

Building Resilience Index

International Finance Corporation

📍 The Philippines (soon to be updated for other countries)

Hazard(s):

Wide-ranging: wind, water, fire, geo seismic

Type of action:

Assessment

Type of actor:

International organisation

Description

Building Resilience Index (BRI) provides the building sector with a web-based hazard mapping and resilience assessment framework. It identifies hazards based on location and vulnerabilities based on buildings designs.

The tool is designed as a questionnaire and it provides an overall rating based on the client's answer. In particular, it provides:

- location-specific hazard information;
- provision of resilience measures.

The tool is also explicitly designed to help disclose resilience information. It therefore participates in increasing transparency.

The Building Resilience Index is designed to work in tandem with EDGE Green Building Certification, though the two tools do not directly talk to each other.

Audience

All stakeholders along the buildings and construction value chain:

- construction developers,
- banks,
- insurers,
- governments

Timeline

The Building Resilience Commitment campaign was launched in September 2021 in the Philippines as a call to action for business and organizations. It is the first real-life use of the BRI : all stakeholders of the buildings and construction sector pledged to use the BRI to assess their assets following three axes :

- developers: assess resilience and pledge to improve their rating;
- financers: integrate adaptation and resilience in investment decisions;
- governments: develop policies in line with BRI recommendations.

More than 1 million square meters already assessed.

Other projects are in development in other parts of the world: the Caribbean, Vietnam, etc.

How does the initiative address the 10 Principles?

1. Urgency

BRI is designed to give the impetus for change: the tool builds the potential for legal requirement to reach certain rating, to implement certain mitigation measures. The tool's rating system intrinsically highlight the most urgent step to take to improve the resilience.

2. Stakeholders

All stakeholders are to be engaged with BRI and its diffusion: legislators implement policies to require specific BRI ratings, financial institution give credits that favour higher BRI ratings, developers build to the standards required by insurers at the demand of their client.

3. Process

The app proposes adaptation for the whole life cycle (except for demolition): from design to actual works and even retrofitting measures for both the construction projects and renovation projects. The goal is to increase the building's survivability to prolong its life cycle to not only protect residents and users but to also protect the building itself and its functions.

4. Mitigation

The BRI is focused on the assets themselves. As such, there are hazards that impact buildings, and others (like heatwaves) that don't. Therefore, mitigation measures that can improve buildings' resilience are included in the recommendations. However, the focus of the tool is adaptation.

5. Data

Contingency is built into the assessment, though it is not explicit for the user. As a tool with intense focus on financial aspects, it is challenging to talk to developers and financial institutions with prospective risks. Risk analysis relies therefore mostly of historical precedent and there is direct reference to climate projections.

6. Scale

The BRI is an asset-based tool.

7. Green

As the BRI is to be implemented in tandem with the EDGE Green Building certification, all green methods will provide operational continuity. A stated goal is to incentivize going beyond building codes.

8. People

Making buildings more resilient and able to withstand hazards enables the resilience of communities through continuity of functions. This is particularly significant since in many cases, the most vulnerable communities are also living in the most vulnerable buildings. Protecting buildings is protecting livelihood and ensuring stability.

9. Finance

Though there is no tangible outcome yet, BRI has 3 ambitions: incentivize the public sector to fund resilient projects, develop financial products that will promote resilient buildings, and adjust insurance premiums based on BRI rating.

10. Local

BRI is inherently designed to take the local context into consideration as risk evaluations and mitigation measures are location specific. In particular, adaptation measures take local building codes into account.