



Driving Business for Sustainability

In 2024, CH. Karnchang Public Company Limited published its 12th consecutive Sustainability Report to communicate its operations, management policies, strategies, and sustainability framework. The report encompasses key aspects of economic and corporate governance, social responsibility, and environmental stewardship, ensuring transparency for all stakeholders. Furthermore, CH. Karnchang reaffirms its commitment to the transparent disclosure of critical information, emphasizing both accuracy and accountability in the reporting process.

This report covers the company's activities and operations from January 1 to December 31, 2024. CH. Karnchang Public Company Limited has prepared this report in accordance with the Global Reporting Initiative (GRI) Standards. All data has been collected and verified by relevant departments within the company to ensure its completeness, accuracy, and reliability.

Furthermore, the company has aligned its operations with the United Nations Sustainable Development Goals (SDGs) to ensure that its business activities contribute to sustainable development objectives.

The information disclosed in this report has been reviewed based on its relevance to the business, the availability of data, and its impact on operations, particularly within the company's core business sector—construction. This disclosure specifically pertains to the business activities of CH. Karnchang Public Company Limited, as outlined below.

- Southern Purple Line MRT Project: Contract 1 (Tao Poon - National Library)
- Southern Purple Line MRT Project: Contract 2 (National Library - Phan Fa)
- Double-Track Railway Project (Den Chai - Chiang Rai - Chiang Khong): Contract 2 (Ngao - Chiang Rai)
- Double-Track Railway Project (Den Chai - Chiang Rai - Chiang Khong): Contract 3 (Chiang Rai - Chiang Khong)
- Chulabhorn 60th Anniversary Learning and Research Center
- Water Transmission Tunnel Project along Kanchanaphisek Road and the Old Railway Road (Bang Mod Pumping Station - Samrong Pumping Station)
- Bang Ban - Bang Sai Flood Drainage Canal Project: Contract 4
- Thonburi Wastewater Collection and Treatment System Project: Contract 1





















However, this report does not fully disclose all operational information, as some projects are nearing completion and in the process of being handed over to their respective owners. Additionally, the company is refining its data collection processes to ensure that performance reporting aligns with corporate standards and provides comprehensive and clear insights. CH. Karnchang remains committed to improving the efficiency of its data collection systems to enhance the quality of performance reporting in accordance with GRI standards in the future.



Sustainability Management Policies and Goals

Sustainability Management Goals

CH. Karnchang is dedicated to operating its business in a socially and environmentally responsible manner, setting key sustainability goals as follows.






Corporate Governance and Economic Dimensions	Environmental Dimension	Social Dimension
 <ul style="list-style-type: none"> No complaints related to corruption were reported.  <ul style="list-style-type: none"> 100% of suppliers acknowledge and comply with the Supplier Code of Conduct.  <ul style="list-style-type: none"> All new suppliers undergo a thorough screening process. 	 <ul style="list-style-type: none"> Achieve a 1% annual reduction in energy consumption, using 2020 as the baseline year.  <ul style="list-style-type: none"> Achieve a 1% annual reduction in water consumption, using 2020 as the baseline year.  <ul style="list-style-type: none"> Received an award for excellence in environmental compliance, recognizing effective occupational health 	 <ul style="list-style-type: none"> Employees received an average of 9 hours of training per year.  <ul style="list-style-type: none"> No cases of human rights violations were reported.  <ul style="list-style-type: none"> The Lost Time Injury Frequency Rate (LTIFR) for employees and contractors was 0.01 per million hours worked.






<div data-bbox="296 253 400 387"></div> <ul style="list-style-type: none"> 100% of suppliers have been evaluated. <div data-bbox="280 524 416 649"></div> <ul style="list-style-type: none"> Maintain corporate governance at the highest standard. <div data-bbox="272 777 408 900"></div> <ul style="list-style-type: none"> Fully digitalize procurement processes to enhance transparency. <div data-bbox="266 1097 399 1232"></div> <ul style="list-style-type: none"> Strengthen anti-corruption initiatives at every level of the organization. <div data-bbox="264 1422 400 1547"></div> <ul style="list-style-type: none"> Achieved an “AA” rating in the SET ESG Rating for sustainable stocks. <div data-bbox="264 1731 400 1865"></div> <ul style="list-style-type: none"> The company’s Annual General Meeting (AGM) management received an “excellent” rating. 	<p>and safety (OHS) management and construction site conditions. This award was granted by the Mass Rapid Transit Authority of Thailand after meeting the assessment criteria at the Outstanding level.</p>	<div data-bbox="1166 257 1302 394"></div> <ul style="list-style-type: none"> No employee or contractor fatalities were recorded. <div data-bbox="1166 553 1302 678"></div> <ul style="list-style-type: none"> 100% of customers rated their satisfaction as good or very good. <div data-bbox="1158 889 1294 987"></div> <ul style="list-style-type: none"> All customer complaints were successfully resolved.
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 <ul style="list-style-type: none"> Recognized as an ESG100 Company.  <ul style="list-style-type: none"> Honored with the “Best CEO, Best CFO, and Best IR” awards by the Investment Analysts Association. 		
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Review of Sustainability Management Policies and Goals in the Past Year

Over the past year, Ch. Karnchang has reviewed and updated its sustainability policy, achieving the following key milestones.

Corporate Governance and Economic Dimensions	Environmental Dimension	Social Dimension
<p>Example :</p>  <ul style="list-style-type: none"> Achieved a top-tier corporate governance rating for the third consecutive year. 	<p>Example :</p>  <ul style="list-style-type: none"> Achieved an 8% reduction in greenhouse gas emissions year-over-year.  <ul style="list-style-type: none"> Implemented a water recycling management system 	<p>Examples :</p>  <ul style="list-style-type: none"> CH. Karnchang has strengthened its human rights policies by ensuring compliance with local labor laws on working hours and overtime. A key focus has been on minimizing excessive working hours, particularly by promoting job opportunities

<ul style="list-style-type: none"> 80% of the digital procurement system improvement has been completed.  <ul style="list-style-type: none"> All employees have received training on the anti-corruption policy. 	<p>in five large-scale construction projects.</p>  <ul style="list-style-type: none"> Increased the proportion of recycled materials used in construction projects by 15%. 	<p>for underprivileged individuals through various company initiatives.</p>  <ul style="list-style-type: none"> Provided skills training for 850 local workers.  <ul style="list-style-type: none"> Ensured that local hires made up an average of 35% across all projects.  <ul style="list-style-type: none"> Achieved a 40% reduction in accident rates from the previous year.
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Over the past year, the company has reviewed and refined its human rights policy to enhance its clarity and scope, ensuring the protection of all stakeholder groups in alignment with international standards. Additionally, the company has strengthened its ability to systematically monitor and assess policy implementation.

Defining the Content of the Sustainability Report

Process for Assessing the Company's Material Sustainability Issues

CH. Karnchang conducts its sustainability reporting by identifying and analyzing key material sustainability topics through an evaluation of both internal and external organizational factors, stakeholder expectations across the value chain, and the risks and opportunities affecting the business. This assessment follows the principle of Double Materiality, covering economic, corporate governance, social, and environmental dimensions in alignment with the Global Reporting Initiative (GRI 3) standards. To ensure continuous relevance, CH. Karnchang engages with



stakeholders every two years to reassess its material sustainability topics. In the intervening period, the company conducts a materiality review by analyzing industry trends and sustainability-related documentation to keep its approach aligned with evolving business and environmental conditions.

In 2024, CH. Karnchang conducted a materiality assessment to reassess key sustainability issues by evaluating various internal and external factors. These factors include regulatory changes, legal requirements, international sustainability standards, and emerging global trends within the construction industry. To align with stakeholder expectations, CH. Karnchang analyzed both potential benefits and adverse effects, as well as associated risks and opportunities. Additionally, the company assessed the potential human rights impacts of its business operations and external influences across the value chain. The materiality assessment process follows four key steps:

Step 1 Review of Material Sustainability Issues	<p>CH. Karnchang has collected and analyzed all business activities, including its roles as both a main contractor and a subcontractor, to assess the impact on eight key stakeholder groups—government agencies and related organizations, customers, business partners, employees, communities and the general public, shareholders, investors and analysts, the media, and competitors—throughout the value chain. Furthermore, the company has evaluated relevant environmental, social, and economic issues.</p> <p>Furthermore, the company has analyzed data from industry peers with similar business operations to CH. Karnchang, taking into account emerging trends, sustainability standards, and assessment frameworks at both national and international levels. To ensure alignment with evolving industry expectations, key sustainability issues have been updated to reflect current best practices.</p>
Step 2 Identifying Impacts Across the Value Chain	<p>The company assesses and identifies the impacts of its business operations across economic, environmental, and social dimensions, considering both positive and negative effects that arise from various activities, either directly or indirectly. The company's value chain is composed of five key activities: sourcing and procurement of construction materials and partners, engineering design and construction, construction execution, project delivery, and post-construction management. Additionally, supporting activities include corporate infrastructure management, human resource management, procurement, and the integration of technology. This assessment aims to provide a clear understanding of the scope</p>





	of impacts on stakeholders and their connection to CH. Karnchang's sustainable development goals.
Step 3 Impact Analysis	Based on the assessment of key material issues impacting stakeholders in Steps 1 and 2, CH. Karnchang has developed a weighted heat map to evaluate the significance of each issue. This process includes analyzing peer companies, industry standards, emerging trends, and both national and international sustainability assessment frameworks. Key references include the Dow Jones Sustainability Indices (DJSI), the Sustainability Accounting Standards Board (SASB), and the Stock Exchange of Thailand's SET ESG Ratings. Additionally, the company is preparing for upcoming changes in the Stock Exchange of Thailand's sustainability assessment methodology, particularly in alignment with FTSE Russell's evaluation framework.
Step 4 Summarizing the Review of Material Sustainability Topics	In the 2024 review of CH. Karnchang's material sustainability topics, the company categorized these topics into two levels: Material Topics and Non-Material Topics. This classification ensures a structured approach to prioritization, guiding policy formulation, delegation of responsibilities, strategic planning, and the development of short-, medium-, and long-term operational frameworks. It also supports the implementation of strategic initiatives and performance monitoring to enhance future management practices. The reviewed material sustainability topics were presented to and approved by the company's board of directors and leadership for public disclosure.

Results of the Materiality Assessment

For the 2024 review of material sustainability topics at CH. Karnchang, the method of presenting evaluation results has been revised. Previously, topics were categorized into a three-tier matrix format (highest importance, high importance, and important topics). Now, a two-tier classification system is used, consisting of Significant Material Topics and Material Topics. Additionally, the number of material topics has increased from 11 to 12, with Product Safety and Quality introduced as a new topic. This inclusion reflects industry trends in both private and government construction sectors—spanning large-scale and smaller projects, domestically and internationally—where sustainability frameworks are placing greater emphasis on product safety and quality. This encompasses factors such as the quality and type of construction materials, including low-emission building materials, to ensure compliance with environmental standards. The goal is to enhance customer and stakeholder confidence in receiving high-quality,





safe, and environmentally responsible products. The details of the 2024 material topics are illustrated in the following image.

For all 12 material topics identified in 2024, CH. Karnchang has established policies, strategies, and business management plans to address stakeholder needs, mitigate potential impacts across the entire supply chain, and support the company's commitment to sustainability. To ensure effective implementation, CH. Karnchang has set clear goals and key performance indicators (KPIs) for each material topic. Further details can be accessed through the CH. Karnchang Sustainability Website.

Material Topics for 2024		SDGs
Significant Material Topics	Energy Management and Climate Change Adaptation	  
	Good Corporate Governance	 
	Occupational Health and Safety	 
	Environmental Management	 
	Human Resource Management	 
	Product Safety and Quality*	  
	Community and Social Engagement	  
Material Topics	Sustainable Supply Chain Management	
	Human Rights	 
	Risk Management	
	Biodiversity	



Customer Relationship Management

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*The material topic newly introduced in 2024 was previously categorized under environmental management.

Note: The text color is used to classify material topics into three key dimensions as follows.

Environmental Dimension	S o c i a l Dimension	Governance and Economic Dimensions
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Report Content

CH. Karnchang's sustainability reporting covers 12 key sustainability topics, along with related sub-topics that are managed in a similar manner. The operational data for these topics is regularly updated to align with the GRI Standard reporting framework. This information is disclosed through two primary channels: the 56-1 One Report and CH. Karnchang's sustainability website.

Key Sustainability Issues	Reporting in the 56-1 One Report	Website Reporting
Environmental Dimensions		
Energy Management and Climate Change Adaptation	✓	https://www.ch-karnchang.co.th/storage/downloads/sustainability/sustainability-development-report/ck-energy-climate-change-management-th.pdf
Environmental Management	✓	https://www.ch-karnchang.co.th/storage/downloads/sustainability/sustainability-development-report/ck-environmental-management-th.pdf
Product Safety and Quality	✓	https://www.ch-karnchang.co.th/storage/downloads/sustainability/sustainability-development-report/ck-quality-materials-th.pdf





Biodiversity	X	https://www.ch-karnchang.co.th/storage/downloads/sustainability/sustainability-development-report/ck-biodiversity-th.pdf
Social Dimensions		
Occupational Health and Safety	✓	https://www.ch-karnchang.co.th/storage/downloads/sustainability/sustainability-development-report/ck-occupational-health-safety-th.pdf
Human Resource Management	✓	https://www.ch-karnchang.co.th/storage/downloads/sustainability/sustainability-development-report/ck-human-capital-management-th.pdf
Community and Social Engagement	✓	https://www.ch-karnchang.co.th/storage/downloads/sustainability/sustainability-development-report/ck-social-community-engagement-th.pdf
Human Rights	✓	https://www.ch-karnchang.co.th/storage/downloads/sustainability/sustainability-development-report/ck-human-rights-th.pdf
Governance and Economic Dimensions		
Good Corporate Governance	✓	https://www.ch-karnchang.co.th/storage/downloads/sustainability/sustainability-development-report/ck-corporate-governance-th.pdf
Sustainable Supply Chain Management	X	https://www.ch-karnchang.co.th/storage/downloads/sustainability/sustainability-development-report/ck-supply-chain-management-th.pdf



Customer Relationship Management	✓	https://www.ch-karnchang.co.th/storage/downloads/sustainability/sustainability-development-report/ck-customer-relationship-management-th.pdf
Risk Management	✓	https://www.ch-karnchang.co.th/storage/downloads/sustainability/sustainability-development-report/ck-risk-crisis-management-th.pdf
Data and Statistics (Performance table)	X	https://www.ch-karnchang.co.th/storage/downloads/sustainability/sustainability-performance-data/ck-sustainability-performance-data.pdf

