

Building a Climate Data Catalogue - Malaysia's Experience

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"Looking Beyond GDP: Towards Social Well-being and Environmental Sustainability"









Financial Sector - Climate Change, Data Gaps and Actions



Malaysia's financial sector in recent years has stepped up its response to address the urgent and existential threats posed by climate and environment-related risks.



Lack of quality and easily accessible climate-related data is one of the key factors that has hampered efforts by the financial sector to manage climate-related risks and support decarbonisation.



Joint Committee on Climate Change

Joint Committee on Climate Change (JC3) – the focal point for collective climate actions in the financial sector – established the Sub-Committee on Bridging Data Gaps (the Sub-Committee) in July 2021.



Identify crucial climate data needed by the financial sector, determine the availability of credible data sources and prevailing data gaps, and subsequently explore solutions and recommendations to address them.



Establish a Data
Catalogue (DC) aimed at serving as a source of reference on climate and environmental data for the financial sector and represents a call to action for stakeholders to collectively improve the availability and accessibility of climate data.

-Major causes of data gaps issues are due to lack of data availability, capacity and data disclosure.









JC3 Climate Data Catalogue - Journey

Stocktake on Availability of Climate Data

- Adopted NGFS' user-centric data needs identification approach for its Directory.
- Focus on Malaysia climate and environment data, based on the use cases of the Malaysian financial sector.
- Identified critical data required, availability of credible data sources and prevailing data gaps.

Validation with Stakeholders

- Validated comprehensiveness of data needs within the committee and other industry groups
- Engaged critical data providers, especially Government ministries/agencies to understand availability of data and gaps, including what gave rise to the gap
- **Technical assistance from World Bank**, i.e., to improve the comprehensiveness, relevance and organisation of the DC's content.

Finalise and
Publish
Climate DC &
Report

- Besides availability, decided to also publish the data gaps as call-to-action to data providers to bridge gaps
- Incorporated critical feedback from internal and external stakeholders

Organised by:

• Published DC and accompanying Report in December 2022 on regulators' websites

Maintenance and Future Plan

- Updated at least **annually** to incorporate new developments/data needs
- Inclusion of new data items that meets the inclusion criteria¹ will be approved by a Review Committee
- Explore web-based format like NGFS Directory based on current usage and feedback (subject to further assessment)









JC3 Climate Data Catalogue - Methodology

Stepwise Identification based on Uses Cases



- 1. Regulators (e.g., Central Bank)
- 2. Banking Institutions
- Insurers and takaful operators
- 4. Asset Managers
- 5. Pension Funds



- 1. Exposure quantification
- 2. Investment and lending decisions
- 3. Macroeconomic modelling
- 4. Financial stability monitoring
- Climate-related disclosures
- 6. Scenario analysis
- 7. Stress testing
- 8. Product Development



- 1. Footprint
- 2. Transition sensitivity
- Physical vulnerability
- 4. Alignment
- Mobilisation (i.e., Scaling up green finance)
- 6. Combined metrics

Key Results

- 143 granular data items by various dimensions (equivalent to 82 unique data items) have been identified by members of JC3. Some data items may serve more than one stakeholder and use case.
- 103 granular data items (55 unique data items) are prioritised* and categorised into the Top 8 data groups:
- * Prioritisation of the data item is based on the following criteria:
 - a) profiled as a 'must have' data item
 - the number of times that the data item is being profiled (across stakeholders and use cases)

NGFS's user-centric approach emphasises the importance of user perspectives when identifying data needs.

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JC3 Climate Data Catalogue - Outcome

- 5 financial sector stakeholders
- 8 use cases
- 82 data items, of which the Top 8 groups are:
- i. Greenhouse gas (GHG) emissions and forward-looking targets
- ii. Green/sustainable lending/financing
- iii. Non-renewable and renewable energy
- iv. Exposure to physical risks
- v. Asset value-at-risk (VaR) arising from natural catastrophes
- vi. Environmental, Social and Governance (ESG) score/rating
- vii. Water consumption and waste management
- viii. Biodiversity and forestry indicators

49% of climate-related data needed by the financial sector is

available.

However, of the available data, most of them:

- Lack sufficient detail;
- Are not easy to access; or
- Are not comparable

Data Challenges

- i. Differences in methodology
- ii. Legal impediments and restrictions
- iii. Decentralised data compilation and publication
- iv. Various climate disclosure requirements/frameworks
- v. Lack of capacity and motivation for disclosure

Recommendations

- i. Implement common definitions and methodologies (adopt common definitions and methodologies for key climate data at national level, alignment to established frameworks/standards and adopt common inter-operable data standards to encourage data sharing)
- ii. Promote and enforce greater disclosures

 (open data concepts, review confidentiality restrictions, capacity building, industry-led platforms to facilitate disclosures)
- iii. Leverage on technology and available data sources (application of technology such as APIs, statistical gap-filling and use of proxy data)





Organised by:







JC3 Climate Data Catalogue - Key Lessons Learnt

1 Prioritisation

- The need to have a systematic way to prioritise data items. In our case, we based it on number of stakeholders and use cases needing the data
- This would enable us to perform deep-dive on critical data items and structure engagement plans with the relevant data providers

- Maintain credibility and neutrality
- Enlist **World Bank**'s help to establish a data source scoring which determines the credibility of data sources in fulfilling the data needs (not published, only used for internal reference)
- Include most major/common private data sources, based on desktop research and engagement with members
- Caveat that inclusion does not mean endorsement users should make own assessment

- Collaborate

 and communicate with data providers
- Effectively communicate the data needs and use cases of the financial sector to data providers to ensure that the data providers appreciate the **criticality of the data and the benefits of providing the data.** Whole-of-industry approach in justifying the data need is critical.
- Demonstrate **win-win outcome** in making the data available (e.g., sectoral GHG and vehicle emissions, flood data)









JC3 Climate Data Catalogue - Ongoing actions and future

User Interface

- Current Excel format of the DC limits navigation across climate data items.
- Hence, will explore having a web-based and more user-friendly interface, based on current usage/demand.

Structure

- Will adopt the remaining World Bank recommendations on relational spreadsheet structure, improving the structure of naming convention and metadata.
- Enrich content with more global sources
- Improve the data sources based on available global data sources which can be downscaled to get country-level specific information.

Intensifying efforts in 2023 to address climate data needs focusing on Top 3 data groups

- Improve data availability and quality, on areas such as granularity i.e., via enhancement to data collection/reporting of financing at portfolio level/entity and bond/sukuk issuance at stock level to capture green classifications.
- 2. Policy advocacy to improve accessibility, availability and granularity issues of climate data with government agencies, i.e., Exposure to physical risks and GHG emissions (sectorial and vehicles) data.
- Sharing among Sub-committee members on the application of methodology to promote greater awareness/understanding on readily available data and its potential/usage.









THANK YOU













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