



BIODIVERSITY RISK ASSESSMENT REPORT 2023

Home Product Center Public Company Limited



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- Home Product Center Public Company Limited (the "Company") recognizes that biodiversity is crucial for maintaining healthy ecosystems and sustainable business practices. Therefore, the Company aims to protect biodiversity and minimize risks by integrating good practices on biodiversity management into its business operations. These practices include sustainable sourcing of products and materials, expanding the range of eco-friendly products, developing closed-loop circular products, and supporting reforestation projects, etc.
- To ensure that the entire supply chain complies with good practices on biodiversity management, the Board of Directors oversees the Company's operations and supply chain activities, considering their impact on biodiversity and alignment with business strategies. As a result, the "Biodiversity Commitment" has been announced to commit to avoiding operational activities that impact biodiversity across the Company's supply chain. The Company also ensures that the store expansion plan undergoes the mitigation hierarchy principles and strictly complies with No Net Loss ("NNL") and Net Positive Impact ("NPI") goals. Additionally, the Company has also committed to a "No Deforestation Commitment" which requires all stakeholders in the supply chain to end or reduce the deforestation associated with the Company's operations.

For more details on Biodiversity Commitment and No deforestation Commitment, please visit this link:
<https://hmpro.listedcompany.com/misc/CG/20230710-hmpro-environmental-policy-en.pdf>

- Business operations can put pressure on biodiversity. To understand this impact, a program focusing on potential risks to the business correlated with biodiversity health has been conducted. This serves as a starting point to assess the business's influence on biodiversity.
- The Company employs the World Wildlife Fund (WWF) Biodiversity Risk Filter to conduct a spatial assessment of corporate-level biodiversity-related risks. This helps prioritize specific locations for further analysis, including upstream activities, company-own operations, adjacent area, and downstream activities.
- The assessment pinpoints potential risk areas and opportunities for developing prevention and mitigation plans. This enables the Company to proactively minimize its impacts on and dependencies from biodiversity..
 - **Impacts on Biodiversity:** Changes in the state of nature which may result in changes to the capacity of nature to provide social and economic functions. Impacts can be positive or negative. They can be the result of an organization's or another party's actions and can be direct, indirect or cumulative (TNFD, 2022a).
 - **Dependencies on biodiversity:** Aspects of ecosystem services that an organization or other actor relies on to function. An organization might be dependent upon an ecosystem's regulation of water flow and quality, the resilience it provides against hazards like fires and floods, the pollination of crops it enables by providing a suitable habitat for pollinators, or its provision of timber or fibers.

- The current version of the WWF BRF covers physical and reputational biodiversity-related risks that affect the locations of company or supply chain sites. This classification of risks aligns with the risk classification of the Taskforce on Nature-related Financial Disclosures (TNFD).

Physical Risks

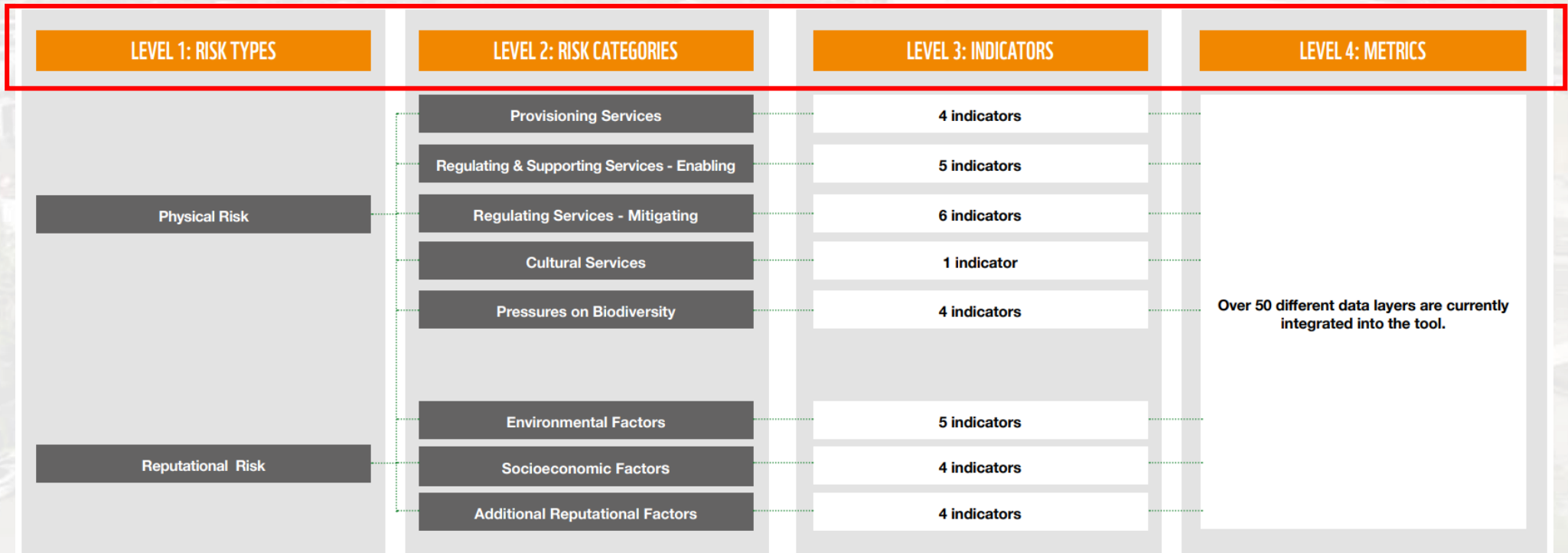
These are driven by the ways in which a business and its supply chains depend on and can be affected by both natural and human-induced conditions of land- and seascapes, and how pressures might deteriorate ecosystem services in the future. The global decline of ecosystem services, for example, could lead to reduced productivity (e.g., lack of fertile soils and pollination) or increased costs of inputs (e.g., scarcity of natural fibers or harvest losses).

Reputational Risks

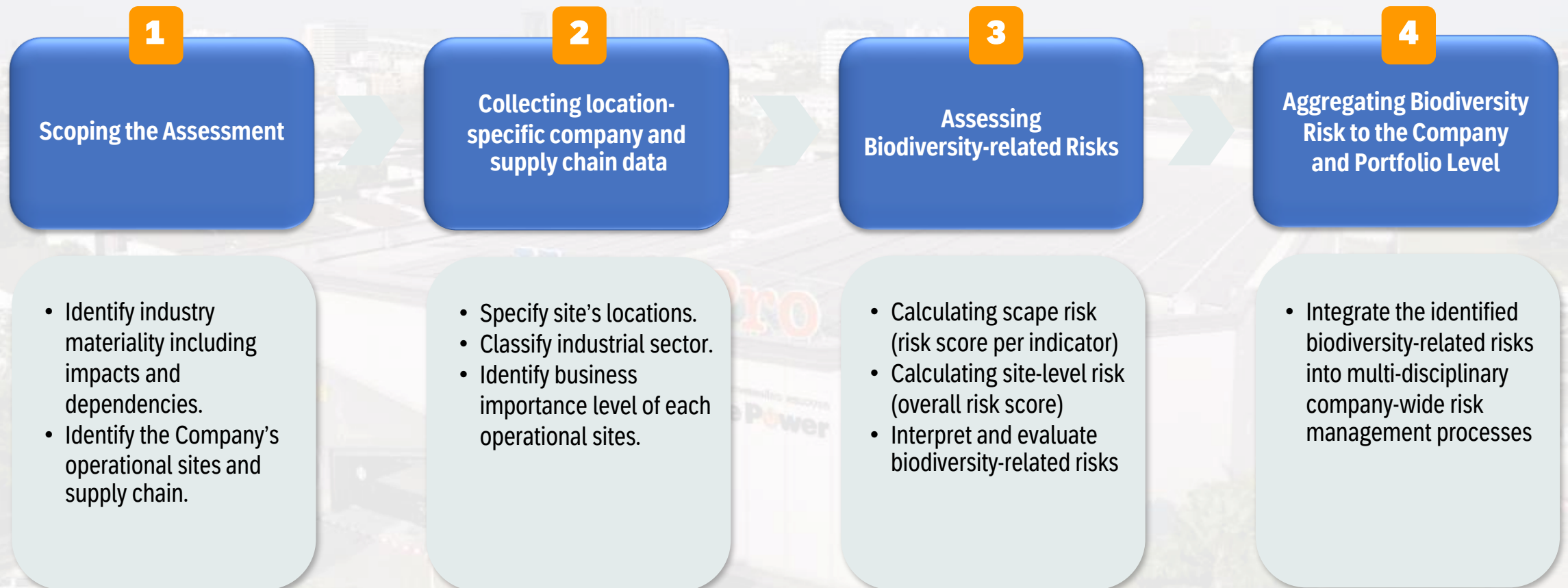
These can result from a company's actual or perceived negative impacts on biodiversity and people. Reputational risk represents stakeholders' and local communities' perceptions of whether companies conduct business sustainably or responsibly with respect to biodiversity and can ultimately affect brand value and market share, among other factors. Adverse effects on business could emerge from, for example, damages to the corporate brand and thus declining sales, or greater investor scrutiny and thus declining share price.

To assess the different aspects of physical and reputational biodiversity-related risks, the WWF BRF follows a four-level risk hierarchy.

- Level 1** **Risk types**, combines the risk categories into the broader risk types.
- Level 2** **Risk categories**, groups the indicators into higher-level risk clusters with more direct relevance to companies and financial institutions.
- Level 3** **Indicators**, comprises information on the importance and local integrity of biodiversity aspects, not as raw data but spatially (dis-)aggregated to an assessment unit and translated to a risk score ranging from 1 to 5.
- Level 4** **Metrics**, comprises the raw global data sets that measure different aspects of biodiversity and ecosystems in a specific location that may lead to biodiversity-related risks for companies and financial institutions.



- The WWF Biodiversity Risk Assessment was used as reference for methodologies and frameworks to assess physical and reputational biodiversity-related risks.
- The assessment process consists of 4 step including 1) scoping the assessment 2) Collecting location-specific company and supply chain data 3) Assessing Biodiversity-related Risks and 4) Aggregating Biodiversity Risk to the Company and Portfolio Level.



1 Scoping the Assessment

Indicator #	BRF Indicators	Impact/Dependency	Industry			
			Appliances & General Goods Manufacturing	Construction Materials	General or Specialty Retailing	Other (Average of all sectors)
Physical Risk						
Provisioning Services						
1.1	Water Scarcity	Dependency	4.0	5.0	2.0	4.0
1.2	Forest Productivity and Distance to Markets	Dependency	0.0	4.0	0.0	1.0
1.3	Limited Wild Flora & Fauna Availability	Dependency	0.0	1.0	0.0	1.0
1.4	Limited Marine Fish Availability	Dependency	0.0	0.0	0.0	1.0
Regulating & Supporting Services - Enabling						
2.1	Soil Condition	Dependency	0.0	0.0	0.0	1.0
2.2	Water Condition	Dependency	2.0	2.0	2.0	3.0
2.3	Air Condition	Dependency	2.0	2.0	1.0	2.0
2.4	Ecosystem Condition	Dependency	0.0	0.0	0.0	1.0
2.5	Pollination	Dependency	0.0	0.0	0.0	1.0
Regulating Services - Mitigating						
3.1	Landslides	Dependency	4.0	4.0	4.0	4.0
3.2	Wildfire Hazard	Dependency	3.0	3.0	3.0	3.0
3.3	Plant/Forest/Aquatic Pests and Diseases	Dependency	0.0	0.0	0.0	1.0
3.4	Herbicide Resistance	Dependency	0.0	0.0	0.0	1.0
3.5	Extreme Heat	Dependency	3.0	3.0	3.0	4.0
3.6	Tropical Cyclones	Dependency	4.0	4.0	4.0	4.0
Cultural Services						
4.1	Tourism Attractiveness	Dependency	0.0	0.0	0.0	1.0
Pressures on Biodiversity						
5.1	Land, Freshwater and Sea Use Change	Impact	1.0	1.0	1.0	3.0
5.2	Tree Cover Loss	Impact	1.0	5.0	1.0	3.0
5.3	Invasives	Impact	0.0	2.0	2.0	2.0
5.4	Pollution	Impact	5.0	5.0	4.0	1.0
Reputational Risk						
Environmental Factors						
6.1	Protected/Conserved Areas	Impact	3.0	3.0	1.0	3.0
6.2	Key Biodiversity Areas	Impact	2.0	2.0	1.0	3.0
6.3	Other Important Delineated Areas	Impact	2.0	2.0	1.0	3.0
6.4	Ecosystem Condition	Impact	2.0	2.0	1.0	3.0
6.5	Range Rarity	Impact	1.0	1.0	0.0	2.0
Socioeconomic Factors						
7.1	Indigenous Peoples (IPs); Local Communities (LCs) Lands and Territories	Impact	3.0	3.0	1.0	3.0
7.2	Resource Scarcity: Food - Water - Air	Impact	1.0	1.0	0.0	1.0
7.3	Labor/Human Rights	Impact	2.0	2.0	2.0	3.0
7.4	Financial Inequality	Impact	2.0	2.0	2.0	2.0
Additional Reputational Factors						
8.1	Media Scrutiny	Dependency	3.0	4.0	3.0	3.0
8.2	Political Situation	Dependency	2.0	2.0	1.0	2.0
8.3	Sites of International Interest	Dependency	2.0	2.0	0.0	2.0
8.4	Risk Preparation	Dependency	2.0	2.0	2.0	2.0

- Industry materiality refers to the significance of biodiversity-related issues to a specific industry.
- HomePro's own operations, subsidiaries, and joint ventures have been categorized under the General or Specialty Retailing Industry. Adjacent areas and downstream entities have been classified as Other Sector (representing an average of all sectors). Upstream entities, including suppliers of appliances, general goods, and construction materials, fall under the Appliances & General Goods Manufacturing and Construction Materials industries.
- The industrial materiality result classified risk indicator as high to very high priority.

<u>Dependencies</u>	1.1 Water Scarcity 1.2 Forest Productivity and Distance to markets 3.1 Landslides 3.5 Extreme Heat 3.6 Tropical Cyclones 8.1 Media Scrutiny
<u>Impacts</u>	5.2 Tree Cover Loss 5.4 Pollution

1 Scoping the Assessment

Identifying the Company's operational sites and supply chain covers 131 sites including 121 sites of company own operations and 10 sites of upstream activities. The adjacent area and downstream activities were conducted using sites repeating counted as in the Company own operation.

Type of Site	Location	Site
Own operation, Subsidiaries, and Joint Ventures (121 sites)	Bangkok Metropolitan Region (43 sites)	M001, M006, S014, S015, S017, S019, S021, S022, S039, S048, S082, S083, S085, S086, S097, S104, M014, M018, M019, M020, S002, S006, S009, S010, S013, S016, S024, S040, S061, S091, S098, S101, S102, S103, S105, M021, S088, S093, S096, S100, S106, S107, S605
	Central Region (13 sites)	S023, S037, M008, S033, S044, S045, S052, S054, S059, S062, S068, S078, S077
	East Region (18 sites)	M004, M007, S031, S055, S075, M005, M013, M015, M016, M023, S018, S030, S042, S057, S073, S081, S084, M024
	North Region (13 sites)	M002, S032, S065, S071, M012, M022, S012, S026, S051, S060, S063, S067, S076
	Northeast Region (17 sites)	S027, S028, S038, S053, M003, M010, M011, S036, S043, S046, S049, S066, S069, S064, S072, S099, S603
	South Region (17 sites)	S025, S035, S050, S058, M009, M017, S011, S020, S034, S041, S047, S056, S074, S079, M025, S108, S604
Adjacent areas (1 sites)		The representative area adjacent to own operations where was identified as highest physical risk and reputational risk (repeating counted).
Upstream Activities (10 sites)		Representative area where the significant suppliers are located.
Downstream Activities (6 sites)		Representative area of the customers based on their importance to the business and revenue generation in each region (repeating counted).

2 Collecting Location-specific Company and Supply Chain

131 sites = Own operation (121 sites) + Upstream Activities (10 sites)

Business
importance level

High High revenue generation

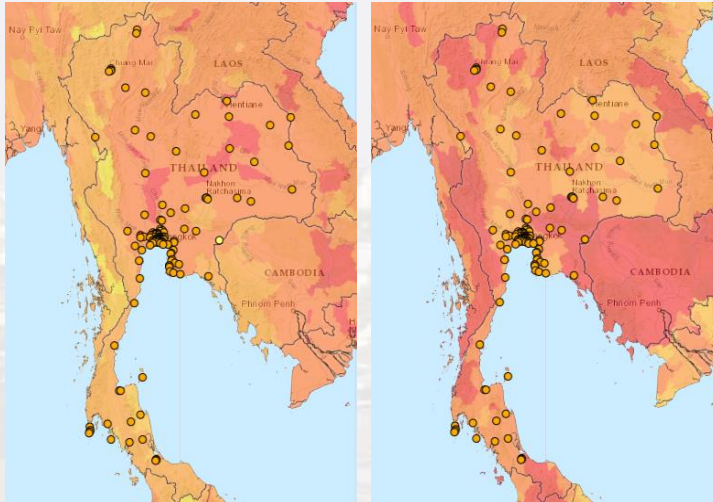
Medium Medium revenue generation

Low Low revenue generation

Type of site	Industry sector	Location	Business importance level	Site
Own operation, Subsidiaries, and Joint Ventures (121 sites)	General or Specialty Retailing	Bangkok Metropolitan Region (43 sites)	High (16 sites)	M001, M006, S014, S015, S017, S019, S021, S022, S039, S048, S082, S083, S085, S086, S097, S104
			Medium (19 sites)	M014, M018, M019, M020, S002, S006, S009, S010, S013, S016, S024, S040, S061, S091, S098, S101, S102, S103, S105
			Low (8 sites)	M021, S088, S093, S096, S100, S106, S107, S605
		Central Region (13 sites)	High (2 sites)	S023, S037
			Medium (10 sites)	M008, S033, S044, S045, S052, S054, S059, S062, S068, S078
			Low (1 sites)	S077
		East Region (18 sites)	High (5 sites)	M004, M007, S031, S055, S075
			Medium (12 sites)	M005, M013, M015, M016, M023, S018, S030, S042, S057, S073, S081, S084
			Low (1 sites)	M024
		North Region (13 sites)	High (4 sites)	M002, S032, S065, S071
			Medium (8 sites)	M012, M022, S012, S026, S051, S060, S063, S067
			Low (1 sites)	S076
		Northeast Region (17 sites)	High (4 sites)	S027, S028, S038, S053
			Medium (9 sites)	M003, M010, M011, S036, S043, S046, S049, S066, S069
			Low (4 sites)	S064, S072, S099, S603
		South Region (17 sites)	High (4 sites)	S025, S035, S050, S058
			Medium (10 sites)	M009, M017, S011, S020, S034, S041, S047, S056, S074, S079
Low (3 sites)	M025, S108, S604			
Adjacent areas (1 sites)	Other sector (average of all sector)		Medium (1 sites)	The representative area, M003 (Nong Khai), adjacent to own operations where was identified as highest physical risk and reputational risk (repeating counted).
Upstream Activities (10 sites)	Appliances & General Goods Manufacturing and Construction Materials		High (10 sites)	Representative area where the significant suppliers are located.
Downstream Activities (6 sites)	General or Specialty Retailing		High (6 sites)	Representative area of the customers based on their importance to the business and revenue generation in each region (repeating counted).

3 Assessing Biodiversity-related Risks

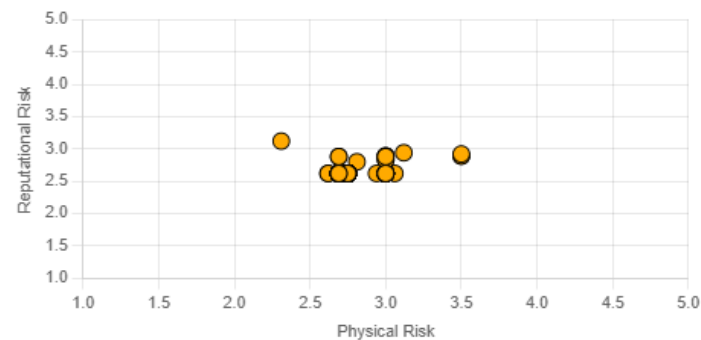
Spatial Analysis



Scope Physical risk

Scope Reputational risk

Physical risk Vs. Reputational risk



Key findings

The Company's operation

- None of the Company's operational sites fall into high or very high risk levels.
- Most operational sites (121 sites) have medium physical and reputational risk.
- The physical risk across the Company's operational sites ranged between 2.31-3.12 (medium level), while the reputational risk ranged between 2.62-3.12 (medium level).

Adjacent area

- The representative area adjacent to the Company's operations, M003 (Nong Khai), experiences medium physical risk (3.12) and medium reputational risk (2.94).

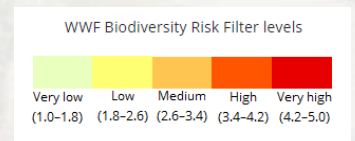
Upstream activities

- The result showed that 3 sites were classified as high physical risk and medium reputational risk. While the other 7 sites fall into medium physical risk and medium reputational risk.

Downstream activities

- All 6 downstream sites identified as medium physical and reputational risk.

Number of Sites by Risk Type



3 Assessing Biodiversity-related Risks

Key findings on risk category

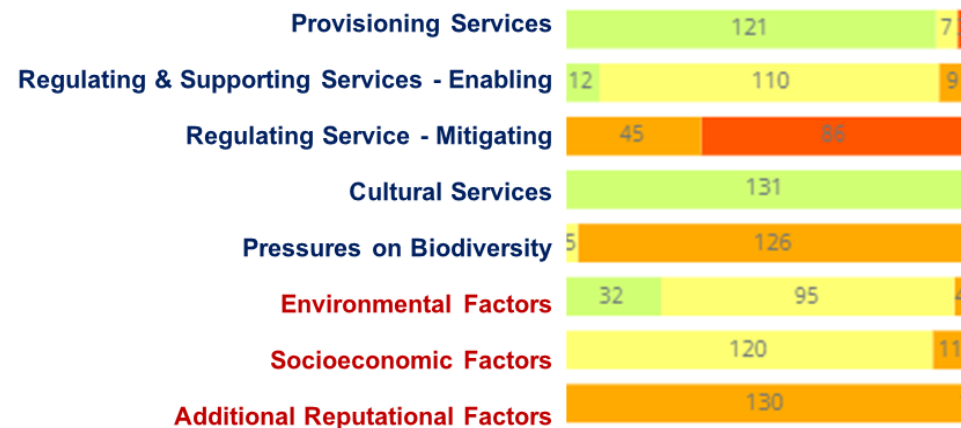
- There are 2 physical risk categories and 1 reputational risk category that found sites falling into high risk level.
- The greatest number of sites (86 sites) classified as very high risk level fall into the category of Regulating Service - Mitigating.

Key findings on risk indicator

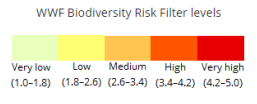
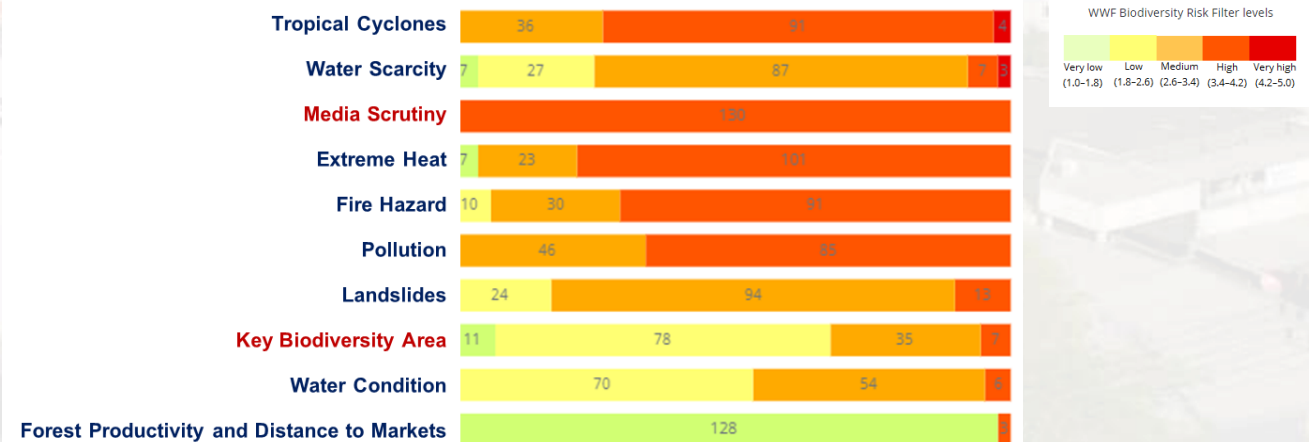
- Ranking top 10 highest risk indicator revealed that there are 8 indicators were detected as physical risk meaning that physical risk had more critical impacts on biodiversity than reputational risk (2 indicators).
- The greatest number of sites fall into very high risk level of the physical risk which are Tropical Cyclones (4 sites) and Water Scarcity (3 sites).
- The result indicated that most of the sites (130 sites) experience Media Scrutiny as high reputational risk level.

The assessment result of risk identification of **Physical risk** and **Reputational risk** were shown below:

Number of sites by risk categories



Number of sites by top 10 risk indicator



4 Aggregating Biodiversity Risk to the Company and Portfolio Level

- According to the assessment results, the identified potential physical and reputational risks shall be integrated into the multi-disciplinary, company-wide risk management process. This integration was developed to ensure that the Company has considered biodiversity-related risks and has an appropriate mitigation plan to lessen these risks.
- Continuous monitoring and updating are conducted to maintain the effectiveness of the Company's risk management in ongoing operations, upstream activities, downstream activities, adjacent areas, and upcoming operations.





THANK YOU
Home Product Center Public Company Limited

