

2023

CLIMATE ACTION WHITE PAPER OF CIMC ENRIC

CIMC ENRIC

LNG

LNG

H₂

e-Methanol

CIMC ENRIC

About the Report

CIMC Enric Holdings Limited ("Company" or "the Company" and collectively with its subsidiaries as "the Group" "CIMC Enric" or "we") elaborates on the Company's efforts in managing climate change and crafts this report in alignment with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), especially the four core pillars (i.e., Governance, Strategy, Risk Management, Metrics and Targets) of the TCFD framework.

This report is CIMC Enric's first white paper on climate action. It comprehensively explains the Group's approach to climate risk management and performance and with the aim of discussing climate issues with our stakeholders and reflecting the Group's great ambition under the dual-carbon goal of "carbon peaking and carbon neutrality".



Report Timeline

This report presents details regarding the climate performance of CIMC Enric Holdings Limited and its subsidiaries for the period spanning from January 1, 2023 to December 31, 2023, with some extensions into the near future.



Report Boundary

Unless specified otherwise, this report contains relevant data and information pertaining to CIMC Enric and its subsidiaries as outlined in the Appendix.



Report Data Description

The data for this report pertaining to the Company's historical information is sourced from official documents, statistical reports, financial reports, and climate-related information that has been collected, aggregated, and subjected to audit. Unless specified otherwise, monetary amounts in the report are denominated in RMB.



Forward-Looking Statement

This report contains forward-looking statements. Forward-looking statements can be identified by words or phrases such as "or" "will" "expect" "anticipate" "future" "aim" "estimate" "intend" "seek" "plan" "believe" "potential" "continue" "ongoing" "goals" "purpose" "may" or similar expressions. Forward-looking statements involve inherent risks and uncertainties. Many factors could cause actual results to differ materially from those described in any forward-looking statements. The forward-looking statements made in this report are only specific to the events or information as of the date when the relevant statements are made in this report and are based on current expectations, assumptions, estimates, and forecasts. CIMC ENRIC Holdings Limited is under no obligation to update any forward-looking statements to reflect events or circumstances after the date of making such statements or to reflect the occurrence of unexpected events, except as required by applicable law. For a more comprehensi-

ve view of our financial results and operations for the fiscal year (including various risks that may adversely impact our operating results and financial condition), please refer to our annual report and other filings submitted to HKEX.



Standards Reference

HKEX's Consultation Paper on Enhancement of Climate-related Disclosures under the Environmental, Social and Governance Framework

IFRS S2 Climate-related Disclosures issued by the International Sustainability Standards Board (ISSB)

Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)

Technical Supplement: The Use of Scenario Analysis in Disclosure of Climate-Related Risks and Opportunities issued by the Task Force on Climate-related Financial Disclosures (TCFD)



Publication

This report is published in English and Chinese respectively. In case of discrepancies between the Chinese version and the English translation, the Chinese version shall prevail. Readers and stakeholders can access this report on the Company's website (www.enricgroup.com).



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01

COMPANY OVERVIEW

- About Us
- Global Operations
- Business Overview
- Social Recognition

1.1 About Us

CIMC Enric was established in 2004 and listed on the Hong Kong Stock Exchange in 2005 as a member of China International Marine Container (Group) Co., Ltd. ("CIMC Group"). We are mainly engaged in the design, development, manufacture, engineering and sales of various types of transportation, storage and processing equipment widely used in clean energy, chemicals and environment, liquid food and other industries, and provide related technical maintenance services. Adhering to the development concept of "Green Energy, Clean Logistics, Better Life", we always insist on promoting the use of clean energy and sustainable development through technological progress and product innovation. At the same time, the Company provides customers with high-quality, reliable equipment and professional comprehensive value-added services, provide good returns for employees and shareholders, and creates sustainable value for society as a long-term mission, and is committed to becoming an industry-leading technology-based enterprise in the clean energy, chemicals and environment and liquid food market.

Vision

To become an industry-leading technology-based enterprise in the clean energy, chemicals and environment and liquid food market



Mission

Through technological progress and product innovation, we make energy cleaner, environment sustainable and life more enjoyable, offering customers high-quality, reliable equipment and professional comprehensive value-added services, and good returns for employees and shareholders while creating sustainable value for society!



Development concept

Green energy
Clean logistics
Better life





1.2 Global Operations

With the vision of becoming a global industry leader, CIMC Enric focuses on providing high-quality, reliable and intelligent products and services, and actively creates sustainable value for society. Throughout our innovation and development endeavors, we operate from China with a global outlook and maintain production bases and R&D centers in China, Germany, Netherlands, Denmark and Belgium and many other European countries. Additionally, we have established a product marketing network covering over 100 regions and countries.



3+ Industry Sectors

10+ Product Brands

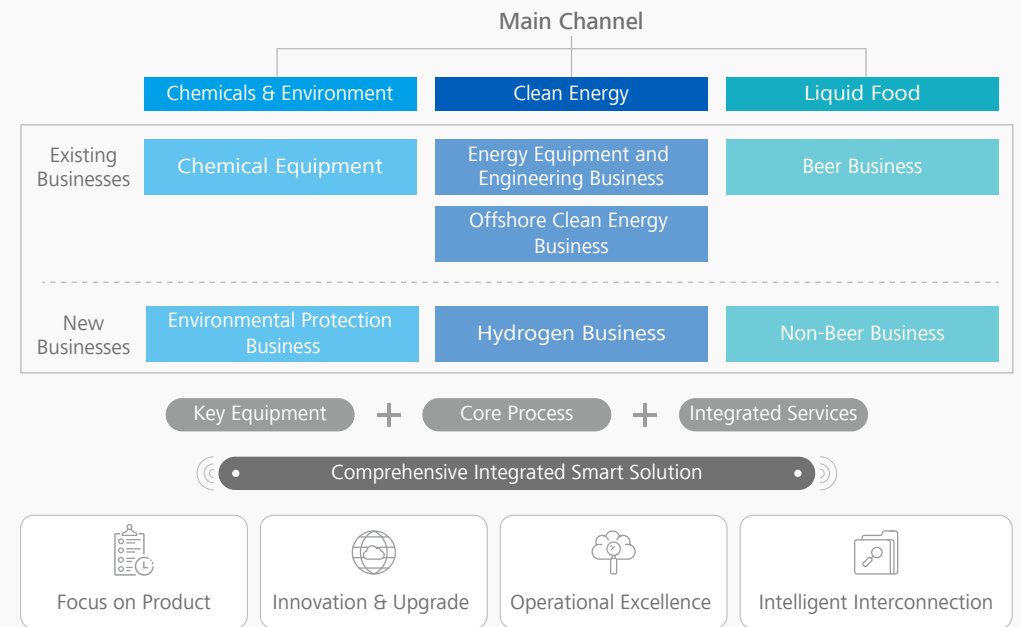
20+ International Manufacturing Bases/R&D Centers

10000+ Employees

1.3 Business Overview

CIMC Enric is a leading integrated business service provider and a major equipment manufacturer in the sectors of clean energy, chemicals and environment, and liquid food, with a focus on "key equipment, core process and integrated services". Our offerings include key equipment, engineering services, and systematic intelligent solutions for transportation, storage, and processing. Among them, our ISO liquid tanks, cryogenic liquid trailer, and cryogenic storage tanks, as well as large storage tanks for LNG terminals and CNG fueling stations, are widely recognized by domestic and international markets. The subsequent section outlines our business product portfolio and core business value chain.

Product Portfolio



Four strategic focus areas are highlighted with icons: Focus on Product, Innovation & Upgrade, Operational Excellence, and Intelligent Interconnection.

Core Product Matrix

Comprehensive deployment of natural gas-focused onshore + offshore clean energy



Onshore clean energy industry chain



Upstream (production and processing)

- Liquefaction plant/wellhead skid-mounted equipment
- Onshore wellhead gas treatment and processing



Midstream (distribution)

- Clean energy distribution equipment
- LNG peak shaving storage equipment and engineering
- Other clean energy storage equipment and engineering



Downstream (application)

- Clean energy equipment for transportation
- Commercial and industrial LNG small fuel tanks



Offshore clean energy industry chain



Upstream (production and processing)

- Offshore oil and gas processing module



Midstream (distribution)

- Small and medium-sized gas carriers (LEG/LPG/LNG)



Downstream (application)

- Oil-to-gas conversion for ships (marine tanks and power systems) (inland waterways, coastal)
- LNG bunkering vessel and offshore/onshore bunkering



Hydrogen industry chain



Upstream (production and processing)

- Hydrogen production from methanol and hydrogen refueling demonstration project
- Hydrogen production from coke oven gas demonstration project



Midstream (distribution)

- Hydrogen tube bundle trailer
- Liquid hydrogen storage tank



Downstream (application)

- Hydrogen refueling station
- Hydrogen cogeneration building
- Type III and Type IV on-vehicle hydrogen cylinders

Chemical tanks and environmental protection equipment

Chemical Tank Containers



- Liquid tanks, gas tanks, powder tanks
- Tank services
- Tank operation intelligence

Environmental protection equipment



- Environmental protection equipment
- Hazardous waste disposal
- Solid waste utilization

Liquid food equipment and engineering

Beer business



- Industrial beer turnkey projects
- Craft beer projects and modules

Non-beer business



- Distilled Spirits turnkey Project
- Biopharmaceutical turnkey Project
- Others



1.4 Social Recognition

Engagement in Green Standards

CIMC Enric is dedicated to advancing green development and championing ecological protection in the industry. We actively contribute to the development of national standards, local standards, group standards and enterprise standards. Notably, in the past two years, our involvement in green standards includes:

► National Standards

GB/T 42612-2023	Fully-wrapped carbon fiber reinforced cylinders with a plastic liner for the on-board storage of compressed hydrogen as a fuel for land vehicles
GB/T 42610-2023	Test method for evaluating hydrogen compatibility of plastic liner of high pressure gaseous hydrogen cylinders
GB/T 42626-2023	Periodic inspection and evaluation of fully-wrapped fibre reinforced composite gas cylinders of compressed hydrogen gas for automotive vehicles
GB/T 12337-2014	Steel spherical tanks, includes Amendment 1
HJ2026-2013	Technical specifications of adsorption method for industrial organic emissions treatment project
HJ1093-2020	Technical specifications for industrial organicwaste gas treatment by regenerative thermal oxidation

► Local standards

DB13/T 5753-2023	Technical requirements for hydrogen transportation on long tube trailers
DB32/T 4041-2021	Integrated emission standard of air pollutants in Jiangsu Province

► Company standards

Q/320582SDY27-2023	Fixed Vacuum Insulated Liquid Hydrogen Spherical Pressure Vessel
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► Group standards

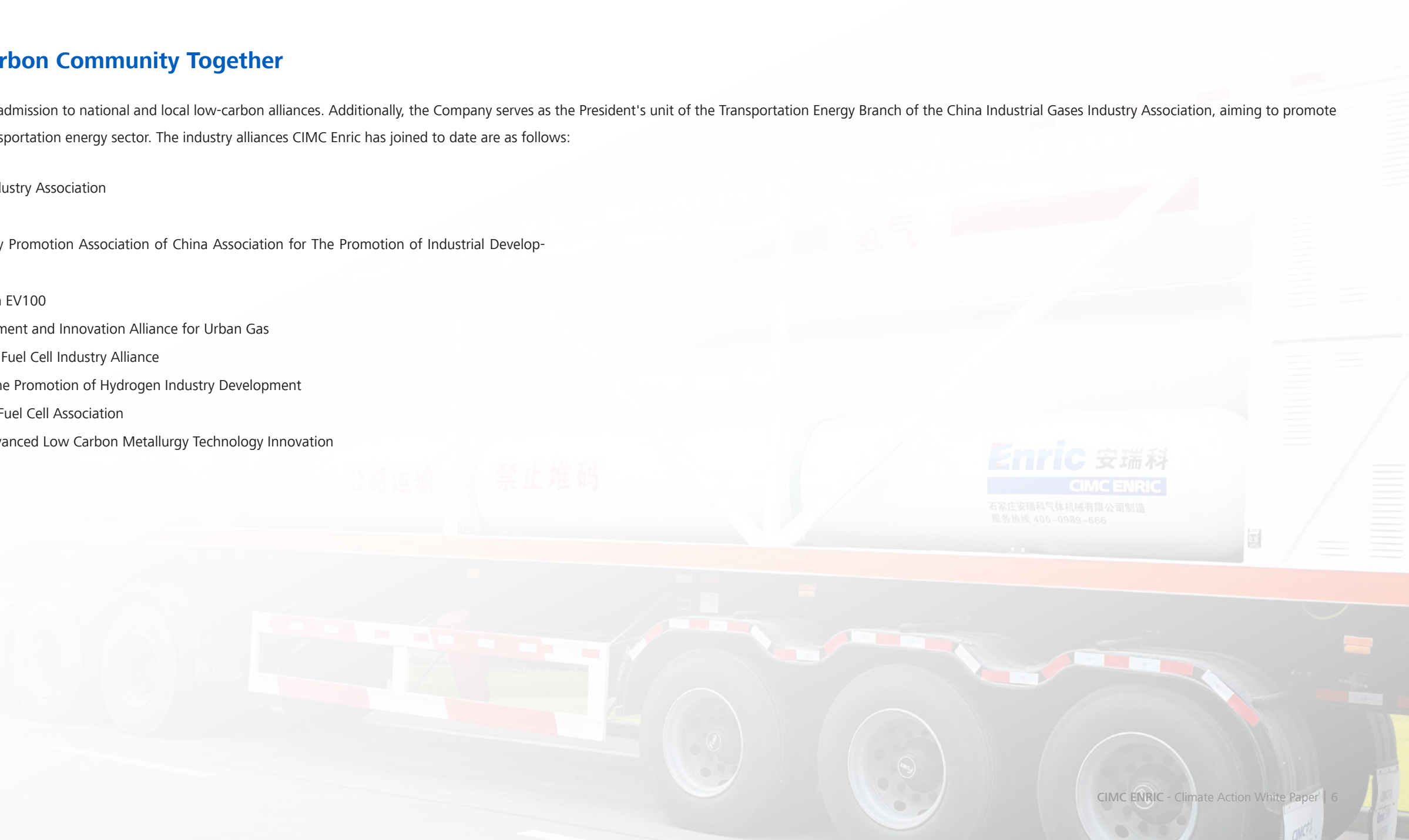
T/CATSI 05007—2023	Special technical requirements for transportable vacuum-insulated liquid hydrogen pressure vessels
T/CATSI 05008—2023	Special technical requirements for compressed hydrogen aluminum liner carbon fiber full winding bottle container
T/CGMA 0405-2022	Cryogenic valves for hydrogen — General test method
T/CGMA 0407-2022	Cryogenic valves for hydrogen — General technical specifications
TCCGA 10007-2021	Safety technical regulation for filling cylinders basket
TCCGA 20006-2021	Safety technical rule for the use of gas cylinders
TCCGA 40003-2021	Technical regulations for safety use of hydrogen tube trailer
TCCGA 40004-2021	Technical regulations for safety use of diaphragm compressor for hydrogen refueling station
TCCGA 40005-2021	Technical specification for safe use of hydraulic piston compressor for hydrogen refueling station
TCCGA 40007-2021	Technical regulations for the safe use of automobile compressed hydrogen plastic liner carbon fiber fully wrapped gas cylinders
TCCGA 40008-2021	Technical regulations for the safety of hydrogen systems on vehicle
TCCGA 40009-2021	Technical regulation for the safety of liquid hydrogen systems on vehicle
TCCGA 40010-2021	Technical specification for safe use of liquid hydrogen filling machine
TCCGA 40011-2021	Technical regulation for the safety of liquid hydrogen dewar
T/GDGM 0002-2019	Technical specification for green-design product assessment - low-alloyed steel road tanker for liquefied gas



Building Low Carbon Community Together

CIMC Enric actively pursues admission to national and local low-carbon alliances. Additionally, the Company serves as the President's unit of the Transportation Energy Branch of the China Industrial Gases Industry Association, aiming to promote carbon reduction in the transportation energy sector. The industry alliances CIMC Enric has joined to date are as follows:

- China Industrial Gases Industry Association
- China Hydrogen Alliance
- Hydrogen Energy Industry Promotion Association of China Association for The Promotion of Industrial Development
- Hydrogen Forum of China EV100
- China Hydrogen Development and Innovation Alliance for Urban Gas
- China Z-Park Hydrogen & Fuel Cell Industry Alliance
- Qinghai Association for the Promotion of Hydrogen Industry Development
- Shenzhen Hydrogen and Fuel Cell Association
- Hubei Consortium on Advanced Low Carbon Metallurgy Technology Innovation





02

GOVERNANCE

- Climate Governance
- Climate-linked Remuneration

2.1 Climate Governance

CIMC Enric has established a robust ESG governance structure with explicit responsibilities. The Company is committed to integrating climate governance with its business philosophy through a top-down governance structure. This approach ensures the effective and organized implementation of climate action.

CIMC Enric's ESG Governance Structure

▼ Duties

- Be fully responsible for the Company's ESG work;
 - Issue the statement of the Board of Directors and approve the ESG report;
 - Propose ESG strategy and target resolutions.
- Exercise ESG duties on behalf of the Board of Directors;
 - Review major ESG issues, monitor the implementation and review the progress of goals;
 - Review the ESG report and make disclosure recommendations.
- Formulate ESG policy objectives and allocate resources;
 - Deliberate on major ESG issues;
 - Internal approval of the ESG report;
 - Organize and check the achievement of policy objectives.
- Regularly supervise the progress of ESG work and policy objectives, and put forward suggestions for improvement;
 - Organize the preparation and disclosure of ESG reports, as well as external exchanges and training activities.
- Concretely implement the Company's ESG improvement work;
 - Cooperate with the submission of ESG data and cases.

▼ Organization and Structure



▼ ESG work leader team members and their respective functions

Members (departments)	Functions
President	Team Leader , general coordinator
The Secretary of the Board (Office of the Secretary of the Board)	Executive team leader , coordinating report preparation, information disclosure, and board coordination
Digital Lean Security Department	Lead department , resource use, product responsibility, emissions, HSE, intelligence, information security
Enterprise Management Department	Lead department , supply chain management product sales
Science and Technology Innovation Sharing Centre	Product responsibility, technological innovation
Human Resources & Administration Department	Employment, development and training, labor standards, community investment
Legal Compliance Department	Anti-corruption, internal control system, overseas enterprise coordination
Strategic Development Department	Development strategy, corporate honor
Financial Management Department	Enterprise credit, tax payment



In November 2023, the Board of Directors of CIMC Enric reviewed and approved revisions to the Charter and Terms of Reference of the Sustainable Committee of CIMC Enric (the "Charter"). These changes solidify the committee's role in addressing ESG trends, identifying and overseeing emerging risks such as climate change, and monitoring climate change indicators and targets, thereby promoting more comprehensive and practical climate governance. The updated Charter also mandates the Sustainable Committee to provide recommendations to the Board of Directors and obtain their approval for the disclosure of sustainability-related issues and the setting of targets, which enhances the Board of Directors' involvement and oversight of climate-related risks and opportunities.



Major Updates



Board of Directors

New responsibilities

- Reviewing the Sustainable Committee's recommendations concerning ESG (including climate risks and opportunities) performance improvement, ESG-related risks, measures, policies, etc.
- Assessing the Company's sustainability-related disclosures, including ESG reporting and climate reporting.
- Promoting and facilitating collaboration between the Sustainable Committee and other standing committees.



Sustainable Committee

New responsibilities

- Overseeing and reviewing ESG (including climate risks and opportunities) trends and issues.
- Developing and reviewing ESG (including climate risks and opportunities) objectives, strategies, risks, measures, policies, materiality issues, management guidelines and budgets for research.
- Monitoring and reviewing the effectiveness of ESG (including climate risks and opportunities) objectives, company performance, and action plans.

Mode and frequency of communication

- Conducting a minimum of one annual meeting and arranging additional ad hoc meetings as necessary.
- Presenting the Company's ESG (including climate risks and opportunities) work plan and recommendations to the Board of Directors timely.

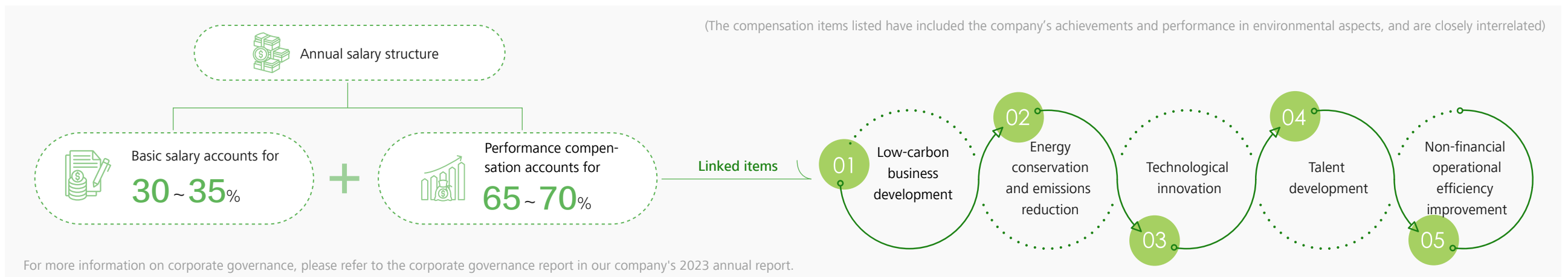
2.2 Climate-linked Remuneration

ESG-linked remuneration of directors and executive management and clawback mechanism

CIMC Enric has established a mechanism for linking climate issues and executive pay, which is overseen by the Remuneration Committee. Currently, the performance-based remuneration of the Company's executive directors and senior management is tied to key ESG issues, forming a vital component of their remuneration assessment results. The ESG issues cover aspects such as low-carbon business development, energy conservation, emission reduction, technological innovation, and/or improvement of non-financial operational efficiency. Two indicators, namely "Low-carbon business development (contribution to carbon reduction in the value chain)" and "Energy saving and emission reduction (internal carbon reduction)", are linked to climate transition risk. The Company has introduced a demerit point system and a one-vote veto system for bottom-line issues affecting the Company's long-term development, including health and safety, anti-corruption, and compliance operations. Simultaneously, in case of a significant incident, the Company will, based on the circumstances and impact, undertake actions such as deducting the relevant performance pay and imposing extra administrative and financial liabilities.

As a result, in the annual assessment conducted for senior management within the Company, ESG issues have become an important part influencing the compensation assessment. Due to the different roles and responsibilities carried by relevant individuals, the degree of linkage between their compensation assessment indicators and ESG-related issues varies.

► Take the compensation structure of the executive director and President of the Company as an example



► We have policies on deferred payment of remunerations and clawback provisions

Deferred Payment

Regarding the deferred payment, the Company's Board started a long-term equity incentive plan in April 2020 for employees, to award outstanding employees and retain key personnel for the Company's long-term development. To selected qualified participants, long-term incentives are vested in three phases during 2022 to 2024 on the condition that participants meet established criteria in terms of performance achieved in the year upon the approval of the Company's Board.

Clawback Provisions

The clawback provisions is implemented in strict compliance with the Company's Regulations on Integrity of Cadres and Personnel in Sensitive Positions of CIMC Group which specifically define employees' (including executive directors and executive management) behaviors in violation of regulations and discipline. The salary clawback provisions and bonus clawback system include, but are not limited to, the deduction of year-end bonuses, options and share awards, withholding of bonuses paid and/or additional financial compensation, etc.

The performance of the executive directors and senior management will be reviewed and appraised annually or upon significant changes to ensure the compliance awareness and ability of the executive directors and senior management to perform their duties to safeguard the long-term sustainable and healthy development of the Company.

For more information on corporate governance, please refer to the corporate governance report in our company's 2023 annual report.





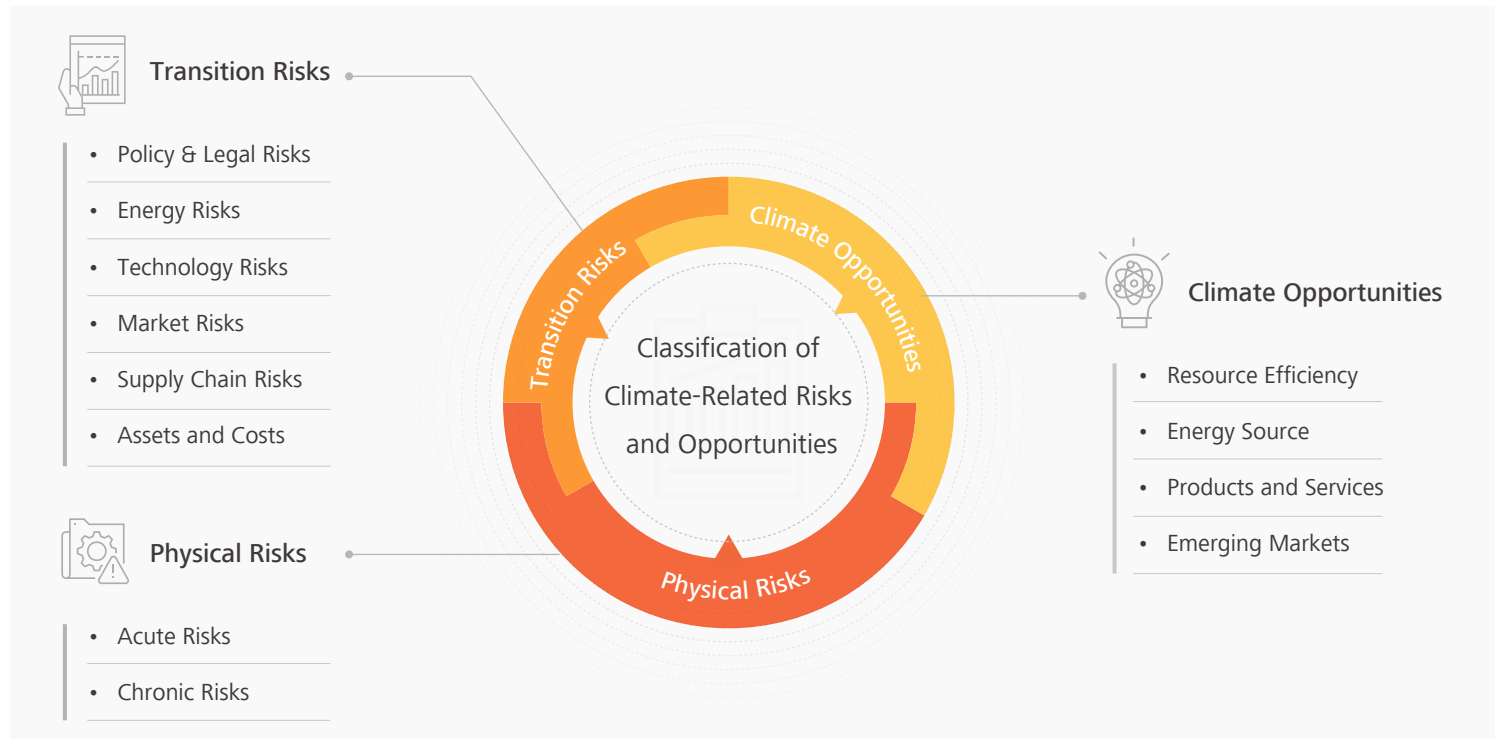
03

STRATEGY

- Risks & Opportunities
- Scenario Analysis

3.1 Risks & Opportunities

To gain deeper insights into the impact of climate change on the Company, the associated risks and opportunities, and to fortify the Company's business resilience, CIMC Enric has carried out the identification and assessment of climate-related risks and opportunities aligned with HKEX's Consultation Paper on Enhancement of Climate-related Disclosures under the Environmental, Social and Governance Framework and the IFRS S2 standard. This involved in-depth research into policy information, market dynamics, and technological trends, followed by the assessment, analysis, and consolidation of climate-related risks and opportunities. Impact evaluations were conducted against established criteria, and based on the results, risks and opportunities were ranked by materiality to create a matrix and generate a list of key risks and opportunities.



Climate-related Risks and Opportunities Matrix

We have identified 11 physical risks, 10 transition risks, and 13 climate-related opportunities through value chain analysis, industry assessment, and stakeholder surveys related to CIMC Enric's business and operations. Prioritization of these risks and opportunities was based on the severity and frequency of climate risks, and the alignment of external attractiveness and internal capacity of climate opportunities (please refer to the risk management process for the assessment methodology). This was achieved with the involvement of relevant departments and member units¹. The matrix diagram is shown below.

Additionally, due to the variability in business models and the potential disparities in climate risks, we conducted separate internal research for different business categories, specifically equipment + process business and engineering services business.

1. The member units covered in this research comprise those in the category of equipment and process business, including CIMC Sanctum, Shijiazhuang Enric, CIMC Hongtu, Nantong Energy, CIMC Enric Hydrogen Energy, CIMC Safeway, and SOE; and those in engineering service business include CIMC EnTech.

Climate-Related Risks

According to the TCFD recommendations, climate-related risks are categorized into two main categories:



Physical risk

Physical risk entails the physical impact of climate change. By characteristics, it includes acute physical risks and chronic physical risks. Acute physical risks are short-term incident-caused climate hazards, such as extreme heat, tropical cyclone, extreme precipitation, and river flooding. Chronic risks result from prolonged changes in climate attributes, including wet trends, wind speed trend, and sea level rise.

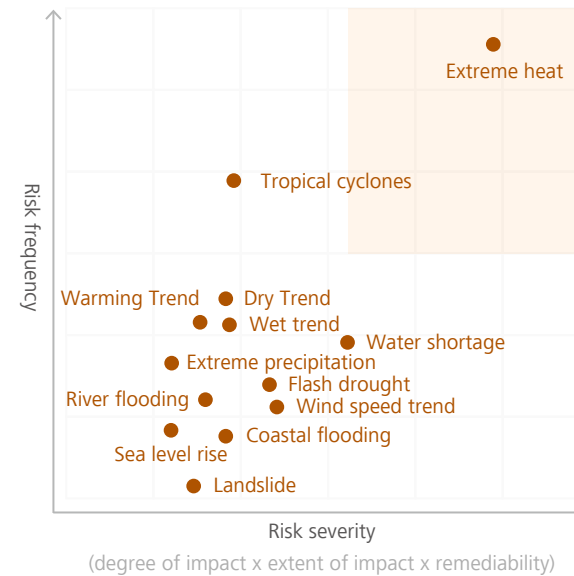


Transition risk

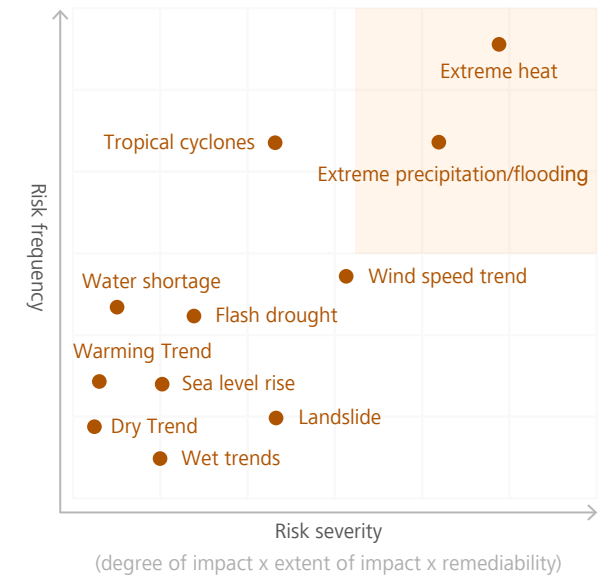
As defined by the International Monetary Fund (IMF), this risk arises from shifts in climate policy, technology, and market sentiment during the transition to a low-carbon economy, potentially causing fluctuations in asset prices and broader economic crises. In simple terms, it represents the potential economic cost of mitigating and adapting to climate change globally. This transition requires changes in policy, legislation, technology, and markets, posing reputational and financial risks to companies to varying degrees.

Physical Risk Matrix

Equipment + process business



Engineering service business

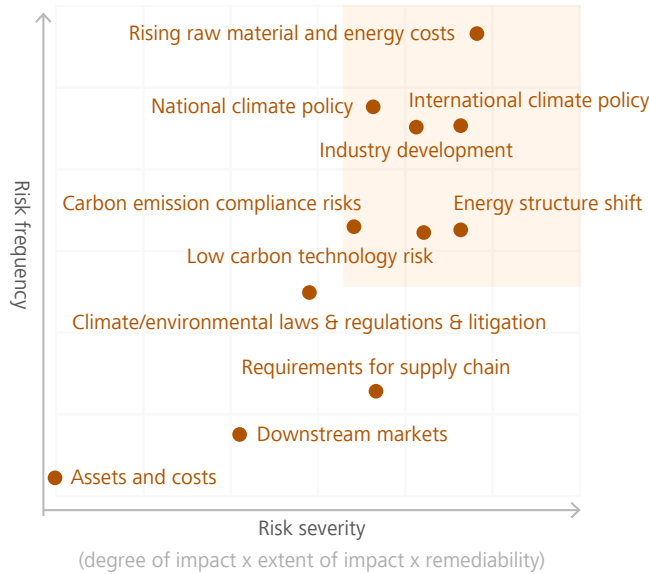


For the evaluation of physical risks, we identified and prioritized risks such as extreme heat, tropical cyclone, extreme precipitation, flash drought, wind speed trend, and sea level rise. Our findings indicate that extreme heat poses the highest risk to business continuity across all surveyed companies. This is primarily reflected in an increase in power load pressure resulting in power restrictions and production limitations, which are characterized by suddenness and difficulty to predict, alongside reduced employee efficiency due to discomfort in high temperatures. Although tropical cyclone frequently impact the surveyed companies, their predictability (usually one week in advance) allows CIMC Enric to implement effective preventive measures, thus minimizing their operational impact. In the field of engineering service business, due to the fact that engineering construction usually happens in the construction site designated by the client, project operations are subject to uncertainties in operation sites and outdoor activities, rendering them susceptible to climate-related disruptions at project sites. Consequently, extreme precipitation, flooding, and other climate events also represent significant risk points for the engineering services business.

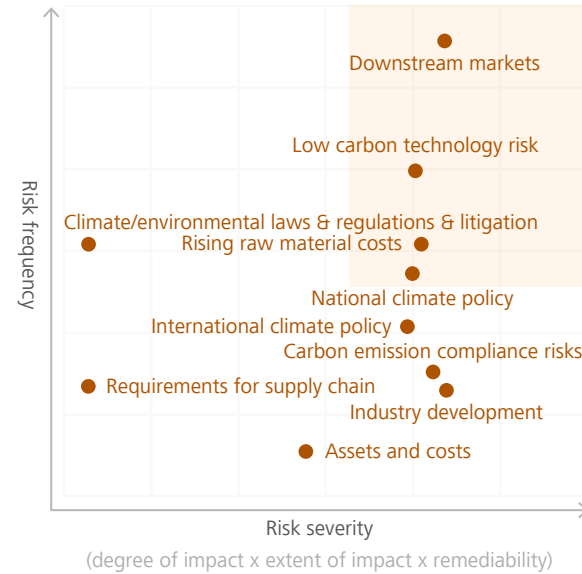


► Transition Risk Matrix

• Equipment + process business



• Engineering service business



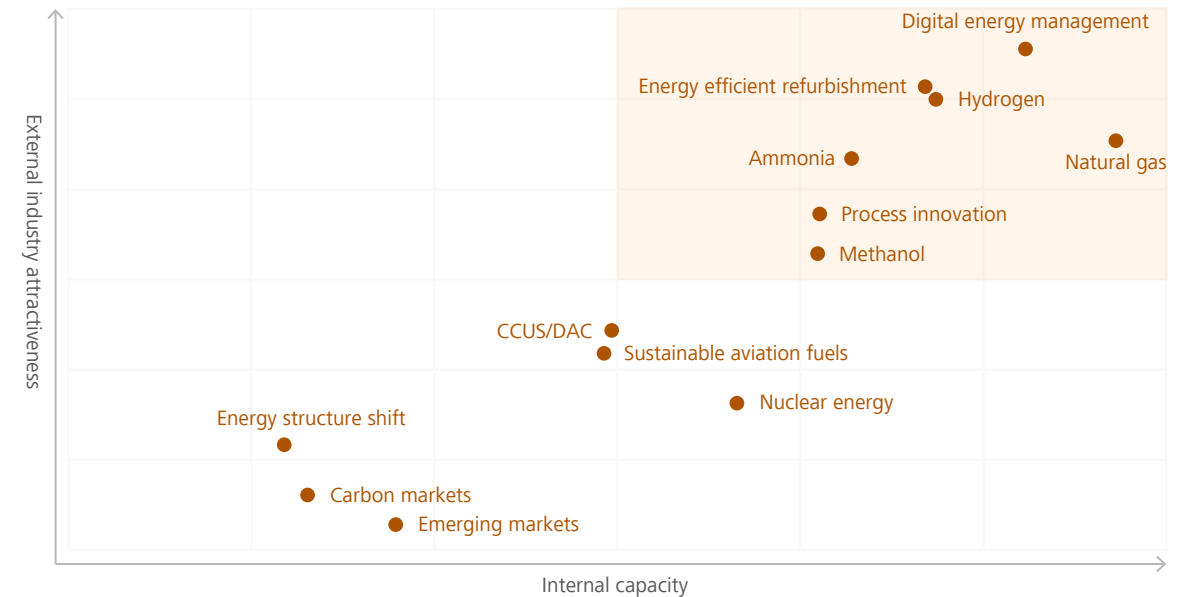
In examining transition risks, we align with the comprehensive risk categories proposed by TCFD, encompassing policy and legal risks, technology risks, market risks², etc., with further segmentation into subcategories. As major global economies reinforce climate change-related policies and regulations, such as China's "1+N" policy system, the EU's Fit for 55, and the Inflation Reduction Act of the U.S., companies must attach importance to an array of transition risks stemming from these policies. Climate-related policies fall into two primary categories: those that curtail activities with adverse climate impacts, and those that bolster adaptive capabilities to climate change. Under the strain of restrictive policies, CIMC Enric is presently prioritizing risks including escalated energy/raw material costs, low-carbon technology risks, energy structure shifts, and carbon emission compliance risks. Furthermore, we are monitoring the projected peak

2. The research process did not include the assessment of reputational risk since we believe that reputational risk is an outcome of climate practices. CIMC Enric emphasizes process control in climate transition to preempt reputational issues at the source.

demand for natural gas, which is a transitional energy source in the process of net-zero transition, in the Asia-Pacific region between 2035 and 2040, followed by a plateau phase. Therefore, we will continue to track the natural gas industry dynamics and intensify our research and development endeavors in other clean energy sectors to ensure a smooth transition prior to this phase. In the context of engineering service business, the minimal energy demand (contributing less than 1% to CIMC Enric's overall emissions) diminishes risks associated with energy structure shift and carbon emission compliance to peripheral concerns.

Climate-related Opportunities

Mitigating and adapting to the impacts of climate change poses risks and offers opportunities for greater growth via resource efficiency and cost savings, low-emission energy sources, product and service innovation, new market expansion, and supply chain resilience.








In the assessment of climate opportunities, CIMC Enric, a provider of key equipment and engineering services for clean energy, is focused on identifying future low-carbon transition and clean energy business prospects relevant to the Company. Operationally, our priority is the advancement of energy efficient refurbishment, process improvements, digital energy systems, and other related low-carbon initiatives. In terms of business development, we aim to expand into additional sectors in the future, specifically green ammonia and green methanol, building on our current clean energy sources, such as natural gas and hydrogen. Furthermore, we are attentive to opportunities in the carbon market, CCUS/DAC, sustainable aviation fuels, and similar areas; we intend to strategically enter these domains as they mature.

Timeline

In order to have a closer look at the potential impact of each climate risk and opportunity on CIMC Enric, the Company has classified the occurrence timeline of climate-related risks and opportunities into short-term (2023-2025), medium-term (2026-2030), and long-term (2031-2050). A thorough evaluation of the identified risks and opportunities has been carried out to assess their impact period. The analysis has yielded the following specific results:

Timeline	Period	Year	Description
Short-term	 1-3 years	2023–2025	CIMC Enric will review and create short-term work plans every 3-5 years, aligning them with its current development status and CIMC Group's strategy. The upcoming 2025 marks the initiation of a new five-year plan, the most crucial period preceding carbon peaking. Consequently, regulatory pressure is expected to increase significantly.
Medium-term	 3-10 years	2026–2030	The IEA's World Energy Outlook 2023 highlights the global energy transition and carbon reduction path until 2030, which corresponds to China's "3060 Dual Carbon Goal of Carbon Neutrality and Carbon Peaking" and the "15th Five-Year Plan". This serves as the foundation for CIMC Enric's analysis of medium-term climate risks and opportunities.
Long-term	 10-30 years	2031–2050	The year 2050 aligns with the normative scenarios of IEA's projections, including the IPCC's conclusion of net-zero emissions for 2050, and it is also in line with the primary energy-related objectives of the UN Sustainable Development Goals (SDGs). Consequently, CIMC Enric has chosen it as the long-term timeframe for assessing climate risks and opportunities.

Impact Assessment and Response

We further analyze the climate-related risks and opportunities across every segment of the Company's value chain. Considering potential impacts and financial shocks, we then implement targeted initiatives to mitigate their effects on business operations.



Regarding climate-related risks

Each member company devises and enacts appropriate contingency plans and response procedures informed by risk assessments and business impact analyses to ensure the continuity or swift recovery of resources, critical business processes, and facility operations. Furthermore, we routinely review and promptly test the response plans and procedures and make adjustments and optimizations according to potential changes in the external physical environment.



In terms of climate opportunities

We actively engage with factors such as shifts in domestic and international climate policies, alterations in upstream and downstream market demands, technological innovation, energy structure shift, and low-carbon product research and development. We proactively establish plans through energy-saving technological advancements, low-carbon production methods, and the creation of green solutions to transition risks into opportunities and prepare for potential paths in the future, ensuring our ability to adapt and respond to evolving external demands.



Physical Risk Impact Assessment and Response

Risk category	Short-term	Medium-term	Long-term	Description of potential impact	Value chain impact	Financial impact	Response
Extreme heat Warming trend Flash drought	✓	✓	✓	<ul style="list-style-type: none"> High temperatures and power constraints can cause capacity limitations, necessitating scheduling adjustments and leading to occasional downtime in projects Rising temperatures can drive higher energy usage and more frequent maintenance needs for operations, plant ventilation, refrigeration, cooling, and air conditioning Unexpected extreme heat events can pose health and safety risks for employees working in outdoor environments 	Operation	<ul style="list-style-type: none"> Increased operating and administrative costs Loss of revenue due to operational disruptions 	<ul style="list-style-type: none"> Design photovoltaic and energy storage initiatives to boost the share of renewable energy supply and bolster the resilience of each facility for managing peak power demand Develop energy storage projects to enhance operational continuity in the face of power constraints and production limitations stemming from extreme heats Furnish facilities including generators for preparedness and enable flexible adaptation of working hours during summer power constraints Develop an Emergency Response Plan for heat stroke incidents Conduct emergency drills for heat stroke incidents in summer to enhance our emergency response capacity Implement special measures to prevent heatstroke at construction sites during summer, including the establishment of high-temperature rest areas, dissemination of pertinent materials, contraindication risk assessment for high-temperature tasks, and provision of high-temperature subsidies, to safeguard personnel well-being
Extreme precipitation Flooding	✓	✓	✓	<ul style="list-style-type: none"> Urban flooding can damage or submerge assets like plants, equipment, and inventory Intense short-term rainfall can cause local water ingress or leaks in the plant and workshops, rendering equipment unusable and halting local operations Heavy rainfall may strain plant drainage systems, potentially causing ground flooding or equipment loss or damage 	Operation	<ul style="list-style-type: none"> Increased operating and administrative costs Decrease in revenues in the event of a major natural disaster that results in a shutdown of production Increase in employee and equipment insurance cost Loss of value and impairment of assets 	<ul style="list-style-type: none"> Member units have independently developed emergency plans and response procedures for typhoon and flood prevention, including the Emergency Plan for Typhoon and Flood Prevention, the Guidelines on Emergency Response Procedures for Typhoon and Flood Prevention, and the Natural Disasters Emergency Plan Conduct flood control emergency drills and address identified issues with targeted improvements Prior to the start of the rainy season, implement preparatory flood control measures and ensure the availability of comprehensive flood control materials to enhance emergency response readiness for the flood season During the rainy season, conduct thorough inspections, enhance the arrangement and reinforcing of equipment in low-lying and vulnerable areas, verify the safety of electrical circuit facilities, and inspect the dredging of rainwater wells and drainage pipes, among other tasks Arrange emergency drills for typhoon and flood prevention and implement specific improvements based on identified drill issues



Risk category	Short-term	Medium-term	Long-term	Description of potential impact	Value chain impact	Financial impact	Response
Tropical cyclone (typhoons, hurricanes) Wind speed trend	✓	✓	✓	<ul style="list-style-type: none"> • Typhoons or hurricanes can result in damage to buildings, including factories (e.g., roofs, roller shutters, doors, and windows). Equipment and facilities on construction sites, such as cranes, may also sustain damage and pose safety risks. Damaged dockside vessel cables may cause vessels to drift or collide with docks • When a typhoon results in the suspension of outdoor operations or equipment damage, it may slightly impact project costs but will not affect overall project delivery • Extreme weather accompanied by lightning may cause malfunctions in the plant's power distribution system and elevate the risk of accidents, including electrical fires and explosions • Strong winds can restrict traffic or damage transportation infrastructure, impacting the transportation of products upstream and downstream • Safety risks for employees, customers, contractors, and suppliers will increase 	Operation	<ul style="list-style-type: none"> • Increased operating and administrative costs • Decrease in revenues in the event of a major natural disaster that results in a shutdown of production • Increase in employee and equipment insurance cost • Loss of value and impairment of assets 	<ul style="list-style-type: none"> • Member units have independently developed emergency plans and response procedures for typhoon and flood prevention, including the Emergency Plan for Typhoon and Flood Prevention, the Guidelines on Emergency Response Procedures for Typhoon and Flood Prevention, and the Natural Disasters Emergency Plan • Prior to the arrival of tropical cyclones, monitor meteorological warnings, issue advance warning notices, activate the emergency response plan, anticipate site safety risks, implement preventive measures, and ensure completion of safety checks against strong winds • Upon the arrival of a tropical cyclone and based on different meteorological warning signals, execute key flood and typhoon prevention measures according to the emergency procedure guidelines • Engineering projects should acquire natural disaster insurance to mitigate risks before project commencement
Landslide	✓			<ul style="list-style-type: none"> • Currently, no projects are located near mountainous areas. However, should there be future projects near rock slopes or mountains, CIMC Enric will conduct comprehensive assessments of the risks related to landslides, including factory collapse, operational interruptions, equipment damage, and personnel safety concerns. 			
Water shortage			✓	<ul style="list-style-type: none"> • Plants or engineering projects with high water consumption may face restrictions on water usage, leading to a reduction in production capacity • This affects water availability concerning both quality and quantity of water. For instance, nuclear power Ag water devices have specific water quality requirements 			
Sea level rise			✓	<ul style="list-style-type: none"> • Currently, no projects require consideration of this climate risk. Long-term impacts will be evaluated through scenario analysis 			



Transition Risk Impact Assessment and Response

Risk type	Short-term	Medium-term	Long-term	Description of potential impact	Value chain impact	Financial impact	Response
International and domestic climate policies	✓	✓	✓	<ul style="list-style-type: none"> Stricter national climate policies may raise the cost of carbon management. For instance, the recent State Council executive meeting addressed the Energy Law of the People's Republic of China (Draft) and approved the Interim Regulations on the Administration of Carbon Emission Trading (Draft), among others The Carbon Border Adjustment Mechanism (CBAM) will enforce carbon tariffs on EU imports. This may pose a risk of increased costs for the export of CIMC Enric's related products, as reflected in the establishment of CBAM in Regulation (EC) No. 2023/956 7311 00, pertaining to Iron and Steel Containers for Compressed or Liquefied Gases The EU CSRD has been officially implemented, necessitating sustainable information disclosure and reporting verification for businesses operating within the European Union 	Upstream; Operations	<ul style="list-style-type: none"> Increased operating and administrative costs Capital expenditures in the short term 	<ul style="list-style-type: none"> Closely monitor the development of policies, laws, and regulations Actively engage in the development of national, industry, group, and other relevant standards Prudently incorporate climate-related goals and standards into investment decisions Augment reasonable investments, implement emission reduction measures, and enhance energy consumption management to align with policy requirements Deliberate timely transfer of production capacity to foreign countries for risk mitigation Adhere strictly to local regulatory requirements for information disclosure, undergo verification to prevent false information disclosure, greenwashing, and other related issues
Industry development		✓	✓	<ul style="list-style-type: none"> The trade-off between decarbonization and security of supply will limit investment decisions in natural gas for numerous companies Natural gas serves as a transitional energy source for achieving net-zero emissions. According to the IEA, global consumption demand for natural gas is projected to peak between 2030 and 2035, carrying the risk of a subsequent decline in demand 	Upstream; Operations	<ul style="list-style-type: none"> Increase in R&D costs Decrease in revenue 	<ul style="list-style-type: none"> Enhance market insights and promptly adapt business development strategies Effectively manage internal operations and conduct thorough competitor analysis to safeguard product advantages
Upstream raw materials	✓	✓	✓	<ul style="list-style-type: none"> Rising raw material costs, particularly for steel, pose a challenge for energy-intensive enterprises due to the potential increase in energy and carbon prices, which could be transferred to corporate expenditures. 	Upstream	<ul style="list-style-type: none"> Increase in production costs 	<ul style="list-style-type: none"> Enhance research and development efforts and mitigate risk by judiciously substituting raw materials Revamp and enhance procurement processes to incorporate innovative and sustainable practices while formulating targeted green procurement strategies Collaborate with suppliers to achieve low-carbon transition



Risk type	Short-term	Medium-term	Long-term	Description of potential impact	Value chain impact	Financial impact	Response
Downstream market		✓	✓	<ul style="list-style-type: none"> Downstream market demand is shifting away from high carbon footprint products towards green, low-carbon alternatives; failure to transform products may impact company revenue 	Downstream	<ul style="list-style-type: none"> Decrease in revenue 	<ul style="list-style-type: none"> Enhance customer communication and proactively anticipate their needs Expand exploration and research on product carbon footprints Boost research and development of clean energy and environmental protection products
Low carbon technology innovation	✓	✓	✓	<ul style="list-style-type: none"> Discrepancies between the R&D costs of low-carbon technological innovations and their subsequent benefits could impact the Company's financial performance Investments in external low-carbon technological innovations are making the Company's products less competitive 	Operations	<ul style="list-style-type: none"> Increased R&D costs Accelerated depreciation of high-energy consuming equipment Decrease in revenue 	<ul style="list-style-type: none"> Develops low-carbon technological innovations driven by market demand while mitigating market risks effectively Establish a specialized R&D center to enhance low-carbon research and development, including hydrogen production and storage tank design optimization, among others. Additionally, the R&D outcomes can facilitate the commercialization of scientific and technological advancements Undertake energy-saving upgrades to enhance equipment energy efficiency; expedite the disposal of high-energy-consuming and low-value assets to mitigate the risk of stranded assets
Energy structure shift	✓	✓	✓	<ul style="list-style-type: none"> The government issued a "dual-control" carbon emissions target, leading to an expected rise in the frequency of energy control events, including power restriction, dual-control, and staggered power consumption, ultimately limiting electricity usage for regular operations Neglecting timely assessment and adjustment of the energy use structure may result in higher energy expenses. Furthermore, substantial capital investment is necessary for green power projects and procuring green energy 	Operations	<ul style="list-style-type: none"> Increased operating and administrative costs Capital expenditures in the short term 	<ul style="list-style-type: none"> Establish photovoltaic power generation and incorporate green power procurement to reduce dependence on conventional fossil fuels Strategically design the layout of energy storage devices to enhance the reliability and stability of microgrid power supply Deploy digital energy monitoring and management systems and associated enhancement measures Improve the operational efficiency of plant facilities through process innovation, energy-saving technologies, and other relevant measures
Carbon emission compliance risks		✓	✓	<ul style="list-style-type: none"> The national policy has transitioned from dual-control of energy consumption to dual-control of carbon emissions. This shift has elevated the challenges for carbon emission control and compliance The re-launch of the CCER market raises the prospect of expanding mandatory compliance, potentially leading to escalated costs for enterprises COP 28 countries did not adopt the latest proposal of Article 6.2 and 6.4, expressing concerns about the voluntary carbon market's ability to recognize high-quality carbon credits. This situation introduces a level of uncertainty into the future carbon market 	Upstream	<ul style="list-style-type: none"> Non-operating expenses 	<ul style="list-style-type: none"> Monitor these risk topics, stay informed about relevant domestic and international policies, and plan in advance Improve the energy-saving and carbon reduction technologies within the Company, ensuring a continuous reduction of carbon emissions Develop new energy projects such as photovoltaic power and energy storage in line with policy requirements



Climate Opportunity Impact Assessment and Response

Opportunity type	Short-term	Medium-term	Long-term	Description of potential impact	Value chain impact	Financial impact	Response
Internal Operation							
Digital energy management		✓		<ul style="list-style-type: none"> Effective energy monitoring and management, such as implementing an energy management system, conducting energy audits and energy efficiency diagnosis, and adopting energy-saving technologies, is crucial for CIMC Enric (primarily for equipment and process business). This approach significantly reduces energy consumption and carbon emissions, resulting in cost savings 	Operation	<ul style="list-style-type: none"> Increase in short-term capital expenditures due to technological improvements 	<ul style="list-style-type: none"> Improving digital energy management to optimize energy efficiency Expanding investments in renewable energy and low-carbon solutions Implementing energy efficiency technology improvement projects to optimize production processes
Energy efficient refurbishment		✓		<ul style="list-style-type: none"> Given the current landscape of green energy development, timely adjustment of the existing energy consumption structure and the adoption of clean energy present opportunities for energy cost savings for enterprises 		<ul style="list-style-type: none"> Reduced operating costs due to lower energy consumption 	<ul style="list-style-type: none"> Developing new low energy/high efficiency technologies through R&D innovation Reusing waste materials and increasing the material utilization rate Adopting product lightweighting measures to reduce Scope 3 emissions
Process innovation		✓	✓	<ul style="list-style-type: none"> Implementing energy-saving and low-carbon R&D improvements in technology and production processes and establishing lean production management may initially raise costs. However, in the long term, these low-carbon process innovations will reduce production energy consumption and carbon emissions, resulting in cost savings related to energy consumption and carbon emissions 			<ul style="list-style-type: none"> Actively participating in green cooperative research programs such as low carbon footprint steel to broaden technology channels
Green Business							
Natural Gas (full value chain)	✓	✓		<ul style="list-style-type: none"> Product restructuring plays a vital role in the low-carbon transition. This includes technology upgrades, raw material changes, and adjustments to the business model, all of which significantly impact CIMC Enric's five business segments, encompassing clean energy equipment manufacturing, natural gas transmission and transportation, and EPC. Adhering to the trend of carbon neutrality and carbon peaking, aligning with green transportation, and adapting the products and services in green equipment manufacturing will enhance the competitiveness of the enterprise's products, expand market share, and consequently boost revenue 	Downstream	<ul style="list-style-type: none"> Increased R&D costs Revenue increases due to rising demand for products and services 	<ul style="list-style-type: none"> Design the hydrogen energy business framework to establish an integrated operation featuring production & storage & transportation & refueling + application scenario + intelligent hydrogen energy solutions Conduct technical exploration and building reserves for alternative energies such as green methanol and green ammonia Direct a particular focus towards the technical reserve and research and development of CCUS technology, anticipating business model maturity CIMC Enric is committed to enhancing our R&D investment, with a targeted application for 74 green patents in 2023. These patents will span across areas contributing to energy conservation, environmental protection, clean energy, and green infrastructure upgrades
Hydrogen (full value chain)		✓	✓				<ul style="list-style-type: none"> Be actively involved in the formulation of national, industry, and group standards pertinent to the advancement of low-carbon products and technologies
Ammonia (bio-based production, industrial tail gas capture, storage and transportation)		✓	✓	<ul style="list-style-type: none"> The recent release of the Action Outline for Green Development of Shipbuilding Manufacturing Industry (2024-2030) by the Ministry of Industry and Information Technology, in conjunction with other four departments, underscores China's concerted efforts to embrace alternative fuels and new energy technologies for ships. This is in line with the global shift towards green-powered ships, particularly liquefied natural gas (LNG) and methanol, which hold a majority share, exceeding 50% in the international market. Additionally, the European Union's Fit for 55 explicitly includes the shipping industry in the Emissions Trading Scheme (ETS), signaling definitive business prospects for clean energy ships 			
Methanol (bio-based production, storage and transportation)		✓	✓				

(The detailed business layout can be found in the Climate Action Plan chapter)



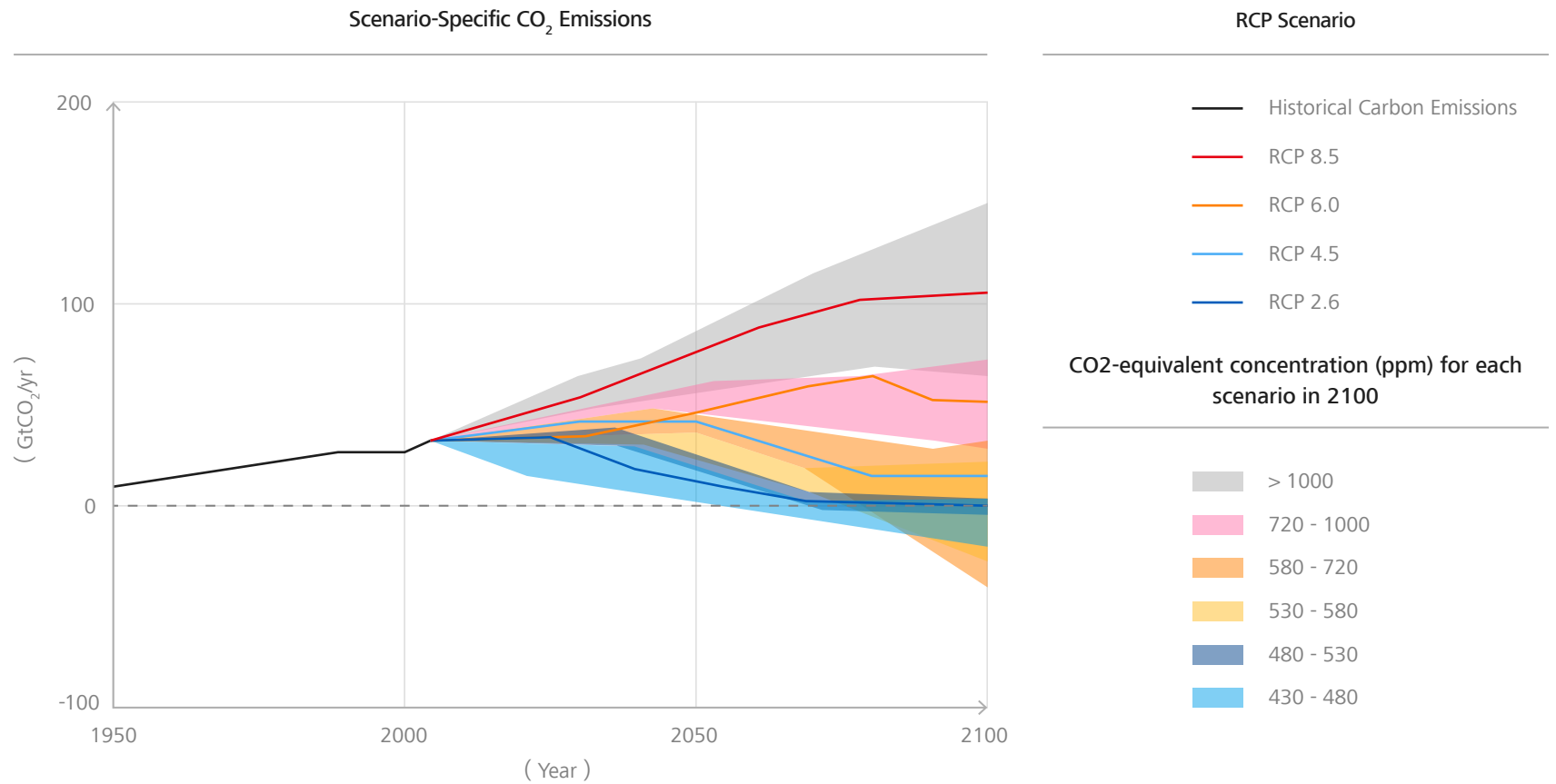
3.2 Scenario Analysis

Basic Parameter

CIMC Enric conducts scenario analyses aligned with the TCFD guidelines based on our assessment of the Company's potential climate risks and opportunities. The outcomes are integrated into the Company's strategic resilience considerations to bolster our responsiveness to climate change. Our analysis draws from the public climate scenarios by the International Energy Agency (IEA) and the United Nations Intergovernmental Panel on Climate Change (IPCC). We select various levels of transition and physical risk scenarios from these sources and combine them with our internal carbon reduction simulations to assess the potential long-term impacts of climate change over time.

Our scenario analysis for physical risks is grounded in the IPCC AR5's Representative Concentration Pathway (RCP), which specifically addresses the modeling of physical climate risks. Considering the correlation between higher temperatures in high greenhouse gas (GHG) concentration settings and an elevated frequency of climate hazards, we opted to focus on two specific emission scenarios: RCP4.5 and RCP8.5. This approach provides insights into the capacity of businesses to sustain continuous operations and adapt to heightened extreme climate events.

IPCC RCP Scenario-Specific CO₂ Emissions³

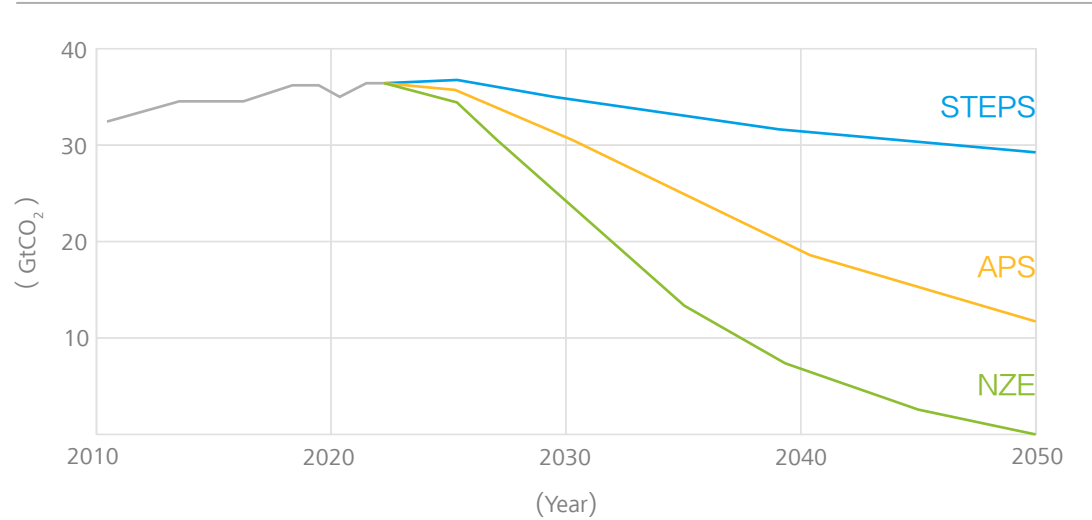


3. Source: IPCC Fifth Assessment Report (AR5)

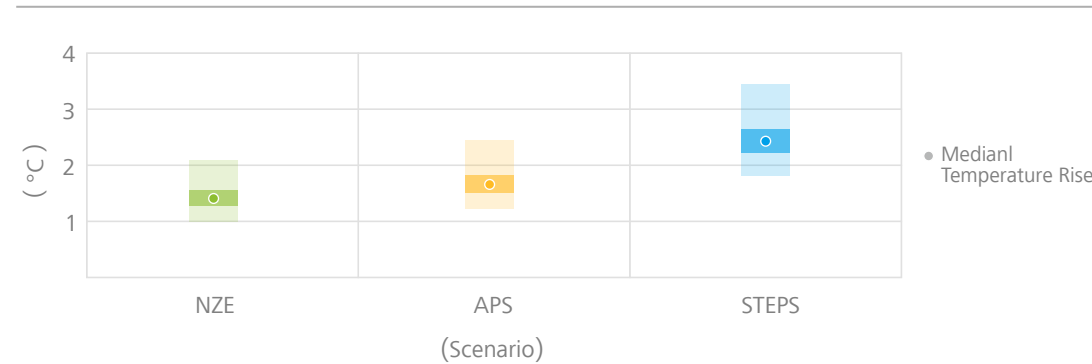


▼ IEA Scenario-Specific Greenhouse Gas Emissions and Implied Temperature Rise⁴

Scenario-Specific CO₂ Emissions



Temperature Rise in 2100



To analyze transition risks, the IEA's Climate Scenario Model contains a systematic depiction of future energy trends, which helps CIMC Enric to identify energy transition opportunities and risks across its business segments and to understand the clean energy market trends on a global scale. Based on the IEA's World Energy Outlook report, we have adopted the Net Zero Emissions by 2050 Scenario (NZE2050) as the Low Emissions Scenario, the Announced Pledges Scenario (APS) as the Moderate Emissions Scenario, the Stated Policies Scenario (STEPS), which depicts a business-as-usual pathway, as a high-emissions scenario to evaluate the Company' opportunities and risks amid varying levels of external transition pressures.

The figure illustrates global energy and industrial process-related CO₂ emissions across different scenarios, and the implied global temperature rise by 2100. Specifically, the STEPS scenario forecasts a 2.4°C global temperature rise by 2100, whereas the APS scenario indicates a 1.7°C rise. In contrast, the NZE scenario anticipates a peak global temperature rise of just under 1.6°C by around 2040, followed by a decline to around 1.4°C by 2100, aligning closely with the objectives outlined in the Paris Agreement. Notably, the IEA's scenario models indicate lower potential temperature increases in comparison to the IPCC RCP scenarios. This disparity chiefly arises from heightened carbon emission costs under stringent global government regulations, rendering the analysis primarily informative under relatively low-carbon scenarios.

Source: IEA World Energy Outlook 2023



▼ Scenario Parameter Table

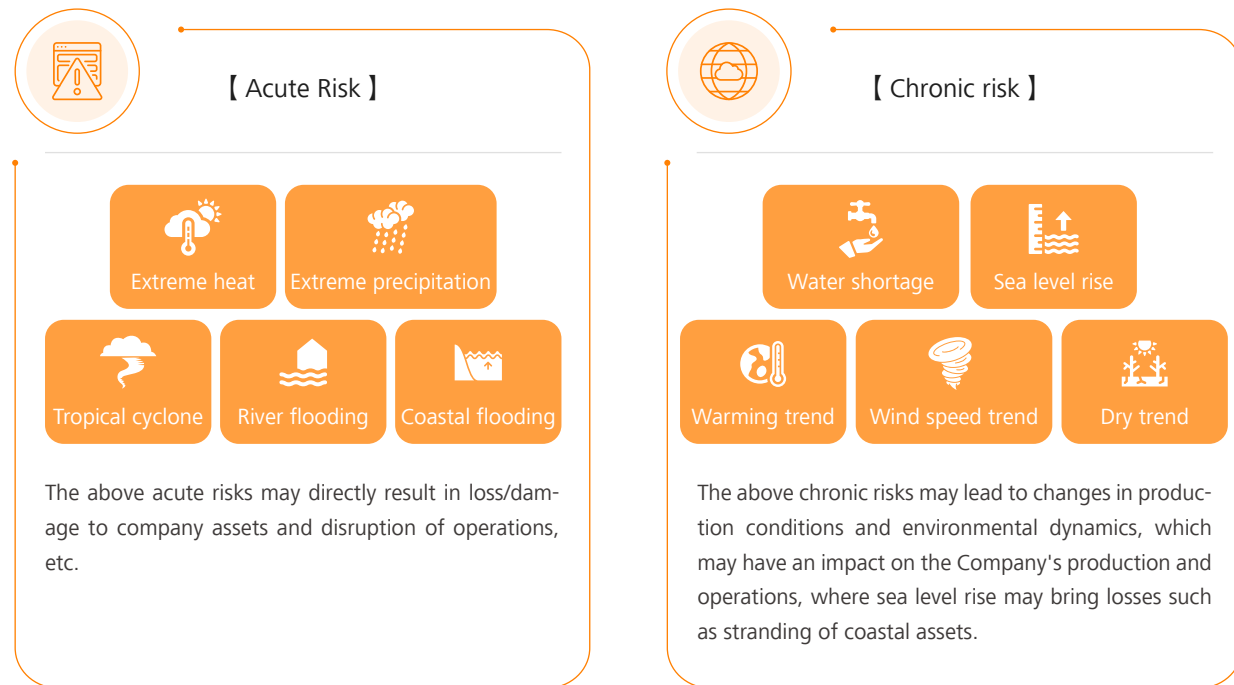
	Physical risk		Transition risk		
Scenario	RCP4.5	RCP8.5	IEA-NZE2050	IEA-APS	IEA-STEPS
Implied temperature rise	~ 2.7 °C	> 4°C	< 1.5°C	~ 1.7°C	2-3°C
Scenario description	In this scenario, substantial mitigation measures are adopted to stabilize at half today's levels by 2080. Resultantly, it anticipates a global temperature rise of over 2°C by 2100.	In this scenario, the current emission rates are upheld, portraying a business-as-usual outlook. It anticipates to culminate a global temperature rise of over 4°C by 2100.	This scenario illustrates an attainable route to achieving net-zero CO ₂ emissions from the global energy sector by 2050, effectively curbing global temperature increases to 1.5°C. It is important to note that this pathway doesn't hinge on emission reductions beyond the energy sector to accomplish its objectives.	This scenario is underpinned by the presumption that all climate commitments, including Nationally Determined Contributions (NDCs) and long-term net-zero targets, will be fully and punctually met by governments worldwide.	This scenario is based on a comprehensive, case-by-case evaluation of prevailing policies and those announced by global governments. It serves to discern the probable trajectory of the energy system in the absence of supplementary policies, projecting a global average temperature increase of approximately 2.6°C above pre-industrial levels by 2100.
Source of fundamental data	IPCC		IEA		
Timeframe	<ul style="list-style-type: none"> • Mid term: 2030 • Long term: 2050 		Carbon pricing risk <ul style="list-style-type: none"> • Short term: 2023-2025 • Mid term: 2026-2030 • Long term: 2031-2060 	Opportunities for energy market transition: <ul style="list-style-type: none"> • Short term: 2023-2025 • Mid term: 2026-2030 • Long term: 2031-2050 	
Boundary of analysis	<p>The climate risk scenario analysis covers the Company's major operating businesses in mainland China, including the clean energy, chemical and environmental, and liquid food segments (excluding companies identified as non-significant GHG emitters⁵), with specific coverage of the following member companies: CIMC Safeway, CIMC Sanctum, CIMC Hongtu, CIMC Holvrieka, SOE, Nantong Energy, Enric (Bengbu) Compressor, and CIMC Enric Hydrogen Energy, Shijiazhuang Enric. We assessed the various climate risks and opportunities of these member companies through multi-dimensional data such as GHG emissions data, asset locations, business characteristics, financial indicators, etc., combined with risk scenario parameters. The scope of the above analysis only focuses on the Company's own production and operations and does not yet include a quantitative analysis of the climate risk transmission impact of the Company's upstream and downstream value chains.</p> <p>The opportunity scenario analysis focuses on the business characteristics of the clean energy segment. Therefore, the scope and parameter selection are different from the risk analysis, mainly covering all member companies of the energy equipment engineering, offshore clean energy, hydrogen energy and new energy businesses in the clean energy segment.</p>				

5. Non major emitters: Companies that do not contribute significantly to the group's greenhouse gas emissions (accounting for less than 1% of emissions), mainly including service oriented enterprises with small asset sizes and less risk exposure to carbon emissions.

Physical Risk

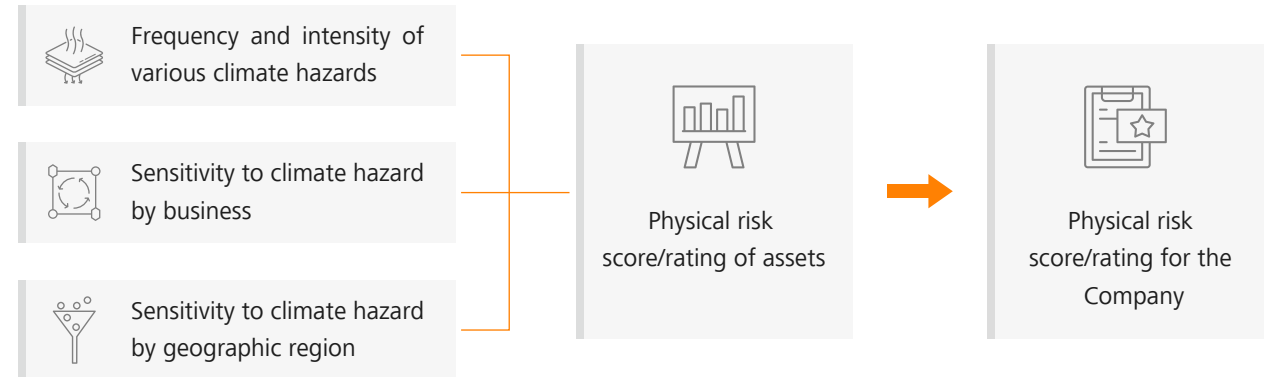
Following the physical risk matrix and scenario selection, CIMC Enric identifies and assesses 10 prevalent types of climate risks. Each risk type was scored for each asset using climate hazard intensity and sensitivity indicators. The specific parameters included in the physical risk analysis are:

- ◇ Climate risk types (see Appendix for risk definition and data sources);



- ◇ Introduce a climate hazard frequency and intensity indicator for each scenario to objectively measure the magnitude of climate risk;
- ◇ Introduce sensitivity indicators by business and region to assess the impact of climate risk on the Company's business category.

Our analysis methodology



Scenario analysis assumptions

- ◇ In the physical risk scenario analysis, we assume that internal factors such as primary business, asset size, revenue, and risk mitigation measures remain constant for each operational location. We solely evaluate the climate risk faced by the existing assets under the disaster level of each scenario;
- ◇ There are two primary mechanisms through which physical risk impacts a company's operations: loss or damage to assets, which predominantly affects the balance sheet, and operational disruption or reduced efficiency, which mainly impacts the income statement. Therefore, it would be inadequate to measure it solely with an asset value. We utilize two indicators to assess the influence of climate risk on a company: the percentage of operating sites exposed to varying risk levels, indicating the number of operating sites affected by specific climate risks, and the percentage of an operating site's revenue in relation to the company's overall revenue when exposed to a high-risk level, indicating the financial vulnerability of the operating site due to climate risk without signifying an actual loss;
- ◇ The Company's operations external to the location of its assets, such as EPC engineering projects, do not provide a basis for medium- to long-term scenario analysis. This is attributed to the short project durations, typically lasting 1-2 years, and the substantial geographic uncertainty associated with the client's project locales.



Scenario Analysis Results

The physical risk analysis encompassed assets across 12 operating locations of CIMC Enric's nine member companies (refer to the scenario parameter table for specifics). These locations are situated in Nantong City, Jiangsu Province; Suzhou City, Jiangsu Province; Bengbu City, Anhui Province; Shijiazhuang City, Hebei Province; and Jingmen City, Hubei Province. Utilizing the financial data and risk profile of each asset location, we determined an aggregate climate risk score for the Company.

▼ Table of CIMC Enric Physical Risk Levels and Trends

Risk name	Risk type	Average risk level	Baseline, short term, long term risk trends	
			RCP 4.5	RCP 8.5
Extreme precipitation	acute risk	Medium		
Extreme heat	acute risk	Medium		
Tropical cyclone	acute risk	Medium	N/A	
Wind speed trend	chronic risk	Low		
Warming trend	chronic risk	Low		
Dry trend	chronic risk	Low		
Water shortage	chronic risk	Low		
Coastal flooding	acute risk	Low		
Sea level rise	chronic risk	Low		
River flooding	acute risk	No Risk		

The table displays the risk ratings and trends of the 10 physical risks at the company level in the RCP4.5 and RCP8.5 scenarios. Of these, extreme heat, extreme precipitation, and tropical cyclone are notably significant for the Company in both scenarios, each with a medium risk rating, and represent the primary physical risks for all companies. Additionally, coastal flooding and chronic climate risks have a low rating, whereas river flooding poses no risk to the Company in either scenario.

When comparing risk exposures of revenue in both scenarios, the increase in physical risk due to RCP4.5 outweighs that of RCP8.5. This is mainly attributed to the greater long-term exposure to extreme precipitation and some chronic risks in the RCP4.5 scenario, leading to a higher risk rating for a larger number of operating sites.

*Note: The tropical cyclone data are incomplete, particularly for the RCP 4.5 scenario and for 2030 under the RCP 8.5 scenario.



▼ Distribution of Physical Risk Exposure in Key Operating Sites of CIMC Enric

Risk name	Baseline (current period)					2030					2050					
	No risk	Low risk	Medium risk	High risk ⁶	Risk exposure of revenue ⁷	Scenario type	No risk	Low risk	Medium risk	High risk	Risk exposure of revenue	No risk	Low risk	Medium risk	High risk	Risk exposure of revenue
Extreme precipitation	0%	0%	75%	25%	24%	RCP 4.5	0%	0%	75%	25%	24%	0%	0%	50%	50%	31%
						RCP 8.5	0%	0%	75%	25%	24%	0%	0%	75%	25%	24%
Extreme heat	0%	0%	83%	17%	14%	RCP 4.5	0%	25%	67%	8%	7%	0%	0%	92%	8%	7%
						RCP 8.5	0%	25%	67%	8%	7%	0%	8%	83%	8%	7%
Tropical cyclone	17%	0%	42%	42%	15%	RCP 4.5	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	N/A	-
						RCP 8.5	N/A	N/A	N/A	N/A	-	17%	0%	33%	50%	17%
Wind speed trend	0%	83%	8%	8%	7%	RCP 4.5	0%	58%	33%	8%	7%	0%	83%	8%	8%	7%
						RCP 8.5	0%	58%	33%	8%	7%	0%	83%	8%	8%	7%
Warming trend	0%	100%	0%	0%	0%	RCP 4.5	0%	50%	42%	8%	7%	0%	33%	58%	8%	10%
						RCP 8.5	0%	83%	8%	8%	7%	0%	33%	50%	17%	17%
Dry trend	0%	92%	8%	0%	0%	RCP 4.5	0%	92%	0%	8%	7%	0%	92%	0%	8%	7%
						RCP 8.5	0%	92%	8%	0%	0%	0%	42%	58%	0%	0%
Water shortage	0%	92%	8%	0%	0%	RCP 4.5	0%	92%	8%	0%	0%	0%	92%	8%	0%	0%
						RCP 8.5	0%	92%	8%	0%	0%	0%	92%	8%	0%	0%
Coastal flooding	83%	8%	8%	0%	0%	RCP 4.5	83%	8%	8%	0%	0%	83%	8%	0%	8%	7%
						RCP 8.5	83%	8%	8%	0%	0%	83%	8%	0%	8%	7%
Sea level rise	100%	0%	0%	0%	0%	RCP 4.5	25%	75%	0%	0%	0%	25%	75%	0%	0%	0%
						RCP 8.5	25%	75%	0%	0%	0%	25%	67%	8%	0%	0%
River flooding	No Risk															

Based on the results of the scenario analysis in the table, the key physical risks with potential impact on the Company under the baseline scenario (representing the average value of the last 5 years) include extreme heat, tropical cyclone, wind speed trend, and extreme precipitation. These findings align with internal executive and expert conclusions, although the risk level of extreme precipitation slightly differs due to substantial efforts made by the Company in extreme precipitation resilience, such as equipment elevation, local reinforcement, and drainage optimization. There have been no significant losses caused by extreme precipitation in the Company's history, which differs from the baseline scenario analysis that relies on objective data and does not consider the Company's actual initiatives. These factors may have led to the discrepancies.

6. Indicates the proportion of sites exposed to high risk exposures to the overall number (limited to 12 major sites in the scenario analysis)

7. Risk exposure of revenue: indicates the proportion of the annual revenue of the operating entity exposed to climate high-risk exposures to the Company's overall revenue, and does not represent the proportion of the actual loss amount

Considering the risk trends and asset risk distribution in future scenarios, the Company's risk levels of five physical risks will significantly change, bringing potential financial impacts. Therefore, the Company needs to focus on specific risks and adjust its approach accordingly:

◇ Risk Reduction Category

Extreme heat

- The impact of extreme heat on the Company is relatively pronounced in the baseline year. However, in both analysis scenarios, the risk level is projected to decrease significantly in the medium term and have a slight increase in the long term, exhibiting an overall declining trend. Taking into account the assessment of asset risk distribution, in both RCP4.5 and RCP8.5, the Company's share of assets exposed to high risk of extreme heat has decreased from 17% to 8%. Additionally, the risk exposure of revenue has decreased from 14% to 7%. In RCP8.5, the Company's share of assets exposed to low risk of extreme heat increases to 8-25%.
- While the operational impact of extreme heat in corresponding operating locations will decrease slightly, on a global scale, the frequency and severity of extreme heat will still increase in medium to high emission scenarios. This could impact the normal functioning of the value chain and, consequently, affect the Company indirectly. Therefore, this risk should not be overlooked.



◇ Elevated Risk Category

Warming trend



- The Company faces a notably increased risk of a warming trend in the analysis scenarios, with the long-term risk level rising from low to medium. In both analysis scenarios, almost 50% of the Company's operational assets will transit from low to medium warming trend risk in the long term, with 8-17% of its assets facing an increase to a high-risk level.
- The Company's future energy consumption will be influenced by plant ventilation and cooling, resulting in heightened costs for purchasing and maintaining cooling equipment.

Sea level rise



- The Company faces potential sea level rises in the future due to the location of some of its assets in Nantong and Suzhou, Jiangsu Province on the coast. In the analysis scenarios, 67%-75% of the Company's assets face a low level of sea level rise risk, while 8% are exposed to medium risk of sea level rise under RCP 8.5.
- The Company faces potential future increases in asset expenses and operating costs due to equipment damage, transportation disruptions, and unstable utility supplies. Additionally, there may be heightened replacement costs for stranded coastal assets.

Dry trend



- Under RCP8.5, the risk of dry trend affecting over half of CIMC Enric's assets will shift from low to medium in the long term. For RCP4.5, the overall dry trend risk remains unchanged; however, the risk rating of 8% of its operating sites has increased to high risk, resulting in a 7% risk exposure of revenue, in contrast to 0% in RCP8.5.
- The current dry trend risk has no significant impact on the Company's production operations. However, the Company should monitor future business development to identify any production segments dependent on ambient humidity, as the dry trend may elevate its operating costs.

Tropical cyclone



- The Company faces heightened exposure to the impacts of increased tropical cyclone risk in RCP8.5 over the long term, leading to a rise in the number of assets exposed to high risk.
- In RCP8.5, the Company anticipates future increases in operating costs, asset and equipment maintenance costs, and insurance expenses. Additionally, the Company is exposed to potential revenue impacts from shutdowns and production stoppages.

▼ Geographic Distribution of CIMC Enric's Physical Risks

Risk ranking	City	Average risk level	Number of member companies	Baseline, short term, long term risk trends		Types of risks that lead to some assets facing high risks
				RCP 4.5	RCP 8.5	
1	Nantong	Low	5			Extreme precipitation, extreme heat, tropical cyclone, wind speed trend, warming trend, coastal flooding
2	Shijiazhuang	Low	1			Extreme precipitation, extreme heat, and dry trend
3	Suzhou	Low	1			Tropical cyclone and wind speed trend
4	Jingmen	Low	1			Extreme precipitation and warming trend
5	Bengbu	Low	1			Tropical cyclone

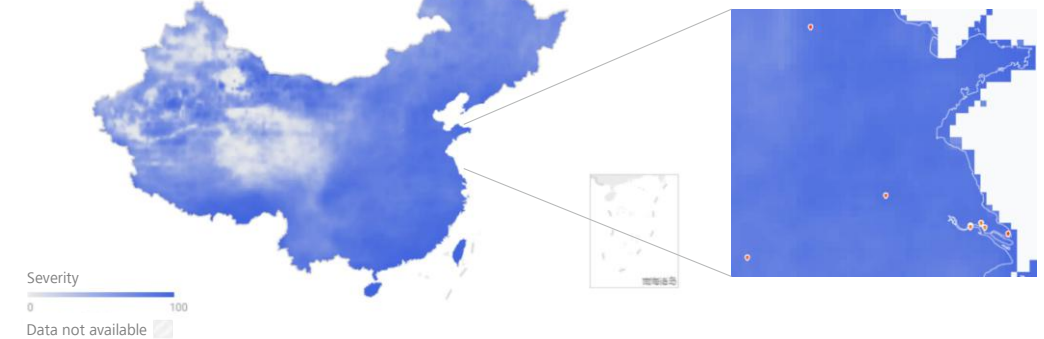
Based on the analysis of the Company's physical risk exposure, CIMC Enric has identified specific scenarios and types of risks that require focused attention in the provinces and cities where business operations are conducted. The long-term risk levels of member companies situated in Nantong and Suzhou in Jiangsu Province, and Bengbu in Anhui Province, are higher in the RCP8.5 scenario compared to RCP4.5. Conversely, member companies located in Shijiazhuang in Hebei Province, as well as in Jingmen in Hubei Province, exhibit lower risk levels in the RCP8.5 scenario in comparison to RCP4.5. Furthermore, the Company has a greater number of member companies located in Nantong. Given Nantong's geographical characteristics, situated on the Asia-Europe continent and directly facing the Pacific Ocean, its risk categories are notably complex and the overall risk level surpasses that of member companies in other regions. Hence, it is imperative for the Company to take into account the six types of physical risks associated with Nantong in the future, and reinforce the corresponding risk mitigation measures.

▼ Heat Maps of Main Risk Under Different Scenarios

Heat Map of Extreme Precipitation Risks for Scenario in China >>>

Scenario: RCP 4.5

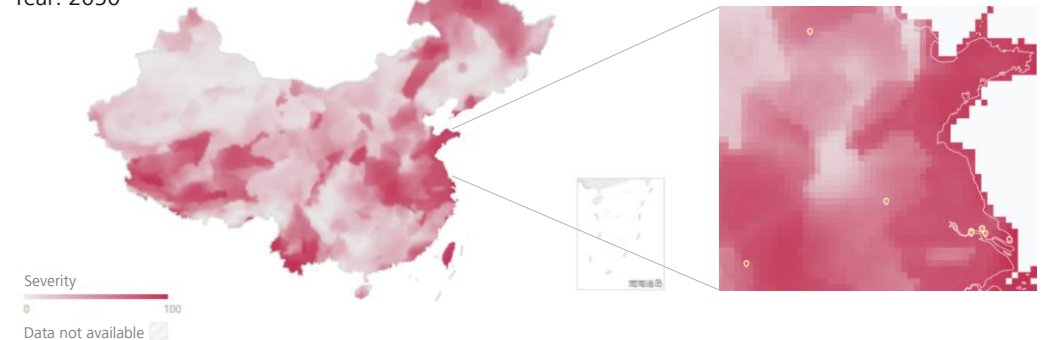
Year: 2050



Heat Map of Extreme Heat Risk for Scenario in China >>>

Scenario: RCP 4.5

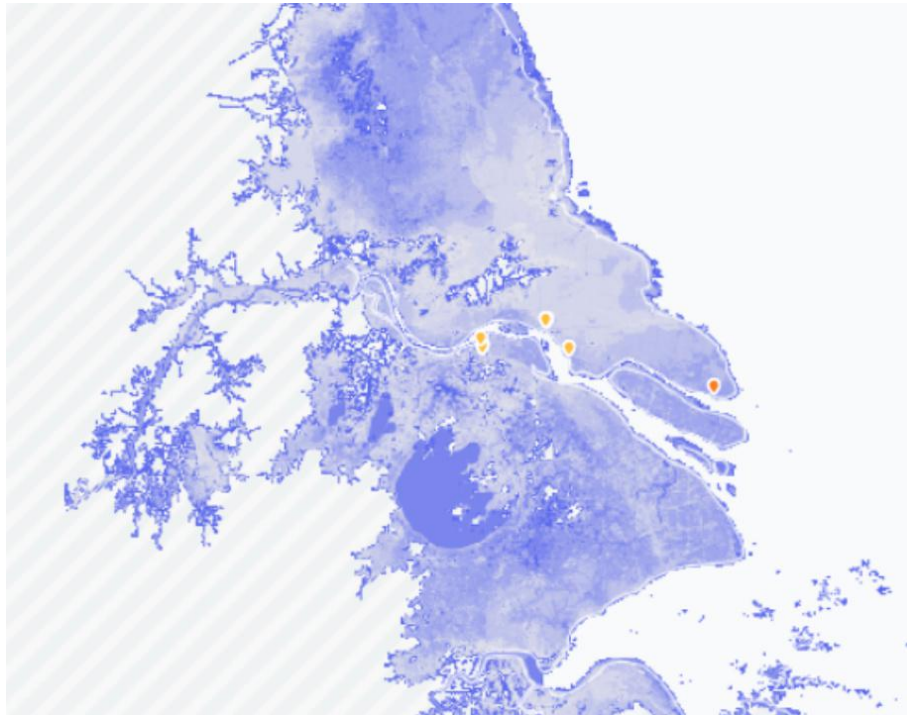
Year: 2050



Heat Map of Sea Level Rise Risk for Scenario in Yangtze River Delta >>>

Scenario: RCP 8.5

Year: 2050



Transition Risk

CIMC Enric's transition risk analysis prioritizes assessing potential carbon costs or potential carbon revenue opportunities related to carbon emissions trading within the policy framework. With the ongoing internal discussions on CIMC Enric's carbon emission reduction target, we temporarily integrate internal emission reduction scenario simulations and the external public scenario IEA scenario into our analysis to account for the uncertainty in the Company's future carbon emissions pathways and the macro policy environment. In our internal emission abatement scenario simulation, we explore two abatement routes:

- An aggressive carbon emission reduction path based on the SBTi net-zero standard;
- A compliance pathway aligned with the country's carbon peaking and carbon neutrality targets.

The external scenario is constructed based on the simulation of the internal emission reduction scenario, using the internal carbon emission route as the baseline. Additionally, we utilize the IEA's scenario to calculate the difference in value between the Company's carbon emission baseline and carbon emission budget, representing the additional carbon emission reduction. Subsequently, we calculate the Company's transitional climate value-at-risk (CVaR) by discounting, with the cumulative value of the discounted carbon cost as a percentage of the Company's value. A negative value indicates a potential cost, while a positive value indicates potential benefits. The scenario analysis encompasses specific parameters, including:

- ◇ The total GHG emissions of CIMC Enric to model internal carbon reduction pathways, covering CIMC Enric's Scope 1 and Scope 2 emissions in 2022 in the analysis. It excludes GHG emissions from non-significant fugitive emission sources⁸.
- ◇ The industry-based carbon budgets in the public scenario, carbon prices in the public scenario (market carbon prices, not marginal cost of emissions reductions)⁹, and the Company's financial data utilized to calculate the external costs associated with the Company's payment for additional carbon emission reduction or the potential carbon revenue opportunities.

8. Non-significant Fugitive Emission Sources: Fugitive emission sources that contribute less than 5% of the Company's GHG emissions, including fugitive emissions from welding shielding gas, air conditioning refrigerant, and others. According to the methodology of SBTi and other public organizations, emission sources contributing less than 5% of GHG emissions are identified as non-significant and are excluded from the inventory and target-setting process. Therefore, for the purposes of accounting and internal scenario development, such emissions were excluded from our scenario analysis.

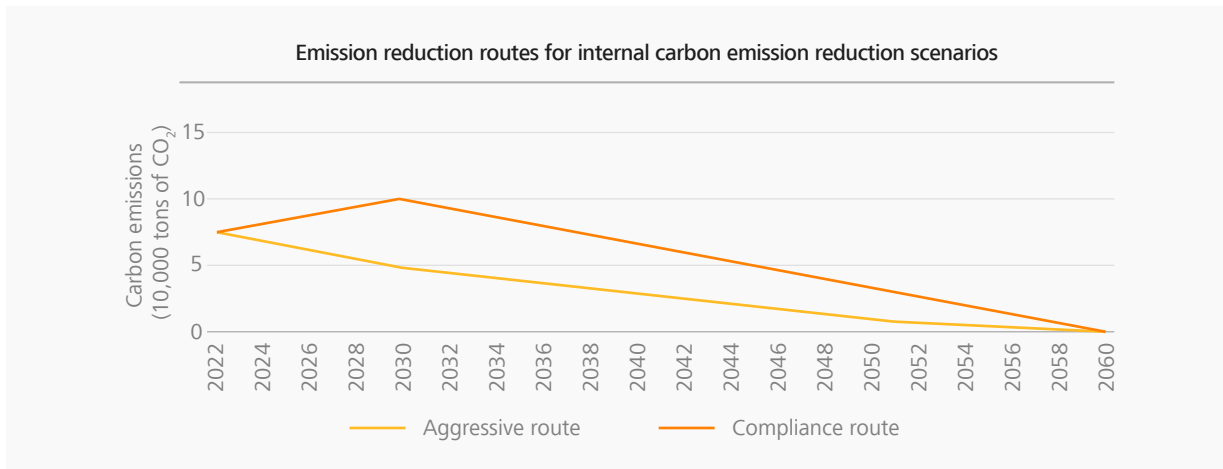
9. Scenario-based carbon price: In the IEA scenario, carbon price refers to the price used in the carbon market, rather than the marginal cost of carbon reduction. It means the carbon pricing method that internalizes the external costs caused by not using clean energy in energy consumption.



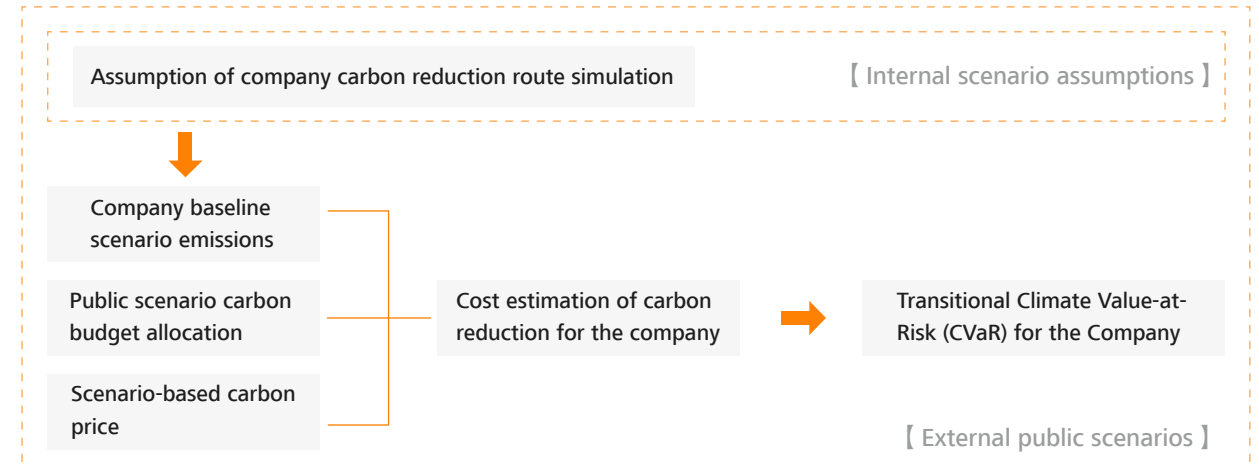
Scenario Analysis Assumptions

- ◇ Assuming perfect effectiveness and full operation of carbon tax policy and carbon market cap-and-trade mechanisms;
- ◇ Assuming that the Company's operational market and core business will remain unchanged for the time being;
- ◇ For this scenario analysis, two carbon reduction pathways have been chosen to simulate carbon reduction targets, taking into account China's specific national realities and the "3060 Dual Carbon" goal of carbon neutrality and carbon peaking. CIMC Enric selects the compliant route and the aggressive route for the simulation, as outlined in the accompanying figure. The details are as follows:
 - The aggressive carbon reduction route is established by CIMC Enric in accordance with the SBTi Corporate Net Zero Standard, which sets the requirement for companies to limit temperature rise to 1.5°C. The route aims to reduce carbon emissions by 42% for the entire group by 2030, 90% by 2050, and 100% by 2060, using the 2022 GHG emission level as the baseline;
 - CIMC Enric devises a carbon reduction route aligning with the national goal of reaching carbon peaking by 2030 and carbon neutrality by 2060. The route considers the macroeconomic growth curve, the Company's internal business expansion plan, and the grid emission factor curtailment trend. It assumes the Company's carbon emissions will naturally increase at a rate of 3% per year until reaching a peak in 2030, followed by a decrease of 3.4% per year until achieving carbon neutrality in 2060;
 - Methodology limitations: The IEA official document indicates that the scenario-based carbon price represents the average price of the global carbon market, an approach for internalizing external costs. However, it does not depict the actual costs incurred internally by the Company for emission reduction measures. In the NGFS scenario, the scenario-based carbon price refers to the marginal cost of carbon emission reduction, which represents the incremental cost per unit of carbon dioxide reduced by a company.

▼ Internal scenario-based emission reduction route



▼ Analysis Flow Chart





Conclusion of Scenario Analysis

▼ Overview of Transition Risks at CIMC Enric (2023-2060)

Internal scenario-based emission reduction route	IEA climate scenario		Carbon emission budget (MTCO ₂ e)	Additional carbon emission reduction required ¹⁰ (MTCO ₂ e)	Carbon emission reduction costs (or carbon revenue) ¹¹ (RMB million)	CVaR ¹² , %
Aggressive route	NZE2050	Low emission scenario	1.59	-0.55	202.47	1.8321
	APS	Moderate emission scenario	3.39	-2.37	217.82	1.9711
	STEPS	High emission scenario	5.63	-4.61	203.22	1.8389
Compliance route	NZE2050	Low emission scenario	1.59	0.53	30.38	0.2749
	APS	Moderate emission scenario	3.39	-1.28	128.03	1.1586
	STEPS	High emission scenario	5.63	-3.51	151.65	1.3722

Overall, the results indicate the Company has a low level of transition risk with CVaR ranging from approximately 0.27% to 1.97%. Whether the aggressive route or compliance route is taken for emission reductions, the Company is expected to achieve carbon revenue equivalent to at least 0.27% of its enterprise value due to carbon pricing in all scenarios. Among the scenario combinations, the Company will face the lowest transition risk in the APS scenario by adopting the aggressive route of emission reduction, which will result in a CVaR of 1.97% and potential carbon revenue of at least RMB 14.6 million higher compared to other scenarios.

Upon examining the internal emission reduction route variability, it is found that there is no significant difference between the two emission reduction pathways in the APS scenario and the STEPS scenario (as illustrated below). The difference in CVaR between the two routes under the same scenario is less than 0.9%. However, in the NZE2050 scenario, the disparity in CVaR exceeds 1.5%, with both routes resulting in negative CVaR. This suggests that if the external policy is not strictly tightened, there will be no significant financial impact on the Company, regardless of the chosen emission reduction target. Nevertheless, as a responsible company, CIMC Enric will still select an optimal route tailored to its own requirements and endeavor to proactively achieve the national dual carbon goal of carbon peaking and carbon neutrality at the company level.

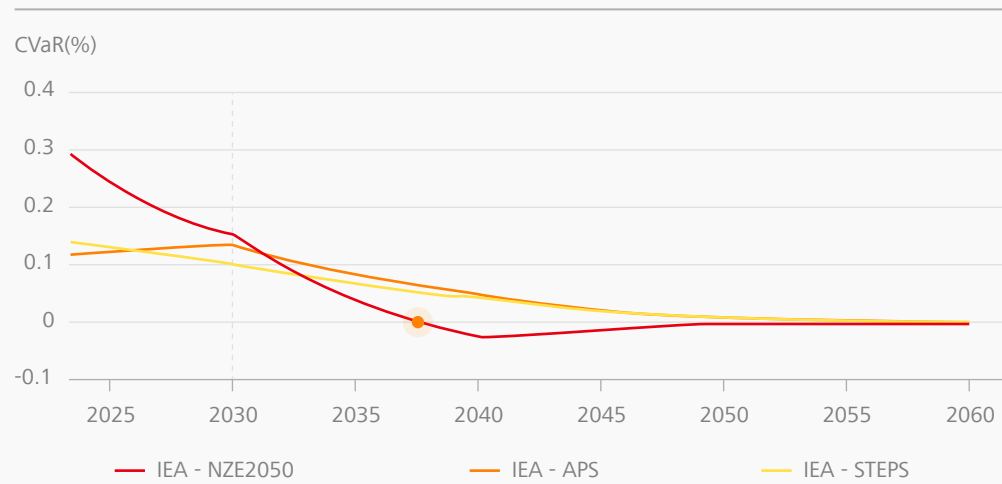
10. Additional carbon emission reduction required: refers to the additional carbon emission reduction required by the Company to limit its carbon emissions below the carbon budget under a certain carbon reduction path. If the value has a negative measure, it indicates that the Company's carbon emissions are below the carbon budget and the carbon budget is in surplus, so no additional reduction is needed.

11. Carbon emission reduction cost (or carbon revenue): is the company's cost to reduce carbon emissions which is beyond the carbon budget. If the value has a positive measure, it indicates that there is a potential carbon revenue for the company under the scenario.

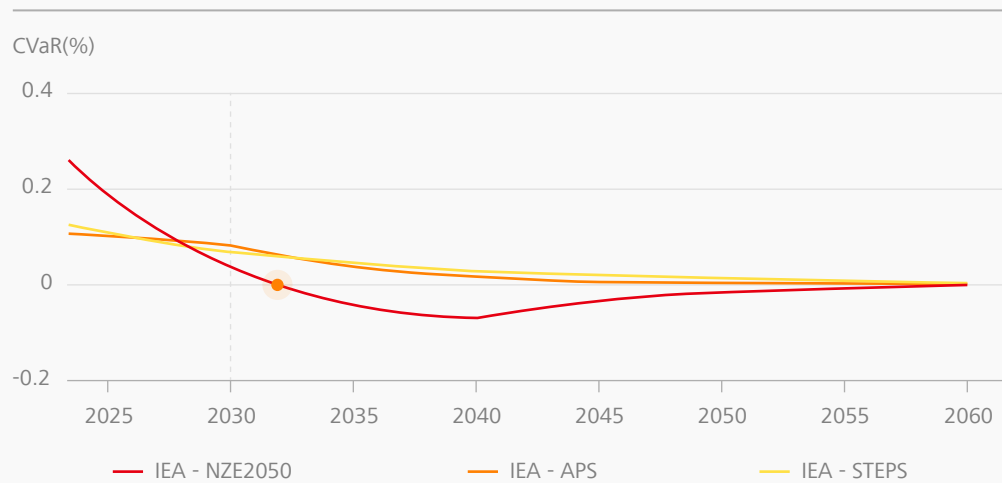
12. CVaR is the ratio of a company's discounted carbon costs to its value at a given time, and the extent to which a policy change which affects the carbon price affects the company's value. If the value has a positive measure, it indicates that there is a potential carbon revenue to the company under the scenario, but does not indicate an actual gain. It is reflected by no additional cost of abatement.



CVaR in Aggressive Carbon Reduction Scenarios



CVaR in Compliance Carbon Reduction Scenarios



The year-by-year trend curve of transition risk exposure in medium and high emission scenarios shows a consistent trend for the Company, with a positive CVaR, which is steadily decreasing. This indicates a declining potential for carbon revenue over time, though the Company is currently not exposed to the risk of carbon cost as per the analyzed years. Conversely, under the low emission scenario driven by stringent emission reduction policies, the Company's potential carbon revenue in the NZE2050 scenario are initially higher but decrease year by year. Moreover, the CVaR will drop to less than 0% starting from 2038 and 2032 under the aggressive route and compliance route, respectively, suggesting the Company is starting to face the risk of additional carbon costs. The negative CVaR for the compliance route appears nearly six years earlier than the aggressive route. It is essential to note that potential carbon revenue mainly manifest in the short to medium term, and given the current policy environment, there may be limited opportunities to cash out surplus carbon credits under the carbon budget (despite the current restart of CCERs in the Chinese market). There is a potential risk of long-term negative CVaR in the NZE2050 scenarios of the aggressive and compliance routes. CIMC Enric will closely monitor the dynamics of the national carbon market and prepare to increase emission reduction in the medium and long term to contribute to the national dual carbon carbon neutrality and carbon peaking.

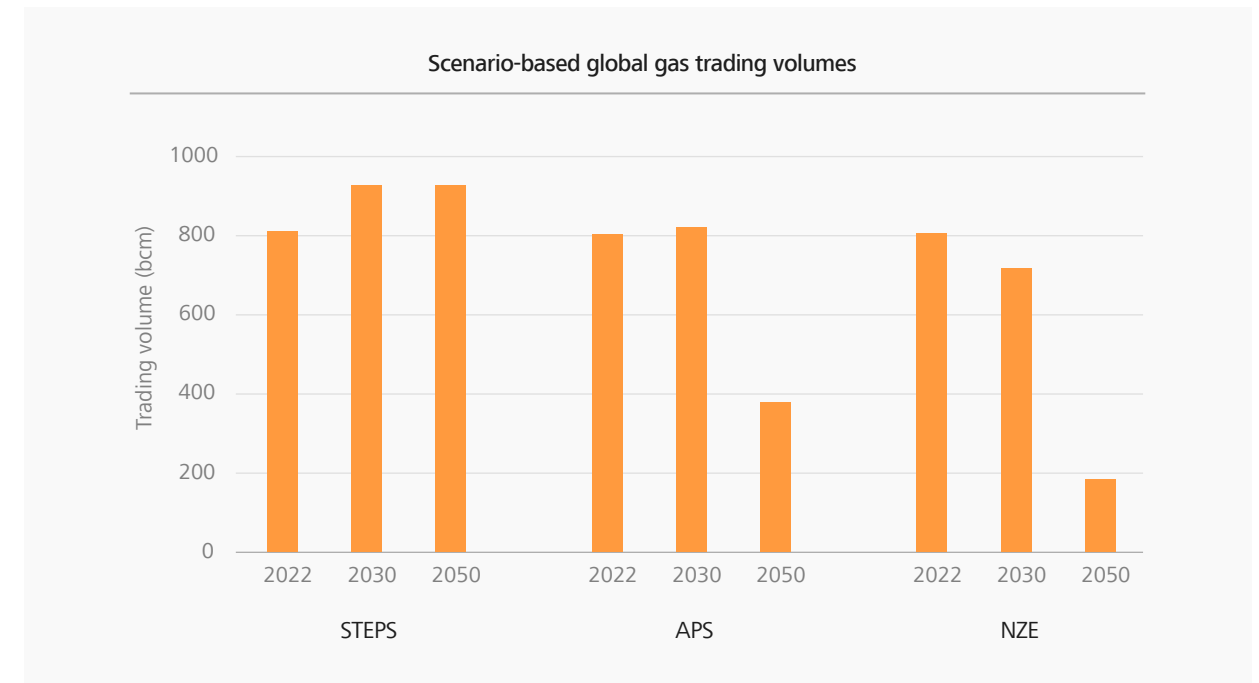
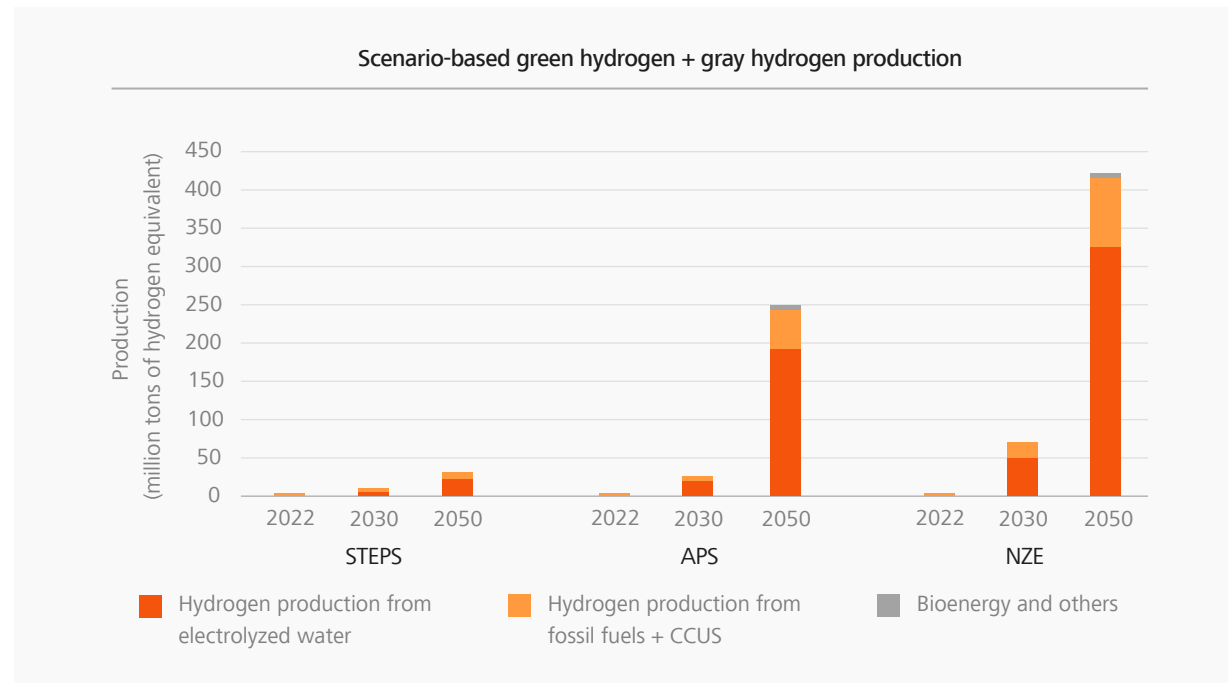
Among the member companies, Shijiazhuang Enric Gas Equipment, Nantong Energy, and Enric (Bengbu) Compressor have higher greenhouse gas (GHG) emission intensity per unit of revenue (output value) compared to other member companies. As a result, the carbon budgets allocated to them, based on industry, revenue (output value), and other parameters are tighter, thus posing a higher transition risk for these three companies in the medium-to-long term compared to the other member companies. However, in most scenarios, these companies do not face significant carbon cost risks, with the main risks occurring in the compliance route - medium/low emission scenario and the aggressive route - NZE2050 scenario. Consequently, CIMC Enric will focus on the emission reduction initiatives and effectiveness of these member companies in subsequent emission reduction pathway coordination to ensure consistency across the company. On the other hand, CIMC Safeway, CIMC Hongtu, and CIMC Sanctum are the members with the lowest transition risk, which will potentially bring carbon revenue to the Company under various scenarios.

Climate Opportunities

The IEA's climate scenarios describe and illustrate future trends across diverse energy sectors, such as the growth in both supply and demand for various energy sources in the short and long term. CIMC Enric, as an integrated service provider of clean energy solutions, analyzes prospective opportunities for profit growth brought by the future pathway of energy transition. This analysis is based on the growth data for energy market provided in the scenarios, coupled with our own business segment planning. The analysis incorporates critical parameters such as:

◇ Supply and demand data for natural gas, hydrogen, ammonia, methanol and other energy sources, as well as the corresponding growth rates, which shall be used to estimate the incremental market size in the future.

▼ Demand for each energy under the scenarios¹³



13. Source: IEA's World Energy Outlook 2023



Scenario Analysis Assumptions

- ◇ CIMC Enric's segmental business plan remains consistent, as outlined in the Climate Action Plan - Green Solutions section for more details. CIMC Enric continues to maintain a stable share in the energy market and is well positioned to take advantage of the energy market opportunities in each scenario;
- ◇ The Company's primary focus on clean energy, such as natural gas, hydrogen, and methanol, remains unwavering and is projected across the four major business segments, including energy equipment and engineering (equipment + process), offshore clean energy (equipment + process), hydrogen and biomass (green methanol). Additionally, the new energy (integrated services), smart interconnections and multi-energy complementary business are not taken into consideration for the opportunity value-added;
- ◇ Net profit margins for all business scenario projections are assumed to be 5%;
- ◇ According to Clarksons Research, CIMC Enric's natural gas-related equipment and process business is leading the industry, with a historical growth rate approximately 6 percentage points higher than the industry average. Consequently, a growth premium of 6% will be reflected in the subsequent financial calculation of natural gas-related businesses, based on the average growth rate of IEA scenarios (measuring natural gas trading volume, not demand). Meanwhile, other businesses such as green hydrogen, green ammonia and green methanol are in the initial stages of industry development, and the expected average growth rate in the IEA scenario will be used as the financial growth rate of CIMC Enric's related businesses.

Conclusion of the scenario analysis

In CIMC Enric's business development strategy, sectors such as natural gas, green hydrogen, green ammonia and green methanol hold significant relevance, and their roles in the energy sector will continue to be more solidified, offering the Company new growth prospects. The IEA's World Energy Outlook suggests that while short-term natu-

ral gas demand is projected to rise, a global peak is anticipated by 2030, with subsequent modest growth. However, the Chinese market is expected to witness natural gas consumption levels between 550-600 bcm¹⁴ by 2030, reaching a plateau around 2040, approximately a decade after the global demand peak. Consequently, the Company's natural gas engineering equipment and offshore clean energy division may encounter risks resulting from market saturation in the foreseeable future.

Regarding hydrogen energy developments, green hydrogen and blue hydrogen will emerge as primary sources in low-emission scenarios. The annual growth rate in the production of green and blue hydrogen is projected to exceed 70% by 2030 under carbon-neutral and zero-emission scenarios, with anticipated extensive application in industrial decarbonization, transportation and energy storage. Additionally, ammonia is considered as a pivotal clean energy source and storage medium, particularly in low-emission scenarios emphasizing the development of green ammonia, where the annual production growth rate is estimated to reach 45% by 2030. Furthermore, global methanol production is expected to surge from 100 million tons to 500 million tons by 2025, with a considerable proportion attributed to green methanol. The expansion of these emerging energy sources underscores the substantial market opportunities for CIMC Enric, aligning with its integrated business deployment encompassing hydrogen, new energy and biomass, as well as its technological expertise across certain scenarios.

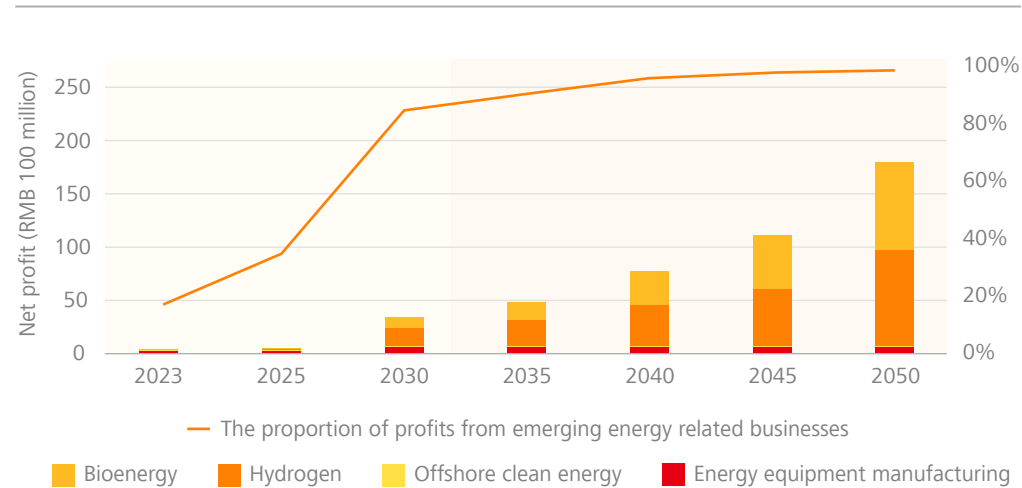
Based on the data from various energy transition scenarios and the characteristics of the Company's clean energy segment business, CIMC Enric concludes the results of the scenario analysis of transition opportunities. The data analysis indicates that the Company's greatest opportunity for clean energy transition lies with NZE2050 scenario, followed by the APS scenario, where emerging energy sources (hydrogen energy, biomethanol) are poised to contribute substantial profits to CIMC Enric. Conversely, the STEPS scenario offers the smallest opportunity for transition, with natural gas-related businesses remaining the profit leader. Specifically:

14. Source: China Natural Gas Development Report (2021)



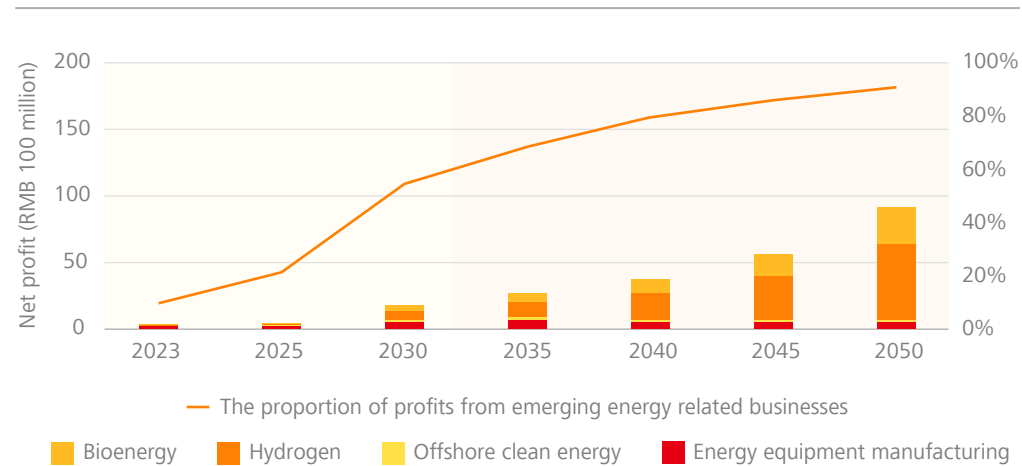
▼ Transition Opportunities in NZE2050 Scenario

Calculation of Transition Opportunities in NZE2050 Scenario



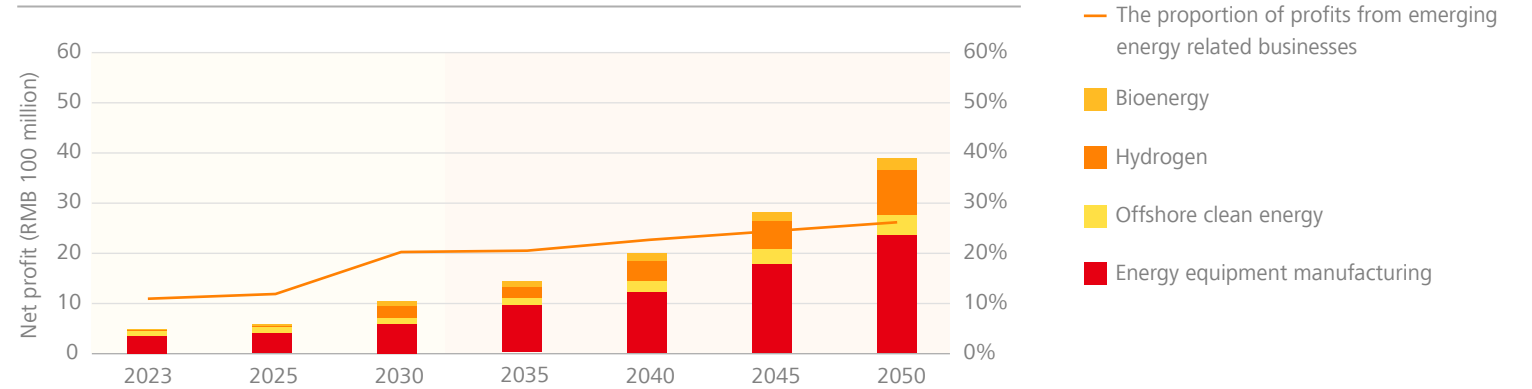
▼ Transition Opportunities in APS Scenario

Calculation of Transition Opportunities in APS Scenario



▼ Transition Opportunities in STEPS Scenario

Calculation of Transition Opportunities in STEPS Scenario



- Under the NZE2050 scenario, driven by burgeoning demand for green hydrogen, green ammonia and green methanol, the Company foresees a rapid increase in consolidated profitability in the medium term, projecting approximately RMB3.5 billion by 2030. This growth is expected to stabilize in the long term, reaching around RMB18 billion by 2050. While energy equipment manufacturing and offshore clean energy will experience gradual growth, the profit contribution ratio of the emerging energy businesses—hydrogen and biomass (methanol)—is anticipated to surpass 95%, becoming the Company's primary source of profit.
- The Company's emerging energy business demonstrates a gradual growth trajectory in the early stages within the APS scenario, reaching around RMB1.8 billion by 2030. The growth is expected to accelerate after 2030, with profits projected to reach around RMB10 billion by 2050. Over the long term, these two businesses are anticipated to contribute more than 85% of profits, with biomass (green methanol) slightly surpassing hydrogen's profit contribution and becoming the dominant force. Additionally, the natural gas-related equipment and processing division is projected to account for approximately 10% of the Company's profit contribution.
- Under the STEPS scenario, the emerging energy-related segments exhibit insufficient growth momentum, with natural gas demand peaking in the medium term. Consequently, the overall business opportunities for the Company are limited, with a long-term profit forecast of approximately RMB4 billion. The primary business growth continues to center on energy equipment and offshore clean energy operations (equipment + processes), contributing to about 75% of long-term profit. Meanwhile, the hydrogen and biomass sectors are expected to maintain a slow growth trend in the medium and long term, with a long-term profit contribution of merely approximately 25%.



04

RISK MANAGEMENT

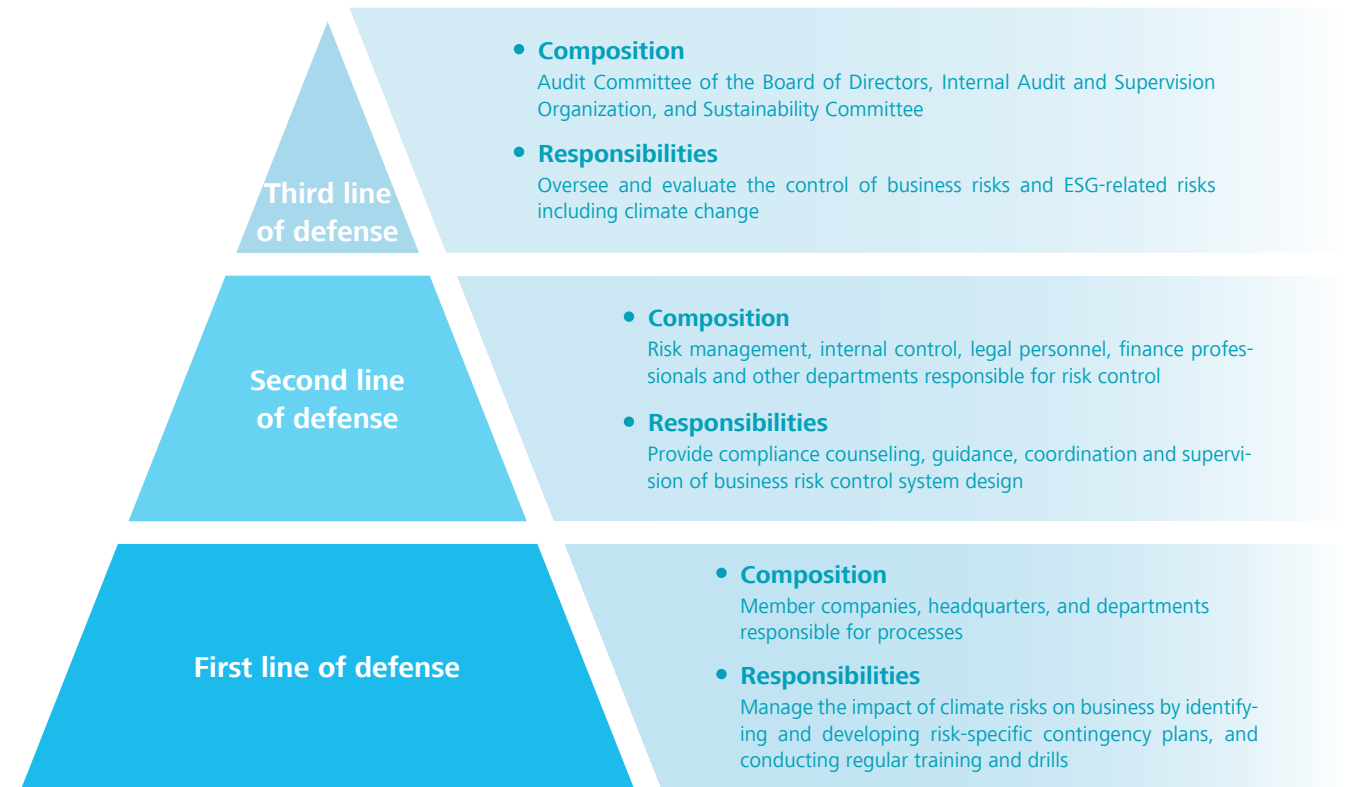
- Risk Management Structure
- Risk Management Process

4.1 Risk Management Structure

CIMC Enric prioritizes stakeholder interests and recognizes the crucial significance of mitigating and managing climate-related risks while leveraging associated business prospects to foster sustainable value creation and long-term enterprise stability. Subsequently, we develop and consistently enhance our risk management structure and control system, establishing a closed-loop risk management cycle. We apply the forward-looking approach to facilitate the seamless integration of climate change considerations into our risk control management system and form a resilient and accountable corporate foundation.



CIMC Enric establishes three lines of defense for risk control and incorporates climate change-related risks into its risk management strategy to ensure comprehensive risk oversight within the Company.





4.2 Risk Management Process

CIMC Enric set up a climate risk and opportunity management process to achieve a comprehensive risk management cycle encompassing "risk identification, risk assessment, risk prioritization, risk response, optimization and enhancement."

Risk Identification

CIMC Enric incorporates the "risk prevention as the main focus" strategy into its risk control approach and develops a climate risk identification list following the COSO ERM framework. The Company organizes seminars and interviews among business and risk leaders from its subsidiaries and conducts questionnaire surveys involving internal and external stakeholders, in order to more comprehensively and objectively identify the physical and transition risks faced by the Company.

Regarding the identification of physical risks, a detailed screening is carried out based on geographic location, climatic features, disaster characteristics, industry specifics and other relevant aspects. This assessment leads to the identification of 13 subcategories of physical risks in total. As for transition risks, the Company performs a thorough analysis considering external macroeconomics, policies and laws, industry trends, market risks (including upstream and downstream markets, consumer behavior, low-carbon technologies and products), supply chain vulnerabilities, and internal operational and asset risks. In total, 12 subcategories of transition risks are identified.

In the pursuit of identifying business opportunities, the Company pinpoints 13 prospects across various dimensions including resource efficiency, energy structure adjustment, energy-saving initiatives, digital energy management systems, products and services, emerging markets and the carbon market.

Risk Assessment

In the area of risk assessment, CIMC Enric applies the Delphi method in conjunction with the COSO's "Enterprise Risk Management for Environmental, Social and Governance-related Risks" to gather expert opinions effectively. Internal business leaders, risk control leaders and external industry experts are engaged by CIMC Enric to score the current and potential risks. The expected impact and likelihood of individual risks are then evaluated systematically through multiple rounds of questionnaires to identify and verify the physical risks, transition risks and business opportunities most related to the Company.

The risk severity is comprehensively assessed based on three dimensions: the level of impact, the scope of impact and the potential for remediation. Meanwhile, the likelihood of risk occurrence is graded using five levels—"very low, low, medium, high and very high"—each with a corresponding score ranging from 1 to 5. The detailed logic of the scoring system can be found in the table below:

Risk Severity	
Level of Impact	This means the extent of the risk's effect on CIMC Enric, including factors such as asset losses, customer churn rate and percentages of income decline.
Scope of Impact	This delineates the breadth of impact of the risk on CIMC Enric, encompassing factors like subsidiary count, business proportion, etc.
Potential Remediation	This metric signifies the feasibility of implementing measures to alleviate or eradicate the impact of the risk.
Likelihood of Risk Occurrence	
Likelihood of Occurrence	This denotes the probability of the risk, including frequencies such as more than once a year, once in a decade, and so forth.
Scoring Dimensions for Opportunity	
External Industry Attractiveness	Evaluate the appeal of the opportunity within the industry, taking into account factors such as policy incentives, industry scale, technological maturity, gross margins and entry barriers.
Internal Capability Alignment	Assess the Company's internal capacity to venture into the business full of opportunity, including the alignment with its current operations, technical expertise, talent pool and financial resources.

Risk Prioritization

CIMC Enric employs a prioritization process that involves calculating risk and opportunity scores derived from scoring results. Initial scoring is conducted for individual subsidiary risk points, which are then aggregated to generate distinct matrices for physical and transition risks across the Company's diverse business categories. A parallel approach is adopted for business opportunities and an opportunity matrix reflective of the outcomes is formed.

The risk and opportunity matrices are presented in the "Risks and Opportunities" section.

Risk Response

Upon completion of risk identification and assessment, the Company analyzes the root causes of risks and develops or adjusts risk management strategies, internal monitoring protocols, and risk control regulations to proactively prevent, eliminate or mitigate risks at their origins. Simultaneously, the Company devises specific countermeasures and solutions tailored to business risk scenarios, including contingency plans for natural disasters, protocols for emergency response, etc. It also conducts regular reviews to confirm the effective management and control of risks in terms of their nature and severity. Furthermore, the Company persistently enhances the monitoring and early warning within its internal control and risk management systems, leveraging the benefits of digital risk management tools. The Company is dedicated to comprehensively covering key business processes and realizing automated analysis and early warning of business risks. Regarding raising awareness, the Company delivers targeted training sessions and disaster preparedness drills tailored to diverse risk management roles to bolster employees' awareness and competence in risk prevention.

Please refer to the "Risks and Opportunities" section for detailed response measures.



SOE Enhances Employee Emergency Response Capabilities through Drill

In May 2023, SOE, a subsidiary of CIMC Enric conducted a 30-minute typhoon and flood control drill, covering the process from the alarm to the end, swiftly completing essential preparations and effectively demonstrating the rapid response capacity of the emergency staff. Besides, SOE addressed issues identified in the drill, such as corrosion, for prompt protection and maintenance, and established a routine maintenance program for the centralized management of flood control equipment.



SOE Typhoon and Flood Control Drill

Optimization and Improvement

Climate risks are highly intricate and unpredictable. We will further optimize and strengthen our capacity to recognize, study and alleviate climate risks with farsightedness, closely track the climate practices of prominent international organizations and corporations, enhance cross-sector collaboration and stakeholder involvement, and further improve information dissemination and transparency. Additionally, we will reinforce climate-oriented training and awareness initiatives to bolster the climate adaptation capabilities of our enterprises and employees, ensuring better preparedness for future climate change challenges.



05

CLIMATE ACTION PLAN

- Value Chain Carbon Reduction
- Green Solutions



The 28th United Nations Climate Change Conference (COP28) took place on November 30th in Dubai, UAE. COP28 conducts global stocktake of the Paris Agreement and achieved a “UAE Consensus” on mitigation, adaptation, finance, loss and damage and a just transition. Ultimately, the parties essentially reached a consensus:



Transition away from fossil fuels in the energy system in a just, orderly and equitable manner and accelerate action in a key decade to achieve net zero emissions by 2050;



Expedite the clean energy transition by 2030, global renewable energy to be tripled and the rate of energy efficiency improvements doubled.

We are confident that the consensus established by the global parties in COP28 invigorates the advancement of clean energy, and low-carbon transition and development are indisputably the path forward for the next 30 years. Accordingly, CIMC Enric devises a climate action plan tailored to its business capabilities.

Climate Action Plan

Areas of Focus

Value Chain Carbon Reduction

Green Solutions

Objectives

- In anticipation of future business growth, greenhouse gas (GHG) emissions may increase in the short term. However, our commitment to achieving carbon neutrality in the medium to long term remains unwavering. Efforts are currently underway to develop a plan for reducing operational carbon emissions (Scope 1+2), with details to be shared upon approval by the Board of Directors.

- By 2025, we consolidate and fortify our core business, achieve deployment and strategic demonstration in our growing business, and make initial milestones in our strategic emerging business.
- By 2027, we transition our growth business into our core operations, achieve significant advancements in our strategic emerging business, and position ourselves as a comprehensive provider of technology-driven, low-carbon and intelligent new energy solutions.

Directions for Action

- To continually decrease the overall energy consumption and greenhouse gas (GHG) emissions per manufacturing unit, and ultimately attain carbon neutrality through carbon offsetting and removal within and beyond the value chain.

Optimize core business

- Onshore energy equipment and engineering business (equipment + process)
- Offshore clean energy business (equipment + process)

Expand growing business

- Hydrogen business (production, storage, transportation, fueling and utilization)
- Integrated new energy services (Gas source acquisition + end-use utilization)

Incubate strategic emerging business

- Green methanol (equipment + process)
- Integrated intelligent energy

Key Initiatives

- Energy Saving and Carbon Reduction Retrofit
- Green Photovoltaic Power Program
- Green Factory Program
- CCUS Program Planning
- Carbon Credit + Internal Carbon Price Mechanism
- Digital Green Manufacturing

- Extend the industry chain at both ends, expand the upstream gas source and downstream use cases, and develop end-to-end integrated service capabilities.
- Prioritize dual-carbon initiatives and develop the hydrogen business while structuring our industry around "one chain and three regions".
- Align with the energy transition trend, promote intelligent interconnection, distributed energy and green energy technology such as energy storage, CCUS, and Green methanol, alongside other innovative ventures.

Capability Support

Digital Operation

Capital Operation

Organizational Reinvention


Talent Strategy



5.1 Value Chain Carbon Reduction

Carbon Reduction Target

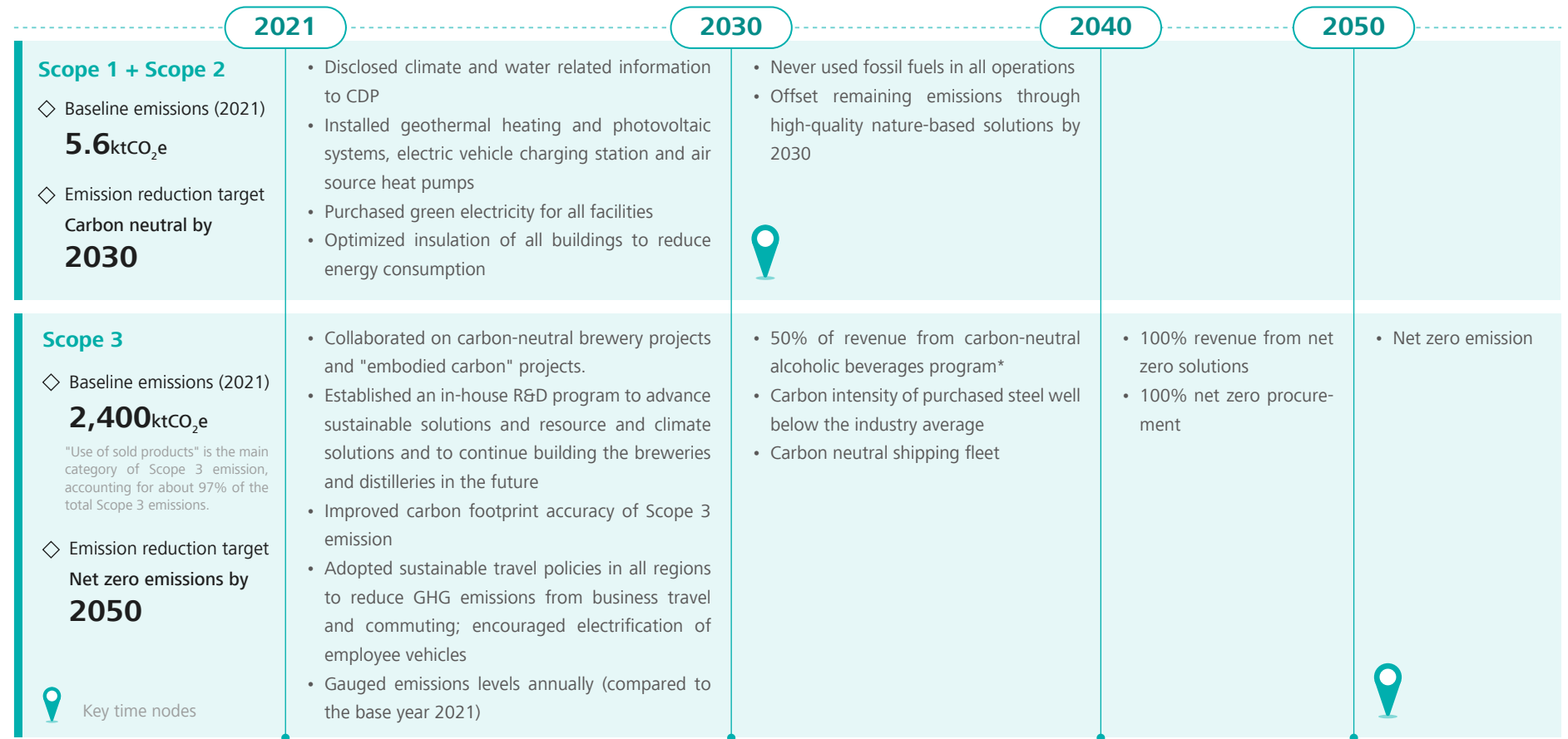
At the Group level, CIMC Enric actively seeks inspiration and comparison with international initiatives and standards (e.g. SBTi, ISO 14068), analyzing and developing an achievable operation and emission reduction roadmap. This roadmap is disclosed to the public upon review and approval by the Board of Directors. While the target is currently subject to discussion, CIMC Enric, operating in the equipment manufacturing sector, primarily generates indirect emissions through purchased electricity, resulting in a substantially lower GHG emission intensity compared to high carbon emitting sectors like iron and steel, cement and public utilities. Therefore, it will resolutely will not lag behind the national "dual-carbon" target of carbon neutrality and carbon peaking. CIMC Enric is firmly committed to:

 Achieving the carbon peaking for the entire Group by 2030 and attaining carbon neutrality by 2060

Feature: Net Zero Targets of Subsidiaries

As a subsidiary of CIMC Enric, CIMC Holvrieka is dedicated to delivering secure and sustainable products and services to clients in the food, alcoholic beverage, and pharmaceutical sectors. CIMC Holvrieka is fully aligned with the Paris Agreement and is steadfast in attaining net-zero emissions from breweries, distilleries, food and pharmaceutical production facilities within its operations and value chain. CIMC Holvrieka strives to accomplish operational-level carbon neutrality by 2030, deliver comprehensive net-zero solutions by 2040 to guarantee the safety, efficiency and sustainability of our clients' long-standing 24*7 production facilities, and achieve net-zero emissions throughout the entire value chain by 2050, as outlined in the subsequent plan:

▼ CIMC Holvrieka Carbon Neutrality Action Roadmap



*Note: We continue to invest in research and development to deliver innovative net-zero emission solutions for our beverage, food and pharmaceutical businesses, including: Green and efficient energy use; reduced, reused and recycled materials; sustainable procurement policies to reduce the embodied carbon of our technologies; zero waste.



Carbon Reduction Initiatives

Carbon Reduction in Operations

Initiative	Entity	Name	Scope of Emission Reduction Contribution	Description
Energy saving and carbon reduction retrofits	Nantong Energy	Process innovation	Scope 1	Significantly reducing natural gas consumption by remodeling the vacuuming drying room and updating the vacuuming process.
		Elimination of energy-intensive equipment	Scope 2	Sorting out the motors across the company, eliminating 198 motors below the L2 efficiency, and improving the electric energy efficiency.
	CIMC Hongtu	Centralized gas supply	Scope 2	Independently developing, designing and building centralized compressed air pipeline in the workshop, replacing ordinary air compressor with frequency-changing screw air compressor, saving energy consumption.
	CIMC Sanctum	Aluminum heat treatment furnace	Scope 2	Updating the aluminum heat treatment to take the place of the traditional pit-type furnace, adopting full-automatic control technology, reducing energy consumption and doubling the efficiency within the same working time.
		Centralized gas supply	Scope 2	Phasing out eight energy-intensive air compressors among 11 air compressors and replacing them with three energy-efficient L1 air compressors. <ul style="list-style-type: none"> Adopting the industrial frequency and variable frequency cooperation method to solve the power energy consumption through automatic frequency and speed reduction; Combining two product lines of compressed air complement to avoid under-use and over-supply of air while saving energy; Developing air compressor group control system, monitoring the operation of air compressors in all sites, implementing intelligent dynamic matching of equipment in the entire air pressure station, and effectively saving electricity. Saving 60,000kWh of electricity per year.
		Demonstration project for the application of "green" deep penetration welding in low temperature welding	Scope 2	For medium and large cryogenic storage tanks with wall thickness below 12mm, the deep penetration welding process replaces the traditional multi-process alternating welding process. The switch entails welding only one longitudinal seam and one annular seam, thus reducing man-hours, processes, and product transfers to just one. As a result, it saves about 39,000kWh of electricity annually.
Lean management	CIMC Sanctum	Improvement of industrial circulating water management	Scope 2	Developing a routine pipeline wall salt cleaning plan and leveraging the water quality report to activate the MVR dynamically can enhance electricity conversion efficiency. This cost-effective action can annually save about 92,000kWh of electricity, yielding a 15% decrease in monthly electricity consumption per RMB10,000 of MVR evaporation output value.
		Improvement in electricity management for high-power environmental facilities for VOCs	Scope 2	Immediately shutting down VOCs exhaust treatment facilities after spraying can reduce the non-effective operating time of the VOCs facility by 30 minutes, meeting the requirements of local environmental regulatory agencies. Three sets of waste gas treatment facilities (VOCs) save approximately 99,000kWh of electricity annually.



Initiative	Entity	Name	Scope of Emission Reduction Contribution	Description
Clean energy	SOE	Distributed photovoltaic projects	Scope 2	Through the implementation of distributed photovoltaic projects, the factory's power consumption structure shifts from relying solely on urban electricity to a combination of 60% urban electricity and 40% photovoltaic power generation. It is expected to cut carbon dioxide emissions by 2,814 tons annually, while also bringing a 15% discount in electricity expenses. From January to October 2023, the photovoltaic system produced a total of 5.6 million kWh of electricity, with the company consuming 4.08 million kWh. As a result, a saving of approximately RMB820,000 was achieved.
	Nantong Energy	Distributed photovoltaic and energy storage projects	Scope 2	The company initiates and implements a rooftop distributed photovoltaic project with a 1.168MW capacity in the first phase, which is currently under construction. Additionally, an initial 3MW energy storage project is being considered for peak cut to reduce electricity costs, serve as a backup power source during outages, ensure uninterrupted critical processes, and enhance business continuity during extreme temperatures.
	CIMC Hongtu	Distributed photovoltaic	Scope 2	In collaboration with the power construction company, the company fully utilizes the roof resources of the factory building to complete the photovoltaic power generation project's construction. Since its commissioning in December 2022, photovoltaic electricity accounts for 43% of the total electricity consumption.
	CIMC Sanctum	Purchasing green electricity	Scope 2	By purchasing 100,000kWh of green electricity through Heilan Power, the company obtains green certificate number 0112302000002892, which helps reduce 871,900 kilograms of carbon dioxide, 4,700 kilograms of sulfur dioxide and 4,300 kilograms of nitrogen oxides.
		Reducing the use of diesel	Scope 1	The company purchases 5 electric forklifts in batches and plans to gradually replace the current national standard fuel forklifts, thereby saving approximately 10,000 liters of diesel annually.
	CIMC Safeway	Roof-mounted distributed photovoltaic	Scope 2	Currently, the total rooftop photovoltaic capacity is about 0.9MW and is being spontaneously used for power supply in standard tank workshops and other locations. As of November 2023, the annual photovoltaic power generation reached 571,598kWh, resulting in a reduction of carbon emissions by 70.25tCO ₂ e. Additionally, the company is constructing another rooftop photovoltaic project with a total capacity of 0.65MW, and generate electricity by December 2023, utilizing a "spontaneous self-use, surplus electricity connected to the grid" consumption method.
Digital operations	CIMC Sanctum	Digital energy consumption management system	Scope 1,2	The company, in collaboration with the Group's data center, develops the IOT digital energy management system. This system can track energy use and consumption, and collect performance data, and KPI comparative assessment by shift, region and production line. Moreover, it involves data modeling based on historical trends of energy use to facilitate energy use benchmarking. The system also incorporates real-time monitoring of vital equipment operations and OEE monitoring combined with production and quality data to optimize equipment utilization, reduce failure rates, and enhance equipment management.
	CIMC Safeway	Dual carbon digital system	Scope 1, 2	At CIMC Safeway, a dual-carbon digitalization pilot project is undertaken to achieve panoramic energy and carbon management, enterprise carbon emission accounting, analysis and alarm. This project also includes product carbon footprint accounting and present carbon footprint data in real time. Additionally, it features a panoramic carbon platform and carbon tools for meticulous management, alongside internationalized carbon certification and quantifiable carbon value. This initiative serves as an exemplary demonstration of dual-carbon digital management for the Group's enterprises.

In October 2023, China's Ministry of Ecology and Environment introduced the first batch of four methodologies for greenhouse gas emission reduction projects and officially launched the national greenhouse gas voluntary emission reduction trading on January 22, 2024. Additionally, the State Council executive meeting approved the Interim Regulations on the Administration of Carbon Emission Trading (Draft) in January 2024. The regulations clearly indicate the permit allocation mode, which initially offers free distribution and introduces compensated allocation at a later stage. This evidences the official legal enforcement of China's carbon trading management. The Company is currently exploring and researching carbon credit offset and an internal carbon pricing mechanism in line with the principle of prudence. Any relevant plans will be announced at the earliest convenience in the foreseeable future. The main considerations for the use of carbon credits and the internal carbon pricing mechanism are as follows:



Carbon credits

- Initially assessing carbon credit assets for internal development and exploration of external cooperation models;
- Determining the stages in the use of carbon credits and sourcing of high-quality, globally recognized carbon credits;
- Balancing financial costs with consolidated income, such as environmental benefits, customer volume and product premiums;
- Creating incentives for subsidiaries to utilize carbon credits.



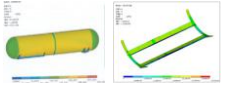


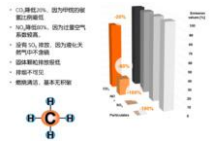
Internal carbon pricing

- Harmonizing the relationship between the internal tax and the shadow price mechanisms, as well as the logic of carbon pricing;
- Incorporating carbon pricing in the value assessment of investment decisions and measuring the operational inputs and outputs of investment projects;
- Promoting consistent values formation within the organization;
- Developing a monetized assessment mechanism for organizational departments using internal carbon pricing.





Carbon Reduction Across Value Chain

Initiative	Entity	Name	Scope of Emission Reduction Contribution	Description	
Lightweight design	CIMC Hongtu	Lightweight design of medium voltage main products	Scope 3 1. Purchased goods and services 12. End-of-life treatment of sold products	The company innovatively introduce a stress analysis design for mobile pressure vessels, achieving a uniform strength of the structure. This approach has resulted in thinning the areas with the potential for thinning. Furthermore, extensive research has been conducted on the application of 590MPa high-strength steel pressure vessels, leading to a significant reduction in product weight. The company's medium voltage products have seen a weight reduction of 500kg per unit and an overall curb weight reduction of over 3% through the analysis and design combined with the use of high-strength steel materials.	
		Low Carbon Metallurgical Consortium of Hubei	Scope 3 1. Purchased goods and services 12. End-of-life treatment of sold products	In collaboration with Baowu Group and Wuhan University of Science and Technology, the company develops materials for liquefied gas storage tanks, utilizing steel grades with low Ceq and low Pcm to improve tank strength and impact toughness. This approach has resulted in a weight reduction of over 10% for a single product. With low-carbon steel or high-strength steel, the single unit cost of LPG semi-trailers is reduced by RMB7,000, and a weight reduction of 477kg per unit is achieved. The proportion of green materials utilized increases from 24.45% to 38.8%.	
	Shijiazhuang Enric	Lightweight container for ultra large volume fibreglas wrapped gas cylinder	Scope 3 1. Purchased goods and services 12. End-of-life treatment of sold products	The stress analysis help reduce the weight of the container by 150kg. The reasonable selection of walking structure help reduce the walking weight by 350kg compared to conventional products. The optimization of the gas cylinder wrapping process leads to a weight reduction of 40kg for each cylinder, equating to a total weight reduction of 360kg.	
Green product	SOE	Energy-saving device design for 40K LPG transporting ships	Scope 3 11. Use of sold products	When designing environmentally friendly ships, the optimization of the propulsion system is a crucial area of focus. Specifically, fan-shaped vanes are widely utilized energy-saving devices, categorized into pre-shrouded vanes and sunshine-type pre-shrouded vanes, each suitable for varying stern flow characteristics. When designing a 40,000 cubic meter medium-sized liquefied petroleum gas carrier (40K MGC), ship model tests are carried out to validate the effectiveness of these two vane types in enhancing the vessel's energy efficiency.	
		Clean energy powered ships	Scope 3 11. Use of sold products	SOE's vessels are equipped with dual fuel-powered engines and generator sets, thereby minimizing exhaust emissions into the atmosphere. Methane, the cleaner energy source, can reduce CO ₂ , NO _x , SO _x and particulate matter (PM) emissions, while also enhancing energy efficiency. Notably, vessels such as the 20k secure emission and energy efficiency certificates from Classification Societies.	
CCUS	SOE	LCO ₂ Tank R&D	Scope 3 11. Use of sold products	SOE researches and develops liquid carbon dioxide (LCO ₂) tanks to bolster technical capabilities for future LCO ₂ tank projects. The successful development of these tanks, designed for storing liquid carbon dioxide, will contribute significantly to global emission reduction targets.	



5.2 Green Solutions

Business Strategy and Objectives

Following the consensus reached at COP28, global countries have introduced various climate-related policies. Aligning with the state's industrial direction, CIMC Enric devises challenging goals through innovative pathways in response to CIMC Group's new five-year (2023-2027) development strategy.



Overall Strategic Goal

CIMC Enric is slated to transition from "equipment + engineering" to "integrated service provider", while developing an interactive value-added business model that revolves around "key equipment + core process + integrated service", aiming to emerge as an integrated provider of scientific, technological, low-carbon and intelligent new energy solutions.

Business development strategy

» **Leading Strategy: Product Focus, Top-Tier Positions**

Enhance research and development of essential equipment and core technology to reinforce our leading status within the industry. Emphasize low-carbon, zero-carbon, energy-efficient, and carbon-reduction initiatives aligned with the dual-carbon goals.

» **Innovation Strategy: Technological Advancement, Integrated Solutions**

Leverage technological innovation, as well as model innovation, to drive the growth of our integrated service business.

» **Growth Strategy: Strategic Demonstration, Comprehensive Expansion**

Concentrate on strategic demonstration, commit to industry integration, and achieve extensive expansion and replication.

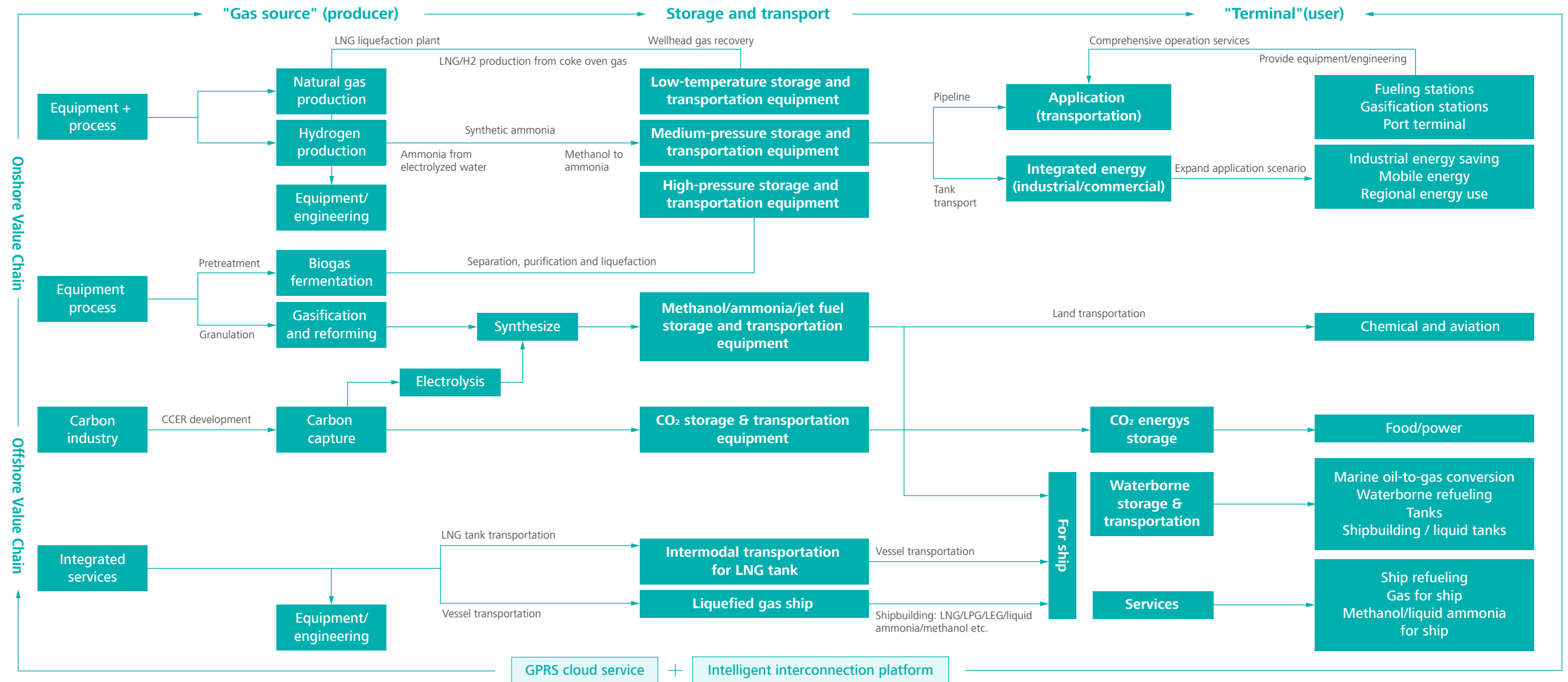
CIMC Enric is committed to strengthening its existing one-piece and two-wing businesses - optimizing and reinforcing its onshore business for energy equipment and engineering, offshore business for clean energy business, and hydrogen businesses to solidify its leading position in the industry. Furthermore, CIMC Enric will extend its value chain vertically upstream and downstream based on its clean energy equipment manufacturing business to provide comprehensive end-to-end services.

For the upstream end, driven by technological innovation, CIMC Enric focuses on resource development and acquisition, establishing and improving its comprehensive operational capabilities, and using coke oven gas and industrial by-product gas to create a series of strategic demonstration projects. Leveraging its successful experiences, the Company will quickly replicate and spread the model to scale up new projects and businesses.

For the downstream end, CIMC Enric will capitalize on its multi-channel resource pool and sales model to develop and provide high-end equipment and distributed integrated energy solution for combined heat and power, combined cooling, heating and power and carbon dioxide (in the agricultural field), and industrial users by taking advantage of various energy resources such as natural gas, hydrogen and green methanol, while also enhancing energy efficiency and consumption levels through an intelligent operation system to provide comprehensive multi-energy services.



Building on its end-to-end manufacturing and service capabilities, CIMC Enric will focus on key equipment, core processes and integrated services at the core of its operations, and expand three energies to incubate three innovative businesses, which will integrate into the vertical business of the industry chain, and form a business loop.



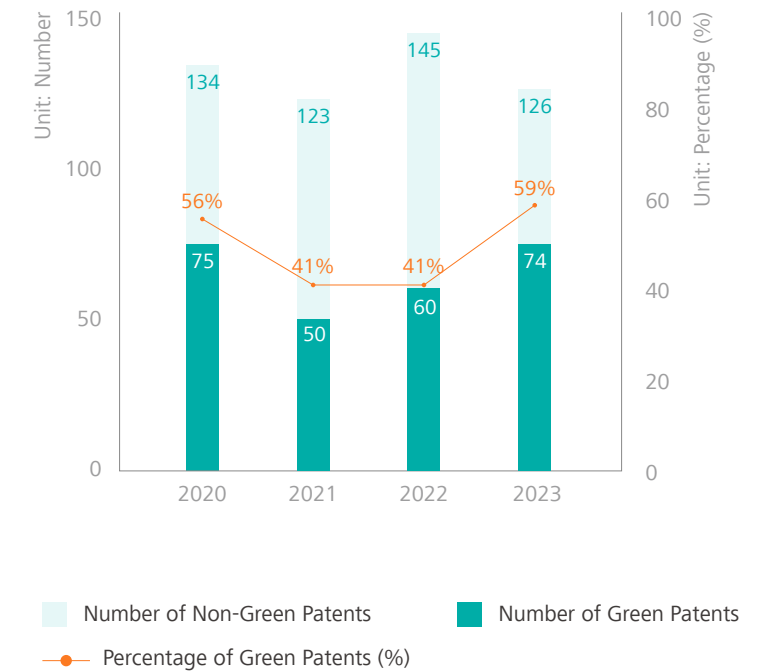
Know-how and Product Breakthrough





CIMC Enric attaches great importance to the technical reserves for green business, continuously increases research and development investment in low-carbon fields, and prepares for seizing green business opportunities in the medium and long term. CIMC Enric has 19 research and development centers, including 9 overseas research and development centers, and establishes an innovation mechanism to drive value growth, continuously promoting the transition of green research results. In 2023, the number of green patent applications by CIMC Enric reached 74, representing a year-on-year increase of 23%. The proportion of green patent applications to the total number of patents was 59%, an increase of 18 percentage points compared to 2022.

Major Breakthroughs in CIMC Enric's Green Business in 2023

Business category	Onshore business for energy equipment and engineering (equipment + process)		
Product development projects	<ul style="list-style-type: none"> Natural Gas Peak-Shaving Storage Station Project 	<ul style="list-style-type: none"> Low temperature Anhydrous Ammonia Carrier 	<ul style="list-style-type: none"> Carbon Dioxide Transporter
Project description	<p>CIMC Sanctum successfully won a bid for a 29,000m³ natural gas peak cut for a reserve station project, which, upon completion, will effectively enhance the local natural gas regulating and emergency response capacity, greatly safeguard the demand for gas, and lay a solid foundation for the local promotion of clean energy.</p> 	<p>The first domestic low-temperature anhydrous ammonia transportation vehicle successfully developed and manufactured by Shijiazhuang Enric was delivered in batch. This achievement has established a novel model for the storage and transport of "green ammonia - green hydrogen."</p> 	<p>Shijiazhuang Enric has fulfilled all orders for carbon dioxide transportation semi-trailers, including the design, manufacturing, and delivery of the largest volume of carbon dioxide semi-trailers. This milestone will support Carbon Dioxide Capture, Utilization and Storage (CCUS) project, contributing to the advancement of the customer's green and low-carbon initiatives.</p> 

▼ Green Patent Applications



Business Category	Offshore business for clean energy business (equipment + process)		Green methanol
Product development projects	<ul style="list-style-type: none"> The first ship of 8,200 cubic meters LNG refueling vessel 	<ul style="list-style-type: none"> "Jacket pile-driven platform + net box" equipment 	<ul style="list-style-type: none"> Methanol fuel supply system
Project description	<p>On October 12, SOE successfully delivered an 8,200-cubic-meter LNG carrier to the Fratelli Cosulich Group of Italy. This vessel marks SOE's first LNG ship after the operation of the West Plant, signifying a significant milestone in its shipbuilding development.</p> 	<p>On July 10, SOE delivered Mingyang Smart Energy's self-developed integration equipment of wind turbine jacket pile-driven platform + net box. This pioneering equipment, the world's first wind-fishery integration equipment, is set to commence operations by the end of July. It will be utilized in China's first "offshore wind power + sea ranch + seawater hydrogen production" integration project.</p> 	<p>CIMC Bluewater's methanol fuel supply system has been awarded the Approval-in-Principle (AIP) certificate for methanol fuel supply systems by DNV. This system is a core piece of equipment for green methanol powered vessels, serving as a catalyst for promoting clean and low-carbon development in the shipping industry and driving the realization of green and low-carbon transition in ship power.</p> 
Business category	Hydrogen business (equipment + process)		
Product development projects	<ul style="list-style-type: none"> Skid-mounted hydrogen refueling station + double-decker hydrogen buses 	<ul style="list-style-type: none"> Methanol hydrogen production skid 	<ul style="list-style-type: none"> 30MPa hydrogen tubular container
Project description	<p>On July 6, CIMC Enric completed the delivery and installation of the core equipment for Hong Kong's inaugural skid-mounted hydrogen refueling station for Hong Kong Citybus. This station, which has already been put into operation on November 30th, also marks the debut of the first hydrogen bus equipped with Type IV onboard hydrogen storage cylinders.</p> 	<p>On November 1, CIMC Enric Hydrogen Energy unveiled the first skid-mounted methanol steam reforming hydrogen generation unit at the 6th SNEC International Hydrogen & Fuel Cell Exhibition. This innovative unit has a small footprint, is energy-saving, and features one-touch intelligent control of the hydrogen content, ensuring optimal safety and efficiency.</p> 	<p>Shijiazhuang Enric's High-Pressure Hydrogen Division achieved a milestone by successfully launching the first 30MPa tube bundle hydrogen container wrapped with carbon fiber and commencing mass production. This accomplishment has set a new domestic record for the carrying capacity of high-pressure hydrogen transportation equipment, leading to a significant reduction in transportation costs.</p> 



Investment Plan

In line with our commitment to green and intelligent development, we seize the opportunities presented by the new climate consensus and expand our business horizons. Below are the investment plan details for CIMC Enric for the next 5 years.

Business segments	Products in Focus
Onshore business for energy equipment and engineering	<ul style="list-style-type: none"> Expand current high-pressure and low-temperature production lines Expand energy storage, CCUS and other new business Focus on valves and other key components
Offshore business for clean energy business	<ul style="list-style-type: none"> Expand the fuel tank production line Facilitate powered ship production line Automate production equipment
Hydrogen energy	<ul style="list-style-type: none"> IV hydrogen storage cylinder, alkali tanks, etc PEM electrolyzer, hydrogen valve and other key components New materials for fuel cells, etc
New energy	<ul style="list-style-type: none"> Expand existing capacity High-quality unconventional gas source projects and downstream application projects at home and abroad
Intelligent interconnection	<ul style="list-style-type: none"> Intelligent equipment intelligent systems



Case Study: CIMC Enric Explores Green Financing Opportunities

CIMC Enric has successfully secured a EUR170 million (approximately RMB1.34 billion) sustainability-linked bank loan (SLL) from ING, a Dutch bank. This loan's interest rate and guarantee fee rate are tied to the Company's international ESG scores (CIMC Enric's MSCI rating is raised to AA by December 2023) and will be adjusted based on changes in these scores. By leveraging its strong ESG performance, the acquisition of this sustainable loan marks CIMC Enric's initial foray into green finance. This strategic move aims to decrease the Company's financing costs, expand its financing capabilities, and underscore the financial market's acknowledgment of CIMC Enric's enduring commitment to sustainable development.



Performance - Performance Data for Climate-related Indicators¹⁵

Indicators	Unit	2023	2022	2021	Proportion of decrease or increase 2023/2022
Absolute emissions					
Total GHG emissions (Scope 1+2)	Tons of carbon dioxide equivalent	115,679.61	94,838.54	102,663.28	22.0%
Direct greenhouse gases (Scope 1)	Tons of carbon dioxide equivalent	31,353.17	23,140.20	16,149.61	35.5%
Indirect greenhouse gases (Scope 2)	Tons of carbon dioxide equivalent	84,326.44	71,698.35	86,513.67	17.6%
Intensity emissions					
GHG emission intensity (Scope 1+2)	Tons of carbon dioxide equivalent RMB100 million revenue	489.62	541.22	607.61	-9.5%
Direct greenhouse gases (Scope 1)	Tons of carbon dioxide equivalent per RMB100 million revenue	132.70	132.06	95.58	0.5%
Indirect greenhouse gases (Scope 2)	Tons of carbon dioxide equivalent per RMB100 million revenue	356.92	409.16	512.03	-12.8%
Clean energy generation and usage					
Clean energy generation	kWh	10,055,714.00	173,976.41	504	5,680%
Clean energy usage	kWh	8,102,230.20	171,216.41	504	4,632%
Green patent					
Number of green patent applications	—	74	60	50	23.3%
The proportion of green patents to total patent applications	%	59%	41%	41%	18ppt

Based on CIMC Enric's initial internal assessment, the primary emissions stem from supplier and customer activities in the value chain, with a particular focus on the following three categories:

- Purchased goods and services: procurement of raw materials for products (CIMC Enric needs to purchase a large amount of steel. Currently, domestic steel production involves blast furnaces and long process steelmaking, resulting in high overall emissions);
- Capital goods - investments in fixed assets (CIMC Enric will continue to support business expansion through ongoing fixed asset investment and M&A activities);
- Use of sold products - emissions during product use (greenhouse gases emitted by customers during use).

The Group is projected to commence the initial Scope 3 assessment in 2024, with the disclosure of relevant Scope 3 data expected in 2025.

15. Due to the limited impact of the new energy business on the Group's operations, the revenue related to environmental performance indicators and data intensity does not encompass the new energy business. Greenhouse gas emissions are calculated as follows:

Direct GHG (Scope 1): Calculated by multiplying the Company's oil and gas consumption by the corresponding emission factor;

Indirect GHG (Scope 2): Calculated by multiplying the Company's electricity consumption by the appropriate emission factor. The emission factor used is referenced from the "Average CO₂ Emission Factor of China's Regional Power Grids in 2012";

Total GHG emissions: Calculated by summing the direct GHG emissions (Scope 1) and indirect GHG emissions (Scope 2).



Appendix I

The scenario analysis of CIMC Enric incorporates internationally recognized and authoritative climate data for modeling. Details regarding the interpretation of climate-related risks, data sources, resolution and coverage¹⁶ are provided in the table below:

Risk name	Risk type	Indicators and their definitions	Coverage	Resolution	Data sources
Extreme heat	Acute	Heat wave intensity: the frequency and duration of events where temperatures in summer surpass the normal levels for a specific location	Global	25km	Sixth Coupled Model Intercomparison Project (CMIP 6) National Aeronautics and Space Administration (NASA)
Extreme precipitation	Acute	Heavy rainfall intensity: the frequency and duration of events when precipitation exceeds the typical level for a given location within a specified period	Global	25km	Sixth Coupled Model Intercomparison Project (CMIP 6) National Aeronautics and Space Administration (NASA)
Tropical cyclone	Acute	Cyclone frequency: the frequency of tropical cyclones within a specific location over the course of a year	Global	10km	Sixth Coupled Model Intercomparison Project (CMIP 6) National Aeronautics and Space Administration (NASA)
River flooding	Acute	Depth of inundation: the frequency and depth of river flooding within a specific area over a defined timeframe	Global	1km	World Resources Institute (WRI)
Coastal flooding	Acute	Depth of inundation: the frequency and depth of coastal flooding within a specific area over a defined timeframe	Global	1km	World Resources Institute (WRI)
Water shortage	Chronic	Depth of runoff: the depth of surface water and groundwater runoff within a specific time	Global	10km	World Resources Institute (WRI)
Dry trend	Chronic	Dry days: the count of sustained non-precipitation days within a specific period, serving as an indicator of drying trends in a particular location	Global	25km	Sixth Coupled Model Intercomparison Project (CMIP 6) National Aeronautics and Space Administration (NASA)
Warming trend	Chronic	Warming days: the number of days within a specified period where temperatures at a particular location consistently exceeded historical levels for the same timeframe	Global	25km	Sixth Coupled Model Intercomparison Project (CMIP 6) National Aeronautics and Space Administration (NASA)
Wind speed trend	Chronic	Average annual wind speed: the prevailing wind speed at a specific location within a given year	Global	25km	Sixth Coupled Model Intercomparison Project (CMIP 6) National Aeronautics and Space Administration (NASA)
Sea level rise	Chronic	Sea level rise trend: the tendency of the coastline of a location to extend landward due to sea level rise during a given time period	Global	1km	Sixth Coupled Model Intercomparison Project (CMIP 6) National Aeronautics and Space Administration (NASA)

16. Source: MioTech's Climate Risk Methodology



Appendix II

Boundary Coverage

No.	Short Name	Full Name
1	CIMC Safeway	CIMC Safeway Technologies Co., Ltd.
2	CIMC Sanctum	Zhangjiagang CIMC Sanctum Cryogenic Equipment Co., Ltd.
3	Shijiazhuang Enric	Shijiazhuang Enric Gas Equipment Co., Ltd.
4	CIMC Hongtu	Jingmen Hongtu Special Aircraft Manufacturing Co., Ltd.
5	Langfang Integration	Enric (Langfang) Energy Equipment Integration Co.,Ltd.
6	CIMC Holvrieka	Zieman Holvrieka Asia Co.,Ltd.
	CIMC Holvrieka includes the following subsidiary companies	
	Ziemann DE	Ziemann Holvrieka GmbH, Bürgstadt & Ludwigsburg, DE
	Briggs UK	Briggs of Burton PLC, Burton on Trent UK
	DME	DME Process Systems Ltd.
	McMillan	McMillan Coppersmiths & Fabricators Ltd, Prestonpans, UK
	Briggs USA	Briggs of Burton, Pittsford, New York, USA
	Ziemann BE	Ziemann Holvrieka NV, Menen, BE

No.	Short Name	Full Name
7	SOE	Nantong CIMC Sinopacific Offshore & Engineering Co., Ltd.
8	Liaoning Hashenleng	Liaoning CIMC Hashenleng Gas Liquefaction Equipment Co., Ltd.
9	Nantong Energy	Nantong CIMC Energy Equipment Co., Ltd.
10	Nantong Port	Nantong CIMC Port Development Co., Ltd.
11	CIMC EnTech	CIMC Enric Engineering Technology Co., Ltd.
12	Enric (Bengbu) Compressor	Enric (Bengbu) Compressor Co., Ltd.
13	CIMC Lvjian	CIMC Lvjian Environmental Protection Technology Co., Ltd.
14	CIMC Environmental Services	CIMC Environmental Services Co., Ltd.
15	CIMC Enric Hydrogen Energy	Beijing Enric Xinneng Energy Resources Technology Co.,Ltd
16	CIMC Safeway Lianyungang	CIMC Safeway Tank Services (Lianyungang) Co., Ltd.
17	CIMC Safeway Jiaxing	CIMC Safeway Tank Services (Jiaxing) Co., Ltd.



Appendix III

As the HKEX's climate disclosure has not yet been formally documented, Part D: Consultation Paper on Enhancement of Climate-related Disclosures under the Environmental, Social and Governance Framework" has been used for the time being for benchmarking purposes.

Disclosure requirements for consultation documents		Corresponding Sections
Governance		
	An issuer shall disclose the identity of any board committee or board members responsible for oversight of climate-related risks and opportunities	Climate Governance
	An issuer shall disclose how the board ensures that the appropriate skills and competencies are available to oversee strategies designed to respond to climate-related risks and opportunities	Climate Governance
	An issuer shall disclose how and how often the board and its committees are informed about climate-related risks and opportunities	Climate Governance
Governance	An issuer shall disclose how the board and its committees consider climate-related risks and opportunities when overseeing the issuer's strategy, its decisions on major transactions, and its risk management policies	Climate Governance
	An issuer shall disclose how the board and its committees oversee the setting of, and monitor and review progress toward, targets related to significant climate-related risks and opportunities, including whether and how related performance metrics are included in remuneration policies	Climate-linked Remuneration
	An issuer shall disclose a description of management's role in assessing and managing climate-related risks and opportunities, including: the scope of climate-related responsibilities and duties performed by management-level position(s) or committee(s); how the board's oversight is exercised over such management-level position(s) or committee(s); and whether dedicated controls and procedures are applied to the issuer's management of climate-related risks and opportunities	Climate Governance



Disclosure requirements for consultation documents		Corresponding Sections
Strategy		
Climate-related risks and opportunities	An issuer shall disclose its assessment of any climate-related risks reasonably likely to have a material effect on the issuer’s business model, strategy and cash flows, its access to finance and its cost of capital, which may manifest in the short, medium or long term	Risks and Opportunities
	An issuer shall disclose a description of such climate-related risks identified and the time horizon over which each could reasonably be expected to have a material effect on the issuer	Risks and Opportunities
	An issuer shall disclose how the issuer defines the short, medium and long term and how these definitions are linked to the issuer’s strategic planning horizons and capital allocation plans	Risks and Opportunities
	An issuer shall disclose whether the risks identified are physical or transition risks	Risks and Opportunities
	An issuer shall disclose whether the risks identified are acute or chronic	Risks and Opportunities
	An issuer shall disclose current and anticipated effects of any climate-related risks identified on the issuer’s: business operations (including the types and locations of operations), business model and strategy; products or services; and/or suppliers and other parties in its value chain	Risks and Opportunities Scenario Analysis
Transition plans	An issuer shall describe how the issuer is responding to the climate-related risks identified and, where applicable, any climate-related opportunities identified, including: any current or anticipated changes to the issuer’s business model, strategy and resource allocation to address such climate-related risks and opportunities; any adaptation and mitigation efforts (direct or indirect) undertaken or to be undertaken by the issuer; and how these plans will be resourced	Value Chain Carbon Reduction Green Solutions
	The issuer shall disclose the set climate related targets and greenhouse gas emission targets, including the objective of the target; scope of the target; period over which the target applies; base period from which progress is measured; milestones or interim targets (if any); in relation to GHG emission targets, the extent to which the target relies on the use of carbon credits; the issuer shall disclose the degree of carbon credit used in the plan: gross emission targets, intended use of carbon credits and net emission targets separately; and the type of carbon credit, and whether the credits will be subject to a third-party credit verification or certification scheme	Value Chain Carbon Reduction



Disclosure requirements for consultation documents		Corresponding Sections
Climate resilience	The issuer shall disclose information that enables investors to understand the resilience of the issuer's strategy and operations to climate-related changes, developments or uncertainties. This envisages disclosure on: the extent assets and business activities at risk are covered by the issuer's strategy, its current and planned mitigation actions and/or investments; the implications, if any, of the issuer's findings for its strategy; the significant areas of uncertainty considered in the analysis of climate resilience; and the ability of the issuer to adjust, or adapt its business model	Scenario Analysis
	The issuer shall disclose the climate-related scenario analysis used to assess the effect of climate-related risks and, where applicable, opportunities on its business model, strategy and cash flows, its access to finance and its cost of capital, and the resilience of its strategy and business model, as well as the input data and the sources of the scenarios used in the analysis. An issuer should use a method of climate-related scenario analysis that is commensurate with an issuer's circumstances. An issuer should disclose the following information: whether the scenarios used are associated with transition risks or increased physical risks; how the scenarios chosen are relevant to assessing the issuer's resilience; critical assumptions about the way the transition to a lower-carbon economy will affect the issuer; and time horizons used in the analysis	Scenario Analysis
Financial effects of climate-related risks and opportunities	Current financial effect - Describe and, where material, quantify the effect of climate-related risks and, where applicable, climate related opportunities identified on the issuer's financial position, financial performance and cash flows for the most recent reporting period; and describe whether and how such risks and, where applicable, opportunities may result in a material adjustment to the carrying amounts of assets and liabilities reported in the financial statements within the next financial year	Risk Management
	Anticipated financial effect - Describe the anticipated effects of climate-related risks and where applicable, opportunities identified on the issuer's financial position, financial performance and cash flows over the short, medium and long term. This envisages disclosures on: how the issuer expects its financial performance to change over the short, medium and long term, considering its strategy to address significant climate related risks and opportunities; and how the issuer expects its financial position to change over the short, medium and long term, considering funds required: how the issuer defines the short, medium and long term	Scenario Analysis Investment Plan
Risk Management		
Risk management	Describe the process the issuer uses to identify, assess and manage climate-related risks. This envisages disclosure of: how the issuer assesses the likelihood and effects associated with such risks; how the issuer prioritizes climate-related risks relative to other types of risks, including its use of risk-assessment tools; how the issuer monitors and manages its climate related risks; how such process is integrated into the issuer's overall risk management process; and any changes in the processes compared to the prior reporting period	Risk Management



Disclosure requirements for consultation documents		Corresponding Sections
Metrics and Targets		
Greenhouse gas (GHG) emissions	Disclose absolute gross GHG emissions generated during the reporting period, expressed as metric tons of CO ₂ equivalent, classified as: Scope 1 emissions, Scope 2 emissions and Scope 3 emissions	Performance
	Disclose the following information in relation to GHG emissions: a statement describing the standard in accordance with which the issuer's GHG emissions have been measured; the GHG emissions consolidation approach used; and a summary of specific exclusion of sources, facilities and/or operations with a justification for their exclusion	Performance
	In relation to Scope 3 emissions, disclose: the categories of significant upstream or downstream activities along the value chain that have been included in the calculation; the basis for selecting such upstream or downstream activities; the basis for its measurement of Scope 3 emissions; and the reasons for omission if it excludes those GHG emissions	Performance
Transition risks	Disclose the amount and percentage of assets or business activities vulnerable to transition risk	Scenario Analysis
Physical risks	Disclose the amount and percentage of assets or business activities vulnerable to physical risk	Scenario Analysis
Climate-related opportunities	Disclose the amount and percentage of assets or business activities aligned with climate-related opportunities	Scenario Analysis
Capital deployment	Disclose the amount of capital expenditure, financing or investment deployed towards climate-related risks and opportunities	Investment Plan
Internal carbon prices	In respect of issuers who maintain an internal carbon price, disclose: the price for each metric tonne of GHG emissions that the issuer uses to assess the costs of its emissions; and an explanation of how the issuer is applying the carbon price in decision-making	Value Chain Carbon Reduction
Remuneration	Describe how climate-related considerations are factored into remuneration policy	Climate-linked Remuneration
Industry-based metrics	Issuers are encouraged to consider the industry-based disclosure requirements prescribed under other international ESG reporting frameworks such as the SASB Standards and the GRI Standards, and make disclosures as they see fit	Performance