

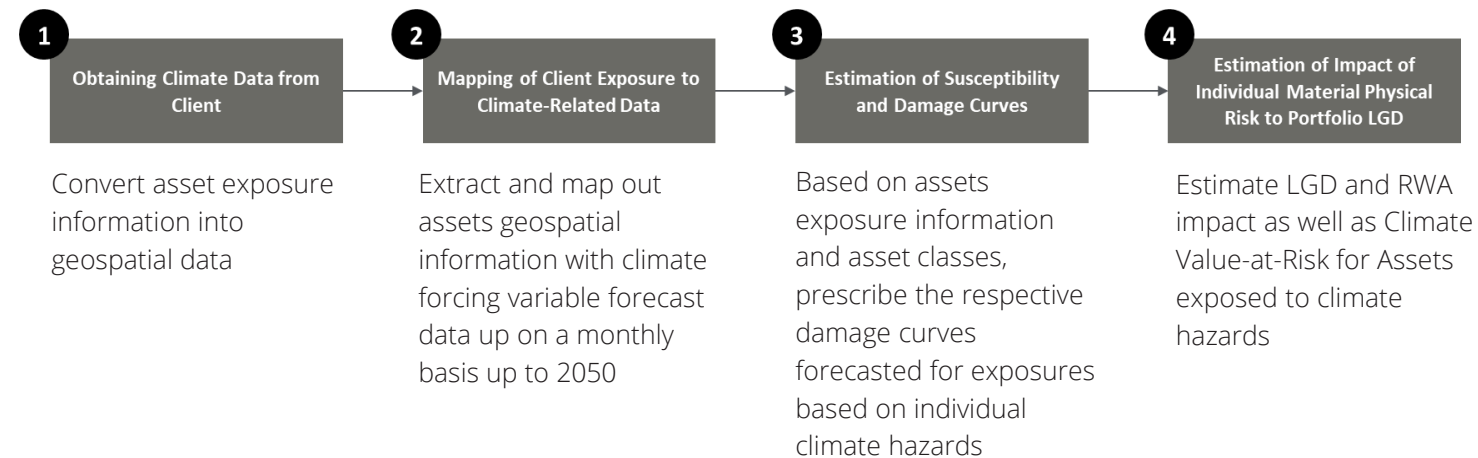
# Our Climate Risk Scenario Analysis Solution

## Deloitte's Climate Risk Modelling Key Features

- Forward-looking models forecasting impact up to 2050.
- Our approach is granular whereby physical risk can be measured at address level and customized based on asset classes.
- Adhere to global scenario datasets

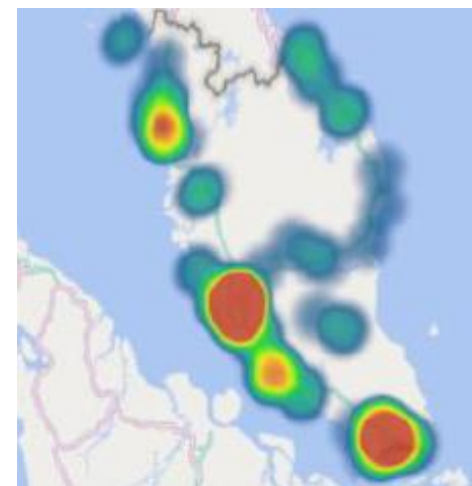
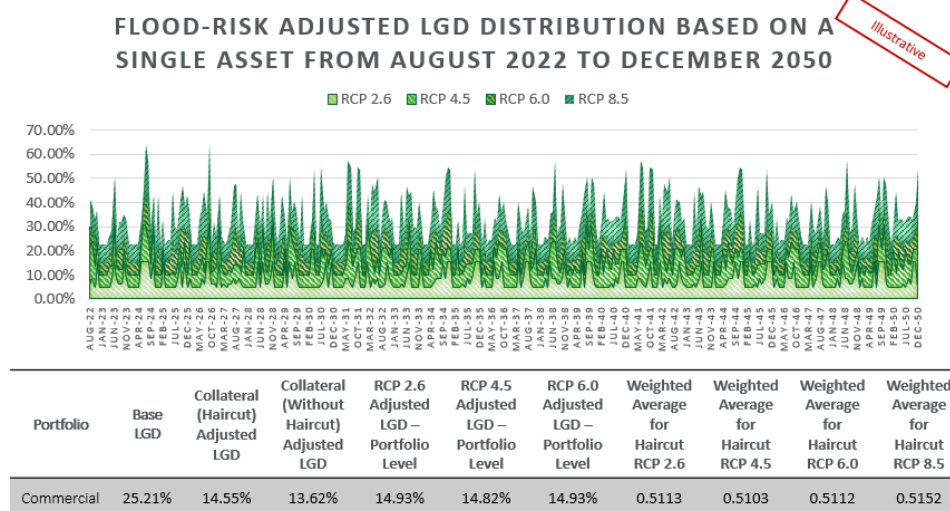
## Deloitte Physical Risk Scenario Analysis Tool

We have developed a quantification tool that integrates material physical risk impact to the ECL estimation for IFRS 9 provisioning via its impact on LGD and the underlying collaterals held by the Bank. Leveraging on key reference scenarios from NGFS and IPCC.



## Physical Risk Scenario Analysis Result

We are able to forecast the impact of physical risks such as flood risks and typhoon risks on the asset value of collaterals and compute the impact on the LGD due to stranded assets and are then geographically mapped accurately using geospatial modelling.



Flood risk heatmap for asset exposure under scenario RCP 4.5

## Climate Risk and Scenario Analysis Recent Case Studies

### (1) Banking Conglomerate - Climate Risk Management and Scenario Analysis Implementation Plan and Quantitative Scenario Analysis

A large banking conglomerate was looking develop their climate risk management and scenario analysis implementation plan to manage climate-related risks and opportunities, through developing an implementation roadmap spanning governance, strategy, risk appetite, risk management, scenario analysis, and disclosure pillars over the next 3 years.

### (2) Quantitative Measurement of Physical Risk on Bank Portfolio

Deloitte was engaged by a Malaysian government-linked bank that predominantly caters to SMEs to:

- Identify material chronic and acute physical risks that the bank is susceptible to
- Identify the key climate and internal data required to quantify the physical risk impact on the banking book and provisioning in line with the IFRS and Basel Standards
- Develop a comprehensive solution to quantify the physical risk impact on the banking book and provisioning in line with the IFRS and Basel Standards

# Our Globally Connected Network

## Serving you around the globe

Deloitte is the world's largest professional services organisation, providing audit & assurance, consulting, financial advisory, risk advisory, tax & legal related services to public and private clients spanning multiple industries.

With a globally connected network of member firms in more than 150 countries and territories, Deloitte brings world-class capabilities and high-quality service to clients, delivering the insights they need to address their most complex business challenges.

The world's largest professional services organisation

**Deloitte Malaysia**  
2,500+ staff and more than 60 partners across 8 offices



150 countries over 750 locations

With more than 345,000 people

**Deloitte Asia Pacific** Over 70,000 staff and 4,000 Partners in 20 countries in more than 120 cities

**Deloitte Southeast Asia**  
Over 10,600 staff and 400 Partners in 11 countries and 25 offices



## Services Offered

We have been helping our clients globally across climate risk related-needs

- Assessment of climate-related risks and opportunities across diverse divisions and multiple countries
- Climate scenario analysis
- Industry-wide climate risk stress testing
- Climate risk catastrophe and economic modeling
- Linking risks and opportunities with financial outcomes
- Process review against the TCFD framework
- Drafting of TCFD reports
- Climate disclosures



## Our Team and Capabilities

We have deep experience and competencies in climate risk with in-house

- Climate scientists
- Sustainability SMRs
- Risk modelers
- Disclosure specialists
- Regulatory SMRs
- Former regulators
- Data and technology architects

We leverage our industry leading tools and accelerators to serve our clients

- Proprietary tools and accelerators such as enable our clients quickly ramp-up climate risk objectives

**4,500** practitioners

Global sustainability and climate risk community

**35+** countries

Sustainability and climate risk delivery footprint

Actively influencing the regulatory standard setting landscape and industry approach to climate risk management globally



## Connect with us



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