



Renewable Energy Market Outlook 2020



Since releasing our first Renewable Energy market update at the beginning of 2019, as a country, Australia has now overshot its 2020 renewable energy target by nearly 1 gigawatt (GW) through accumulating enough completed and committed projects to meet the goal in late August, according to the latest data from the Clean Energy Regulator.¹

Whilst the target has been met, an ongoing Large-scale Renewable Energy Target (LRET) scheme will continue to require high-energy users to meet their obligations under the policy until 2030. This will continue to drive the development of new projects across Australia, however, this will not be without challenges. The industry continues to be hampered with ongoing grid connection challenges and unexpected degradations in Marginal Loss Factors set by the Australian Energy Market Operator (AEMO).

At Aon, whilst we continue to work on a number of new projects, there has been a notable slowdown in the projects moving towards financial close as these industry issues continue to pose challenges for developers. As a leading broker in the renewable energy sector, we continue to work with the global insurance market to develop risk transfer solutions for our clients to meet their requirements, however, the insurance industry globally continues to face its own challenges which need to be carefully understood by project developers and sponsors to ensure best possible solutions.

¹<https://www.cleanenergycouncil.org.au/advocacy-initiatives/renewable-energy-target>

Insurance Market Update

The renewable energy insurance market (consistent with the global insurance market as a whole) is experiencing a period of turbulence as it looks to re-adjust itself after a sustained period of soft market conditions. Whilst capacity remains stable, appetite has reduced due to a sustained period of competitive pricing and increased claims.

There has been a noticeable trend in the transition of the competitiveness of capacity from the London / European market to locally domiciled capacity who initially were unable to follow the soft international pricing but are now seeing improved terms and conditions which is attracting them to underwrite risks in this sector. At the same time over this period, local insurers spent time educating and acquiring staff to be able to start to capitalise on this sector.

The withdrawal in London / European market capacity, especially from Australia, has been driven by the high volume of claims that have arisen from the construction projects in the Australian market that were placed some 18 to 24 months ago. These insurers have seen in excess of 100% loss ratios in their Australian books and are under pressure to manage their exposures and return books to profitability. These actions have been consistent across the board and predominantly have included:

- Reduced lead / follow line capacity for construction business from 100% in some instances to now no more than 20% - 35% per project

- Reduced appetite for standalone construction opportunities, and focusing on first year operational placements where warranties remain in place and are underpinned by comprehensive operation and maintenance (O&M) arrangements
- Heavily reviewing contractor and sub-contractor arrangements on a project by project basis - this has led to reduced appetite and/or increased deductibles in certain cases
- Increased focus on natural catastrophe exposures including flood, windstorm, bushfire and hail risks
- Rating tables being rewritten by lead capacity providers, with particular focus on the increasing construction base rates and applicable multipliers
- An increase in minimum deductibles for out of warranty wind sites to \$200k - 250k
- Elements of wording changes to address market-wide performance issues. Particular areas of focus include tightening in defects cover, series loss provisions and business interruption coverage extensions.

At the back end of all of these projects placed some 18 to 24 months ago, the biggest challenge for many clients / project developers is having to re-adjust their financial models to manage increased premium costs from projects completing their construction and first year operational policies. In these circumstances, these original construction policies were underwritten at the bottom of the soft market and are now being impacted by a market that has dramatically shifted to the other end of the spectrum, with increased pricing, higher deductibles and changes in policy coverage.







Key Risk Factors

All the factors outlined are having an impact globally on existing and new business across our portfolio. The changing underwriting process means that clients need to be in the market early with increased levels of underwriting information and the flexibility to work around policy coverage to drive positive outcomes in the current market conditions. We do however acknowledge that based upon relevant contractual agreements that may be in place, flexibility in respect to terms and conditions may be difficult and require agreement from contractual counterparties.

With insurers seeking to manage their exposures through line sizes, placements are requiring additional capacity to complete. This presents additional challenges as each insurer is pushing its own underwriting guideline criteria, which is leading to an increased incidence of split rated placements where new capacity entering an incumbent program comes at an increased price to incumbent capacity. While pressure exists on terms for all placements, we are seeing insurers focus on the following key areas in the renewables market.

1. Contractor error during construction

A large majority of losses experienced in the construction phase of projects have arisen from contractor error and negligence which has resulted in insurers withdrawing blanket covers to all contractors and subcontractors. In the event that all contractors / sub-contractors need to be covered, insurers will require substantial information such as any relevant experience they have, and details of any previous issues experienced, and remedial action taken. There is a focus on contractor supply chains, quality assurance mechanisms as well as the experience

Category	2020 Direction	Comments
Limit		<ul style="list-style-type: none"> • Insureds are not considering cutting limits as the savings do not currently outweigh the benefits. • Insureds already rating on Probable Maximum Loss scenarios.
Retentions		<ul style="list-style-type: none"> • Deductible levels coming under pressure after sustained period of reductions • Risks in Long Term Agreements bound at retention levels below current market guidelines • Insurers re-reviewing natural catastrophe (nat cat) exposures and adequate retentions
Coverage		<ul style="list-style-type: none"> • Insurers re-reviewing wordings to bring back in line with underwriting guidelines • Focus on ageing /out of production technology - insurers differentiating between warranty /out of warranty technology • Prototypical technology continues to be a focus point including LEG defect exclusions and adequate Serial Loss Clauses • Additional coverage restrictions being applied to nat cat sub-limits and microcracking (for solar)
Capacity / Appetite		<ul style="list-style-type: none"> • Capacity came under pressure throughout 2019 and will continue in 2020 both locally and internationally • Local carriers appetite increased, however nat cat factors driving deployed capacity • Insurers seeking to manage exposures on a per risk basis - London markets reducing coverage from 100% offerings on prior years • Potential influx of newer capacity from insurers with thermal coal underwriting restrictions
Claims		<ul style="list-style-type: none"> • Renewable energy market still underperforming globally. Recent Texas hail losses cost market US\$75m • In Lloyd's renewable energy sits inside general Power Gen risk code so continues to be seen as underperforming class • Australian market large number of construction and operational claims
Premium		<ul style="list-style-type: none"> • Expect continued rate adjustment through 2020 with extreme cases of 30%+ premium rate increases • Insurers will seek to differentiate risks focusing on "in warranty" and clean accounts • Biggest impact of clients in LTAs where market increases have been avoided in past 12 / 24 months

Some Key Mitigation Strategies for Construction Projects to Consider:

- Contract with experienced parties and strong project management
- Tier 1 suppliers and understanding of supply chain risks
- Proven technology with certification and operating history
- Design tolerance matching weather exposures
- Marine warranty surveyors, route surveys and reliable hauliers
- Selection of suitable ports, especially for large equipment
- Implementation of flood, fire and security measures early in construction period
- Multiple main transformers including redundancy and adequate separation (e.g. firewalls) for large projects
- Contingency planning – construction and operation
- Condition monitoring, dissolved gas analysis, oil sampling, vibration monitoring etc.
- Extensive O&M contract or extended warranty periods from OEMs
- Multiple site access roads
- Alternative mitigation measures – drones to check for damage in hard to reach places.
- Adequate timing or ‘float’ in project GANTT chart for all subcontracts to be completed without undue time pressure

of the independent owner’s engineer in signing off (sub) contractor work as being completed to an adequate level.

We are seeing a lot of pressure to ensure contractors are taking more responsibility for any negligent acts they perform with the insurers looking to sit secondary the contractor’s insurance placements in some circumstances.

Specifically, in Australia, there is a growth in the number of new international contractors looking to participate in the renewables sector. While these international contractors may be global experts in the sector, they may not have a track record in the Australian market. This does not mean these contractors are uninsurable, but information must be provided to support their experience. This has been driven by a multitude of different losses including two large turbine suppliers who have registered multiple claims due to issues with their contractors during installation and a cable contractor who has submitted multiple claims for damage during their installation as a result of incorrect installation techniques.

2. Growing size of turbines and a lack of type certification

In recent years, there has been an exponential growth in the size of wind turbines entering the market. Gone are the days of the 0.5 megawatt (MW) to 2MW units, particularly in Australia the move to 4MW and 5MW+ turbines seems to be common practice for new projects.

The speed of innovation in wind turbine technology has meant that it is a regular occurrence for turbines manufacturers to release new models. Whilst this is a great achievement for the industry as a whole, it has meant some projects are now coming to market with unproven and in many cases uncertified turbines.

This lack of operating experience is causing insurers major concerns and has led to large increases in deductibles and premiums for these types of projects when compared to similar projects with proven technology. For those turbines which are not certified the market will only offer London Engineering Group (LEG) 1 coverage, there is no option for LEG 2 (LEG coverage summary below). Aside from the specific issue around certification, the growth in the size of turbines has also come hand in hand with a growth in the value of each individual turbine and its components and the lead time for replacement equipment. These turbines are therefore increasing the size of each claim for insurers as the turbines are more expensive but also require specialist cranes to install (which have longer lead times to hire).

In order to cover these risks, insurers expect clients to retain more of the risk than they traditionally have. For turbines over 3.5MW, we are generally seeing minimum deductibles of \$250,000. The premiums per MW are also higher for these technologies than the sub-3.5MW turbines. This is to account for the increasing value of claims insurers are now faced with following an incident on one of these larger turbines.

LEG Clauses Explained

	LEG 3	LEG 2	LEG 1
Costs to fix defects in the absence of damage	✗	✗	✗
Costs to improve (original) Design, Plan, Specification, Workmanship or Material	✗	✗	✗
Loss, damage or costs incurred in accessing defective element	✔	✗	✗
Costs to fix defective element itself	✔	✔/✗	✗
Costs to fix damage to (other) property supported by the defective property	✔	✔	✗
Costs to fix damage to (other) property caused by the defective element	✔	✔	✗

✗ No coverage

✔ Cover included

✔/✗ Circumstances of claim dictate whether or not these costs will be included

Source: Aon proprietary data

3. Insolvent equipment manufacturers

As well as larger turbines, the cost of renewables is becoming more and more competitive. This has led to extensive pressure on manufacturers to ensure they are as competitive as possible to be selected for new construction projects and O&M contracts. We have recently seen several manufacturers entering liquidation with the highest profile being Servion.

This can be problematic from an insurance standpoint as essentially it means spare parts are generally harder to procure and those manufacturers who also conduct O&M operations of the equipment will no longer be able to provide this service. This can lead to restrictive insurance options available to the client.

4. Natural catastrophes

Natural catastrophe events have been particularly prevalent in recent years. As a result, insurers have experienced large renewables losses globally. This has led to insurers reviewing their natural catastrophe models and whether these property reflected underlying catastrophe risks leading to under-pricing and over subscription. Consequently, revised modelling has led to insurers imposing more restrictive terms and conditions. It is fair to say that those projects that had construction and operational policies bound 18 to 24 months ago, did not have these restrictive coverages but could potentially see more restrictive positions from insurers as they re-review their exposures.

Insurers have begun to implement natural catastrophe limits and increased deductibles specifically in the case of windstorm, flood, bushfire, and hail. This is highlighted by a recent hailstorm in Texas which caused a total loss of a solar farm after over 400,000 solar panels were damaged, leading to a loss of between \$70million and \$80million for the insurers². This specific loss has forced the market to reevaluate how they consider natural catastrophe events, risk modelling and hailstorm exposures in particular.

5. Warranties & Obsolete Technology

The availability of equipment warranties continues to be a hot topic for insurers in the renewables sector and in the current market climate, is actually driving further differentiation in appetite for specific risks.

Traditionally, there was little to no change in terms and conditions offered by insurers after equipment warranties had expired. This was largely driven by successive years of soft insurance market conditions, with insurers unable to charge adequate premium increases to reflect an increased exposure to them once equipment warranties expired. However, over the past 12+ months, given the poor performance of the sector, there has been a noticeable shift in insurer appetite for 'in' or 'out' of warranty projects.

The impact on terms and conditions for out of warranty projects is characterised by increased pressure on deductible levels combined with an increase in premium rate. In extreme cases, where out of warranty projects have poor loss histories, insurers have elected to not insure these projects altogether as they seek to remove their worst performing risks. This has ultimately led to a small pool of insurers willing to insure these projects.

² <https://insuranceinsider.com/articles/129613/texas-hailstorm-set-to-generate-70mn-80mn-solar-loss>



How is Aon supporting our clients in this market?

The market continues to transition and we expect this hardening trend to continue throughout 2020. At Aon, we are ensuring that we work closely with our clients to manage expectations throughout this challenging period. Ultimately, early engagement and planning are key to successfully navigating through this changing market.

Clients need to focus on the quality of information being provided to insurers. Over the past decade, insurers were more willing to underwrite risks on lesser information, however, this is no longer the case. It is important that we receive detailed underwriting information, especially on contractor / sub-contractor, natural catastrophe and technological exposures in good lead time so we can help obtain a positive outcome.

Clients must also be prepared to undertake a full remarketing exercise both locally and overseas, and potentially China. As insurers restrict their capacity allocation on a per risk basis, we will need additional capacity to complete risks.

Aon Client Treaty

Aon Client Treaty (ACT), exclusive to Aon clients, is a co-insurance solution that provides up to 15% capacity on London Global Broking Centre business. It is a pre-secured and guaranteed follow capacity from a panel of Lloyd's Syndicates.

In the current challenging insurance market environment, ACT has proven to be an invaluable broking asset. Many of our competitors have struggled to fill their clients' insurance programmes at acceptable terms and conditions.

The benefits include:



Help minimise price increases

Reduce the risk of “the tail wagging the dog” (i.e. when pursuing aggressive pricing or coverage objectives, the last 15% of the placement can be the most difficult).



Access more capacity

The capacity in addition to any existing involvement.



Help minimise market volatility

Access to pre-prescribed capacity to fill gaps in the programme, offset unreasonable premium increases, minimise the use of sub-par / inexperienced capacity, and resist coverage retractions as the market shifts.

There has also been an increasing focus on obsolete technology and end of life, particularly in the wind sector. The oldest wind projects in Australia which are 10+ years old, use technology that is no longer manufactured. There is increased focus from insurers on future capital expenses (CAPEX) / operating expenses (OPEX) for these assets to understand whether clients continue to invest in them and what they would do in the event of catastrophic failures. Insurers have sought to manage exposures through the basis of settlement indemnities aligned to indemnity values or where known defects exist, total defect exclusions (LEG 1 defects exclusion). Careful consideration needs to be given to policy reinstatement provisions in the event of damage to turbines that are no longer in commercial production.

Clients who purchase extended warranties or are able to provide an independent engineering report are likely to be rewarded with better outcomes than generally seen across the market.



How you can help manage and mitigate the market cycle

Clients should also be prepared, in extreme circumstances, to accept split terms and conditions across placements from insurers in order to complete 100% participation. A split placement could be characterised by differing terms and conditions from insurers such as differences in premium, deductibles and coverage including flood, hail or windstorm sub-limits. While Aon recommends consistent coverage across placements where possible, split placements may be appropriate in obtaining terms and conditions that are favourable to the clients' specific circumstances.

- 1 Start preparing now**

Time is critical. Renewal timelines are generally becoming longer which means the whole process must start earlier and with more preparation.
- 2 Positively differentiate... information is the key**

The quality of the risk submission will become more important to ensure optimal renewal terms. Buyers (and their broker) will need to articulate to the insurers how their risk is managed better than that of their peers.
- 3 Invest in insurer relationships**

Insurers are sticky and will go that extra mile for those clients that have invested time and money in building long term relationships.
- 4 Challenge practices and approaches**

Consider the evolving risk profile, review wordings, retentions and limits. As insurers focus on breadth of coverage, buyers need to understand the relevance of their policy wording.
- 5 Understand your risk tolerance**

In various circumstances, buyers will need to make quick decisions around risk retention and appetite. Preparing this work upfront and refreshing financial assumptions internally and with boards can help expedite tough decisions.
- 6 Explore alternative risk financing options**

The trend towards increased retentions will likely lead to more extensive utilisation of captives, even from organisations that may have previously discounted this approach due to a lack of scale.
- 7 Use data and analytics**

Make informed recommendations and decisions, particularly around program design and where to invest in risk control.

› Contact us today!

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