

Ausgrid Revenue Proposal 2024-2029

Premium Projections and Insurance Market
Update

3 November 2023

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Executive Summary

Introduction

Marsh Pty Ltd has been engaged by Ausgrid to provide a forecast of its cost of managing risk for the forthcoming regulatory period (2024 – 2029). We understand that this report will be provided to the Australian Energy Regulator (AER) as part of Ausgrid's Revenue Proposal.

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

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

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

Summary of Ausgrid's program

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

- Property (Industrial Special Risks);
- Liability (including General and Products Liability, Bushfire Liability, Failure to Supply Liability and Professional Indemnity);
- Directors' and Officers' insurance (D&O);
- Cyber Insurance;
- Workers Compensation (Excess of Loss cover);
- Other ancillary lines (including Crime, Contract Works, Motor Vehicle, Mobile Plant & Equipment, Drones, Marine Cargo, Asbestos Removal Liability, Corporate Travel and Statutory Liability insurance).

Ausgrid retains exposure to the following risks:

- Towers and Lines – consistent with industry practice, and reflecting the lack of availability of commercial cover, Ausgrid does not commercially insure transmission towers or lines.
- 'Below deductible' risks – Ausgrid retains exposure to all risks for which commercial cover is held but where claims are less than the deductible.
- Workers' Compensation – Ausgrid, as a self-insured employer, retains exposure to all Workers' compensation risks, but commercial cover is held for losses in excess of \$1,500,000.

It is noted that Ausgrid continues to have insurance requirements as a condition of the Distribution Network Lease:

- [REDACTED]
- [REDACTED]
- [REDACTED]

█ [REDACTED]

The requirements of the lease (in particular the required [REDACTED] add significant cost to the insurance program. This should be reviewed but this report will focus on a lease compliance insurance program.

Apart from the above, Marsh has reviewed Ausgrid's insurance program and considers Ausgrid'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 – FY2029) on the basis of:

- Projected growth in Ausgrid'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 Property and Liability policies' claims performance and subsequent renewal pricing;
- An allowance for all current statutory taxes and levies, excluding GST.

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

- Significant increases in the premiums that Ausgrid must pay to continue purchasing Property and Liability coverage;
- Increasing (but moderating) premium cost and the availability of Cyber Insurance in the insurance market for critical infrastructure;
- Increases in deductibles will increase Ausgrid's expected value of uninsured risks.

Insurance Premium Forecasts

Our forecast of Ausgrid's average annual insurance premium for the next regulatory period is **\$23.08m** (\$nom) inclusive of all costs, and stamp duty (excluding GST).

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

Year	FY25	FY26	FY27	FY28	FY29	Total	Average
General Liability (Bushfire) & Professional Indemnity Premium							
Directors & Officers Liability Premium							
Industrial Special Risk/Property Premium							
Cyber Premium							
NSW Workers Compensation (Self Insured) Premium	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	\$ -	\$ -
NSW Workers Compensation (Excess of Loss) Premium							
PLUS ES NSW Workers Compensation Direct (new) Premium	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	\$ -	\$ -
PLUS ES Victorian Workers Compensation Direct (new) Premium	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	\$ -	\$ -
Victorian Workers Compensation Direct Premium	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	\$ -	\$ -
Motor Vehicle Compulsory Third Party (CTP) Premium							
Motor Vehicle (including Claims Handling) Premium							
Crime Premium							
Corporate Travel Premium							
Mobile Plant & Equipment Premium							
Contract Works Material Damage Premium							
Marine Transit Premium							
Asbestos Removal Liability Premium							
Drone Hull & Liability Premium							
Grand Total							

Note that this forecast allows for the expected increase in Ausgrid's regulated asset base over the regulatory period. These increases become a factor in the **Industrial Special Risks / Property** premium only. Please refer to Tables 5 (Property Premiums) and 18 (Consolidated Premiums) which show the impact to the insurance premium of removing these forecasted increases from the Declared Values for insurance purposes.

Scope of Report

Background and Scope

The scope of our review is to provide a forecast of Ausgrid's insurance premiums payable for the forthcoming 5 year regulatory period (2024 – 2029), with separate estimates for each year. Our estimates include an allowance for the following insurance classes:

- Property;
- Liability (including General and Products Liability, Bushfire Liability, Failure to Supply Liability and Professional Indemnity);
- Financial Risks (including Directors' and Officers' insurance (D&O) and Crime Insurance);
- Other ancillary lines (including Contract Works, Motor Vehicle, Mobile Plant & Equipment, Drones, Workers Compensation (Excess of Loss cover), Marine Cargo, Asbestos Removal, Corporate Travel and Statutory Liability insurance)
- Cyber Insurance.

Ausgrid retains exposure to the following risks:

- Towers and Lines – consistent with industry practice, and reflecting the lack of availability of commercial cover, Ausgrid does not commercially insure transmission towers or lines.
- 'Below deductible' risks – Ausgrid retains exposure to all risks for which commercial cover is held but where claims are less than the deductible.
- Workers' Compensation – Ausgrid, as a self-insured employer, retains exposure to all Workers' compensation risks, but commercial cover is held for losses in excess of \$1,500,000.

Approach and Methodology

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 will be a level of uncertainty in these projections.

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

Insurance Market Drivers

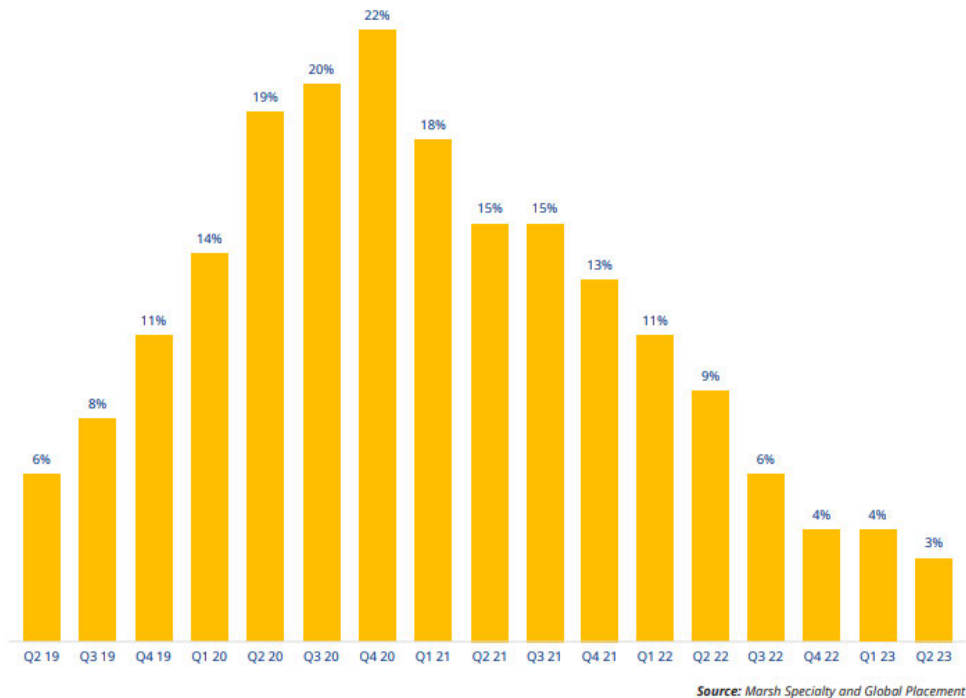
The global general (non-life) insurance industry generates approximately US\$2.9 trillion in revenue each year. The market cycle and cost of insurance is influenced by a number of key factors including:

- 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



Composite pricing was relatively consistent across regions, driven largely by rate decreases for financial and professional lines and either decreases or moderating increases for cyber insurance. Property insurance experienced the largest increases of any major product line.

Globally, cyber insurance pricing increases moderated to 1%, compared to 11% in the prior quarter and 28% in the fourth quarter of 2022.

Regionally, composite pricing increases for from Q3 2022 to Q2 2023 were as follows:

Figure 2 – Composite Insurance Pricing Change by Region



As shown above, the level of premium increases globally are in decline but there remains consistent pressure from insurers to continue premium increases albeit at the slower pace now that pricing is getting closer to “technical rates” whereby insurers believe they can make adequate profit.

Whilst each class of insurance unique in respect of insurer appetite and pricing, we generally expect pricing to continue to increase in the next few years but at a more modest rate than what has been seen in previous years. Most insurers globally are now generating profit from their underwriting activities which will develop more appetite for growth and competition in the market. Please refer to the **Insurance Market Update** on page 26 of this report for more insights.

Alternative Risk Transfer Options

When facing difficult operating conditions and higher rates for commercial insurance, organisations take a hard look at their options. Many conclude that one solution is to retain more risk by increasing their deductibles or self-insured retentions and buying insurance above those levels.

In 2020, Marsh captive clients opted to do exactly that — by increasing the premium volume in existing captives. In addition, many organisations decided to form a new captive entity.

It is important to note that, for the vast majority of captive parents, a captive is an effective way to supplement — rather than replace — their insurance purchasing. Fully self-insuring is often inefficient. Most organisations are best-served by exploring captives as one component of an effective risk financing program that takes into account specific risks and exposures, risk tolerance, risk management strategies, and ESG approach.

By many measures, 2020 was a year of historic growth for captives. Marsh's benchmarking data show increases in the total number of captives, overall net premium volume, certain types of captive vehicles, such as cells, third-party premium volume, parent company regions, and more.

When looked at by captive type, cell captives experienced the most rapid growth in 2020. This type of captive vehicle is alternately known as protected cell companies (PCCs), segregated portfolio companies (SPCs), segregated account companies (SACs), or incorporated cell companies (ICCs). Cells can be easy and quick to set up, which may have helped their steep growth during the pandemic. Also on the rise are holding company captives, special purpose vehicles, and risk retention groups. D&O and cyber were the top two coverages written in cell facilities formed in the first half of 2021.

Still, single-parent captives account for the vast majority of all captives — and represent nearly 75% of all captives managed by Marsh.

Some of Ausgrid's peers have already formed their own captives or are utilising PCC's for property, liability, D&O (typically listed TNSP and DNSP's) and increasing, cyber risks. Globally, cyber has shown continuous growth within captives. The number of captives writing cyber risk grew by 13% between 2019 and 2020, with a 127% increase over the past five years.

For liability programs, other DNSP and TNSP's in Australia are using captives to their competitive advantage by stepping into layers which cannot be filled or where insurer terms are unacceptable.

As illustrated in this report, Ausgrid's insurance costs will continue to rise. The utilisation of a Captive or PCC would assist in moderating these costs subject to Ausgrid's risk bearing capacity and/or appetite being sufficient to take on a reasonable level of risk beyond its current deductibles.

Analysis of Insurance Related Costs

Basis of Estimates

We have prepared our estimates for the forthcoming regulatory period (2024 – 2029) on the basis of:

- Projected growth in Ausgrid's regulated asset values over the regulatory period.
- Continuing hard market conditions resulting in premium increases, coverage reduction, increases in deductible and capacity contraction, which will begin to soften throughout the regulatory period.
- Absence of any catastrophic event causing a major claim, which could have a significant impact on Property and Liability policies claims performance and subsequent renewal pricing.
- Allowance for all reasonably expected statutory taxes and levies, excluding GST.

Three main implications for Ausgrid from the state of the insurance market and continuing associated pressures on price, capacity, and coverage:

- Significant increases in the premiums that Ausgrid must pay to continue purchasing Property and Liability coverages.
- Increases in deductibles will increase Ausgrid's expected value of uninsured risks.
- Increasing (but moderating) premium cost and availability of Cyber Insurance in the insurance market.

Comments on insurance program

Marsh has reviewed Ausgrid's insurance program and considers its 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:

- Compliance with insurance specifications contained in the Network lease;
- Annual development and Board approval of Ausgrid's Insurance Renewal Strategy. This Strategy forms a critical component of the insurance program renewal process, supports good governance, and provides a transparent mechanism to review the insurance program's structure and suitability on an annual basis;
- Ausgrid and external generated risk assessments (i.e. loss exposure analysis) and reviews.
- Maximum Foreseeable Loss (MFL) studies: Ausgrid periodically undertakes an analysis of its Bushfire Liability profile to ensure that it is maintaining appropriate level of insurance cover. The most recent analysis (May 2020) shows that the limit current purchased (in compliance with Network Lease) is extremely conservative and represents a return period of 4,684 years (probability that the policy limit will be exceeded is 0.0213%)
- Underwriter engineering reports: Ausgrid participates in regular Risk Engineering Visits arranged by its lead Property Underwriters which involve the inspection of Ausgrid sites to assess risk exposures. This also provides Ausgrid with the opportunity to address any risk recommendations identified as part of those inspections.
- Broker advice, expertise, and market analysis:
 - Including insurance renewal analysis against market updates.

- Policy (e.g. limits, premium rates, coverage) benchmarking against comparative industry peers.
- Continuous review and monitoring of policy wording.
- Ausgrid claims history and loss ratios:
 - This provides a mechanism to validate coverage and limits, and an opportunity to pursue improvements where coverage gaps or clarifications are required.
 - Also allows Ausgrid to benchmark Loss Ratios (premium v. claims)

As outlined above, Ausgrid, 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

Ausgrid purchases Property insurance to cover its regulated assets consistent with good industry practice. Note that this excludes pole and wire infrastructure as per industry standard due to lack of insurance market appetite to insure those types of assets. Coverage for business interruption is limited to Additional Increased Costs of Working and Rents. This again is standard for a DNSP.

Ausgrid's current policy limit for Property and Business Interruption is \$1,000,000,000 (as required under the Network Lease). Deductibles vary depending on asset which has sustained damage, but range from \$200,000 to \$10,000,000. There is a threshold of 7 days for the limited business interruption. It is understood these deductible levels have been stable for many years.

While Marsh has not been involved in procuring insurance for Ausgrid, it considers the cost of its Property 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 property insurance policy is of an adequate and sustainable level.

Marsh considers Ausgrid's property insurance to be prudent and efficient for its risk exposure.

Basis of Insurance Premium Projection

Insurance Premiums have been calculated by obtaining the regulated portion of the Property base premium for FY2023. The premium is forecast using projected insurance market rate change in conjunction with the change in asset base, to provide an overall commercial Insurance premium per year for the regulatory period.

Increased asset values

Growth in Ausgrid's value of assets to be insured will drive the cost of Property insurance, which is projected to grow as shown in Table 2.

Table 2 – Ausgrid's projected Regulated Asset growth.

Year	FY25	FY26	FY27	FY28	FY29
Regulated Asset Base	\$17,362,000,000	\$17,777,000,000	\$18,290,000,000	\$18,732,000,000	\$19,107,000,000
Growth %	3.9%	2.4%	2.9%	2.4%	2.0%

Results

In relation to Ausgrid's Property insurance, Marsh projects that premiums percentage, per dollar insured, will change as shown in Table 3 .

Table 3 – Ausgrid's projected Property Insurance premium rate movement.

Year	FY25	FY26	FY27	FY28	FY29
Industrial Special Risk/Property Rate Movement YoY (%)	2.5%	2.5%	-2.5%	-2.5%	-5.0%

Therefore, allowing for stamp duty and associated fees, Marsh projects that Ausgrid’s cost of Property insurance will be as shown in Table 4 .

Table 4 – Ausgrid’s projected Property Insurance premium movement.

Year	FY25	FY26	FY27	FY28	FY29
Industrial Special Risk/Property Premium	[REDACTED]				

If we look to exclude *Opex Trended Output Growth* (i.e. not factor the increase in Declared Values over the rest period, then the premium should more closely reflect Table 5.

Table 5 – Ausgrid’s projected Property Insurance premium movement not factoring projected Regulated Asset growth (i.e. no increases in property declared values)

Year	FY25	FY26	FY27	FY28	FY29
Industrial Special Risk/Property Premium	[REDACTED]				

Liability

Summary of Insurance Cover

Ausgrid seeks to procure a total program limit of \$860,000,000 to provide a prudent level of coverage for a bushfire event. However, in the past two years it has not been efficient to purchase coverage to that level due to availability and insurer pricing and therefore lower limits of \$850,000,000 (2022) and \$818,500,000 (2023) have been accepted.

This policy covers legal liabilities for third party property damage and bodily injury, arising out of Ausgrid's business operations.

Consistent with good industry practice, the policy provides additional coverages specifically designed for power utilities including:

- **Financial Loss – Failure to Supply Liability.** This protects Ausgrid's legal liability for losses incurred by third parties due a negligent act of Ausgrid which leads to a failure to supply event. This coverage extension does not require property damage to be sustained by the third party. The current program limit is \$175,000,000 but this is not supported by all insurers and therefore there are uninsured gaps within the program for this coverage.
- **Professional Indemnity.** This protects Ausgrid from civil liability claims arising from the provision of professional services to third parties. This coverage is limited to \$50,000,000.
- **Electromagnetic Field Liability.** This protects Ausgrid from legal liability for bodily injury sustained due to electromagnetic fields. The coverage is to the full program limit, but not all insurers provide this extension so there are uninsured gaps within the program for this coverage.

The program is subject to a deductible of \$250,000 except for Bushfire Liability where it increases to \$10,000,000.

Given Ausgrid's metropolitan focused distribution area and excellent claims history (last bushfire loss was \$2,300,000 in 1990) insurers should give favourable consideration when underwriting the liability program. However, the bushfire liability insurance market is extremely challenging and insurers are reducing capacity, monitoring accumulations and setting minimum rates regardless of risk profile.

Basis of Premium Projection

The current Ausgrid Combined Liability Program is a complex placement with more than 20 different insurers providing various layers of different size capacity at varying premiums. The complexity of the placement is exacerbated by the fact that discussions have to be undertaken with numerous individual insurers in parallel, with a high degree of confidentiality in place.

Before considering future forecasts for the Ausgrid Liability placement, it is important to explain some fundamental aspects and influencers within the current insurance market:

Not a simple actuarial exercise

Household (or domestic) insurance products are priced by insurers on an actuarial basis. This is more difficult with bushfire risk for network businesses.

The reason an actuarial approach can be taken by household insurers is because there is a high volume of incidents and claims, and a significant amount of data available to the insurance market, to adopt such an approach to pricing. This is not the case with bushfires although insurers are increasing turning to actuaries in an effort to collate global loss data to help build models to assist with pricing adequacy.

Whilst there have been, and continue to be, serious and catastrophic bushfires, and their frequency is increasing, there is an insufficient volume of incidents and occasions on which a network business

has been at fault, for the bushfire liability risk insurers of those networks to be able to adopt an accurate actuarial approach to pricing of premiums. Each country or state has different legislations they would impact the defensibility of a claim and different geographical and climate conditions which alter the inherent bushfire risk.

Weather

Weather conditions have a major impact on bushfire risk. The years 2020-2022 saw La Nina weather conditions which delivered record rain to parts of South East Australia literally dampening the ability of a bushfire to take hold. Now we are seeing a return to more normal conditions, being a drier and hotter summer. The three years of higher rainfall has promoted growth of vegetation providing more fuel for a fire. As widely reported in the media, fire mitigation efforts such as “back burning” are well behind schedule (as at September 2023) in NSW.

The Bureau of Meteorology released its climate outlook on 7 September 2023 which forecast:

- Below median rainfall
- Above median maximum temperatures
- Above median minimum temperatures

These combined with high fuel loads and a possible El Nino pattern will increase bushfire risk in South East Australia.

Insurers perception of bushfire liability risk has changed dramatically

There has only recently been an increased recognition of, and focus on, the increased risk, severity and frequency of bushfires in Australia and globally by insurers. Recent losses are leading, and will continue to lead, to significant pressure to recover increased premiums.

The catastrophic bushfires that occurred in Australia during 2019/2020 led to insurers becoming extremely concerned about their bushfire liability exposure. To a far greater extent than in the past, insurers are having to justify – internally within their organisations – the risks proposed to be underwritten. There is an increased focus on due diligence and analysis of profitability of proposed underwritten risks. Regardless of the recent bushfires, but certainly severely accentuated by their occurrence, this has resulted in insurers in the primary layer having no appetite to take on new risk, whilst reducing capacity and to seeking premium increases to recover historical paid losses.

For those underwriters that remain willing to underwrite bushfire liability, their view of your world is that bushfire frequency in Australia continues to increase, which in turn increases the risk they insure. In this environment, insurers that continue to offer capacity are being staunch in their need to receive a minimum dollar amount per quantum of capacity offered, whilst simultaneously looking to reduce capacity they offer. Many of Ausgrid’s insurers need to receive a minimum dollar amount per quantum of capacity offered, and that minimum is increasing significantly as historically it has been inadequate.

Underwriter stakeholders are influencing behaviour

Treaty reinsurers are challenging underwriting approaches taken, forcing accountability on direct insurers in way that has not been seen previously in Australia and is more akin to the USA.

In the current environment, underwriters have been required by Lloyds and/or management to assess the level of aggregated risk they have to Bushfire exposure. Specific to your risk, this requirement is driven by the fact that Ausgrid primary layer insurers are also the primary layer insurers for other DNSP’s and TNSP’s, as well as government and regulatory bodies at Federal, State and Local level and ancillary service providers. Because of their in-depth analysis, each insurer has identified the fact that some insureds have been paying comparatively less to other peer organisations within their portfolio. Consequently insurers are now:

- a) Mandating minimum dollar amounts per quantum of capacity offered which are required to take appropriate account of bushfire exposure as well as increased internal costs (particularly the cost of reinsurance which has trended upwards significantly in recent times)
- b) Required to determine the level of volatility in their portfolio and demonstrate the portfolio is robust enough to sustain large bushfire losses. Where this has not been demonstrated, management has exited from this sector (there was 6 examples of this in the year 2020)

As a result, whereas previously Ausgrid's favourable network location and strong mitigation practices has assisted to secure more favourable premiums than their peers, the benefit of this positive risk differentiation has been heavily diluted in today's market. Strong risk mitigation practices do however remain crucial for the purposes of ensuring that Ausgrid can access maximum available capacity.

In summary, underwriters are now faced with a decision – correct the portfolio and accounts that are under-priced or to which they are overexposed or exit the sector (and possibly lose their jobs). The reality is that for a number of insurers it is easier not to write an account in this market than face the consequences of a large bushfire loss. As noted earlier, many of the insurers need to receive a minimum dollar amount per quantum of capacity offered. Like other businesses, they are experiencing increased internal costs and increased costs of reinsurance. Coupled with the impacts on their businesses of recent bushfires, these costs are pushing up the minimum price per million dollars of cover that they are willing to accept.

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

- It is important to note that the placement/program structure can vary significantly year by year as insurer appetite, capacity and pricing changes. At the 2023 renewal, the Ausgrid liability program saw a loss of circa \$100m of capacity from the program's largest insurer. Much of this capacity was replaced by new insurers who were previously not utilised due to their high premiums. This trend of insurers "de-risking" their portfolios will likely continue into the future. So whilst the market conditions may be improving, procuring these large limit "bushfire exposed" programs will continue to increase and Ausgrid may need to continue to reduce the limit purchased if insurers premiums are not considered reasonable. Our projections assume capacity will be purchased to the extent it is commercial reasonable to do so at or around the \$800m+ level.
- The projections below are based on the following assumptions:
 - No major changes to Ausgrid's risk profile
 - No additional significant losses to the liability program,
 - No significant electricity infrastructure related bushfire event in Australia, and
 - No further significant deterioration in the global insurance market.

Revenue Projections

Growth in the amount of Ausgrid's (regulated) revenue also impact future premiums as insurers tend to link revenue to premium increases for this class of business. Ausgrid's revenue is projected to grow as shown in Table 6.

Table 6 – Ausgrid's projected Regulated Revenue growth.

Year	FY25	FY26	FY27	FY28	FY29
Forecast Regulated Revenue	\$2,091,000,000	\$2,143,000,000	\$2,197,000,000	\$2,254,000,000	\$2,313,000,000

Year	FY25	FY26	FY27	FY28	FY29
Regulated Growth	5.3%	2.5%	2.5%	2.6%	2.6%

Results

In relation to Ausgrid's Liability insurance Marsh projects that Insurance premiums will grow as shown in Table 7.

Table 7 – Ausgrid's projected Liability Insurance premium changes.

Year	FY25	FY26	FY27	FY28	FY29
General Liability (Bushfire) & Professional Indemnity Rate Movement YoY (%)	10%	7.5%	5%	3%	0%

Therefore, allowing for stamp duty and associated fees, Marsh projects that Ausgrid's cost of Liability insurance will be as shown in Table 8.

Table 8 – Ausgrid's projected Liability Insurance premium movement.

Year	FY25	FY26	FY27	FY28	FY29
General Liability (Bushfire) & Professional Indemnity Premium					

Please note the premiums in Table 8 **do not** take in account the forecasted projected Regulated Revenue growth. Modest revenue movements as projected would not make an impact on Liability insurance premiums for a business like Ausgrid.

The above premiums have been developed utilising expected market movements over a six year period from FY24 to FY29. The base premium for which we have applied these movements is the actual FY24 liability premium as advised in early September 2023. By FY25, there is an expectation that the market would have fully implemented the significant pricing corrections currently being seen and more modest premium increases will likely be applied as there is no suggestion that the risk of bushfire both globally and in Australia will reduce.

We have assumed no change to the current policy limits and therefore assume capacity is available to provide the protection required by Ausgrid.

Directors & Officers Liability (D&O)

Summary of Insurance Cover

Ausgrid purchases D&O insurance with a \$150,000,000 limit of liability.

As Ausgrid is not a listed entity, it does not require Side C (Entity Securities Coverage) and therefore buys Side A and Side B coverage which provides protection to directors and officers.

A \$150,000 deductible applies to Side B (Company Reimbursement) and \$Nil for Side A (Non Indemnifiable Liability of Directors and Officers).

Marsh considers Ausgrid's D&O insurance to be prudent and efficient for its risk exposure.

Basis of Premium Projection

2023 saw a continuation of pricing moderation and general improvement of market conditions in the Australian D&O space. The lack of mergers and acquisitions activity, particularly in the US, and a substantial increase in competition from London markets has led to some local insurers not meeting their growth targets, which has further driven down pricing.

A more optimistic claims landscape has attracted new entrants and a renewed interest from local and locally represented global insurers in the Australian D&O market as insurers focused on new growth strategies. Historically, only a select few London insurers were consistently writing Australian-based D&O risks at low attachment points. In the current market, the reverse is observed – over 40 London based insurers are actively seeking Australian D&O risks, with a number of insurers having a keen appetite for primary layer or low attachment point participation.

A flattening of premium rises was initially expected for the first half of 2023 compared to the second half of 2022. However, persistent market competition has led to a continued decline in premium rates in 2023.

There exists variation in insurer rating dependent on historic pricing, industry segment, insurer portfolio profitability and strategy. Larger premium reductions were achieved by ASX listed companies who got relief from Side C premiums which had grown exponentially over the past five years.

Results

In relation to Ausgrid's D&O insurance Marsh projects that premiums will grow as shown in Table 9.

Table 9 – Ausgrid's projected D&O Insurance Premium movement.

Year	FY25	FY26	FY27	FY28	FY29
Directors & Officers Liability Rate Movement YoY (%)	-5%	-2.5%	0%	0%	0%

Therefore, allowing for stamp duty and associated fees, Marsh projects that Ausgrid's cost of D&O insurance will be as shown in Table 10.

Table 10 – Ausgrid's projected Financial Lines Insurance Premium movement.

Year	FY25	FY26	FY27	FY28	FY29
Directors & Officers Liability Premium					

Cyber

Summary of Insurance Cover

Ausgrid purchases Cyber insurance with a [REDACTED] limit of liability.

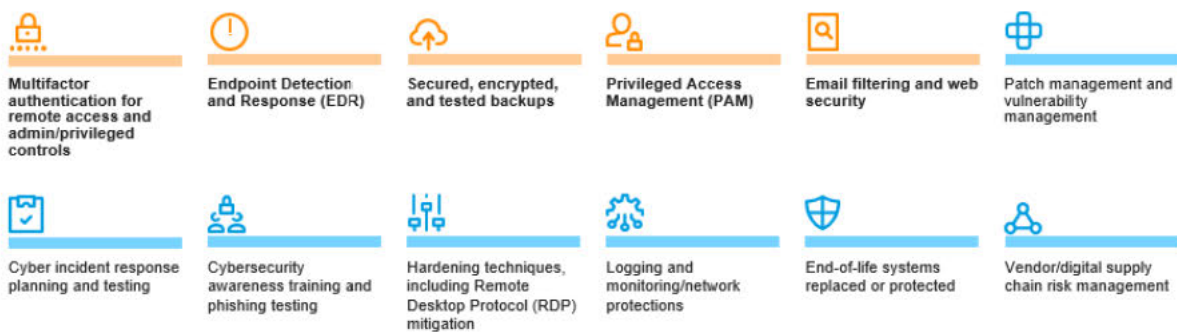
A [REDACTED] deductible applies.

It should also be noted that there is also a Failure to Supply exclusion.

As a critical infrastructure provider, maintaining cyber insurance is consistent with good industry practice however there is very low insurer appetite for underwriting critical infrastructure so the sustainability of this insurance with any meaningful coverage or at low attachment points will be a challenge going forward.

Funding Risk Management vs Insurance

Depending on the future availability and cost of procuring cyber insurance for Ausgrid's critical infrastructure, consideration should be given to cost / benefit of retaining the risk (self-insurance) and utilising the funds saved to improve controls to reduce the impact of cyber events. Investment in enhancing the below 12 Key Controls & Best Practices may provide a better outcome than simply transferring the risk.



Basis of Premium Projection

This class of insurance presents the greatest challenge in respect of future premium projections. Like the liability program insurers will continue to reduce capacity and become more selective where they deploy that capacity. Critical infrastructure risks such as Ausgrid (and other DNSP's and TNSP's) will have limited choice of insurers and may find coverage being offered does not adequately transfer the risks whilst premiums continue to rise. Whilst the market has improved during 2022-23 should there be cyber-attacks targeting electricity grids elsewhere in the world, it may get to the point whereby it simply becomes uneconomic to continue purchasing this insurance in the commercial market. At that stage self-insurance (which is already being imposed on Ausgrid – especially for Ransomware) will become the most efficient option. In addition to transferring the financial risk of cyber events, one of the key attractions to this class of business is accessing the insurers network of response consultants (including access of digital currency wallets) and data recovery specialists.

However, based on the assumption that coverage and capacity will stabilise and Ausgrid continues to buy this class of insurance throughout the regulatory period, we have forecast the costs below.

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 Ausgrid's Cyber insurance premiums will grow as shown in Table 11.

Table 11 – Ausgrid’s projected Cyber Insurance premium rate movement.

Year	FY25	FY26	FY27	FY28	FY29
Cyber Rate Movement YoY (%)	5%	5%	5%	5%	5%

Therefore, allowing for stamp duty and associated fees, Marsh projects that Ausgrid’s cost of Cyber insurance will be as shown in Table 12.

Table 12 – Ausgrid’s projected Cyber Insurance premium movement.

Year	FY25	FY26	FY27	FY28	FY29
Cyber Premium					

Workers Compensation – NSW Excess of Loss

The only workers compensation coverage placed into the general insurance market is the NSW Excess Workers Compensation. Ausgrid self-insures workers compensation in NSW but with this policy responding to any claim greater than \$1,500,000 (indexed) for any event or series of events.

This policy was restructured and moved to a new insurer [REDACTED] at renewal 2021 at a higher premium and attachment point. The change of insurer was due to the incumbent insurer (Vero) exiting this class of business.

Some observations in respect of this small market segment:

- The market experienced significant challenges in 2021
- We estimated the Excess of Loss Market to be worth only \$35m-\$40m at the start of 2021. 85% of this is placed with [REDACTED]
- Late reporting of claims has resulted in many unexpected losses for the market which would not have been factored in pricing risks
- This combined with the small premium pool, portfolio profitability has resulted in Vero exiting this class of insurance in 2021. With the exit:
 - We are experiencing significant rate increases, up to 400%
 - Appetite to write business is diminished
 - Capacity is restricted i.e. retention limits increasing, un-indexed no longer being offered

Even with sizable increases across policies in this class, insurers are still reporting that it is unprofitable and will continue to seek increases in 2022.

However, for Ausgrid, [REDACTED] has underwritten the risk in 2021 with a premium of [REDACTED] or effective premium rate of [REDACTED] we would expect to see the premium stabilise with much more modest increases in the future unless there are deterioration in the historical claims costs or significant increases in the wages.

Results

The results are based on the assumption that there will be no material change of the current deductibles for the forthcoming regulatory period.

Marsh projects Ausgrid's NSW Excess Workers Compensation insurance premiums will grow as shown in Table 13.

Table 13 – Ausgrid's projected NSW Excess Workers Compensation Insurance premium rate movement.

Year	FY25	FY26	FY27	FY28	FY29
Excess of Loss Workers Compensation (NSW) Rate Movement YoY (%)	10%	5%	5%	5%	5%

Therefore, allowing for stamp duty and associated fees, Marsh projects that Ausgrid's cost of NSW Excess Workers Compensation insurance will be as shown in Table 14.

Table 14 – Ausgrid’s projected NSW Excess Workers Compensation Insurance premium movement.

Year	FY25	FY26	FY27	FY28	FY29
NSW Workers Compensation (Excess of Loss) Premium	[REDACTED]				

Other Classes

As described in the Executive Summary, Ausgrid also procures other classes of insurance including Crime, Contract Works, Motor Vehicle, Mobile Plant & Equipment, Drones, Marine Cargo, Asbestos Removal Liability, Corporate Travel and Statutory Liability insurance.

Please see below Table 15 where we forecast the insurance premium rate movement for each class:

Table 15 – Ausgrid’s projected “Other Classes” insurance premium rate movement

Year	FY25	FY26	FY27	FY28	FY29
Motor CTP Rate Movement YoY (%)	5%	5%	5%	5%	5%
Motor Vehicle Rate Movement YoY (%)	5%	2.5%	2.5%	2.5%	2.5%
Crime Rate Movement YoY (%)	10%	5%	0%	0%	0%
Corporate Travel Rate Movement YoY (%)	2.5%	2.5%	2.5%	2.5%	2.5%
Mobile Plant & Equipment Rate Movement YoY (%)	5%	5%	5%	5%	5%
Contract Works Material Damage Rate Movement YoY (%)	5%	5%	5%	5%	5%
Marine Transit Rate Movement YoY (%)	5%	5%	5%	5%	5%
Asbestos Removal Liability Rate Movement YoY (%)	5%	5%	5%	5%	5%
Drone Hull & Liability Rate Movement YoY (%)	30%	25%	20%	15%	10%

Therefore, allowing for stamp duty and associated fees, Marsh projects that Ausgrid’s cost of “Other Classes” insurance will be as shown in Table 16.

Table 16 – Ausgrid’s projected “Other Classes” insurance premium movement.

Year	FY25	FY26	FY27	FY28	FY29
Motor Vehicle CTP Premium					
Motor Vehicle (including Claims Handling) Premium					
Crime Premium					
Corporate Travel Premium					
Mobile Plant & Equipment Premium					
Contract Works Premium					
Marine Transit Premium					
Asbestos Removal Liability Premium					
Drone Hull & Liability Premium					
Grand Total					

Consolidated Premium Table FY23 to FY29

Table 17 – Forecast Annual Insurance Premiums for various insurance classes from FY23 to FY29 which factors projected regulated asset growth (i.e. increases in declared values for property insurance purposes)

Year	FY23 Actuals	FY24	FY25	FY26	FY27	FY28	FY29	Total	Average
General Liability (Bushfire) & Professional Indemnity Premium									
Directors & Officers Liability Premium									
Industrial Special Risk/Property Premium									
Cyber Premium									
NSW Workers Compensation (Self Insured) Premium	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	\$ -	\$ -
NSW Workers Compensation (Excess of Loss) Premium									
PLUS ES NSW Workers Compensation Direct (new) Premium	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	\$ -	\$ -
PLUS ES Victorian Workers Compensation Direct (new) Premium	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	\$ -	\$ -
Victorian Workers Compensation Direct Premium	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	\$ -	\$ -
Motor Vehicle Compulsory Third Party (CTP) Premium									
Motor Vehicle (including Claims Handling) Premium									
Crime Premium									
Corporate Travel Premium									
Mobile Plant & Equipment Premium									
Contract Works Material Damage Premium									
Marine Transit Premium									
Asbestos Removal Liability Premium									
Drone Hull & Liability Premium									
Grand Total									

Table 18 – Forecast Annual Insurance Premiums for various insurance classes from FY23 to FY29 which ignores projected regulated asset growth (i.e. no increases in declared values for property insurance purposes)

Year	FY23 Actuals	FY24	FY25	FY26	FY27	FY28	FY29	Total	Average
General Liability (Bushfire) & Professional Indemnity Premium									
Directors & Officers Liability Premium									
Industrial Special Risk/Property Premium									
Cyber Premium									
NSW Workers Compensation (Self Insured) Premium	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	\$ -	\$ -
NSW Workers Compensation (Excess of Loss) Premium									
PLUS ES NSW Workers Compensation Direct (new) Premium	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	\$ -	\$ -
PLUS ES Victorian Workers Compensation Direct (new) Premium	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	\$ -	\$ -
Victorian Workers Compensation Direct Premium	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	\$ -	\$ -
Motor Vehicle Compulsory Third Party (CTP) Premium									
Motor Vehicle (including Claims Handling) Premium									
Crime Premium									
Corporate Travel Premium									
Mobile Plant & Equipment Premium									
Contract Works Material Damage Premium									
Marine Transit Premium									
Asbestos Removal Liability Premium									
Drone Hull & Liability Premium									
Grand Total									

Table 19 – Forecast Annual Premium / Rate % Movement Year on Year from FY23 to FY29

Year	FY23 Actuals	FY24	FY25	FY26	FY27	FY28	FY29
General Liability (Bushfire) & Professional Indemnity	28%	10%	10.0%	7.5%	5.0%	3.0%	0%
Directors & Officers Liability	-10%	-5%	-5.0%	-2.5%	0.0%	0.0%	0.0%
Industrial Special Risk/Property	14%	5.0%	2.5%	2.5%	-2.5%	-2.5%	-5.0%
Cyber	101%	10%	5.0%	5.0%	5.0%	5.0%	5.0%
NSW Workers Compensation Self-insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured
Excess of Loss Workers Compensation (NSW)	86%	10%	10%	5%	5%	5%	5%
PLUS ES NSW Workers Compensation Direct (new)	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured
PLUS ES Victorian Workers Compensation Direct (new)	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured
Victorian Workers Compensation Direct	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured
Motor Vehicle Compulsory Third Party (CTP)	-7%	5%	5%	5%	5%	5%	5%
Motor Vehicle	7%	5%	5%	2.5%	2.5%	2.5%	2.5%
Crime Rate Movement YoY (%)	20%	20%	10%	5%	0%	0%	0%
Corporate Travel	14%	5%	2.5%	2.5%	2.5%	2.5%	2.5%
Mobile Plant & Equipment	3%	5%	5%	5%	5%	5%	5%
Contract Works Material Damage	5%	5%	5%	5%	5%	5%	5%
Marine Transit	4%	5%	5%	5%	5%	5%	5%
Asbestos Removal Liability	0%	5%	5%	5%	5%	5%	5%
Drone Hull & Liability	125%	115%	30%	25%	20%	15%	10%

Insurance Market Update

Insurance Market Overview

Insurers have now (mostly) returned to a reasonable level of profitability following four years of successive rate rises however are still being challenged by more frequent and severe weather events.

We are currently in the “Strong Profits” phase of the insurance market cycle. However, certain classes of insurance (e.g. Directors and Officers) have already entered the “Capital Flows back into the market” and “Rates start to fall” phase of the cycle. Other classes of insurance should begin to follow soon and we have seen new insurers establish themselves in Australia and insurers re-enter classes of business from which they had previously withdrawn.

The deciding factor for major classes of insurance such as property will be the level of global natural catastrophes which will continue to impact reinsurance costs faced by insurers which ultimately get passed through to insurance buyers.

Across most insurance classes, pricing appears to be stabilising as insurers achieve premium rate adequacy. Coupled with improving loss ratios and higher investment returns from increasing interest rates, this has encouraged a return of market competition, albeit cautiously.

Although this year’s property reinsurance treaty renewals were again challenging, competition remains strong among insurers for quality risks with favourable loss records. CAT-exposed accounts remain challenging, particularly for those with US or New Zealand locations. While inflationary impacts continue to increase declared values, it is encouraging to see insurers are now working with brokers and insureds to allow higher declared values to offset their need to achieve premium rate.

In the Australian liability insurance market, insurers have generally displayed broad appetite and a willingness to compete for new business, with the exception of those with US exposure. In these cases, some insurers have reduced capacity and/or adjusted pricing accordingly to limit their own exposure.

The financial and professional lines insurance market saw a much welcomed reprieve in 2022 following a number of years of substantial pricing increases and diminishing insurer appetite in the D&O market, particularly for ASX listed entities. In the first half of 2023, market conditions improved overall, notably for insureds with a sound financial position and clear pathway through the current inflationary environment.

The chart below shows that General Insurers in Australia have made good underwriting profits in both 2021 and 2022. Whilst investment income they earn has been volatile and impacts their overall result, net profit after tax of the industry has increased.



	December 2021	December 2022	Change (annual)
Gross earned premium	\$57.5bn	\$62.8bn	9.2%
Gross claims expense	\$38.5bn	\$46.2bn	19.8%
Underwriting result	\$4.0bn	\$6.8bn	69.4%
Investment income	\$0.4bn	\$-1.7bn	-
Net profit after tax	\$1.7bn	\$2.3bn	34.3%

Source: Australian Prudential and Regulatory Authority, General Insurance Statistics for December 2022

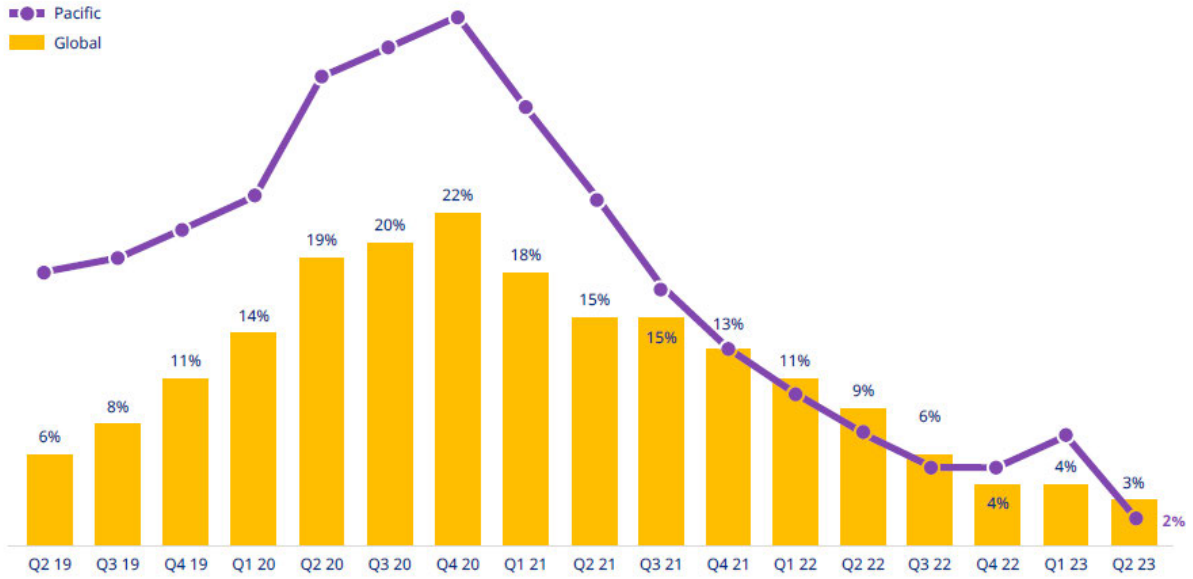
Like insurers domiciled in Australia, the major international insurers have seen improvements in profitability during the past few years with all major carriers reporting Combined Operating Ratio's below 100% for both 2021 and 2022 reflecting the impact of sustained premium increases and more disciplined underwriting.

	Swiss Re Corporate Solutions	Allianz	CHUBB	AIG	ZURICH	AXA	FM Global	QBE
2022 (YTD)	98.4%	95.0%	84.0%	88.5%	91.9%	95.6%	69.7%	94.0%
2021	97.1%	97.5%	89.1%	92.4%	94.3%	97.1%	83.1%	93.7%
2020	109.0%	115.0%	99.6%	102.8%	98.4%	112.2%	92.5%	112.7%
2019	107.8%	112%	90.6%	99.8%	96.4%	96.4%	80.6%	97.5%
2018	118%	102%	91%	115%	98%	99%	129%	95.7%
2017	133%	105%	95%	113%	101%	108%	130%	104.5%

Source: Marsh Pty Ltd

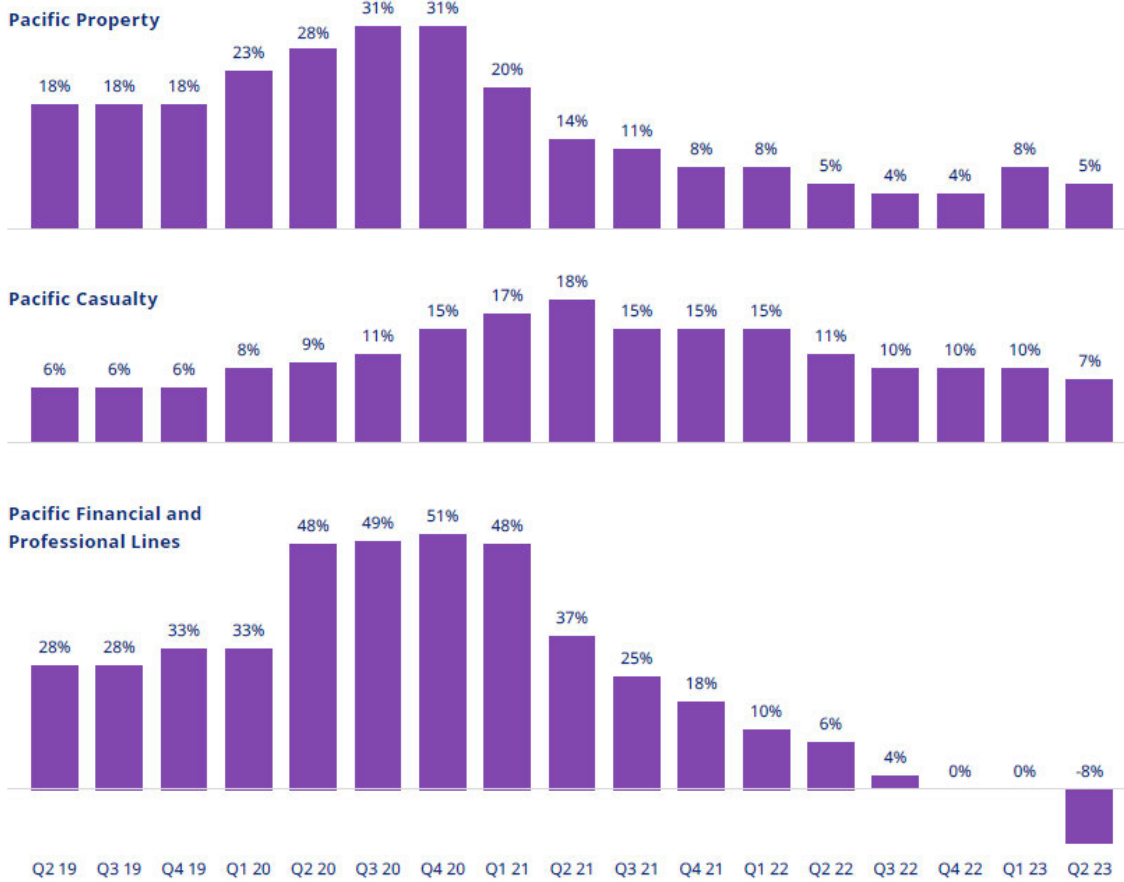
The following charts provides a snapshot of Pacific Pricing, where insurance pricing increased 2%, down from 7% in the prior quarter (see Figures 12 and 13).

12| Pacific composite insurance pricing change



Source: Marsh Specialty and Global Placement

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



Source: Marsh Specialty and Global Placement

Property insurance pricing increased 5%, compared to 8% in the prior quarter, with loss impacted and Natural Catastrophe exposed clients seeing the highest increases.

Casualty insurance pricing rose 7% compared to 10% in the prior three quarters, and remained challenging from a pricing perspective, with insurers focused on claims inflation resulting from litigation trends, as well as materials cost inflation. The emergence of new capacity fostered more competition than has been seen over the last three years.

Financial and professional lines pricing decreased 8% after being flat in the prior two quarters. D&O pricing continued to decline, generally decreasing 10% or more. Competition remained strong for both primary and excess layers from both new and legacy insurers. Macro-economic impacts, such as inflation and interest rate pressures, were important underwriting factors.

Cyber insurance pricing increased 8%, compared to 25% in the prior quarter. Increased competition among insurers opened up more options for purchasers. Ransomware claims were the most common, usually involving both business interruption (BI) and data breach. Risk information remained important to underwriters, particularly regarding an organization's ability to mitigate ransomware threats.

Property

The start of 2023 saw both Australian and global property insurers experience significant reinsurance cost increases ranging from 25-50% following the January treaty reinsurance renewals. Consequently, insurers are looking to recoup some of this increase in cost through higher premium rates.

The rise in reinsurance cost was driven by more than US\$120b in natural catastrophe property losses and business interruption losses in the last two consecutive years, of which A\$9b was due to Australian flood losses in 2022. In addition to cost increases, insurers faced increased retentions and/or a reduction in limits available for natural catastrophe coverages. For insurers with upcoming treaty renewals throughout 2023, similar outcomes are to be expected.

The second half of 2022 saw improvements in local market conditions with year-on-year average premium increases of 4% experienced throughout Q2 and Q3. However, this trend dampened as challenging market conditions returned at the start of 2023. In the first quarter of this year, premiums increased 8% on average across the Pacific region compared to the same period last year. In Australia, insureds with good claims experience and low natural catastrophe (Nat Cat) exposures saw premium increases in the range of 0-8%. For loss-impacted insureds or those with high Nat Cat, US or New Zealand exposures, higher premium increases of 10-15% were experienced.

Q2 2023 saw a lower average pricing increase of 5% across the Pacific region. This was driven by a combination of historically high-priced capacity being replaced and a wider range of 0-5% rate increases across the market in general. Overseas placements of Australian risks into London and other European markets experienced higher rate increases of 5-10%.

Power Property

Insurers are continuing to monitor the impact of increased replacement costs, lead times and the volatility of power prices on claims payments. In common with most sectors of the economy, the power market is seeing higher values for most items of equipment due to increased commodity prices. Insurers continue to press clients for accurate, updated sums insured for property damage values. This is further complicated where there is aging equipment which may not be replaced like-for-like (particularly where there is potential for replacement with renewable technology). Therefore, it is vital that clients are prepared to address these issues to avoid imposition of restrictions such as average clauses.

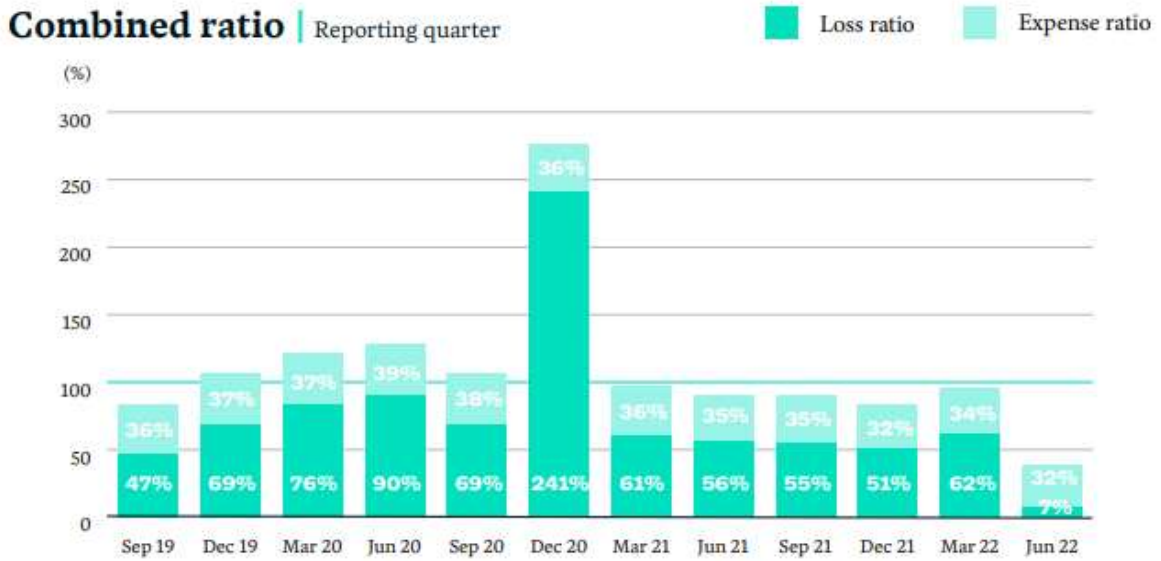
Supply chain issues remain for key components. For example, in some locations, lead times for transformers are reported to have doubled with buyers turning to manufacturers that they would have previously dismissed. This is causing some concern to Insurers due to the potential inclusion of technology that they may not be comfortable with. However, most Insurers recognise the current challenges faced by buyers. Therefore, Insurers want to ensure clients have robust contingency plans in place in the event of a claim.

For Insurers to maintain profitability in the face of these claims inflationary pressures and supply chain issues they will need to increase premium rates. By how much is difficult to say as the premium levels achieved now will need to be adequate to cover the level of claims inflation over the coming 12 months or more. Even so, there will be an impact on profitability in the short term. Continued premium rate increases similar or even higher than recently experienced therefore should be expected in the months to come as markets attempt to remain profitable.

Other areas that Insurers continue to monitor are the impact of intermittent renewables on the grid, particularly the changing load profiles for previous base-load power plants. Furthermore, grid instability and frequency changes can cause damage to equipment and infrastructure.

Coal continues to be the most challenging sector for buyers with capacity continuing to diminish. This is despite the increased utilisation of coal-fired generation (and several reports of delayed retirements).

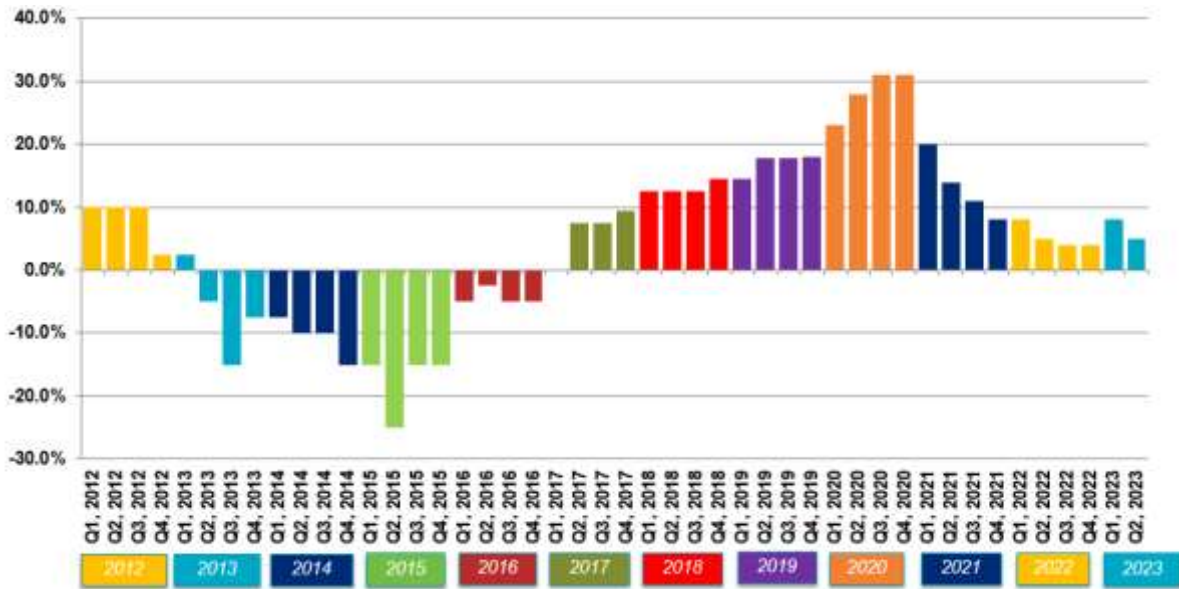
The following chart shows that the Commercial Property market in Australia has been profitable since March 2021 following several poor quarters. It illustrates the Combined Ratio (claims plus expenses divided by premium) of those insurers regulated by the Australian Prudential and Regulatory Authority.



Source: Taylor Fry RADAR 2022

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 65% to return a profit. However, this analysis does not take into account the investment income earned by insurers from premiums paid. The analysis above is purely their underwriting result.

The below chart illustrates 10 years of **Property** rate movements in the Pacific. The cyclical nature of market is clearly illustrated.



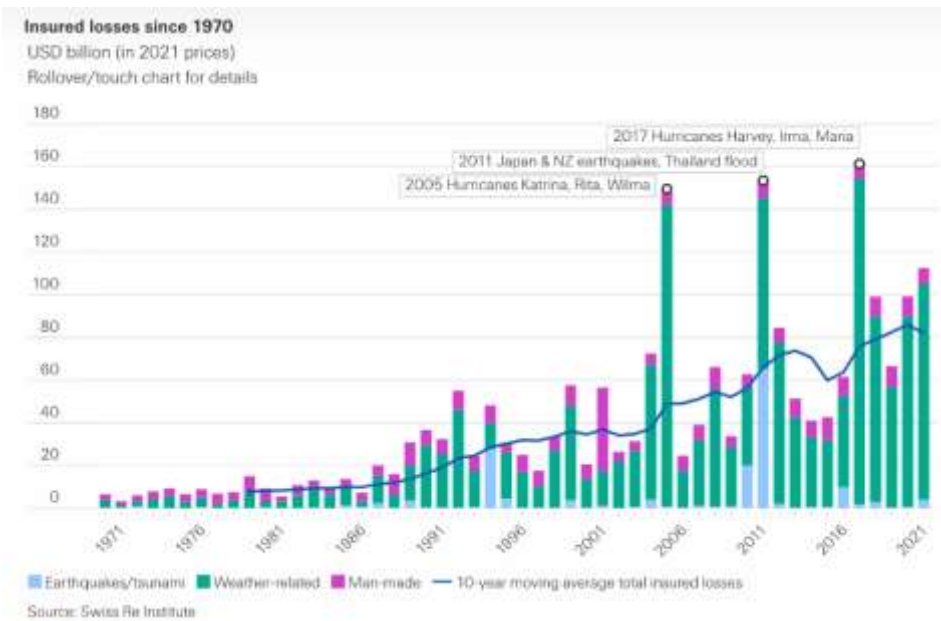
Source: Marsh Pty Ltd

Natural Catastrophe

Catastrophic losses continue to dominate insurer concerns about pricing sustainability. Please refer to the chart below which shows catastrophe losses over the past 50 years. It illustrates the more frequent and higher value catastrophe losses.

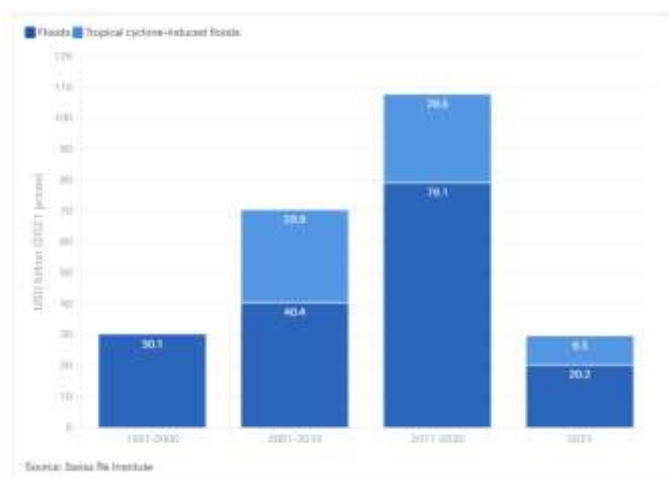
2021 delivered USD119bn of losses, the **fourth highest on record** and well above the USD83bn 10 year average. The projected 2022 annual large loss total rose to \$112 billion, driven mostly by Hurricane Ian. European flood and hail events, Australian floods and US severe storms also contributed to 2022 loss experience. This does not include the impact of the most recent December winter storm events. (Guy Carpenter News Release 30/12/2022)

For 2022, Swiss Re have predicted \$115bn and Munich Re \$120bn so both 2021 and 2022 delivered the same very high level of catastrophic losses.



Source: Swiss Re Institute – 30 March 2022

As shown below, there has been an upturn in flood losses over the past twenty years with 2021 being as much as the entire decade from 1991 to 2000:



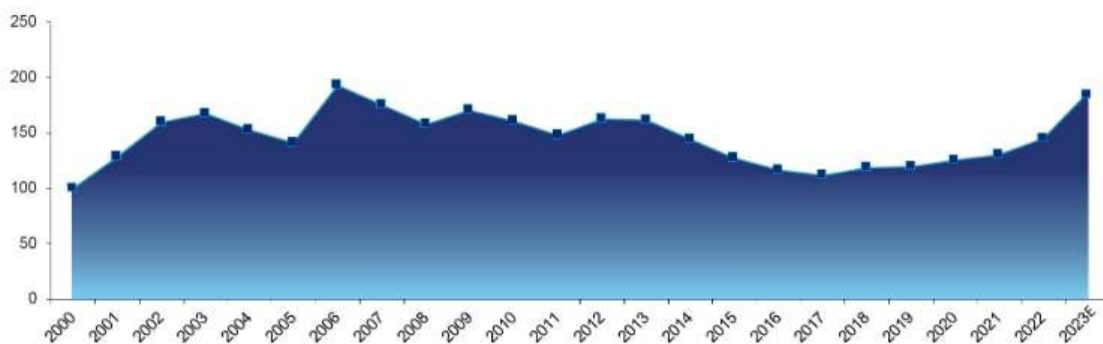
Source: Swiss Re Institute – 30 March 2022

Global Reinsurance

On 1 January 2023, many global reinsurance programs were renewed. Following many years of poor returns and above average catastrophe losses, property insurance reinsurance premiums increased significantly in an effort to correct this ongoing trend.

The Guy Carpenter Global Rate on Line (ROL) Index **increased 27.5% year on year**, primarily driven by pricing and attachment point adjustments in the US and Europe. The index is a measure of the change in dollars paid for coverage year on year on a consistent program base. The index 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. Unlike risk-adjusted measurements, the index is not dependent on the model or method used to measure the amount of perceived risk in a program, which can vary widely. This was the **6th consecutive year of increases**, representing a cumulative total increase of ~65%.

Guy Carpenter Global Property Catastrophe Rate on Line Index - 2000 to 2023



Source: Guy Carpenter

“January 2023 reinsurance renewals are proving to be one of the most challenging reinsurance markets the sector has experienced”

Source: Guy Carpenter News Release 30/12/2022

Analysts at JP Morgan have reported that the “resounding view” from reinsurers is that the hard market conditions experienced at the January 2023 renewals are “here to stay” for at least the remainder of the year.

Source: Reinsurance News 27/02/23

Liability

Challenging market conditions continued well into the first half of 2023 for the Australian casualty/liability insurance market.

At the end of 2022, the market showed signs of improvement in rate increases. However, a combination of increased reinsurance costs at the start of 2023 and claims inflation (reflected in an upward trend in liability claims severity and payouts) has led to year-on-year premium increases in the range of 5-15% across the Australian liability market in the first half of 2023. While average pricing movements in Q1 remained at 10%, similar to the previous two quarters, premium increases from recent June renewals abated, resulting in a slightly lower average pricing increase of 7% in Q2 2023.

In some instances, competition in the market has helped to moderate pricing increases by introducing new capacity or restructuring programs. This was primarily driven by a number of new entrants into the liability market as well as some insurers focusing on growth strategies through increasing their participation on desirable programs.

Key Coverage and Underwriting Trends

Profitability remains a main concern for the liability insurance market both locally and globally. Liability insurers have only sought moderate rate increases over the last few years, compared to other insurance classes, which experienced more significant price rises.

The long-tail nature of liability risks combined with an uptick in claims latency, frequency and severity and increasing claims inflation over prior years, continued to drive market uncertainty. As a result, policy retentions and premium rates continued to be scrutinised by insurers. Even insureds with longstanding relationships with insurers have faced claims-driven pricing adjustments and reductions of capacity.

In the first half of 2023, the Australian liability insurance market has generally displayed broad appetite and a willingness to write new risks, with the exception of risks that have US exposure – both domiciled and export exposure. In these cases, some insurers have reduced capacity and/or adjusted pricing accordingly to limit their own exposure.

Environmental, social and governance (ESG) considerations remain a key element of the underwriting process, with insureds typically asked to demonstrate a clear strategy in this space. For some insurers, commitment to the advancement of their own ESG transition journeys has impacted their underwriting guidelines, leading to more restrictive coverage and capacity available to insureds in certain industries.

In the first half of 2023, environmental was generally regarded as the dominant element of ESG, however, there has been an increasing underwriting focus on social and governance elements. For example, insurers have requested more information around an insured's relationship with its workforce and communities including the nature of outsourced labour forces in developing parts of the world.

Similar to COVID-19 and cyber insurance coverage in recent years, per- and polyfluoroalkyl substances (PFAS) are coming under increased scrutiny. In recent months, we have seen insurers attempting to apply exclusionary language in policy wordings to limit coverage provided for PFAS risks. In order to reduce the likelihood of this limitation of cover, it is important for insureds to be able to demonstrate and substantiate proactive PFAS risk identification and management during the underwriting process.

Insured Purchasing Patterns

Purchasing patterns have varied depending on the needs of the insured, the industry in which they operate and availability of market capacity.

In the first six months of 2023, insureds continued to review the level of limit purchased. Those experiencing poor claims performance have also evaluated higher retention levels as a way to mitigate their insurance spend.

Industries and/or risks that continue to be particularly impacted by challenging market conditions included:

- Power and utilities – particularly bushfire and dam exposures
- US-exposed risks – both domiciled and export exposure, particularly automotive
- Rail – due to numerous recent losses in Australia and overseas
- Worker-to-worker exposed accounts
- PFAS-exposed accounts – particularly water utilities
- Coal-exposed accounts
- Sport (concussion) and community/ecclesiastical (abuse cover)

For particularly challenging industries and classes of risk, such as those listed above, we have observed a trend from insureds to secure higher limits in an effort to 'futureproof' their insurance programs. Given the long-tail nature of liability risk, insureds need to consider inflationary trends of awards and legal costs when assessing the adequacy of policy limits.

Looking Ahead

Insurers will likely continue to seek premium rate increases across their portfolios throughout 2023 as they continue to protect profitability from claims inflation. Nonetheless, new capacity and appetite for growth is expected to continue to generate competition in the liability insurance market.

With the markets' ongoing and increasing focus on ESG, insureds that can demonstrate maturing ESG frameworks generally will be viewed more favourably by insurers, as will insureds with well performing loss experiences.

For insureds with more challenging risks, those that can demonstrate a proactive approach to identifying and managing these risks will be best positioned to navigate the underwriting process in a challenging market.

Bushfire Liability

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

- Increased wildfire/bushfire activity local and globally (see Bushfire Claims Examples later in this report), with insurer's unfavourable perceptions of this risk compounded by:
 - i. Bushfire activity in Australia during the 2019/20 bushfire season and now concerns about the buildup in vegetation during the cooler and wetter east coast weather over the past few years due to the La Nina effect.
 - ii. 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 in recent years whereby:

- HDI reduced their overall capacity offering by circa 30% (up to \$35m reduction in capacity offered by this market)
- AXA XL reduced their overall capacity offering by circa 35% (up to \$25m reduction in capacity offered by this market)

Allianz Global Corporate and Specialty have ceased writing long tail business entirely in Australia. They were a large capacity provider (up to \$100m) on utility risks. We note that they are cautiously deploying capacity back into Australia but have limited appetite for bushfire 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 \$35m 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

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 new capacity is offered, pricing is increasing with some markets being opportunistic.

Bermudan Markets

Capacity remains in Bermuda, however it comes at a punitive cost.

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 for non-Chinese owned businesses.

Summary

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 US 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
- 2023 Greece Wildfires: a blaze in the North Eastern region of Greece burned an estimated 93,000 hectares and it is believed to be the largest single blaze to hit an EU country since 2000. This was in addition to fires burning north West of Athens as well as on the islands of Rhodes, Corfu and Evia.
- 2023 Hawaiian island of Maui: considered to be the largest natural disaster ever to affect Hawaii, these wildfires burned over 2,000 acres, killed 115 people, displaced thousands more and devastated the town of Lahaina. It has been estimated by Moody's that the fire will cause up to \$6bn in economic losses. It has been alleged that powerlines owned by Hawaiian Electric ignited the fires when wires came down during Hurricane Dora. A class action is expected.

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).

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 Australia electricity utility accounts 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 first half of 2023 saw the Australian cyber market begin to stabilise as premium rate increases continued to moderate. With the type and frequency of 'expected' losses and ransomware-type losses becoming more predictable, insurers have become better prepared. Cyber insurers are slowly returning to profitability as they are able to better forecast and price to cover attritional losses (i.e. high frequency and low to moderate severity).

Other key factors contributing to the improvement of insurer loss ratios included:

- Significant uplift in cyber maturity in insureds
- Continued improvement and investment by insureds in cyber hygiene
- Managing limit capacity and systemic aggregation risk exposure
- In some cases, increased deductibles and business interruption waiting periods.

Tied in closely with premium rate stabilisation was the recent flow of new capital and increased capacity back into the cyber insurance market, which fosters greater competition among insurers and their ability to drive competitive pricing. The market was the most competitive it has been in years, as cyber insurers broadened their appetite for quality risk.

Pricing Trends

In the first half of 2023, cyber insurance premium increases in the Australian market were notably lower than those seen throughout 2022. Premiums increased by 10-15% on average, which is much lower than increases observed in the previous year (ie, 30-40% in Q4 2022). In Q2 2023, average premium increases further moderated to 8%.

The combination of sustainable loss ratios, improved profitability, thorough and selective underwriting, increasing focus on growth strategies by insurers, as well as new entrants into the market, has led to a more competitive cyber market landscape. As insurer competition and underwriting appetite continue to strengthen across both local and global markets, cyber insurance pricing is expected to continue to stabilise and trend downwards.

Claims

The overall frequency of claims has been climbing steadily over the last 10 years. The total number of claims for 2023 is expected to exceed those in 2022, based on Marsh data to date (see Fig. 4) with severity of those matters also trending upwards.

Some notable cyber claims trends include:

Industries experiencing the highest frequency of incidents include legal and professional services, healthcare, financial services and government entities.²

- Increase in third-party data breaches other than technology service providers (eg, law firms, file storage/transfer companies).
- Increase in regulatory interventions (eg, APRA imposing additional capital adequacy requirements on organisations following large-scale data breaches).
- Ransomware claims were the most common, usually involving both business interruption and data breach. Data exfiltration (the extraction of confidential information prior to the locking down of systems) continues to grow.
- Downward trend in ransomware payments – a record low 34% of companies experiencing a ransomware attack paid a ransom in Q2 2023, compared to 42% in the same period last year.³ This is a sign of improved controls and incident responses, despite increased ransomware activity.

Although ransom demands are typically in the millions of dollars, actual payment of a ransom tends to be less common in the Pacific region. Restoration and recovery have been the preferred method of incident response from affected organisations.

As ransom payments decrease, cyber threat actors will likely look for alternative ways to monetise attacks. We also expect to see an increase in third-party claims and regulatory action against organisations for failing to meet their data and network security obligations.

Key Underwriting Terms

As insurer competition improved in both local and global cyber markets, more options have become available for insureds at renewal. In the first half of 2023, we observed less restrictive coverage, higher limits and moderating premium increases. Coverage scrutiny remained, especially around privacy, extended supply chain and war.

Insurers have been more open to consider broadening policies to incorporate niche coverages, for example, business interruption-linked reputational harm cover is being increasingly negotiated into programs where the insured has a significant public profile.

Despite improving market conditions, the underwriting process continues to deep dive into an insured's cybersecurity controls. Insurers remained cautious towards high-risk industries or organisations not meeting expected risk management standards.

Key risk focus areas for insurers include:

- Catastrophic risk (eg, aggregation exposure and supply chain risk)
- Dynamic privacy regulations
- Geopolitical tension
- Continued threat of ransomware

There has also been an increasing focus on how cyber fits into the ESG space, for example, environmental implications of technology use, organisations' social responsibility to protect data and customer privacy, corporate governance related to cyber risk and crisis management.

In an effort to preserve the long-term sustainability of cyber reinsurance, insurers continue to closely scrutinise organisations' cybersecurity hygiene and data practices, and examine loss history to help inform their underwriting approach. There was a particular focus on incident response and recovery plans as well as mitigation controls, such as multifactor authentication, privileged access management and managing third-party vendors.

Looking ahead

Cyber insurance is increasingly becoming a more efficient risk transfer solution as more capacity enters the market. As market conditions are expected to continue to improve throughout the rest of the year, barring unforeseen events, there is greater scope for insureds to improve coverage and obtain tailored solutions for their specific needs.

Demonstrating strong maturity and cyber resilience is key to generating market interest and standing out from the increasing volume of client submissions. Clients are benefiting from using the Marsh self-assessment tool and benchmarking data as part of their renewal strategy, to help differentiate their risk when approaching the market. While insurers continue to become more comfortable with the level of detail provided in cyber self-assessments, additional questions around the sharing, collection and retention of data are becoming more prevalent.

For organisations with strong controls, increased focus on cyber risk treatment options would be expected from insurers. For organisations in the more challenging industries, starting the renewal strategy early and focusing on the critical controls insurers are looking for are key in ensuring favourable renewal outcomes.

See below the Marsh Q1 2023 Cyber Market Snapshot:



List of Data Reviewed

Ausgrid provided Marsh with data:

- 2017 Insurance Due Diligence & Estimate Premiums
- 2019 D&O Placement Tower
- 2019 General Liability Tower
- 2020 Policies Summary, Towers
- 2021 Placement Towers
- 2021 Policies Summary
- 2022 Policies Summary, Towers, Historic Premiums
- 2023 Liability Program Tower and Premiums
- 2023 Aviation / Drones Premium
- Various Claims History Reports
- Property Assets Schedules and Various Risk Survey Reports
- Various Proposals and Underwriting Submissions
- Renewal Reports for the 2020-21 and 2021-22 period of insurance (issued by Ausgrid's insurance broker)
- Renewal Premium Calculation Table for 2022-23 (FY23)

Unless otherwise stated, all values in this report are nominal, i.e. values are expressed in the monetary terms associated with each future year.

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

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