



## About JC3 Climate Data Catalogue

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The JC3 Sub-Committee on Bridging Data Gaps (Sub-Committee) has undertaken the second annual review on the Joint Committee on Climate Change (JC3) Climate Data Catalogue (DC). Specifically, the DC serves as:

- (i) **A source of reference** for climate and environmental data relevant to use cases in the financial sector. It includes data that are readily available, partially available, and unavailable as well as observations on data gaps.
- (ii) An avenue to **promote broader awareness** on the prevailing data gaps and **serve as a call to action** for data providers to improve the availability and accessibility of data.
- (iii) **Improve users' accessibility** to relevant data sources. The DC contains links to data sources and does not hold any dataset within the DC.

The DC is compiled by the Sub-Committee on Bridging Data Gaps established under JC3, based on critical data needed by the financial sector to support various use cases. The approach is modelled after the Network for Greening the Financial System's (NGFS) systematic process in compiling the NGFS Directory<sup>1</sup>. The DC predominantly focuses on Malaysian climate and environmental data, as global data items and sources are already extensively covered by the NGFS Directory.

The compilation is based on the collective contribution by the members of the JC3 and its sub-committees and compiled on a best effort basis and may not reflect new data sources that may emerge in between updates to the DC. Users would need to make their own assessments of the information that best meet their needs.

## 2024 Climate Data Catalogue

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In the course of carrying out this annual review, the Sub-Committee has obtained feedback from various users, ranging from financial sector comprising financial institutions, asset managers, as well as JC3 members including associations and international organisations. In addition, the Sub-Committee enlisted the World Bank's assistance to assess and provide feedback on the comprehensiveness of the data items, use cases and metrics, quality and availability of data sources provided in the DC. The 2024 DC has been enriched with more global data sources that containing Malaysia exposure, specifically on physical risk such as ERA5-Land/Heat, NASA NEX-GDDP CMIP6, GlobFire Fire Perimeters, JRC River flood

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<sup>1</sup> Refer to the NGFS Data Directory [The NGFS Directory \(masdkp.io\)](https://www.masdkp.io)

hazard maps, World Bank Global Coastal Flood Hazard Maps, Google Earth Engine Catalogue, MODIS Aqua and Terra satellite.

In addition to improving the availability of previous DC data sources, the Sub-Committee has also expanded data coverage on biodiversity, environmental, and nature-related financial risks. This follows the latest recommendations from the Taskforce on Nature-related Financial Disclosures (TNFD) issued in September 2023, and the LEAP approach guidance published in October 2023, which emphasise the importance of nature and biodiversity for finance. New data items on water, forests, wild species, ecosystems, and pollution are being included. Sources for these data items include the National Biodiversity Index, Corporate Biodiversity Footprint (CBD), Other Effective Area-based Conservation Measures (OECMs), World Database on Protected Areas (WDPA), Global Database on Protected Area Management Effectiveness (GD-PAME), United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), and the International Union for Conservation of Nature (IUCN).

The step taken by the Sub-Committee is aligned align with the tone set by the Conference of the Parties to the Convention on Biological Diversity (COP 15), where global governments reached a landmark agreement to adopt the Kunming-Montréal Global Biodiversity Framework (GBF).

**Main Findings from 2024 Climate Data Catalogue**

The 2024 Climate Data Catalogue encompasses 160 unique environmental and climate-related data items, which is further dissected into various dimensions, culminating in a total of 286 granular data items. These data items are classified into 15 data groups such as GHG Emissions, Green/Sustainable Financing, Exposure to Physical Risks, and Non-renewable/Renewable Energy, and further mapped to the relevant use cases, as established by the NGFS. Summary of Data Groups, Data Items and Status of Availability are provided in the Appendix 1.

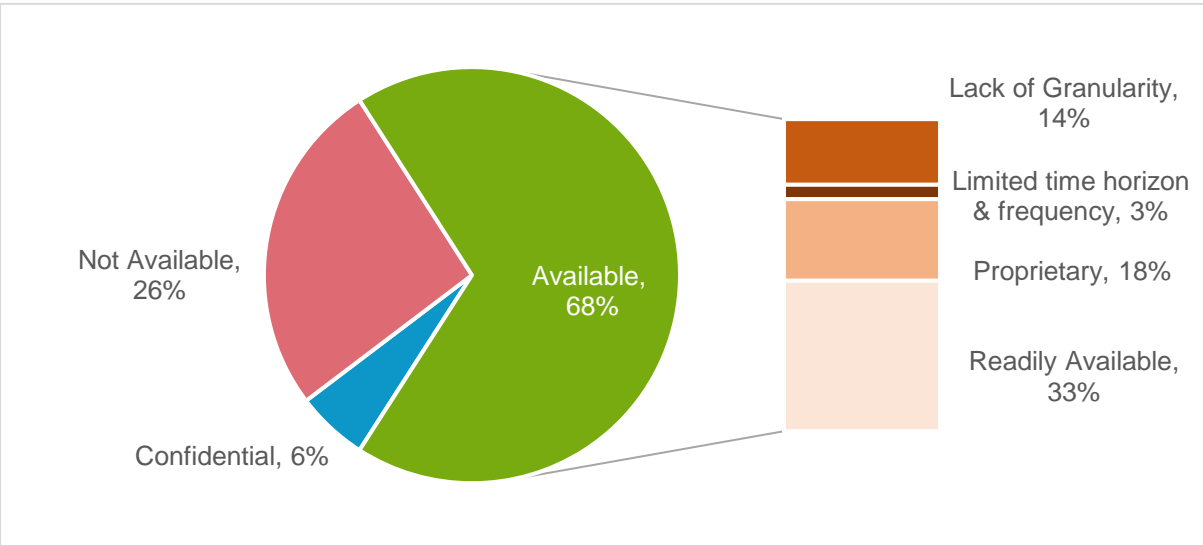


Diagram 1: Data Availability in 2024 JC3 Climate Data Catalogue

### Key statistics of the 2024 DC:

- Controlling for the number of data items, the availability of 2023 DC data has improved by 3%, rising from 68% to 71%. This increase can be attributed to global data sources as well as climate risk tools.
- 25% increase in data items (or 32 new data items) from previous year (2024: 160 unique with 286 granular data vs. 2023: 128 unique with 249 granular data), mainly from biodiversity and forestry indicators and newly included ancillary non-climate data item to support scenario analysis/stress testing data groups based on TNFD's recommendations.
  - However, with the 32 newly added data items in 2024, data availability stands at 68%, as half of these additional items does not have readily available data sources.
- Features 496 data sources from 202 data providers.
- Of the 68% of data items in the 2024 DC that are available:
  - 33% are readily available
  - 18% are proprietary in nature that requires subscription to access; and
  - 17% with gaps due to lack of granularity and limited time horizon.

### Going forward ...

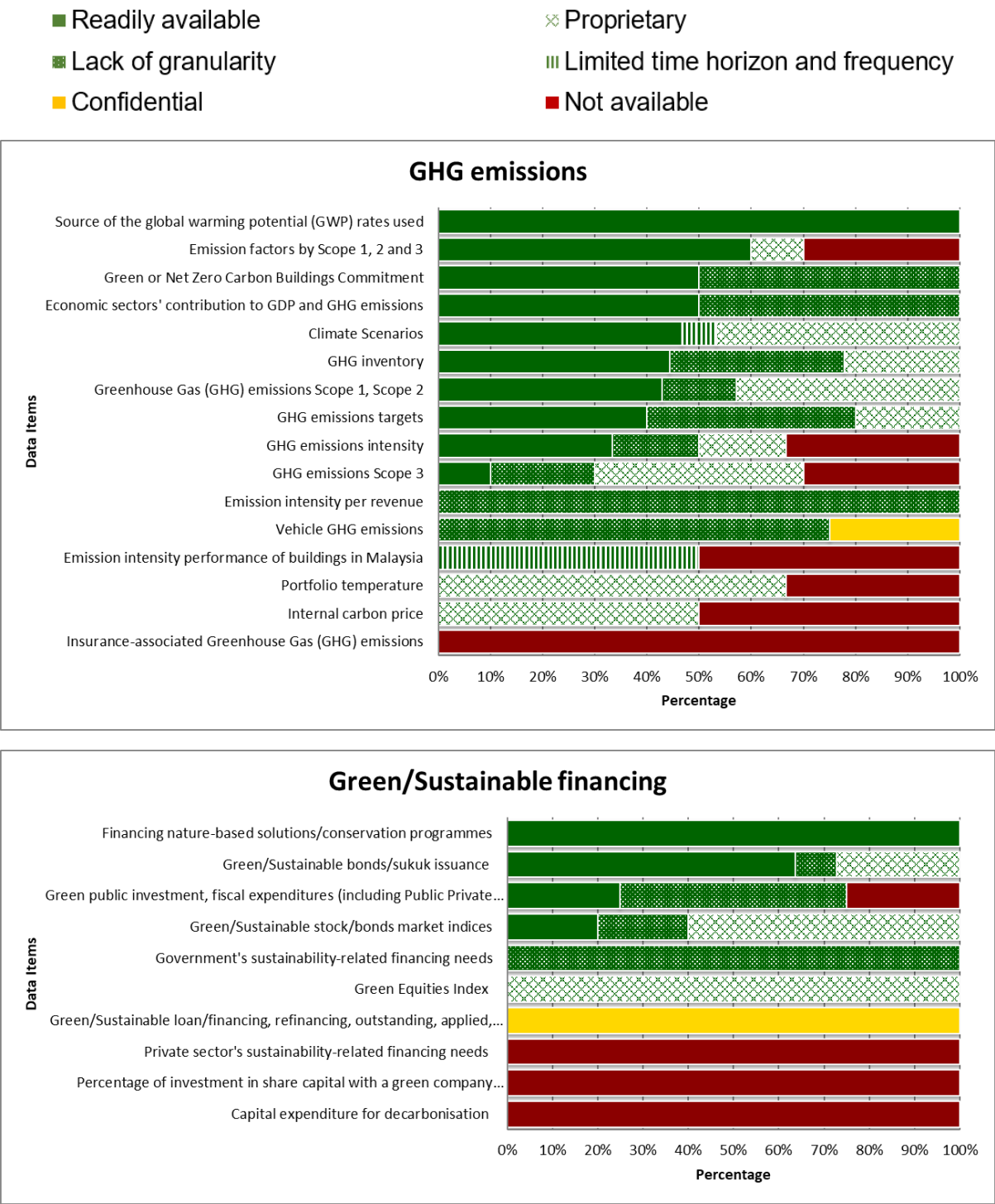
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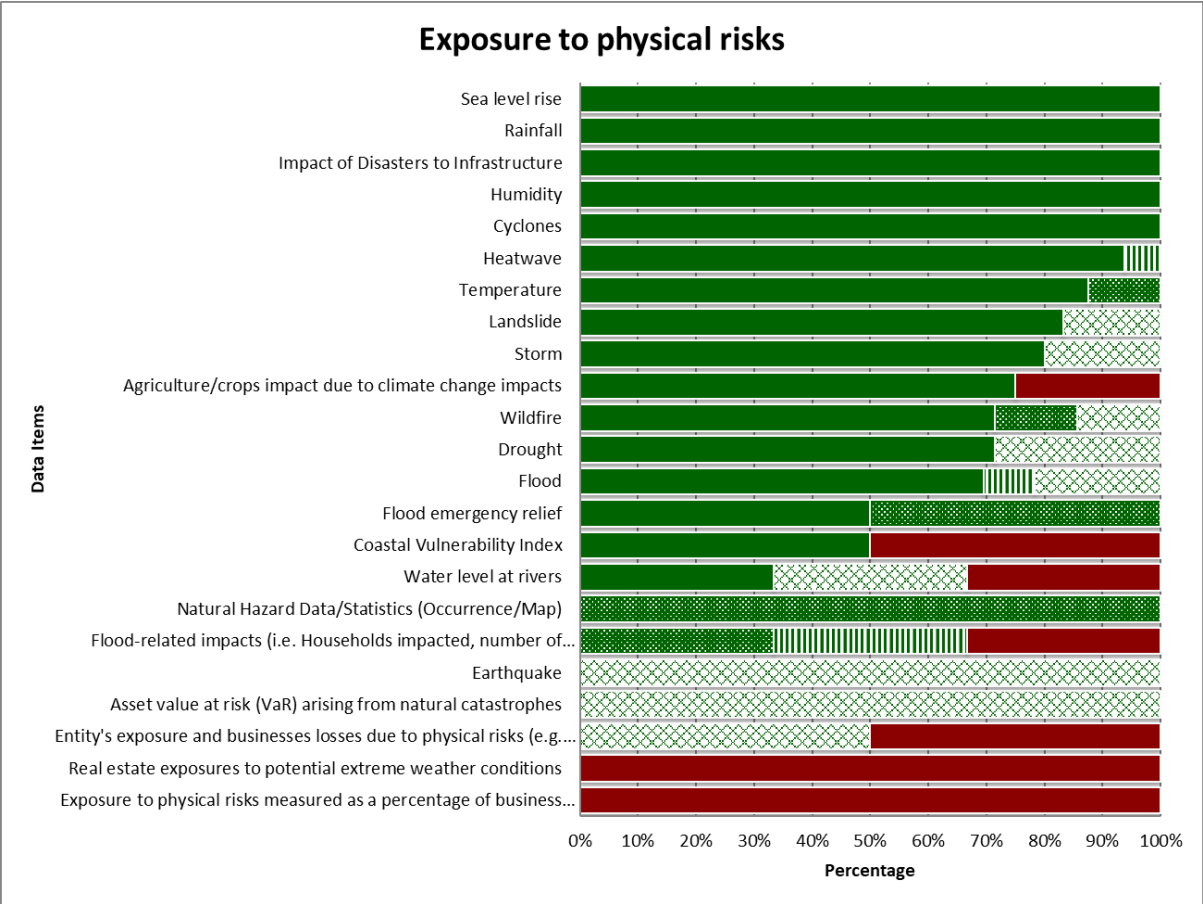
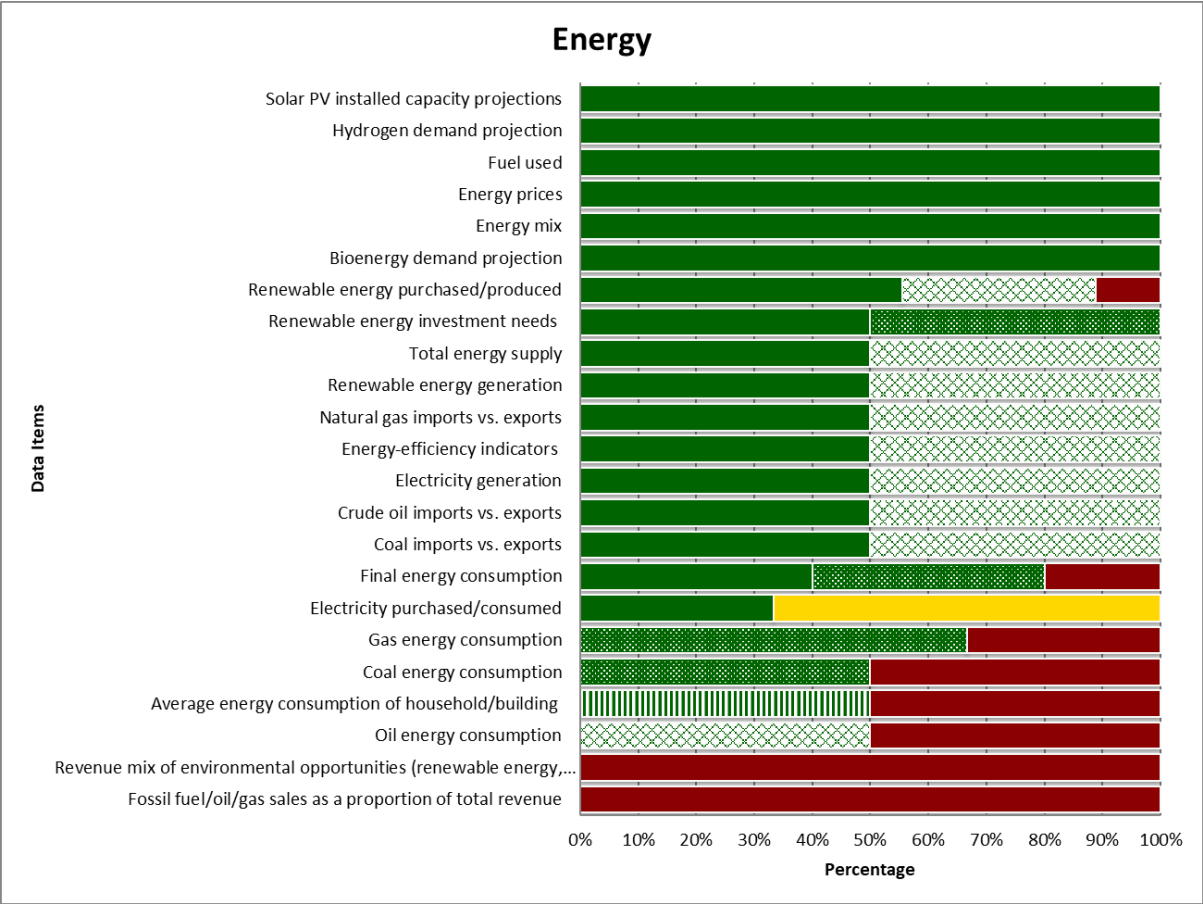
The DC will continue to be updated annually, to ensure its relevance based on the latest data requirements, standards and data sources. The Sub-Committee welcomes feedback and suggestions to improve the comprehensiveness and usability of the DC, through the 'Suggestion/Feedback' section on JC3 website or via email to [climatedc@bnm.gov.my](mailto:climatedc@bnm.gov.my). Such feedback will allow the Sub-Committee to continuously enhance the content and functionalities of the DC to meet the evolving needs of financial sector users.

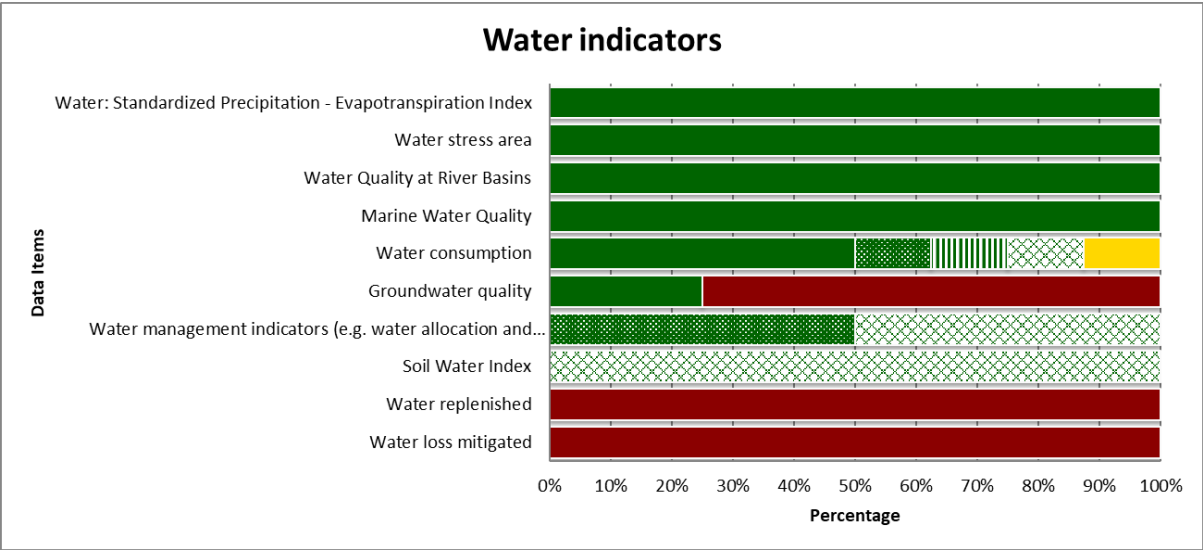
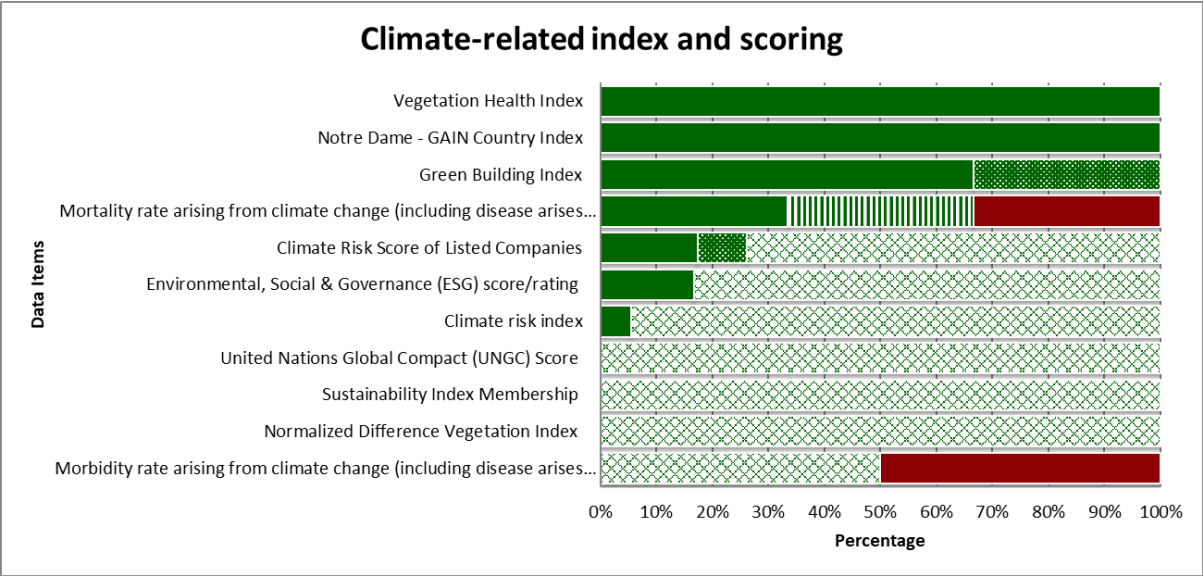
Moving forward, JC3 will continue to intensify efforts to collaborate with relevant public and private data providers to bridge data gaps and improve the availability and accessibility of environmental and climate related data items.

*Issued in November 2024*

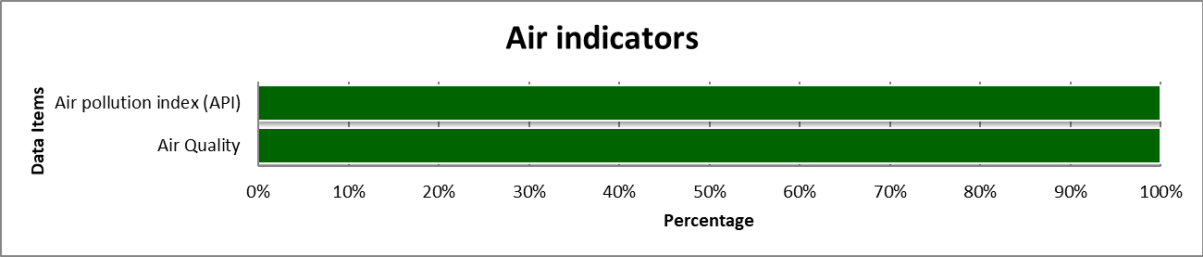
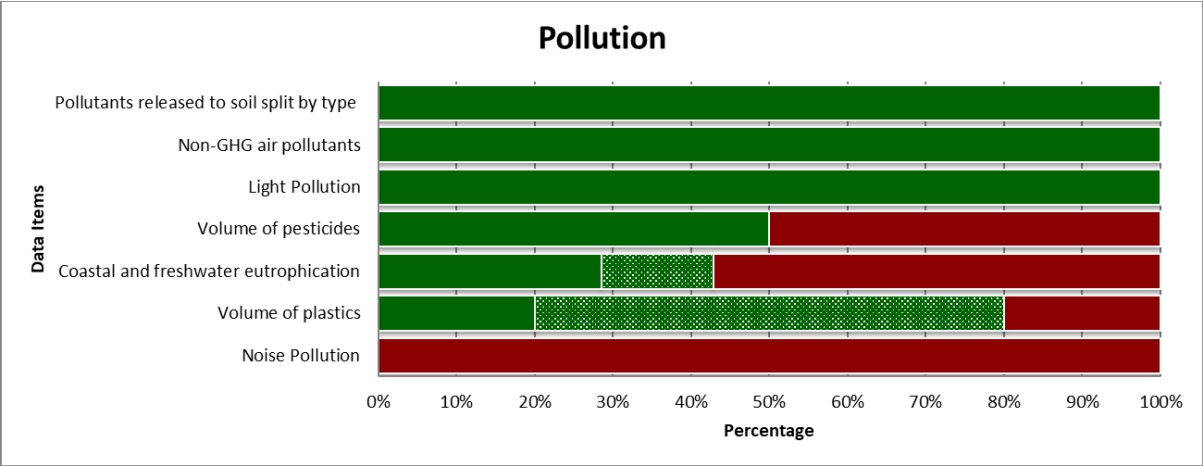
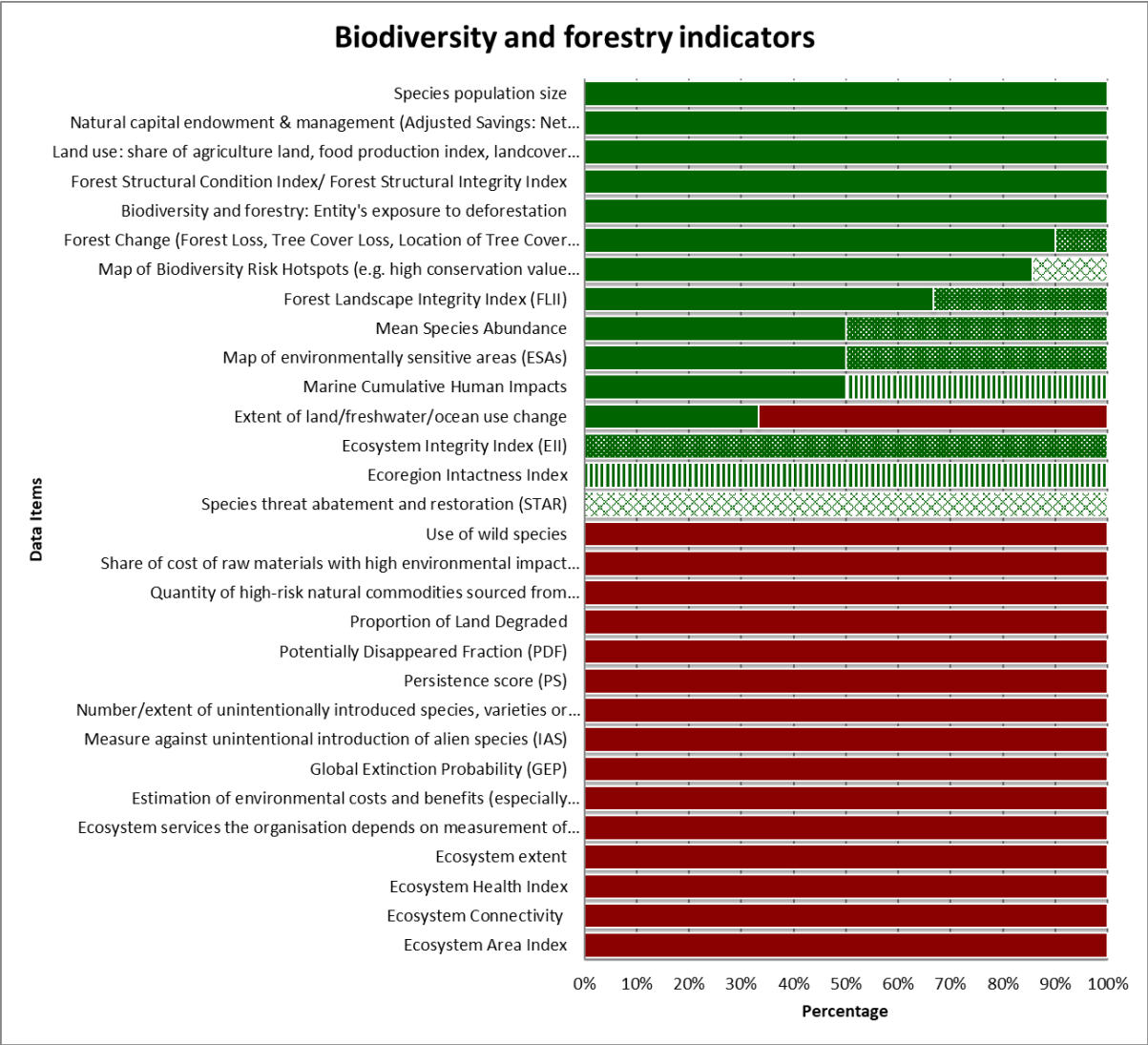
Appendix 1:  
2024 JC3 Climate Data Catalogue - Data Groups, Data Items and Status of Availability



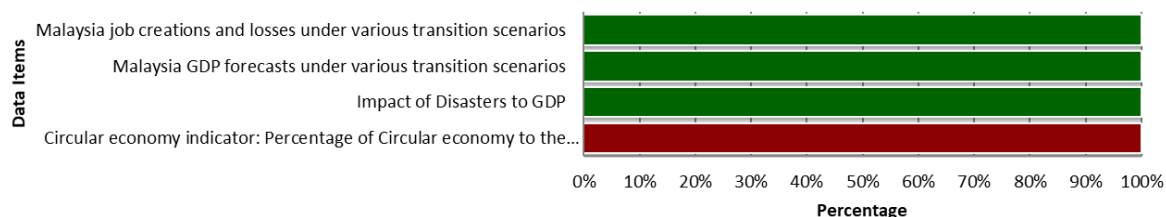




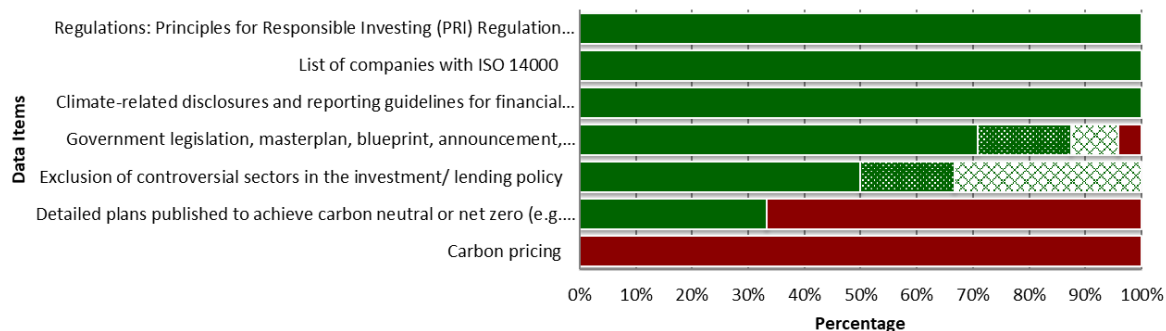




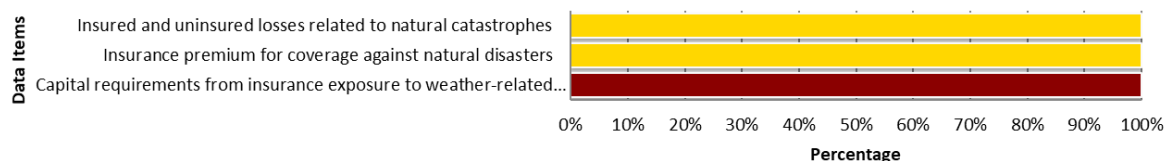
## Macroeconomic Impact



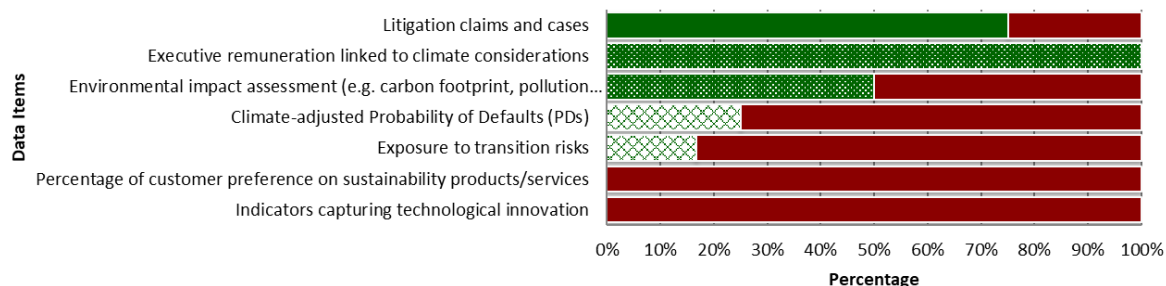
## Policy, regulation and standard



## Insurance sector's exposure to climate risk



## Others



## Ancillary non-climate data item to support scenario analysis/stress testing

