Essential Energy

Premium Projections and Insurance Market Update

5 October 2022

CONTENTS

Reliance and Distribution

Marsh Pty Limited (Marsh) has been engaged by Essential Energy to provide insurance premium projections and related commentary for the period 1 July 2024 to 30 June 2029.

Reliance's and Limitations

We have assumed that the information provided to us is accurate and complete in all material aspects. We have considered the reasonableness of the data but have not undertaken a complete review to verify the accuracy.

The opinions and estimates contained in this report constitute our best judgement as of the date of this report and are subject to change without notice. In our judgement, we have employed techniques and assumptions that are appropriate and the conclusions presented herein are reasonable, given the information currently available.

In carrying out our investigations and providing the report, we have acted solely and exclusively for Essential Energy and we have assumed no duty to advise AER or any other entity or person. By consenting to the report being given to AER as part of the regulatory submission, we are not taken to have assumed any duty to advise you or to consider your circumstances or position. The report is provided to Essential Energy and AER only for the purpose of assisting in formulating of the revenue proposal.

Except insofar as liability under statute cannot be excluded, Marsh, its directors, employees and agents will not be held liable for any loss or damage of any kind arising as a consequence of any use of this report or purported reliance on the report including any errors in, or omissions from, the utilised models.

This report must be read in its entirety. Individual sections of this report could be misleading if considered in isolation from each other. In particular, the opinions expressed in this report are based on a number of assumptions and qualifications which are set out in full in the report.

Executive Summary

Introduction

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

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

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

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

Summary of Essential Energy's program

Essential Energy's insurance program consists of the following insurance classes:

Class of Coverage	Main Policy Limit	Commercial Market or icare / TMF
Property	[redacted]	icare / TMF
Liability	[redacted]	icare / TMF
Directors & Officers	[redacted]	Commercial Market
[redacted]	[redacted]	[redacted]
Crime / Fidelity	Unlimited	icare / TMF
Corporate Travel	As per Schedule	icare / TMF
Motor	Unlimited above Essential Energy's [redacted] annual retention	icare / TMF

Uninsured Exposures:

- Poles and Wires – consistent with industry practice, and reflecting the lack of availability of commercial cover, Essential Energy does not insure its distribution poles or wires.
- 'Below deductible' risks – Essential Energy retains exposure to all risks for which cover is held but where claims are less than the deductible.
- A significant deductible of [redacted] in respect of Bushfire Liability.
- An annual self-insured maximum retention of [redacted] for motor vehicles claims.

Insurance Premium Forecasts – Commercial Market

Our forecast of Essential Energy's average annual insurance premium for the next regulatory period is [redacted] ($nom) inclusive of all costs, and stamp duty (excluding GST).

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

Class of Insurance	FY23	FY24	FY25	FY26	FY27	FY28	FY29
	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
General Liability	[redacted]						
D&O Liability							
Property							
[redacted]							
Motor Vehicle							
Crime							
Travel							
Broker Fees							
Grand Total							

Insurance Premium Forecasts – Combined TMF & Commercial Market

icare (on behalf of the TMF) provided their own forecasted contributions for FY23 to FY29. As Essential Energy utilises TMF for all insurance with the exception of D&O Liability [redacted] we have provided an updated paper reflecting the combined TMF and Commercial Market placement. The forecast of Essential Energy's average annual insurance premium for the next regulatory period is [redacted] ($nom) inclusive of all costs, and stamp duty (excluding GST).

Table 2 – Forecast TMF & Commercial Market cost of Insurance Premium for various insurance classes.

Class of Insurance	FY23	FY24	FY25	FY26	FY27	FY28	FY29
	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
General Liability *	[redacted]						
D&O Liability **							
Property *							
[redacted]							
Motor Vehicle *							
Crime & Travel *							
Broker Fees **							
Grand Total							

* Coverage provided by TMF
** Coverage provided by Commercial Insurers and placed by Brokers

Conclusion

As can be seen by the tables above, Essential Energy's current strategy of utilising both TMF and the Commercial Insurance Market delivers a much better value for money outcome than placing all insurance in the Commercial Insurance Market.

Scope of Report

Background and Scope

The scope of our review is to provide a forecast of Essential Energy'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);
- Directors and Officers;
- [redacted]
- Other ancillary lines (including Motor Vehicle, Corporate Travel and Crime/ Fidelity); and
- Insurance Broker Fees

Approach and Methodology – Commercial Market

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'.

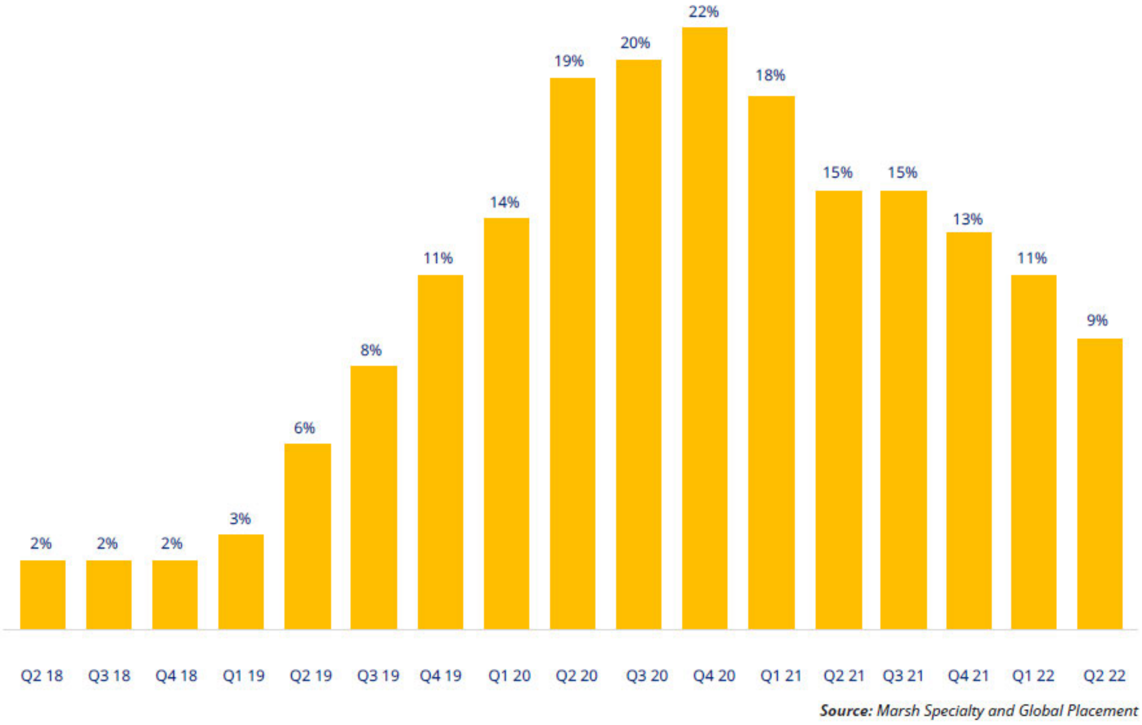
Insurance Market Drivers

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 current market cycle has been subject to 19 consecutive quarters of premium increases as illustrated in the *Marsh Global Insurance Market Index* and as detailed below.

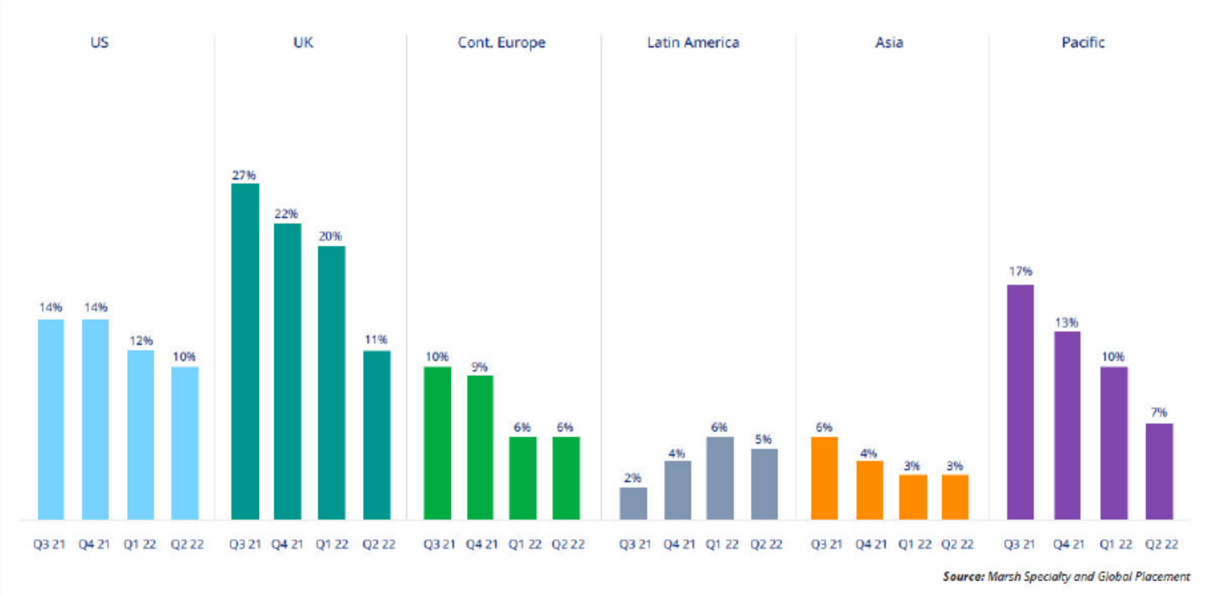
Figure 1 – Global Insurance Composite Pricing Change



It was observed that the second quarter of 2022 saw a slower pace of increases in the financial and professional lines which contributed to a moderation of pricing in most geographies. However, the cost of cyber insurance continued to rise significantly although not to the same extent (100% +) seen in late 2021 and early 2022.

Regionally, composite pricing increases for the past four quarters were as follows:

Figure 2 – Composite Insurance Pricing Change by Region



As shown above, with the exception of Latin America, the level of premium increases globally are in decline. However, 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). The 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.

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 24 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.

Essential Energy (along with other in the power transmission and distribution industry) have already formed their own captives or are utilising PCC's for property, liability, D&O (Side C mainly) and increasingly, [redacted]

Essential Energy established a PCC in 2019 but in now in the process of winding it up given this is no longer required with the TMF providing key coverages. The TMF offers a better value for money proposition than the Commercial Market, Captives and PCC's for most of the coverages required by Essential Energy.

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.

However, as Essential Energy is a NSW government owned enterprise, it already has access to an alternative risk transfer option: The Treasury Managed Fund (TMF) managed by Insurance and Care NSW (icare). Indeed Essential Energy utilises the TMF for much of its risk transfer requirements and this may well be the most efficient way for Essential Energy to transfer its risk.

As illustrated in this report, regardless if TMF or the commercial insurance market is utilised, Essential Energy's insurance costs will continue to rise. The utilisation of a Captive or PCC could assist in moderating these costs subject to Essential Energy'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 Essential Energy's asset values over the regulatory period with particular focus on inflationary pressures.
- Continuing hard market conditions in the short term resulting in premium increases, coverage reduction, increases in deductible and capacity contraction, which will begin to soften throughout the regulatory period.
- Absence of any new catastrophic event causing a major claim, which could have a significant impact on Property and Liability policy claims performance and subsequent renewal pricing.
- Allowance for all reasonably expected statutory taxes and levies, excluding GST.

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

- Significant increases in the premiums that Essential Energy must pay to continue purchasing Property (driven by Natural Catastrophe exposures) and Liability coverages (driven by Bushfire exposures).
- Increases in deductibles will increase Essential Energy's expected value of uninsured risks.
- Increasing premium cost and availability of [redacted] in the insurance market.

Comments on insurance program

Essential Energy has the benefit of being able to access the NSW government's statutory self-insurance scheme (TMF). The scheme provides broad coverage and looks to provide its members with value for money. TMF is not run to generate profit so it should immediately be less expensive than commercial insurers who price in a margin. Further, as it is not classed as "insurance" it does not attract taxes other than GST whilst the commercial market will charge additional Terrorism Premium (ARPC) and the NSW Emergency Services Levy (for Property) and Stamp Duty on all classes of insurance.

Marsh has reviewed Essential Energy'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:

- Annual development and Board approval of Essential Energy'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;
- Maximum Foreseeable Loss (MFL) studies: Essential Energy periodically undertakes an analysis of its Bushfire Liability profile to ensure that it is maintaining appropriate level of insurance cover. The most recent analysis (Dec 2016) shows that the limit of [redacted] current purchased have an annual exceedance probability of 0.11% which represents a return period of 893 years. This is based on the assumption that Essential Energy is found liable for their contributory negligence as often there are other parties involved with bushfire events (e.g. sub-contractors);
- Broker advice in respect of those insurances that remain insured via the commercial market (Directors & Officers [redacted] and
- Essential Energy's claims history and loss ratios.

It should be noted that Essential Energy elects not to purchase the standard TMF coverage option for Property and Liability, instead electing a more cost effective option. This involves the application of limits, sub limits and higher deductibles. This design more closely reflects the coverage that would be obtainable in the commercial market.

Property

Summary of Insurance Cover

Essential Energy purchases Property coverage for its 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.

Essential Energy's current policy limit for Property and Business Interruption is [redacted] This amount would reflect their Maximum Foreseeable Loss in any one event. Deductibles vary depending on asset which has sustained damage, but range from [redacted]. There is a threshold of 7 days for the limited business interruption. It is understood these deductible levels have been stable for many years.

Coverage for property risks is provided by the Treasury Managed Fund (TMF)

Given the direct TMF placement, Marsh has not been recently involved in procuring insurance for Essential Energy, however it considers the cost of its property coverage to be competitive in the current environment and taking into account Essential Energy's exposure and loss profile.

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

Basis of Insurance Premium Projection – Commercial Market

Our premium projections are based on what we believe could be realistically achieved in the commercial insurance market. We cannot predict the cost of coverage provided by the TMF however we have been provided a TMF Forecast (dated 13.09.22) which outlines the expected contributions required for the years FY23 to FY29. These contributions have been included in the tables below, being distinct from the premiums forecasted to be required by the Commercial Market.

Insurance Premiums have been calculated by obtaining the declared asset values for FY2022 and then applying inflationary adjustments for future years. 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.

It should be noted that Essential Energy sustained [redacted] worth of property damage in Lismore during the February 2022 floods. This would have severally impacted insurance pricing for the 2022 renewal had they not been protected by a [redacted] and this has been feed into the pricing models building up to FY25.

Increased Asset Values

Growth in Essential Energy's value of assets to be insured will drive the cost of Property insurance, which is projected to grow as shown in Table 3. This is driven particularly by inflationary pressures based on current global trends and also increasing demand for new electricity infrastructure.

Table 3 – Essential Energy's projected Regulated Asset growth.

Year	FY25	FY26	FY27	FY28	FY29
Declared Asset Values	$3,375,728,320	$3,493,878,812	$3,598,695,176	$3,706,656,031	$3,799,322,432
Growth %	5%	3.5%	3%	3%	2.5%

Results – Commercial Markets

In relation to Essential Energy's Property insurance, Marsh projects that rates will change as shown in Table 4.

Table 4 – Essential Energy's projected Property Insurance premium rate movement.

Year	FY25	FY26	FY27	FY28	FY29
Property Insurance Rate Movement YoY (%)	7.5%	5%	0%	-2.5%	-2.5%

Therefore, allowing for stamp duty and associated fees, Marsh projects that Essential Energy's cost of Property insurance would be as shown in Table 5 .

Table 5 – Essential Energy's projected Property Insurance premium movement.

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

Results – TMF

The following contributions have been forecasted by icare on behalf of the TMF (as at 13.09.22)

Table 6 – Essential Energy's projected Property Contributions to TMF

Year	FY25	FY26	FY27	FY28	FY29
TMF Property Cover	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Liability

Summary of Insurance Cover

Essential Energy purchases Liability insurance with an [redacted] Limit of Liability. This policy covers legal liabilities for third party property damage and bodily injury, arising out of Essential Energy's business operations.

Coverage for liability risks is provided by the Treasury Managed Fund (TMF)

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

- Financial Loss – Failure to Supply Liability. The TMF provides this cover to the full policy limit which would not be achievable in the commercial insurance market.
- Professional Indemnity. This protects Essential Energy from civil liability claims arising from the provision of professional services to third parties. Again, the TMF provides this cover to the full policy limit which would not be achievable in the commercial insurance market with insurers capping this at $50m to $100m.
- [redacted] TMF provides this cover to the full policy limit in respect of third party property damage and bodily injury. .
- Pollution Liability. TMF provides this cover to the full policy limit but limited to Sudden and Accidental pollution events only except with respect to Essential Energy's water assets in Broken Hill where coverage extends to include gradual pollution.

The program is subject to various deductibles ranging from [redacted] with the latter being in respect of Bushfire Liability claims. Most losses are subject to a [redacted] deductible.

Basis of Premium Projection – Commercial Market

Our premium projections are based on what we believe could be realistically achieved in the commercial insurance market. We cannot predict the cost of coverage provided by the TMF however we have been provided a TMF Forecast (dated 13.09.22) which outlines the expected contributions required for the years FY23 to FY29. These contributions have been included in the tables below, being distinct from the premiums forecasted to be required by the Commercial Market.

Essential Energy operates an electricity distribution network with approximately 185,000km of lines and 1.3m poles. The vast majority of these are above ground and in rural areas of NSW. This creates an elevated risk of bushfire exposure which in turn results in high insurance premiums and a limited amount of global insurance capacity.

Whilst the Essential Energy has coverage provided by the TMF, a commercial market solution would be a complex placement involving twenty or more global insurers accessed via Australia, Singapore, United Kingdom, Europe and possibly Bermuda. providing various layers of different size capacity at varying premiums.

Before considering future forecasts for the Essential Energy 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 inherit bushfire risk.

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.

Please refer to page 33 for more detailed history of Australian bushfires.

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. Those insurers who would write Essential Energy's risk would also write 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 were 6 examples of this during of 2020).

Whilst Essential Energy can exhibit strong risk management practices, the inherit exposure presented still impacts heavily on the cost of insurance. 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 and assumes only modest growth Essential Energy's network 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. Our projections assume capacity will be purchased to the extent it is commercial reasonable to do so.
- The projections below are based on the following assumptions:
  - No major changes to Essential Energy'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.

Results – Commercial Markets

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

Table 7 – Essential Energy's projected Liability Insurance premium changes.

Year	FY25	FY26	FY27	FY28	FY29
General Liability (Bushfire) & Professional Indemnity Rate Movement YoY (%)	10%	7.5%	5%	2.5%	2.5%

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

Table 8 – Essential Energy's projected Liability Insurance premium movement.

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

The above premiums have been developed utilising expected market movements over an eight year period from FY23 to FY29. The base premium for which we have applied these movements is the forecasted FY23 liability premium based on a market increase to the FY21 actual premium paid when the program was placed in the commercial market. The increase from FY21 to FY22 was substantial for the majority of DNSP's in Australia as the market contracted and rates increased significantly. By FY25, there is an expectation that the market would have fully implemented the required 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 Essential Energy.

Results – TMF

The following contributions have been forecasted by icare on behalf of the TMF (as at 13.09.22)

Table 9 – Essential Energy's projected Liability Contributions to TMF

Year	FY25	FY26	FY27	FY28	FY29
TMF Liability Cover	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Directors & Officers Liability (D&O)

Summary of Insurance Cover

Essential Energy's purchases D&O insurance with a [redacted] limit of liability for Side A (Directors & Officers) & Side B (Company Reimbursement)

Coverage for Directors and Officer Liability is provided by the commercial insurance market.

As Essential Energy's 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 [redacted]

A [redacted] deductible applies to Side B (Company Reimbursement) and $Nil for Side A (Non Indemnifiable Liability of Directors and Officers).

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

Basis of Premium Projection – Commercial Market

The pace of rate increases slowed significantly by the end of CY21. This is due to improved insurer profitability, new D&O insurer entrants, D&O buyers seeking lower limits, creating further competition for insurers offering increased supply of capacity.

There exists variation in insurer rating dependent on historic pricing, industry segment, insurer portfolio profitability and strategy.

Some risks are still attracting a double digit increase, e.g. heavy exposure to COVD-19.

Results

In relation to Essential Energy's D&O insurance Marsh projects that premiums will grow as shown in Table 10.

Table 10 – Essential Energy's projected D&O Insurance Premium movement.

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

Therefore, allowing for stamp duty and associated fees, Marsh projects that Essential Energy's cost of D&O insurance will be as shown in Table 11.

Table 11 – Essential Energy's projected Financial Lines Insurance Premium movement.

Year	FY25	FY26	FY27	FY28	FY29
Directors & Officers Liability Premium	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Other Classes

As described in the Executive Summary, Essential Energy also procures other classes of insurance including Motor, Corporate Travel and Crime / Fidelity.

Coverage for these risks is provided by the Treasury Managed Fund (TMF)

Our premium projections are based on what we believe could be realistically achieved in the commercial insurance market. We cannot predict the cost of coverage provided by the TMF however we have been provided a TMF Forecast (dated 13.09.22) which outlines the expected contributions required for the years FY23 to FY29. These contributions have been included in the tables below, being distinct from the premiums forecasted to be required by the Commercial Market.

Basis of Premium Projection – Commercial Market

Please see below Table 14 where we forecast the insurance premium rate movement for each class:

Table 14 – Essential Energy's projected "Other Classes" insurance premium rate movement

Year	FY25	FY26	FY27	FY28	FY29
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%

Therefore, allowing for stamp duty and associated fees, Marsh projects that Essential Energy's cost of "Other Classes" insurance will be as shown in Table 15.

Table 15 – Essential Energy's projected "Other Classes" insurance premium movement.

Year	FY25	FY26	FY27	FY28	FY29
Motor Vehicle (including Claims Handling) Premium	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Crime Premium ($10m Limit)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Corporate Travel Premium	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Grand Total	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Basis of Premium Projection – TMF

The following contributions have been forecasted by icare on behalf of the TMF (as at 13.09.22)

Table 16 – Essential Energy's projected "Other Classes" Contributions to TMF

Year	FY25	FY26	FY27	FY28	FY29
Motor Vehicle Cover	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Crime Cover	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Corporate Travel Cover	Included	Included	Included	Included	Included
Grand Total	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Consolidated Premium Table FY23 to FY29 – Commercial Markets

Table 17 – Commercial Market Forecast annual Insurance Premiums for various insurance classes from FY 23 to FY29

Class of Insurance	FY23	FY24	FY25	FY26	FY27	FY28	FY29
	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
General Liability (including Bushfire Liability)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Directors & Officers Liability	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Property	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Motor Vehicle	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Crime	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Corporate Travel	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Broker Fees	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Grand Total	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Table 18 – Commercial Market Forecast Annual Premium / Rate % Movement Year on Year from FY 23 to FY29

Class of Insurance	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
General Liability (Bushfire) & Professional Indemnity	15%	15%	10%	7.5%	5%	2.5%	2.5%
Directors & Officers Liability	15%	5%	2.5%	0%	0%	0%	0%
Industrial Special Risk/Property	40.0%	10.0%	7.5%	5.0%	0.0%	-2.5%	-2.5%
[redacted]	33%	50%	45%	35%	25%	15%	10%
Motor Vehicle (including claims handling)	5%	5%	5%	2.5%	2.5%	2.5%	2.5%
Crime	20%	10%	10%	5%	0%	0%	0%
Corporate Travel	10%	10%	2.5%	2.5%	2.5%	2.5%	2.5%

Property Declared Value	$ 2,990,678,468	$ 3,214,979,353	$ 3,375,728,320	$ 3,493,878,812	$ 3,598,695,176	$ 3,706,656,031	$ 3,799,322,432
Forecasted Increases - Inflationary	10.0%	7.5%	5.0%	3.5%	3.0%	3.0%	2.5%

Consolidated Premium Table FY23 to FY29 – Combined TMF & Commercial Markets

Table 19 – Combined TMF & Commercial Market Forecast annual Insurance Premiums for various insurance classes from FY 23 to FY29

Class of Insurance	FY23	FY24	FY25	FY26	FY27	FY28	FY29
	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
General Liability (including Bushfire Liability)	[redacted]						
Directors & Officers Liability (Commercial Market)	[redacted]						
Property	[redacted]						
[redacted]	[redacted]						
Motor Vehicle	[redacted]						
Crime	[redacted]						
Corporate Travel	[redacted]						
Broker Fees	[redacted]						
Grand Total	[redacted]						

Table 20 – Combined TMF & Commercial Market Forecast Annual Premium / Rate % Movement Year on Year from FY 23 to FY29

	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
General Liability (Bushfire) & Professional Indemnity	TMF Forecasted Contribution		TMF Forecasted Contribution				
Directors & Officers Liability	15%	5%	2.5%	0%	0%	0%	0%
Industrial Special Risk/Property	TMF Forecasted Contribution		TMF Forecasted Contribution				
[redacted]	85%	65%	50%	35%	25%	15%	10%
Motor Vehicle (including claims handling)	TMF Forecasted Contribution		TMF Forecasted Contribution				
Crime	TMF Forecasted Contribution		TMF Forecasted Contribution				
Corporate Travel	TMF Forecasted Contribution		TMF Forecasted Contribution				

Insurance Market Update

Insurance Market Overview

We are currently in the "Hard Market" section of the insurance market cycle (as illustrated), characterised by increasing premiums, 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 offered during the soft market phase as they fight to maintain market share in a 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 the 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 significant Natural Catastrophe events in Australia create substantial volatility and make profitable underwriting challenging for insurers and reinsurers.

The alignment to technical underwriting models, used to justify pricing, terms and capacity, has 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 must now refer to their respective head office committees. This process places less emphasis on insurers' prior history and relationships with buyers, favouring 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.

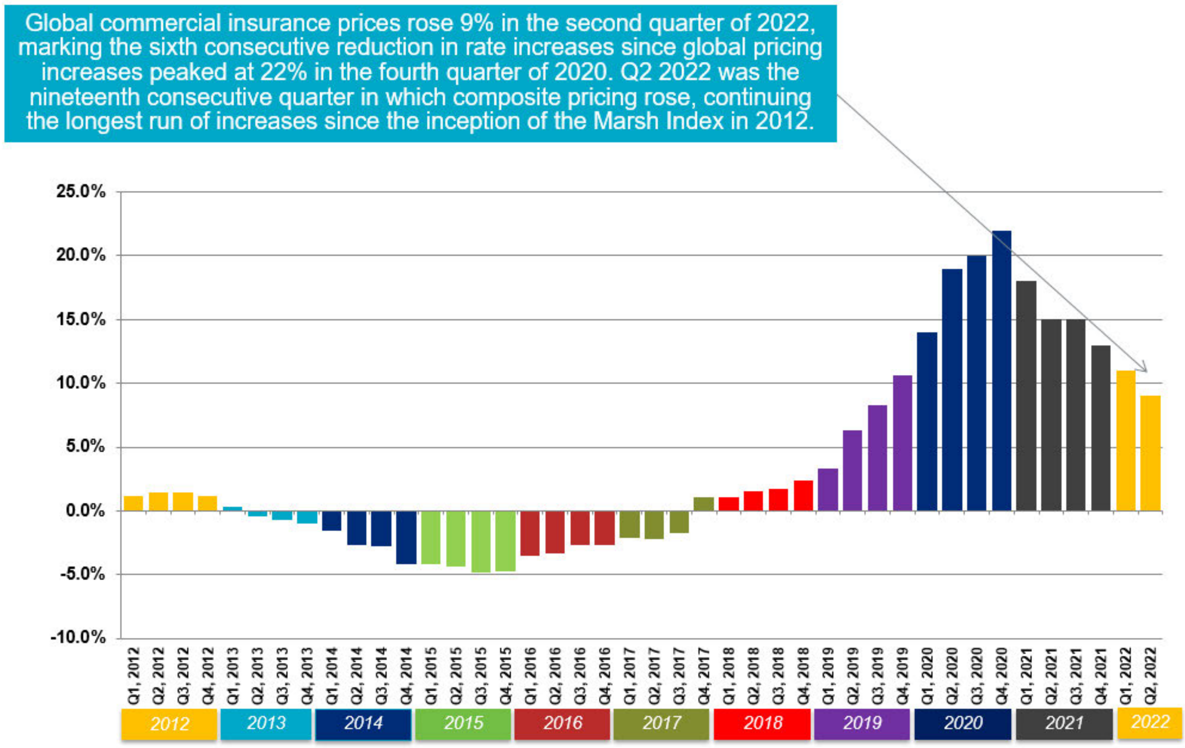
- Natural catastrophe limits are also being reviewed/reduced and imposed for bushfire, wind, flood and hail, along with aggregated limits.

- 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 reviewing engineering reports. The positive attributes of risk such as fire protection, preventative maintenance, asset monitoring and business continuity plans etc. Can 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 chart below shows the **Global Insurance Composite Pricing Change** over a 10 year period. It notes the extreme acceleration of rate increases across all classes of insurance. The level of increases are moderating but there is still increases being applied generally.



Australian Insurer Underwriting Results

Below are a sample of the announcements made by Australian domiciled major insurers:

- **QBE** reported (for Year Ended 31/12/21) profit of USD750m compared a loss of USD1.517bn in 2020. The CEO noted: "In targeting ongoing premium growth, we will remain vigilant in pricing adequately for an appropriate risk-adjusted return on capital, with claims inflation, catastrophe costs and overall portfolio volatility key areas of ongoing focus."

- **Suncorp** reported a FY22 insurance net profit of $174m considerably **down** on $547m in FY21. This was attributed to intense **natural hazard season** and volatile financial markets.

- **IAG** saw Gross written premium increase by 5.7% due to rate increases and improved customer retention. However, their insurance margin was **down** from 13.5% to 7.4% to due higher than forecasted **NAT CAT losses** and increasing reserves from prior year losses. However, the reported profit was much improved at $347m compared to last year's loss of $427m.

See below data released by APRA in on 25 August 2022. It shows premiums were up significantly and outpaced the increase in claim costs leading to improved loss ratio (72% down to 62%) however the overall Net Profit of industry was flat due to a $2.8 billion investment loss which according to APRA was due to "unrealised losses on interest-bearing investments due to increases in bond yields during the March and June quarters". Insurers have earned less than 4% Annual Net Profit margin over the past three years.

	June 2021	June 2022	Change (annual)
Gross earned premium	$54.3bn	$60.4bn	11.4%
Gross claims expense	$42.4bn	$45.2bn	6.6%
Underwriting result	$1.5bn	$6.3bn	328.4%
Investment income	$1.6bn	$-2.8bn	-
Net profit after tax	$0.9bn	$0.9bn	0.3%

	June 2021	June 2022	Change (annual)
Net loss ratio	72%	62%	-10 percentage points
Return on net assets	3.2%	3.1%	-0.1 percentage points
Prescribed capital amount coverage ratio	1.70x	1.69x	-0.01x

Chart 1: Profitability

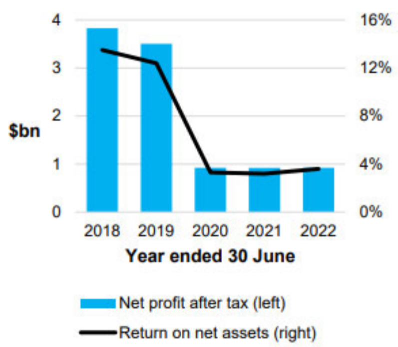
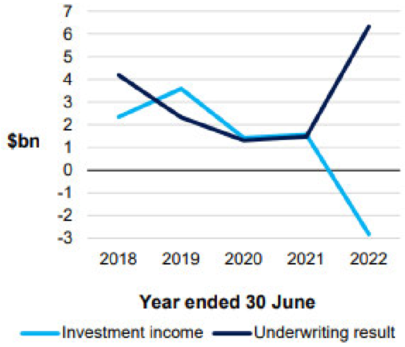


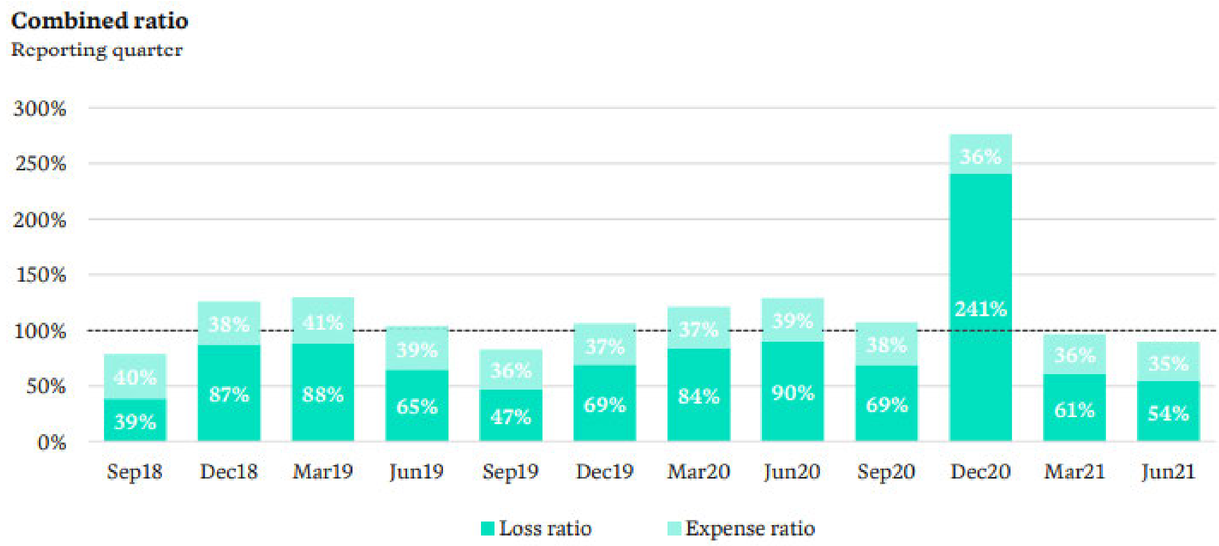
Chart 2: Major Profit Components



Source: Australian Pruden ial and Regulatory Authority, General Insurance Statistics for June 2022

Australian Commercial Property

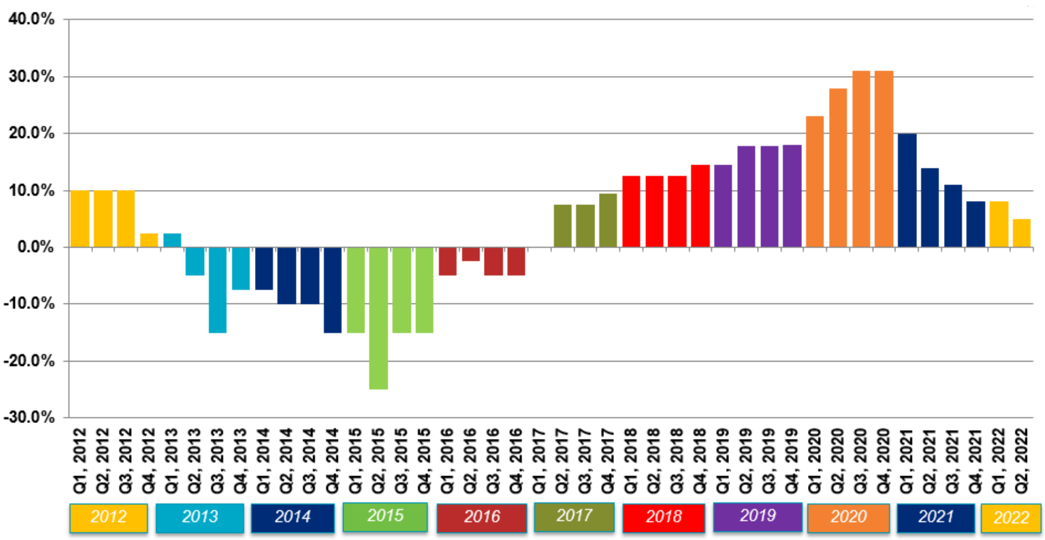
The following chart shows that the Commercial Property market in Australia was non-profitable in 8 of the 12 quarters in the period September 2018 to June 2021. It illustrates the **Combined Ratio** (claims plus expenses divided by premium) of those insurers regulated by the Australian Prudential and Regulatory Authority.



Source: Taylor Fry RADAR 2021

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. It should be noted that these are property rate movements. The chart does not reflect actual premium increases which would be substantially higher once declared values are adjusted for inflation.



Source: Marsh Pty Ltd

Global Property

Power & Utility Markets

2022 has been marked by some challenging and complex market dynamics driven by inflation, climbing interest rates, and heightened climate concerns. Despite this, we have continued to see a gradual tapering of rate increases during the second quarter for well risk-managed, loss free risks with minimal natural catastrophe (Nat Cat) exposure.

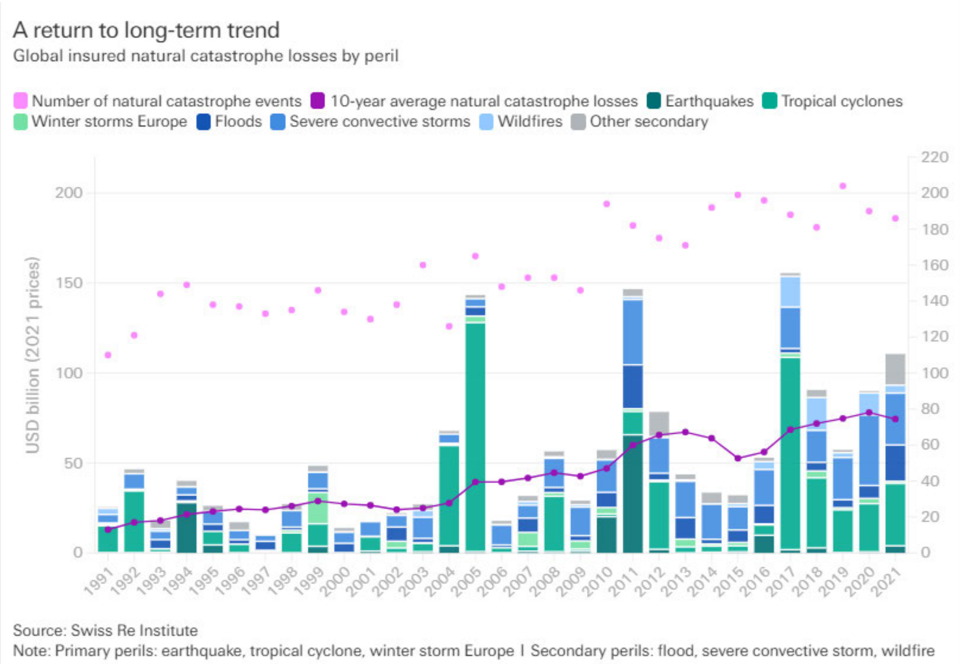
With the London power market significantly recalibrating over the last two and a half years, many underwriters started the year looking to push line size and grow their book on target accounts. Cases of oversubscription buoyed by capacity from international markets have now become more commonplace, driving competition and further flattening out rate uplift; and in certain specific cases even securing rate reductions.

In balance to this, however, where competitive tension cannot be achieved, due to risk quality, Nat Cat exposure, or claims experience, markets have continued to apply robust rate increases. Overall, average rate expectations remain in the single digits.

A clear trend in the market has been the pressure seen from the current inflationary environment. Insurers expect to see a demonstrable updates to insured's property values and, where they feel these are out of step with current trends, will instead build increases into their pricing models accordingly. Further compounded by this are the issues around increased labour costs and global supply chain management, leading to a stretching of lead times, greater business interruption volatility and ultimately an increase in the quantum of claims. In consequence, underwriters have found these global economic factors to be a firm footing from which to push back from, citing the increase in associated claim costs as a key driver behind the need to maintain applied rate and focus on tightening terms and conditions, with one prevalent item being the application of caps for Business Interruption.

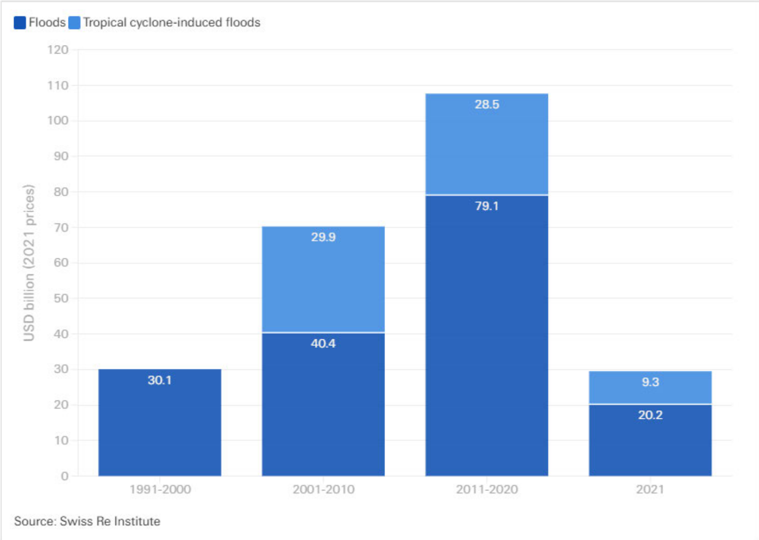
Natural Catastrophe

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 is estimated to be USD119bn, the fourth highest on record and well above the USD83bn 10 year average.



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

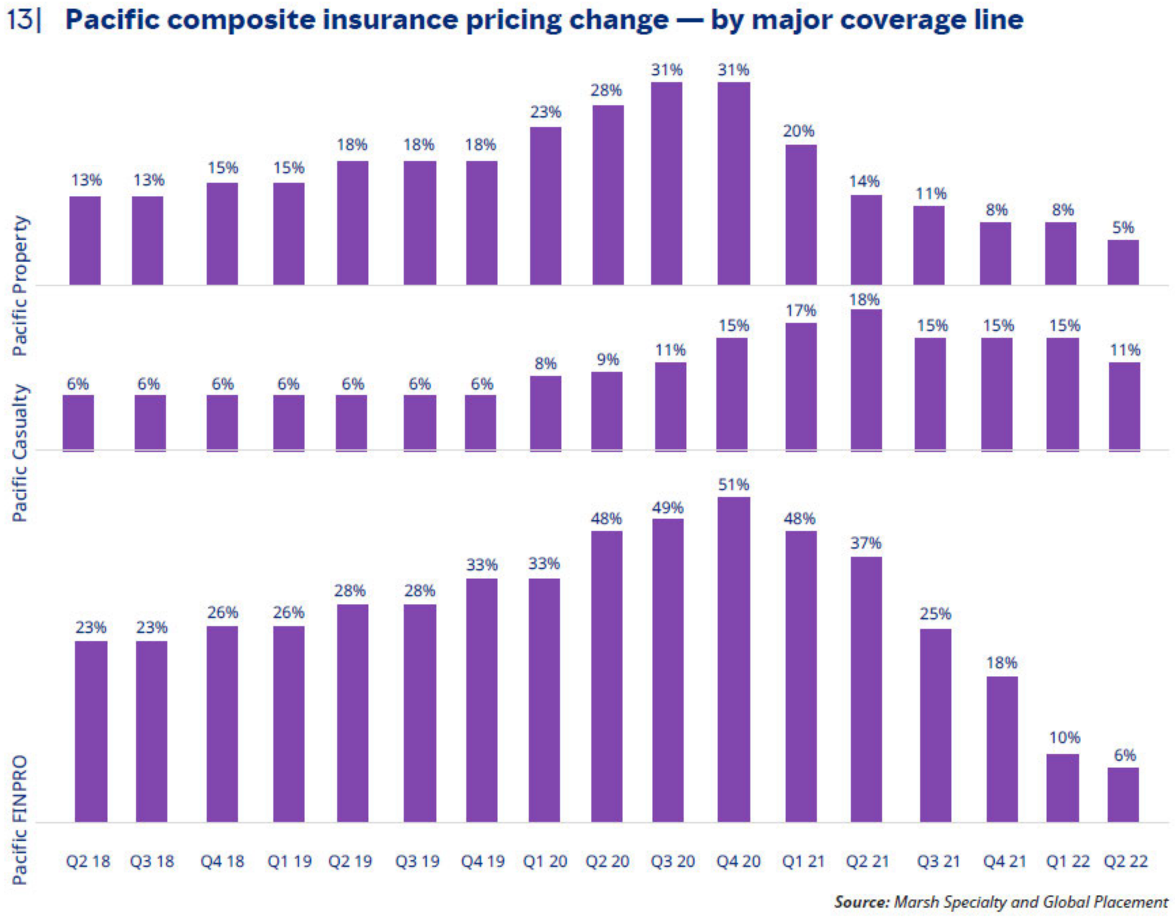
Global Insurer Underwriting Results

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 however all had swung to profit in 2021 with premium increases outpacing the growth in claims.

	Swiss Re Corporate Solutions	Allianz	CHUBB	AIG	ZURICH	XL Group	FM Global	QBE	HDI	LLOYD'S
2021	90.6%	97.5%	85.5%	91%	94.3%	97.1%	83.1%	91.5%	94%	93.5%
2020	122.6%	117.2%	101%	103.7%	99.8%	101.7%	92.5%	109.5%	104.6%	110.4%
2019	107.8%	112%	90.6%	99.8%	96.4%	96.4%	81%	97.5%	104.9%	102.1%
2018	118%	102%	91%	115%	98%	99%	129%	95.7%	113.7%	104.5%
2017	133%	105%	95%	113%	101%	108%	130%	104.5%	112.6%	114%

Source: Marsh Pty Ltd

The following chart shows the movement in Property, Casualty and Financial Lines rates ove the past four years:



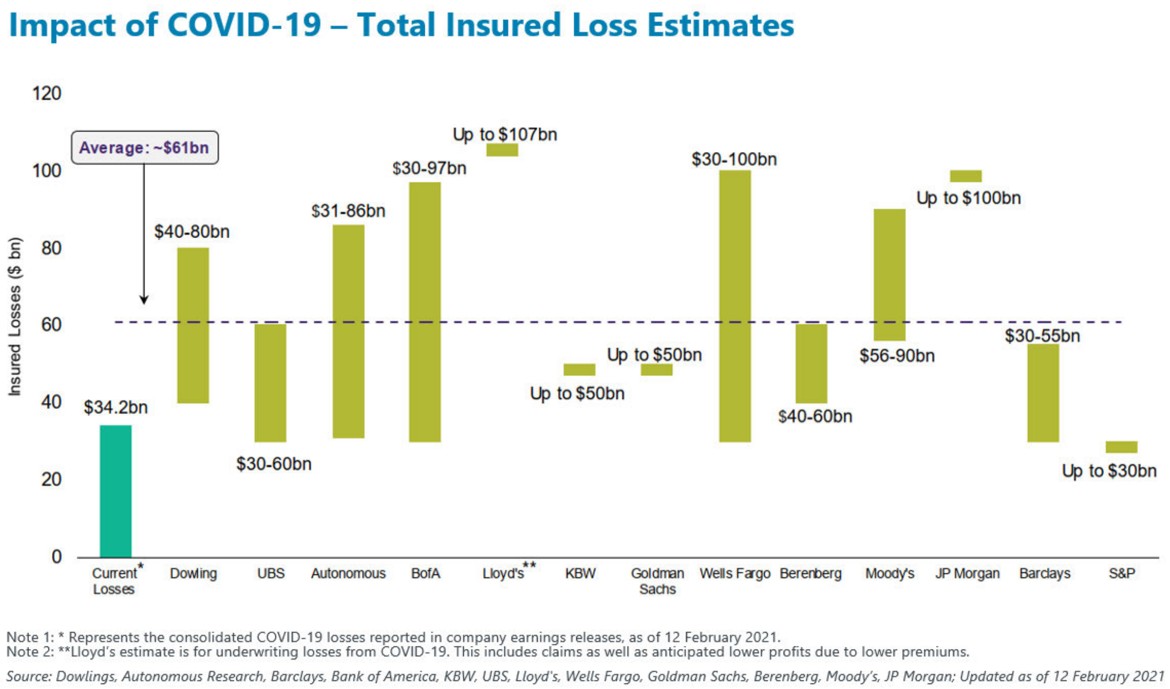
Property insurance pricing rates increased 5%, down from 8% in the prior quarter, despite severe flood events in Queensland and New South Wales. Insureds in CAT zones, especially flood, faced increased underwriting focus, including on contingent business interruption, deductibles, and risk mitigation. A demonstrable commitment to continual risk improvement was critical to renewal success. Valuations have become a major underwriting focus for insurers due to global inflation.

Casualty insurance pricing rose 11%, down from 15% in each of the three prior quarters. Insurers remained cautious due to claims inflation; with available capacity reduced, programs often experienced placement challenges. Risk selection has been more pronounced than in the past. Major programs underwent substantial restructuring of layers as a result of changing underwriter appetite.

Financial and Professional lines pricing rose 6%, a decrease from 10% in the prior quarter. The 5% decrease in pricing in the D&O market was the first reduction since 2017. Competition continued to develop, particularly for excess layers, resulting in improved pricing. Cyber insurance remained challenging, driven by frequent and severe ransomware losses.

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.

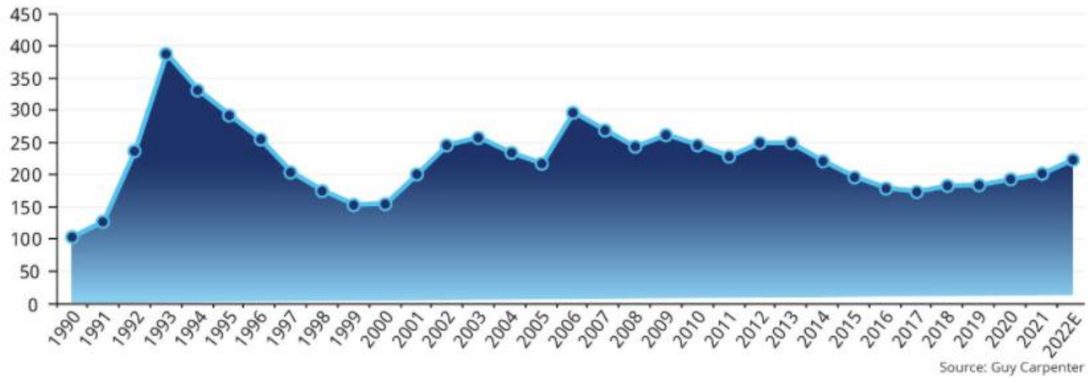


Global Reinsurance

On 1 January 2022, 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 9% (up from 6% in 2021)**, reflecting the biggest year-over-year increase since 2009, according to research by Howden.

The Guy Carpenter Global Property Catastrophe ROL index was **up 10.8 percent year on year**, at January 1 2022. This is up from 4.5% at January 2021. 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. While pricing exhibited a wide range on a risk-adjusted basis, non-loss-impacted business was generally flat to up 7%, with loss-impacted up 10% to over 30%



Liability including Bushfire Liability

Global 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
    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

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

The Casualty market is still perceived by insurers as in need of corrective action to reach their perceived 'rate adequacy'.

This is reinforced by Casualty being the only class that continued to be loss making according to Lloyd's 2021 results, and by continued concerns of social inflation pushing up loss costs.

There has been no significant new entrants into this sector, nor any meaningful increases in capacity of existing participants, meaning for large limit towers, there are very little alternative options. This is especially true in primary layers; however, we are starting to see some competition in excess layers where total limits purchased are less than the maximum working capacity in the market.

There is growing momentum in the market for new exclusions around Climate Change and expanding 'Toxic Substances' exclusions to include amongst other things per-fluoroalkyl and poly-fluoroalkyl substances (PFAS).

On the back of the argument that rate adequacy has not yet been achieved in this sector, Insurers are still looking to push for rate increases. The market is looking for around plus 10% in the International space (non-US, including Canada) but decreases have been achieved when different layering / deductible structures have been proposed. Accounts with US exposure are paying around plus 15%.

Wildfire, Social inflation, US Auto court awards, and PTSD Class actions remain a concern for the market, as losses from these exposures continue to manifest themselves.

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+)

Generali (a long term insurer in this sector) has decided to withdraw all capacity.

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.

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.

Bermuda markets looking to substantially cut back their capacity (many from USD 100M to USD 25M) has been largely dealt with over the last 2-3 years, with most markets now willing to offer the same capacity they offered last year. However, adverse claim activity or pricing ambitions at renewal out of step with the broader industry segment can at times be significant enough reasons for markets to review / alter their participation on an account.

The Bermuda market is still seeing increases in the 10-20% range within the Energy & Power industry segment, with underlying pricing achievements / outcomes playing a role in their decision making process

Key considerations are year-on-year exposure changes from an asset base perspective, existing claims maturation, new claims activity, changes to underlying terms and conditions, and any shifts in program structure.

The following are hot topic items for Bermuda Energy & Power Casualty insurers, and Insureds should be prepared to discuss these in the lead up to their renewals.

- ESG Initiatives / Global Warming / Net Zero
- Asset Integrity / System Hardening programs (severe weather events)
- PFAS
- Auto Exposure

- Wildfire (especially location of solar assets)
- Operations in Russia / Belarus / Ukraine

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.

International Liability Reinsurance Treaties

There was continued positive underlying rate movement across casualty lines which factored heavily into renewal outcomes, as prospective loss ratios showed continued improvement

Another important consideration in reducing loss projections is ongoing underwriting discipline by insurers. Factors include limits management and tighter underlying policy terms and conditions. Casualty capacity was generally sufficient. However, outcomes ranged widely based on casualty line and capacity requirements.

Financial lines benefited from the healthiest reinsurer appetite, with cyber aggregate being the most challenged.

Source: Guy Carpenter January 2022 Reinsurance Renewal Briefing

Feedback form the recent 1 July reinsurance treaty renewals in Australia show that prices increased +1% to +5% for portfolios with “no loss emergence” and +10% to +20% for portfolios with “loss emergence”. For those treaties without loss emergence, increases followed underlying exposure growth and inflation.

Many buyers continue to evolve their position on silent cyber, with a more disciplined underwriting approach applied to all cyber risks welcomed by reinsurers

Source: Gallagher Re 1st View, 1 July 2022

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 25,000 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.
- Blue Mountains Fire's (NSW) in 2013 which destroyed more than 300 homes. Several class actions were brought against parties including the electricity distributor. Total settlements and insurance subrogations actions were circa $25m.
- 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).

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

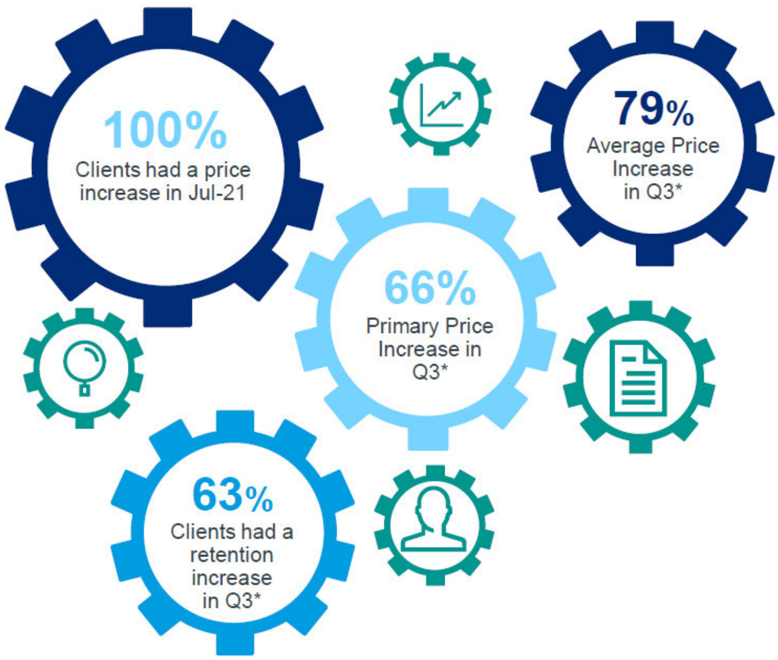
This change is driven in large part by a dramatic increase in both the frequency and severity of ransomware incidents in 2020 onward.

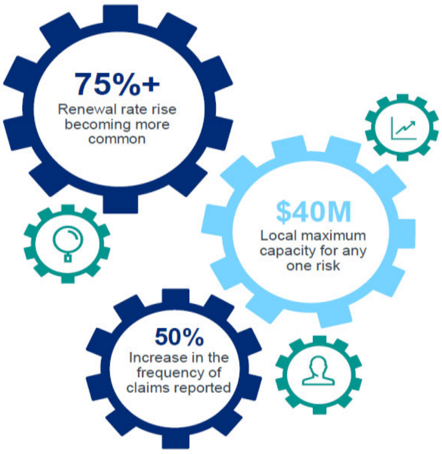
Aggregation risk is a key issue as insurers grapple with the increasing volume and cost of attacks, the increasing number of widespread attacks and the trickle down impacts of cybersecurity incidents in the supply chain.

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

See the following page for the Marsh Q4 2021 Cyber Market Snapshot:

Cyber Insurance Market Snapshot

Favors Buyer | Neutral | Favors Insurers

Claims	Rates	Capacity & Attachment	Underwriting	Coverage
Overall claims frequency and severity remains high driven by ransomware. Mild improvement in some categories but losses continue. Ransomware, systemic risk & regulations continue to drive concern.	Losses have accelerated pricing pressure even on loss free accounts with good controls. Excess pricing is increasing faster than primary, compounding increases. Expect increases to continue into 2022.	Claims activity and future uncertainty have insurers aggressively managing global capacity & increasing SIRs. Distressed classes & large towers may see capacity challenges.	Full application & responses to ransomware Q's are required; carriers using 3rd parties to externally scan environments. Also expect inquiries on recent supply chain events, biometric info, & operational technology.	Many carriers scaling back ransomware-related coverages, or not offering coverage if poor controls. More scrutiny on contingent business interruption (systemic risk) and regulatory cover (biometric information).
+55% YoY Increase In Loss Ratios, indicating an industrywide underwriting loss for 2020	October 2021 Cyber Premiums: **+117%** Avg increase same limits **+181%** Avg increase all renewals* *All renewals include limits changes.	October 2021 Cyber Renewals: **31%** reduced limits **8%** increased limits **65%** increased SIRs Driven by insureds minimizing increases & less available capacity.	**12** Key Controls & Best Practices are now viewed by carriers as essential	in average BI / CBI waiting periods due to ransomware and supply chain attacks

List of Data Reviewed

Essential Energy provided Marsh with data:

- 2020-21 Annual Report
- Treasury Managed Fund 2021 Statement of Cover
- Bushfire Liability Overview (Dec 2016)
- Renewal Questionnaire 2022-23
- TMF Proposal 2021-22
- Insurance Premium Summary 2016-22
- TMF Contribution Forecast 2024-29 (dated 15.07.22)
- TMF Contribution Forecast 2024-29 (dated 13.09.22)
- Property Renewal Questionnaire 2021-22
- Various Claims History Reports

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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