

# ClimateAUS

## Physical Climate Risk

### Intelligently Designed. Location and Portfolio Level Intelligence.

For 25 years, Risk Frontiers has been leading the development of natural catastrophe models for the Asia-Pacific region.

Risk Frontiers is implementing a catastrophe loss modelling solution to enable business and community leaders to more fully understand their exposure to future climate scenarios. Our models are the ideal tool to understand climate change impacts to inform adaptation decision making.

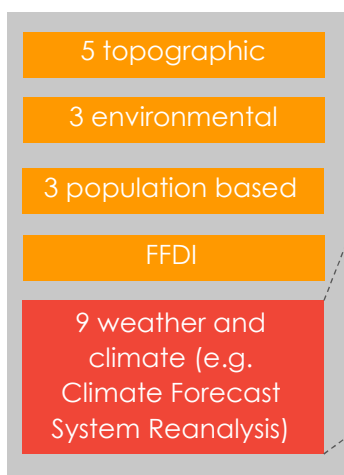
### Future Proofing Business and the Community

The Task Force on Climate-related Financial Disclosures (TCFD) provides the framework for transparent company reporting on climate change risks. This gives investors and regulators more clarity the risks a company faces. The Australian Securities and Investment Commission (ASIC) also recommend that listed companies with material exposure to climate risk consider reporting under the TCFD framework.

Risk Frontiers' climate risk analysis tools are designed to quantify the impact of future climate scenarios on effects to property, physical environment and company financials.

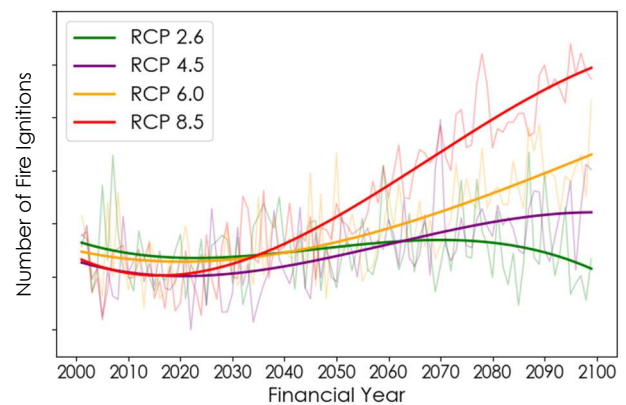
### Bespoke Climate Analyses

#### Bushfire hazard module machine learning predictors



#### Stochastic simulations under future climate pathways

Weather & climate variables extracted from the Community Climate System Model (CCSM) under four Representative Concentration Pathways (RCPs)



<b>Location</b>	1 Middle Street, Valley Heights, NSW
Lat: -37.37, Lon: 145.28	Elevation: 235 meters
Property Replacement Value	AUD 1,000,000
Climate zone - Current	Temperate - Wet winter, dry summer; Mild/warm summer, cold winter
Land cover/vegetation type	Open forest
Annual Probability of loss	
- Current	0.02% - 0.05%
- 2030 RCP 8.5	0.02% - 0.05%
- 2050 RCP 8.5	0.025% - 0.06%
- 2070 RCP 8.5	0.04% - 0.08%

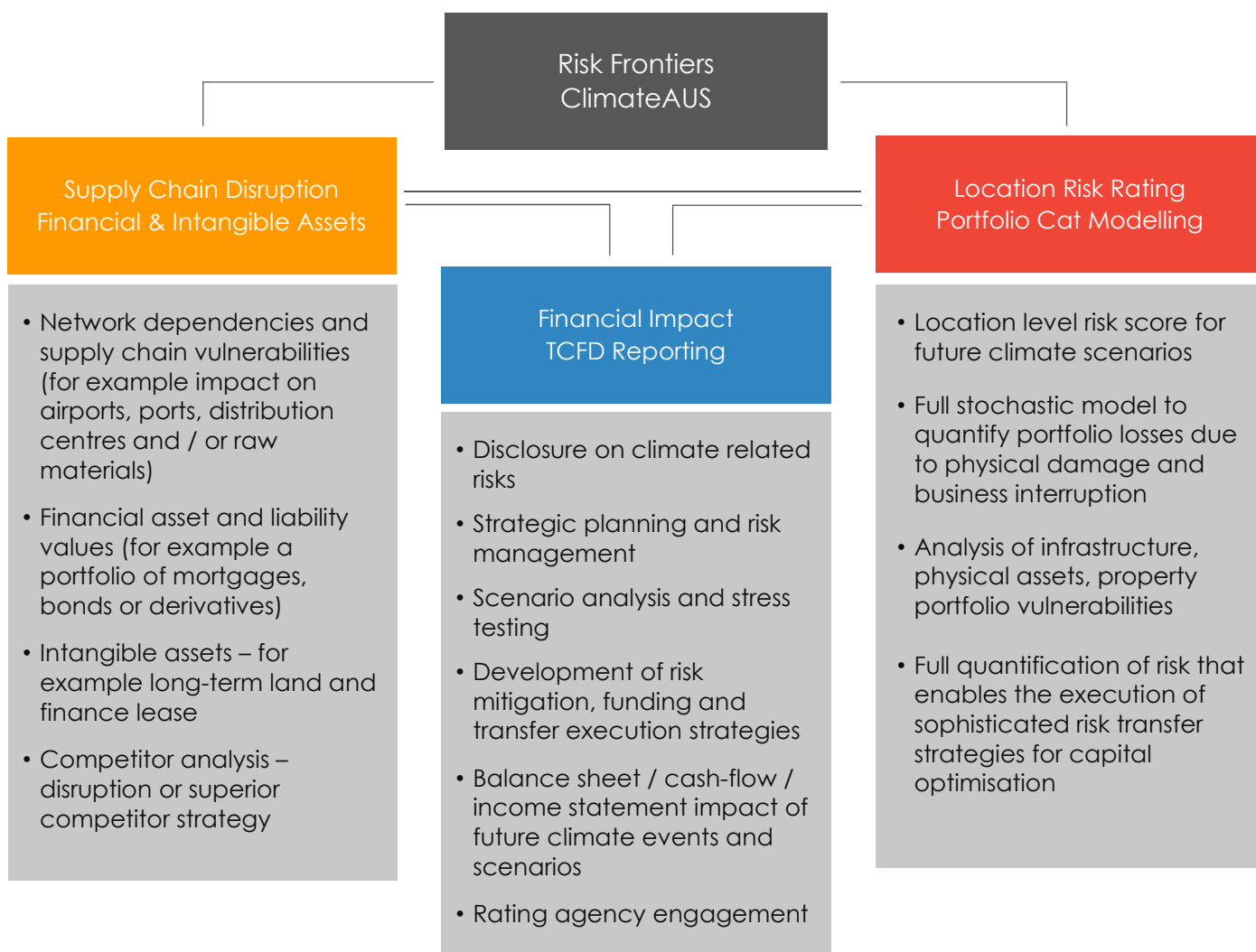
Figure 1: Example of physical climate risk evaluation framework applied to property level bushfire risk

## Collaboration with Academia and Industry

Risk Frontiers maintains a global affiliate and collaboration network that enables best practice in the real-world implementation of climate solutions and policy.

Risk Frontiers is a Partner Organisation of the Australian Research Council's Centre of Excellence for Climate Extremes (CLEX). CLEX is an international research consortium of five Australian universities and a network of outstanding national and international partner organisations. The improved predictions of climate extremes will enable improvements in how Australia copes with extremes now and in the future.

Risk Frontiers are also closely aligned with the (re)insurance industry and associated capital markets and have developed sophisticated tools for the pricing of natural hazard risks. These span tropical cyclone, flood, bushfire, hail, earthquake and tsunamis. Our catastrophe modelling tools have been used extensively by insurers to devise capital management strategies and execute reinsurance placements.



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