

Biodiversity and Ecosystem Services Risk Assessment

BEM manages biodiversity and ecosystem services risks through the Environmental Impact Assessment (EIA) process. The Company assesses potential risks and impacts on biodiversity and ecosystem services throughout all phases of project development and operations, and establishes Environmental Mitigation Measures to prevent, minimize, and address environmental impacts as guidance for project implementation.

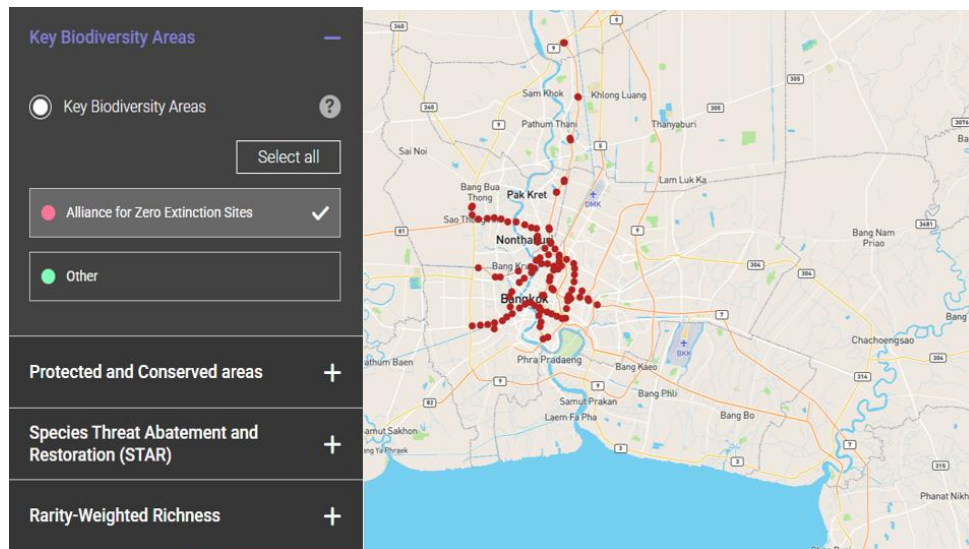
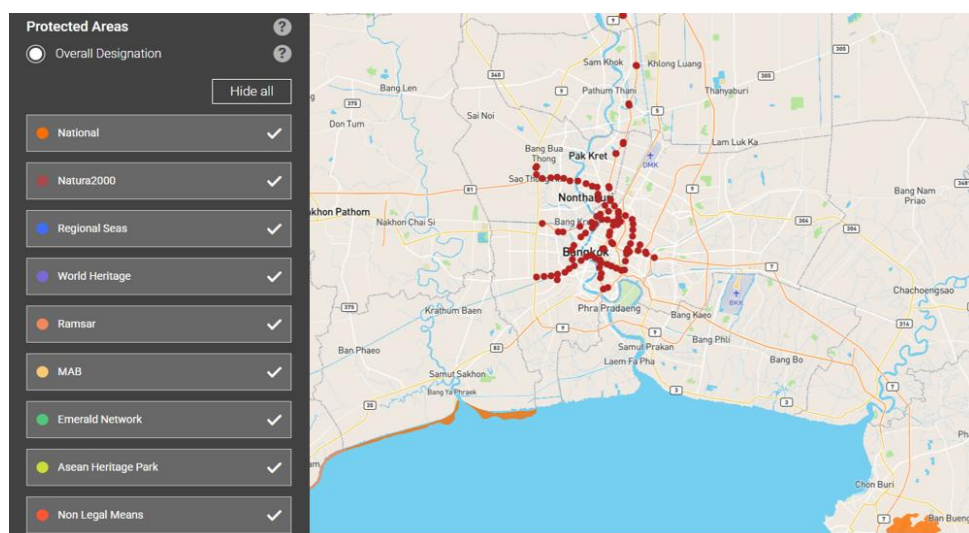
In addition, BEM has conducted a biodiversity and ecosystem services risk assessment in accordance with the LEAP Approach developed by the Taskforce on Nature-related Financial Disclosures (TNFD). The assessment was conducted through the following steps:

STEP	L - Locate Locate the locations of the Company's interface with nature	E - Evaluate Evaluate dependencies and impacts on nature	A - Assess Assess nature-related risks and opportunities	P - Prepare Prepare action plans and management strategies for nature conservation
TOOLS	IBAT  Integrated Biodiversity Assessment Tool	ENCORE  ENCORE	WWF BRF  Biodiversity Risk Filter 	Mitigation Hierarchy
BOUNDARY	Cover the Company's operations across its entire value chain.			

1. L - Locate the locations of the Company's interface with nature

BEM identified the locations and boundaries of its operational sites that interface with and may impact nature, covering its three core businesses: Expressways, Rail, and Commercial Development. The Company applied a location-specific approach using the Integrated Biodiversity Assessment Tool (IBAT), a biodiversity database platform. This assessment evaluated the proximity of the Company's operational sites to Protected Areas (PAs), Key Biodiversity Areas (KBAs), and species of conservation concern listed on the IUCN Red List of Threatened Species within a 2-kilometer radius of the Company's operational sites. The assessment results confirmed that none of the Company's operational sites are located within or adjacent to Protected Areas, Key Biodiversity Areas (KBAs), Natural World Heritage Sites, forest reserves, or protected areas classified under IUCN Categories I-IV. **Accordingly,**

the Company has no operational sites located within, or directly connected to, areas of high biodiversity importance, and no operational activities were identified as having significant impacts on such areas.



2. E - Evaluate dependencies and impacts on nature

BEM evaluated its dependencies on ecosystem services and the impacts of its operations on nature using the ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) tool. ENCORE classifies industries according to the International Standards Industrial Classification of All Economic Activities (ISIC), enabling organizations to assess their relationships with and impacts on natural capital. The evaluation was conducted under the following sector classifications:

- ISIC Section: Transportation and storage
- ISIC Division: Land transport and transport via pipelines
- ISIC Group/Class: Transportation Via Railway and Other land transport

Dependencies	Scope	ENCORE Materiality Rating	
		Other land transport	Transportation Via Railway
Ecosystem Service	Visual amenity services	Very High	Very High
	Water supply	Very Low	Very Low
	Other Provisioning services – Animal-based energy	Medium	
	Global climate regulation services	Medium	Medium
	Rainfall pattern regulation services (at sub-continental)	Medium	Medium
	Local (micro and meso) climate regulation services	Low	Low
	Air filtration services	Very Low	Very Low
	Soil and sediment retention services	High	Low
	Water flow regulation services	Low	Low
	Flood mitigation services	Medium	Medium
	Storm mitigation services	Medium	Medium
	Noise attenuation services	Very Low	Very Low
	Biological control services		Very Low
	Other regulating and maintenance service – Diluted by atmosphere and ecosystem	Very Low	Very Low
Impact	Scope	ENCORE Materiality Rating	
		Other land transport	Transportation Via Railway
Pressures	Disturbance (e.g., noise, light)	Medium	Medium
	Emissions of GHG	Medium	Medium
	Emissions of non-GHG air Pollutants	Low	Medium
	Generation and release of solid waste	Very Low	Low
	Area of land use	Medium	Medium
	Emissions of toxic pollution to water and soil	Low	Low
	Emissions of nutrient pollutants to water and soil	Low	Medium
	Volume of water use	Low	Medium
	Introduction of invasive species	Low	Very High

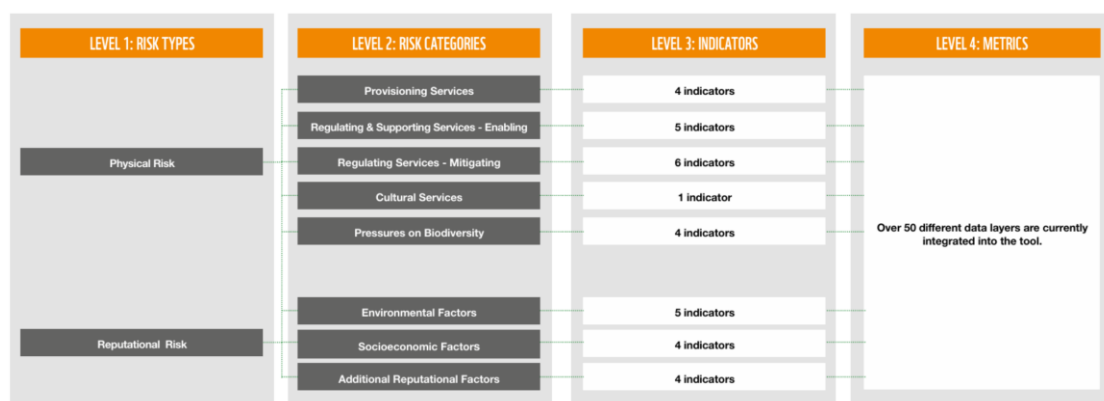
Very High	High	Medium	Low	Very Low
-----------	------	--------	-----	----------

Source: ENCORE (2024). *Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE)*, developed by Global Canopy, UNEP Finance Initiative (UNEP FI), and UNEP-WCMC. Available at [ENCORE Nature](#).

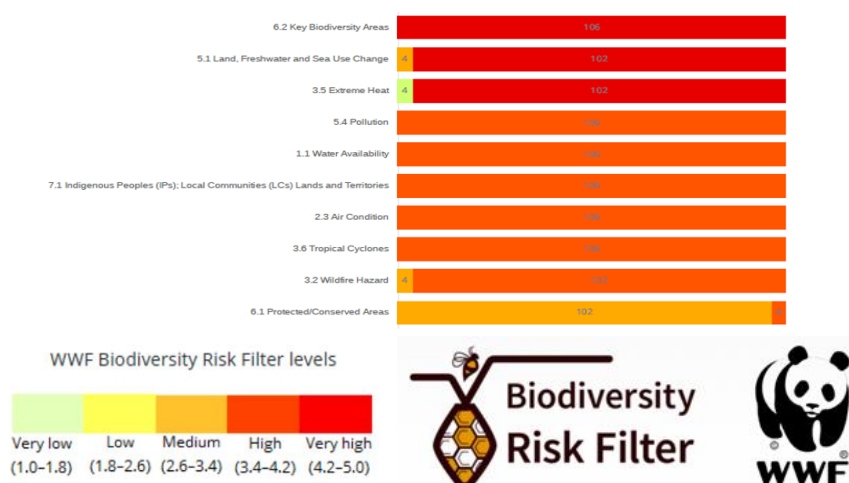
Although ENCORE results at the sector level indicate that rail and other land transport activities (including expressway operations) have a high dependency on visual amenity services and may face high risks associated with invasive species, BEM's location-specific assessment indicates that these issues **are not material to its operations**. This is because all operational sites across the Company's three core business segments are located in urbanized environments, where business activities do not rely on natural scenery to attract passengers. Furthermore, potential impacts related to **invasive species and biodiversity loss were assessed as "low"** because the Company's operational sites have limited interaction with natural ecosystems. As a result, the likelihood of causing ecosystem disturbance or contributing to biodiversity loss is considered low.

3. A - Assess nature-related risks and opportunities

BEM leveraged the World Wide Fund for Nature - Biodiversity Risk Filter (WWF BRF) as a reference tool to assess nature-related physical and reputational risks. This tool evaluates potential biodiversity-related risks and impacts associated with the Company's operations by incorporating location-specific factors, including endangered species, ecosystems, and protected areas.



Number of sites by top 10 risk indicators



The assessment identified the top 10 biodiversity-related risk indicators, comprising seven physical risk indicators and three reputational risk indicators. The most relevant risks identified for the Company include Physical Risk **5.1 - Land, Freshwater and Sea Use Change** and Reputational Risk **6.2 - Key Biodiversity Areas (KBAs)**, specifically in relation to the Chao Phraya River corridor. The Company has established mitigation measures to manage potential impacts associated with these areas through its natural resource conservation practices and environmental impact mitigation measures prescribed under the Environmental Impact Assessment (EIA) framework.

4. P - Prepare action plans and management strategies for nature conservation

BEM has established a nature conservation framework based on the Mitigation Hierarchy, in alignment with its Biodiversity and No-Deforestation Policy. The Company applies a hierarchical approach to environmental impact management comprising avoidance, impact minimization and mitigation, restoration, and offsetting/compensation, where applicable.

These measures are implemented through environmental protection and mitigation programs, as well as environmental monitoring and inspection activities, to ensure the effectiveness of environmental management and alignment with the assessment results. Key measures include land-use surveys along project corridors in accordance with EIA requirements, the installation of retaining structures to prevent soil erosion, wastewater treatment and effluent quality control in compliance with applicable regulations, and regular aquatic ecology monitoring in the Chao Phraya River. Monitoring results have consistently met applicable standards, and no significant impacts on biodiversity have been identified.