

SUSTAINABILITY REPORT

2023

Building Resilience

Focusing on Sustainable Infrastructure







CH. Karnchang

Table of Content

CEO Message

CK Business 03

Building Sustainable Value Chain 11

ESG Awards of Pride 21

About This Report 25

Building Trust and Prosperity :

Upholding Ethical Governance for Sustainability

- Governance and Compliance 31
- IT Security Cybersecurity and Data Privacy 43
- Sustainable Supply Chain 47
- Risk and Crisis Management 55
- Customer Relationship Management 67

Building Eco-Resilience : Nurturing Sustainable Environments

- Environmental Management 71
- Energy and Climate Change Management 79
- Biodiversity 85

Building Communities Strengthen :

Empowering through Sustainable Development

- Occupational Health and Safety 89
- Social and Community Engagement 95
- Human Capital Management 105
- Human Rights 111

GRI content index 117





Mr. Aswin Kongsiri

Chairman of the Board of Directors



Mr. Plew Trivisvavet

Chairman of the Executive Board




Mr. Nattavut Trivisvavet

President

CEO MESSAGE

CH. Karnchang Public Company Limited is dedicated to conducting construction and public infrastructure development businesses to elevate the living standards and create a good quality of life for people in a sustainable society. The Company adheres to the principles of constructing quality based on international standards and Green Construction. It promotes and supports a balanced and ethical society throughout the value chain, following the ESG (Environment Social Governance) framework, as well as supports the United Nations Sustainable Development Goals (SDGs). In 2023, CH. Karnchang Limited has been recognized as a sustainable stock with an A-level rating in the SET ESG Ratings by the Stock Exchange of Thailand (SET). The Company received the Chief Innovation Officer award from the National Innovation Agency. Furthermore, it has been honored with the ESG 100 award for the seventh consecutive year in 2023 by Thaipat Institute, and it received an excellent rating in the 2023 Annual Shareholders Meeting Quality Evaluation by the Thai Investors Association. The Company achieved an “Excellent” rating in the 2023 Corporate Governance Assessment by the Thai Institute of Directors (IOD). Additionally, it was awarded for outstanding environmental performance in 2023 by the State Railway of Thailand (SRT) for construction contractors who demonstrated excellent environmental performance. This reflects the success of the Company's sustainable operations.

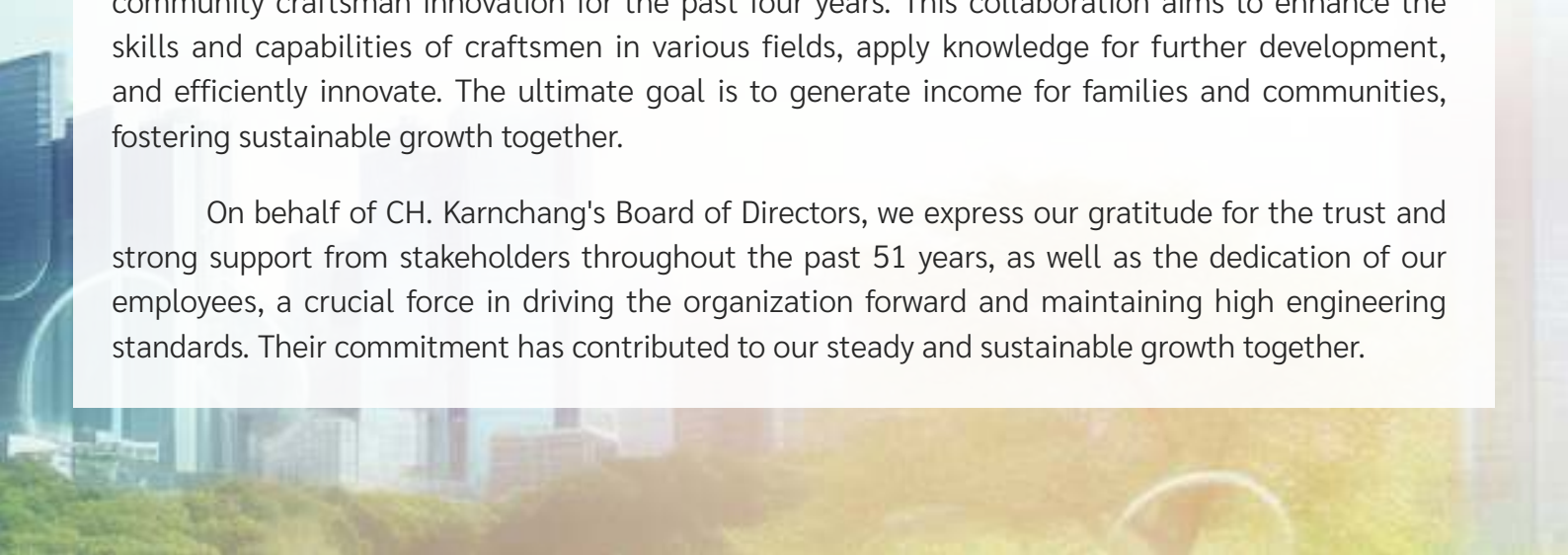


CH. Karnchang, is dedicated to Building Resilience: Focusing on Sustainable Infrastructure. The Company has laid the foundation for sustainability, from establishing guidelines for developing its construction business and public infrastructure projects in the future. It supports transparent and disclosed operations aligned with the global standard and sustainability assessment framework of Global Reporting Initiative (GRI) 2021, to meet the needs of stakeholders and adapt to changes in the construction industry. In 2023, CH. Karnchang analyzed key sustainability issues through internal and external assessments, as well as risks and opportunities impacting the business. The Company also considered stakeholders' expectations throughout the value chain, focusing on 11 key topics covering economic, corporate governance, social, and environmental dimensions. The top three priority topics were Good Corporate Governance, Occupational Health and Safety, and Human Capital Management. The Company places high importance on these priority topics and has outlined management guidelines, closely monitoring the outcomes as they are crucial for both effective business operations and impact on stakeholders.

CH. Karnchang establishes policies and operational guidelines in sustainability to express the Company's commitment and determination to develop and drive the business toward sustainability. Additionally, it serves as a framework for thought leadership, directions, and objectives in conducting business for employees, fostering understanding, and participation from stakeholders throughout the Company's value chain. The formulation of policies and operational guidelines is particularly crucial in driving sustainability in project-level operations. CH. Karnchang emphasizes various projects that promote a sustainable culture within the organization, focusing on managing and mitigating potential impacts resulting from construction and infrastructure development projects on the economy, environment, and society. The Company also closely monitors the performance of its operational activities.

In 2023, CH. Karnchang has successfully secured the contract for the Luang Phra Bang Hydroelectric Power Plant, the construction for the Thonburi Wastewater Collection & Treatment System Plant : Contract 1 valued at approximately 100 billion THB. We believe that this large-scale project will generate substantial income and returns that are both favorable and suitable for the Company and its shareholders over a continuous period of up to 7 years. Looking ahead to 2024, CH. Karnchang is confident that it can successfully bid on several government construction projects and meet its goals. In addition, the company has been collaborating with the National Innovation Agency (NIA) and ChangeFusion Institute to promote community craftsman innovation for the past four years. This collaboration aims to enhance the skills and capabilities of craftsmen in various fields, apply knowledge for further development, and efficiently innovate. The ultimate goal is to generate income for families and communities, fostering sustainable growth together.

On behalf of CH. Karnchang's Board of Directors, we express our gratitude for the trust and strong support from stakeholders throughout the past 51 years, as well as the dedication of our employees, a crucial force in driving the organization forward and maintaining high engineering standards. Their commitment has contributed to our steady and sustainable growth together.





The background of the cover is a light blue gradient with abstract, flowing white shapes. On the left side, there is a vertical collage of green elements: a small globe, a city skyline, a winding road with a car, and various leaves and plants. On the right side, there is a vertical collage of green elements: a small globe, a city skyline, a winding road with a car, and various leaves and plants. The text "SUSTAINABILITY REPORT" is in a dark blue, sans-serif font, and "2023" is in a large, bold, orange font. There are two large, semi-transparent orange circles at the bottom right.

SUSTAINABILITY REPORT 2023



1

ABOUT CH. KARNCHANG



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CH. Karnchang Public Company Limited, or CH. Karnchang, was found on November 27, 1972, to engage in the construction contracting business. The Company undertakes construction projects from various sectors, including Government Agencies, State Enterprises, and Private sectors. It operates both in Thailand and the Lao People's Democratic Republic under the name CH. Karnchang (Laos) Limited.



Date of registration on the Stock Exchange of Thailand (SET) :

October 10, 1994



Registered Capital :

1,693,899,970 Baht



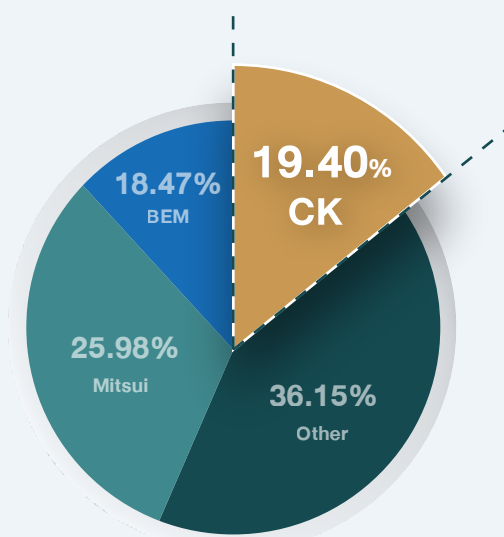
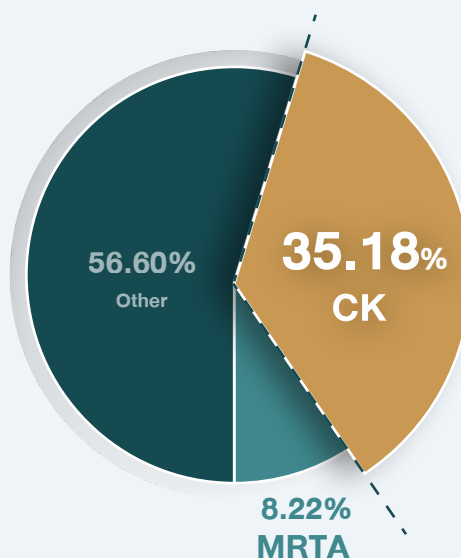
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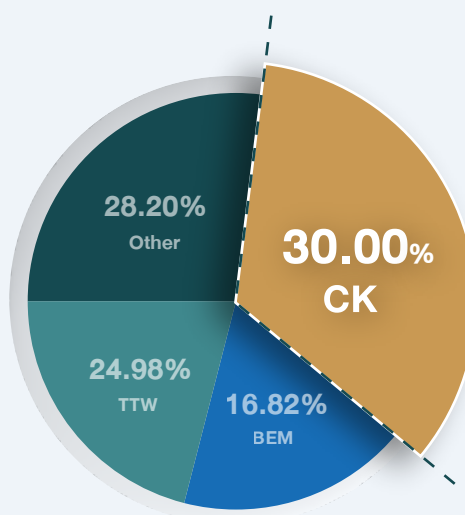
PROPORTION OF INVESTMENT IN INFRASTRUCTURE PROJECT DEVELOPMENT BUSINESS



TTW Public Company Limited



CK Power Public Company Limited



THE BUSINESS STRUCTURE OF CH. KARNCHANG

The revenue from the operations of CH. Karnchang Public Company Limited is generated by two main sectors : construction business and public infrastructure development business.

CONSTRUCTION BUSINESS



INFRASTRUCTURE INVESTMENT

- Mass Transit Rapid System
- Transportation System



- Infrastructure System



- Electric Power System



■ Dividend ■ Capital Gains

► CONSTRUCTION BUSINESS

The construction business operations of the Company, subsidiaries, and joint ventures can be categorized into two types:



Main Contractor

The Company will proceed to submit proposals as a company entity to be the main contractor either through participating in a direct bidding process or negotiating directly with the project owner. Subsequently, the Company will proceed to subcontract certain parts of the work by considering reliability and past performance as selection criteria. It should be noted that the Company does not exclusively rely on or depend on any specific subcontractor.



Subcontractor

The Company will undertake projects by accepting contracts from other contractors who have obtained direct contracts from project owners. Generally, as being the sole main construction contractor may not be sufficient for large-scale projects, the Company considers being a subcontractor. This operational approach allows the Company to benefit from the transfer of engineering technology, various production processes, and management practices. Moreover, it establishes potential trade partnerships capable of undertaking larger projects and requiring advanced technology in the future.

► INFRASTRUCTURE INVESTMENT

The Company has invested comprehensively in the development of basic infrastructure projects at the regional level. Currently, the Company has invested in various projects, including mass transit systems, transportation systems, water infrastructure, and electric power systems. These investment projects involve diverse and distinct operational characteristics, as follows:



1. BOT (Build-Operate-Transfer)

Private entities have the right to invest in construction and operate projects based on a concession agreement granted by the government. The purpose is to generate returns within a specified period. After the concession period expires, ownership rights to the invested property will be transferred back to the government as compensation.

2. BTO (Build-Transfer-Operate)

Private entities act as designers, investors, and constructors of assets and transfer ownership rights to the government immediately upon completion of construction. Subsequently, they manage the projects according to the concession or contractual agreements as stipulated.

3. BOO (Build-Own-Operate)

Private entities act as investors and self-manage the projects. Government agencies shall purchase goods during the concession or contractual period. Upon expiration of the concession period, such property shall remain vested in the investing company.

4. BOOT (Build-Own-Operate-Transfer)

Private entities act as investors and self-manage the projects. Government agencies will be the purchasers of goods during the concession or contractual period. Ownership of the assets will be transferred back to the government at the end of the specified period.



Vision, Missions, Values and Strategy

■ Vision



**CH. Karnchang : Engineering Sustainable
Life Infrastructure and Socieity**

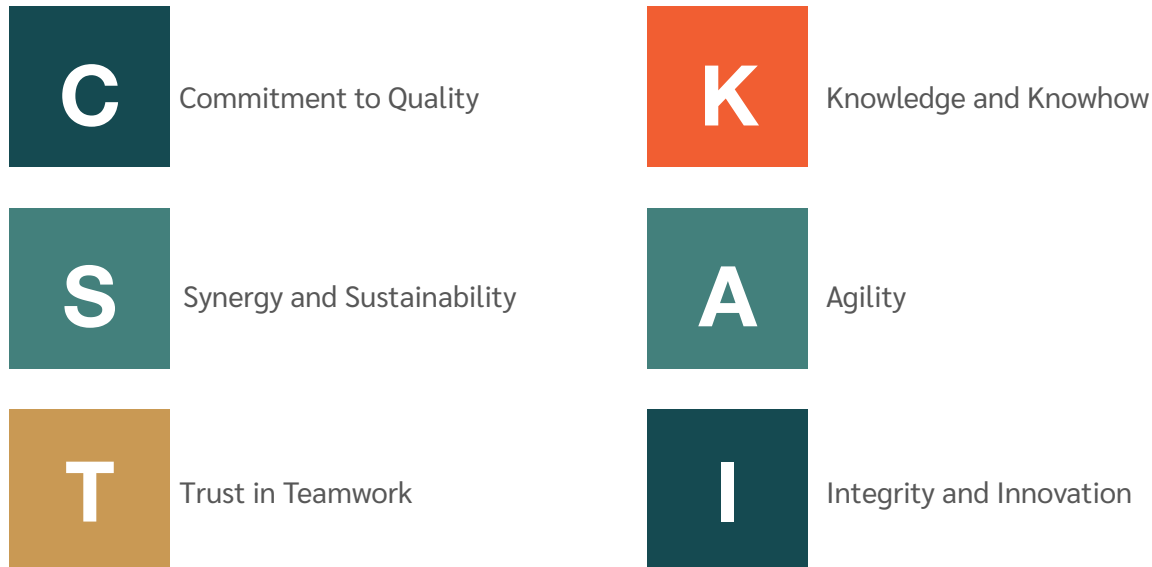


■ Mission



- Create quality works for customers, aiming to contribute to society and the nation, while considering fair and favorable returns for shareholders and stakeholders in all sectors.
- Manage operations professionally under ethical principles and adhere to good corporate governance.
- Promote organizational development for sustainability, aligned with a commitment to responsibility towards communities, society, the environment, and the nation.
- Foster a learning organization, focusing on human resource development and innovation.

■ Values **C-K-S-A-T-I**



■ Strategies

Enhance Synergy Toward Sustainability

- Strive for sustainability by engaging in businesses that benefit society and the nation, with a commitment to long-term returns that are fair to all stakeholders.
- Manage engineering operations by adhering to cost-effective management principles, delivering quality work within standards, and on schedule.
- Be an organization of learning and development, focusing on nurturing human capital and continuous innovation.
- Be adaptable and responsive to enhance competitiveness in the global market and meet market demands.
- Expand collaborative efforts in construction business and invest in fundamental infrastructure projects within the CH. Karnchang Group to create projects that benefit society and the nation.
- Emphasize the importance of nature, the environment, and addressing climate change.

■ Targets, Plans, and Strategies for the Company's Operations

To ensure the Company's business operations align with policies and achieve set objectives, the following targets, plans, and strategies have been implemented for the fiscal year 2023:



- Progress construction and related activities according to the schedule by developing and adopting new innovations as appropriate.



- Execute projects in accordance with contract terms for each project.



- Evaluate the feasibility of operations, considering their environmental and natural impacts, and prepare for investments in various projects.



- Maintain flexibility, including managing short-term and long-term investments efficiently to increase revenue. Utilize financial tools to manage risks and reduce financial costs.



- Foster partnerships with stakeholders through social responsibility processes and communicate both internally and externally.



- Maintain an effective, transparent management system that complies with good governance principles. Ensure adherence to quality management systems (ISO 9001:2015) and enhance information systems using modern technology to improve operational efficiency.





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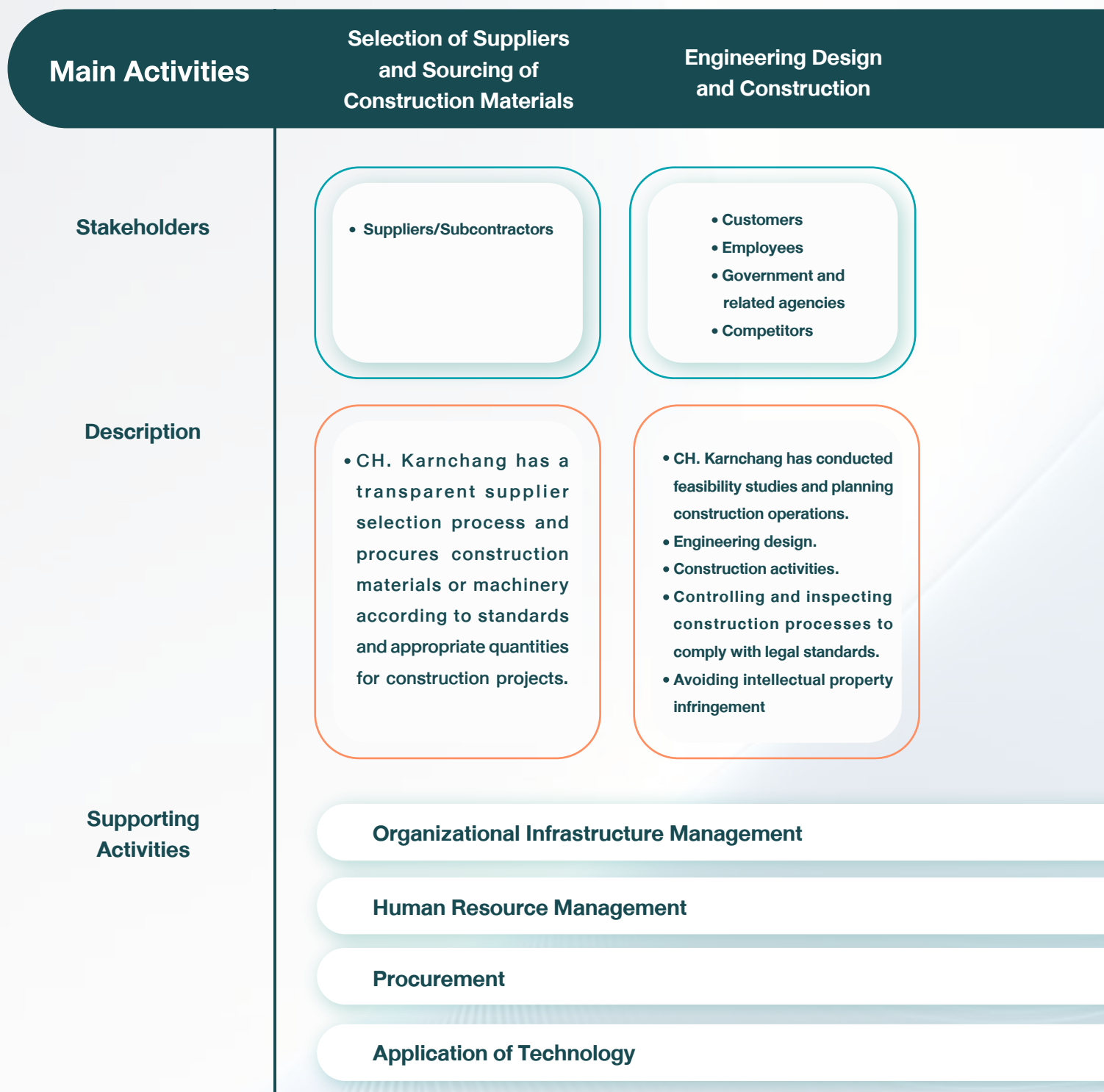
BUSINESS VALUE CHAIN



BUSINESS VALUE CHAIN

CH. Karnchang considers and evaluates the value chain, which demonstrates the relationships of stakeholders involved in business activities from the beginning to the end. CH. Karnchang is committed to creating value in services and products to meet the needs of stakeholders in all sectors.

The value chain of the Company consists of five main activities, including selection of suppliers and Sourcing of construction materials, engineering design and construction, project construction operations, construction project delivery, and post construction management.



Project Construction Operations

- Customers
- Community and the general public
- Employees
- Government and related agencies

- Executing construction projects assigned, such as mass transit systems, airports, energy facilities, water supply, etc.

Construction Project Delivery

- Customers

- Delivering construction projects of high quality that meet the requirements and conditions, satisfying the needs of clients.

Post Construction Management

- Community and the general public
- Employees
- Government and related agencies
- Shareholders, Investors and Analysts

- Managing and disposing of construction waste and debris, delivering it to waste disposal companies or relevant authorities.
- Communicating the success of the project and allocating benefits to shareholders fairly, equally, and with transparency.

Analysis of Stakeholders in the Business Value Chain

CH. Karnchang prioritizes taking into consideration the opinions of stakeholders in a fair and equitable manner. Therefore, the Company conducts an analysis to identify stakeholders in the value chain through organizational assessments on various issues, such as compliance with relevant laws, joint agreements, or basic rights protection. Recognizing that relationships and collaboration with stakeholders contribute to the company's sustainable growth, the analysis revealed that the main stakeholders of the Company consist of 8 groups: 1) Shareholders, Investors, and Analysts 2) Employees 3) Customers 4) Suppliers 5) Press 6) Communities and the General Public 7) Government Agencies and 8) Competitors. The three groups are identified as the most significant and are expected to engage in activities or participate with the Company in 2023 are as follows:



In this regard, CH. Karnchang has summarized the expectations of stakeholders regarding the Company's business operations and the Company's responses to the expectations of each stakeholder group. Additionally, the Company has outlined avenues for collaboration and practices towards stakeholders for 2023 as follows:

Table Showing Participation and Guidelines for Stakeholders of CH. Karnchang

1. Customer		
• Government Project Owners • Private Project Owners • Companies in the CH. Karnchang group		
Stakeholder Expectations and Concerns	Guidelines for Treating Stakeholders	Engagement Channels
<ul style="list-style-type: none"> • There is care and management of occupational health and safety in operations, with measures to control potential impacts on the environment. • There are efficient personnel and sufficient resources for performing tasks. • There are efficient tools, machinery, and equipment for operational tasks. • There is experience and expertise in operational efficiency to deliver quality work within specified timeframes. 	<ul style="list-style-type: none"> • Manage engineering work based on efficient cost management principles, delivering quality work according to standards and within specified timeframes. • Establish rigorous and efficient occupational health and safety and management plans, regularly inspect and assess operational risks, and promote training to increase awareness of safety and health among employees and suppliers. • Provide training and development for employees' skills, conduct performance assessments to improve efficiency, and adhere to the specifications and requirements of bidding and contracts. • Use tools, machinery, and equipment that are safe and efficient. • Have a team of experts and experienced professionals in construction operations. • Establish a systematic project management system that keeps information up to date, maintaining accurate and comprehensive technical details and construction prices. • Improve work processes to reduce environmental impact by employing environmentally friendly technologies and methods and regularly assessing and reporting environmental impacts. 	<ul style="list-style-type: none"> • Report documents and evidence according to requirements • Meeting with project owners • Organizing training activities, volunteering, or other activities together • Telephone communication • Website • Email • Letter

2. Shareholders, Investors and Analysts

Stakeholder Expectations and Concerns	Guidelines for Treating Stakeholders	Engagement Channels
<ul style="list-style-type: none"> • Adhere to the law, ensuring accuracy, transparency, and having a well-monitored business operation. • Treat shareholders, investors, and analysts equally and fairly. • The Company has good business performance and financial status, is stable, and operates in accordance with set goals, including allocating benefits lawfully, such as fair dividend payments, and providing accurate and complete information. 	<ul style="list-style-type: none"> • Adhering to laws, regulations, and enforcement methods to ensure that practices toward shareholders, investors, and analysts comply with the standards for good corporate governance. • Providing information equally, accurately, comprehensively, clearly, efficiently, and in a timely manner. • Having clear and transparent guidelines or policies for allocating benefits. 	<ul style="list-style-type: none"> • Annual General Meeting (AGM) for shareholders. • Analyst Meeting • Roadshow, Conference Meetings, and Company Visits • Participation in activities organized by the Stock Exchange of Thailand (SET). • Submission of the 56-1 One Report, an annual information report • Sustainable Report (SD Report) • Company Presentation summarizing operational results • Telephone communication • Conference Call • Video Conference • Print media and public relations • Website: www.ch-kamchang.co.th • Email: ck-ir@ckplc.com.

3. Employees

Stakeholder Expectations and Concerns	Guidelines for Treating Stakeholders	Engagement Channels
<ul style="list-style-type: none"> • Receives care and management of occupational health and safety in operations. • Receives appropriate compensation and benefits. • Employees have equal rights. • Experiences progress in their professional development, stability, and safety in their work. They receive development opportunities by enhancing knowledge and skills appropriately. 	<ul style="list-style-type: none"> • Efficiently operate in the field of occupational health and safety. • Provide fair and appropriate compensation. • Adhere to labor laws while considering the fundamental human rights and the needs of employees, establishing channels for complaints in cases of unfair treatment. • Emphasize the development of potential in work, have performance assessment plans, and set participatory goals for employees' progress. 	<ul style="list-style-type: none"> • Management meetings with employees • Training and seminar activities • Email communication • Newsletters • Notices • Instructions through supervisors • Notifications through Microsoft Teams • Organizing activities to solicit opinions on various topics such as safety, sustainability, and recreational ideas

4. Suppliers

Stakeholder Expectations and Concerns	Guidelines for Treating Stakeholders	Engagement Channels
<ul style="list-style-type: none"> • Ensure timely payment for the goods and services as per the agreed schedule. • Continuously utilize products and services from suppliers or contractors. 	<ul style="list-style-type: none"> • Treat all suppliers fairly and equally, with transparent standards for competitive pricing and verifiable processes. • Communicate effectively in evaluating the use of products and services from suppliers, promote and support suppliers to consider sustainability. 	<ul style="list-style-type: none"> • Report on purchase/order documents and contracts • Conduct meetings with contractors and vendors • Organize training, volunteer, or other collaborative activities • Telephone communication • Email

5. Press

Stakeholder Expectations and Concerns	Guidelines for Treating Stakeholders	Engagement Channels
<ul style="list-style-type: none"> • Receive clear and accurate information from the Company on specific points. • Receive information that is equal to that provided to other stakeholders. 	<ul style="list-style-type: none"> • Communicate information efficiently, beneficially, promptly, accurately, and responsively to events. • Treat all Press groups equally, similar to other stakeholder groups. 	<ul style="list-style-type: none"> • Publish and disseminate organizational news through press releases, articles, and news. • Conduct interviews and meetings with executives for exchanging opinions. • Email • Telephone communication

6. Community and the General Public

Stakeholder Expectations and Concerns	Guidelines for Treating Stakeholders	Engagement Channels
<ul style="list-style-type: none"> • No impact is observed from construction activities, be it in terms of pollution, such as air, dust, noise, or soil surface water quality, including the impact on the quality of life and daily living. This includes preventing accidents or adverse effects arising from the use of machinery and the transportation of large equipment. • In the event of any impact from construction, corrective actions must be promptly taken to return to normal conditions as quickly as possible. 	<ul style="list-style-type: none"> • Carry out construction efficiently, implement measures to inspect tools and machinery, and assess potential impacts on the public. Engage in discussions and dialogue with the community to monitor and inquire about the impacts resulting from construction activities. • Address and resolve issues promptly, inquire about the needs of the community, collaboratively establish and support standard practices, participate in and support preventive activities, and foster understanding within the community. Also, contribute to the development of the quality of life in the community, such as organizing community relation activities to enhance the skills of the community members. 	<ul style="list-style-type: none"> • Prepare environmental impact reports. • Community relations activities • Lodge complaints at the construction project office. • Construction project's Facebook page. • Telephone communication • Project office's website • Meetings conducted through supervisors. • Public relations signs • Collaborative training, volunteer, or other joint activities

7. Government and Related Agencies

Stakeholder Expectations and Concerns	Guidelines for Treating Stakeholders	Engagement Channels
<ul style="list-style-type: none"> • Adhere to the law and regulation in order to ensure accuracy, completeness, clarity, and efficiency. • Conduct activities according to appropriate processes and timelines. 	<ul style="list-style-type: none"> • Adhere to laws, regulations, and enforcement methods to ensure accuracy, completeness, clarity, efficiency, and compliance with procedural regulations. • Plan operations in advance appropriately. 	<ul style="list-style-type: none"> • Meetings with government agencies • Email • Telephone communication

8. Competitors

Stakeholder Expectations and Concerns	Guidelines for Treating Stakeholders	Engagement Channels
<ul style="list-style-type: none"> • Conduct fair and legal practices towards competitors, refraining from damaging the reputation of other companies through malicious accusations. Avoid accessing information or trade secrets of companies within the same industry group through unethical and illegal means or engaging in anti-competitive practices. 	<ul style="list-style-type: none"> • Conducting business within the framework of the law, with ethics, transparency, and auditability, including avoiding violations of property and intellectual rights. 	<ul style="list-style-type: none"> • Meetings through the Thai Contractors Association under H.M. the King's Patronage and other relevant organizations.





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ESG Awards of Pride

ESG Awards of Pride

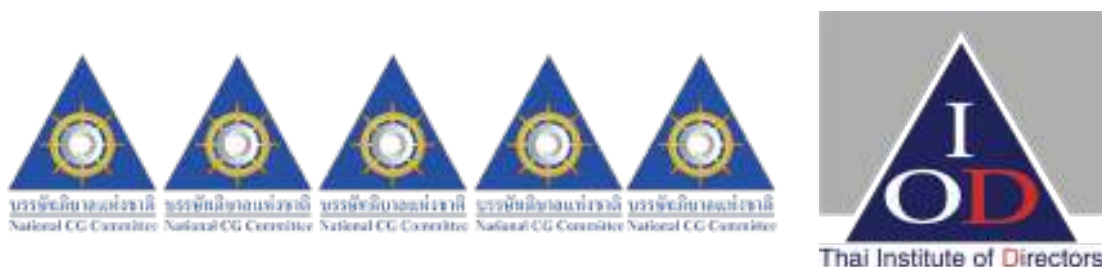
- The SET ESG Ratings of the Year 2023 in Level A



On November 6, 2023, The Stock Exchange of Thailand (SET) announced the list of Sustainable stocks of the year 2023 or SET ESG Rating 2023, changed the name from 'THSI Sustainable Stocks (Thailand Sustainability Investment) to Sustainable Stocks SET ESG Ratings' for the first year. CH. Karnchang Public Company Limited has been selected as one of the listed Sustainable stocks (SET ESG Ratings) and continuously for 4 years. In 2023, CH. Karnchang received a rating in level A from the sustainability assessment covering economic, social, and environmental dimensions as a registered company that is outstanding in its sustainable business operation, has strong business performance, provides stable stock return to shareholders, alongside having corporate social responsibility to all stakeholders of all sectors, society, and environment, under the ESG (Environment, Social and Governance or ESG) framework.

- **Good Corporate Governance Award for Thai Listed Companies of 2023**

CH. Karnchang Public Company Limited received a score of “Excellent” in the assessment of corporate governance of Thai listed companies of 2023 from Thai Institute of Directors Association (IOD).



- **Shareholder’s General Assembly Meeting Quality Assessment**

CH. Karnchang Public Company Limited received an assessment score in the quality of Shareholders General Assembly meeting (AGM Checklist) in 2023, in the range between 90-99 by the Thai Investors Association.



- **ESG 100**



CH. Karnchang Public Company Limited has been selected to be in the list of ESG100 Companies of 2023 from Thaipat Institute for the 8th consecutive year.

In the evaluation of ESG Emerging and ESG100 for the year of 2023, Thaipat Institute has evaluated a total of 888 listed company’s securities using information relating to ESG from more than 16,445 data points. The selection criteria are considered from securities with outstanding ESG performance for which information has been disclosed, including operations that reflects ESG in various dimensions.

- **Award for Compliance with Environmental Standards**



Mr. Nutt Nakthoranin, Rotesrikul, the Assistant Governor of Mass Rapid Transit Authority of Thailand (MRTA), presented the award for outstanding safety management and outstanding safety officer of 2023 (January – December 2023) to the MRTA Purple Line, Tao Pun - Rat Burana (Kanchanapisek Road) Section, because the project had the administration of safety, occupational health and work environment in construction which passed the assessment outstandingly. Mass Rapid Transit Authority of Thailand (MRTA) implements safety in construction of electric train project program every year in order to demonstrate the realization of safety to all interested parties concerned so that they have good safety, occupational health and work environment as a result of administration according to the standard prescribed by law and state's policies.

Accordingly, CH. Karnchang arranged to have assessment of operation in terms of safety, occupational health and work environment of subcontractors and work safety officers every 6 months. The assessment form has 2 topics as follows.

1. Assessment of management of safety, occupational health and work environment in 20 items.
2. Assessment of work safety officer in 16 items. The safety specialist, relevant persons and consulting company will conduct the assessment of the safety management of the contractors and the work safety officers.



4

ABOUT THIS REPORT



About This Report

In 2023, CH. Karnchang Public Company Limited prepared its 11th consecutive sustainability report with the objective of communicating information, operations, management policies, guidelines, and operational frameworks for the sustainable development of the Company. This report covers economic and governance aspects, social responsibility, and environmental considerations, aiming to inform all stakeholders. Additionally, CH. Karnchang Public Company Limited is committed to transparency and quality in disclosing significant information, as reflected in this report.

This report covers activities and operations between January 1st to December 31st, 2023. CH. Karnchang Public Company Limited has prepared the report under the framework of the Global Reporting Initiative (GRI) Standard. All data has been collected and verified by responsible units within the Company to ensure completeness, accuracy, and reliability of the information.

Furthermore, CH. Karnchang has aligned its operations with the United Nations **Sustainable Development Goals (SDGs)** to ensure that its activities are in line with sustainable development objectives.

■ Scope of Reporting

The disclosure of information in this report has been considered in terms of business relevance, data readiness, and its impact on the core business operations, specifically in the construction business of CH. Karnchang Public Company Limited.

- MRT Purple Line South Extension Project : Contract 1, Tao Pun - National Library Section
- MRT Purple Line South Extension Project : Contract 2, National Library - Phan Fa Section
- Chiang Mai - Chiang Rai - Chiang Khong Double Track Railway Project : Contract 2, Ngao - Chiang Rai Section
- Chiang Mai - Chiang Rai - Chiang Khong Double Track Railway Project : Contract 3, Chiang Rai - Chiang Khong Section
- King Chulalongkorn Hospital : Integrated Medical Center Building Project
- H.R.H Princess Chulabhorn's Commemorating : Learning & Research Centre Project.
- Water Transmission Tunnel Project : Bangmod – Samrong Pumping Station
- Floodway Distribution Project, Bang Ban - Bang Sai : Contract 4
- Luang Prabang Hydroelectric Power Project

However, this report may not disclose all information under the Company's operations as some projects have been completed, and others are currently undergoing data development to ensure that the reporting meets the Company's standards for completeness and clarity. CH. Karnchang is committed to planning and improving its data collection systems for efficiency to report operational results with quality according to GRI reporting standards in the future.

■ Sustainability Report Content Determination Process

CH. Karnchang prepares a sustainability report by considering materiality topics through an assessment of internal and external factors within the organization, covering risks and opportunities that impact the business. The report encompasses issues in economic and corporate governance dimensions, as well as social and environmental aspects. It also takes into account the expectations of stakeholders within the value chain. The identification of materiality topics is done through the use of a materiality matrix, following these steps.



Step 1 : Identification

In identifying materiality topics, the working group considers issues relevant to the business and issues of concern from stakeholders within the value chain. The sustainable development goals aim to align with the United Nations' sustainable development goals, covering all dimensions, including economic and corporate governance, social, and environmental aspects.



Step 2 : Prioritization

The working group prioritizes the key issues of CH. Karnchang to evaluate the materiality topics that are significant for the expectations of stakeholders. CH. Karnchang assesses the importance of each issue from two perspectives: the level of influence on stakeholders' assessments and decision-making and the level of significance of economic and corporate governance impacts on society, the environment, and the economy. Additionally, CH. Karnchang considers the scope of potential impacts resulting from these materiality topics.



Step 3 : Validation

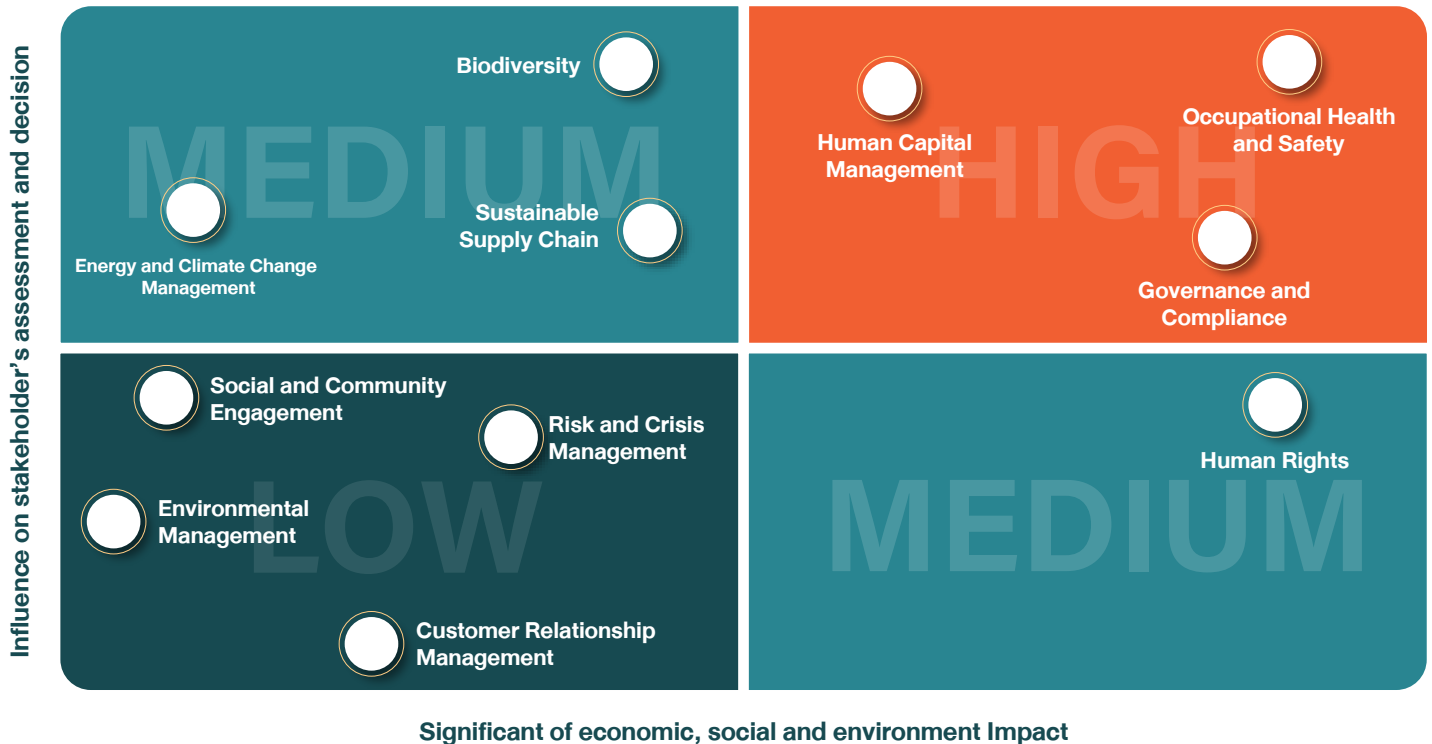
For accuracy, completeness, and transparency, the working group has conducted a review and presented the materiality topics to senior management for consideration. Senior management has reviewed and approved that these issues align with the expectations of stakeholders both within and outside the Company.



Step 4 : Review

CH. Karnchang is committed to developing and enhancing sustainability reporting by providing opportunities for stakeholders to express their opinions on the sustainability report. This is aimed at elevating the process of report preparation to align with the needs and expectations of stakeholders and aspiring to continually improve the reporting process.

Summary of Materiality Assessment Results and The Scope of Reporting



11 Materiality Topics

Economic



- Governance and Compliance
 - Business ethics
 - Corporate Governance
 - Anti-Corruption
- Customer Relationship Management
- Sustainable Supply Chain
- Risk and Crisis Management

Environment



- Environmental Management
 - Waste and Water Management
 - Quality of Construction Materials
 - Environmental Laws
- Energy and Climate Change Management
 - GHG Emissions
 - Energy
 - Air Emission
- Biodiversity
 - Environmental Impacts from Construction Projects

Society



- Occupational Health and Safety
- Social and Community Engagement
- Human Capital Management
 - Attracting and Retaining Employees with Potential
 - Education and Training
- Human Rights
 - Economic and Social Laws
 - Employment/Labor Laws

Report Content

The content in this report covers 11 materiality topics and also includes sub-topics that are closely managed. All operational information related to these topics has been updated and aligned with the GRI Standard reporting requirements.



For information on the Company's operations outside the scope of this report, please refer to the annual report (form 56-1 One Report) of CH. Karnchang Public Company Limited or visit http://www.ch-karnchang.co.th/investor/th/quick_download.php



Download this report

<http://www.ch-karnchang.co.th/#/mission/growth-together>

For Further Details, Please Contact

This report is prepared for the benefit of stakeholders in all sectors, available in two languages: Thai and English. The information is presented in accordance with the GRI Standards indicators, attached at the end of the report for reference. You can quickly search for information and download this report, along with the annual report (Form 56-1 One Report), from the CH. Karnchang website. For additional information, please inquire at:

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Ratchadaphisek Subdistrict, Dindaeng District, Bangkok 10400, Thailand
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Company Secretary
company_secretary@ckplc.com



Vice President, Office of President
ck-ir@ckplc.com



5



CORPORATE GOVERNANCE AND COMPLIANCE

Corporate Governance and Compliance

■ Impact on Business and Stakeholders

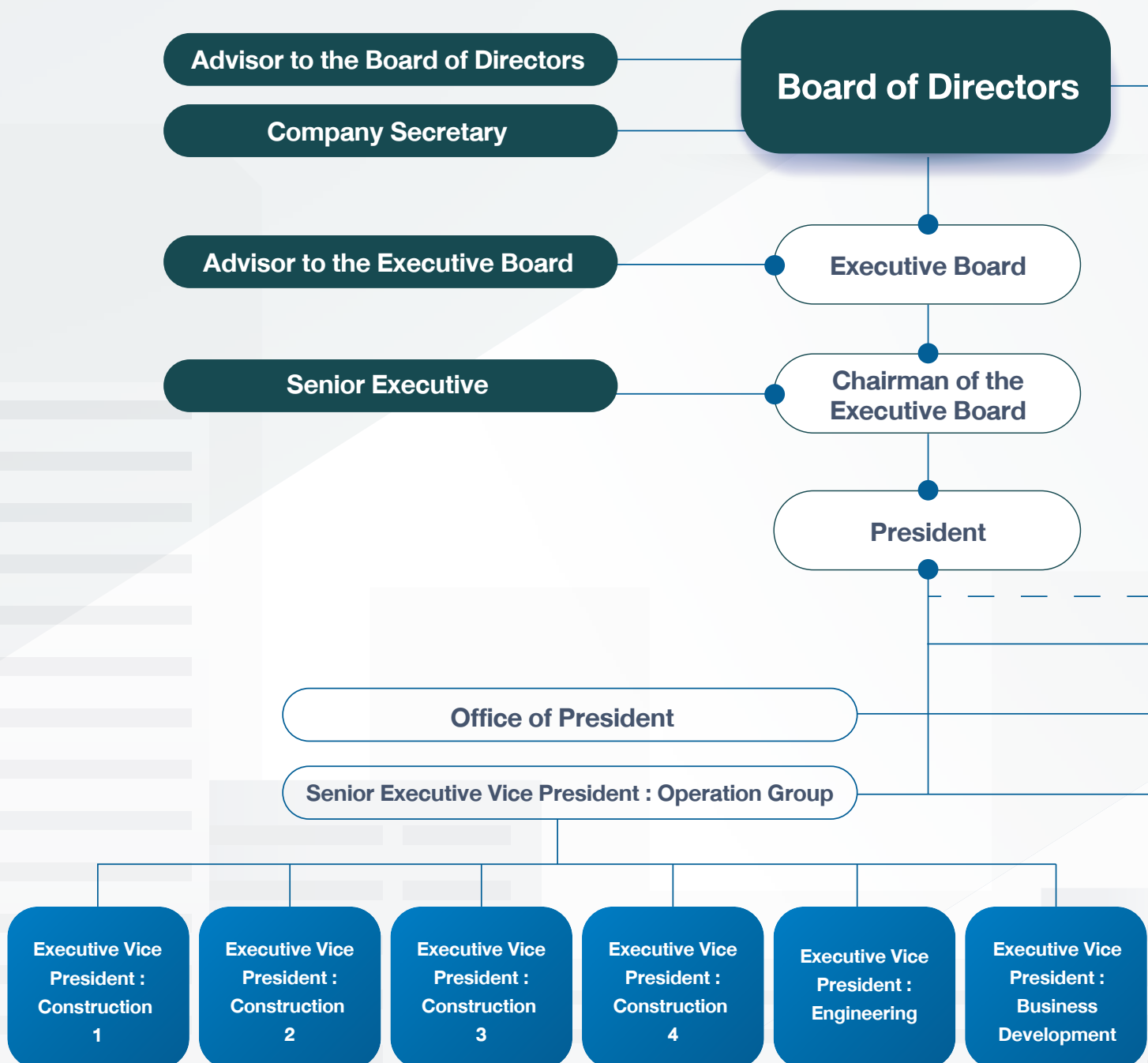
CH. Karnchang believes that good corporate governance is the foundation for the Company's long-term success and the satisfaction of stakeholders. Good governance results in the Company operating for the maximum benefit of stakeholders, which in turn helps to build trust, attract investment, improve employee morale, increase customer satisfaction, and enhance the Company's public image.

■ Commitment, Challenge, and Opportunity

CH. Karnchang and the Company's board of directors are aware of and value good corporate governance. They have implemented policies and management guidelines related to good corporate governance into the board of directors' roles and responsibilities. Additionally, they are actively involved in the development of other policies and practices related to corporate governance.

■ Management and Operational Approach

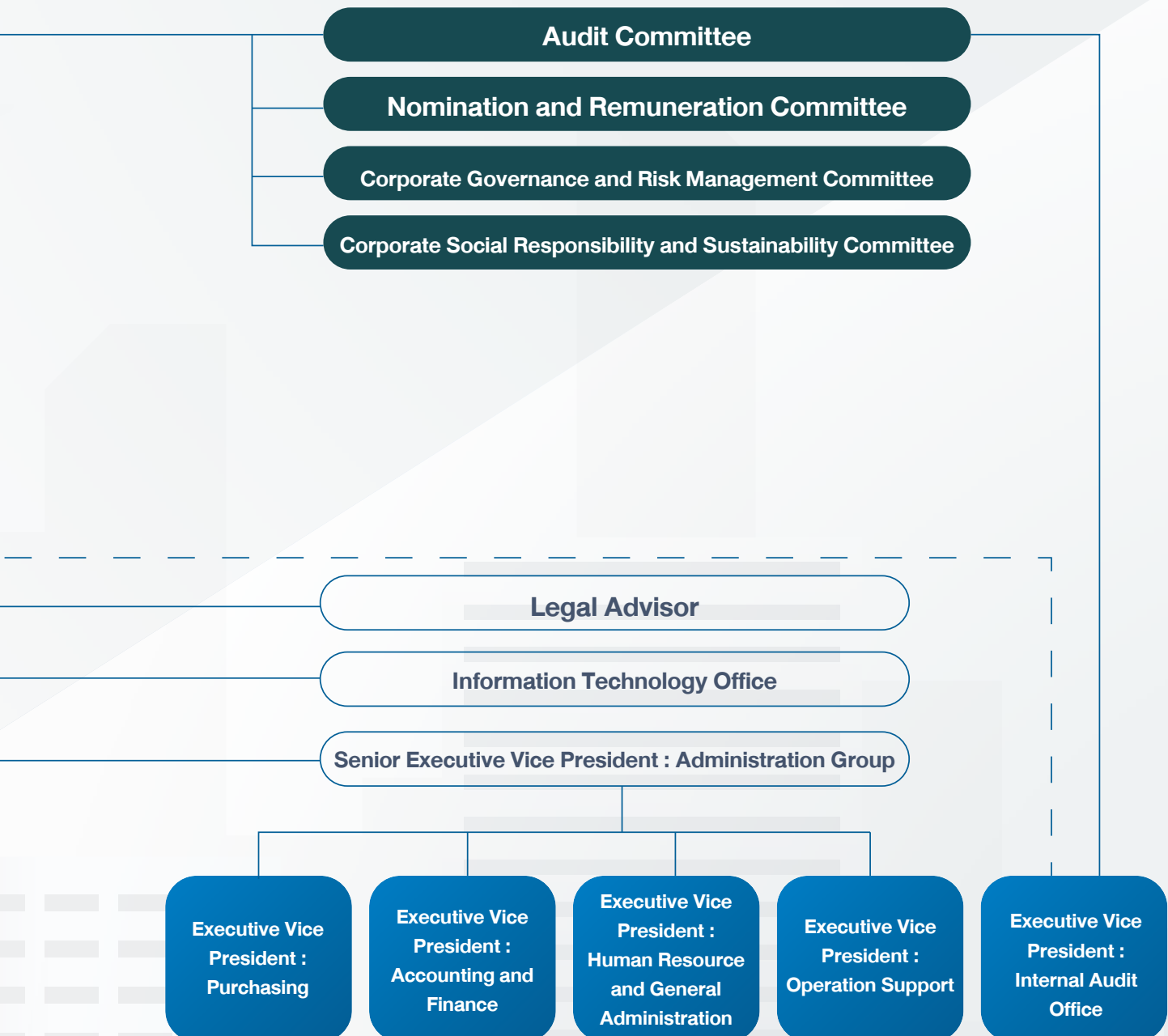
The Company has developed a code of conduct and business ethical guidelines for conducting business as a framework for behavior towards the Company, colleagues, external parties, and society, based on good ethical principles. This includes establishing effective internal management and control systems, mechanisms for transparency, maintaining financial credibility and disclosure, managing the business with consideration for all stakeholders, and respecting the rights and equality of shareholders. The Company follows the principles of the Stock Exchange of Thailand (SET) best practices. In addition, to communicate and promote adherence to business ethics, the Human Resources department has established the Company's code of conduct and business ethics, as mentioned earlier, to provide employees working for the Company with guidelines. Over time, training on adhering to business ethics has been consistently organized for all employees.



Company

Sustainability Structure

(As at December 31, 2023)



■ Number of Board of Directors and Independent Directors

Number of Directors 10



1 Female



9 Male

4 person

6 person

Independent Director

Executive Directors

■ Composition of the Board of Directors

The composition of the Board of Directors must consist of qualified individuals who possess leadership qualities, vision, knowledge, abilities, and experience in various fields. They should possess the necessary skills as required by CH. Karnchang, and maintain honesty and integrity while making independent decisions for the maximum benefit of the Company and shareholders. The current board structure consists of 10 qualified individuals with qualifications, skills, knowledge, and experience that are beneficial to the Company and who are able to perform duties efficiently. The board consists of 6 Executive Directors and 4 Independent Directors. This aligns with the proportion set by the Securities and Exchange Commission, which mandates at least 1 Independent Director to every 3 board members, totaling no less than 3 Independent Directors. It also requires an Audit Committee with independent members responsible for financial examination and expressing independent opinions. They have duties similar to those specified in the Stock Exchange of Thailand (SET) regulations. The board includes at least one member with financial knowledge and experience to audit financial statements, ensuring independence and unbiased opinions. The Chairman of the Board is an independent director in accordance with the SET regulations, has no relationships with the management, and is different from the CEO.

CH. Karnchang's board has established a policy limiting the number of registered companies each director can serve to a maximum of 5, without exceptions. This is considered a manageable number, ensuring directors can consistently attend meetings. However, no policy limits the number of terms a director can serve, as they possess a good understanding of the Company's business and provide beneficial advice to both the Company and shareholders. Additionally, the board has appointed a Company Secretary, in accordance with the principles of good corporate governance, to provide legal advice and information on various regulations, ensuring the board carries out its duties according to resolutions made during board meetings.

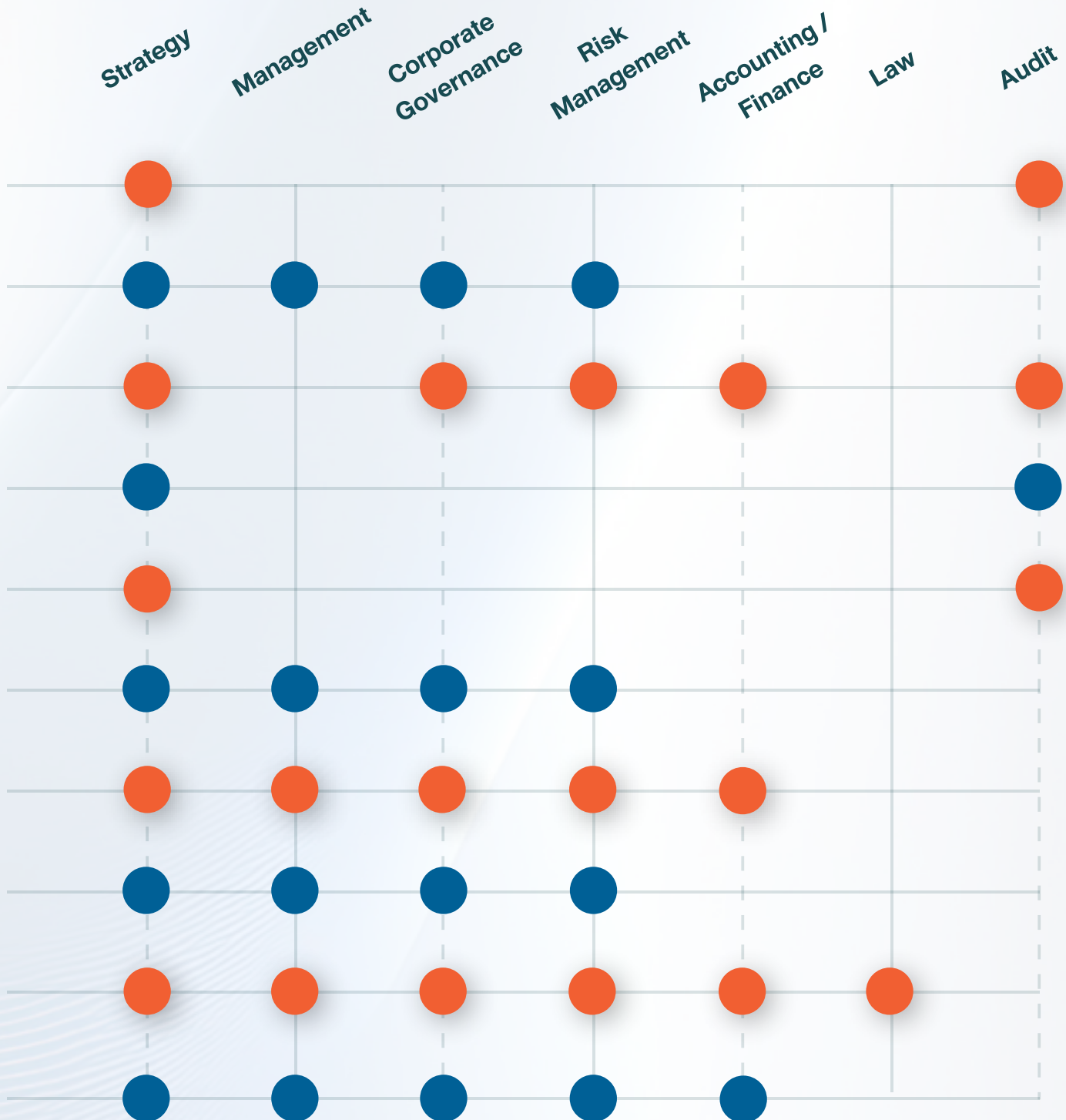
The Board of Directors has established a policy regarding directors concurrently holding positions in other companies, including those of the Chief Executive Officer. As per policy, directors are required to inform the board of the reasons and details of the companies where they hold positions. The maximum limit for such positions in other registered companies has been set at 5 companies.



However, in its recruitment of board members, CEOs and Senior Executives, CH. Karnchang emphasizes and conducts the recruitment of individuals with experience, qualifications, and necessary skills for business management under its diversity policy. The board composition is required to be diverse in various aspects, including professional skills, specific expertise, and gender. The Company has analysed the necessary skills required for board members, CEOs, and Senior Executives, considering diversity in skills and expertise. The analysis showed that the current Board of Directors, CEO, and Senior Executives of the Company possess the required experience, qualifications, skills, and expertise in a comprehensive manner. For details on the skills and expertise of the current Board of Directors, the summary is as follows:

Board Skill Matrix

	Engineer	Technology	Industrial Conditions	Foreign Marketing	Policy and Sustainability
Independent Directors and Chairman of the Board of Directors					
Directors and Chairman of the Executive Board					
Independent Directors					
Independent Directors					
Independent Directors					
Directors					
Directors					
Directors					
Directors					
President					



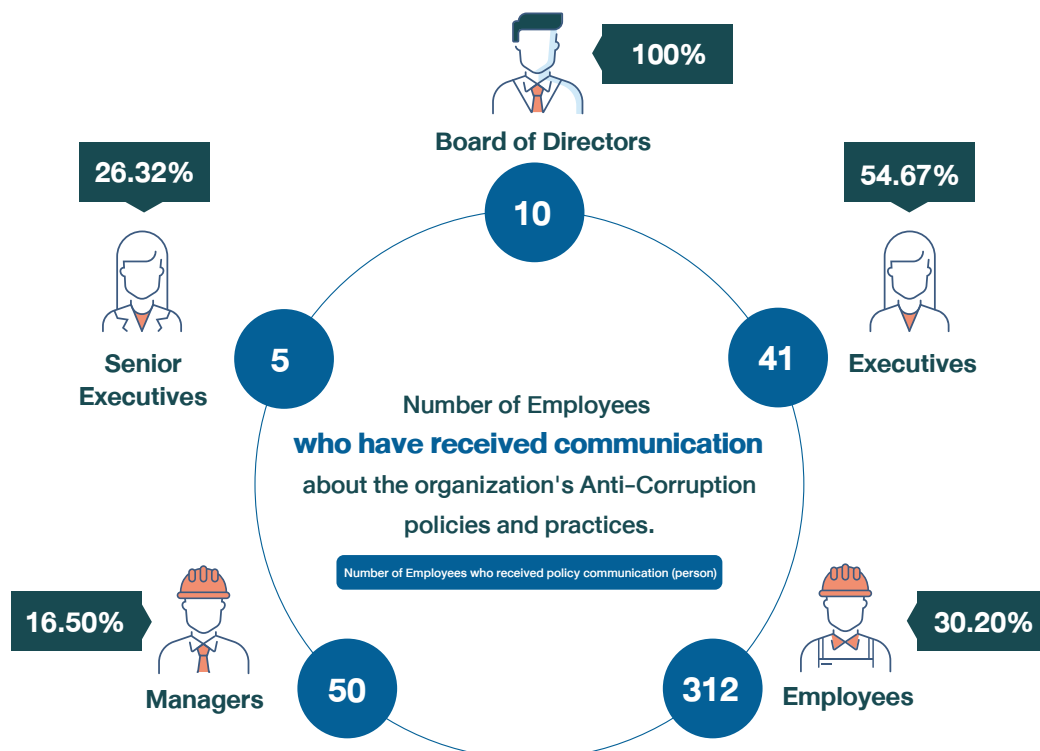
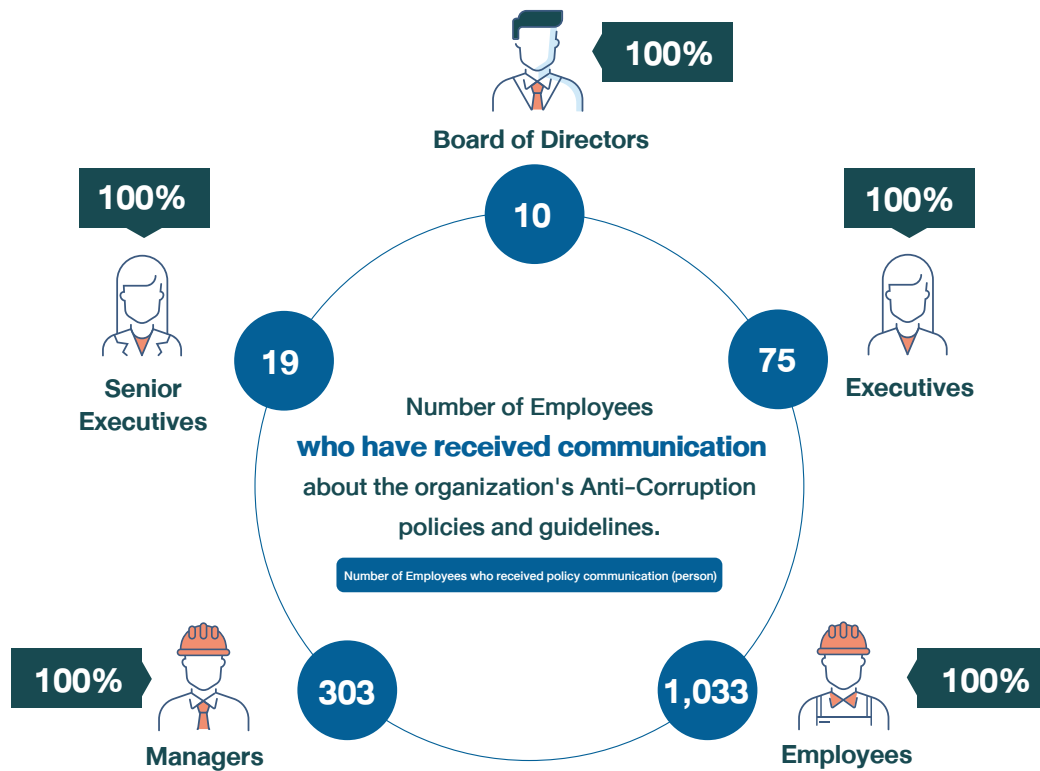
■ Anti-Corruption

Due to its nature as a large-scale construction business with high investment value and involvement in developing the country's public infrastructure projects, CH. Karnchang is concerned with Anti-Corruption. This matter is of great importance to the Thai Construction Industry Association, which operates under H.M. the King's Patronage, and the Anti-Corruption Organization of Thailand (ACT). Both organizations have emphasized the significance of collaborative efforts to prevent and combat corruption. Furthermore, they have underscored the importance of joining the Collective Action Coalition Against Corruption (CAC), a Thai private sector initiative against corruption. This initiative aims to promote collaboration in preventing and combating corruption, aligning with the national strategy on corruption prevention and suppression and fostering cooperation among organizations to support various measures against corruption.

In addition, the Thai Contractors Association has signed a memorandum of understanding on cooperation to prevent and combat corruption with the Anti-Corruption Organization of Thailand (ACT). This aims to strengthen collaboration to support and promote anti-corruption measures. The joint approach includes establishing a network for preventing and combating corruption, involving both the public and private sectors. The goal is to collaborate on auditing, monitoring, implementing, and improving corruption prevention and suppression measures. Currently, the Company is in the consultation process with the Thai Contractors Association and businesses within the construction contracting group to determine the suitability of joining and expressing commitment to the Thai private sector's collaborative initiative against corruption.



■ The Communication of Policies and Guidelines Related to the Organization's Anti-Corruption Efforts.



■ Channels for Receiving Complaints on Anti-Corruption

CH. Karnchang has established channels for reporting, complaints, and protection measures for whistleblowers who observe violations or acts of corruption and collusion, in accordance with the principles of good corporate governance in terms of responsibilities towards stakeholders. The Company has defined a process for consideration and provided protective and mitigating measures for the reporters or complainants, as outlined in the anti-corruption reporting and complaint policy set by the Company as follows.



■ Monitoring Compliance with Business Ethics

CH. Karnchang Public Company Limited has conducted monitoring to ensure compliance with the principles of good corporate governance, covering various aspects.



- Employee wellbeing and non-discrimination
- Anti-competitive behaviour
- Environment, working condition, and occupational health and safety in the organization
- Information security

Performance in Handling Complaints Related to Business Ethics in 2023.

0
Complaints

Complaints regarding violations of business ethics and corruption within the organization

0
Complaints

Complaints regarding violations of business ethics and fraud and corruption outside the organization

0
Percentage

Percentage of complaints regarding violations of business ethics, fraud, and corruption that were resolved.





9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



CH. Karnchang Public Company Limited | SUSTAINABILITY REPORT 2023

■ Outstanding Performance in 2023

Cyber Protection



100%

- Improved the cybersecurity surveillance system with an automatic alert notification through MS Teams to system administrators
- Ensured 100% prevention of unauthorized access to critical servers from outside the organization

■ Targets and Key Performance Indicators

Training on Information Technology Security Awareness



1. Training for organizations holding confidential and special control level data.

with an 80% coverage.



2. Training for organizations holding internal use only and public level data.

with a 60% coverage.

■ Impact on Business and Stakeholders

Cyberattacks can lead to significant data loss, financial repercussions, and legal issues. They can disrupt projects and destroy the trust of stakeholders, impacting not only immediate costs but also tarnishing the reputation of the Company and its competitive advantage. Effective cybersecurity is not just a preventive measure, and it is a strategic asset for maintaining trust and credibility in highly competitive industries.

■ Commitment, Challenge, and Opportunity

Ensuring the security of data and information systems is crucial for effective management and continuous business operations. It is essential to instill confidence and maintain the security of data and information systems by ensuring that the information is stable, secure, accurate, and reliable and that the Company can prevent the leakage of both Company and other personal information. This helps reduce the risk of data breaches and protects the organization's reputation.

■ Management and Operational Approach

CH. Karnchang has adopted certain aspects of the NIST and ISO 27001 standard guidelines to align with the budget and organizational practices. Additionally, Microsoft Office 365 is utilized for data storage and control. Furthermore, the Company has implemented a two-tier Firewall to prevent data leakage, especially in departments handling sensitive information, such as Human Resources and General Administration Department. The practical implementation of data security and information system measures resulted in no complaints in 2023.

■ Safety Audit Process or Incident Management



1. Identify

Conduct a study to comprehend its information assets and assess cyber risks.



2. Protect

Control and carry out operations according to cybersecurity measures to manage and mitigate cyber threats and enhance cybersecurity.



3. Detect

Continuous monitoring and surveillance are used to detect and track cybersecurity threats, provide early warnings, and maintain situational control.



4. Respond

Respond to cybersecurity threats using the following principles: contain the incident, identify the root cause, and establish corrective measures.





5. Recovery

Plan for recovery and restoring systems to regular operation after being impacted by a cybersecurity threat in accordance with relevant policies.



SUPPLY CHAIN MANAGEMENT

■ Targets and Key Performance Indicators

Targets and Key Performance Indicators	Performance 2023
100 percent of suppliers have undergone supplier risk assessments, and no risks were identified.	100 % 
100 percent of the new suppliers have undergone the supplier screening process.	100 % 

■ Impact on Business and Stakeholders

Implementing sustainable practices in the supply chain is a critical factor that cannot be overlooked in today's business environment. It helps strengthen and enhance the supply chain's flexibility to cope effectively with challenges arising from environmental and societal issues. Adhering to standards and changing regulations helps mitigate the risk of legal violations and financial penalties. Additionally, companies with a sustainable supply chain can build trust with customers. Sustainability has become a key consideration for shareholders, as it influences the long-term stability and reputation of the Company.

■ Commitment, Challenge, and Opportunity

CH. Karnchang is committed to operating under the principles of good corporate governance, emphasizing the prevention of corruption in the procurement and contracting processes to foster fairness and transparency. This policy has positive effects on stakeholders at all levels, from suppliers to customers, ensuring the procurement of high-quality materials and technician equipment and the selection of capable contractors. CH. Karnchang's selection process prioritizes quality and reasonable prices, considering vendors' and subcontractors' experience and track record. This results in efficient operations and helps build trust among all stakeholders. Additionally, it contributes to creating a competitive and sustainable business environment.

■ Management and Operational Approach

Sustainable Procurement Policy

CH. Karnchang recognizes the importance of procurement and contracting as the core of its business operations. The Company is dedicated to managing procurement, contracting, and the supply chain, sustainably, ensuring compliance with relevant laws, regulations, and standards, emphasizing integrity, transparency, and auditability. Considering the impact on the environment, society, and ethics is crucial. Therefore, a sustainable procurement policy has been established as follows:

1. Procure and contract according to the specified criteria, considering the products' requirements, price, service, and quality to maximize CH. Karnchang 's benefits.
2. Procure and contract with a focus on business ethics, treating suppliers fairly without discrimination. Provide accurate, complete, and clear information to all suppliers equally and fairly. Receive and consider supplier feedback and suggestions to enhance efficiency in mutual business development.
3. Procure and contract through a transparent selection process that ensures fair competition, treating all suppliers equally without favoritism, and allows for verifiable inspection. Adhere strictly to relevant regulations and laws and support ethical business practices. Have responsibility towards society and the environment.
4. Support Green Procurement by promoting and endorsing products and services that contribute to reducing environmental impact and lowering greenhouse gas emissions, while also considering occupational health and safety. Throughout, focus on developing efficient waste management systems.
 - 4.1 Promote and support the procurement of products and services from local and domestic suppliers to stimulate the economy, boost local employment, create opportunities for career development, and generate income for people in the community.
 - 4.2 Highlight and support the use of products and services that carry environmental labels, green labels, or have been certified according to environmental management standards such as ISO 14001 or other environmental conservation standards.
5. Specify the details of the Terms of Reference (TOR) and conditions in the contract with suppliers to ensure mutual understanding, avoid discrimination against suppliers, and ensure completeness, accuracy, and fairness.
6. Procure with suppliers who prioritize human rights based on international standards, ensure fair treatment of employees, equality, and provide a suitable work environment, promotes health, and prioritizes occupational safety while not supporting suppliers engaged in businesses related to forced labor.

■ Supplier Code of Conduct

CH. Karnchang is committed to enhancing work processes and fostering strong relationships with business partners (suppliers) in every aspect. To achieve this, CH. Karnchang has developed a Supplier Code of Conduct to be used in the sustainable development of business between the Company and suppliers, aiming for the most suitable and efficient direction. CH. Karnchang strives to improve practices in the areas of business ethics, human rights, occupational health and safety, and the environment. These efforts are intended to meet or exceed legal standards.

CH. Karnchang utilizes the mentioned social and environmental issues in the Supplier Code of Conduct as criteria for selecting Approved Vendors and as criteria for selecting New Approved Vendors. The Company and suppliers will collaborate for efficient and sustainable teamwork in both the short and long term. This collaboration involves sharing information and jointly finding appropriate practices that align with the highest operational standards. Regular evaluations will be conducted to ensure alignment with established standards.

■ New Approved Vendor

CH. Karnchang has established criteria for selecting newly approved vendors that encompass economic, social, and environmental considerations, such as compliance with laws, international human rights principles, and environmental standards. The Company utilizes a process of screening and evaluating new suppliers to ensure that each partner can operate with consideration for the environment and with social responsibility.



■ Significant Supplier Identification

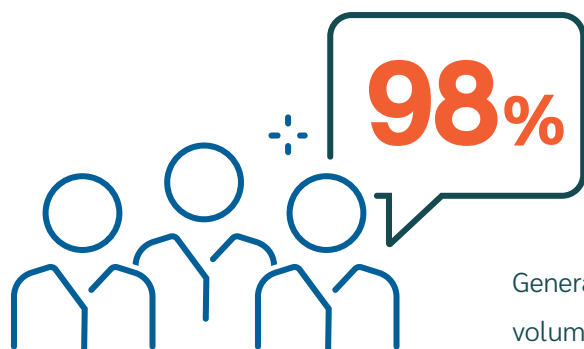
CH. Karnchang has categorized suppliers into three types. Critical Tier 1 Supplier, Non-Critical Tier 1 Supplier, and Critical Non-Tier 1 Supplier. This allows the Company to analyze and strategize its operations effectively and assess the associated risks with suppliers.



Critical Tier 1 Supplier

Criteria for identifying Critical Tier 1 Supplier

- Direct trading suppliers with high contract value
- Suppliers with continuous long-term contracts
- Suppliers with specialized expertise that cannot be substituted



Non-Critical Tier 1 Supplier

General direct trading suppliers with moderate contract volume or low contract value with moderate or low levels of risk.

0%

Critical Non-Tier 1 Supplier

The contract specifies products that have special specification

■ Supplier Risk Assessment

CH. Karnchang has a process to assess suppliers' risks and the potential impacts that may affect the organization's operations. This process covers economic aspects, such as product quality, delivery, coordination/services, and sustainability aspects, such as ethics, Labor Practices and Human Rights, environmental management, and responsibility towards communities and society. In 2023,

“ **100%** underwent this assessment, and no significant risks were identified. ”

■ Supplier Economic Risk Assessment and Mitigation Plans

• Management Risks and Project Delay Risks

The risk arising from project delays, in general, may be due to delays caused by the employer, the contractor, or reasons that cannot be attributed to a specific party. Delays related to suppliers and procurement fall under delays caused by the contractor. For instance, when there is a shortage of construction materials. CH. Karnchang mitigates such issues by proactively entering contracts in advance for the purchase of various materials. For example, the Company has placed orders for cement and steel to anticipate the needs of projects that have already been contracted. Additionally, the Company closely monitors production and delivery to ensure alignment with the project timeline.

• Risk from Construction Material Prices, Labor Costs, and Oil Price Fluctuations

The management of construction contracts in each project contributes to initial profitability, contingent on accurate project cost estimation and control of actual incurred costs within the defined budget. The factors influencing cost estimation depend not only on the prices of construction materials and labor costs but also on the fluctuations related to market supply and demand. The oil price situation is an indirect cost factor affecting operational costs.

CH. Karnchang Mitigates the Aforementioned Issues through Two Types of Construction Contracts, namely :

1. In cases where the construction contract involves adjusting the construction cost based on the Escalation Factor (K), which is calculated based on the variable production costs that may change. This formula may not cover all increased costs of raw materials and labor but accommodates unforeseen raw materials and labor costs increase, minimizing the impact on construction costs. The majority of the projects within the Company's group are from government sector clients, accounting for 33.92% of the total project value as of December 31st, 2023, representing the remaining portion of revenue to be recognized in the future.

2. In the case of a fixed-price construction contract or lump-sum contract, where the agreement does not specify or allow for the determination of an Escalation Factor (K), this is primarily applied to Turnkey Projects. In such cases, the project's total value includes the contingency for potential increases in the cost of construction materials. These projects are primarily associated with private sector clients, accounting for 66.08% of the total project value as of December 31st, 2023, representing the remaining portion of revenue to be recognized in the future.

■ Management of Supplier Payment

Credit risk consideration is crucial, as it may significantly impact the stability of the company's business and operations. To mitigate financial risks at CH. Karnchang, the Company has a policy that clearly specifies payment terms for identified suppliers. These terms align with the payment period from the project owners. The policy categorizes partners into types such as sellers, contract workers, and labor contractors. Clear payment terms are defined in purchase and work orders. Notably, subcontractors and labor contractors have shorter payment periods compared to major subcontractors and large-scale sellers. The Company emphasizes that if payments to suppliers exceed the agreed-upon and specified period in the purchase and work orders, extending beyond 60 days, it may impact the suppliers' confidence regarding CH. Karnchang's credit. In 2023, the Company did not have any instances of overdue payments exceeding 60 days.

■ Safety Talk Project

CH. Karnchang has initiated a Safety Talk Project to review occupational health and safety practices with employees and contractors before they commence work at the construction site. This project plays a crucial role in emphasizing and raising awareness among employees and contractors about the importance of safety during operations. This project helps ensure that contractors understand and comply with occupational health and safety practices before entering the construction area. In 2023, this project has contributed significantly to enhancing safety practices and awareness among employees and contractors.







RISK AND CRISIS MANAGEMENT

■ Impact on Business and Stakeholders

Risk Management lies at the heart of CH. Karnchang's business operations. The ability to identify, assess, and manage risks effectively is essential for minimizing potential impacts on operations. Effective risk management not only mitigates losses but also enhances the Company's confidence and stability, paving the way for sustainable long-term growth and success.

■ Commitment, Challenge and Opportunity

The rapid changes in today's world cause diverse risk factors, such as technological advancements, increased competition from domestic and international businesses in the same sector, and political uncertainties that directly and indirectly affect business operations. Therefore, Risk Management has become a crucial tool in business to achieve goals. It is also a key component of Good Corporate Governance that enables organizations to achieve economic objectives, fulfill relationship-building goals, and respond to the expectations of all stakeholder groups. As a result, CH. Karnchang has reviewed its processes and strategies for conducting business in the current business atmosphere to ensure readiness to cope with the aforementioned changes. This includes assessing the current situation to anticipate and address potential risks that may arise in the future.

■ Management and Operational Approach

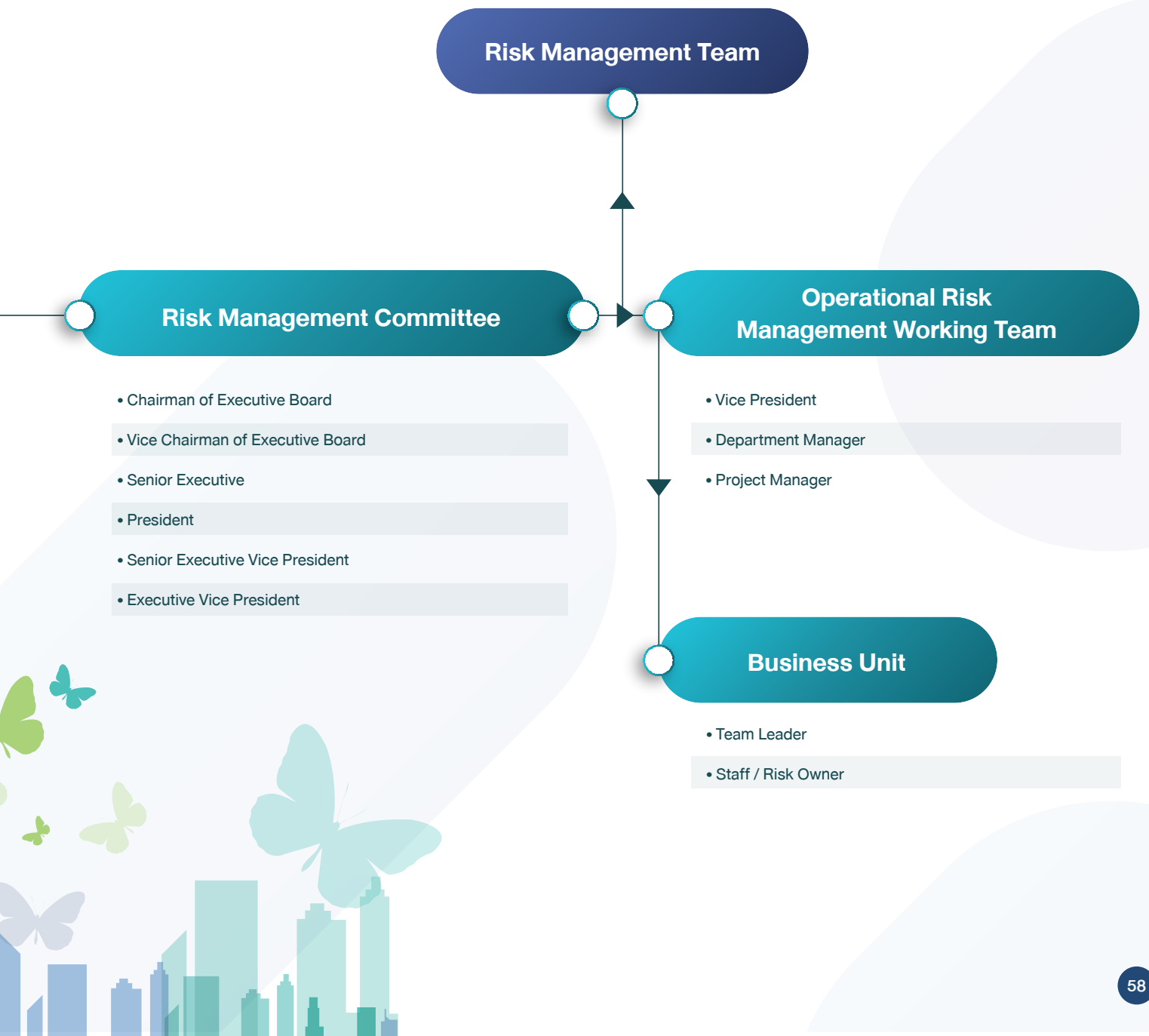
CH. Karnchang has developed a Risk Management framework in accordance with a global practice called COSO ERM 2017: Enterprise Risk Management Integrating with Strategy and Performance. This framework emphasizes managing risks throughout the organization at both the organizational and departmental levels, including the structure, roles, responsibilities of Risk Management, and the Risk Management process. It serves as a tool to help risk owners achieve objectives and goals, leading to successful and efficient operational performance and ultimately contributing to the organization's sustainable growth and added value.

Furthermore, CH. Karnchang has appointed the Corporate Governance and Risk Management Committee, tasked with establishing policies and the framework for risk management operations, providing guidance to the Board and Management on risk management, and overseeing and supporting successful risk management. This includes assessing significant risks for the Company that align with its business and considering internal and external factors that may impact business operations and organizational objectives, for example, in investment, finance, security, legal, and regulatory compliance areas.

This includes proposing preventive measures, reducing risk levels to acceptable levels, monitoring and evaluating results, continuously adjusting action plans to minimize risks appropriately, and regularly reporting risk assessment results and operational activities to the board of directors. In case of significant issues that have a substantial impact on the Company, it is essential to promptly report to the board of directors for their swift consideration to prepare a Business Continuity Plan (BCP) to cope with various events that may cause disruptions to the organization's operations, ensuring a return to normal operations within a reasonable timeframe. These operations are outlined within the risk management framework.

■ CH. Karnchang's Risk Management Structure





Position	Roles and Responsibilities
Board of Directors	<ul style="list-style-type: none"> • Define strategies and objectives of the organization to align with its mission, vision, and core values. • Oversee the risk management culture, capabilities, and the implementation of risk management by Executives and employees. • Conduct joint meetings with the Corporate Governance and Risk Management Committee to receive quarterly risk management reports. • Review the annual risk management policy as presented and approved by the Corporate Governance and Risk Management Committee, making adjustments if necessary.
Corporate Governance and Risk Management Committee	<ul style="list-style-type: none"> • Establish policies and key risk management strategies. • Promote risk management policies and ensure that risk management processes are implemented throughout the organization. • Review and monitor key risks across the organization, ensuring appropriate management plans are in place and evaluating overall risk management performance. • Understand risks that may have severe adverse impacts on the organization and ensure appropriate actions are taken to manage those risks. • Provide recommendations and approvals for the organization's risk management.
Risk Management Committee	<ul style="list-style-type: none"> • Consider defining the acceptable risk levels and establishing risk management frameworks. • Implement organization-wide risk management plans to ensure that the organization achieves its goals effectively and aligns with the principles of organization-wide risk management. • Promote awareness among management and employees about the importance of risk management. • Evaluate the relationships and impacts of each risk, track the progress of risk management implementation against the plan's objectives, and provide recommendations for continuous improvement. • Report on risk management activities quarterly to the Corporate Governance and Risk Management Committee to ensure that key risks are monitored and managed at an acceptable level, supporting the Company's efforts to achieve its defined objectives.

Position	Roles and Responsibilities
Secretary of the Corporate Governance and Risk Management Committee	<ul style="list-style-type: none"> • Coordinate and conduct meetings with the Corporate Governance and Risk Management Committee, project management meetings, and project risk management task force meetings. • Collect risk assessment data from each department and compile supporting information for meetings, ensuring the adequacy of the risk management system in collaboration with the Office of the Chief Executive Officer. • Develop the Company's risk management plan in collaboration with the office of the Chief Executive Officer and present it to the Corporate Governance and Risk Management Committee, the Board of Directors and Risk Management Committee. • Prepare a report on the Company's risk management results in collaboration with the Office of the Chief Executive Officer and present them to the Corporate Governance and Risk Management Committee.
Risk Management Team	<ul style="list-style-type: none"> • Develop and/or review risk management policies, risk management frameworks, and acceptable risk levels, as well as critical risk management processes for the organization. • Support and advice in identifying key risks for each department. • Monitor the risk assessment process and the development of risk management measures by each department or risk owners to compile corporate risk. • Establish a Corporate Key Risk Indicator (KRI) index to track risk trends. • Prepare reports on organizational risk management at scheduled intervals and present them to the Corporate Governance and Risk Management Committee. • Monitor risk management reports to ensure that the risk management process is implemented organization-wide and is aligned with the strategic plan. • Coordinate to ensure the risk management process is aligned with strategic planning. • Provide consultation to Executives and staff on implementing the risk management process according to established frameworks.

Position	Roles and Responsibilities
Operational Risk Management Working Team	<ul style="list-style-type: none"> • Conduct risk analysis for each department, assess opportunities, and evaluate the impact of risks identified through analysis. Submit the findings to the Assistant to the Chief Executive Officer of the respective department for approval before forwarding to the Secretary of the Board of Directors and Risk Management Committee. • Participate in meetings to collectively approve the results of risk assessments for all departments each quarter before presenting them at the Risk Management Committee meeting.
Business Unit	<ul style="list-style-type: none"> • Identify and report risks related to operations and participate in developing and implementing risk management plans.



■ Risk Management Process

CH. Karnchang manages organizational risk through Enterprise Risk Management (ERM), a systematic process applicable to every organization and business. This process involves identifying Key Risk Indicators (KRIs), assessing risks, prioritizing them using a risk matrix, and managing risks. Organizational risk management helps generate supportive outcomes, allowing the organization to consider its risk appetite or risk tolerance to create shareholder value. It establishes operational frameworks for the organization to effectively manage uncertainty, risks, and opportunities. The Company has a risk matrix that demonstrates the assessment of the likelihood and impact of significant risks. Continuous monitoring and evaluation are conducted to assess the Company's risk management outcomes.

Risk management is a continuous process that begins with establishing policies or objectives for risk management, clearly defined by the management. The process is carried out through the organization's predefined risk management mechanisms, in conjunction with internal auditing or control mechanisms, to assess the success against the objectives. This leads to the improvement of the risk management mechanisms for enhanced efficiency. The organization's risk management process is structured into 6 steps, as follows:



■ CH. Karnchang's Risk Appetite

- ▶ Do not invest in countries lacking political and economic stability and where there is insufficient understanding to manage risks adequately.
- ▶ Engage in business activities that benefit the overall community and promote sustainable development continually, but these activities must not adversely impact business operations. Compliance with regulations and laws is mandatory.
- ▶ Refrain from undertaking projects with negative reputational impacts, even if the potential returns are high.
- ▶ Avoid investing in projects without sufficient understanding to manage risks or sufficient potential/resources to operate.
- ▶ Do not bid on projects with low Internal Rate of Return (IRR) or projects that face intense price competition.
- ▶ Form business partnerships, but must not compromise the quality of products and services, as well as have negative implications on the Company's image.

■ Emerging Risk Management



► Cyber Threats

Currently, CH. Karnchang has incorporated computer technology and network systems to link data between departments and construction projects as part of the organizational network system. This is done to enhance operational efficiency and securely maintain the database, aiming to avoid risks such as unauthorized internal and external attempts to access the network and database, use of insecure devices to connect to the system, installation of unauthorized or pirated software leading to computer viruses or malware, and potential damage or loss of critical data. CH. Karnchang has established procedures for maintaining and monitoring computer equipment and network systems to be suitable for the current environment. Continuous efforts are made to develop and enhance the security system. Investments are made in both hardware and software used within the organization. Firewall systems for intrusion detection and prevention are implemented continuously. Additionally, the antivirus systems are regularly updated to improve the effectiveness of automatic virus and malware removal from devices. Moreover, there is a design for crucial data backup and a system recovery plan to address risks in emergencies. Access to devices and/or network systems must be authorized and reviewed by authorized personnel before usage. Training programs are in place to provide knowledge and raise awareness about the impact and preventive measures against cyber threats. Additionally, there are regular announcements and notifications of cyber threats and danger alerts from cyber threats communicated internally to employees and management through timely communication channels.

► Risk from High Competition in Bidding

In the current business environment, CH. Karnchang has faced increased competition in bidding for construction projects from both government agencies and private enterprises. Competitors in the same market are enhancing their capabilities, demonstrating significant experience, and showcasing achievements, making the bidding process more challenging. The Company acknowledges the importance of developing the business to meet standards, both in terms of cutting-edge technology and innovative construction practices, as well as ensuring readiness in skilled labor, maintaining financial liquidity, and establishing trust based on past experiences and achievements, both domestically and internationally. In this regard, CH. Karnchang has established a policy for work practices to reduce risks and enhance opportunities in bidding for new projects by participating with partners both domestically and internationally, who have a track record aligned with the project requirements set by the project owners or collaborating with foreign companies that possess technical expertise and technology as stipulated by the government. This is aimed at instilling confidence in clients and investors that the Company can successfully bid for projects according to the specified objectives and develop the capabilities to compete in projects where the Company does not have previous experience, establishing itself as a leader in the construction industry.

► Changes in Laws and Regulations Both Domestically and Internationally

CH. Karnchang has conducted studies and stays informed about legal amendments, regulations, and various provisions related to work practices, both domestically and internationally. Additionally, training sessions are organized to provide knowledge to employees, aiming to ensure that Executives and staff are aware of any modifications or changes in laws, regulations, and related provisions concerning work practices. This proactive approach helps reduce conflicts and legal actions, aligning with management guidelines that seek to enhance the organization's capabilities to seek business partners to increase opportunities for participation in tenders, plan operations, and assess legal constraints that may pose risks to construction projects involved in both domestic and international bidding.



■ Guidelines for Promoting a Risk Management Culture throughout the Organization

CH. Karnchang Public Company Limited has guidelines to promote a risk management culture throughout the organization. It integrates risk management into the organization's core values and has plans that align with these values. Through effective communication, mutual understanding, and fostering awareness of risk, the Company builds a knowledge base. This enables employees at all levels to study and research information, exchange experiences, and collaborate across units. The risk owners and risk management department utilizes the designation of risk as one of the criteria for development. This approach leads to the enhancement and refinement of risk management processes, transforming them into an efficient mechanism for strategic management. CH. Karnchang has established Key Performance Indicators (KPIs) to measure the performance of risk management, both at the organizational level and the risk owner level.

■ Training on Risks and Risk Management for Personnel at all Levels

In order to promote the organizational culture, CH. Karnchang has provided risk awareness and management training to the Board of Directors, Senior Executives, and staff. This training aims to enhance understanding of the risk management framework and the responsibilities of each individual in managing and communicating information related to risk. When conducting training in the organization, the following issues should be taken into consideration:

- Differences in the level of responsibility in risk management
- Knowledge of existing risks and risk management in the organization
- All new employees should receive training to understand their responsibilities regarding risk and the risk management process.

■ Crisis Management at the Organizational Level

CH. Karnchang Public Company Limited has a Business Continuity Plan (BCP) in place to address the risk of business disruption or cessation caused by factors such as accidents, natural disasters, acts of terrorism, etc. This plan also encompasses dealing with health-related risks, such as the outbreak of infectious diseases like the COVID-19 virus.





9

CUSTOMER RELATIONSHIP MANAGEMENT

■ Targets and Key Performance Indicators

Key Performance Indicator	Performance 2023	Target 2023
Customer satisfaction score	100% of customers rate their satisfaction as "Good" or "Excellent"	100% of customers rate their satisfaction as "Good" or "Excellent" 
Number of complaints resolved	100%	100% 

■ Impact on Business and Stakeholders

CH. Karnchang believes that managing customer relationships is the key to business success. Excelling in customer relationship management involves not only meeting the needs and expectations of customers, but also enhancing the quality of services. This, in turn, leads to customer satisfaction and loyalty, fostering continuous patronage of the Company's services

■ Commitment, Challenge and Opportunity

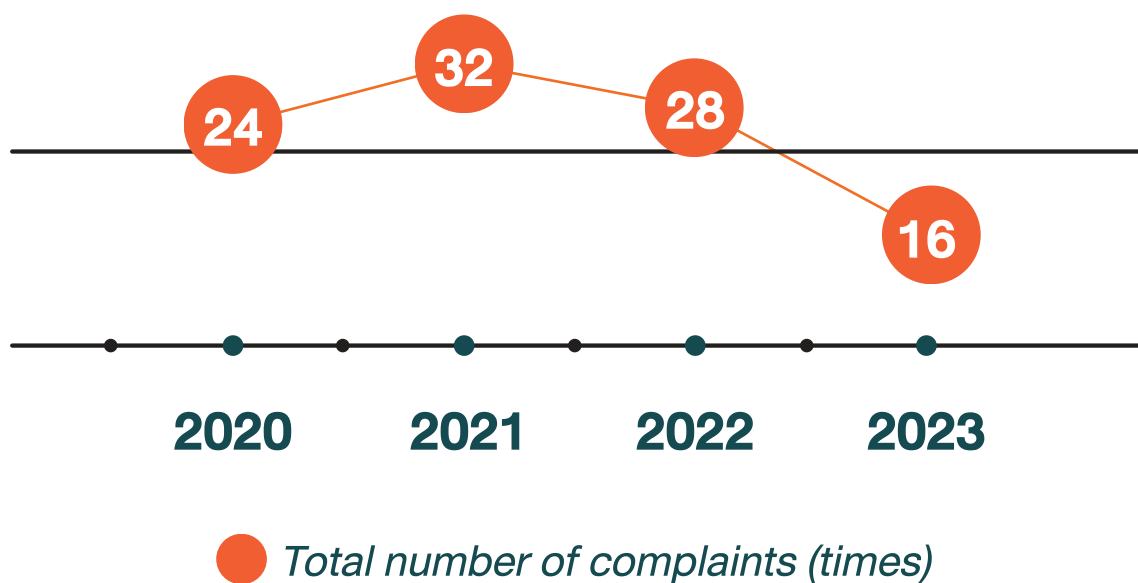
CH. Karnchang places the utmost emphasis on the satisfaction of "customers" or "project owners" because it is a construction service business. "Customers" or "project owners" expect to receive construction work that is of high quality, meets standards, is comprehensive, safe, timely, and involves participation in social and environmental responsibilities throughout the project implementation.

■ Management and Operational Approach

The Company operates in accordance with the ISO 9001/2015 quality management system. Therefore, for every project, a customer satisfaction survey is conducted, and the criteria for scoring are as follows: Excellent 86-100%, Good 71-85%, Fair 56-70%, Needs Improvement 41-55%, Urgent Improvement 0-40%. The target for customer satisfaction set by the Company is no less than the "Good" level. Data on customer satisfaction is collected regularly every month. In 2023, 100% of CH. Karnchang's customers gave scores at the "Good" or "Excellent" levels.

■ Using Information Obtained from Customer Satisfaction Assessments to Develop and Improve Processes

In 2023, CH. Karnchang received a total of 16 complaints from operations across all projects. CH. Karnchang has undertaken improvements and corrections to address the issues arising from these operations, aiming to enhance customer satisfaction.



Rate of complaints
resolved (%)

100%

WARE

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SOFTWARE

FIREWALL



10



ENVIRONMENTAL MANAGEMENT

■ Targets and Key Performance Indicators

Issue	Target 2023	Performance 2023
Business operations do not comply with the standards or criteria set by law.	0	0

■ Impact on Business and Stakeholders

CH. Karnchang has an understanding and awareness of the importance of environmental management. Given that the Company's business operations may have an impact on society and various stakeholders, factors such as air pollution and unsustainable use of construction materials could contribute to increased waste. This could potentially lead to a loss of consumer confidence in the Company and have adverse effects on the business.

■ Commitment, Challenge and Opportunity

CH. Karnchang is committed to steering its business towards environmental responsibility by maximizing the benefits derived from resource utilization. The Company continually develops and enhances its operational processes to ensure that its activities have minimal impact on the environment and communities. Moreover, CH. Karnchang is steadfast in adhering to environmental laws and regulations.

To underscore transparency in its operations, CH. Karnchang has disclosed its environmental management policy, established a committee to oversee environmental and sustainable practices, and outlined plans for activities within the organization. This commitment extends to all stakeholders. Furthermore, the Company is dedicated to providing information about its environmental operations openly.

■ Management and Operational Approach

Environmental Management

CH. Karnchang manages environmental aspects in accordance with Environmental Management Policy, Green Construction, Climate Resilience, and Sustainable Biodiversity Management, covering all production activities from planning, to waste management, and post-use product management. The Company also promotes and imparts knowledge to employees, contractors, customers, business partners, and stakeholders on resource efficiency and effective waste management.

To ensure safety, occupational health, and environmental responsibility, CH. Karnchang has established a Safety, Occupational Health and Environment in Workplace Committee. This committee is responsible for maintaining and updating the environmental regulation and law database relevant to the Company's business operations and projects to ensure modern and consistent operations. Internal audits are conducted periodically to ensure compliance with laws. Furthermore, regular meetings are held to report on operational results, address challenges, and propose improvements in the committee's duties on an annual basis.

In addition, CH. Karnchang has been certified with the International Organization for Standardization's 9001 Standard for Quality Management System. This certification confirms the Company's commitment to efficient management and quality work, demonstrating our dedication to operating effectively and maintaining quality at every stage of our business processes.



Environmental management policy includes the appointment of a committee to manage and oversee the environment and sustainability.



Water Management

CH. Karnchang uses water in the construction process and uses to reduce the amount of dust generated from construction activities. The primary water source is regional tap water. However, CH. Karnchang emphasizes the importance of water management in the construction process to maximize benefits and ensure sustainable water management practices. The Company promotes water recycling within the project and prioritizes the proper treatment of wastewater generated during construction and temporary sanitation facilities. Preliminary treatment is conducted in wastewater treatment tanks before discharging into public water bodies, ensuring compliance with water quality standards as required by law.



Waste Management

CH. Karnchang is aware of the importance of waste management resulting from its business operations. In the absence of proper waste management, it could have significant impacts on the environment and surrounding communities. CH. Karnchang's waste management process begins with planning and continues throughout the project. This includes calculating the appropriate length of steel for the project to reduce costs and minimize the amount of waste generated. Materials that can be reused are separated, and recycling is implemented to reduce the volume of waste sent to landfills before delivery to municipalities for appropriate disposal methods.

In order to ensure that waste management is carried out effectively and in compliance with the law for every construction project, CH. Karnchang has implemented a waste management plan. This plan includes recording the types, quantities, and weights of solid waste generated from construction activities, as well as the amounts of soil, sand, and materials resulting from construction or demolition. The Company also evaluates the efficiency and issues related to waste management, considering the accumulation of solid waste and debris in the construction area. Weekly monitoring and inspections are conducted throughout the construction period, with support to raise awareness among employees about proper waste separation.



Construction material quality

CH. Karnchang places importance on selecting sustainable construction materials, recognizing that the choice of materials is crucial for the construction industry and can contribute to reducing environmental impacts in various ways. The Company, therefore, conducts its business in conjunction with supporting environmentally friendly construction (green construction) practices. This includes sustainable design/construction of green buildings, choosing materials that conserve energy or reduce greenhouse gas emissions, avoiding the use of materials that may release Volatile Organic Compounds (VOCs), avoiding materials with asbestos, avoiding construction materials containing hazardous substances, using materials with a Life Cycle Assessment (LCA), sustainable supply chain management, environmentally friendly sourcing, and providing guidelines for reusing or recycling construction materials to reduce raw material consumption and waste.

Air Quality Control

Construction, modification, repair, and demolition of buildings are activities that generate airborne dust during the construction phase, impacting air quality in the surrounding areas. This can directly affect workers on-site and communities near the construction area. Considering these considerations, CH. Karnchang has established measures to control airborne dust during these activities as follows :

1. Comply with the Enhancement and Conservation of National Environmental Quality Act of 2535 B.E., as well as the regulations of the Bangkok Metropolitan Administration (BMA) and the dust control guidelines from the Department of Pollution Control. CH. Karnchang has to coordinate with relevant government agencies, such as the Department of Pollution Control and the National Environmental Board.
2. Install a water spray system at the construction site to reduce airborne dust.
3. Spray water to exposed soil, soil piles, and sand piles to prevent dust dispersion.
4. Clean vehicles and tires, removing soil, clay, or sand residues before leaving the construction site.
5. Set speed limits for vehicles within the construction area to minimize dust dispersion.
6. Establish guidelines for managing dust issues on the construction site, including monitoring air quality points, project boundary lines, plans, and procedures under the specified standards and indices set by government authorities.



Additionally, CH. Karnchang conducts inspections and assessments of Total Suspended Particulate Average 24 hours and Particulate Matter less than 10 Microns Average 24 hours. This is done using high volume air sample equipment. Moreover, measurements for Nitrogen Dioxide and Sulphur Dioxide gases are also conducted, and the values are in accordance with the specified standards.



■ Project to Utilize Recycled Water at the Huay Yor Reservoir.

CH. Karnchang has designed a reservoir to accommodate and collect water flowing from Huay Yor stream for consumption by the project's staff. The storage operations began in early 2023. The reservoir was able to store water at 100% of its capacity in September 2023. Additionally, household water consumed by the project staff within the residential area that has undergone treatment is discharged into the Huay Yor reservoir. This enables the project to use recycled water from the Huay Yor reservoir for both tap water and drinking water after undergoing standard production and quality control processes, resulting in a reduction in the extraction of water from natural sources.




The recycled water
usage amounts to
188,400
CBM


which can support
a workforce of
6,561
people within the project.

■ The Waste Sorting Project to Collect Points for Redeemable Rewards

CH. Karnchang is aware of the importance of waste management, especially due to the large number of residents in the project area, leading to an increased amount of waste. Proper waste management is necessary, aligning with environmental requirements from relevant authorities. To facilitate waste management, CH. Karnchang conducts waste separation at the source before sending it to waste sorting and incineration facilities. The waste is categorized into construction waste and community waste, and then further sorted to be effectively managed. Additionally, there is communication and awareness-building to emphasize the importance of waste management, providing knowledge and understanding of different types of waste. This encourages employees to actively participate in waste management. CH. Karnchang has implemented a points collection and rewards redemption program to incentivize and involve employees in waste management efforts.




The quantity of recycled
waste, totalling
386 tons

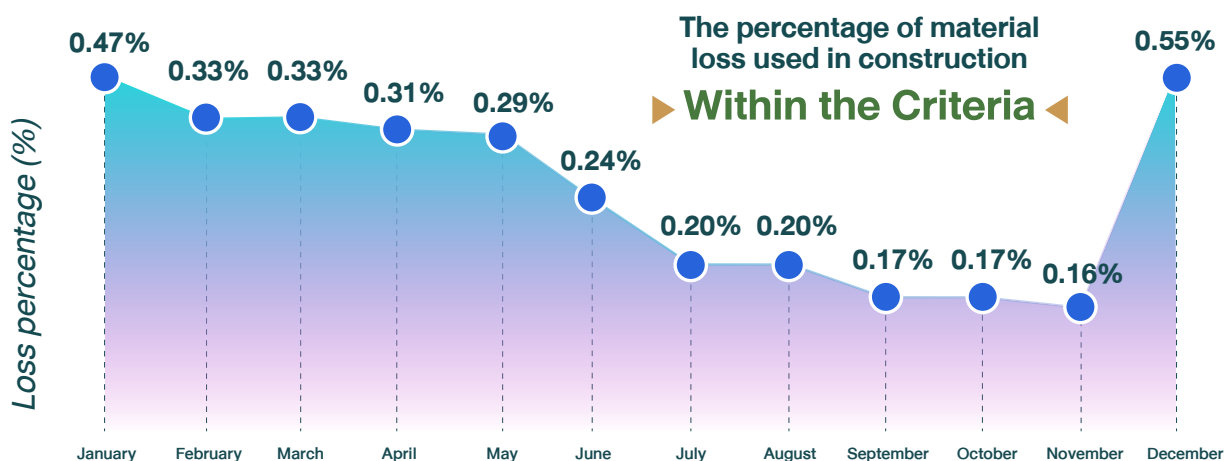
can reduce greenhouse
gas emissions by

295
tonsCO₂ equivalent/ton.

■ Project to Control Materials Used in the Construction Process

Controlling the materials used in the construction process is a crucial process in maintaining the quality and quantity of materials to ensure the highest quality of output and prevent material losses, thereby reducing unnecessary waste in the construction system.

CH. Karnchang systematically records the quantity of materials used and establishes an acceptable percent loss of materials in construction processes. This allows for continuous monitoring of work progress and monthly planning. Throughout 2023, the percent loss of materials used in construction has remained within CH. Karnchang's set standards, with operational results showing a percent loss of material used in construction below 0.6%.



Control Materials Used in the Construction Process in 2023



11



ENERGY AND CLIMATE CHANGE MANAGEMENT

■ Impact on Business and Stakeholders

Currently, climate change is a major challenge that the world must confront. The primary causes of climate change and the continuous rise in temperatures are attributed to human activities. For example, fossil fuels are burned for energy generation during various manufacturing processes, such as cement and steel production. The release of greenhouse gases from construction processes directly impacts changing climate conditions, affecting human life. This issue is closely linked to the operations of businesses in every sector. Due to these reasons, many countries prioritize addressing climate change, leading to the Paris Agreement. Thailand is one of the signatories committed to limiting the global average temperature increase to below 2 degrees Celsius. Without effective energy management and greenhouse gas control measures in business operations, climate change may impact businesses financially and negatively. In particular, leading companies and investors increasingly recognize the importance of addressing climate change issues. This may be a risk arising from business barriers or transition risk from the impact of official regulations to solve environmental problems, such as new environmental laws or the influence of environmentally conscious consumers and investors interested in addressing climate change, which may affect business operations.

■ Commitment, Challenge, and Opportunity

CH. Kanchang is committed to contributing towards reducing greenhouse gas emissions and has set the goal of achieving Net Zero carbon emissions by 2065. The Company conducts its business based on the principles of a circular economy, maximizing the value of natural resources, energy, and water.

■ Management and Operational Approach

Responding to Climate Change

CH. Karnchang is actively responding to climate change in line with environmental management policies. The Company is committed to green construction, sustainable climate conditions, and biodiversity. This aligns with Thailand's national goal. The Company aims to be a Net Zero carbon business by 2065. In order to successfully achieve the aforementioned commitment, CH. Karnchang's Board of Directors has appointed a Corporate Social Responsibility and Sustainability Committee. This committee establishes policies related to social and environmental responsibility projects, monitoring the progress and advancements of Corporate Social Responsibility (CSR) activities. Moreover, it emphasizes the importance of formulating operational policies to ensure the Company's business growth is stable, sustainable, and capable of generating maximum benefits for stakeholders in all sectors. Under the consideration of Environmental, Social, and Governance (ESG) responsibilities, regular meetings are held quarterly to report on the progress of operations.

In 2023, the Board of Directors approved the implementation of a Carbon Footprint assessment for the organization to evaluate the reduction of greenhouse gas emissions resulting from various activities. Additionally, the Corporate Social Responsibility and Sustainability Committee was tasked with formulating operational policies to guide the organization towards sustainability. They provided recommendations, monitored operational practices, and ensured alignment with social and environmental policies. The committee also assessed and tracked progress in social and environmental operations, aiming to achieve success in the environmental policy and the goal of achieving Net Zero carbon emissions by 2065.

The Greenhouse Gas Emission Assessment from the Business Process Project

Unit : Tonne CO2 equivalent	
	Year 2023
Scope 1 : Direct GHG emissions	8,671.00
Biogenic CO2 emission	395.00
Scope 2 : Indirect GHG emissions from energy consumption	7,784.00
Scope 3 : Other indirect GHG emissions	219,302.00
Total	236,152.00

Consultant : Advance Energy Plus Company Limited
Verifier : Bureau Veritas Certification (Thailand) Limited

Moreover, CH. Karnchang conducted a risk assessment, which is part of the Enterprise Risk Assessment, aiming to plan and mitigate the impacts of climate change. The identified risks include drought, flooding, business operation disruptions, raw material procurement challenges, and changes in laws and regulations related to greenhouse gases. The Company has also implemented measures to prevent potential future impacts.

■ Climate Change Risk Assessment

Climate Change Risks	Risk Level Before Management	Preventive Measures	Risk Level After Management
 Drought	Medium	<ul style="list-style-type: none"> • Collaborate with government agencies on initiatives aimed at reducing energy usage to mitigate global warming. • Efficiently manage resources, procurement, and product transportation to optimize resource utilization. • Emphasize employee occupational health and safety. 	LOW
 Flooding	Medium		LOW
 Business Plan from Seasonal Changes	Medium		LOW
 Procurement of Raw Materials	Medium		LOW
 Changes in Laws and Regulations	Medium		LOW

■ Energy Management

CH. Karnchang recognizes the importance of conserving energy and utilizing it to its maximum value. Given the continuous increase in energy demand, there are direct impacts on businesses, such as rising production costs and energy shortages. Due to these reasons, CH. Karnchang adopts energy management practices by supporting government initiatives for energy conservation. The company also encourages employees to be conscious of and attentive regarding energy use, aiming to reduce the organization's energy consumption and associated costs.

■ Project to Transport Crushed Stone and Concrete via Conveyor Belts instead of by Ten-Wheel Truck

To achieve the goal of becoming a Net Zero carbon emission business by 2065, CH. Karnchang is committed to developing technology and innovation to assist in reducing greenhouse gas emissions. In 2023, CH. Karnchang became aware that the quantity of crushed stone used in the production process of concrete mix and the amount of concrete used in projects in the Lao People's Democratic Republic were substantial. This led to the extensive use of ten-wheeled trucks and concrete mixer trucks, resulting in inefficient fuel consumption. Consequently, CH. Karnchang has developed a design for a conveyor system to transport stones from the Primary Crushing Plant to be processed to the desired size at the Secondary Crushing Plant. This system, accounting for 60% of the total volume, is employed for the transportation of ready-mix concrete via a conveyor system for construction projects at various locations, covering a total distance of approximately 2.5 kilometers. This initiative has reduced greenhouse gas emissions and allowed the Company to minimize fuel consumption in its vehicles.

• Transporting crushed stone for concrete mixing using conveyor belts

In 2023

reduced carbon dioxide emissions by

286 TonCO₂eq

and led to a reduction in diesel fuel consumption of

151,651 liters



• Transporting 40% of the concrete via a mix-ready concrete truck and 60% via conveyor belts

In 2023

reduced carbon dioxide emissions by

57 TonCO₂eq

and led to a reduction in diesel fuel consumption of approximately

236,268 liters



■ Partial use of Fly Ash as a Substitute for Hydraulic Cement Project

CH. Karnchang has developed a concrete mix design for the construction process of structures that require different properties. One of the designs includes reducing the amount of cement and using fly ash as a substitute in the proportion of 33%, while maintaining the same strength value.

Concrete is compacted according to the designed specifications. CH. Karnchang consistently monitors and checks the physical properties of fly ash every time it is imported for use in the project. This ensures that the use of fly ash as a substitute for hydraulic cement complies with the specifications and does not cause issues with the concrete strength. This project effectively meets the users' requirements and helps reduce construction costs by utilizing surplus materials, while also contributing to a reduction in greenhouse gas emissions.

- The partial use of fly ash as a substitute for hydraulic cement

in 2023

reduced carbon dioxide emissions by

1,919 TonCO₂eq



■ CH. Karnchang Energy Saving Project

The inefficient and ineffective use of energy has wide-ranging environmental impacts, such as releasing greenhouse gases and depleting resources. This directly affects businesses and increases the risk of facing challenges due to changing climate conditions. In response to these issues, CH. Karnchang has implemented an energy-saving project by replacing traditional light bulbs with more energy-efficient LED bulbs. This initiative helps reduce greenhouse gas emissions and lowers energy costs.

The energy-saving project has reduced electricity consumption by

15,595

kilowatt-hours per year



representing a

45%

decrease compared to the previous year.



12



BIODIVERSITY

■ Impact on Business and Stakeholders

The Environment and Biodiversity are crucial for maintaining the balance of nature and sustaining human life. Business operations play a significant role in driving both negative and positive changes in the environment. Without appropriate measures and management of biodiversity, it may impact biodiversity and ecosystems, affecting the Company's operations throughout the supply chain. For example, resource shortages can lead to a lack of essential construction materials, resulting in increased costs.

Furthermore, if the Company lacks biodiversity management, it may impact the extinction of living organisms. For example, land alteration activities for construction projects can affect the population of living organisms residing in the area. Without proper conservation measures, it may also affect the Company's image and credibility. Neglecting the potential impacts on nature may lead to complaints and conflicts with societal expectations, as well as potentially cause business disruptions.

■ Commitment, Challenge and Opportunity

CH. Karnchang is dedicated to conducting construction business with a strong commitment to social and environmental responsibility, particularly in preserving biodiversity and preventing potential impacts from its operations. Additionally, the Company expresses a clear intention to generate positive environmental impacts. Furthermore, CH. Karnchang is attentive to ecological conservation and ensures compliance with relevant laws in conducting its business operations.

■ Management and Operational Guidelines

CH. Karnchang emphasizes the importance of sustainable business practices to minimize environmental impact and promote biodiversity. The Company operates within the framework of environmental management policies, engaging in green construction practices, climate resilience, and sustainable biodiversity. This commitment reflects an aim to create positive natural impacts. Moreover, CH. Karnchang adheres to international standards and legal regulations for Environmental Impact Assessments (EIA) and implements measures to mitigate potential environmental impacts throughout its business processes. These efforts aim to preserve the ecological integrity of nature and conserve wildlife that may be affected in the vicinity of CH. Karnchang's construction projects.



**Environmental Management Policy, Green Construction,
Climate Resilience, and Sustainable Biodiversity
Management**

■ Assessment of Biodiversity Impacts and Preventive Measures

Surface Water Quality and Aquatic Ecosystems

• Environmental Impact

Storing construction materials and equipment near water sources can lead to the contamination of water bodies with construction debris, as well as impede water flow. In cases where construction occurs in areas above water sources, oil and grease residues may flow into the water, reducing oxygen levels and impacting aquatic life, such as phytoplankton, zooplankton, and benthos.

• Measures to Prevent and Mitigate Environmental Impacts

The Company has implemented measures to prevent construction materials and equipment from contaminating water sources. This includes regularly excavating and cleaning drainage pipes to prevent water runoff from overflowing and obstructing water flow. Additionally, measures are in place to prevent oil and grease residues from flowing into water sources. Environmental water quality monitoring is conducted every 2 months throughout the construction period.

Terrestrial Ecosystems

• Environmental Impact

The construction process may have both direct and indirect impacts on the living conditions of animals in the area and surrounding areas. For example, site preparation for construction may result in a reduction of natural habitat, leading to the dispersal of resident species. This can contribute to a decline in the population of animals and plant species and may pose a risk of future extinction.

• Measures to Prevent and Mitigate Environmental Impacts

Regular assessments of the impact on biodiversity, plant, and wildlife species are conducted every month to promote sustainable coexistence between humans and the environment. Additional measures are implemented, such as protecting wildlife and native plants, preventing soil erosion and degradation, and controlling encroachment into forest areas.

Protection of Local Wildlife and Native Plants

- Do not encroach on the forest area without permission from the supervisor.
- Do not bring plants and animals into or out of the Lao People's Democratic Republic without permission.
- Hunting of any kind is prohibited, both land and aquatic animals
- Trading in wild animals or their meat is prohibited, as well as the cultivation of medicinal plants and valuable wood.
- Possession of hunting equipment is prohibited

Prevention of Soil Erosion and Degradation and Control of Encroachment into Forest Areas

- Do not burn and clear forests. or other areas without permission from the supervisor
- Do not plant crops or dig up soil from the slope to grow crops because it can cause a landslide.
- Do not plant plants in the drainage channel or in its vicinity because it will cause sediment to flow into the drainage channel.
- Do not set fire to the forest.

■ Project to Mitigate the Impact on Biodiversity for the Construction of a Hydroelectric Power Plant.

CH. Karnchang has a project underway to build a hydroelectric power plant on the Mekong River in the Lao People's Democratic Republic, an area rich in biodiversity and a crucial foundation for the people in the Mekong River basin.

CH. Karnchang is aware of the importance of biodiversity in the Mekong River basin and is committed to preventing and mitigating the impacts on biodiversity that may arise from project implementation. This includes impacts on wildlife in the area, encroachment of animal habitats of both terrestrial and aquatic ecosystems or competition for natural resources traditionally used by local communities. CH. Karnchang emphasizes the importance of thorough impact assessments and the development of preventive measures to control and manage operations in line with environmental protection measures. The Company collaborates with project owners to ensure compliance with stringent impact assessments on a monthly basis. Additionally, training programs are in place to enhance the knowledge of employees regarding environmental and biodiversity.



6,561 employees

employees and subcontractors participated in environmental and biodiversity-related seminars.



13



OCCUPATIONAL HEALTH AND SAFETY

■ Targets and Key Performance Indicators

• Target 2023



“ Continuous working **300,000 hours** without injury causing time off work ”

• Performance 2023

Continuous working **10,809,239 hours** without injury causing time off work

■ Impact on Business and Stakeholders

Occupational health and safety is a crucial concern for the sustainability of CH. Karnchang's due to the impact of construction and infrastructure development projects undertaken by the Company. These projects, carried out under various projects, directly affect the health of workers and contractors within CH. Karnchang. Workers and contractors may face hazardous incidents during on-site inspections or construction activities, and there is a risk of accidents from large machinery or equipment that can impact lives. Furthermore, the pressure to expedite work to meet contractual obligations can contribute to stress among the personnel involved.

■ Commitment, Challenge and Opportunity

CH. Karnchang is committed to ensuring the health and safety of its employees and contractors. This dedication is reflected in providing a safe working environment, adhering to relevant regulations, training and educating staff, assessing health and safety risks in the workplace, and implementing preventive measures, such as safe construction processes, secure material transportation procedures, along with transparent disclosure of operational results and relevant statistics for stakeholders' awareness. The Company promotes continuous improvement through monitoring mechanisms, evaluations, and support for the active involvement of employees and contractors in sharing suggestions within the organization.

■ Management and Operational Approach

• Occupational Health and Safety Policy :



- | | |
|---|---|
| 1. Responsibility
We take responsibility for occupational health and safety. | 4. Risk Assessment
There must be a systematic assessment of risks in various operations. |
| 2. Awareness
Employees and project stakeholders must be aware that safety is everyone's responsibility. | 5. Promotion and Training
Occupational health and safety are promoted through training and knowledge-sharing for all employees and operators. Everyone has the right to stop work when equipment and tools are not in working condition or when potential dangers are observed. |
| 3. Integration into Operations
Occupational health and safety considerations must be integrated into all operational plans. | 6. Continuous Improvement
Policies regarding safety are continuously improved to instill confidence in occupational health and safety. |

• Measures to Take Care of the Health and Safety of Employees

CH. Karnchang Public Company Limited establishes guidelines for prevention and risk reduction, as well as operational procedures and a Health & Safety Management Plan. This plan aims to ensure the occupational health and safety of all employees and contractors by minimizing potential hazards during work activities, as well as preventing situations related to the outbreak of diseases.

• Prevention and Risk Reduction Guidelines

Accidents during construction are identified as a common risk in the operations of CH. Karnchang. Therefore, CH. Karnchang has established guidelines for preventing and reducing occupational health and safety risks in the working environment during the operational processes. Project managers and personnel are responsible for strictly adhering to these guidelines.



• **Operational Procedures and Occupational Health and Safety Management Plan**

Clearly outline the steps for developing a safety plan for construction projects, emergency response plans, workplace safety standards, safety training, and other relevant aspects. This should encompass both employees and contractors, ensuring comprehensive coverage.

• **Continuous and Uninterrupted Operations.**

CH. Karnchang has established operational guidelines to prevent possible deficiencies by implementing the ISO 9001:2015 quality management system to maintain standards for construction projects and the main office. This coverage includes primary activities within the Company's business. Additionally, the group of companies has outlined guidelines for developing personnel to possess knowledge, skills, ethics, and responsibility for the organization and its stakeholders. This aims to reduce and prevent damage resulting from risks impacting the mentioned operations. Natural disasters, internal unrest, war, or pandemics are risks beyond control. Thus, the Company has devised a Business Continuity Plan (BCP) to ensure that employees and management across all departments can carry out their duties during crises or emergencies and return to normal operations within an appropriate timeframe.

• Risk Assessment in the Workplace

CH. Karnchang Public Company Limited assesses the workplace risks for employees and suppliers working within the Company's operational areas using a job-specific risk assessment form. This form covers risk factors, opportunities for occurrence, impacts, and preventive/reduction measures. The assessment covers the entire value chain of construction and infrastructure development projects. The results of these assessments are disclosed internally and shared with project stakeholders and employees/contractors through quarterly risk management reports.

• Employee Health Care

CH. Karnchang takes comprehensive care of its employees and contractors in accordance with relevant laws in Thailand, including



- (1) Ministry of Industry regulations on the standards for managing occupational health and safety and environmental conditions in construction work, BE 2551 (2008).
- (2) Occupational Safety, Health, and Environment Act, BE 2554 (2011).
- (3) Ministry of Industry regulations on the standards for managing occupational health and safety and environmental conditions in work (Version 2), BE 2553 (2010).
- (4) Ministry of Industry regulations on the standards for managing occupational health and safety and environmental conditions related to steam boilers and pressure vessels, BE 2552 (2009).
- (5) Ministry of Industry regulations on the standards for managing occupational health and safety and environmental conditions in confined spaces, BE 2547 (2004).



In addition, CH. Karnchang promotes workplace safety for its employees through safety promotion activities. This includes Safety Instruction in various areas such as basic first aid, working at heights, basic fire extinguisher operation, traffic volunteerism, and checking fire extinguishers. Safety Patrol involves on-site inspections of construction work areas, and Safety Talk involves reviewing and listening to employee feedback on safety practices before commencing work. These activities are organized based on past risk assessment data.

• Safety Committee at the Project Office

CH. Karnchang appoints an Safety, Occupational Health, and Environment in Workplace Committee to manage occupational health and safety for employees and contractors. The committee consists of no fewer than 11 members, including the Committee Chair (appointed with authority from the employer, who is the project manager), the Committee Members (5 individuals appointed as authoritative level representatives and 6 individuals selected through a selection process as operational level representatives), and the Director and Secretary (professional-level safety officer). The committee participates in weekly meetings.

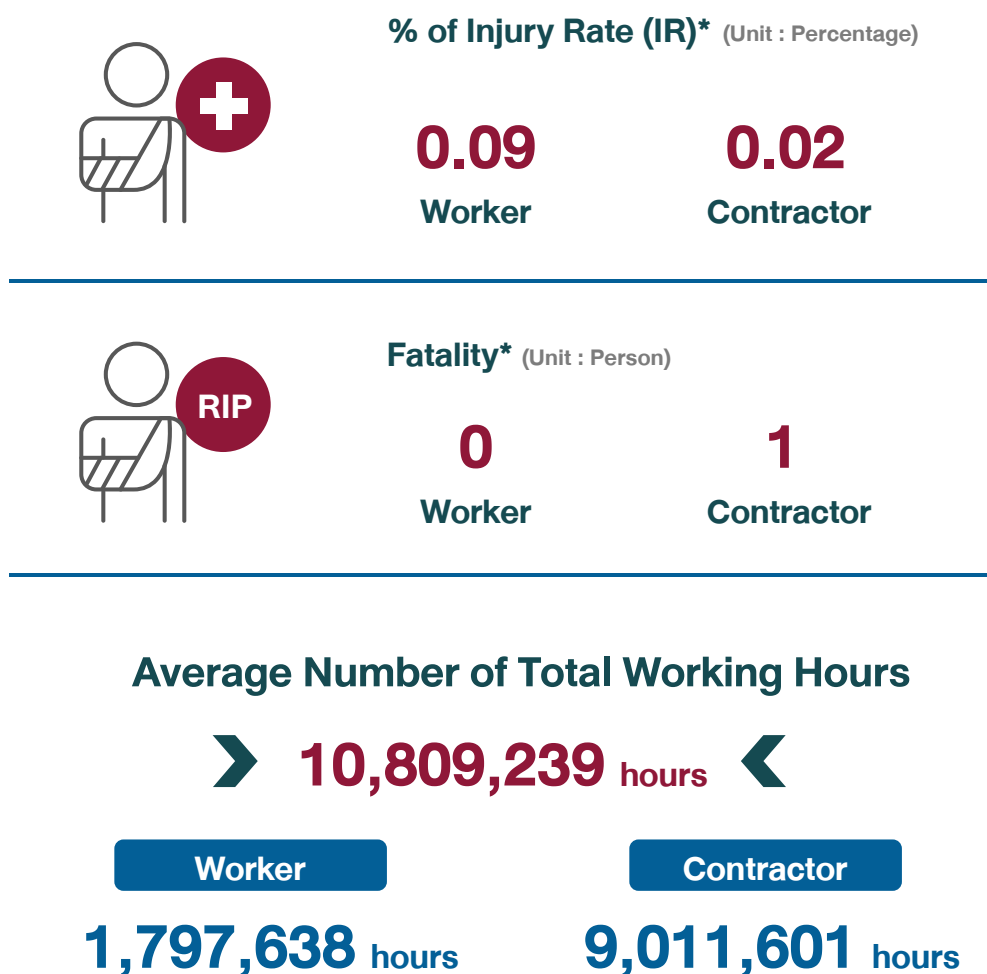
■ Risk Assessment Project

CH. Karnchang always conducts risk assessments before the start of each project. The construction team identifies the causes and potential impacts that may arise from the risks before assessing the risk scores, calculated based on the likelihood of occurrence and the severity of the impact. Following the assessment, the responsible party presents a plan and action items that can mitigate the evaluated risks for management's awareness and approval.

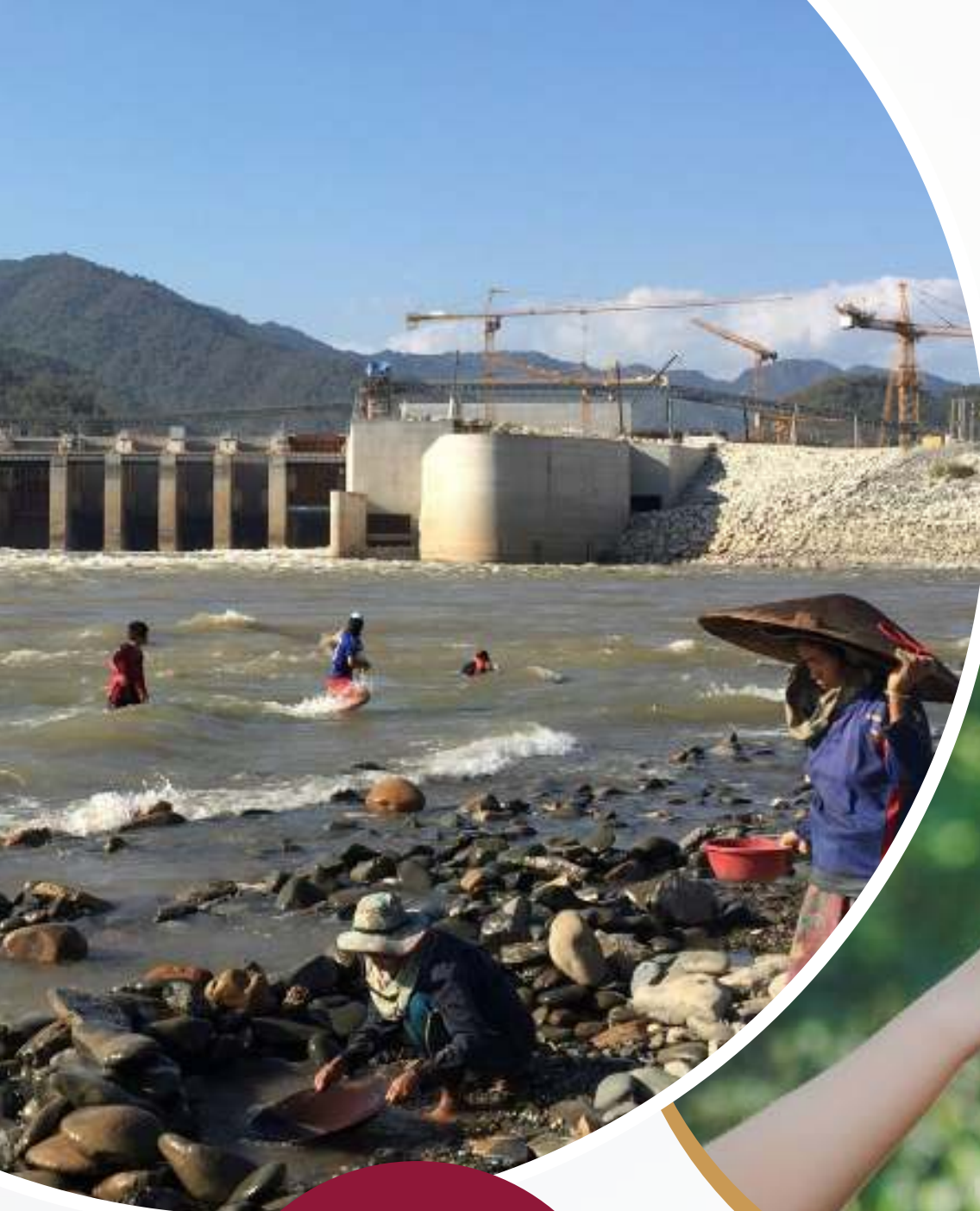
■ Training Project for Operations in Confined Spaces

CH. Karnchang manages the training of practical operations in confined spaces according to the occupational health and safety management plan for working in confined spaces for 246 employees. This includes providing knowledge and guidelines on creating air ventilation channels, developing temporary electrical circuit diagrams, and controlling noise during operations in confined spaces. The training program aims to equip employees with knowledge and practices for working in confined spaces. The benefits of this training initiative for employees and the Company include enhanced knowledge and practices for working in confined spaces, enabling them to successfully complete two related projects without any fatalities.

■ Performance Summary 2023



Remark * CH. Karnchang provides appropriate remediation to injured or fatal employees and contractors.



14



SOCIAL AND COMMUNITY ENGAGEMENT

■ Targets and Key Performance Indicators



*Note: There were no complaints in 2023.

■ Impact on Business and Stakeholders

CH. Karnchang emphasizes the importance of community and societal involvement in sustainable development. Given that the Company's business operations may have significant impacts on both the social and environmental aspects of the surrounding communities, apart from implementing measures to mitigate these impacts, it is essential for the Company to foster understanding, address concerns, and maintain positive relationships with the community. Additionally, collaborative efforts are crucial to creating shared values that instill confidence in the Company's responsible operations. Without nurturing a good relationship with the community and minimizing the negative impacts, there may be long-term consequences for CH. Karnchang's ability to collaborate effectively with the community in the future (License to Operate).

■ Commitment, Challenge and Opportunity

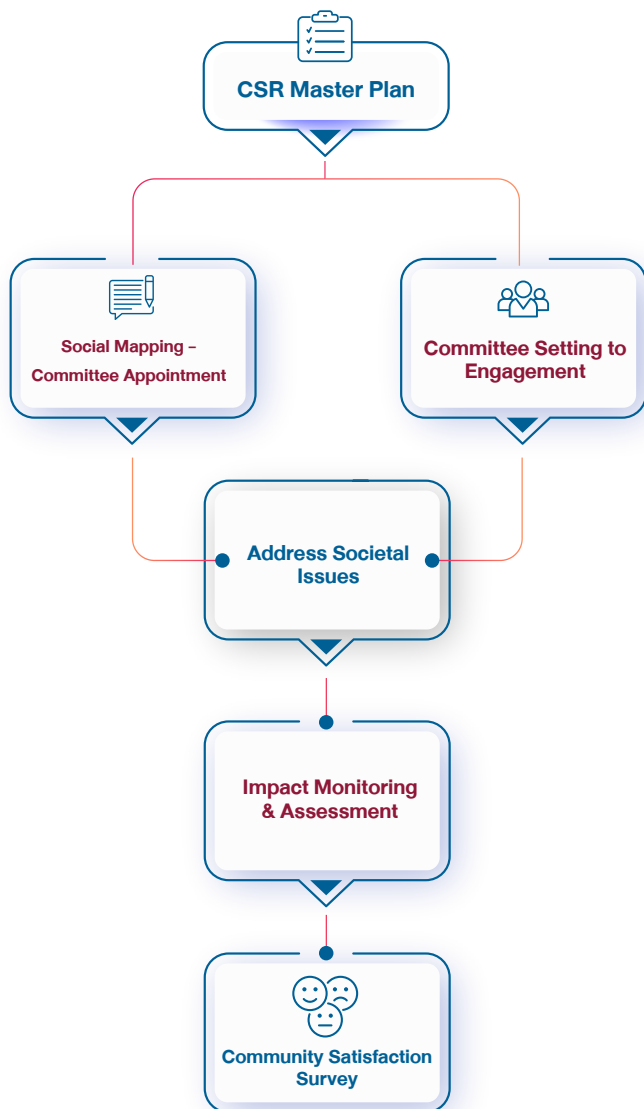
CH. Karnchang is committed to taking care of communities and society with responsibility. The Company is transparent, openly disclosing its operations and relevant statistics, promoting diversity, and avoiding internal societal divisions. CH. Karnchang supports community development projects and investments in education and healthcare initiatives, and adheres to ethical labor practices throughout its supply chain.

■ Management and Operational Approach

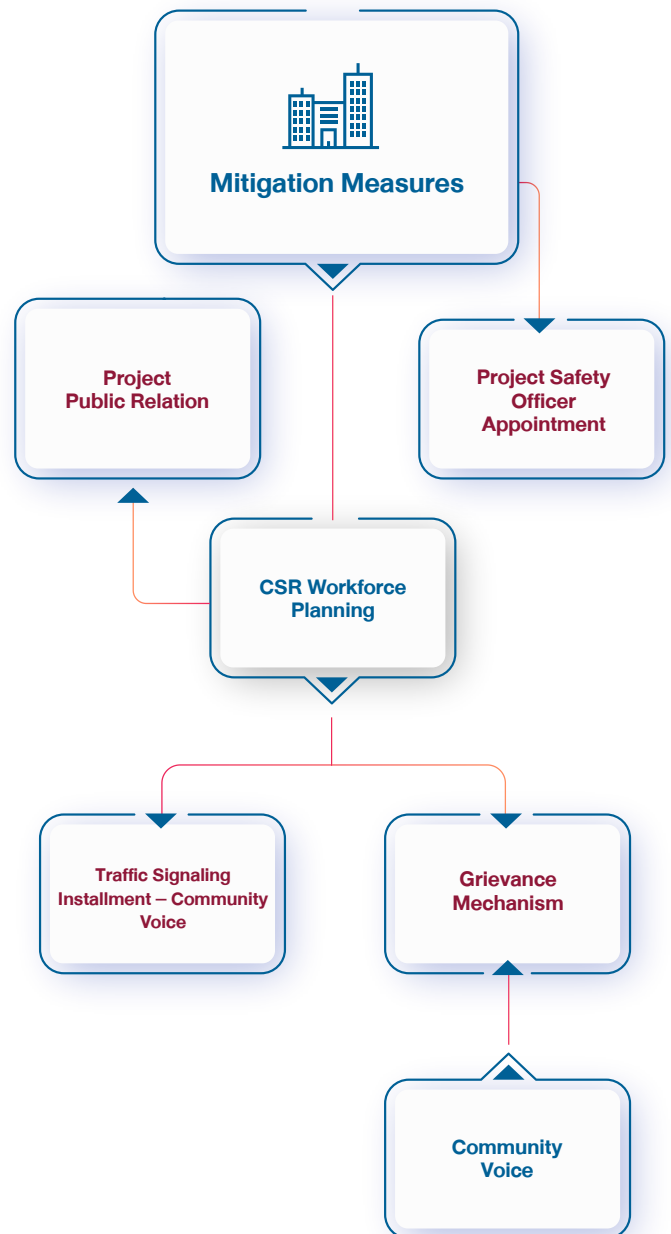
CH. Karnchang has a comprehensive approach to community development around its workplaces and in society as a whole. This aims to take care of communities and society affected by the construction business and the development of public projects, both in the short and long term. The process begins with a survey to identify concerns and potential negative impacts on communities and society resulting from the Company's operations, whether in the present or the future. The survey results are then used as data to develop projects related to the Company's business operations, known as Corporate Social Responsibility (CSR) in Process.

■ Guidelines for Community Development around Workplaces and in Society as a Whole

Community Engagement Framework



Continuous Care for the Community and Society



Channels for Receiving Complaints

CH. Karnchang Public Company Limited (Head Office)



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Telephone: 0-2277-0460

Fax: 0-2275-3659

Email : company_secretary@ckplc.com

Contact the Audit Committee



audit_committee@ckplc.com








<https://www.ch-karnchang.co.th>

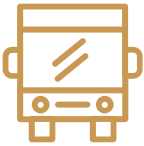





Working group responsible for social and community participation

CH. Karnchang establishes a Corporate Social Responsibility and Sustainability Committee, consisting of the Chairman of the Social Responsibility and Sustainability Committee and members of the Social Responsibility and Sustainability Committee. This committee is set up to monitor the progress and advancements of the Social and Environmental Responsibility projects (Social Activities) of the Company. It promotes the development and formulates business operation policies, focusing on sustainable, resilient growth that can benefit stakeholders the most. This is done with a commitment to environmental responsibility, social welfare, ethical governance (ESG), and pursuit of equitable sustainability.

■ Environmental, Social and Community Impact Assessment

The projects undertaken by CH. Karnchang are large-scale projects that have undergone an evaluation of their environmental, social, and community health impacts following the guidelines for preparing Environmental Impact Assessment (EIA) reports from the Department of Environmental Quality Promotion and the Environmental and Natural Resources Policy and Planning Office. The summary is divided into environmental and socio-economic dimensions, as follows:

Environmental Dimension	Impacts	Examples of Measures to Prevent and Mitigate Impacts
 Soil Resources	The Company's operations may affect soil erosion.	Piling and the construction of cofferdams are carried out to mitigate the risk of soil erosion and collapse.
 Air Quality	The company's operations result in traffic congestion due to road closures for construction and the dispersion of dust particles, which are sources of air pollution	Spraying water on the ground, covering construction materials, and closing traffic lanes as necessary.
 Noise	Transportation of materials and equipment, tools and machinery used in construction causes noise to the surrounding community	Install soundproof walls
 Vibration	Space adjustment, piling, and other operations create vibrations that affects the well-being of the community and condition of surrounding buildings.	Choosing equipment and operational procedures that generate minimal vibration and controlling the weight of trucks in accordance with the law.
 Hydrology, Surface Water Quality, and Aquatic Ecosystem	In cases where there is groundwater, the Company's operations may disrupt the flow of groundwater, affecting the water quantity of nearby rivers or streams, as well as contribute to surface runoff and potential pollution of nearby rivers or streams.	Avoid operating in the rainy season and disturbing the flow of water through the soil.

Social-Economic Dimension	Impacts	Examples of Measures to Prevent and Mitigate Impacts
 Transportation	The Company's operations affect both water and land traffic from the traffic for construction.	Set the material transport time between 11:00 p.m. - 5:00 a.m. and inform locals in the area of the construction schedule.
 Land Use	The Company's construction affects the land use of surrounding communities.	Design the construction to disturb the community area as little as possible.
 Drainage and Flood Control	The Company's operations may affect water drainage, leading to water shortages in some areas.	Use water pumps when flooding occurs.
 Migration and Expropriation	The Company's construction activities impact household planning, concerns about compensation, relocation, and resettlement.	Pay compensation as required by law in a timely manner.
 Public Health/ Occupational Health and Safety	The Company's operations affect the health of the community, including respiratory system diseases, hearing-related illnesses, accidents, and the adequacy of public health resources.	Install clear signage indicating the construction area. Have staff to facilitate traffic and provide life and property insurance for third parties.
 Scenery, Beauty and Tourism	If there are archaeological and cultural sites considered tourist attractions in the nearby area, the construction activities of the Company may have an impact on the landscape, aesthetic value, and tourism in the area.	Design the structure to harmonize with the surrounding archaeological and cultural sites (if any).



All 100% of projects conducted by the Company involve community participation and survey community opinions and concerns in both the pre-construction phase and during construction. Detailed project information, construction activities, safety and environmental impact mitigation measures are provided. Communication channels are established to disseminate news, updates, or coordinate with the project. The Company adheres to the practices of Environmental Impact Assessment (EIA) and addresses issues by adjusting and improving its operations. In areas where no issues are identified, the Company continues its community and social care processes according to the community engagement framework.

■ Corporate Social Responsibility (CSR)

CH. Karnchang has conducted various community-related activities, including public relations efforts, addressing concerns, and environmental and community development activities to care for communities and society consistently. These activities include



Traffic Management in the Project Area

- Define the area around the monitoring point.
- Prepare a traffic plan that aligns with the construction process during different periods.
- Hold meetings to discuss traffic management guidelines with local police and relevant local officials.
- Arrange safety officers to supervise and oversee government officials.
- Compile statistical data to record accidents and causes of traffic accidents involving road users and pedestrians.



Public Relations/Concern Communication

- Public relations to inform the closure of traffic on the Sirat Expressway, section of the tollgate at the Sukhaphiban 3.
- Small-scale public relations for the construction project of the MRTA Purple Line Tao Pun - Rat Burana, along with support for the improvement of classrooms at the Child Development Center.



Environmental and Community Well-being Activities

- Construct perimeter fences around the construction project area.
- Evaluate the quality of surface water and hydro-environmental systems in the construction-operating areas.
- Spray water to prevent the dispersion of dust



Education Promotion Activities

- Provide opportunities for teachers, staff, and students to visit and observe the construction project.

■ Community Innovative Inventors



CH. Karnchang has been carrying out Community Innovative Inventors for three consecutive years, receiving strong collaboration from the National Innovation Agency (NIA) and Change Fusion Institute. CH. Karnchang is committed to fostering resilient communities through the creative ideas of the community, aiming to produce innovations that benefit the occupational stability of individuals. The initiative also promotes and enhances local wisdom through training provided by experts from CH. Karnchang. Competitions are organized to sustain continuous development. In 2023, a total of 12 outstanding innovations were selected nationwide, contributing to a cumulative total of 32 community craftsman innovation projects.

The process of nurturing outstanding communities' innovative invention.

1

Promote participant collaboration via a shared-interest group conversation setup.

3

Train participants on cloud accounting.

2

Train participants on online marketing opportunities (e.g., Facebook, Shopee, and Lazada).

4

Support participants on the process of social enterprise registration for future benefits (e.g., tax reduction, procurement opportunities, and government funding).

Results of the Community Innovative Inventors

After three years of continuous operation, CH. Karnchang has generated positive outcomes for the community in line with the Company's objectives to create value for society and enhance community strength through the Community Craftsman Project. Following the implementation of the project in 2023, CH. Karnchang has monitored the project's benefits through interviews with participating communities and the Company's staff involved in the training.

Communities Participants



"The participation in this project feels like having someone guiding us, helping us to improve and innovate our products."

Ms. Aranya Rotsabai, Project : Tree Pot from Conch Shells



"After going through the Community Innovative Inventors with CH. Karnchang this year, it has allowed the innovations we are working on to reach a broader audience. This innovation has reached even more communities across the country."

Mr. Promroj Wimonkul, Project : Community Plastic Waste Injection Machine



"After participating in this year's project, I feel good that the project pays attention to small entrepreneurs and 'persons with disabilities,' helping to promote the development and advancement of innovations for persons with disabilities."

Mr. Weerachart Sihabong, Project : Hybrid System Disabled Motorcycle

CH. Karnchang Employees



"From participating in this project, I have gained skills that can be applied to daily life, as well as integrating local engineering knowledge and lifestyles seamlessly. It has been beneficial to the community."

Mr. Surarak Jittaseattakul, Civil Engineer, CH. Karnchang



"The Community Innovative Inventors has allowed me to learn innovative craftsmanship and skills, as well as wisdom from craftsmen across the country. It has revealed the commitment to developing various innovations to address the unique problems of each community."

Mr. Sarayut Phomlong, Electrical Engineer, CH. Karnchang



"I have brought my knowledge, abilities, and experiences to share and exchange with the communities to develop inventions from local wisdom, making them efficient innovations with value for both producers and the community."

Mr. Sorrawit Sanduangduan, Mechanical Engineer, CH. Karnchang

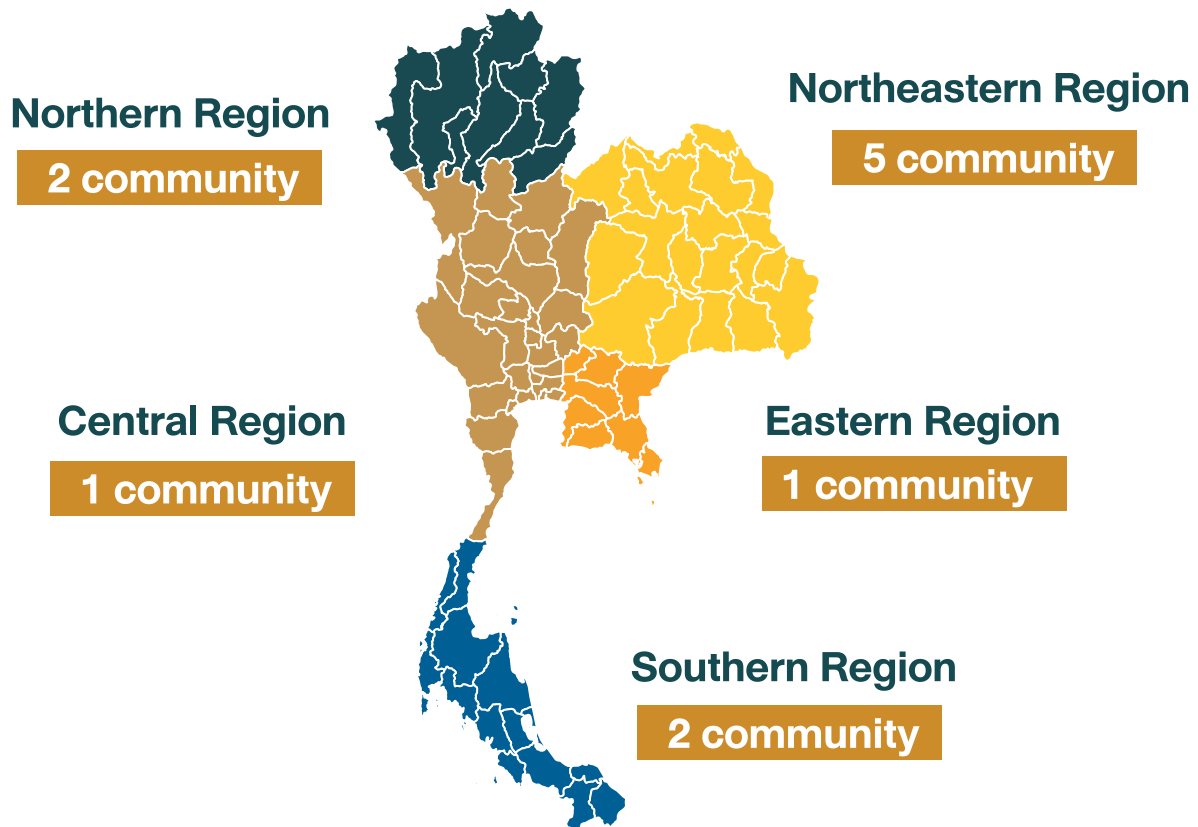
Scan the code to access more information about
the Community Craftsman project.



■ Performance Summary 2023

• Implementation of the Community Innovative Inventors

All Participating Communities 12 Community



20
person

All Employees Participating
in the Project

2
company

All Business Partners
of the Project

0
case

Community Complaints

0
case

Community Complaints
Handled/Resolved



15



HUMAN CAPITAL MANAGEMENT

■ Targets and Key Performance Indicators



Average Number of Training Hours of all Monthly Employees

9.49

Hours/Person/Year



Female Employees

10.95

(Hour/Person/Year)



Male Employees

8.92

(Hour/Person/Year)

Target of Average Number of Training 8 Hours/Person/Year

Average Employee Turnover Rate for Full-Time Employees

	Target	Performance 2023
Management Work	< 1	0.00%
Operational Work	< 1	0.28%
Support Work	< 3	0.35%

Average Employee Turnover Rate for Project Employees

	Target	Performance 2023
Management Work	< 2	0.00%
Operational Work	< 7	2.11%
Support Work	< 5	0.63%

■ Impact on Business and Stakeholders

Due to the sustainable nature of CH. Karnchang 's construction and infrastructure development business, human capital management directly impacts everyone in the value chain, including permanent and temporary staff, as well as subcontractors. This impact is felt across social, human rights, and economic aspects. Therefore, effective human capital management, including initiatives such as competency development plans for all employees, training programs to enhance skills, projects supporting employee satisfaction management, etc., is crucial. Ensuring that employees have the necessary abilities aligned with job requirements leads to efficient job performance, career advancement, having a sense of a purpose, as well as job satisfaction from receiving attention and fair treatment from the Company. Conversely, if the Company fails to manage and care for its employees properly, it could negatively impact operational efficiency and employee well-being, potentially leading to resignations. Moreover, effective human capital management enhances business competitiveness, with training programs providing essential skills for business operations and workforce planning tailored to current industry trends. This approach supports the adaptability of the workforce to future changes in the construction industry.

■ Commitment, Challenge and Opportunity

CH. Karnchang is committed to developing and transforming its management and employee care practices to align with sustainable assessment frameworks and standards, both nationally and globally. This is an important expectation from stakeholders within CH. Karnchang. The Company believes that such development and transformation will play a crucial role in adapting to the changing dynamics of the construction industry in the future, including customer behavior, technological advancements, and emerging job patterns.

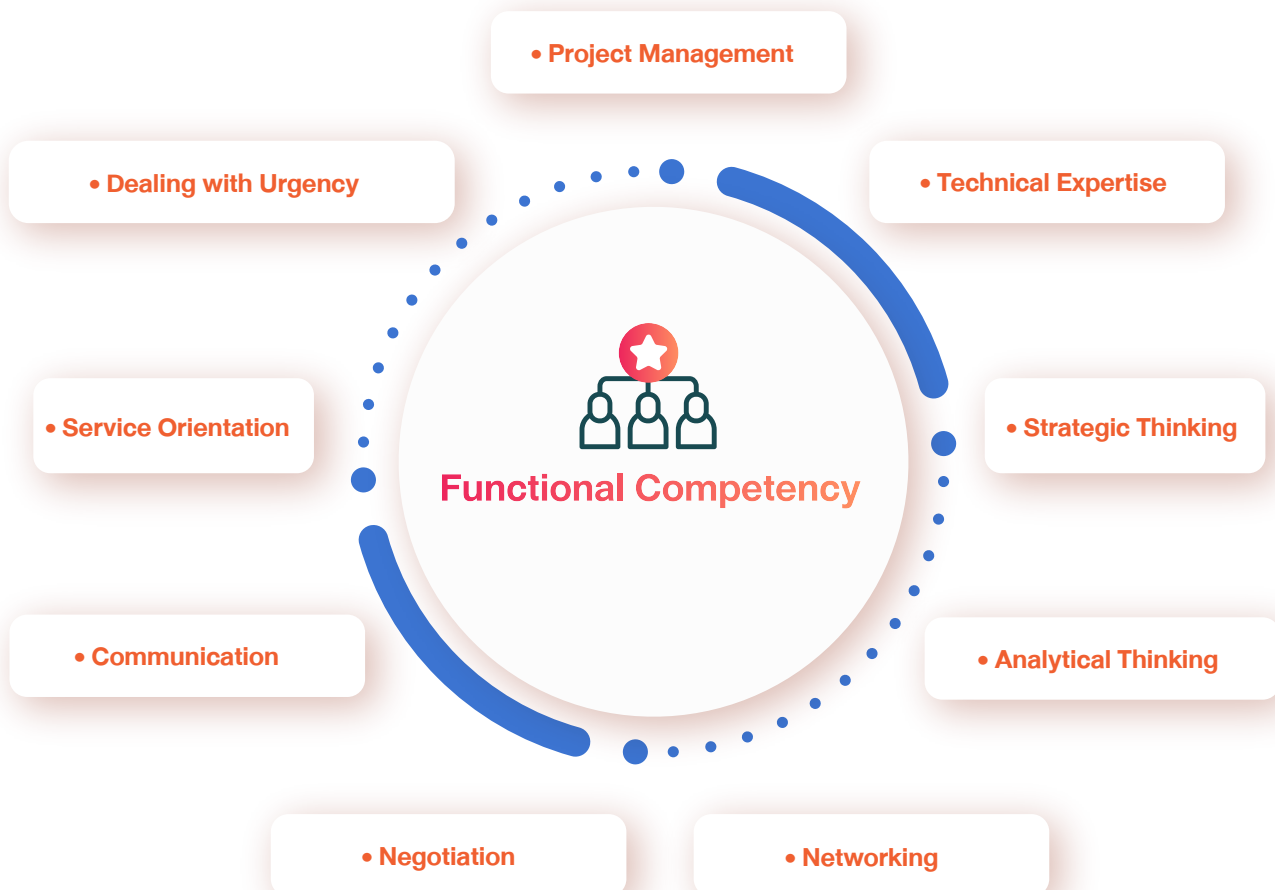
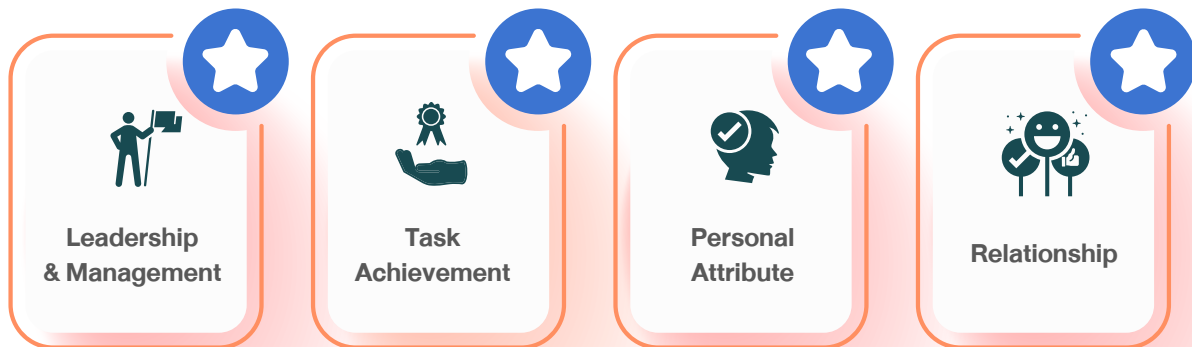
■ Management and Operational Approach

Developing the Potential of Employee and Promoting Employee Advancement

CH. Karnchang conducts regular performance evaluations of employees using the Performance Management Form. The assessment of employee performance serves as crucial data for determining compensation and identifying necessary training programs. The evaluation is divided into the management section and the professional skills or expertise section.

The Development Survey is an assessment of employees' competencies in two aspects: Core Competency, which pertains to the Company's fundamental abilities, and Functional Competency, which relates to job-specific skills. The details are as follows:

Core Competency



Example of Training Projects

- Project management using Primavera software for construction work control.
- Cost management in construction projects using an innovative method by analyzing earned value or assessing work progress efficiency through Earned Value Analysis (EVA).
- Project management innovation using the Critical Path Method (CPM) planning.
- Utilizing Building Information Modelling (BIM) in construction design.
- Guidelines for preventing corruption within the organization, including principles of data protection laws and using personal information documents.
- Techniques for project cost control using Construction Cost Control and Earned Value Management (EVM) systems.
- Quality control of construction projects course.
- Legal knowledge related to construction.
- Transitioning accountants to the digital era for analytical report presentations.
- Thai Financial Reporting Standards (TFRS) 2022
- Tax planning for corporate income tax and value-added tax to help reduce corporate tax burdens.

Attracting and Retaining Employees

CH. Karnchang regularly conducts employee satisfaction surveys to identify factors that affect employee satisfaction and turnover rates. The data from these surveys is used to initiate projects aimed at boosting employee motivation and reducing voluntary turnover. In 2023, the Company surveyed all employees on various work-related issues such as learning opportunities, equipment availability for employees, career advancement, etc. The results indicated that employees were satisfied, meeting the Company's set goals. The Company has analyzed the survey results and outlined projects to enhance employee satisfaction in the future.

Coverage of Employee Satisfaction Survey

Target 2023

100%



Performance 2023

100%

■ Project to Organize Training for Operations in Confined Spaces

The assessment of employee competencies in 2022 found that many employees may not fully understand the procedures for working in confined spaces. Therefore, in 2023, CH. Karnchang initiated a project to provide training on working in confined spaces for 249 employees. The training content focused on occupational health and safety practices for working in confined spaces, including air ventilation, electricity, sound, and lighting. The Company developed a training course based on these criteria and invited safety managers and professional safety officers to serve as instructors. The benefits of this training for operations in confined spaces project include acquiring knowledge and practical skills for working in confined spaces, enabling employees to carry out related projects safely, efficiently, and without incidents resulting in loss of life.

Performance Summary 2023	Unit	Performance 2023	Target 2023
Developing Employee Potential and Promoting Employee Advancement			
Average Training Hours of Employees both Online and Offline	Hours/Person/Year	9.49	8
Female Employees		10.95	8
Male Employees		8.92	8
Operational Level		9.17	
Middle Manager		12.21	
Senior Manager		22.65	
All Training Projects	Projects	22	
General Management		7	
Professional Skills		15	
Percentage of Employees who have been Assigned a Competency Development plan	Person	892	
Female Employees	Person (Percent)	317 (36%)	
Male Employees	Person (Percent)	575 (64%)	
Attracting and Retaining Employees			
Number of Employees who Voluntarily Resigned	Person (Percent)	281 (100%)	
Female Employees		49 (17.44%)	
Male Employees		232 (82.56%)	
Age Below 30		101 (35.94%)	
Age Between 30 – 50		150 (53.38%)	
Age Above 50		30 (10.68%)	



16



HUMAN RIGHTS



■ Impact on Business and Stakeholders

The issue of human rights is particularly relevant to CH. Karnchang's business operations because there are stakeholders involved at every stage of the value chain. The Company's employees are the creators of value, defining the direction and managing the construction projects and the development of various public projects undertaken for clients and business partners. Contractors initiate construction according to the contracted work specified by employees to deliver value to customers. Meanwhile, the community and the society in the construction area are impacted directly and indirectly by the contractors' construction activities. Therefore, the Company is committed to caring for the fundamental rights of these stakeholders throughout the construction process and value delivery. The employees of the contractors, business partners, and customers, as well as the community and society should be treated with human dignity, fairness, and equality. Failure to manage human rights issues and allowing human rights violations, such as the use of child labor or forced labor in construction and discrimination in procurement practices, can lead to negative impacts and damage to the Company's reputation, which is considered invaluable.

■ Commitment, Challenge and Opportunity

The Company is committed to taking care of the fundamental human rights of stakeholders related to the business. This commitment includes conducting a Human Rights Risk Assessment and implementing measures to manage, prevent, and remedy human rights violations. The Company also reports on the outcomes of its human rights efforts following the guidelines of the United Nations Guiding Principles on Business and Human Rights (UNGPs).

■ Management and Operational Approach

Human Rights Policy

CH. Karnchang establishes a human rights policy to demonstrate its commitment to conducting business with importance and respect for the fundamental human rights of those affected within the Company and throughout the value chain, in accordance with the United Nations Guiding Principles on Business and Human Rights, focusing on the principles of Protect, Respect, and Remedy. The Company is dedicated to being a leader in construction business and infrastructure development investment at the regional level, emphasizing quality and comprehensive infrastructure in accordance with human rights standards. The human rights policy is outlined as follows:

- 1. Respecting Human Rights :** The Company is committed to conducting business with transparency and fairness, refraining from privacy violations, and actively seeking and considering the opinions of stakeholders and within the value chain, including employees, customers, partners, contractors, and communities. CH. Karnchang's business operations must be free from any form of illegal labor practices, including human trafficking, child labor below the legally defined age, and forced labor, both within the Company and throughout its supply chain.
- 2. Equal Treatment :** The Company commits to practices that are free from discrimination against any stakeholders and ensures the protection of employee rights in accordance with the law. This includes fair compensation, occupational health and safety standards, quality of life standards, freedom of association and collective bargaining, and equal pay for equal work.
- 3. Due Diligence :** The Company shall conduct a comprehensive Human Rights Due Diligence in line with the United Nations Guiding Principles on Business and Human Rights. This ongoing process aims to identify risks, prevent human rights violations, and establish procedures for remediation when violations occur. The Company is committed to addressing the impacts on those affected by such violations.
- 4. Communication and Disclosure :** The Company shall communicate and disclose the results of its business operations related to human rights, such as risk issues and management guidelines associated with human rights within the organization and the value chain. This includes the number of human rights violations, corrective actions taken in response to violations, and continuous updates to the stakeholders affected by such incidents.

Fair Treatment of Labor According to Human Rights Principles

The Company has appointed a welfare committee within the establishment/business premises or an employee committee to provide opportunities for employees to participate in various activities related to the Company. Examples of such committees include the welfare committee and an employee committee, in accordance with the Labor Protection Act of 1998, Section 96. The Company's welfare committee regularly holds joint meetings with the Company to discuss welfare benefits and any changes to regulations that may impact employees, if applicable, on an annual basis.

■ Human Rights Risk Assessment

In 2023, CH. Karnchang conducted an analysis of enterprise risk and integrated human rights risk as one of the evaluation criteria under sustainability risk. The Company has plans to carry out a comprehensive human rights due diligence process in accordance with the United Nations Guiding Principles on Business and Human Rights in 2024. However, CH. Karnchang has already established preliminary measures for preventing and addressing violations of human rights. These measures include:

1. Reporting Human Rights Violations : The company establishes channels for reporting human rights violations.

- audit_committee@ckplc.com (Audit Committee)

- company_secretary@ckplc.com (Company Secretary)

- ck.whistleblowing@gmail.com

(Executive Vice President : Human Resource and General Administration)

- **CH. Karnchang Public Company Limited (Head Office)**

587 Viriyathavorn Building, Sutthisarnvinichai Rd.,
Ratchadaphisek Subdistrict, Dindaeng District, Bangkok 10400, Thailand
(For correspondence)

2. Protection Measures for Complainants : According to the criteria, complainants or those assisting in the investigation may choose not to disclose their identity if they believe that such disclosure would result in any insecurity or harm. They can also request the Company to establish appropriate protection measures.

3. Remediation for Victims of Human Rights Violations : Individuals who have suffered harm or damage will receive appropriate and fair remediation processes to alleviate their suffering.



Performance Summary 2023	Unit	Performance 2023	Target 2023
Cases of Human Rights Violations	Case	0	N/A
Employees who Participate in Various Activities Organized by the Company, such as the Welfare Committee	Percent	100	100
Number of Committees	Person (Percent)	10 (100%)	N/A
Female		1 (10%)	
Male		9 (90%)	
Aged Below 30		-	
Aged 30–50		2 (20%)	
Aged Above 50		8 (80%)	
Total Number of Employees	Person (Percent)	2,126 (100%)	N/A
Female		549 (26%)	
Male		1,577 (74%)	
Underprivileged		2 (>1%)	
Aged Below 30		265 (12%)	
Aged 30–50		1,227 (58%)	
Aged Above 50		634 (30%)	
Junior Manager		49 (2%)	
Middle Manager		26 (1%)	
Senior Manager		17 (>1%)	
Number of Employees Receiving Benefits	Person (Percent)	2,126 (100%)	
Parental Leave*	Person (Percent)		
Number of Employees who are Entitled to Parental Leave		549 (100%)	
Number of Employees using Parental Leave Rights		11 (2%)	
Number of Employees who used their Parental Leave Rights and Returned to Work		10 (91%)	
Proportion of Returning to Work–using Parental Leave Rights		10 (91%)	

Note: * Only Female Employees



GRI content index: GRI 2

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	Page/ Website	OMISSION			SDG Linkage
				REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
GRI 2: General Disclosures 2021							
1. The Organization and its Reporting Practices							
	2-1	Organizational details	About CH. Karnchang	4-6	A gray cell indicates that reasons for omission are not permitted for the disclosure or that a GRI Sector Standard reference number is not available.	N/A	
	2-2	Entities included in the organization's sustainability reporting	About this Report	26-27			
	2-3	Reporting period, frequency and contact point	About this Report	26-27			
	2-4	Restatements of information	Performance Data (Remark)				
	2-5	External assurance	About this Report	27			
2. Activities and Workers							
	2-6	Activities, value chain and other business relationships	About CH. Karnchang	4-6			
			Business Value Chain	12-19			
	2-7	Employees	Human Rights	115			
	2-8	Workers who are not employees	Performance Data				
3. Governance							
	2-9	Governance structure and composition	Corporate Governance and Compliance	32-35			
			Annual Report	8-13, 135-136			
	2-10	Nomination and selection of the highest governance body	Corporate Governance and Compliance	35-37			
			Annual Report	136			
	2-11	Chair of the highest governance body	Corporate Governance and Compliance	33-34			
			Annual Report	137, 140			
	2-12	Role of the highest governance body in overseeing the management of impacts	Corporate Governance and Compliance	32-34			
			Annual Report	139-145			
	2-13	Delegation of responsibility for managing impacts	Corporate Governance and Compliance	35-36			
			Annual Report	67, 74-75, 139-145			
	2-14	Role of the highest governance body in sustainability reporting	About this Report	28			
			Corporate Governance and Compliance	33-34			
			Annual Report	72-75			
	2-15	Conflicts of interest	Annual Report	139			
	2-16	Communication of critical concerns	Corporate Governance and Compliance	41			
	2-17	Collective knowledge of the highest governance body	Corporate Governance and Compliance	37-38			
			Annual Report	153-154, 162-165			
2-18	Evaluation of the performance of the highest governance body	Annual Report	166-168				
2-19	Remuneration policies	Annual Report	104, 150-151				
2-20	Process to determine remuneration	Annual Report	104, 150-151				
2-21	Annual total compensation ratio	N/A	-				

CK is in the process of data collection.

CK is in the process of data collection.

GRI STANDARD/ OTHER SOURCE		DISCLOSURE	LOCATION	Page/ Website	OMISSION			SDG Linkage
					REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
4. Strategy, Policies, and Practices								
	2-22	Statement on sustainable development strategy	CEO Message	Font Cover				
	2-23	Policy commitments	CEO Message	Font Cover				
			About CH. Karnchang	9-10				
			Corporate Governance and Compliance	32				
	2-24	Embedding policy commitments	CEO Message	Font Cover				
			About CH. Karnchang	9-10				
			Corporate Governance and Compliance	32				
	2-25	Processes to remediate negative impacts	Building Trust and Prosperity : Upholding Ethical Governance for Sustainability	31-70				
			Building Eco-Resilience : Nurturing Sustainable Environments	71-85				
			Building Communities Strengthen : Empowering through Sustainable Development	89-111				
	2-26	Mechanisms for seeking advice and raising concerns	Corporate Governance and Compliance	41				
			Social and Community Engagement	97				
	2-27	Compliance with laws and regulations	Corporate Governance and Compliance	42				
	2-28	Membership associations	Corporate Governance and Compliance	39				
5. Stakeholder Engagement								
	2-29	Approach to stakeholder engagement	Business Value Chain	15-19				
	2-30	Collective bargaining agreements	Business Value Chain	24				
			Human Rights	113				

GRI content index: GRI 3

GRI STANDARD/ OTHER SOURCE		DISCLOSURE	LOCATION	Page/ Website	OMISSION			SDG Linkage
					REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Material Topics								
GRI 3: Material Topics 2021	3-1	Process to determine material topics	About this Report	28				
	3-2	List of material topics	About this Report	29				
Economic Dimension								
Corporate Governance and Compliance								
GRI 3: Material Topics 2021	3-3	Management of material topics	Corporate Governance and Compliance	32				Goal 12, Goal 16
Anti-Corruption								
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	Corporate Governance and Compliance	39-42				
	205-2	Communication and training about anti-corruption policies and procedures	Corporate Governance and Compliance	40				
	205-3	Confirmed incidents of corruption and actions taken	Corporate Governance and Compliance	42				
Anti-Competitive Behavior								
GRI 206: Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Corporate Governance and Compliance	39-42				
Information Technology Security, Cybersecurity and Data Privacy								
GRI 3: Material Topics 2021	3-3	Management of material topics	Information Technology Security, Cybersecurity and Data Privacy	45				Goal 9
Customer Privacy								
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Information Technology Security, Cybersecurity and Data Privacy	42				
Supply Chain Management								
GRI 3: Material Topics 2021	3-3	Management of material topics	Supply Chain Management	48-49				Goal 8
Supplier environmental assessment								
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	Supply Chain Management	48, 50-51				
	308-2	Negative environmental impacts in the supply chain and actions taken	Supply Chain Management	52				
Supplier social assessment								
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	Supply Chain Management	48, 50-51				
	414-2	Negative social impacts in the supply chain and actions taken	Supply Chain Management	52				
Risk and Crisis Management								
GRI 3: Material Topics 2021	3-3	Management of material topics	Risk and Crisis Management	56				
Risk and Crisis Management								
GRI 3: Material Topics 2021	3-3	Management of material topics	Customer Relationship Management	68				
Customer health and safety								
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	Customer Relationship Management	68-69				
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Performance Data					

GRI STANDARD/ OTHER SOURCE		DISCLOSURE	LOCATION	Page/ Website	OMISSION			SDG Linkage	
					REQUIREMENT(S) OMITTED	REASON	EXPLANATION		
Environmental Dimension									
Environmental Management									
GRI 3: Material Topics 2021	3-3	Management of material topics	Environmental Management	73				Goal 8, Goal 12	
Water and Effluents									
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	Environmental Management	74					
	303-2	Management of water discharge-related impacts	Environmental Management	74					
	303-3	Water withdrawal	Performance Data						
	303-4	Water discharge	Performance Data						
	303-5	Water consumption	Performance Data						
Material									
GRI 301: Materials 2016	301-1	Materials used by weight or volume	Performance Data						
	301-2	Recycled input materials used	Performance Data						
	301-3	Reclaimed products and their packaging materials	Performance Data						
Waste									
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	Environmental Management	75					
	306-2	Management of significant waste-related impacts	Environmental Management	75					
	306-3	Waste generated	Performance Data						
	306-4	Waste diverted from disposal	Performance Data						
	306-5	Waste directed to disposal	Performance Data						
Energy and Climate Change Management									
GRI 3: Material Topics 2021	3-3	Management of material topics	Energy and Climate Change Management	81				Goal 7, Goal 12, Goal 13	
Energy									
GRI 302: Energy 2016	302-1	Energy Consumption within the organization	Performance Data						
	302-2	Energy consumption outside of the organization	Performance Data						
	302-3	Energy intensity	Performance Data						
	302-4	Reduction of energy consumption	Performance Data						
	302-5	Reductions in energy requirements of products and services	Performance Data						
Emissions									
GRI 305: Emission 2016	305-1	Direct (Scope 1) GHG emissions	Performance Data						
	305-2	Energy indirect (Scope 2) GHG emissions	Performance Data						
	305-3	Other indirect (Scope 3) GHG emissions	Performance Data						
	305-4	GHG emissions intensity	Performance Data						
	305-5	Reduction of GHG emissions	Performance Data						
	305-6	Emissions of ozone-depleting substances (ODS)	Performance Data						
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Performance Data						

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	Page/ Website	OMISSION			SDG Linkage			
				REQUIREMENT(S) OMITTED	REASON	EXPLANATION				
Biodiversity										
GRI 3: Material Topics 2021	3-3	Management of material topics	Biodiversity	86			Goal 15			
GRI 304: Biodiversity 2016	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Biodiversity	87						
	304-2	Significant impacts of activities, products and services on biodiversity	Biodiversity	87						
	304-3	Habitats protected or restored	Biodiversity	88						
Social Dimension										
Occupational Health and Safety										
GRI 3: Material Topics 2021	3-3	Management of material topics	Occupational Health and Safety	91						
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	Occupational Health and Safety	91-92						
	403-2	Hazard identification, risk assessment, and incident investigation	Occupational Health and Safety	93-94						
	403-3	Occupational health services	Occupational Health and Safety	93						
	403-4	Worker participation, consultation, and communication on occupational health and safety	Occupational Health and Safety	93						
	403-5	Worker training on occupational health and safety	Occupational Health and Safety	94						
	403-6	Promotion of worker health	Occupational Health and Safety	93						
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational Health and Safety	91-94						
	403-8	Workers covered by an occupational health and safety management system	Occupational Health and Safety	94						
Social and Community Engagement										
GRI 3: Material Topics 2021	3-3	Management of material topics	Social and Community Engagement	96			Goal 4, Goal 10, Goal 16			
Local Communities										
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	Social and Community Engagement	98-100						
	413-2	Operations with significant actual and potential negative impacts on local communities	Social and Community Engagement	101						
Human Capital Management										
GRI 3: Material Topics 2021	3-3	Management of material topics	Human Capital Management	107			Goal 5, Goal 8			
Employment										
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	Human Capital Management	110						
Training and Education										
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	Human Capital Management	110						
	404-2	Programs for upgrading employee skills and transition assistance programs	Human Capital Management	109-110						
	404-3	Percentage of employees receiving regular performance and career development reviews	Human Capital Management	110						
Human Rights										
GRI 3: Material Topics 2021	3-3	Management of material topics	Human Rights	113			Goal 1, Goal 3			
Employment										
GRI 401: Employment 2016	401-3	Parental leave	Human Rights	115						

GRI STANDARD/ OTHER SOURCE		DISCLOSURE	LOCATION	Page/ Website	OMISSION			SDG Linkage
					REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Diversity and equal opportunity								
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	Human Rights	115				
			Annual Report	152				
	405-2	Ratio of basic salary and remuneration of women to men	Annual Report	152				
Non-discrimination								
GRI 406: Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	Human Rights	113-114				
Freedom of association and collective bargaining								
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Human Rights	113				
Child Labor								
GRI 408: Child Labour 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	Human Rights	113				
Forced or compulsory labor								
GRI 409: Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Human Rights	113				
Rights of indigenous peoples								
GRI 411: Rights of Indigenous People 2016	411-1	Incidents of violations involving rights of indigenous peoples	Human Rights	113				





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