

# Climate Change & Sustainability in Malaysia

Presentation by  
Matthew Day,  
Head of Zurich Resilience Solutions, Asia

# Agenda

- Climate Change, Natural Hazards and ESG landscape in the region
- How does Zurich respond to climate change and sustainability risks?
- How does Zurich support its customers in building resilience?



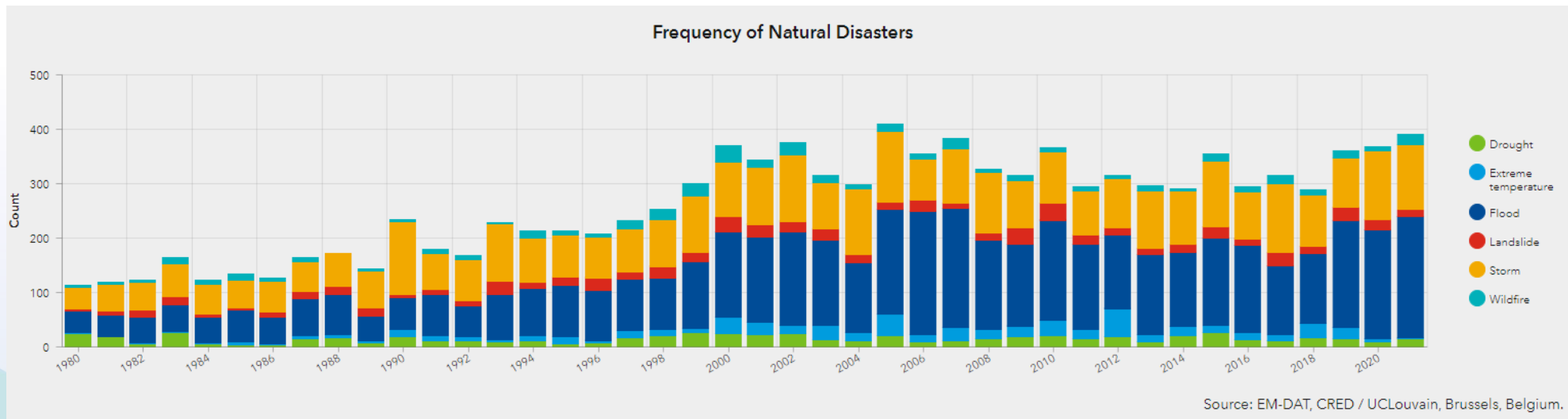
# Climate Change, Natural Hazards and ESG Landscape in the region



# Polling Time

Globally, which of the following climate-related natural disasters occur most frequently in 2021?

- A. A. Storm
- B. Drought
- C. Flood
- D. Wildfire

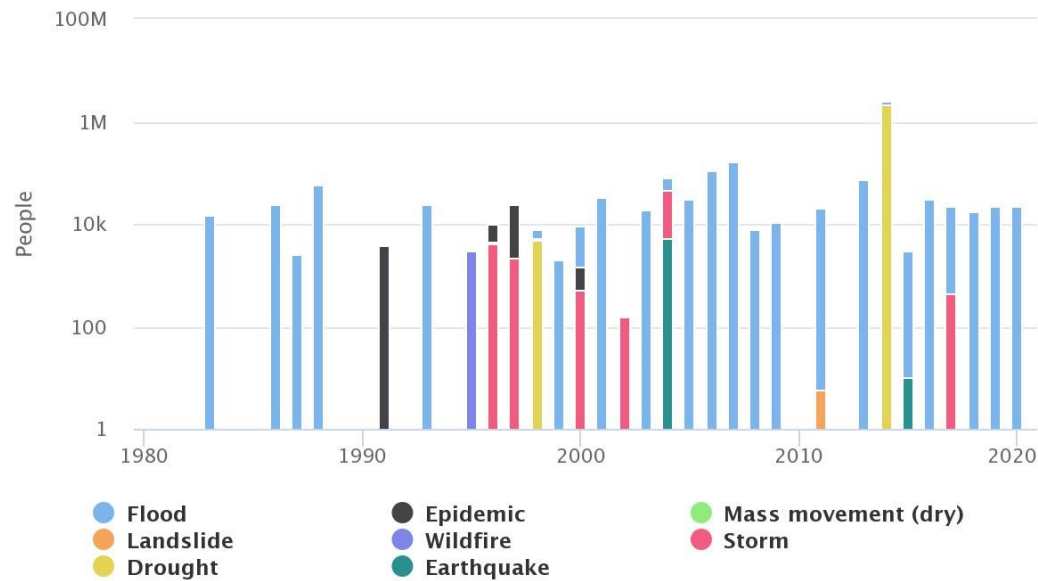


Source: International Monetary Fund, 2022, Retrieved from <https://climatedata.imf.org/pages/climatechange-data#cc5>

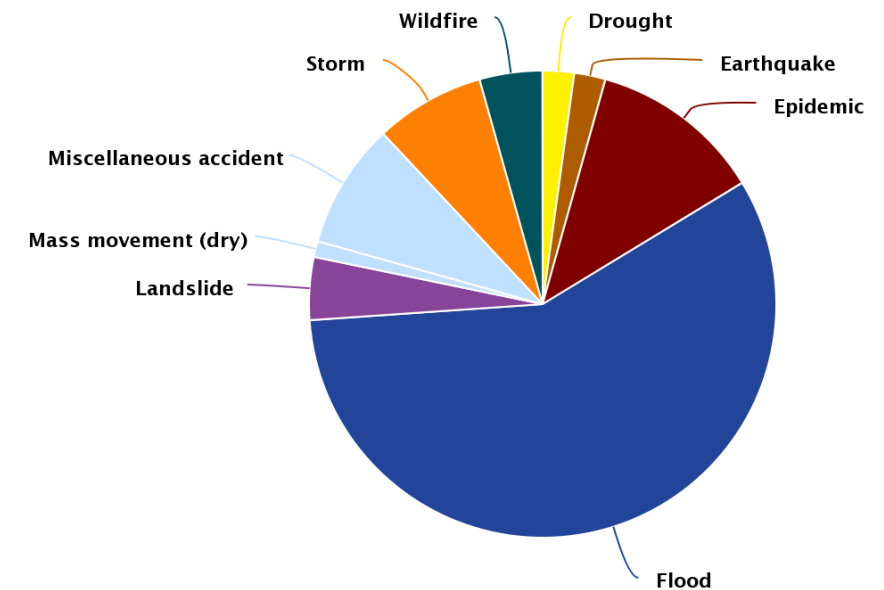
# Natural Hazards in Malaysia

Key Natural Hazard Statistics for 1980–2020

Number of People Affected



Average Annual Natural Hazard Occurrence for 1980–2020



Source: World Bank, 2022, Retrieved from <https://climateknowledgeportal.worldbank.org/country/malaysia/vulnerability>

# Malaysian 2021 Floods

## Malaysia floods hit seven states forcing thousands to evacuate

Story by Reuters

Published 9:44 PM EST, Sun January 2, 2022



Piles of logs and debris washed up along a riverside in Karak town, Pahang state, Malaysia, on December 27.

Terence Wong/AP

Source: CNN, 2022, Retrieved from <https://edition.cnn.com/2022/01/02/asia/malaysia-floods-evacuation-intl-hnk/index.html>

## 'Surprise' urban Malaysia floods drive pleas for climate action

By Thomson Reuters Foundation - May 2, 2022 @ 10:31am



On the street in Malaysia's capital Kuala Lumpur where Chong's family have lived for almost a century residents have coped with regular flooding for decades - but nothing prepared them for the devastation caused by rising waters late last year. - NSTP/ASYRAF HAMZAH

Source: New Straits Times, 2022, Retrieved from <https://www.nst.com.my/news/nation/2022/05/793396/surprise-urban-malaysia-floods-drive-pleas-climate-action>

# Polling Time

In Malaysian Flood 2021, which of the following has experienced a significant amount of damage in terms of the value of the loss?

- A. Public assets and infrastructure
- B. Living quarters
- C. Manufacturing
- D. Agriculture

According to Malaysian Government, Public assets and infrastructure experienced a loss of RM2.0 billion loss (around USD 0.42 billion)

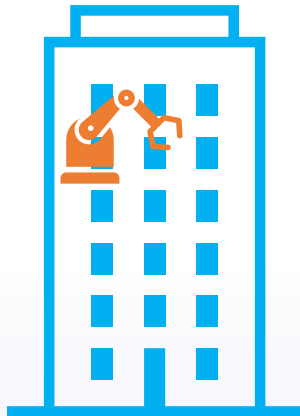
Type of Damage		Value of Loss
Living quarters		RM1.6 billion
Business premises		RM0.5 billion
Vehicles		RM1.0 billion
Agriculture		RM90.6 million
Manufacturing		RM0.9 billion
Public assets & infrastructure		RM2.0 billion

Source: Department of Statistics Malaysia, 2022, Retrieved from [https://www.dosm.gov.my/v1/index.php?r=column/cthemByCat&cat=496&bul\\_id=ZlkxS0JnNThiRHk0ZlZajdyVm44UT09&menu\\_id=WjJGK0Z5bTk1ZEIVT09yUWItRG41Zz09](https://www.dosm.gov.my/v1/index.php?r=column/cthemByCat&cat=496&bul_id=ZlkxS0JnNThiRHk0ZlZajdyVm44UT09&menu_id=WjJGK0Z5bTk1ZEIVT09yUWItRG41Zz09)



# Polling Time

Which building is at higher risk of flood? A or B?



## Building A

- Located at high flood risk area
- Contains machinery worth \$10 million on the 5<sup>th</sup> floor



## Building B

- Located at medium flood risk area
- Contains machinery worth USD \$10 million at basement



# Holistic view of risk

## 1. Exposures

We identify the values or processes that are at risk of disruptions, or the people who could be injured by hazards.

## 2. Hazards

The potential sources of damage are identified, based on the available information. For example, for flood we'll consider:

All potential flood sources, topography, possible contamination sources released by a flood event.



## 3. Controls

We assess the quality of the controls and identify any weaknesses, whether in terms of physical protection, organizational measures, or related to the coverage.

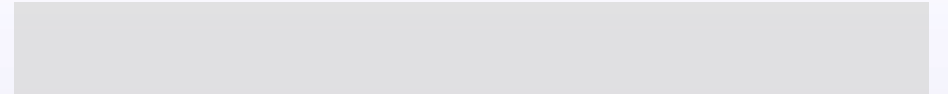
## 4. Event

The events that trigger a potential disruption are defined and, considering the other three dimensions of risk, a scenario is developed and quantified in terms of potential financial losses.

# Provide resilience at key locations to achieve Group sustainability goals

## Sustainable AND Resilient

- Identify key locations (*what are the criteria? Revenue, interdependency? Reputational?*)
- Consider ALL risks (*even low probability*)
- Provide physical and organizational resilience
- Consider value (*including supply*) chain



# Polling Time

How much do you know about ESG regulatory trends in Asia?

- A. I don't know anything.
- B. I am aware of ESG regulatory trends, but I'm not sure what they are.
- C. I know there are national carbon neutrality targets , ESG disclosure rules, but I don't know how they relate to business.
- D. I understand ESG regulatory trends and their impact on companies.



# ESG policies and regulations

## ESG Disclosure Requirements

- usually required by **local regulators**, e.g. stock exchanges, central banks or other industry associations
- Businesses are required to prepare **sustainability reports** and other forms of disclosures to the public, investors and other relevant stakeholders.



## Carbon Targets

- Countries and companies are pledging to reduce carbon emissions.
- **Science-based targets** provide companies with a clearly-defined path to reduce emissions in line with the Paris Agreement goals.



## Task Force on Climate-Related Financial Disclosures (TCFD)

- Created in 2015 by the Financial Stability Board (FSB)
- A form of ESG disclosure framework focusing on climate-related financial risk

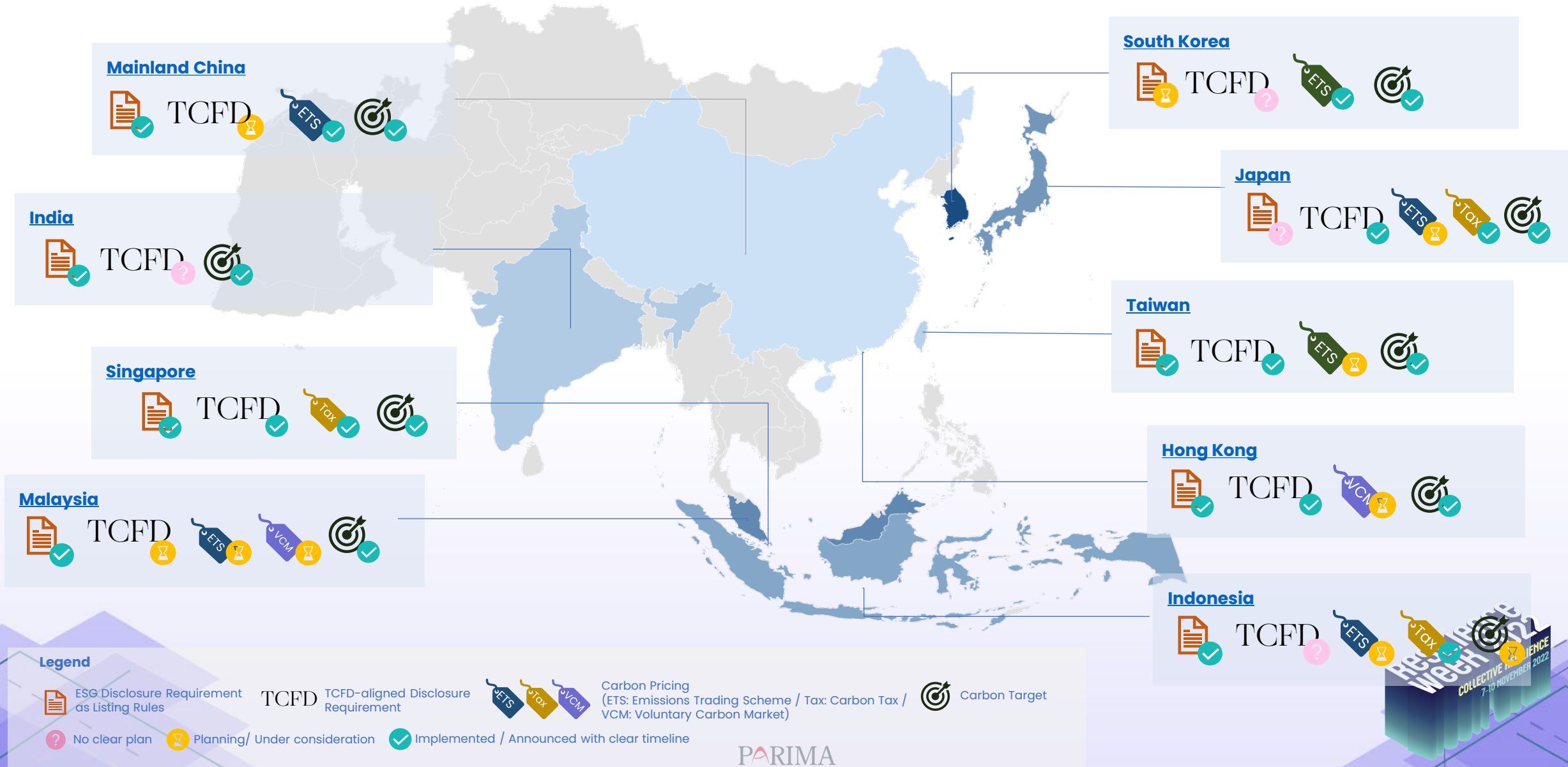


## Carbon Pricing

- Carbon pricing curbs carbon emissions by imposing a fee on emissions and/or providing incentives to reduce emissions.
- There are different forms of carbon pricing: Emissions Trading/ Carbon Tax/ Voluntary Emissions Trading



# Diverse ESG landscape in Asia



# Polling Time

Do you know when Malaysia plans to achieve Net-Zero?

- A. By 2030
- B. By 2050
- C. By 2060
- D. By 2070



# Malaysia National Initiatives



Twelfth Malaysia Plan (RMK-12)

## Carbon Neutral Target

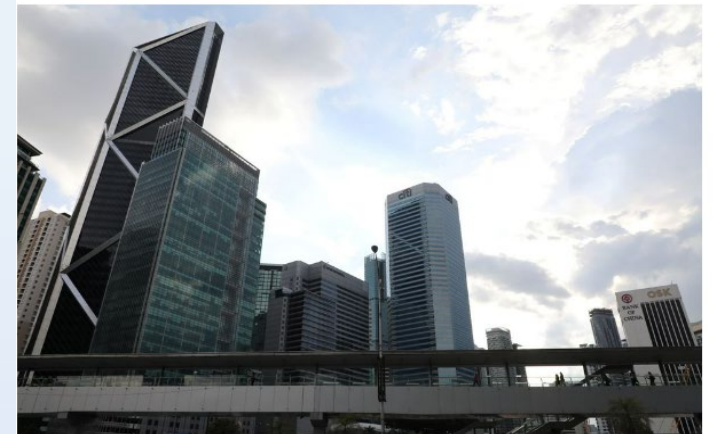
Aim to become carbon neutral "as early as 2050", Prime Minister Datuk Seri Ismail Sabri Yaakob announced in 2021.



## Carbon Pricing

Malaysia's bourse to launch voluntary carbon market by year-end

Reuters



Source: Reuters, 2022, Retrieved from <https://www.reuters.com/business/malaysias-bourse-launch-voluntary-carbon-market-by-year-end-2022-08-15/>

# Stock Exchange

ESG

## Bursa Malaysia adds climate change reporting to sustainability reporting framework for companies on Main, ACE Markets

Hailey Chung / theedgemarkets.com  
September 26, 2022 18:43 pm +08



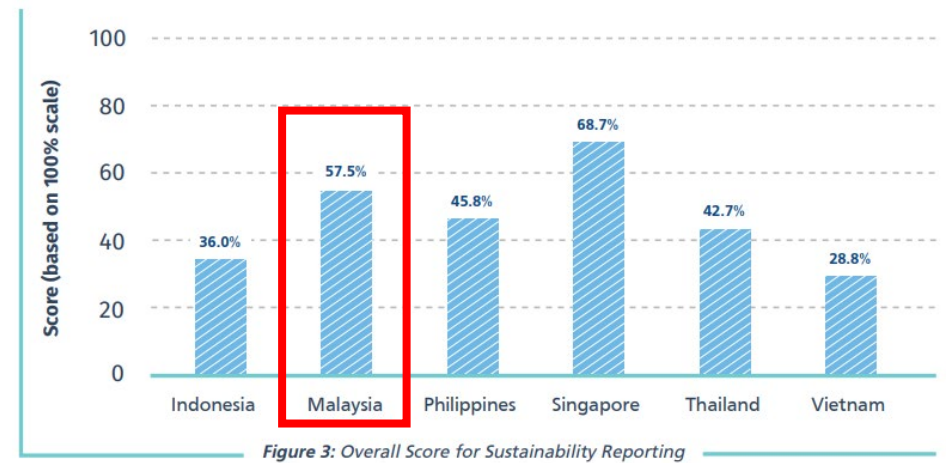
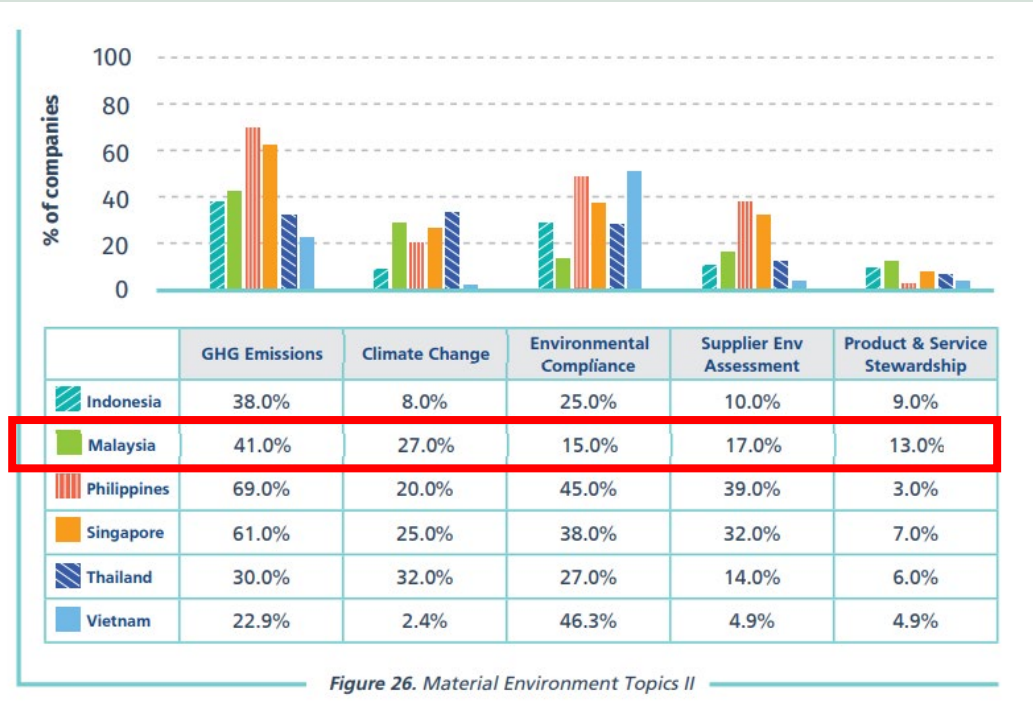
KUALA LUMPUR (Sept 26): Bursa Malaysia Securities Bhd has enhanced sustainability reporting requirements in the listing requirements on the Main Market and ACE Market to elevate the

## TCFD Disclosures

- In March 2022, Bursa Malaysia Securities Berhad proposed amendments to the listing requirements
- Require **all listed issuers** to provide climate change related disclosures aligned with **TCFD Recommendations**.

# Malaysian companies are advancing their sustainability practices

Malaysian listed companies perform remarkably strong in terms of sustainability reporting, second only to Singapore.

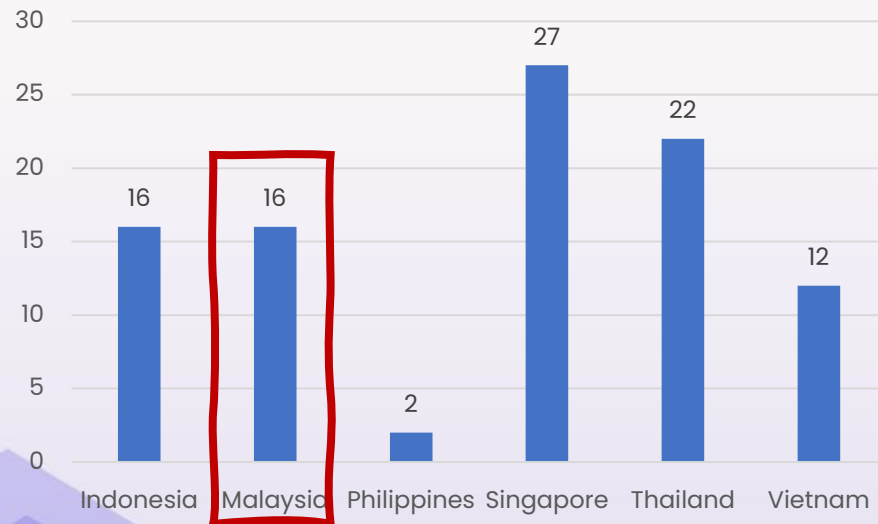


GHG Emissions and Climate Change are the top 2 material environmental topics for listed companies in Malaysia.

# Malaysian companies are advancing their sustainability practices



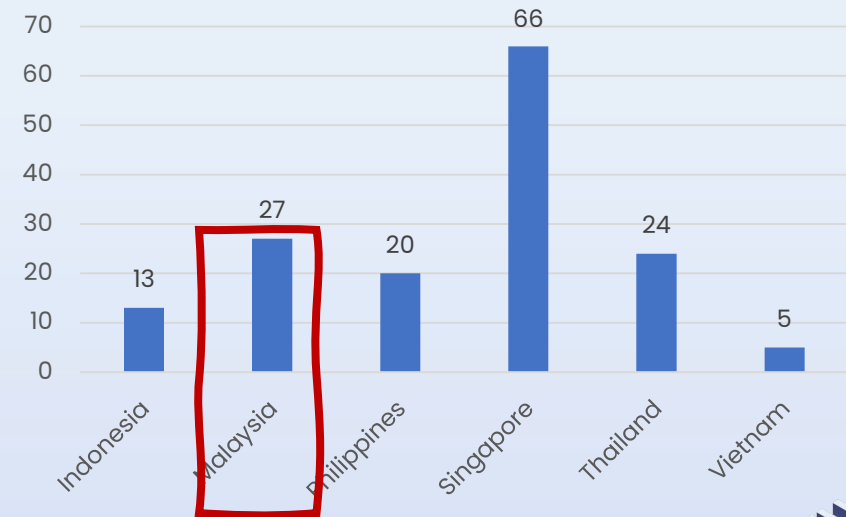
**16** companies has committed to SBTi.



Source: Science Based Targets, 2022, Retrieved from <https://sciencebasedtargets.org/companies-taking-action>



**27** organizations has committed to be TCFD Supporters



Source: TCFD Website, 2022, Retrieved from <https://www.fsb-tcfd.org/supporters/>



# How does Zurich support its customers in building resilience?



# Zurich Resilience Solutions

Building upon our close relationship and giving you direct access to our industry expertise, specialized insights and tools.



Zurich Resilience Solutions (ZRS) – a newly created unit dedicated to offering risk management services.

This unit has been created to combine standalone agility with the ability to draw on close to **150 years of industry experience**.

Through direct, structured and transparent access to Zurich's Risk Engineering expertise, new insights and additional service offerings, ZRS is able to provide an altogether more holistic approach to address your specific needs in today's rapidly evolving risk landscape.

Leveraging our profound relationship with your business and our industry expertise, Zurich Resilience Solutions is a key exponent of our purpose that we will – with our existing and new customers –

## Create a brighter future together.

# Climate Change and Sustainability Consultancy Services in Asia

Supporting customers on their sustainability journey



## Climate Resilience

Helping our customers against the risks of a changing climate through our proprietary Zurich **Climate Change Resilience Services**

Examples:

- Global Exposure Analysis
- Account Loss Modelling
- On-site Visit

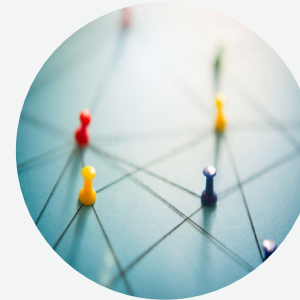


## Disclosure and Communication

Effectively communicate your sustainability strategy and performance to stakeholders

Examples:

- Sustainability Reporting Advisory (e.g. GRI, TCFD)
- Stakeholder Engagement
- ESG Rating Advisory



## Sustainability Strategy

Develop bespoke strategies that can leverage your business impact and stay the course in a rapidly changing world

Examples:

- ESG Strategy/Policy/Framework
- Materiality Assessment
- Peer Comparison and Gap Analysis



## Training and Capacity Building

Gain internal buy-in and build capacity

Examples:

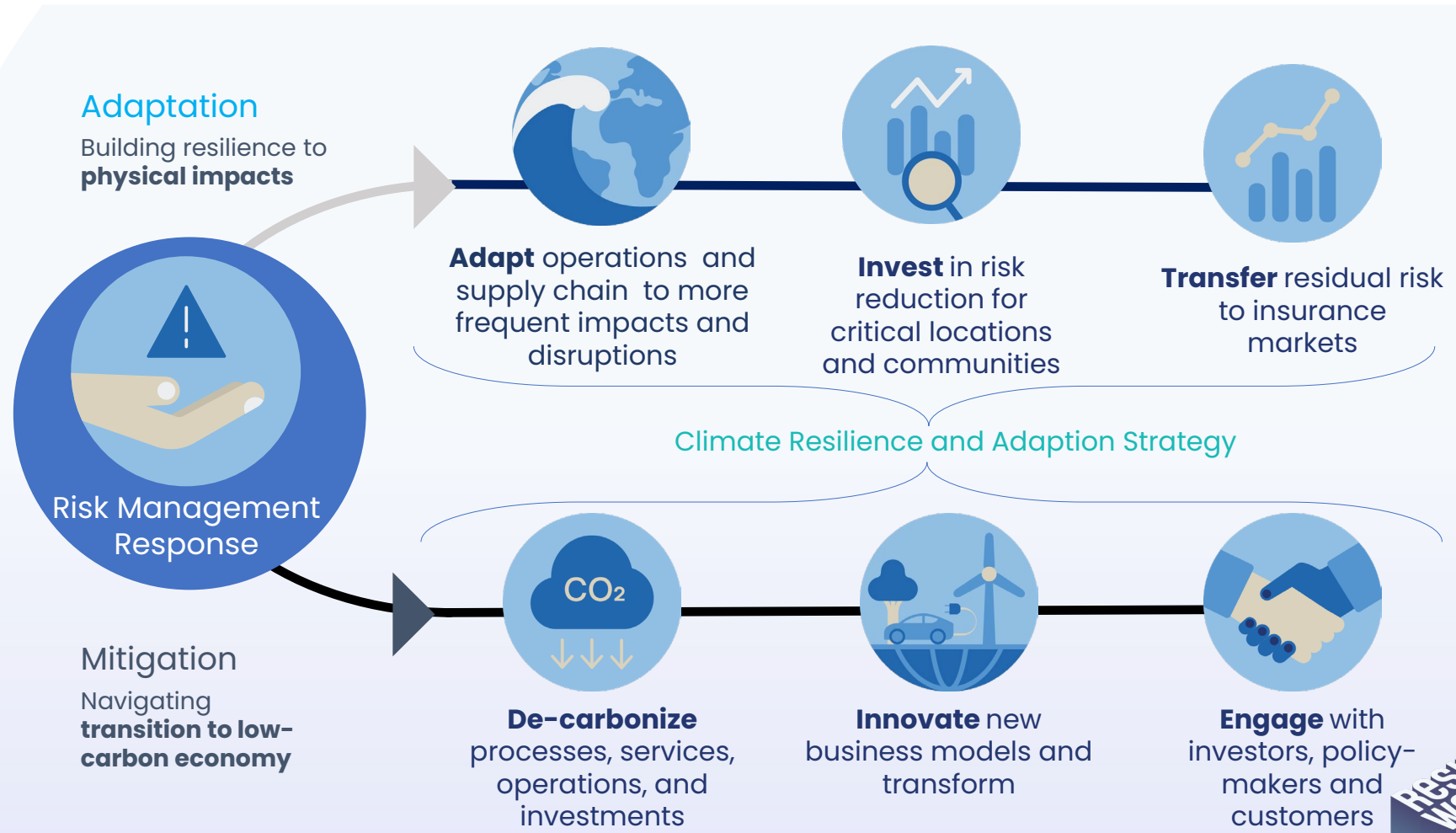
- Management/Board Training
- Implementation Workshops
- General Knowledge Learning

# Sustainability and climate change

Two sides of the same coin

  
... own operations on the environment

  
... the environment on own operations

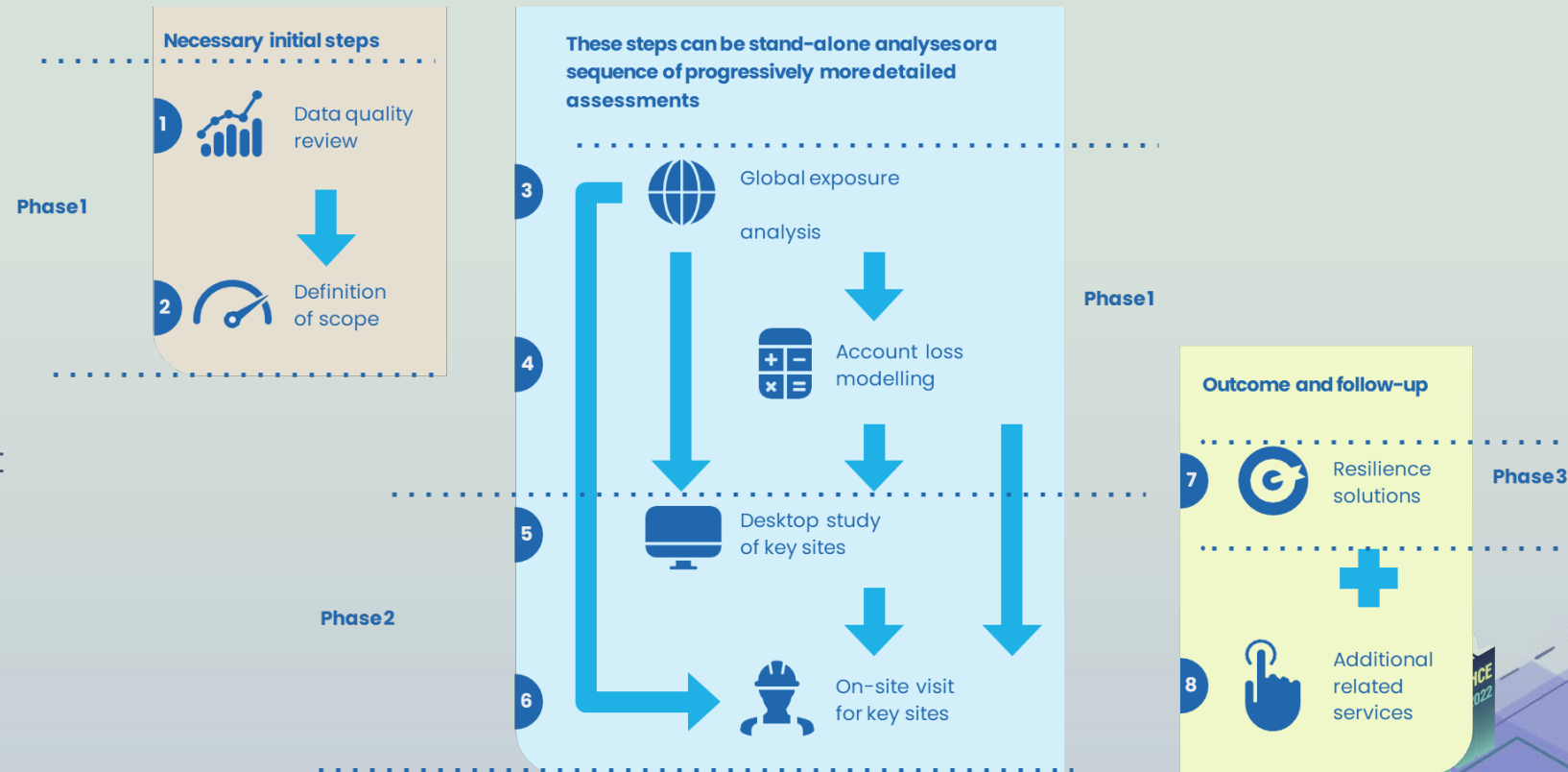


# Zurich Climate Change Resilience Services

A suite of risk management insights and tools designed to help you mitigate current and future risks

## Our unique approach

- Our experts help companies to both mitigate current risks and track future exposures.
- A Current Risk assessment is the first stage in identifying, quantifying and assessing the risks associated with current natural hazard exposures.
- The Climate Change-focused risk assessment will be developed using the Current Risk assessment as a baseline.



# Case Study: Johnson Matthey



X

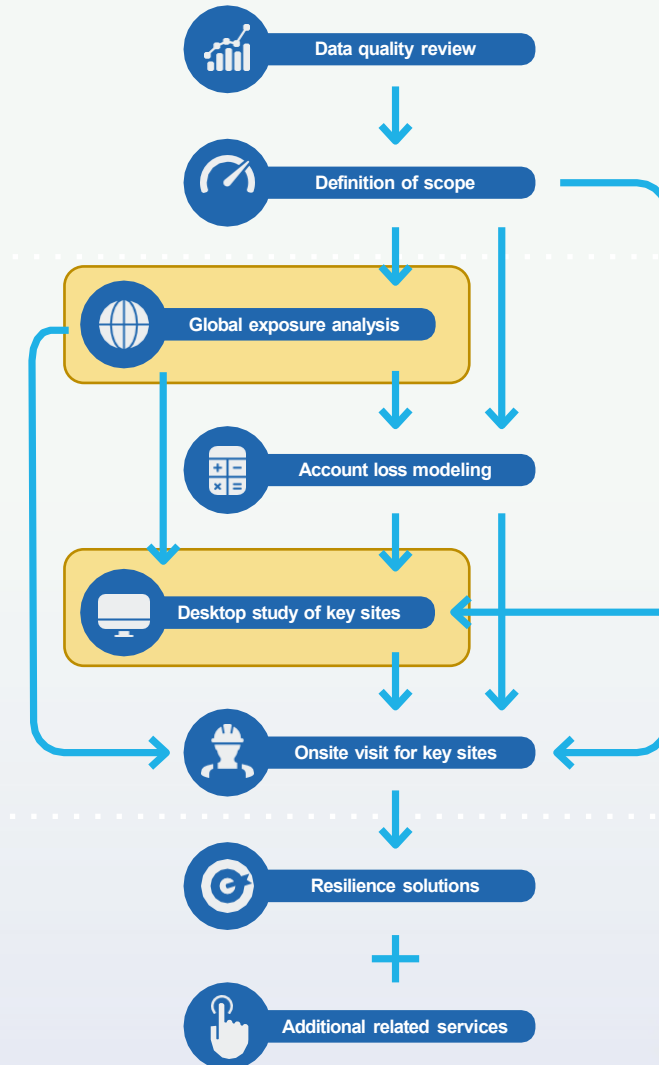


## Climate scenarios for evaluating physical risks

Changing weather patterns as the climate warms may result in physical risks to our assets and supply chains. During the year, we worked with **Zurich Resilience Solutions** to evaluate the exposure of all our assets and those of our strategic suppliers to these risks. To support this work, we used the Shared Socio-economic Pathways (SSPs), the latest climate change modelling scenarios from the Intergovernmental Panel on Climate Change (IPCC). The SSPs produce forward-looking climate data by running climate models driven by assumptions about future global GHG emissions, together with plausible future socio-economic development metrics (economic growth / GDP, demographics, land use and urbanisation), and incorporating the likely implementation of adaptation and mitigation measures.

We looked at three SSPs for the locations of all our own operations and those of our strategic suppliers. We considered four time horizons - 2020 (our baseline), 2030, 2040 and 2050 to identify the top hazards and how they are likely to change. SSP 1-2.6 assumes the lowest temperature rise, and therefore the least physical impact, disruption and adaptation costs; SSP 2-4.5 is the middle temperature rise; and SSP 5-8.5 assumes the highest temperature rise, and therefore the greatest physical impact, and disruption adaptation costs.

Source: Johnson Matthey Annual Report 2022

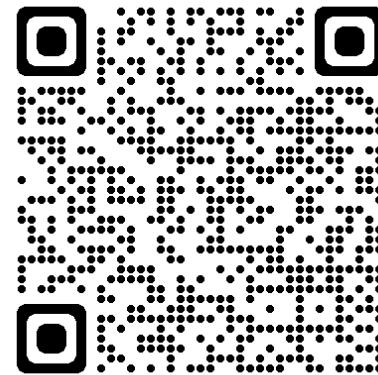




# Thank you



For more information, please visit:  
**Zurich Resilience Solutions, Asia**



**Resilience  
Week 2022**  
COLLECTIVE RESILIENCE  
7-10 NOVEMBER 2022