

Downstream Energy & Power Generation Market Update and the Outlook Ahead

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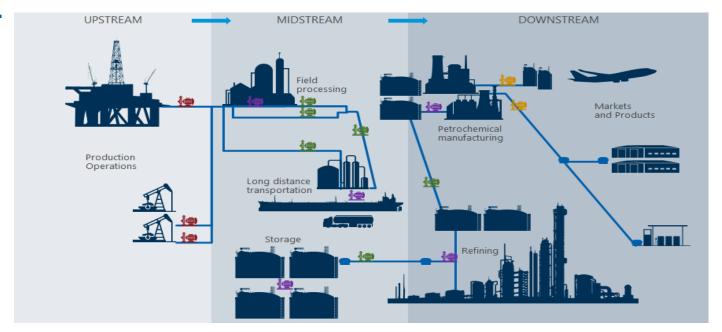


Downstream Energy

Definition

The downstream sector of the oil and gas industry includes the refining of petroleum crude oil, gas processing to purifying raw natural gas, as well as the marketing and distribution of products derived from crude oil and natural gas including the supply of such products as feedstock to the petrochemical

industry.



ENERGY & CONSTRUCTION (RE)INSURANCE CONFERENCE 2025

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Power Generation **Definition**



Power generation is the process of converting various forms of primary energy, such as chemical, kinetic, or nuclear energy, into electrical power

- Photovoltaic effect: Solar panels convert light energy from the sun directly into an electrical current without the need for moving parts or turbines.
- Electromagnetic induction: The majority of electricity is produced by electromagnetic generators that convert mechanical (kinetic) energy into electrical energy. A prime mover, such as a turbine, rotates a magnetic field within coils of wire, inducing an electric current.

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Downstream Energy

Occupancies

The following is a list of Occupancies of UIB Energy & Construction Division's current client portfolio:-

- Refineries
- Petrochemical Plants
- Gas Processing Plants
- Fertilizers
- Chemical Plants
- Pipelines
- LNG / Midstream Storage & Distribution facilities
- Power Generation & Renewable Energy
- Mining

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Section 2

Downstream Energy & Power Generation

- 2024 and 2025 Claims / Losses.
- 2025 Capacity.
- 2025 Rates and beyond.
- 2025 'Hot Topics' and looking forward.



Downstream Energy Loss Activity vs 2025 (so far...)

Downstream losses excess of \$50 million, 2024

Category	Cause	Location	PD\$	BI\$	Total \$	
Chemical	Fire + explosion	North America	66,000,000	133,000,000	199,000,000	
Petrochemical	Fire no explosion	North America	45,000,000	140,700,000	185,700,000	
Petrochemical	Windstorm	North America	41,000,000	50,000,000	91,000,000	
Gas plant	Mechanical failure	North America	20,000,000	70,600,000	90,600,000	
Refinery	Fire + explosion/VCE	Europe	4,900,000	65,800,000	70,700,000	
Petrochemical	Fire no explosion	North America	37,000,000	20,500,000	57,500,000	

Source: WTW Energy Loss Database as of March 6, 2025 (figures include both insured and uninsured losses)

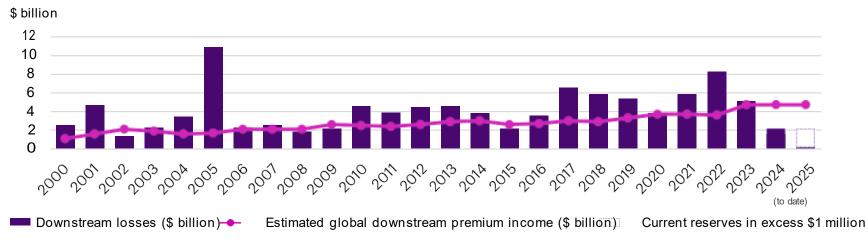
- BI still major driving force representing circa 70% of claims performance.
- Continued North American / European Loss Activity representing majority of market losses.
- Continued Complexity of Losses!

- Benign Loss Activity at circa \$1.4bn+ for 2024 = Short Term Profitability for Sector.
- Relatively benign Nat Cat Losses from (Re)insurance perspective.
 - Q1 2025 Loss Activity already exceeds entirety of 2024 against diminishing premium pool, major 2025 claims in the market include:-
 - PBF Energy Martinez Refinery Known reserve currently at circa \$1.5bn (USA).
 - VARO Energy Bayernoil Refinery (Germany) circa \$700m
 - Marathon Petroleum Corporation Gavelston Bay Refinery (USA).
 - And others!! + Attritional Losses!



2024 Downstream Energy – Market Performance

WELD downstream losses 2000 – 2025 (excess of \$1 million) vs. estimated global downstream premium income

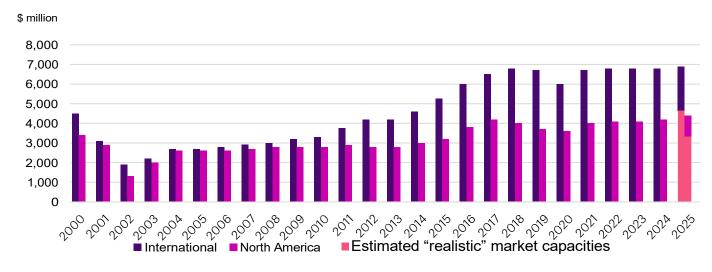


Source: WTW Energy Loss Database as of March 6, 2025 (figures include both insured and uninsured losses)

- A rare movement of profitability against loss making backdrop.
- 2025 Loss Activity Coupled with Softening Conditions create uncertainty in the medium to long-term.
- 2024 losses = \$1.4bn+ in losses vs circa \$4.5bn to \$5bn of global premium income.

2025 Downstream Energy & Power Capacity

Global downstream insurer capacities, 2000 – 2025 (excluding Gulf of Mexico windstorm)



Source: WTW

Longterm and carefully developed partnerships are key!

- Largely Good 2025 Treaty renewals for (Re)insurers.
- Nat Cat for Onshore Energy limited but impacting other P&C Classes.
- Some (Re)insurers increasing line size due to dropping premium levels and gaining market share.
- Still experiencing oversubscription on more attractive placements.
- Overall Stable Capacity Offering, although no New Leaders in 2024.
- More Appetite for Midstream Business and Less BI Exposed Programmes.
- Difference between 'Theoretical' and 'Actual Working Capacity'.
- Very few 'established markets' acting in a lead capacity.



Downstream Energy Rating Movement in 2025 so far...

Large and established market programmes with good performance / Engineering (Excluding North America):

2025 H2 = -10% to -20%.

Loss Free clients with relatively small premium volumes (Excluding North America)

2025 H2 = -7.5% to -12.5%.

Loss Making Risks with Engineering Concerns and less attractive when considering ESG influences (Excluding North America) may not benefit from negative rate movements and face modest rate increases....

The rates shown here are an average for loss free accounts renewing on a '<u>like for like</u>' basis including retention and limit levels.

Variables include:-

Sector e.g. refinery, petrochem vs LNG / Midstream etc.

- Risk Profile and BI Exposure
- Region (North American equivalent rate movement higher).
- History / Track Record.
- Client Differentiation is still key, risk quality still a major focus.



Power Generation Loss Activity in 2024 Top 10 Largest Power Energy Losses

AREA	COUNTRY	LAND/ OFFSHORE	OP/ CAR	CATEGORY 2	CATEGORY 3	CAUSE	PD/ACTUAL US\$	BI/ACTUAL US\$	TOTAL/ ACTUAL US\$
North America	Canada	Land	Maint	Nuclear	Generator	Unknown	73,000,000	116,000,000	189,000,000
Middle East	UAE	Land	OP	Solar	Solar panels	Windstorm	101,000,000	32,100,000	133,100,000
Europe	UK	Land	OP	Biomass	Generator	Mechanical failure	13,800,000	38,500,000	52,300,000
Far East	Philippines	Land	OP	Geothermal	Steam Turbine	Mechanical failure	5,000,000	46,000,000	51,000,000
Europe	Netherlands	Land	OP	T&D	Cable (elec/control)	Unknown	18,480,000	21,550,000	40,030,000
Middle East	Saudi Arabia	Land	OP	Gas	Steam Turbine	Unknown	9,000,000	31,000,000	40,000,000
Middle East	Saudi Arabia	Land	OP	Gas	Steam Turbine	Mechanical failure	9,000,000	27,500,000	36,500,000
Far East	Philippines	Land	OP	Geothermal	Steam Turbine	Mechanical failure	4,400,000	32,000,000	36,400,000
Middle East	UAE	Offshore	CAR	T&D	Cable (elec/control)	Heavy weather	32,500,000	C	32,500,000
North America	USA	Land	OP	Gas	Transformer	Electrical Failure/ Breakdown	16,000,000	15,500,000	31,500,000

source Willis Towers Watson loss database as of June 26, 2025



Power Generation Loss Activity in 2024 Top 10 Largest Conventional Energy Losses

AREA	COUNTRY	LAND/ OFFSHORE	OP/ CAR	RISK TYPE	FAILURE	CAUSE	PD/ACTUAL	BI/ACTUAL	TOTAL/ ACTUAL US\$
							US\$	US\$	
Europe	Netherlands	Land	ОР	T&D	Cable (elec/ control)	Unknown	18,480,000.00	21,550,000.00	40,030,000
Middle East	Saudi Arabia	Land	OP	Gas	Turbine Steam	Unknown	9,000,000.00	31,000,000.00	40,000,000
Middle East	Saudi Arabia	Land	ОР	Gas	Turbine Steam	Mechanical failure	9,000,000.00	27,500,000.00	36,500,000
Middle East	UAE	Offshore	CAR	T&D	Cable (elec/ control)	Heavy weather	32,500,000.00		32,500,000
North America	USA	Land	OP	Gas	Transformer	Electrical Failure/ Breakdown	16,000,000.00	15,500,000.00	31,500,000
Middle East	Kuwait	Land	Maint	Gas	Turbine Gas	Corrosion	19,249,600.00	11,013,660.00	30,263,260
North America	USA	Land	OP	Gas	Generator/ power	Electrical Failure/ Breakdown	22,500,000.00	6,779,840.00	29,279,840
Europe	Ireland	Land	OP	Gas	Structure	Windstorm	7,000,000.00	21,000,000.00	28,000,000
Middle East	Oman	Land	OP	Gas	Turbine Gas	Unknown	12,200,000.00	9,600,000.00	21,800,000
Middle East	Saudi Arabia	Land	OP	Gas	Generator/ power	Mechanical failure	15,700,000.00		15,700,000

source Willis Towers Watson loss database as of June 26, 2025



Power Generation Loss Activity in 2025

- May Sandy Creek, Texas boiler explosion USD 150m+
 could be offline until 2027
- September Pampa Hydro flood USD 105m (estimated)

Power Generation Loss Activity in 2025

• January 2025 – Moss Landing BESS facility – California – USD 500m



Power Generation Rating Movement in 2025 so far...

Power Generation clients (excluding coal) with good claims history and good engineering and little to no natural catastrophe exposure $2025 \text{ H2} = \frac{-7.5\% \text{ to } -15\%}{.}$

on a '<u>like for like</u>' basis including retention and limit levels.

Loss Making Risks with Engineering Concerns may not benefit from negative rate movements and could face rate increases....

Variables include:-

Sector e.g. fuel type and technology.

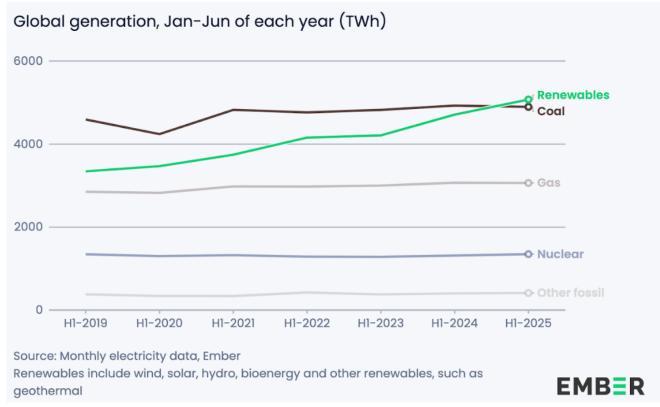
- Risk Profile and BI Exposure
- Territory
- History / Track Record.
- Client Differentiation is still key, risk quality still a major focus.

ESG continues to be a major focus for markets Power Generators using coal or other "dirty" fuel will face fewer markets offering capacity and this is often at higher rates than seen in the rest of the sector.



The Transition to renewables

- Continued transition towards renewable energy solutions
 - Renewables (5,072 TWh) overtake coal (4,896 TWh) as World's biggest source of electricity (BBC 7 October 2025)



Estimated to grow by 4600GW by 2030 – with Solar accounting for 80% of growth



Current 'Hot Topics' and Looking Forward...

- Reducing Premium Pool due to historic Self-Insured Retentions and M&A activity in US Midstream, combined with market softening.
- Carbon Capture Projects / Hydrogen Projects to make up for Premium Pool Reduction?
- Long Term Agreements / Renewal Incentive Bonuses + Other Soft Credits.
- Healthy Levels of Capacity to ensure adequate EML coverage.
- Continued Uncertainty in terms of Geopolitics.
 - Continued Trade, Tariffs and Supply Chain Impacts?
 - Global uncertainty which can impact the following:-
 - Equipment and supply chain issues aggravating BI downtime / Leadtime, indemnity periods should be reviewed?
 - Replacement Cost still accurate?







Thank You

