

ElectraNet Revenue Proposal

Insurance Market Update and Premium
Projections.

January 2021

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Executive Summary

Introduction

Marsh Pty Ltd has been engaged by ElectraNet Pty Ltd to provide a forecast of its insurance premiums for the forthcoming regulatory period (2024 – 2028). We understand that this report will be provided to the Australian Energy Regulator (AER) as part of ElectraNet's Revenue Proposal.

Our advice and the contents of this report are based on the material provided by ElectraNet, market research and analysis, and relevant insurance industry references.

This Executive Summary outlines the key findings of our work. The main body of the report provides a more complete description of our advice, and should be read fully in order to give the findings their appropriate context.

There are three elements to ElectraNet's cost of managing risk, namely:

- The premium paid for insurances purchased by ElectraNet;
- The expected cost of uninsured risks (i.e. self-insured risks);
- The extent to which ElectraNet's risk exposure is limited by the cost pass through mechanism.

Summary of ElectraNet's program

ElectraNet's insurance program consists of the following insurance classes:

- Property (Industrial Special Risks - ISR);
- Liability (including General and Products Liability, Bushfire, and Professional Indemnity);
- Financial Risks (including Directors' and Officers' insurance (D&O) and insurance for Employment Practices Liability (EPL);
- Other ancillary lines (including Motor Vehicle, Workers' Compensation (Excess of Loss cover), Marine Cargo and Corporate Travel and Statutory Liability insurance)
- Cyber Insurance (in place since 2018).

ElectraNet retains exposure to the following risks:

- Towers and Lines – consistent with industry practice, and reflecting the lack of availability of commercial cover, ElectraNet does not commercially insure transmission towers or lines. As such, the tower damage sustained during the 2016 System Black event was an uninsured event;
- 'Below deductible' risks – ElectraNet retains exposure to all risks for which commercial cover is held but where claims are less than the deductible;
- Workers' Compensation – ElectraNet, as a self-insured employer, retains exposure to all Workers' Compensation risks, but commercial cover is held for losses in excess of [REDACTED]

Marsh has reviewed ElectraNet's insurance program and considers ElectraNet's approach to risk management to be prudent and to reflect good industry practice.

Assessment

We have prepared our estimates for the forthcoming regulatory period (FY2024 – FY2028) on the basis of:

- Projected growth in ElectraNet’s regulated asset values over the regulatory period.
- Continuing hard market conditions resulting in premium increases, coverage reduction, which will increase deductibles and cause capacity contraction, but which we expect to soften throughout the regulatory period.
- The absence of any catastrophic event causing a major claim, which could have a significant impact on ISR and Liability policies’ claims performance and subsequent renewal pricing.
- An allowance has been made for all current statutory taxes and levies, excluding GST.

Two main implications for ElectraNet from the state of the insurance market and continuing associated pressures on price, capacity, and coverage are:

- Significant increases in the premiums that ElectraNet must pay to continue purchasing ISR and Liability and Cyber coverage.
- Increases in deductibles will increase ElectraNet’s expected value of uninsured risks.

Insurance Premium Forecasts

Our forecast of ElectraNet’s average annual insurance premium for the next regulatory period is [REDACTED] inclusive of all costs, stamp duty and brokers fees (excluding GST).

All values in this report are nominal, expressed in the monetary terms associated with each future year.

Table 1 – Forecast cost of Insurance Premium for various insurance classes.

Insurance Premium	FY2024	FY2025	FY2026	FY2027	FY2028	Total	Average
Property	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
T&D Assets	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Liability	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Financial Lines	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Ancillary/Others	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Cyber	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Insurance Placement and Broking Costs	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total Insurance Premium	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Asset base

A key driver of the cost of managing risk for a TNSP is the size of the asset base. ElectraNet’s regulated asset base is approximately \$2.4 billion (as at end FY2021). This is projected to grow in the near term as ElectraNet completes two large transmission line projects, namely Project EnergyConnect and the Eyre Peninsula Link project.

ElectraNet projects that its (total) asset base will be as shown in Table 2.

Table 2 – ElectraNet’s projected Total Asset Base (FY2024 – FY2028).

Asset Base	FY2024	FY2025	FY2026	FY2027	FY2028
Total Asset Base					

This report relates only to the regulated portion of ElectraNet’s business. Further, as is common in the electricity transmission sector, ElectraNet does not insure its transmission lines. Therefore, for the purposes of forecasting the cost of managing ElectraNet’s risk, Marsh adjusted the asset base as shown in Table 3.

Table 3 – ElectraNet’s projected Regulated Asset Base (FY2024 – FY2028).

Asset Base	FY2024	FY2025	FY2026	FY2027	FY2028
Regulated Asset Base	2,076,101,304	2,118,418,105	2,165,774,661	2,204,097,191	2,224,903,147

Scope of Report

Background and Scope

The scope of our review is to provide a forecast of ElectraNet's insurance premiums payable for the forthcoming regulatory period (2024 – 2028), with separate estimates for each year. Our estimates include an allowance for the following insurance classes:

- ISR;
- Liability (including General and Products Liability, Bushfire, and Professional Indemnity);
- Financial Risks (D&O and EPL);
- Other ancillary lines (including Motor Vehicle, Workers' Compensation (Excess of Loss cover), Marine Cargo and Corporate Travel and Statutory Liability insurance)
- Cyber Insurance (in place since 2018).

We have referred to the estimated premiums in this report as 'Insurance Premiums'.

ElectraNet retains exposure to the following risks:

- Towers and Lines – consistent with industry practice, and reflecting the lack of availability of commercial cover, ElectraNet does not commercially insure transmission towers or lines. As such, the tower damage sustained during the 2016 System Black event was an uninsured event;
- 'Below deductible' risks – ElectraNet retains exposure to all risks for which commercial cover is held but where claims are less than the deductible;
- Workers' Compensation – ElectraNet, as a self-insured employer retains exposure to all workers compensation risks, but commercial cover is held for losses in excess of [REDACTED]

Approach and Methodology

In order to consider the Insurance Premiums, we have focused on risks that are specific to ElectraNet's prescribed services as a TNSP. We were able to identify five risk groupings for the purpose of our analysis, as follows:

- ISR;
- Liability (including General and Products Liability, Bushfire, and Professional Indemnity);
- Financial Risks (D&O and EPL);
- Other ancillary lines (including Motor Vehicle, Workers' Compensation (Excess of Loss cover), Marine Cargo and Corporate Travel and Statutory Liability insurance)
- Cyber Insurance (in place since 2018).

Insurance Premiums

Where risks are currently insured, we have considered each insurance class separately to derive standalone premium estimates based on the individual circumstances of that insurance class.

In deriving our estimates for each insurance class, we have considered the following factors influencing premium levels:

- Historical changes in insurance cover
- Historical variation in exposure
- Historical claims experience
- Forecasts of exposure
- Expected market outlook
- Other historical market factors (e.g. changes in insurers, changes in insurer profit margins, industry claims experience, etc.) to the extent that historical premium trends are observed which cannot be directly attributable to other factors.

This analysis also relies on assumptions regarding insurance policy deductibles for the entire regulatory period. We have made our best attempt to predict the commercial insurance terms during this future period, however, given the volatility in insurance market, there is a level of uncertainty in these projections.

All values in this report are nominal, expressed in the monetary terms associated with each future year.

Insurance Market Drivers

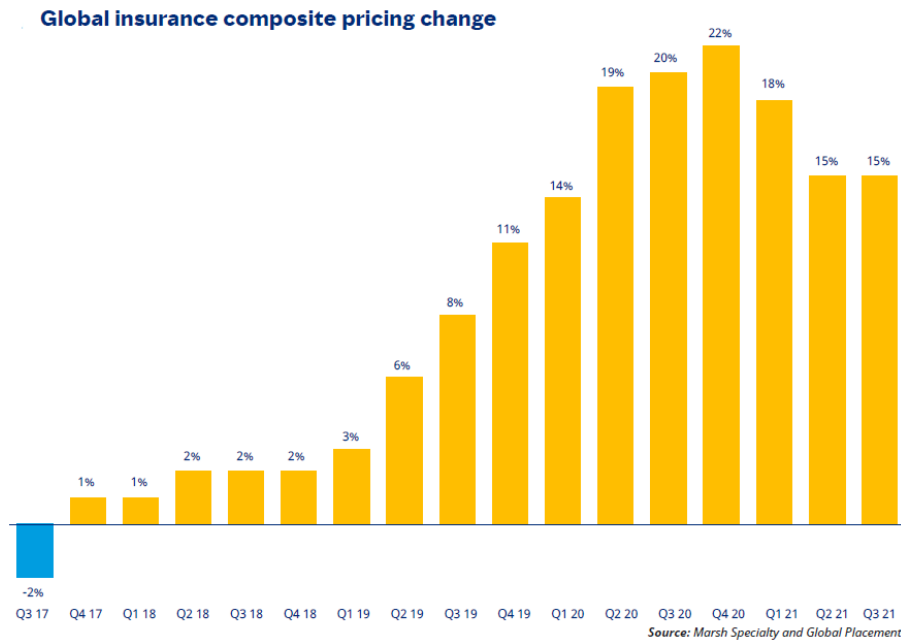
The global general (non-life) insurance industry generates approximately US\$2.9 trillion in revenue each year. The market cycle and cost of insurance is influenced by a number of key factors including:

- Size of premium pool
- Claims paid and / or provisioned
- Major loss events
- Cost of reinsurance
- Investment returns and flow of additional funds into the sector from the Insurance-Linked-Securities

The start of 2020 was impacted by major weather and natural disaster events like bushfires, floods, and hailstorms, causing widespread property damage and business interruption losses. Summer bushfires in Australia had a negative effect on insurers' profitability. A recent COVID-19 Australian business interruption insurance test case ruling where the NSW Court of Appeal rejected insurers argument that policies do not cover COVID-19 losses has further added to the stress of the market.

The current market cycle has been subject to 16 consecutive quarters of premium increases as illustrated in the *Marsh Global Insurance Market Index* and as detailed below.

Figure 1 – Global Insurance Composite Pricing Change

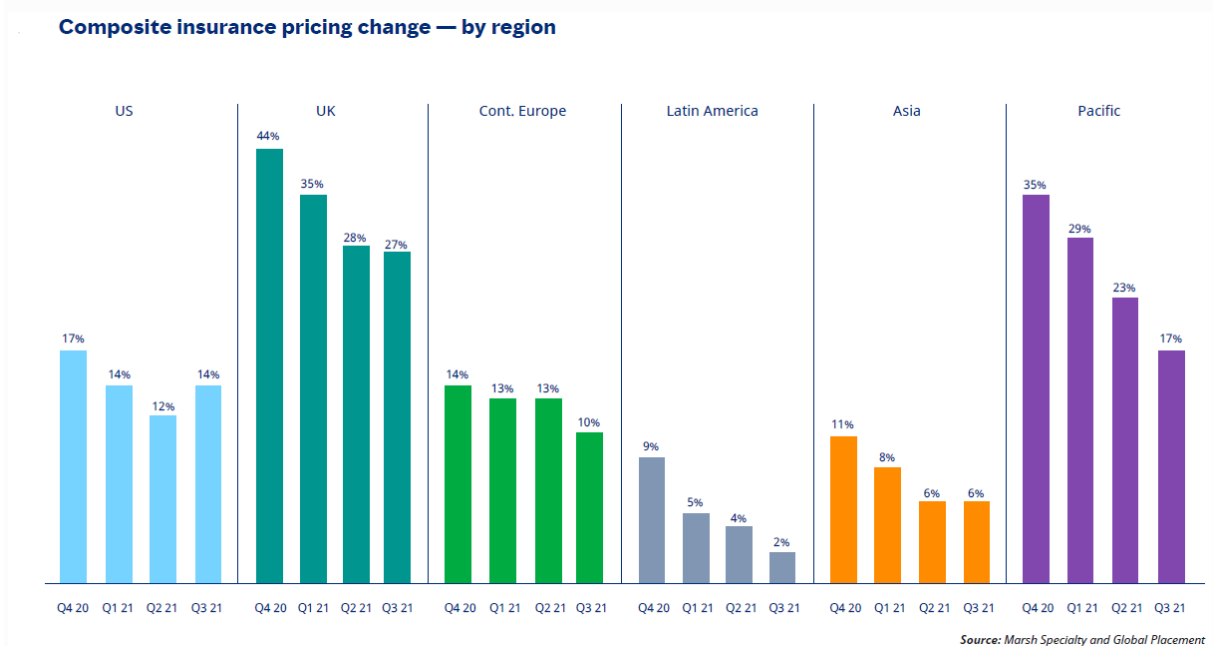


Pricing increases across most regions moderated due to a slower rate of increase in ISR and D&O insurance premiums, with the exception of, the USA where ISR and financial and professional lines pricing increased.

Cyber insurance pricing again rose significantly in the quarter — up 96% in the USA and 73% in the UK — due to increased frequency and severity of losses.

Regionally, composite pricing increases for the third quarter were as follows:

Figure 2 – Composite Insurance Pricing Change by Region



Recent trends in insurance markets suggest a declining but consistent pressure from insurers on maintaining pricing increase. Claims environment continues to remain challenging due to COVID-19 claims disputes concerning interpretation and application of policy wordings, which has a direct impact on insurer's profitability.

Volatile pricing conditions for excess of loss coverage, scrutiny around sanctions, Cyber, and COVID-19 are becoming commonplace. D&O rate increases are showing a downward trend, but continue to remain high.

Cyber insurance pricing is seeing sharp increases of 100% quarter on quarter, the availability of capacity is on a decline, making Cyber liability a challenging space.

In summary, we feel that the premiums will continue to increase for next three years before returning to a more stable level.

For detailed commentary on the relevant insurance market conditions, please refer to Appendix A.

Analysis of Insurance Related Costs

Basis of Estimates

We have prepared our estimates for the forthcoming regulatory period (FY2024 – FY2028) on the basis of:

- Projected growth in ElectraNet’s regulated asset values over the regulatory period.
- Continuing hard market conditions resulting in premium increases, coverage reduction, which will increase deductibles and cause capacity contraction, but which we expect to soften throughout the regulatory period.
- The absence of any catastrophic event causing a major claim, which could have a significant impact on ISR and Liability policies’ claims performance and subsequent renewal pricing.
- An allowance for all current statutory taxes and levies, excluding GST.

Two main implications for ElectraNet from the state of the insurance market and continuing associated pressures on price, capacity, and coverage are:

- Significant increases in the premiums that ElectraNet must pay to continue purchasing ISR, Liability and Cyber coverage.
- Increases in deductibles will increase ElectraNet’s expected value of uninsured risks.

Comments on insurance program

Marsh has reviewed ElectraNet’s insurance program and considers ElectraNet’s approach to risk management to be prudent and to reflect good industry practice. The insurance requirements, including limits, sub-limits, and deductibles, are informed by a range of processes comprising:

- | [Redacted]
- | [Redacted]
- | [Redacted]
- | [Redacted]
- | [Redacted]
- | [Redacted]
- | [Redacted]

As outlined above, ElectraNet, supported by its Brokers, regularly reviews its insurance requirements against the organisational and external environment. Policy limits, sub-limits, deductibles, and uninsured risks are reviewed annually and may change based on factors including risk profile, market capacity, and pricing.

Property

Summary of Insurance Cover

ElectraNet purchases ISR insurance to cover its regulated assets consistent with good industry practice.



While Marsh has not been involved in procuring insurance for ElectraNet, it considers ElectraNet's cost of its ISR insurance to be competitive and a suitable starting point from which to forecast future costs.

Marsh has identified that the limit of liability for the current ISR insurance policy is of an adequate and sustainable level. However, as a result of current pressures in the insurance market, ElectraNet may be subjected to increased deductibles in the future.

Marsh considers ElectraNet's ISR insurance to be prudent and efficient for ElectraNet's risk exposure.

Basis of Insurance Premium Projection

Insurance Premiums have been calculated by obtaining the regulated portion of the ISR base premium for FY2022. The premium is forecast using projected insurance market rate change (Table 5) in conjunction with the change in asset base (Table 4), to provide an overall commercial Insurance Premium per year for the regulatory period (Table 6).

Increased asset values

Growth in ElectraNet's value of assets to be insured will drive the cost of ISR insurance, which is projected to grow as shown in Table 4.

Table 4 – ElectraNet's projected Regulated Asset growth.

Year	FY2024	FY2025	FY2026	FY2027	FY2028
Projected Asset Growth YoY (%)	1.19%	2.04%	2.24%	1.77%	0.94%

Results

In relation to ElectraNet's ISR insurance, Marsh projects that premiums percentage, per dollar insured, will change as shown in Table 5.

Table 5 – ElectraNet's projected ISR Insurance premium rate movement.

Year	FY2024	FY2025	FY2026	FY2027	FY2028
ISR Rate Movement YoY (%)	10.00%	5.00%	0.00%	-5.00%	-5.00%

Therefore, allowing for stamp duty and associated fees, Marsh projects that ElectraNet’s cost of ISR insurance will be as shown in Table 6.

Table 6 – ElectraNet’s projected ISR Insurance premium movement.

Year	FY2024	FY2025	FY2026	FY2027	FY2028
ISR Premium Movement YoY					

Liability

Summary of Insurance Cover

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

There are ongoing challenges in the market securing Bushfire Liability capacity. Insurers are reviewing their underwriting models to determine the impact of climate change and increasing litigation costs. They are seeking to better understand the impact of the worst foreseeable loss events by source mapping and population exposure around high Bushfire zones. How insurers and re-insurers are treating capacity, pricing and coverage continues to change and will have an ongoing material impact on premiums.

[Redacted]

[Redacted]

[Redacted]

Basis of Premium Projection

The premium is forecast using projected insurance market rate change (Table 8) in conjunction with the change in ElectraNet’s (regulated) revenue (Table 7), to provide an overall commercial Insurance Premium per year for the regulatory period (Table 9).

[Redacted]

[Redacted]

Revenue Projections

Growth in the amount of ElectraNet’s (regulated) revenue will drive the cost of Liability insurance, which is projected to grow as shown in Table 7.

Table 7 – ElectraNet’s projected Regulated Revenue growth.

Year	FY2024	FY2025	FY2026	FY2027	FY2028
Projected Revenue Growth YoY (%)	2.00%	2.28%	2.28%	2.28%	2.28%

Results

In relation to ElectraNet’s Liability insurance Marsh projects that Insurance Premiums will grow as shown in Table 8.

Table 8 – ElectraNet’s projected Liability Insurance premium growth.

Year	FY2024	FY2025	FY2026	FY2027	FY2028
CGL Rate Movement YoY (%)	20.00%	10.00%	5.00%	5.00%	2.00%

Therefore, allowing for stamp duty and associated fees, Marsh projects that ElectraNet’s cost of Liability insurance will be as shown in Table 9.

Table 9 – ElectraNet’s projected Liability Insurance premium movement.

Year	FY2024	FY2025	FY2026	FY2027	FY2028
CGL Premium Movement YoY					

Financial Risks

Summary of Insurance Cover

The Financial Risks grouping includes both D&O and EPL insurance.

- D&O risks are legal actions brought against either the entity, ElectraNet, or towards specific Directors or Officers by shareholders.
- EPL risks are legal actions brought against the entity, ElectraNet by its employees

The following describes the deductible and coverage structure currently held by ElectraNet:

- D&O: [REDACTED]
- EPL: [REDACTED]

Basis of Premium Projection

The premium is forecast using projected insurance market rate change (Table 11) in conjunction with the change in ElectraNet’s (regulated) revenue (Table 10), to provide an overall commercial Insurance Premium per year for the regulatory period (Table 12).

The current D&O insurance market is under significant pressure in Australia with some commercial insurers withdrawing capacity from Australia entirely. There is an increased chance that ElectraNet's D&O deductible may continue to increase in the future, however, for the purpose of this analysis the current D&O policy structure was adopted.

As ElectraNet is a private company, there is no risk of Shareholder Class Actions being instituted against it and therefore Side C cover is appropriately not held by ElectraNet. Side C claims typically have a higher chance of a large loss in comparison to claims made under Side A and B.

Marsh has determined that the level of coverage of ElectraNet's EPL policy, as well as the deductible, are efficient and prudent and have therefore been maintained for the duration of the regulatory period.

Revenue Projections

Growth in the amount of ElectraNet's (regulated) revenue will drive the cost of D&O and EPL insurance, which is projected to grow as shown in Table 10.

Table 10 – ElectraNet's projected Regulated Revenue growth.

Year	FY2024	FY2025	FY2026	FY2027	FY2028
Projected Revenue Growth YoY (%)	2.00%	2.28%	2.28%	2.28%	2.28%

Results

In relation to ElectraNet's D&O and EPL insurance Marsh projects that Insurance Premiums will increase as shown in Table 11.

Table 11 – ElectraNet's projected D&O and EPL Insurance Premium movement.

Year	FY2024	FY2025	FY2026	FY2027	FY2028
D&O Rate Movement YoY (%)	20.00%	15.00%	15.00%	10.00%	10.00%
EPL Rate Movement YoY (%)	10.00%	10.00%	0.00%	0.00%	0.00%

Therefore, allowing for stamp duty and associated fees, Marsh projects that ElectraNet's cost of D&O and EPL insurance will be as shown in Table 12.

Table 12 – ElectraNet's projected D&O and EPL Insurance Premium movement.

Year	FY2024	FY2025	FY2026	FY2027	FY2028
Financial Lines Premium Movement YoY					

Ancillary Risks

Summary of Insurance Cover

Table 13 – Ancillary lines of coverage, deductibles, and respective cover limits.

Line of Coverage	Limit of Liability	Deductible
Motor Vehicle	██████	██████
Worker Compensation (XOL)	██████████	██████
Marine Cargo	██████	██████
Corporate Travel	██████	██████
Statutory Liability	██████	██████

Basis of Premium Projection

The premium is forecast using projected insurance market rate change (Table 15) in conjunction with the change in ElectraNet's (regulated) revenue (Table 14), to provide an overall commercial Insurance premium per year for the regulatory period (Table 16).

Revenue Projections

Growth in the amount of ElectraNet's (regulated) revenue will drive the cost of Ancillary Lines insurance, which is projected to grow as shown in Table 14.

Table 14 – ElectraNet's projected Regulated Revenue growth.

Year	FY2024	FY2025	FY2026	FY2027	FY2028
Projected Revenue Growth YoY (%)	2.00%	2.28%	2.28%	2.28%	2.28%

Results

In relation to ElectraNet's Motor Vehicle, Marine, Corporate Travel and Statutory Liability insurance, Marsh projects that premiums will grow as shown in Table 15.

Table 15 – ElectraNet's projected Ancillary Lines Insurance premium growth.

Year	FY2024	FY2025	FY2026	FY2027	FY2028
MV, WC, MC, CT Rate Movement YoY (%)	4.00%	4.00%	4.00%	4.00%	4.00%
Stat. Liability Rate Movement YoY (%)	10.00%	0.00%	0.00%	0.00%	0.00%

Therefore, allowing for stamp duty and associated fees, Marsh projects that ElectraNet's cost of Motor Vehicle, Marine, Corporate Travel and Statutory Liability insurance will be as shown in Table 16.

Table 16 – ElectraNet's projected Ancillary Lines Insurance premium movement.

Year	FY2024	FY2025	FY2026	FY2027	FY2028
MV, WC, MC, CT, SL Premium Movement YoY	██████	██████	██████	██████	██████

Cyber Liability

Summary of Insurance Cover

The cyber insurance market experienced a severe transitional period in 2021. This resulted in premium rates increasing by up 70%-100% quarter on quarter, significant underwriter risk scrutiny being applied to all accounts and a decrease in the capacity available to be purchased. This was driven in large part by a dramatic increase in both the frequency and severity of ransomware incidents from 2020. Marsh was made aware of ElectraNet's efforts to develop its cyber maturity, which has and will continue to support a more favourable review of its cyber risk profile by potential insurance markets.

The worsening loss ratios have also led to corrective actions, such as limiting capacity and co-insurance requirements in order to maintain portfolio profitability. Insurers are actively looking to manage capacity, and apply higher retentions (\$ and time) in addition to narrowing coverage terms.

Basis of Premium Projection

The premium is forecast using projected insurance market rate change (Table 18) in conjunction with the change in ElectraNet's (regulated) revenue (Table 17), to provide an overall commercial Insurance premium per year for the regulatory period (Table 19).

Revenue Projections

Growth in the amount of ElectraNet's (regulated) revenue will drive the cost of Cyber insurance, which is projected to grow as shown in Table 17.

Table 17 – ElectraNet's projected Regulated Revenue growth.

Year	FY2024	FY2025	FY2026	FY2027	FY2028
Projected Revenue Growth YoY (%)	2.00%	2.28%	2.28%	2.28%	2.28%

Results

The results are based on the assumption that there will be no material change the current policy limits or the current deductibles for the forthcoming regulatory period. Marsh projects ElectraNet's Cyber insurance premiums will increase as shown in Table 18.

Table 18 – ElectraNet's projected Cyber Insurance premium rate movement.

Year	FY2024	FY2025	FY2026	FY2027	FY2028
Cyber Rate Movement YoY (%)	70.00%	50.00%	30.00%	10.00%	10.00%

Therefore, allowing for stamp duty and associated fees, Marsh projects that ElectraNet's cost of Cyber Insurance will be as shown in Table 19.

Table 19 – ElectraNet's projected Cyber Insurance premium movement.

Year	FY2024	FY2025	FY2026	FY2027	FY2028
Cyber Premium Movement YoY					

Summary of Findings

Insurance Premiums

In forecasting the insurance premiums for the regulatory period 2024-2028, current base premiums (FY2021) obtained from ElectraNet were used as the initial premium value.

Since this report focuses on the regulated portion of ElectraNet’s business these initial premium values were allocated/split between the regulated and the unregulated portions of ElectraNet’s business based on two criteria, ‘regulated asset base’ for the ISR policy and ‘revenue relating to regulated business activities’ for all other classes of insurance.



Projected premium rates change projected by Marsh were applied in conjunction with asset growth rates for the ISR line, and revenue growth rates for the remaining insurance lines. The growth rates utilized were projected figures relating to the regulated portion of assets only.

Table 20 – Forecast annual Insurance Premiums for various insurance classes.

Insurance Premium	FY2024	FY2025	FY2026	FY2027	FY2028	Total	Average
Property	██████	██████	██████	██████	██████	██████	██████
T&D Assets	██████	██████	██████	██████	██████	██████	██████
Liability	██████	██████	██████	██████	██████	██████	██████
Financial Lines	██████	██████	██████	██████	██████	██████	██████
Ancillary/Others	██████	██████	██████	██████	██████	██████	██████
Cyber	██████	██████	██████	██████	██████	██████	██████
Insurance Placement and Broking Costs	██████	██████	██████	██████	██████	██████	██████
Total Insurance Premium	██████	██████	██████	██████	██████	██████	██████

Appendix A

Insurance Market Overview

We are currently in the “Hard Market” section of the insurance market cycle (as illustrated) as increasing premiums and selective underwriting and shrinking capacity is being witnessed on all accounts.

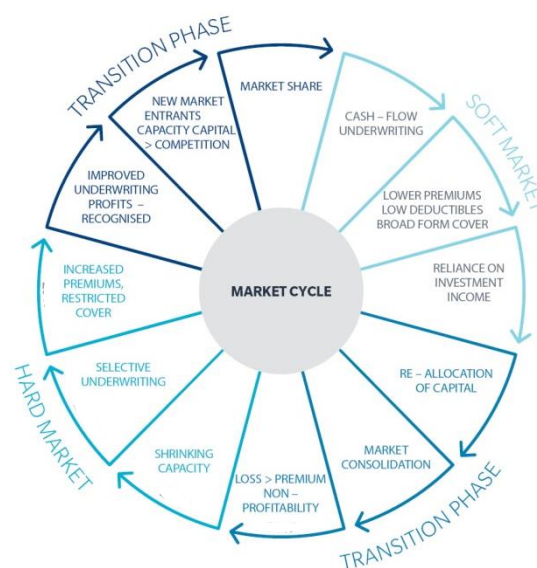
It is not only the cost implications of premium increases. Insurers are also cutting back on coverage enhancements and generous sub limits that were offered during the soft market phase as they fought to maintain market share in a very competitive environment.

It is difficult to predict when the market will move to a transition phase and back towards a Soft Market. It will require sustained profitability of insurers’ property portfolios over a next couple of years before they have the confidence to push for growth and market share (thus increasing competition). However, it is not expected that the escalation of rate increases over the past four years will continue at the same pace. Considerable pricing correction has already occurred and rates should be approaching a sustainable level. However, the persistent occurrences of large NAT CAT events in Australia creates considerable volatility and makes profitable underwriting very challenging for both insurers and reinsurers.

The alignment to technical underwriting models, which are used to justify pricing, terms and capacity, have weighed heavily on property insurers. This has led to limited competition in the market. Overlaid in this process is referral underwriting, where underwriters who were previously empowered to make their own decisions now must refer to their respective head office committees. This process places less emphasis on insurers’ prior history and relationships with buyers, in favour of an approach that is rooted in technical adequacy and profitability for underwriters.

Notable coverage trends occurring in the current Hard Market include:

- Scrutiny by insurers in policy coverage with particular attention to removal and limitation of cover for infectious diseases, civil authority intervention coverages, construction coverages and cyber. The property insurance industry has provided at least some level of coverage for fire, explosion and machinery breakdown which results from a “computer virus” however, due to the rise in frequency and severity of such events, the industry has looked to remove coverage for any loss or damage that occurs from a malicious cyber act.
- Business interruption extensions, including non-damage triggers for customers and suppliers and public utilities (gas, electricity, and water) exposures are being more rigorously tested for validity and geographical scope.
- Natural catastrophe limits are also being reviewed/reduced and imposed for bushfire, wind, flood and hail, along with aggregated limits.
- Declared material damage values are a subject of focus, as insurers seek validation of accuracy and how current they are. In some cases, if valuations are more than three years old, insurers are applying underinsurance clauses (coinsurance/ average) as a penalty to insureds where the percentage of under-declaration is deducted from the loss. This imposition is only removed once insurers are able to sight recent valuations.



The overall presentation of risk is imperative, particularly when it comes to reviewing engineering reports. The positive attributes of a risk can clearly help underwriters differentiate and articulate clients' continued focus on risk management.

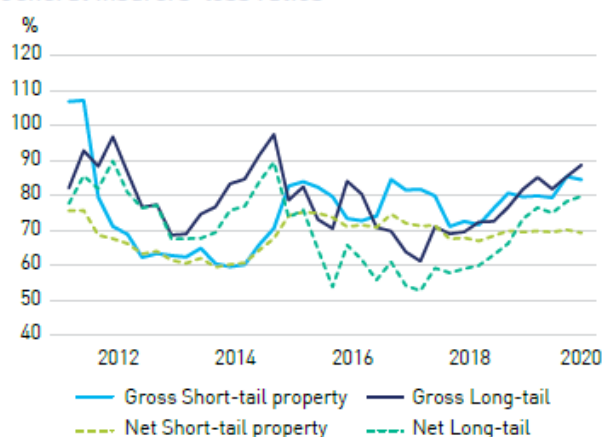
In respect of capacity, whilst most insurers' individual capacity has shrunk, there remains sufficient market capacity for most risks utilising a larger panel of insurers. However, obtaining that extra capacity to complete placements often sees the program being "split rated" as those insurers previously left off the program due to higher pricing requirements now needed.

The charts below show illustrate the financial challenges faced by the Australian insurance market. Whilst rating agencies such as Standard and Poor's and AM Best have (generally) not lowered the Insurer Financial Strength ratings of Australian insurers as they remain well capitalised, their financial results for 2020 remain poor:

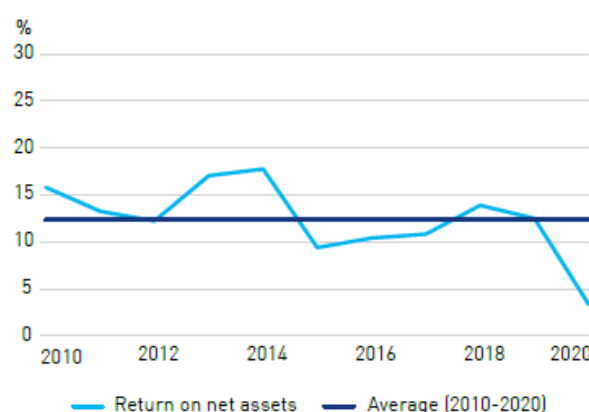
	December 2019	December 2020	Change (annual)
Gross claims expense	\$38.1bn	\$47.2bn	+23.7%
Underwriting result	\$2.3bn	-\$78m	
Investment income	\$3.4bn	\$1.7bn	-48.8%
Net profit after tax	\$3.1bn	\$35m	-98.9%

Source: Australian Prudential and Regulatory Authority, General Insurance Statistics for December 2020

General insurers' loss ratios



General insurers' return on net assets

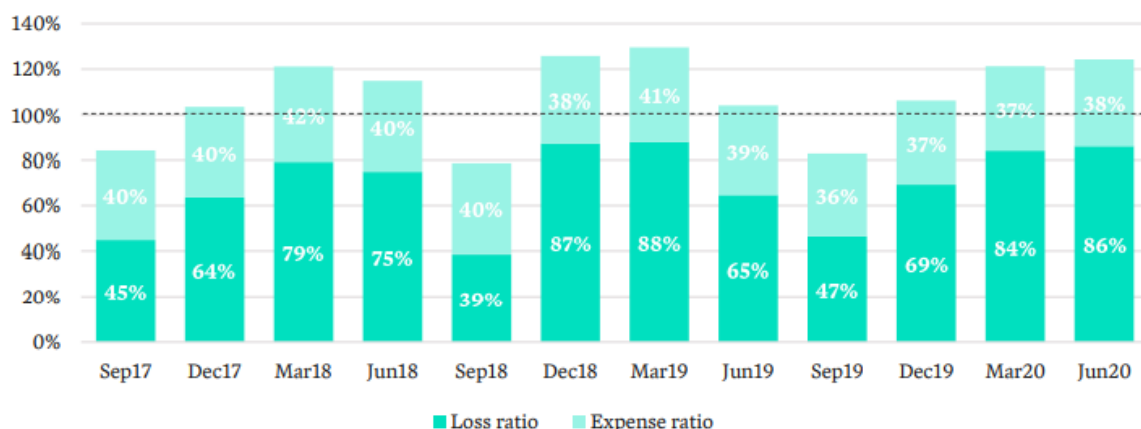


Source: Australian Prudential and Regulatory Authority, APRA 2020 Year in Review

The following chart shows that the Commercial Property market in Australia has been non-profitable in 9 of the 12 quarters in the period September 2017 to June 2020. It illustrates the **Combined Ratio** (claims plus expenses divided by premium) of those insurers regulated by the Australian Prudential and Regulatory Authority.

Combined ratio

Reporting quarter



Source: Taylor Fry RADAR 2020

Whilst the insurer expense ratio (commissions paid to agents / brokers, direct costs and overheads) associated with Commercial Property has reduced marginally over the past couple of years, the portfolio still requires a loss ratio better than 60% to return a profit. However, this analysis does not take into account the investment income earned by insurers from premiums paid. The analysis above and below is purely their underwriting result.

Global Property

Midstream & Downstream Energy

Customers have been trading through the most challenging times and insurers have continued their focus on rate correction within the sector. The good news is that global losses have been within expected tolerance levels and are currently trending below US \$2 billion. The largest individual losses have fallen between South Korea and South Africa and relate to petrochemical and refining.

2020 has also seen an active Gulf of Mexico windstorm season. Although claims are now manifesting and escalating from Hurricane Laura, overall energy infrastructure has been only mildly impacted. Some deterioration of prior year losses is now being realized however, based on industry indicators, 2020 is expected to provide good returns to most downstream and midstream insurers.

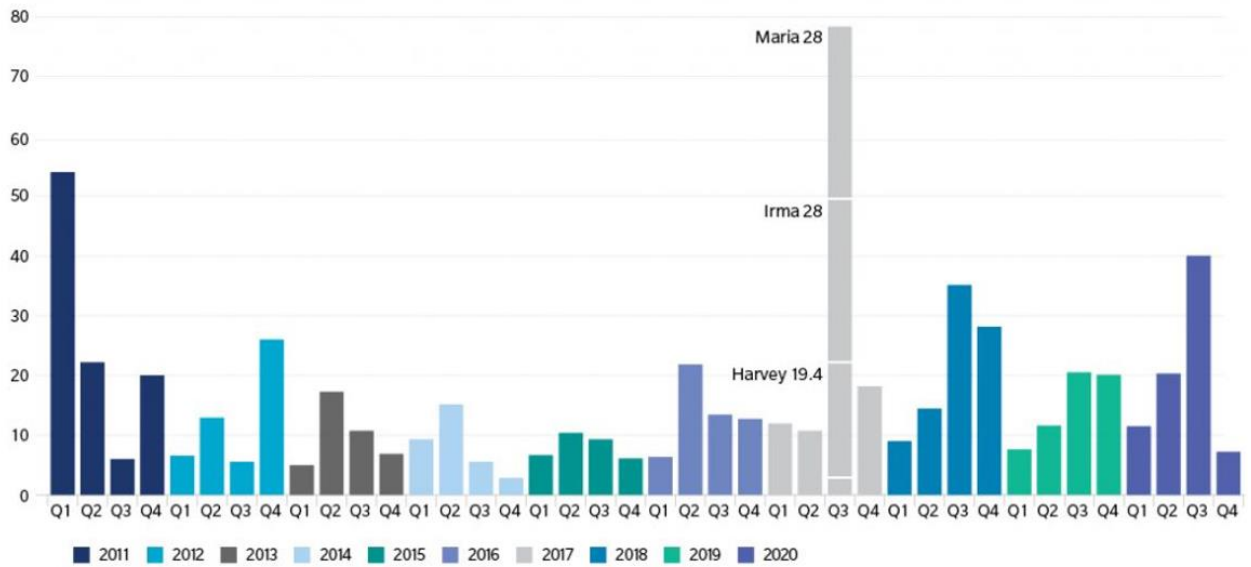
During the fourth quarter, increased differentiation from insurers when assessing customers' risk quality and rating adequacy, coupled with the prior market correction, has reduced rate increases. Nevertheless, average rate increases over the quarter trended on average at 25% on downstream, with the range for midstream continuing to be plus 12.5% to 17.5%.

Renewable Power

On average, minimum rating uplifts to renewal business have continued to stabilize at around 20% to 30%, though larger increases may be experienced on programs with loss activity and/or significant NAT CAT exposure. As we look ahead, 2020 and 2019 underwriting performance is likely to dictate whether the market seeks further increases, or if pricing stabilizes after the significant focus on pricing adjustment in 2020. Deductibles continue to be in-line with current market conditions, where minimum self-insured retentions are generally driven by the size of project (or turbine in the case of wind) and NAT CAT exposure (where relevant).

Please refer to the chart below which shows significant global losses over the past 10 years. It illustrates the more frequent and higher value NAT CAT losses.

Significant Insured Losses: 2011-2020 (USD Billions)



Note: Significant losses => USD \$100M

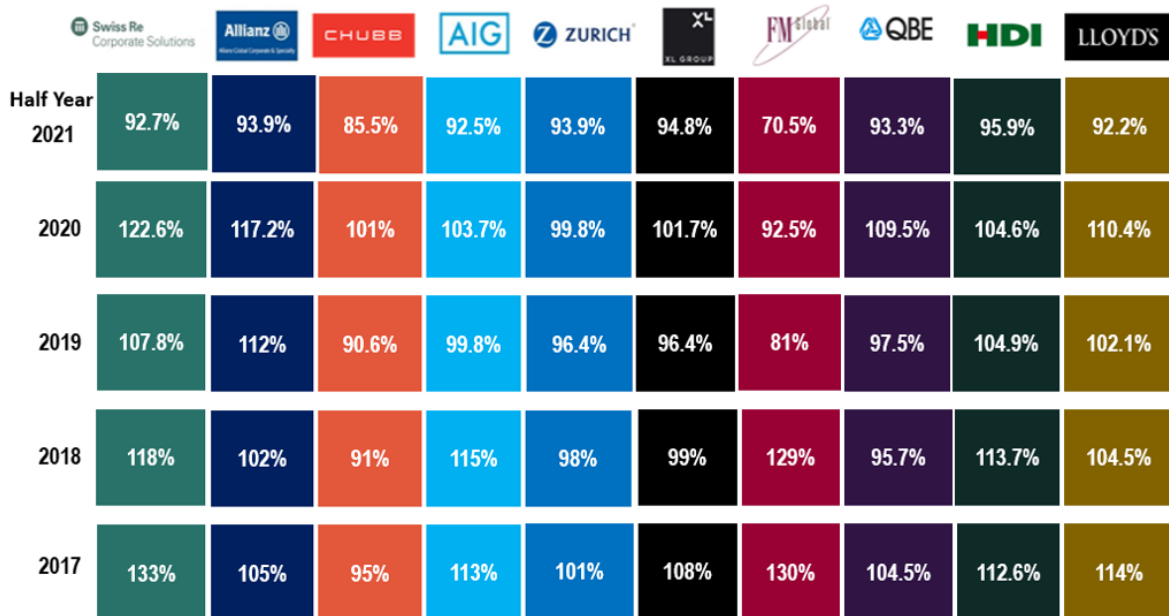
Source: Press releases, PCS, PERILS, Guy Carpenter

Note: This chart excludes the impact of any COVID-19-related losses

Source: Swiss Re Press Release - 19 December 2020

Like insurers domiciled in Australia, the major international insurers have also had challenges with their Combined Ratios. Only a few insurers were able to generate an underwriting profit in 2020.

Global Insurer Combined Loss Ratios Unaccounted BI Losses (COVID-19)

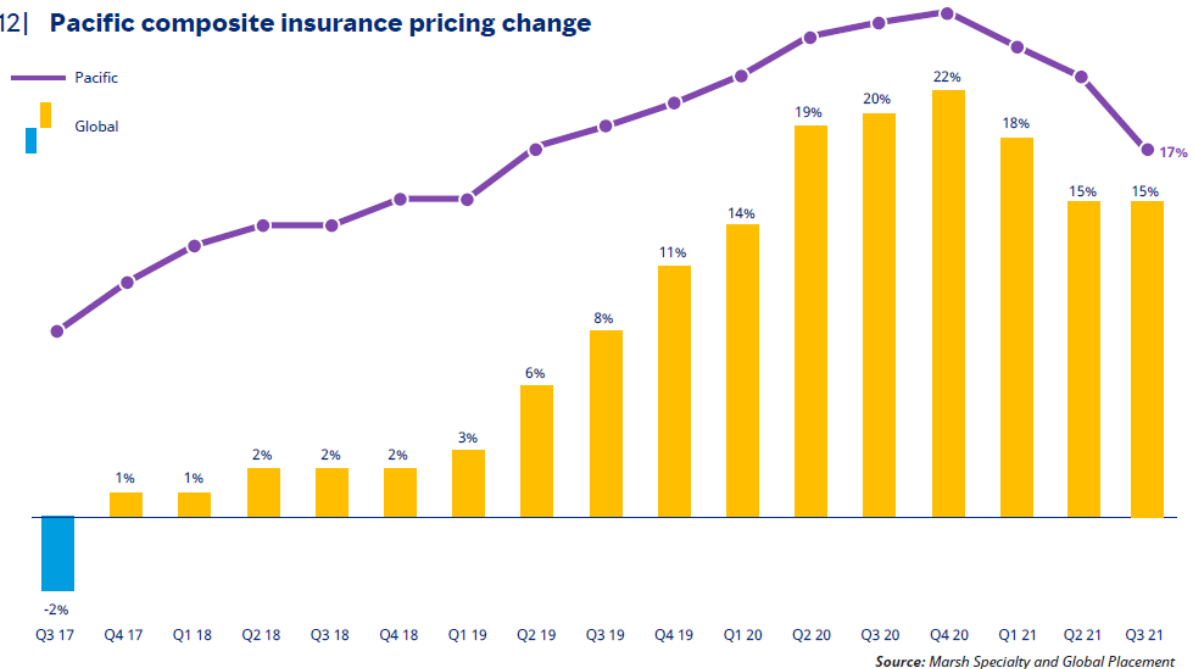


Combined Loss Ratios allow for Insurers expenses

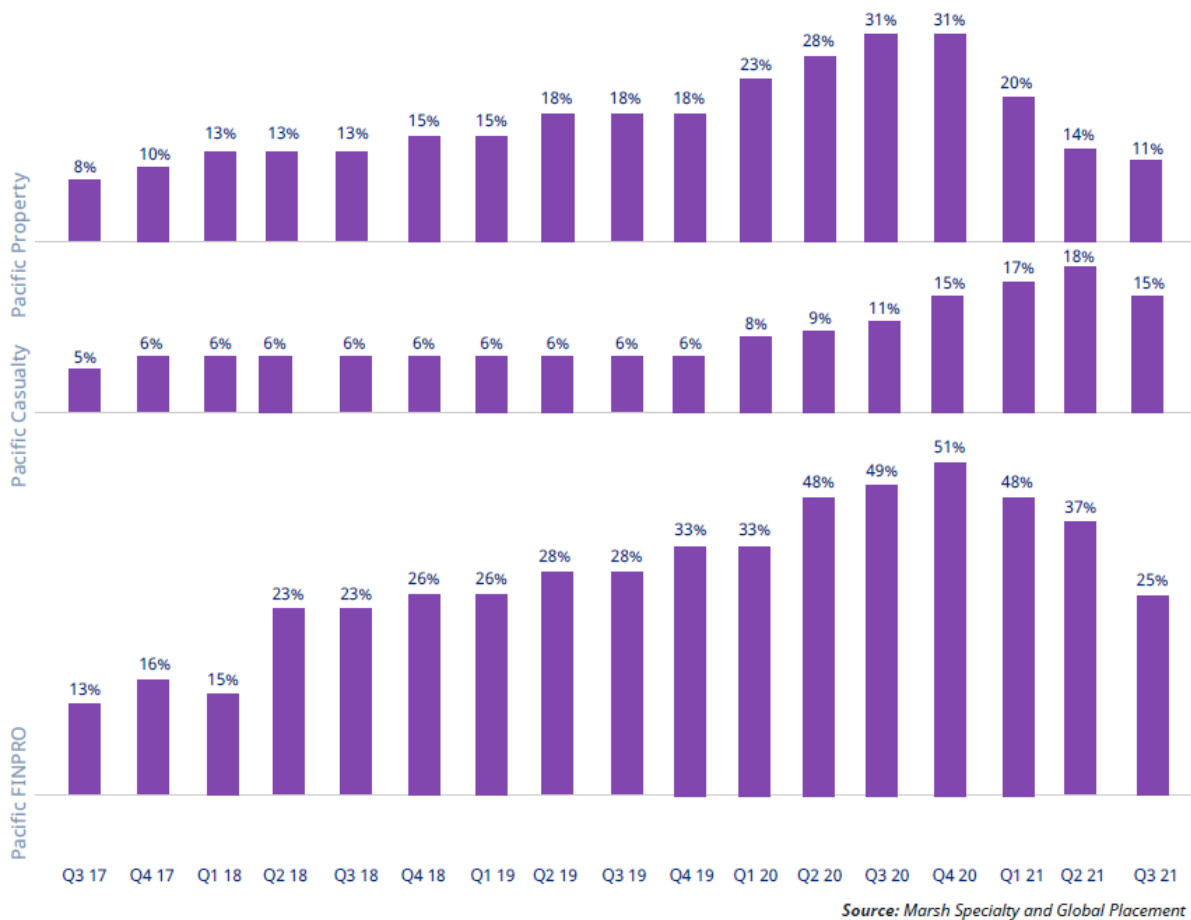
Source: Marsh Pty Ltd

The following charts provides a snapshot of Pacific Pricing, where insurance pricing in the Pacific region increased 17%, continuing an upward trend that began in 2015, although it was the third consecutive quarter in which the rate of increase slowed (see Figures 12 and 13).

12| Pacific composite insurance pricing change



13| Pacific composite insurance pricing change — by major coverage line



Property insurance pricing increased 11%. Elements of competition returned to the market for risks seen as high quality and/or loss free. Difficulties remained for high hazard industries, risks in CAT zones, and clients with poor loss records.

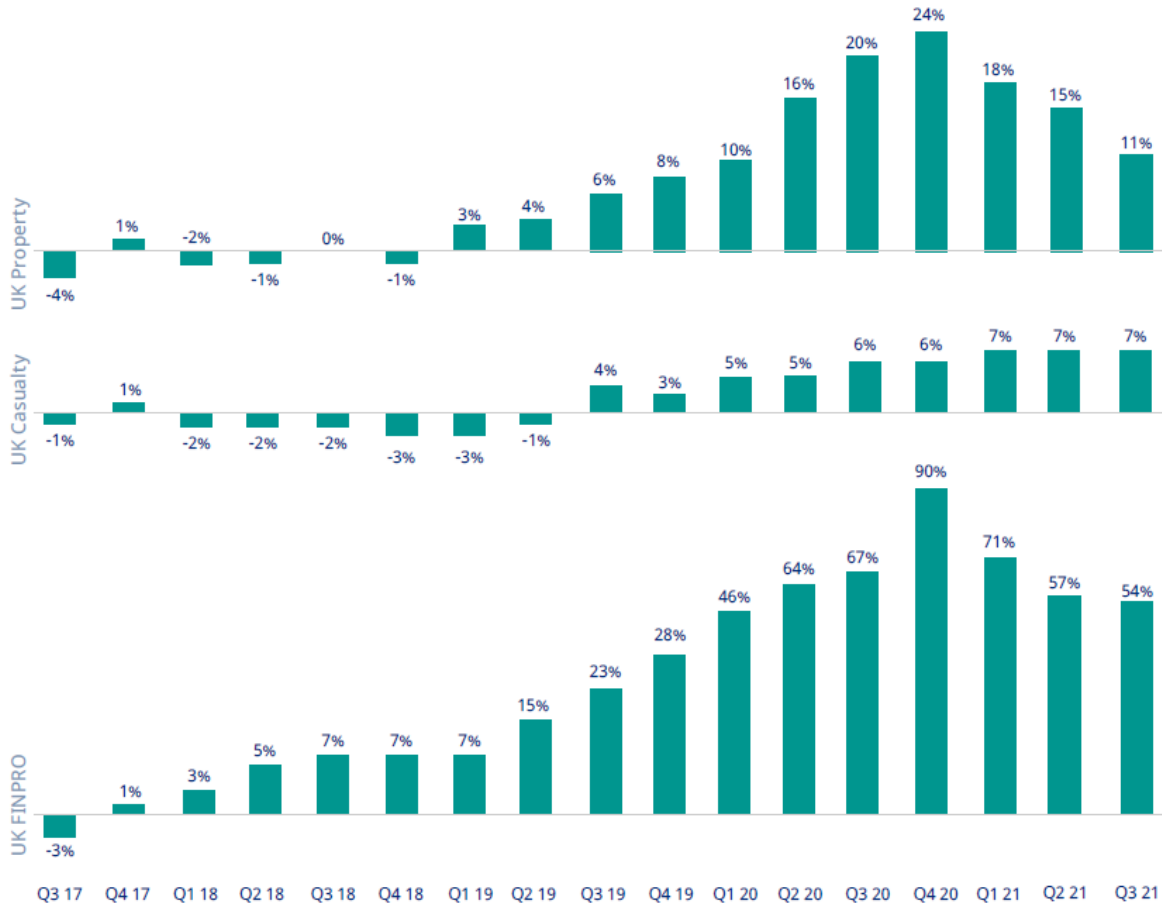
Casualty insurance pricing rose 15%, and remained challenging from a pricing perspective, although with slightly less pressure in the third quarter than the two preceding ones. Insurers’ emphasis on reviewing policy wordings continued. Large programs underwent substantial restructuring of layers as underwriters changed appetite for excess layers.

Financial and professional lines pricing rose 25%, a significant moderation from 48% in the first quarter, but marking 17 consecutive quarters of double-digit increases. The levelling out in pricing of D&O programs continued amid developing competition, particularly for excess layers, which resulted in improved pricing for some large clients. Professional indemnity premiums increased again and capacity tightened.

Cyber premiums increased dramatically, in line with the global trend; capacity shrunk and many programs were unable to purchase historical limits.

The following chart provides a snapshot of **UK Pricing**, where Insurance pricing in the third quarter of 2021 in the UK increased 27%

07| UK composite insurance pricing change — by major coverage line



Source: Marsh Specialty and Global Placement

Property insurance pricing increased 11%, larger organizations generally experienced price increases ranging from 10% to 15%, which reflected a deceleration in the rate change compared to recent quarters. Most renewals from insurers were less volatile than was the case in 2020 and the first half of 2021, in part a reflection of increased competition from alternative markets. The claims environment

remained challenging due to COVID-19 claims disputes concerning interpretation and application of policy wording.

Casualty insurance pricing increased 7% and conditions were more volatile for excess of loss coverage. Scrutiny around sanctions, cyber, and COVID-19 were commonplace, meaning a longer timeframe and the provision of additional information remains vital to finalize a placement successfully.

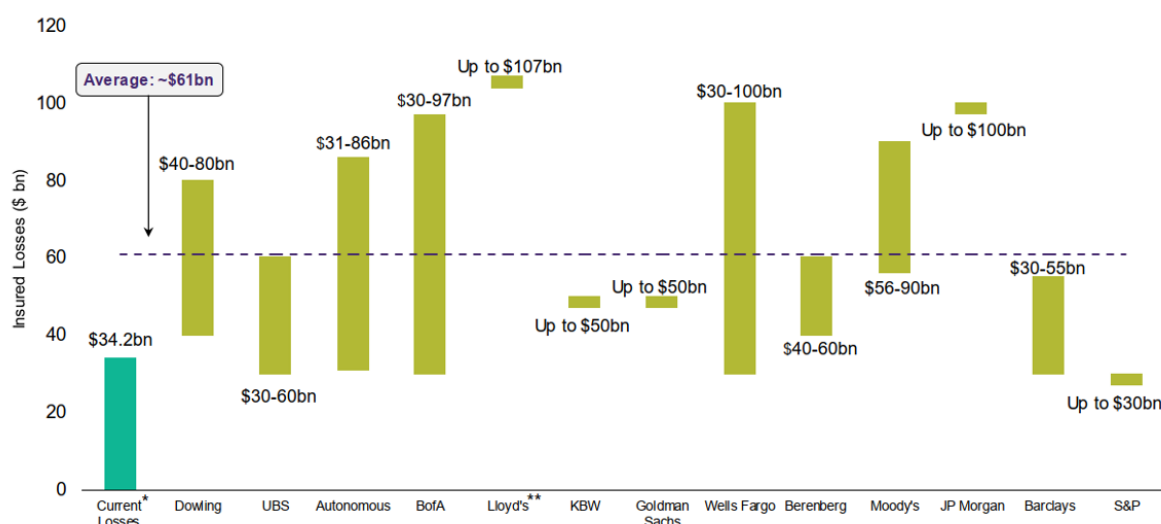
Financial and professional lines pricing increased 54%, largely due to D&O liability. D&O rate increases declined significantly, from 121% in the second quarter to 61% in the third as insurers showed increased appetite and competition.

The cyber insurance market continued to deteriorate, with capacity reducing and rates rising. Some clients experienced triple-digit increases in the quarter, driven largely by ransomware.

COVID-19

The true impact on the industry is still unknown as multiple jurisdictions deal with courts cases between insureds and insurers. Many organisations have to quantify the global insured losses. As you can see, they vary remarkably but the average is \$61bn.

Impact of COVID-19 – Total Insured Loss Estimates



Note 1: * Represents the consolidated COVID-19 losses reported in company earnings releases, as of 12 February 2021.
 Note 2: **Lloyd's estimate is for underwriting losses from COVID-19. This includes claims as well as anticipated lower profits due to lower premiums.
 Source: Dowlings, Autonomous Research, Barclays, Bank of America, KBW, UBS, Lloyd's, Wells Fargo, Goldman Sachs, Berenberg, Moody's, JP Morgan; Updated as of 12 February 2021

Global Reinsurance

On 1 January 2021, many global reinsurance programs were renewed. COVID-19 related claims, notable natural catastrophe losses and pressure on liability lines fuelled by social inflation and low interest rates all helped spur price increases across the board.

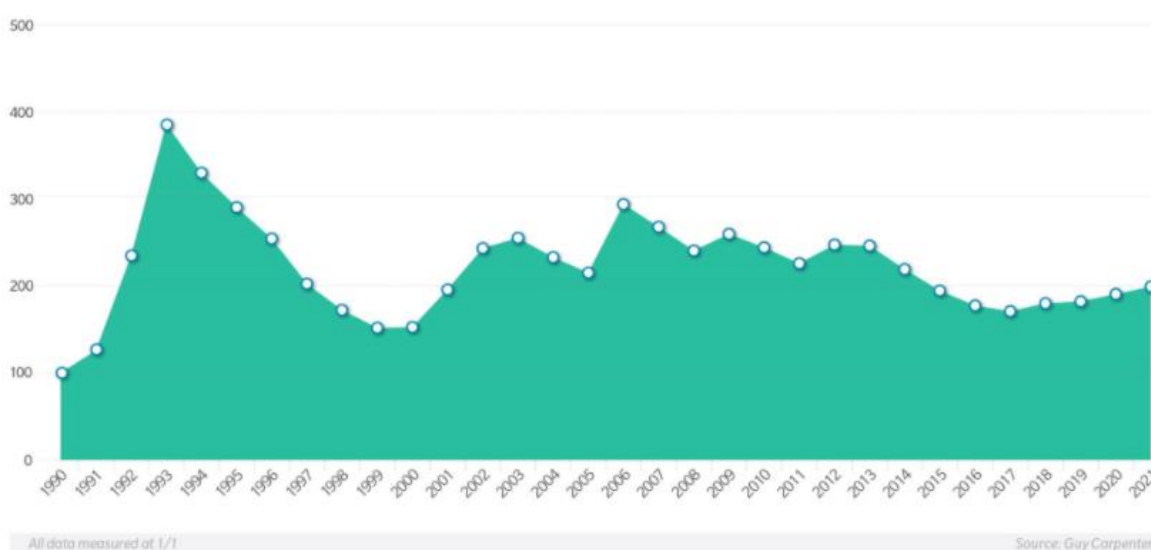
Global risk-adjusted property catastrophe reinsurance rates on-line **rose by an average of 6%**, reflecting the biggest year-over-year increase in over a decade, according to research by Howden.

Lara Mowery, Global Head of Distribution for Guy Carpenter, noted that contract wording discussions were a key component of negotiations, with **communicable disease and cyber exclusions** two of the more prevalent topics.

Looking ahead, James Vickers, Chair of Willis Re International Vickers noted “the 1/1 renewals provide a reassuring signal for the mid-year renewals that capacity is abundant, pricing-movement demands are reasonable and most importantly logical as reinsurers remain focused on differentiating by client and class.”

The Guy Carpenter Global Property Catastrophe ROL index was up 4.5 percent year on year, at January 1. The index is a measure of the change in dollars paid for coverage on a consistent program basis and reflects the pricing impact of a growing (or shrinking) exposure base, evolving methods of measuring risk and changes in buying habits, as well as changes in market conditions.

GUY CARPENTER GLOBAL PROPERTY CATASTROPHE RATE ON LINE INDEX: 1990 TO 2021



Liability including Bushfire Liability

Due to significant capacity withdrawal from the sector, there has been a meaningful reduction in liability capacity, with such capacity offered at a significantly higher cost. Of particular relevance for ElectraNet the loss capacity is due to a number of factors, including:

- Increased wildfire/bushfire activity local and globally (see Bushfire Claims Examples in the next section), with insurer’s unfavourable perceptions of this risk compounded by Bushfire activity in Australia during the 2019/20 and 2020/21 bushfire season and the fact that five of California’s six largest fire events since 1932 were recorded in August and September of 2020 alone
- Non-fire related casualty losses being experienced locally and globally (particularly in the mining sector)
- Continued consolidation of insurers through merger and acquisition activity
- Increased focus by insurers on overall capital deployment, and
- Closure of Lloyds Syndicates and changes in insurer appetite.

We consider each key global market below:

Australian Markets

- All markets are reviewing pricing, attachment points, terms and involvement as demonstrated by key markets HDI and AXA XL who significantly reduced their exposure to bushfire liability during September 2020 renewals
- Allianz Global Corporate and Specialty have ceased writing long tail business entirely in Australia in 2019. They were a large capacity provider (up to \$100m) on utility risks
- Zurich and Vero have ceased writing bushfire Liability and in some cases broader energy risks
- AIG Australia is no longer writing bushfire liability. Australian clients can seek to access capacity through AIG Europe only, with an estimated maximum capacity of \$30m available per client (total capacity from AIG Aus/Europe in 2019 was \$75m+)
- Other markets are seeking pricing increases up to 300% reflecting the volatility in this market segment.

London Markets

- Greater scrutiny from Lloyds has seen the closure of a number of syndicates and more tactical deployment of capital from the remaining syndicates. In addition to the closure of Lloyds Ironshore syndicate, CNA Hardy, Apollo, Brit and Navigators have now exited the bushfire liability market
- Generali are offering significantly lower levels of capacity. Generali is expected to exit the sector in 2021
- Tokio Marine Kiln is extremely reluctant to offer any capacity and when doing so pricing increases of over 200% are being experienced
- Many syndicates have a reduced appetite for new business as they are obtaining increases / growth from existing business written within their quota. Their sentiment is to underwrite existing business profitably, and therefore obtaining new capacity is very challenging
- Where capacity is offered, pricing is increasing with some markets being opportunistic.

Bermudan Markets

- Capacity remains in Bermuda, however it comes at a punitive cost. For example, premium indications for the 2020/21 insurance year renewal for another electricity utility were at \$160k per million dollars of cover.
- Bermuda insurers also utilise their own policy form (i.e. terms and conditions), which is generally more restrictive than the terms of cover from existing insurers.

Chinese Markets

While Chinese markets are continuing to expand their geographic footprint, particularly for Chinese connected business, capacity is still not being deployed in any significant way for casualty risks.

In summarising the market conditions, we estimate that **well over \$500m in capacity has exited the Bushfire Liability sector since the beginning of 2019**. In today's market, insurers are scrutinising and revising their pricing models, with a much greater focus on adequacy of 'pay-back' period. This is resulting in upward pressure on premium outcomes, and downward pressure on overall policy limit for insureds in the sector.

Bushfire Claims Examples

Bushfire is not a hazard or phenomenon that is unique to Australia. In recent times, major bushfires/wildfires have occurred throughout the world, including in North America (with frequency in California), France, Germany, Greece, Indonesia, Italy, Poland and Russia. The consequences are typically measured in terms of hundreds or thousands of buildings destroyed, number of lives lost, and millions of dollars in property damage and resources spent fighting the fire.

The most recent 2019/20 bushfires in Queensland, New South Wales, Victoria, South Australia, Western Australia and the ACT have captured attention globally, with insurers monitoring the impact and the size and scale of the losses. In addition to utilities related liability losses, estimated insured property losses arising from the 2019/20 bushfire season now stand at \$2.32bn.

While there have been a large number of bushfire losses over time in Australia, and there has been increased bushfire activity recently, the largest bushfire events from an insurance perspective (excluding the 2019/20 bushfire events) have included:

- Cudlee Creek and Yorktown fires (SA) in 2019. These fires burnt approximately 25,00 hectares including nearly 100 homes. Overall losses are still to be determined and a class action lawsuit has been issued.
- St Patricks Day Fire (VIC) in 2018, which burnt 400 km² of land in Victoria's south-west farmland, wildlife reserves and property. Overall losses stand at \$22.5m.
- The Black Saturday Fire (VIC) in 2009, which burnt 4,500 km² of land, killed 173 people and destroyed some 2,000 homes. Overall losses A\$1.7bn, insured losses A\$1.07bn (in original values).
- The Ash Wednesday Fire (VIC/SA) in 1983, which burnt 5,200 km², destroyed some 2,400 homes and killed 75 people. Overall losses A\$335m, insured losses A\$176m (in original values).
- The Tasmanian Black Tuesday Fires (TAS) in 1967, which burnt more than 2,600 km², destroyed some 1,400 homes and killed 62 people. Overall losses were A\$35m, insured A\$14m (in original values).
- The Black Friday Fire (VIC) in 1939, which burnt almost 20,000 km², destroyed more than 700 homes and resulted in 71 fatalities.

The increase in frequency of bushfire events is contributing to a more selective approach from insurers in relation to where they will provide capacity, how much capacity they will provide, and the cost of that capacity.

Notable bushfire events outside of Australia have included:

- March 2010: Western Russia — Several hundred individual wildfires caused an estimated US\$15 billion in damage.
- May 2016: Alberta, Canada — The Fort McMurray Wildfire destroyed at least 2,400 homes and buildings. With estimated losses of around CDN\$4 billion, it is the costliest disaster in Canadian history.
- November 2018: Butte County, California, US - The Camp Fire was the deadliest and most destructive in California history. It caused at least 86 fatalities and destroyed 18,804 structures. It was also the world's costliest natural disaster in 2018 and is the most destructive wildfire in history with total damage of US\$16.5 billion.
- 2020 West Coast Wildfires: well over 2 million hectares have burned across California, Oregon, Washington State and neighbouring Idaho. Tens of thousands of people were forced to leave their

homes and at least 27 people have died. At this early stage, the cost of these fires is expected to be similar to the 2018 California fires

Whilst catastrophic bushfire events such as those above gain attention globally, frequent ‘smaller’ bushfires events overseas still generate substantial losses to the insurance market (just as the smaller bushfire events do in Australia).

ElectraNet insurers participating at primary layers of bushfire liability risks across Australia have been, and continue to be, significantly out of pocket as a result of bushfires over recent years, with insurance pay outs exceeding the premiums they have received by several fold. To quantify this, across the industry over the last decade or so, insurers participating at the lower attachment points on the ElectraNet policy have experienced claims incurred costs (i.e. actual and forecast pay outs) in the vicinity of \$100 million across the sector versus premiums received of circa \$25 million. The difference of approximately \$75 million represents a material loss for these insurers which is not sustainable. This factor is a key contributor in the material re-rating of bushfire liability pricing.

Furthermore, the insurance market is at a level that, should another severe bushfire event occur, significant reductions in capacity will occur (on top of the reductions to date) such that limited capacity will be available, with such available capacity coming at a substantially increased cost.

Cyber

The cyber insurance market is experiencing a severe transitional period in 2021, with rates increasing more than 60 %, capacity decreasing, and underwriting scrutiny increasing.

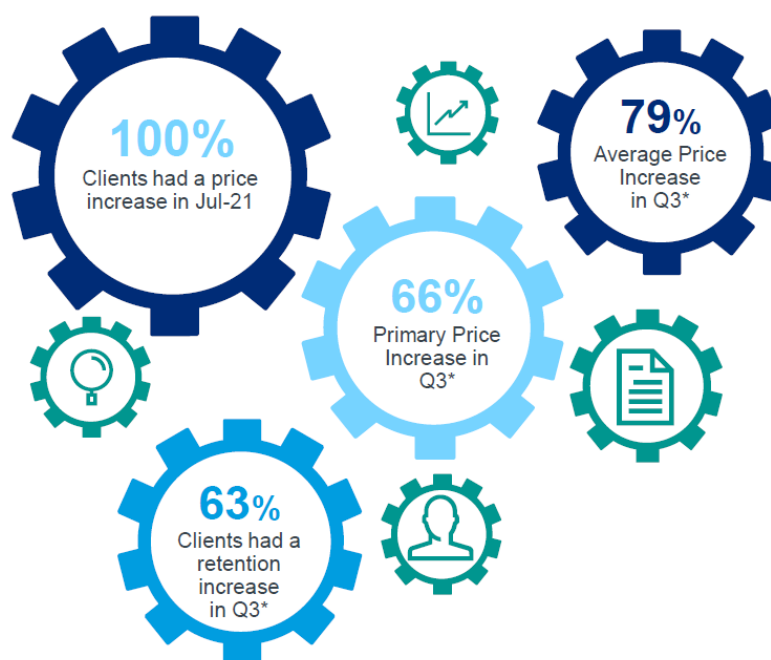
This change is driven in large part by a dramatic increase in both the frequency and severity of ransomware incidents in 2020 onward.

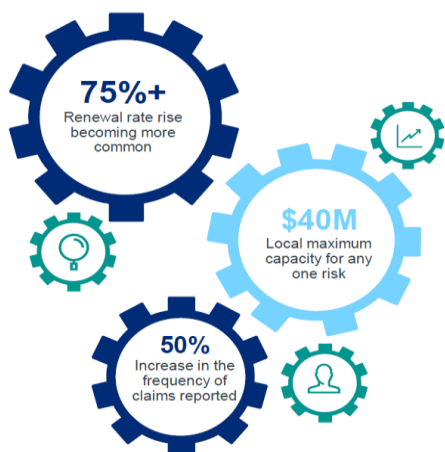
Aggregation risk is a key issue as insurers grapple with the increasing volume and cost of attacks, the increasing number of widespread attacks and the trickle down impacts of cybersecurity incidents in the supply chain.

The worsening loss ratios have also led to corrective actions, such as limiting capacity and co insurance requirements in order to maintain portfolio profitability.

Insurers are actively looking to manage capacity, and apply higher retentions (\$ and time) in addition to narrowing coverage.

In Q3 2021, total programme cyber price increased by an average of 79% for all industries within Marsh’s UK (retail and wholesale) client base.





Steady increase seen over the last few month, culminating in average price increases of 53%, 73% and 79% through May, June and July renewals.

Pacific Market saw sharp premium increases across the board 100%+ not uncommon across all industry. No consistency in pricing where local capacity reduced significantly and as a result highly reliant on London carriers. Bottleneck of submission in London is impacting the Pacific’s ability to access additional capacity for new opportunities.

Differentiation is still possible, and the best way to maximise results in the market is to look carefully at the specific controls that lower the likelihood and impact of ransomware for clients

Conclusion

It is expected the insurance market will continue to increase in 2021 and beyond, despite some competition returning on low risk portfolios. With reinsurance costs increasing between 4-6% this additional cost to insurers will be passed onto insured’s in addition to the technical premium increase required by insurers for non-catastrophic losses.

After four years of rate increases, insurer rates should be approaching “technical rates” now. However, the volatility of NAT CAT, unknown COVID losses and increasing claims activity in cyber space will continue to create uncertainty and poor underwriting results for insurers.

Some commentary from rating agencies:

“market hardening will continue for at least two more years, which should help to balance against uncertain claims reserve developments... and COVID-19 losses”
 AM Best, December 2020:

“reinsurance pricing momentum should continue through 2021 and into the January 2022 renewals”
 Moody’s, February 2021

Below is a graphic which illustrates our view of market sentiment:



“The absence of information gets filled with price”

Source: Marsh Pty Ltd

Appendix B

Table 21 - Asset Base Values and Revenue forecasts supplied by ElectraNet

Contracted Insured Assets	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Substations & Sw itchyards								
Underground Cable								
Overhead Lines								
Radio Sites								
Occupied Sites and Buildings								
Total Contracted Insured Assets								
Regulated Insured Assets	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Substations & Sw itchyards	1,567,224,745	1,673,825,531	1,763,785,296	1,789,354,137	1,831,144,835	1,871,657,845	1,907,691,315	1,932,297,520
Underground Cable	109,524,470	109,373,002	107,644,897	106,457,406	105,138,748	103,722,171	102,272,136	100,341,951
Overhead Lines								
Radio Sites	152,206,750	148,633,102	146,695,827	142,369,821	144,095,679	151,251,473	154,165,189	152,128,589
Occupied Sites and Buildings	32,580,828	35,571,995	33,484,962	37,919,940	38,038,842	39,143,172	39,968,551	40,135,087
Total Regulated Insured Assets	1,861,536,793	1,967,403,630	2,051,610,982	2,076,101,304	2,118,418,105	2,165,774,661	2,204,097,191	2,224,903,147
TOTAL Insured Assets	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Substations & Sw itchyards								
Underground Cable								
Overhead Lines								
Radio Sites								
Occupied Sites and Buildings								
Total Regulated Insured Assets								
Revenue	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Contracted								
Regulated	317,658,474	324,600,000	349,338,393	356,311,893	364,435,804	372,744,940	381,243,525	389,935,877
TOTAL Electr aNet								

ElectraNet provided Marsh with data, including:

Values in this report are rounded, and therefore may not total exactly across each category.

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