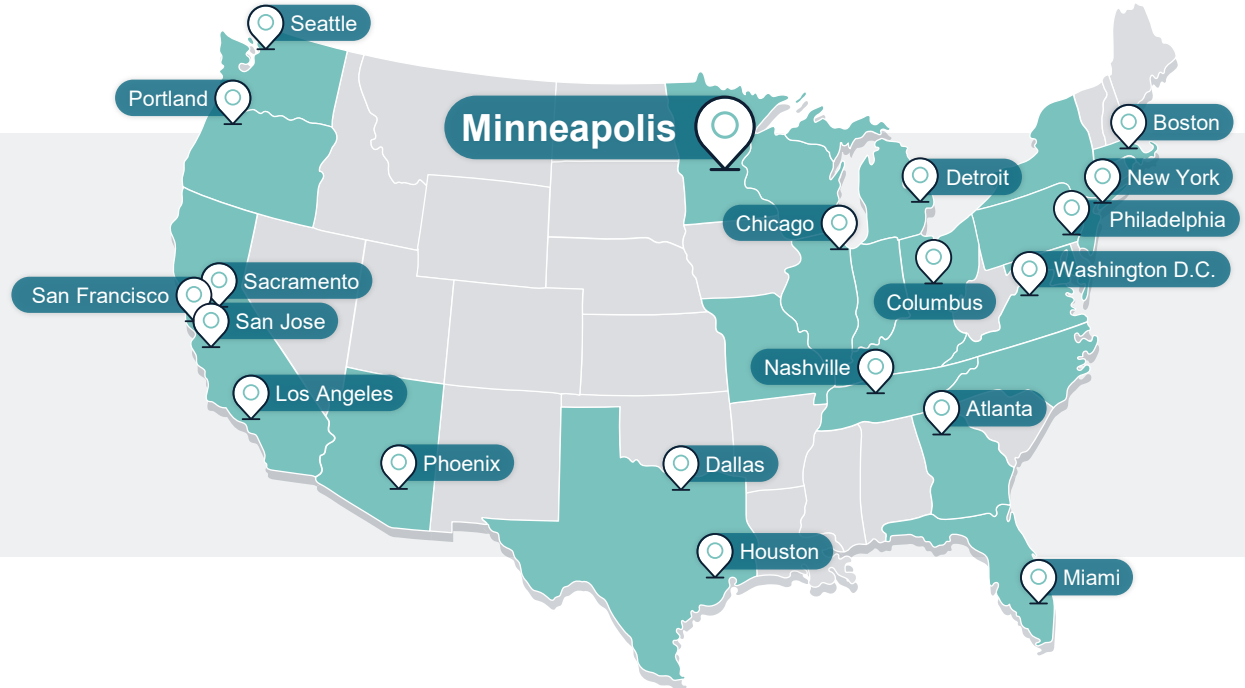
## Key Issues

- Does theft = misappropriation?  
Does the policy cover unexplained, mysterious disappearance, shortage upon taking inventory, etc.
- Continuous crime, no single or occasional event, sequential, no identifiable single occurrence
- Cargoes typically commodities or raw materials, high valued, not identified, commingled, high volumes, easy processing, and used as collateral for securing loans/credit lines (traders)
- Insured **should** transfer this risk contractually to the entity storing the cargo and has responsibility operating the facility



# Strikes, Riots and Civil Commotion Exposures at Retail Locations

Where the Riots  
and insurance  
impacts intersect



- Local policies in place in countries/jurisdictions where required
- Requirements may differ in a given country/jurisdiction for coverages provided under Cargo STP (international transit, domestic transit and storage)
- Local policies may be reinsured by master policy in whole or part
- Premium taxes due to local country/jurisdiction
- Impact on ability to pay claims, provide claims service and offer risk engineering/loss control locally in a country/jurisdiction
- Master policy typically has DIC, DIL, and FINC
- Programs can involve fronting for captives and risk transfer



A large cargo ship is engulfed in flames and thick black smoke on the right side of the image. A fire-fighting vessel on the left is spraying a powerful stream of water onto the burning ship. The word "Losses" is overlaid in large white text in the center of the image.

# Losses



# Warehouse Losses



## Warehouse fire

### Cause of loss

xxx

### Loss Amount

140m USD

Source: [Cargo market faces up to \\$140mn loss for Japanese warehouse fire | Insurance Insider](#)



## Amazon, Illinois

### Cause of loss

Tornado

### Loss Amount

Source: [Amazon warehouse in Illinois hit by tornado, killing 6 \(cnbc.com\)](#)





Image: dpa Picture Alliance / YONHAPNEWS AGENCY – Yonhap

## Coupang warehouse fire

### Cause of loss

Fire

### Loss Amount

Source: [Fire engulfs Coupang warehouse \[PHOTOS\]](#) - The Korea Times



Image: dpa Picture Alliance / ZUMAPRESS.com – Ryu, Seung

## South Korea – E-commerce warehouse fire could cost insurers dear

### Cause of loss

Fire

### Loss Amount

USD 317m

Source: [South Korea: E-commerce warehouse fire could cost insurers dear \(asiainsurancereview.com\)](#)

- Electrical failure or malfunction
- Intentional
- Abandoned or discarded material or product
- Mechanical failure or malfunction
- Heat source too close to combustibles
- Cutting, welding too close to combustibles



# Warehouse Fire Prevention and Mitigation: Unique Fire Protection Challenges

- Building Construction
- Commodity classification
- Fire Detection Systems
- In rack sprinklers
- Prewetting
- Obstructions
- Change management



# Transit losses: Cargo vessel fires

## Felicity Ace, Diamond Highway, Maersk Honam



16 February 2022

### Felicity Ace

Cargo: 4,000 damaged Cars (VW Group)

#### Cause of loss

Fire, unknown

#### Loss amount

- \$ 281m (Source PCS Verisk)

[Fire that left cargo ship full of luxury cars stranded in the Atlantic may finally be going out | CNN Business](#)



30 May 2021

### X-Pearl

Cargo: 1,486 containers (nitric acid, plastic pellets)

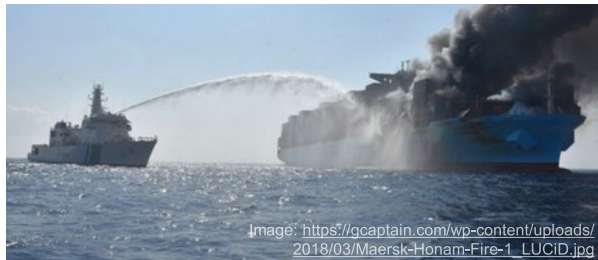
#### Cause of loss

Fire, presumably caused by in-correctly packed or stowed nitric acid

#### Loss amount

- \$ 237m (Source PCS Verisk)
- Worst plastic pollution event

[X-Press Pearl loss will add to insurers' container ship headaches – The Africa Logistics](#)



6 March 2018

### Maersk Honam

Cargo: 7,860 containers

#### Cause of loss

Fire, presumably caused by dangerous cargo

#### Loss amount

- Hull: > \$ 100m
- Cargo > \$ 200m

[Maersk Honam Final Report Inconclusive on Fire's Source \(gcaptain.com\)](#)

# Transit losses: Container overboard vessels

## Maersk Essen, MSC Zoe, ONE Apus



Image: <https://www.marineinsight.com/wp-content/uploads/2020/10/The-Maersk-Essen-enters-the-port-of-Los-Angeles-enroute-to-APM-Terminals-Pier-400-Los-Angeles-California-USA.jpg>

16 January 2021

### Maersk Essen

Cargo: 750 containers

**Cause of loss**  
Severe weather

### Loss amount

- Cargo: \$ ?

[Maersk Essen loses hundreds of containers in the Pacific – Maritime Direct](#)



Image: Bet Noire / Getty Images

1 January 2019

### MSC Zoe

Cargo: 270 containers

**Cause of loss**  
Severe weather

### Loss amount

- Cargo: \$ ?

[MSC Zoe: Islands hit as 270 containers fall off ship – BBC News](#)



Image: One Apus\_1.jpeg (2048x1370) (gcaptain.com)

30 November 2020

### ONE Apus

Cargo: > 1,800 containers

**Cause of loss**  
Severe weather

### Loss amount

- Cargo: > \$200m

[ONE Apus stack collapse losses expected to top \\$200m – The Loadstar](#)

# Transit losses: Record general average claims

## Ever Given, Ever Forward, Northern Jupiter



23 March 2021

### Ever Given

#### Cause of loss

Sandstorm, strong winds resulted in the loss of the ability to steer the ship, Blocking of the Suez Canal for 6 days

#### Loss amount

- > \$ 250m



13 March 2022

### Ever Forward

#### Cause of loss

Unknown, the ship was stuck in Craighill Channel of the Chesapeake Bay for a month

#### Loss amount

- > \$100m responsibility fund to pay for the economic and environmental damaged

[Ever Forward refloated, but salvage and environmental costs could hit \\$100m – The Loadstar](#)



28 January 2020

### Northern Jupiter

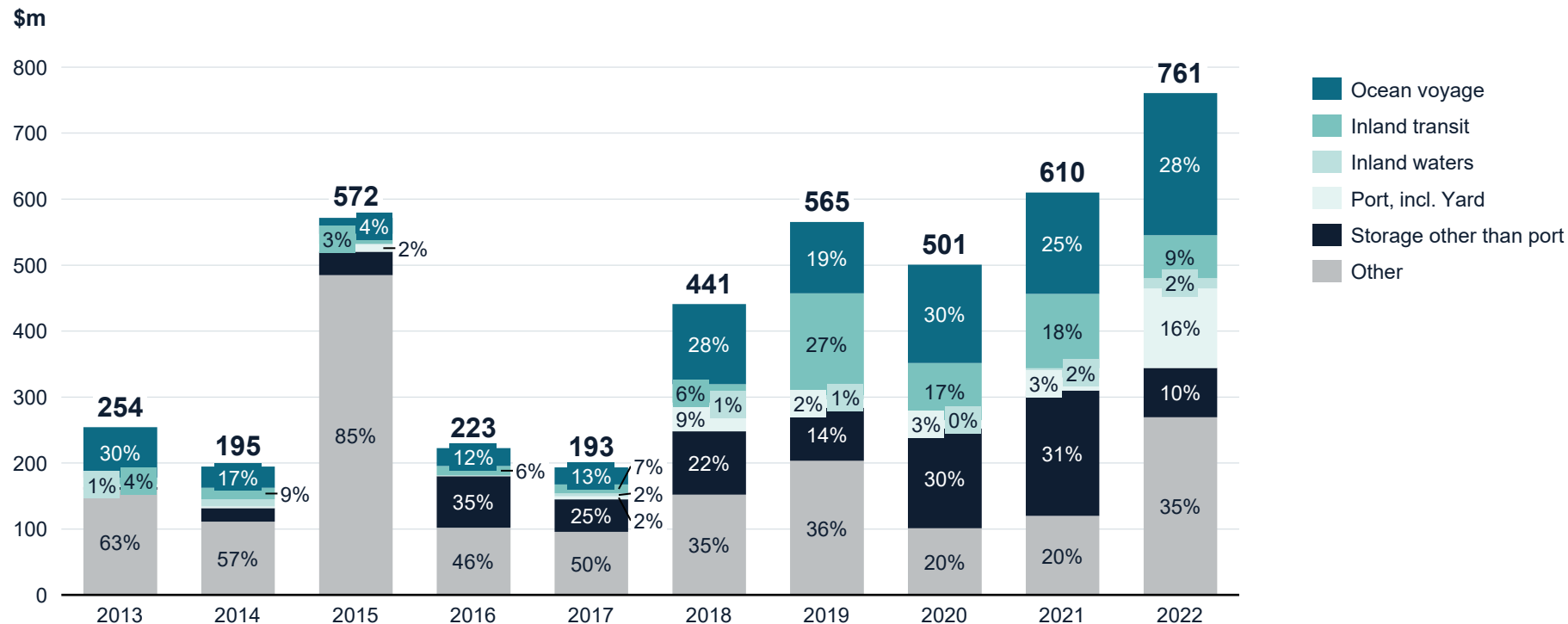
#### Cause of loss

Engine fire, the main engine of the vessel suffered damage

[General average declared on containership Northern Jupiter \(seatrade-maritime.com\)](#)



# Cargo: Incurred losses by loss location (general) in the period 2013–2022, \$m

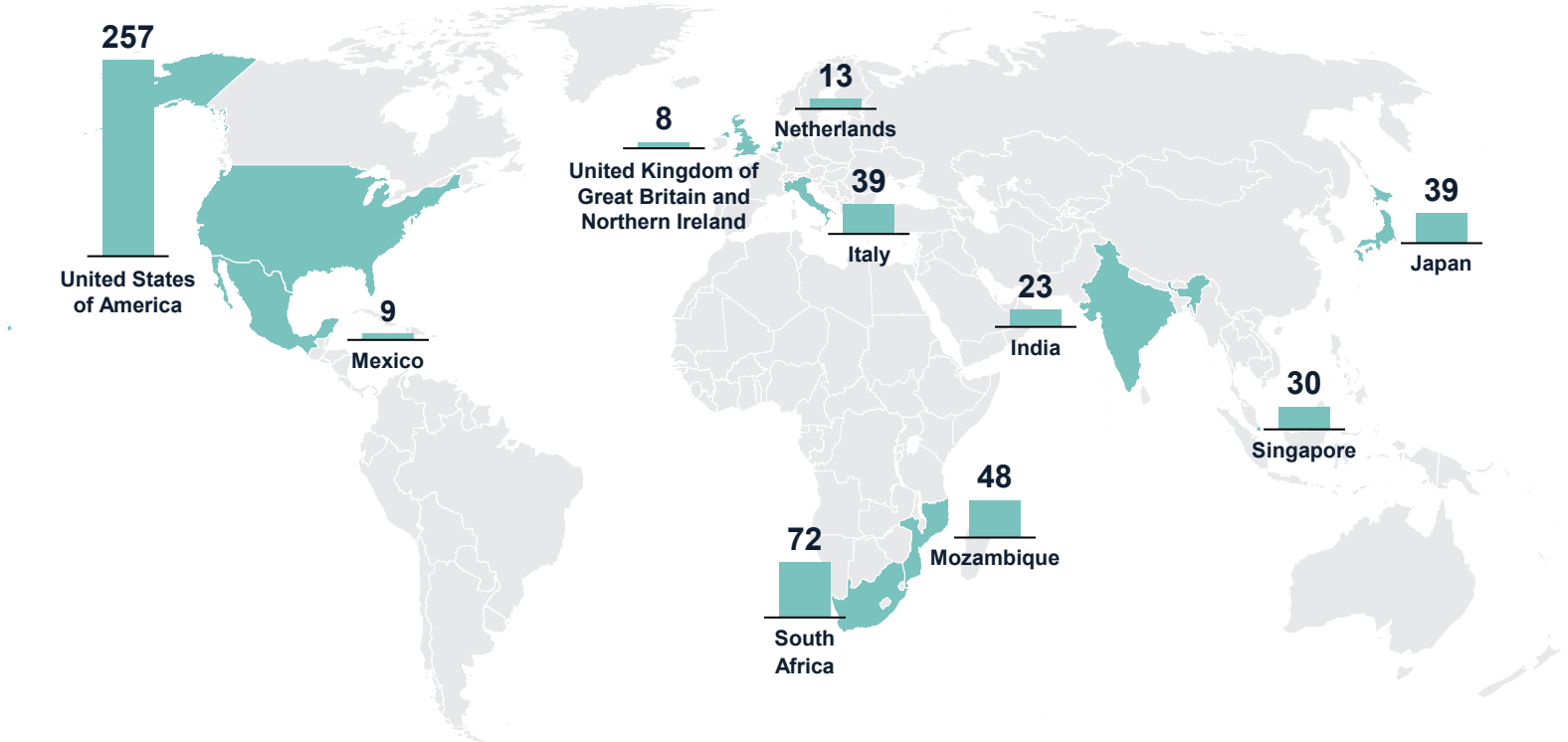


Note: Due to manual mapping work about 28% of all observations can be used for analysis (compared to 27% otherwise)

Note: Data field has been collected in 2021 for the first time

Source: IUMI Major Claims Database

# Cargo: Incurred storage losses by top 10 countries in the period 2013–2022, \$m



Source: IUMI Major Claims Database

# Large Cargo Losses (1/2)

Event	Year	Estimated Gross Cargo Loss	Comments	Source
Dollar Tree	2024	\$ 115 million	Marietta, Oklahoma Tornado Loss to DC	The Insurer
DALI	2024		Baltimore Bridge Allision, General Average	
GRIMALDI COSTA D'AVORIO	2023		Fire	Maritime Executive
FREEMANTLE HIGHWAY	2023	\$ 330 million	Fire	Bloomberg, PCS, Automotive News
Pfizer Plant Tornado Loss Rocky Mount, NC	2023	\$ 100 million	Tornado severely damaged warehouse.	The Insurer, Insurance Journal
Walmart Distribution Center Fire Loss Pailfield, IN	2022	\$ 200 million stock (\$ 500 million total across 3 policies)	Primary Cargo STP and Excess Stock Placement in cargo Market	The Insurer, Insurance Insider, Claims Journal
FELICITY ACE	2022	\$ 281 million	Fire	
EVER FORWARD	2022		General Average, grounding in Cheseapeake Bay	Maritime Executive, Loadstar
BBC VIRGINIA	2021	\$ 175 million	Fire aboard cargo vessel damaging 2 luxury yachts	Breakbulk News, PCS
Kyosan Warehouse Loss	2021	\$ 140 million	Fire at warehouse in Yokohama	Insurance Insider
EVER GIVEN	2021	\$ 250 million (total)	Grounding in Suez Canal, General Average	PCS
Coupang Fire Loss	2021	\$ 300 million +	Fire at Distribution Center in Deokpyeong Logistics Center, Icheon	Korea Times, Asia Insurance Review
MAERSK EINDHOVEN	2021		325 + Containers overboard/damaged	Freightwaves
MAERSK ESSEN	2021	\$ 100 million +	750 containers lost overboard	Shipping & Freight Resource, Seatrade Maritime News

# Large Cargo Losses (2/2)

Event	Year	Estimated Gross Cargo Loss	Comments	Source
ONE APUS	2020	\$ 150 to \$ 200 million	Container collapse/2,000 containers lost/damaged	Loadstar
Beirut Port Explosion	2020	\$ 310 million	Fire/explosion in port	PCS
Nashville Tornadoes	2020	\$ 300 million	Losses stemming from a Dell storage facility which was damaged in March 3, 2020 Tornadoes	The Insurer
Golden Ray	2019	\$ 100 million (\$ 1.1 billion total including H&M, P&I and Cargo)	Vessel Capsize. 4,200 vehicles lost.	PCS, Business Insider
Grande America	2019	\$ 100 million total including H&M, P&I and Cargo	Vessel Fire. 2,210 vehicles and 365 containers lost.	PCS, Freightwaves
Jim Beam Contents/Storage Loss	2019	\$ 150 million	Fire at Jim Beam bourbon facility in Kentucky. 45,000 barrels whisky destroyed.	Inside Fac, Insurance Insider, Forbes, Bloomberg
Yantian Express	2019	\$ 190 million (\$ 40 million Cargo Loss, \$ 150 million GA and Salvage.	Vessel Fire. 320 containers total loss, Large GA.	Insurance Marine News, Shipping and Freight Resource, AIMU Marine Insurance Day Presentation (10/2019)
Sincerety Ace	2018	\$ 85 million. (\$ 137 million total including H&M, P&I and Cargo)	Vessel Fire. 3,500 vehicles lost.	PCS, Automotive Logistics
Typhoon Jebi	2018	\$ 400 to 500 million		GIAJ Market Survey
Macy's Contents/Storage Loss	2018	\$ 78 million	Fire at Distribution Center in West Virginia.	Insurance Journal, Insurance Insider
Maersk Honam	2018	\$ 350 to \$ 500 million	Vessel fire. Expected to be largest general Average in history.	Lloyd's List, Insurance Marine News, Gcaptain
2017 NAT CATs (HIM)	2017	Cargo Specific Loss Amount Unknown	Worst NAT CAT Year in history of P&C Insurance Industry	Lloyd's List, Insurance Marine News, Gcaptain
Space X	2016	\$ 285 million	Satellite pre-launch cover written in cargo market	Insurance Insider, Insurance Marine News, PCS,

# Nat Cat



A person wearing a white cap and dark clothing is walking away from the camera on a long, straight dirt road that stretches into the distance. The road is flanked by green grass and some small shrubs. In the background, a dark, stormy sky with heavy, grey clouds hangs over the horizon. The overall mood is dramatic and somewhat ominous.

**For STP Storage:  
You are a  
PROPERTY UNDERWRITER**

- Named locations and NATCAT loadings
- Sub-limits
- Event limit
- Annual Aggregate Limit
- SOV
- Survey
- Deductibles
- Exposure rating, experience rating is not suit for high severity



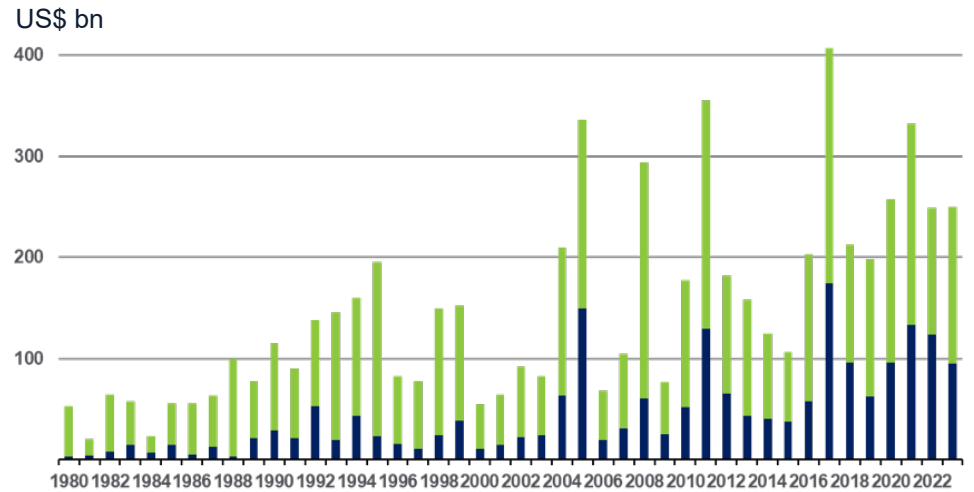
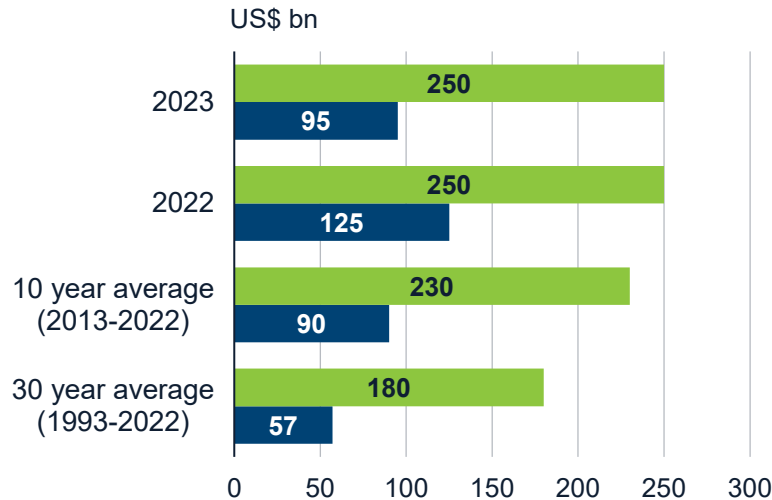
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# US\$ 100bn insured loss years on the rise

Development of annual natural disaster losses worldwide since 1980

## 2023 comparing with long-term average and development of natural disaster losses since 1980



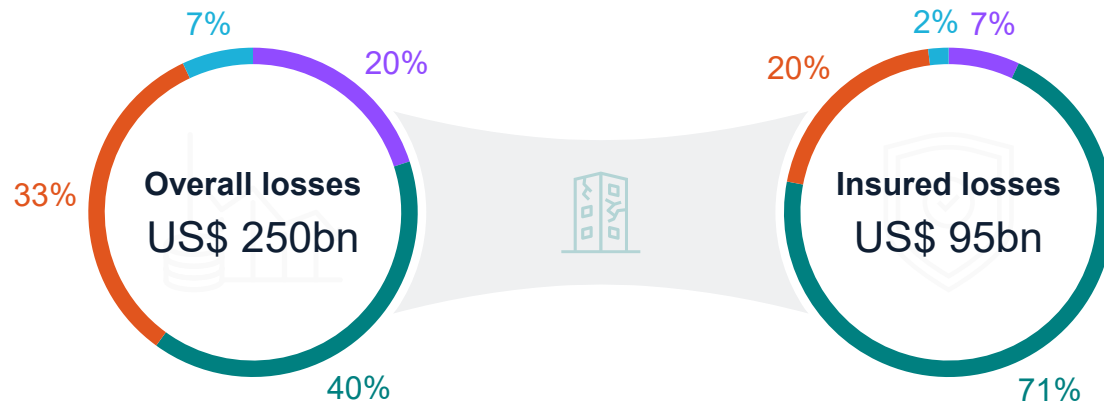
■ Overall losses (in 2023 values) ■ Thereof insured losses (in 2023 values)



# Regional distribution of losses from natural catastrophes

North America<sup>1</sup> with highest share of losses in 2023

In %



■ Asia-Pacific ■ North America<sup>1</sup> ■ Europe ■ Rest of the World

North America once again recorded the highest losses worldwide, although this year its share of global losses was smaller than usual (40%; five-year average 57%).

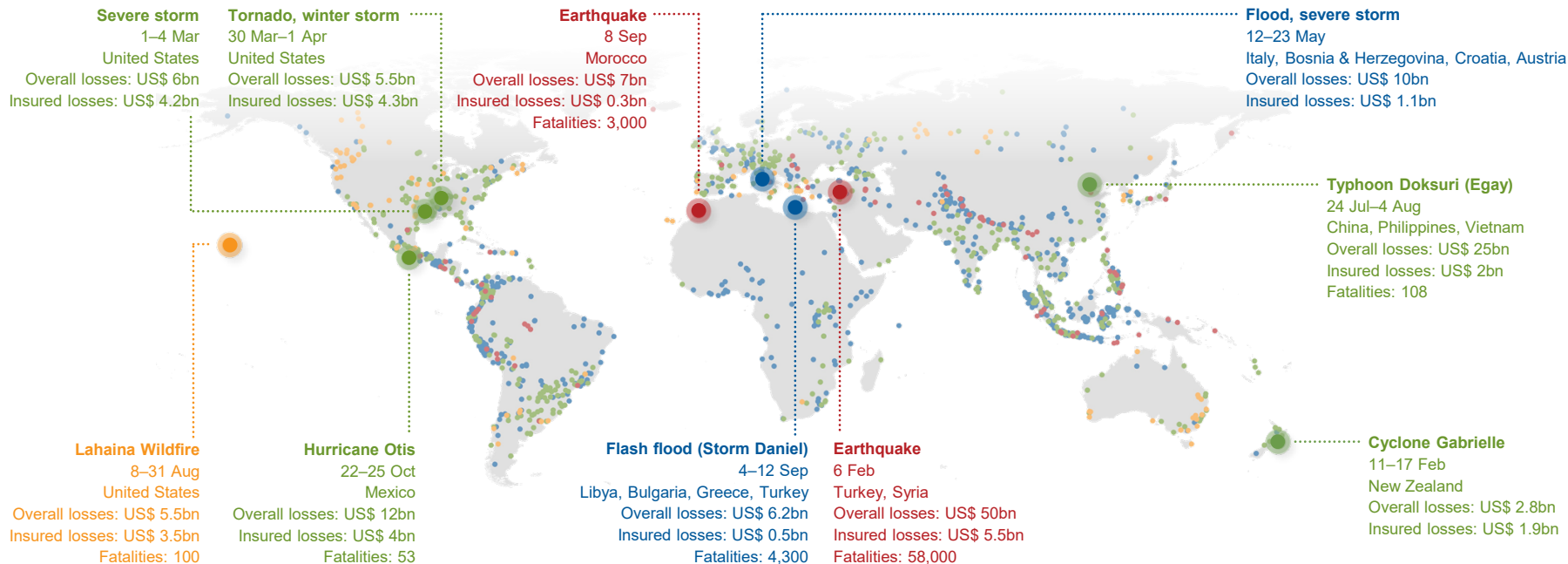
Losses from natural disasters in Europe came to US\$ 83bn, largely due to the earthquakes in Turkey. Insured losses came to around US\$ 19bn.

In the Asia-Pacific region, the overall losses of US\$ 50bn were lower than in the previous year (US\$ 54bn). Approximately US\$ 7bn of this amount was insured.

<sup>1</sup> Incl. Central America, Caribbean  
Source: Munich Re, NatCatSERVICE, 2024

# Nat cat loss events 2023

Natural catastrophes caused overall losses of US\$ 250bn worldwide



**Geophysical events**  
Earthquake, tsunamis,  
volcanic activity

**Meteorological events**  
Tropical storm, extratropical storm,  
convective storm, local storm

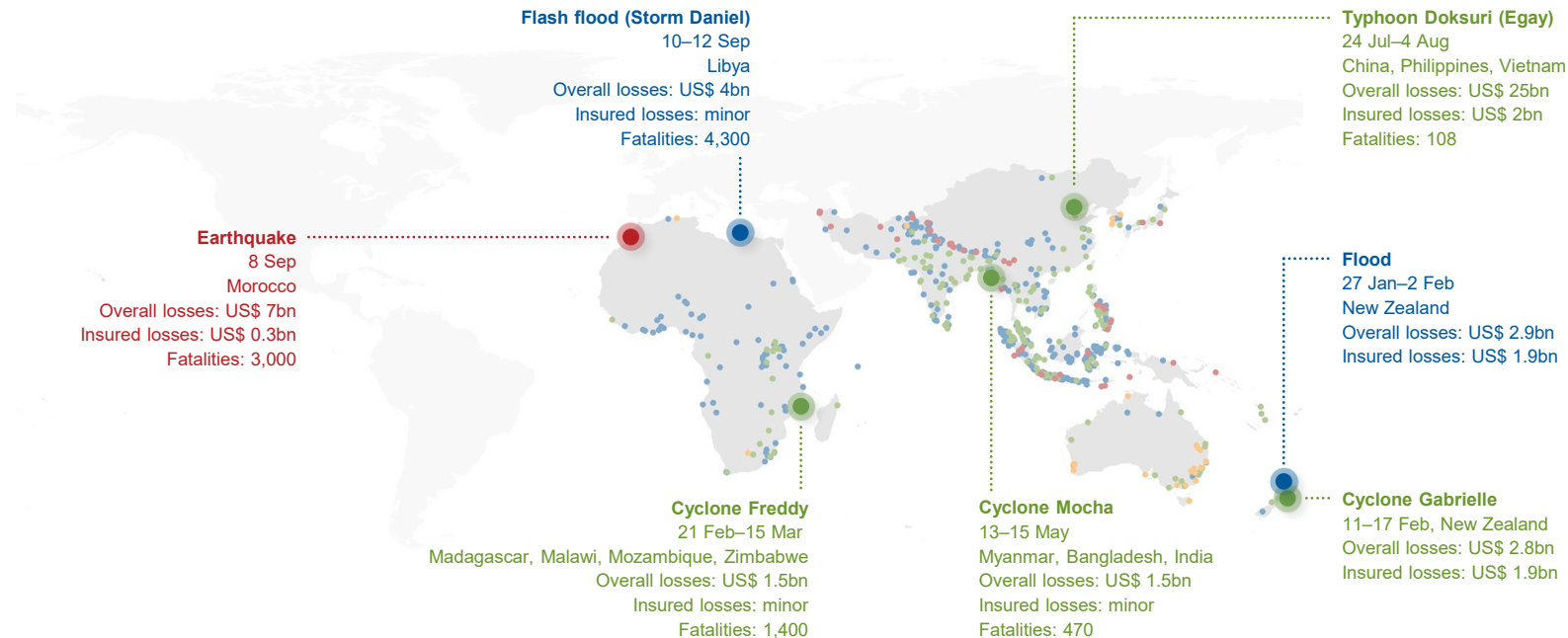
**Hydrological events**  
Flood, mass movement

**Climatological events**  
Extreme temperature,  
drought, wildfire

Significant catastrophes  
(based on the number of fatalities, overall and insured losses)  
 All loss events  
(based on property damage and/or fatalities)

# Nat cat loss events in APAC and Africa 2023

## Natural catastrophes caused overall losses of US\$ 64bn



**Geophysical events**  
Earthquake, tsunami, volcanic activity

**Meteorological events**  
Tropical storm, extratropical storm, convective storm, local storm

**Hydrological events**  
Flood, mass movement

**Climatological events**  
Extreme temperature, drought, wildfire

● Significant catastrophes (based on the number of fatalities, overall and insured losses)  
● All loss events (based on property damage and/or fatalities)

- Also called primary perils
- Low occurrence frequency
- Typically causing high losses (overall and insured)
- Modeled perils
- **Earthquake, hurricane, winterstorm Europe**

## Peak Perils

vs.

## Non-Peak Perils

- Sometimes called secondary perils
- (Very) high occurrence frequency
- Single events typically not causing significant losses (low-to medium losses)
- Unmodeled perils
- Severe convective storm, flood, wildfire (focus of our analysis today)
- In recent years becoming major loss events for the insurance industry

# Recap 2023: What made the year special?



Overall losses US\$ 250bn,  
**only ~40% insured**



**Insured losses up to US\$ 100bn** due to a high number of events.

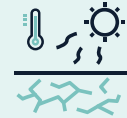
**But:**

**No single mega disasters as major loss driver**

(e.g. Hurricane Ian 2022, Hurricane Katrina 2005)



Very **high number of fatalities – 58,000** due to one Earthquake series in Turkey and Syria



**Hottest year on record** – with also a large number of regional records broken



**SCS more destructive than ever before**

in North America and Europe:  
~60% of last year's insured losses



**Record breaking hailstones** hitting Italy (ø16cm and 19cm)



Wildfire Canada:  
**18.5 million hectares of forest burned**, more than ever before

# Significant non-peak peril losses worldwide 1980–2023

## 10 costliest events ordered by **insured** losses in 2024 values

Date	Event	Affected area	Overall losses in US\$ m (adjusted to inflation)	Insured losses in US\$ m (adjusted to inflation)	Fatalities
1.8–15.11.2011	Flood, landslide	Thailand	46,200	<b>17,200</b>	813
8–25.11.2018	Wildfire (Camp Fire)	United States	20,600	<b>15,600</b>	85
8–20.10.2017	Wildfire (Central and Southern LNU Complex Fires)	United States	19,200	<b>14,600</b>	44
12–19.7.2021	Flood, Flash flood, Landslide, Severe storm	United Kingdom, Germany, Belgium, Netherlands, Luxembourg, Austria, France, ...	58,100	<b>14,400</b>	22
22–28.4.2011	Tornado, Severe storm	United States	15,300	<b>10,200</b>	350
Aug–Nov 2020	Wildfire (series)	United States	15,100	<b>9,100</b>	32
12–22.8.2002	Flood, Flash flood	Germany, Austria, Czech Republic, Hungary, Moldova, Switzerland, Slovakia	31,700	<b>7,200</b>	39
20–27.5.2011	Tornado, Severe storm	United States	13,900	<b>7,000</b>	178
8–12.8.2020	Severe storm	United States	8,200	<b>6,000</b>	4
8–22.11.2018	Wildfire (Woolsey Fire)	United States	6,900	<b>5,600</b>	3

# Warehouse NAT CAT Loss Mitigation

## Hurricane and Flood

- Proximity to coastlines or flood-prone areas
- Building materials and structural integrity (hurricane resistant infrastructure)
- Existing safety systems (e.g., flood barriers, hurricane-resistant windows, proper grading and adequate drainage, waterproofing measures,)
- Potential consequences of power outages/back-up generators (temperature-controlled products, high-security areas, etc.)
- Emergency plans/procedures before, during and after event



# Warehouse Loss Mitigation

## Earthquake

- Building materials and structural integrity (Seismic Bracing)
- Pallet Racking and Seismic Requirements
- Racks bolted to floor, netting/wire gates on racks
- Potential consequences of power outages/back-up generators (temperature-controlled products, high-security areas, etc.)
- Emergency plans/procedures before, during and after event





# Pricing a STP

## **Disclaimer:**

The information presented herein is purely for illustrative purposes and is intended to demonstrate potential methods for the prudent pricing of a Stock Throughput Policy.

The rates and methodologies discussed are hypothetical examples and should not be considered as advice or recommendations. They do not reflect specific market rates or offers and should not be used as a basis for any competitive pricing, benchmarking, or decision-making in real-world transactions.

## How to properly develop the rating base

- Insurable Interest (Terms of Sale, Incoterms <https://2go.iccwbo.org/icc-guide-to-incoterms-2020+book-version-Book/>)
- Policy Valuation (CIF + 10%, Selling Price if Sold)
- Apply a technical exposure rate against the exposure base of actual **or** estimated insured value of annual shipments and goods at risk (for storage)
- Other exposures War, SR&CC, DIC/GOC, Inland only transit

**Incoterms**<sup>®</sup>  
2020 by the International  
Chamber of Commerce (ICC)



**ICC** INTERNATIONAL  
CHAMBER  
OF COMMERCE  
The world business organization

Source: <https://2go.iccwbo.org/>

# Sales Do Not Equal to Insured Exposure

- The sales may be the rating based but rarely will this equate to the exposure base for goods insured
- Not a static relationship. Purchasing patterns change, terms of sale change, and risks change contractually over time.
- The last step in developing a rate against sales is to divide the total technical premium by the insured's estimated gross annual sales (taken from annual report or audited financial statements)
- Base a deposit premium against estimated sales for upcoming policy period (or fiscal year if not the same)

## Gross Sales versus Net Sales

Basis for Comparison	Gross Sales	Net Sales
Definition	Total sales with no deductions	Total sales after deductions
Interdependency	Not dependent on net sales	Dependent on gross sales
Amount	High	Comparatively less
Formula	Units sold × Sales price	Gross Sales Deductions
Deduction of expenses	Less operational expenses	Less non-operational expenses
Relevance	Not as relevant	Relevant in decision making

Source: <https://www.pipedrive.com/en/blog/gross-sales-vs-net-sales>

- Experience rating. Be wary of creative “As If” approaches.
- Develop exposure rate based on partial loss and total loss components (PA/TL)
- Develop exposure rate by researching an annual property contents rate (Fire and EC Perils) for type of goods insured. Prorate for average transit duration (i.e. 2.5 months). Load for additional marine coverages and perils beyond standard property storage.



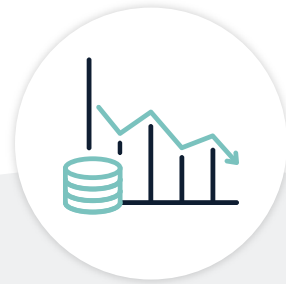
- Experience rating. Be wary of creative “As If” approaches.
- Consult with property underwriting colleagues for input an appropriate property contents rate (Fire and EC Perils) based on criteria location, construction, goods insured, occupancy, public/private protection, and extent of coverage provided.
- Apply rate (annual or monthly if varying exposure amounts for peak seasons) against insured values at risk or limit.  
Adjust for blanket limits if coverage provided on that basis.
- Price Storage exposure in property underwriting mindset.



# Cargo STP Policy Specimen Rating Example

## Cargo Stock Throughput Rating

Transit/Conveyance	Estimated Annual Volume of Insured Shipments (per Policy Valuation)	Rate (per \$ 100.)	Premium
Imports	\$125,000,000	0.0XXX%	\$XXX
Exports	\$28,000,000	0.0XXX%	\$XXX
Cross Shipments	\$15,000,000	0.0XXX%	\$XXX
War SR&CC	\$168,000,000	0.0XXX%	\$XXX
Contingent (DIC/GOC)	\$30,000,000	0.0XXX%	\$XXX
Contingent War SR&CC	\$30,000,000	0.0XXX%	\$XXX
Domestic Inland Transit	\$70,000,000	0.0XXX%	\$XXX
Foreign Inland Transit	\$20,000,000	0.0XXX%	\$XXX
<b>Total Transit Premium</b>			<b>\$XXX,XXX</b>
Location	Estimated Monthly Value at Risk (per Policy Valuation)	Annual Rate (per \$ 100.)	Premium
Location 1	\$22,000,000	0.0XXX%	\$XXX
Location 2	\$15,000,000	0.0XXX%	\$XXX
Location 3	\$15,000,000	0.0XXX%	\$XXX
Location 4	\$12,000,000	0.0XXX%	\$XXX
Location 5	\$11,000,000	0.0XXX%	\$XXX
Location 6	\$7,500,000	0.0XXX%	\$XXX
Location 7	\$5,000,000	0.0XXX%	\$XXX
<b>Total Storage Premium</b>			<b>\$XXX,XXX</b>
<b>Total STP Premium</b>			<b>\$XXX,XXX</b>
<b>Gross Annual Sales</b>			<b>\$XXX,XXX,000</b>
<b>Rate Against Gross Annual Sales</b>			<b>0.0XXX%</b>

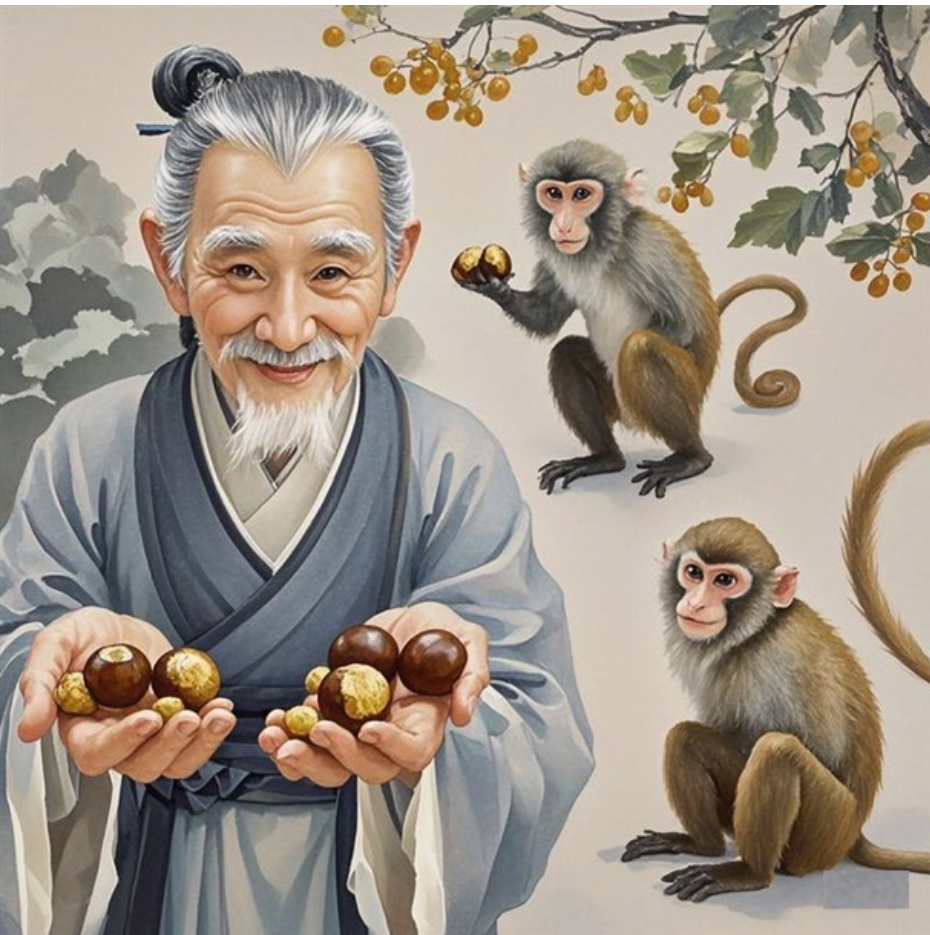


Lloyd's Scale or  
1<sup>st</sup> Party Property  
(Contents) XoL Scale

Address Layering  
and Compression  
in Primary/  
Underlying Layers

Analyze Net  
Effective Rate for  
client retention





朝三暮四

Property four, Cargo three?

$$4 + 3 = 7$$

Property: No!

Property three, Cargo STP three?

$$3 + 3 = 6$$

Cargo: OK

Wait! At least Cargo STP has to be 4 right?!

# For STP Storage: You are a PROPERTY UNDERWRITER



IUMI  
150

Sean M. Dalton  
[sdalton@munichre.com](mailto:sdalton@munichre.com)

Max Liu  
[mliu@munichre.com.cn](mailto:mliu@munichre.com.cn)

[Munich Re Global Marine Solutions](#)

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