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Climate Finance: Middle-income country considerations towards the NCQG

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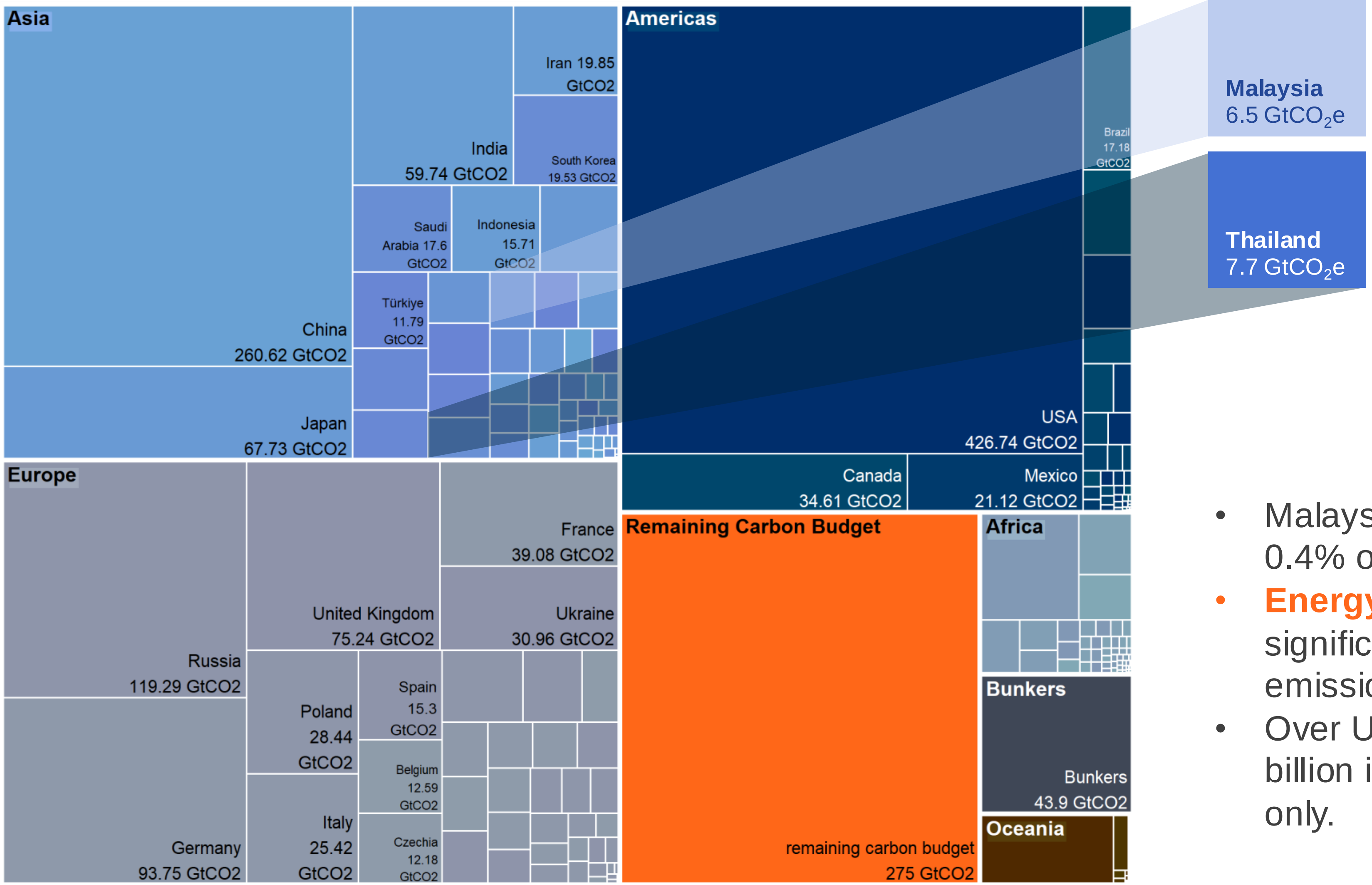
Equity

Developing Country Climate Finance Dilemmas

Total fossil fuel emissions and remaining carbon budget, 1850 – 2022 ($GtCO_2e$)



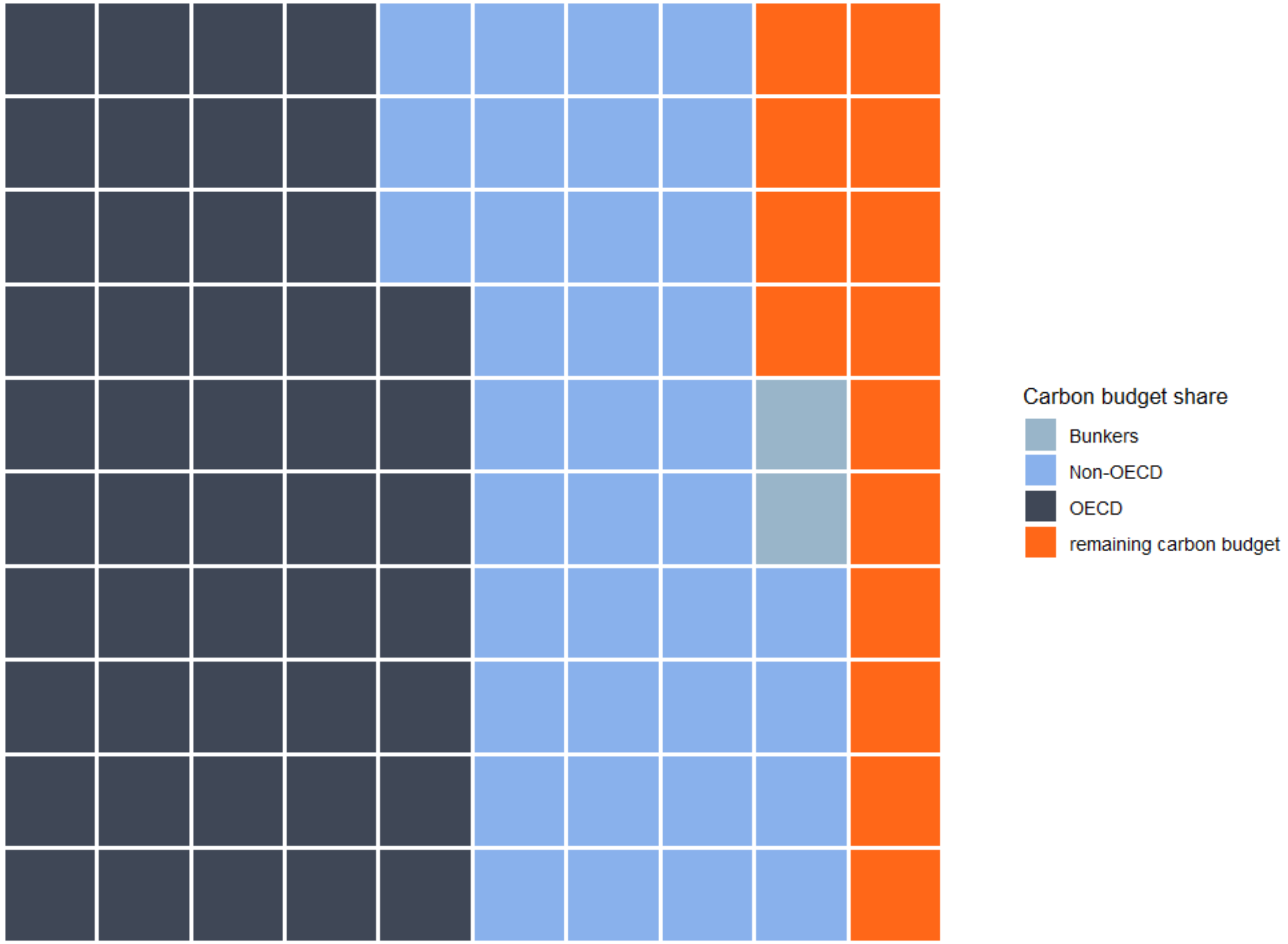
Source: Friedlingstein et el. (2023); KRI visualisation

Individual country emissions

In relation to the **Remaining Carbon Budget** for 1.5C.

- Malaysia is responsible for less than 0.4% of historical emissions.
- **Energy transition costs** remain significant even for a low-emission developing country.
- Over US$330 billion investment required for energy only.

Carbon budget used by OECD v Non-OECD



OECD
38 countries

Non-OECD
157 countries

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Structural Transformation and Climate Change

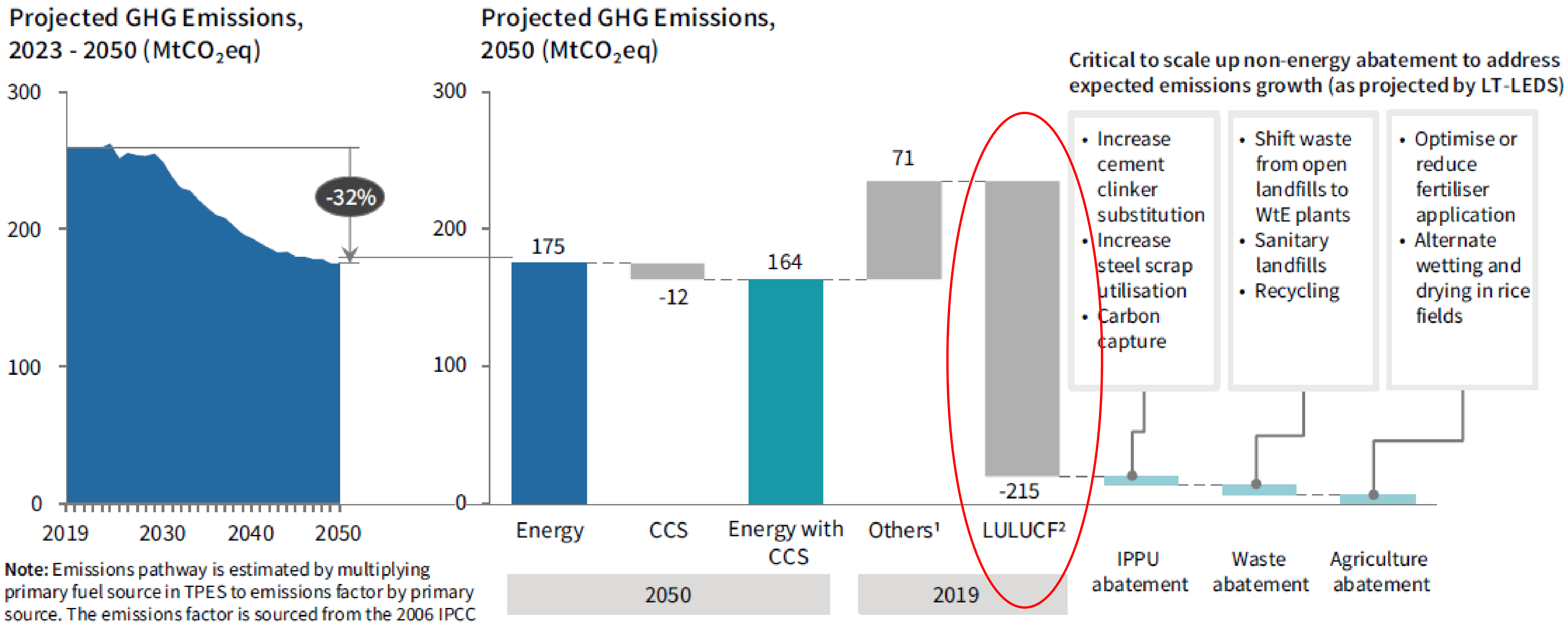
Mitigation | **Adaptation** | **Means of Implementation** | **Loss & Damage**

Current estimates are:

- **RM 1.2 trillion (US$ 277 billion) for energy transition (estimated minumum) until 2050** – National Energy Transition Roadmap (2023)
- **RM 392 billion (US$ 90 billion) for flood adaptation (estimated) over the next 50 years**[1] – NRECC (Climate and Energy) Minister.

Financing climate resilient development may require development of new tools or fresh combinations of existing ones, such as the use of offshore bonds, development finance institutions, and sustainability-linked sukuk or bonds. More active participation in international climate finance fora would also help.

Mitigation pathway to 2050



Note: Emissions pathway is estimated by multiplying primary fuel source in TPES to emissions factor by primary source. The emissions factor is sourced from the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. The objective of this method is to provide directional guidance on policy decisions and is not intended as a submission to UNFCCC nor any other international bodies.

1. Includes IPPU (industrial processes and product use), waste and agriculture
2. LULUCF = land use, land-use change and forestry

- By 2050, **sinks (LULUCF)** would cover 91% of emissions, up from 65% in 2019. Sinks are expected to remain **constant** relative to 2019 levels.
- Removals and sinks and **critically under-financed**. Beyond an Ecological Fiscal Transfer of a mere US$31million nationwide, policy discussion on solutions is limited to sub-standard tools such as carbon credits and carbon taxes.

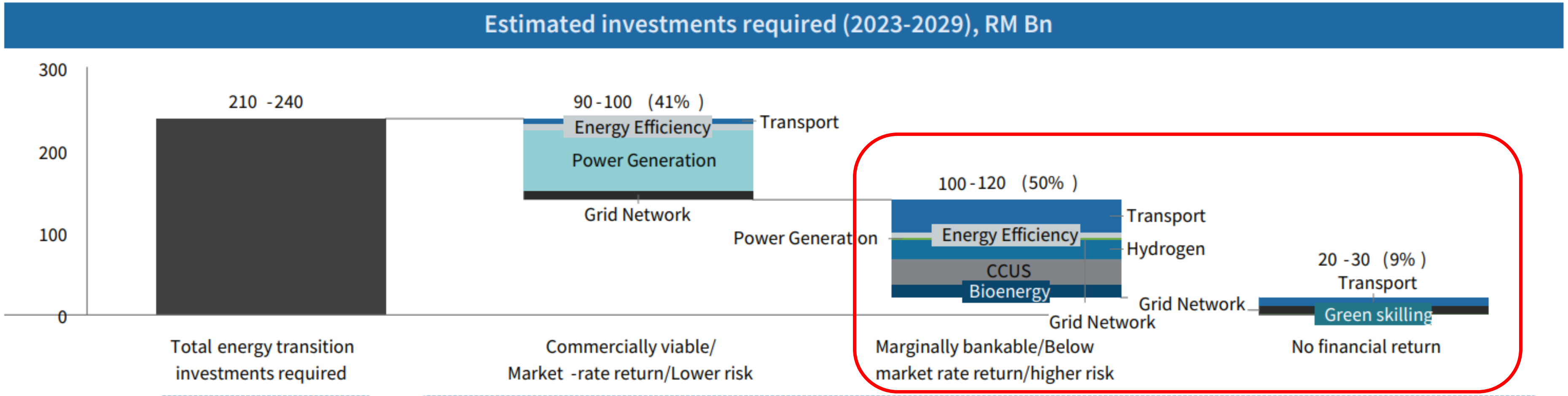
Source: National Energy Transition Roadmap (2023).

Over half of medium-term energy transition investments lack commercial viability

The identified financing needs that are marginally bankable are fundamental to successful transition, e.g., public and electric transport infrastructure, energy efficiency, and grid upgrades.

US$55.4 billion by 2029

Medium-term national energy transition investment needs



	Commercially viable/Market-rate return/Lower risk	Marginally bankable/Below market rate return/higher risk	No financial return
Potential pools of capital	• Domestic banks & FIs • GLICs/SWFs • Green FDI • Large domestic corporations • VC/Early-stage funding	• Public catalytic funding (blended finance1, innovation finance) • MDBs/DFIs • GLICs/SWFs	• Public direct funding
Enabling policy initiatives	• Sector-specific policy implementation • Attract green FDI • Mobilize sustainable finance (e.g., sustainability-linked sukuks, green taxonomies)	• National Energy Transition Facility • MDB/DFI partnerships • Rationalise fuel subsidies	• Rationalise fuel subsidies • Gradual carbon pricing

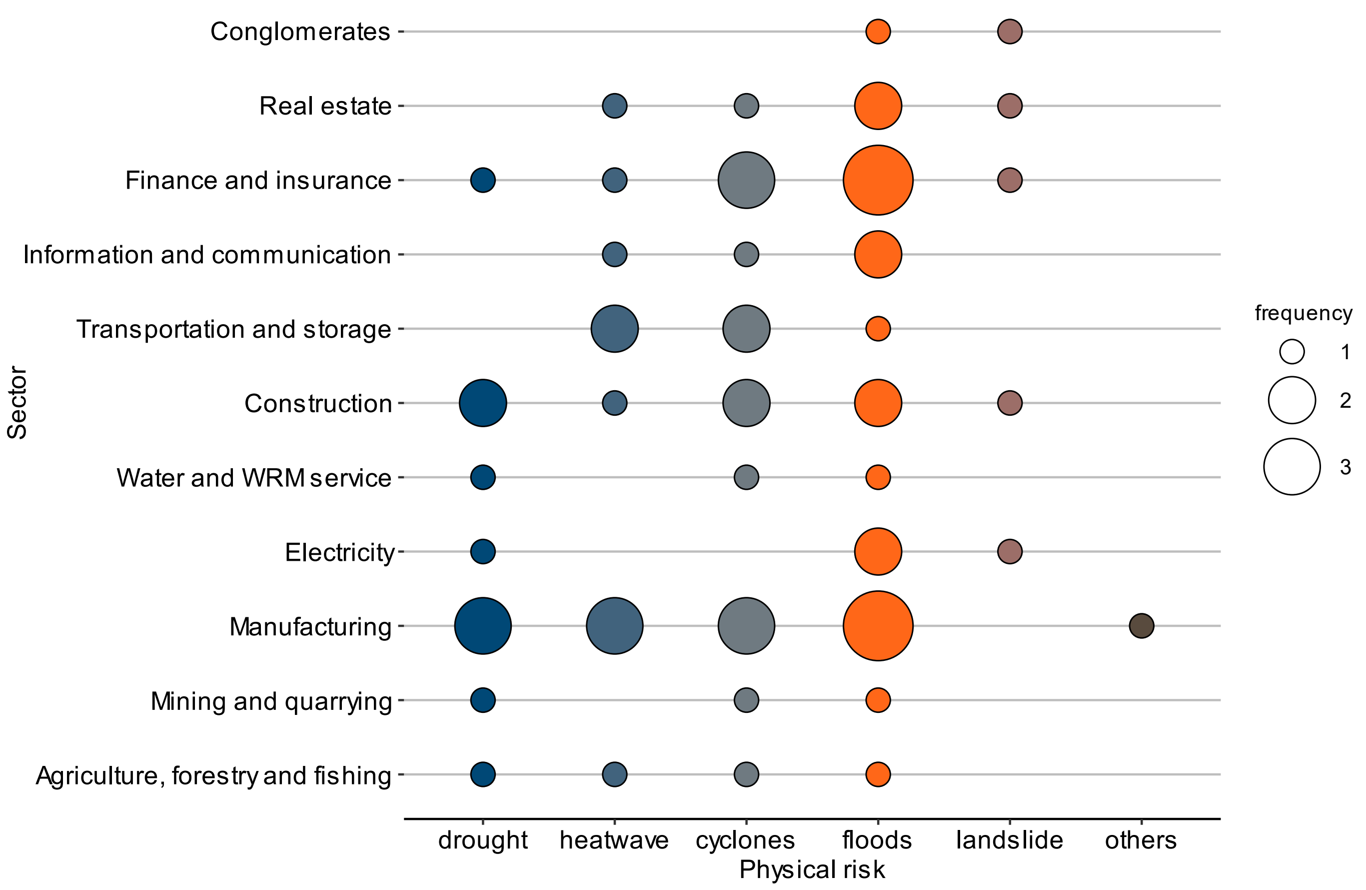
Financial Institution (FI), Government Link Investment Company (GLIC), Sovereign Wealth Funds (SWF)
Foreign Direct Investment (FDI), Venture Capital, Multilateral Development Bank (MDB), Development Finance Institution (DFI)

Source: Ministry of Economy, National Energy Transition Roadmap (2023)

Industries are facing climate risks; adaptation needs to accelerate.

1. Of 28 companies supporting the Taskforce on Climate-related Financial Disclosures (TCFD) framework, all sectors reported **physical risks** across multiple climatic drivers.
2. **The manufacturing sector is exposed to most risk types.** Sectors are vulnerable to risks of not just one, but **combined** physical impacts, requiring different forms of adaptive measures to enhance resilience of their operations on multiple fronts.

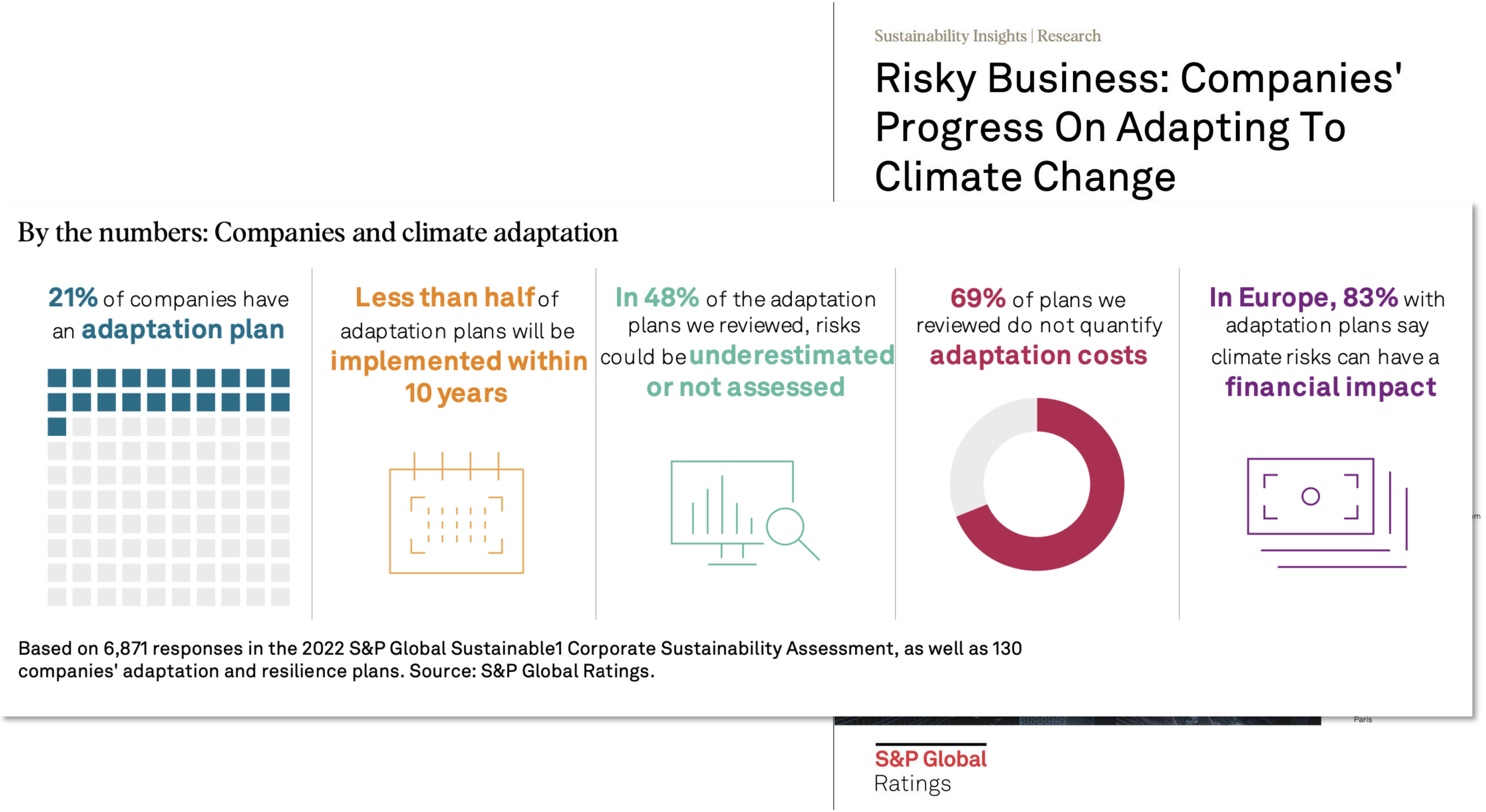
Chronic physical risks reported by Malaysian companies under the TCFD framework, 2022.



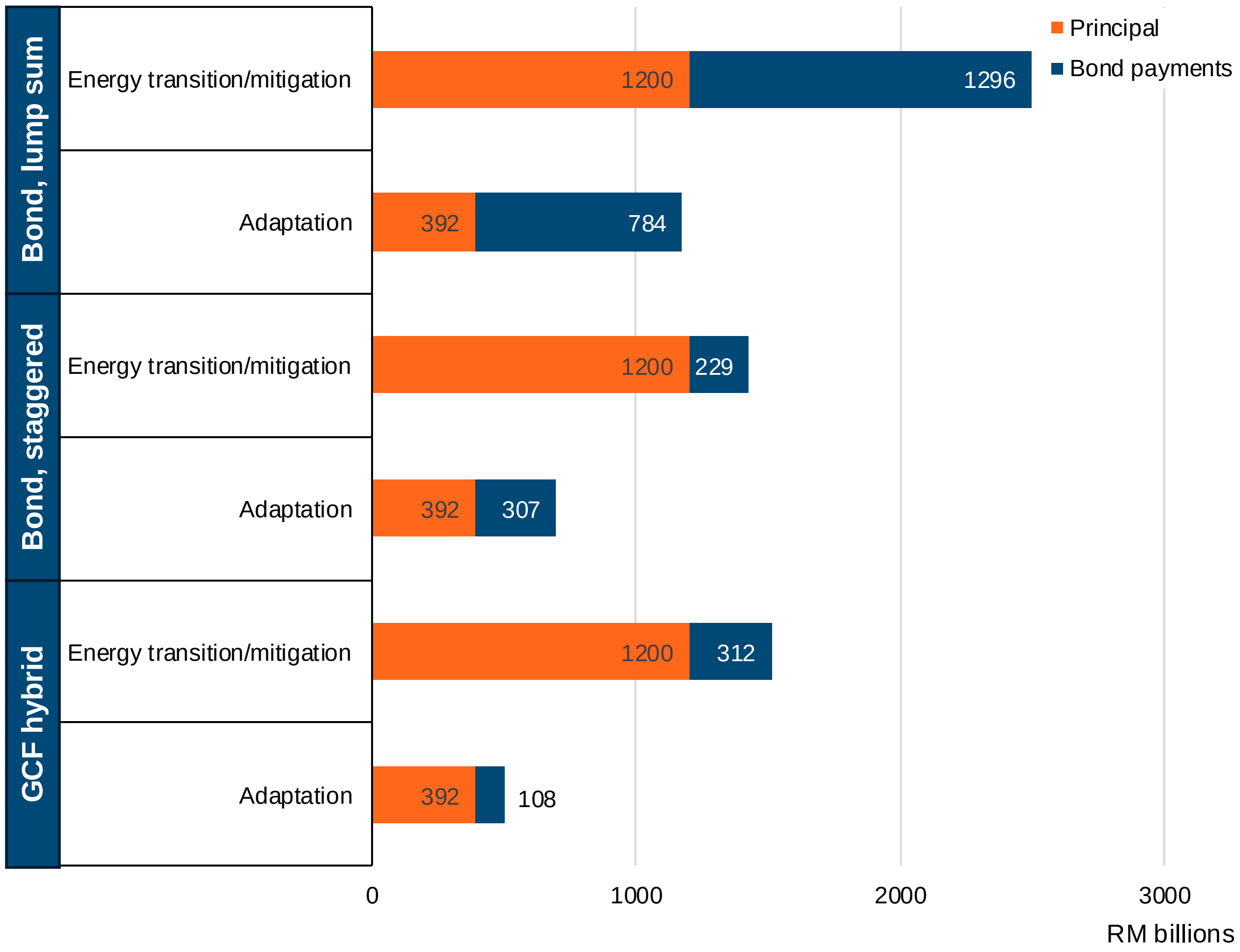
Source: KRI's compilation

Yet, with industry adaptation needs we expect to see the rise of an adaptation industry

Globally, industry is not prepared for adaptation



Cost of Capital Scenarios, Malaysia (Simple)



Scenario 1: Lump sum borrowing – Largest debt service [Benchmark case]

Scenario 2: Bond issuances at 5-year intervals – Pares down debt costs

Scenario 3: Concessional financing – Assume GCF had adequate financing

Key Considerations on the NCQG in 2024

- Cost of capital
- Cost of conserving or improving sinks
- Uncosted costs – especially adaptation and resilience
- Constructive waste / learning by doing / maladaptation – Price in learning by doing in adaptation.
- Timeliness of Financing – funding delayed is funding denied?
- Reconciling risk – Policy tools to open the pathway for high risk/low return items; improving profitability
- Sustainable development: Combining climate measures with industrial policy – creating appropriate policies and institutions to channel and allocate finance, plus drive inclusive growth
- Maintain conditionality in the next NDC cycle – NDCs should reference the adequacy of NCQG
- Unilateral trade measures reducing developing country domestic finance – CBAM
- Retaliatory climate finance measures – historically-adjusted tax on developed countries

Thank you

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