

Lights, camera, action

The time to quantify climate risk
is now

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Qualitative vs Quantitative

Qualitative

- Not necessarily linked to validated data sources.
- Coarse output. E.g. RAG
- Limited ability to inform business decisions
- Quick to implement
- Easy entry for any organisation
- Can equally be delivered by Non-Actuaries and Actuaries

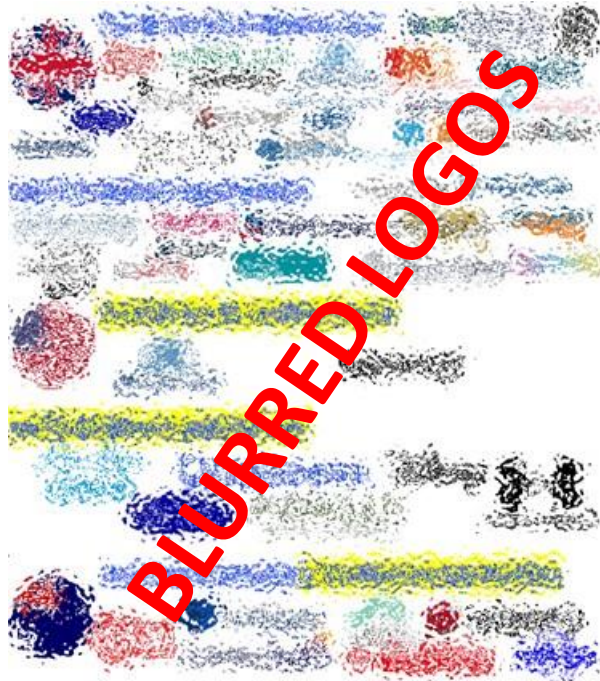
Quantitative

- Grounded in evidence and science / engineering / economics
- Potentially granular outputs
- Informs a wide array of business decisions
- Requires an uplift in organisational understanding of climate risk
- Actuaries are well placed to deliver this

Credentials

KPMG's Climate IQ has been delivered across the globe since 2021.

KPMG Australia employ Actuaries solely dedicated to climate risk assessment.



Our clients range across sectors including consumer goods, food, infrastructure, energy, services and transportation.

The Time is Now

Prepare yourself with KPMG's lessons learnt

Buy-In

Language

Capability

Entrepreneur



Getting Buy-In



Client ----->

<----- KPMG



Hi James,
Our organisation is climate pro, I even remove the plastic film on coffee cups to recycle.

Hi Valued Client,
That's amazing! That's going a step further than the average client.

Getting Buy-In



Client



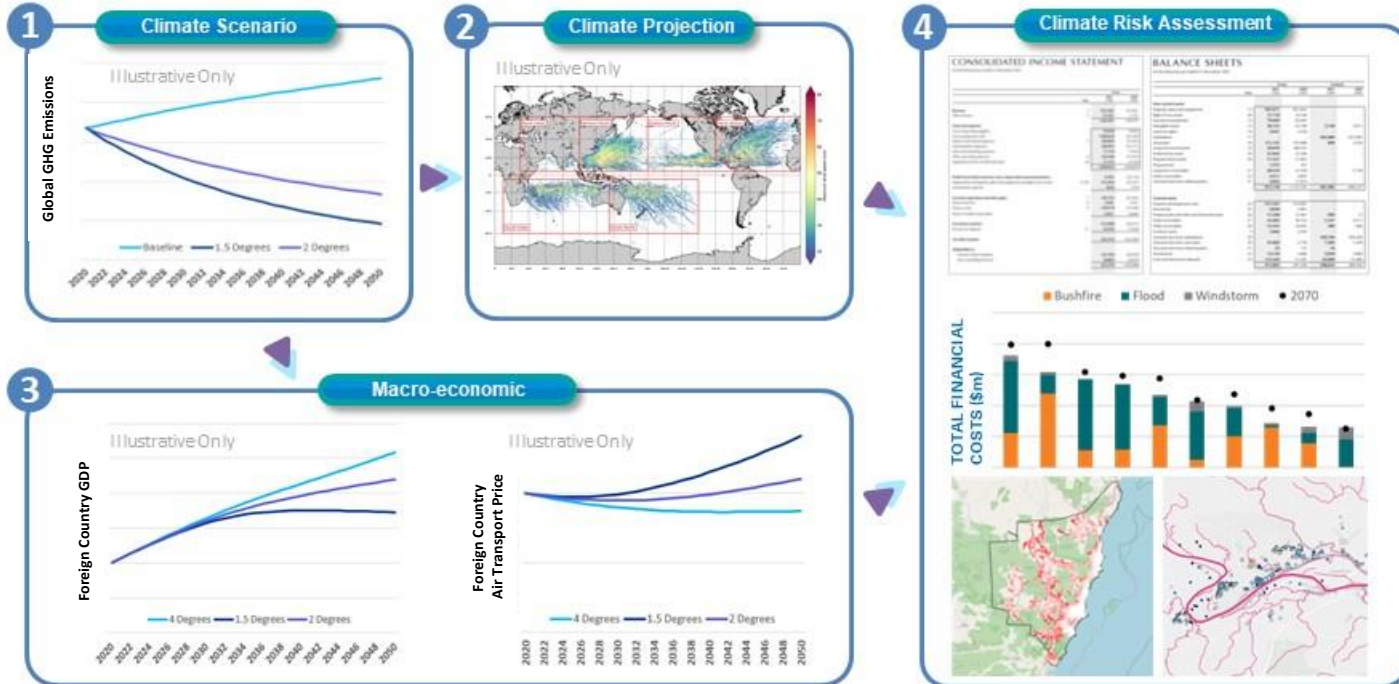
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So, we already do our part for the community. Thanks for your offer of assistance.

We can assist with more than meticulous recycling though. Did you know that...

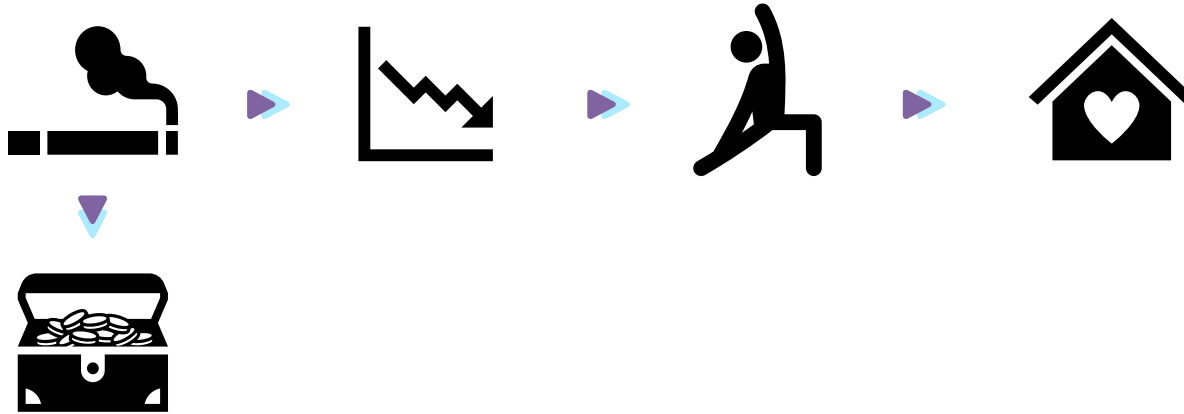
Baby Steps





Common Language

When explaining a heavy tail catastrophe distribution, we can use the analogy of a dice with one side having 100 score.

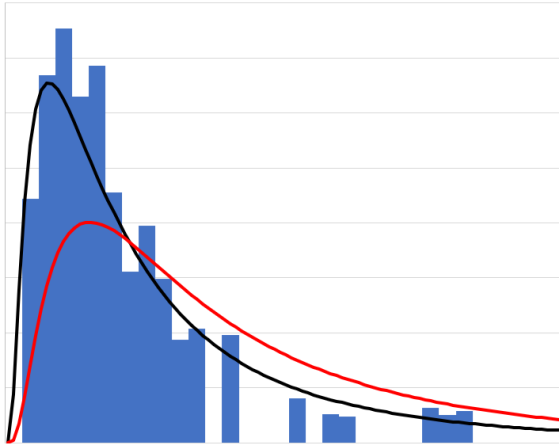


Common Language

A carbon tax may produce widespread economic impacts that are not immediately obvious. However, incremental linkages may be intuitive.

Leverage Capability

Insurance Catastrophe Models



- **What was the capability?**
Existing catastrophe insurance models
- **How was it leveraged?**
Updated with forward-looking climate data
- **What was the impact?**
Future view of event size distribution

Entrepreneurial Clients



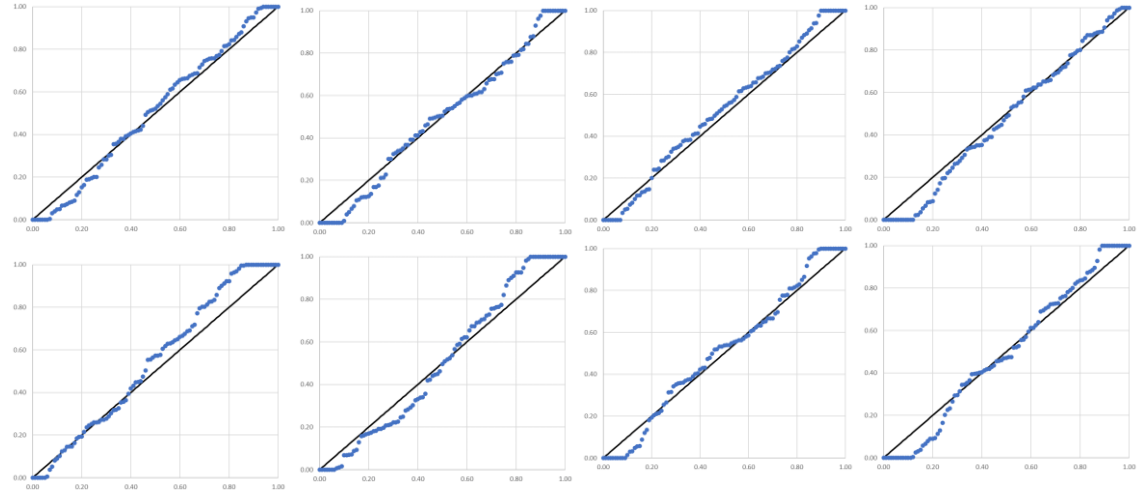
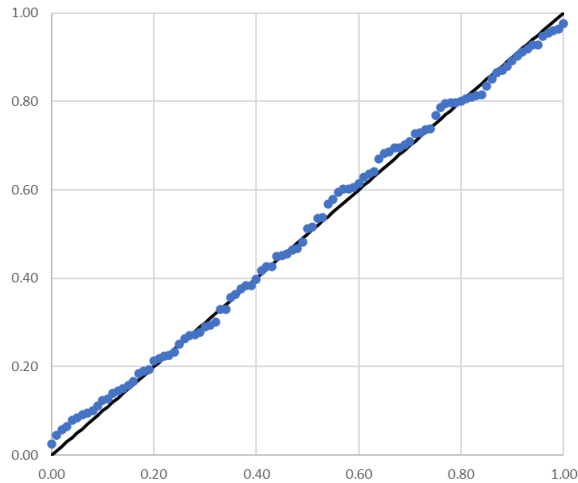
Client ----->

<----- KPMG



Hi James,
Can you please provide the
climate risk analysis at an
individual asset level?

Hi Valued Client,
Yes, I can, but please consider
the following...



Considerations for the Entrepreneur

Generally, analysis is parameterised to reflect outcomes at the highest level. Additional parameterisation is required to allocate outcomes appropriately to lower levels. If parameterisation was not performed at lower levels, then outcomes assessed at lower levels should be considered with care.

Entrepreneurial Clients



Client ----->

<----- KPMG



Hi James,
I noticed that the model did not explicitly allow for shark attacks that may occur due to rising sea-levels. Can we please add this?

Hi Valued Client,
Yes, I can, but please consider the following...



A%



B%



C%



D%

Considerations for the Entrepreneur

Models attempt to capture the fundamental mechanisms that influence the output under scrutiny. There should be a limit to how many real-world phenomena are included based on the materiality to the output.

Entrepreneurial Clients



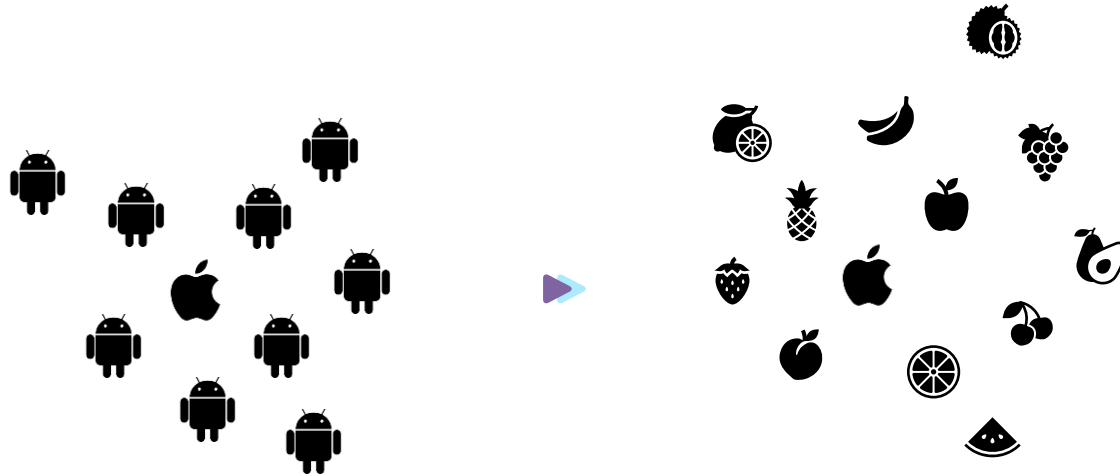
Client ----->

<----- KPMG



Hi James,
The CGE model projects a reduction in our product sales price. Can the model allow for an increase in prices at the expense of sales volume?

Hi Valued Client,
Yes, I can, but please consider the following...



Considerations for the Entrepreneur

A CGE model is a macro-economic model, which projects how regions and sectors will perform in the future. An individual organisation may set itself apart, but how can this be defended?

Closing Comments



James ----->

<----- Joseph

