



中国交建  
CHINA COMMUNICATIONS CONSTRUCTION



# 中国交建 环境、社会及管治报告

Environmental, Social and Governance Report  
of China Communications Construction

# 2024



# 报告说明

## REPORT DESCRIPTION

### 报告范围

**报告组织范围：**本报告涵盖中国交通建设股份有限公司及所属分、子公司。中国交通建设股份有限公司品牌名称为“中国交建”。本报告中中国交通建设股份有限公司简称“中国交建”“公司”“我们”。

中国交建作为中国交通建设集团有限公司重要控股子公司，对其经营业绩起着决定性作用。因此在涉及有关综合性荣誉、排行中，本报告未对两者进行区分表述。

**报告时间范围：**本报告为年度报告，时间跨度为 2024 年 1 月 1 日至 2024 年 12 月 31 日，部分内容适当超出。

### 编制依据

国务院国资委《关于新时代中央企业高标准履行社会责任的指导意见》《建筑央企海外 ESG 工作指引》

财政部《企业可持续披露准则——基本准则（试行）》

港交所《环境、社会及管治报告守则》

上海证券交易所《上市公司自律监管指引第 14 号——可持续发展报告（试行）》

沪深北交易所《上市公司可持续发展报告编制指南》

中国企业改革与发展研究会、责任云研究院《中国企业可持续发展报告指南 (CASS-ESG 6.0)》

联合国 2030 年可持续发展目标（SDGs）

全球报告倡议组织《可持续发展报告标准》（GRI Standards）

国际可持续准则理事会（ISSB）《国际财务报告可持续披露准则第 1 号——可持续相关财务信息披露一般要求》《国际财务报告可持续披露准则第 2 号——气候相关披露》

联合国全球契约（United Nations Global Compact）十项原则

本报告遵循财政部《企业可持续披露准则——基本准则（试行）》有关可靠性、相关性、可比性、可验证性、可理解性和及时性的要求，对于重要议题严格按照治理、战略、风险和机遇管理、指标和目标四个核心要素进行披露。

本报告遵循港交所《环境、社会及管治报告守则》有关“重要性”“量化”“平衡”“一致性”原则的要求，通过社会责任重大性分析回应“重要性”原则，判断出实质性议题，通过量化数据列表回应“量化”和“一致性”原则，通过对负面议题及不良绩效的检讨回应“平衡”原则。

### 内容说明

本报告不存在虚假信息、误导性陈述，中国交建保证内容的真实性、准确性和完整性。

本报告所涉及财务数据仅供参考，最终以公司年报为准。如无特别说明，报告披露的金额均以人民币计量。

### 报告获取

本报告以电子版形式发布，可在中国交建网站 <https://www.ccccltd.cn/> 社会责任专栏下载浏览。若对本报告有任何疑问和意见，您可按以下方式联系我们：

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### Report Scope

**Organizational Scope of the Report****Report organizational scope:** This report covers China Communications Construction Company Limited and its branches and subsidiaries. The brand name of China Communications Construction Company Limited is "China Communications Construction Company". China Communications Construction Company Limited in this report is abbreviated as "CCCC", "the Company" and "We".

As an important wholly-owned subsidiary holding subsidiary of China Communications Construction Group Ltd., CCCC China Communications Construction Company plays a decisive role in its business performance. Therefore, this report doesn't distinguish between CCCC and China Communications Construction Group Ltd. in comprehensive honors and ranking.

**Report time scope:** This report is an annual report spanning from January 1, 2024, to December 31, 2024, within which some content is appropriately exceeded.

### Preparation Basis

*Guiding Opinions on the High-quality Performance of Social Responsibility by Central Enterprises, ESG Guidelines for Overseas Operations of Central Enterprises in the Construction Sector*, by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC)

*Basic Norms on Enterprise Sustainable Disclosure (Trial)* by the Ministry of Finance

*Guidelines on Environmental, Social and Governance Report* by the Stock Exchange of Hong Kong Ltd.

*Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial)* by the Shanghai Stock Exchange

*Compilation of Sustainable Development Reports and Guide for Listed Companies* at the Shanghai Stock Exchange, Shenzhen Stock Exchange, and Beijing Stock Exchange

*China's Corporate Social Responsibility Reporting Guidelines (CASS-ESG 6.0)* by China Enterprise Reform and Development Society and Responsibility Cloud Research Institute

UN 2030 Agenda for Sustainable Development (SDGs)

*GRI Sustainable Development Reporting Standards (GRI Standards)* by Global Sustainability Standards Board (GSSB)

*IFRS Sustainability Disclosure Standard S1-General Requirements for Disclosure of Sustainability-related Financial Information and IFRS Sustainability Disclosure Standard S2-Climate-related Disclosure* by International Sustainability Standards Board (ISSB)

The Ten Principles of United Nations Global Compact

This report adheres to the requirements of the Ministry of Finance's Corporate Sustainability Disclosure Standards – Basic Standards (Trial) in terms of reliability, relevance, comparability, verifiability, understandability, and timeliness. Disclosures on material topics are made in strict accordance with the four core elements: governance, strategy, risk and opportunity management, and metrics and targets.

This report follows the principles of "significance", "quantification", "balance" and "consistency" in the *Guidelines on Environmental, Guidelines on Environmental, Social and Governance Report* by the Stock Exchange of Hong Kong Ltd. It responds to the "significance" principle and identifies substantive topics through the social responsibility significance analysis, responds to the principles of "quantification" and "consistency" through the quantitative data list and responds to the "balance" principle through reviewing negative topics and poor performance.

### Content Specification

This report has no false information and misleading statements. CCCC shall guarantee the authenticity, accuracy and completeness of the report.

The financial data involved in this report is for reference only and shall be subject to the company's annual report. Unless otherwise specified, the amount disclosed in the report shall be measured in RMB.

### Report Acquisition

The report is released in electronic form and can be downloaded and viewed at Social Responsibility Column of <https://www.ccccltd.cn/> of CCCCChina Communications Construction Company. If you have any suggestions or comments on this report, contact us as follows:

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# 董事会致辞

2024 年对于中国交建是极不平凡、极不容易、向实向新的一年。习近平总书记复信肯尼亚留学生点赞蒙内铁路、致信祝贺深中通道建成开通、出席钱凯港开港仪式，给公司上下以极大鼓舞和激励，为新征程公司改革发展提供了前行的指路明灯！我们坚持以习近平新时代中国特色社会主义思想为指导，深入贯彻党的二十大和二十届二中、三中全会精神，在攻坚克难中砥砺奋进，在服务大局中担当作为，书写了建设具有全球竞争力的世界一流企业新篇章。

The year of 2024 was an extraordinary and challenging yet innovative and realistic year for CCCC. General Secretary Xi Jinping's responses—praising the Mombasa–Nairobi Standard Gauge Railway in a reply to a Kenyan student, congratulating on the completion of the Shenzhen–Zhongshan Link, and attending the inauguration of Chancay Port—provided tremendous encouragement and inspiration. These gestures highlighted the guiding light for the company's reform and development on the new journey. Guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and implementing the spirit of the 20th National Congress of the Communist Party of China (CPC) and the Second and Third Plenary Sessions of the 20th CPC Central Committee, we forged ahead amidst challenges and took active roles in major endeavors, writing a new chapter in becoming a globally competitive technology-based, management-oriented, and quality-oriented world-class enterprise.

**这一年，我们以畅通之笔，绘就发展宏图。**秉持“让世界更畅通、让城市更宜居、让生活更美好”的企业愿景，充分发挥中央企业科技创新、产业控制、安全支撑“三个作用”，在践行交通强国战略、共建“一带一路”等实践中留下坚实足迹——全力以赴建设国家重大战略工程，乌尉高速天山胜利隧道全线贯通，平陆运河、舟山国储基地等重大工程进展顺利，彰显功能价值；马东铁、科伦坡港口城等共建“一带一路”的标志性项目取得实质性进展；广泛参与社会救援工作，在灾害应急救援中尽显先锋本色。公司获评交通强国建设试点成效突出单位，充分展现了服务大局的行动自觉和使命担当。

**This year, we used a pen of connection to sketch a grand vision of development.** Adhering to our corporate vision of "making the world more connected, cities more livable, and life better", we fully leveraged the "three roles" of central enterprises: technological innovation, industrial control, and safety support. In our commitment to implementing the strategy of building a powerful transportation nation and jointly building the "Belt and Road Initiative" (BRI) we have left solid footprints—going all out to construct major national strategic projects. The Urumqi-Yuli Expressway Tianshan Shengli Tunnel was fully connected, and significant projects like the Pinglu Canal and the Zhoushan National Reserve Base progressed smoothly, showcasing their functional value. Substantial progress was made in landmark Belt and Road projects such as the ECRL Project and Port City Colombo. We have been actively involved in social rescue operations, demonstrating our pioneering spirit in disaster emergency response. The company was recognized as an outstanding unit for its achievements in the pilot construction of a powerful transportation nation, fully demonstrating our proactive action and commitment to serving the broader agenda.

**这一年，我们以变革之勇，书写治理新篇。**持续推进管理体制创新，完善现代企业制度，提升公司治理效能。围绕建设世界一流企业的目标，一体推进市场化、产业化、数字化、国际化进程，核心功能和核心竞争力进一步增强。“四能”改革和“五型”总部建设取得积极进展，管理效能不断提升，中交人以敢于自我革命、勇于担当使命的决心和勇气闯出一片新天地。数字化转型赋能生产模式、管理流程和服务体系变革升级，公司发展稳中有进、量质齐升。公司国际化升维取得良好成效，在共建“一带一路”沿线国家和地区新签合同额和营业收入稳居建筑央企第一，“中国交建”品牌在世界舞台上更加响亮。

**In 2024, with the courage for reform, we wrote a new chapter in governance.** We continuously pushed for innovation in management systems, perfected the modern corporate system, and enhanced governance efficiency. Focusing on the goal of building a technology-based, management-oriented, and quality-oriented world-class enterprise, we promoted market-oriented, industrialized, digital, and international processes. Our core functions and competitiveness were significantly strengthened. We have made progress in the reform of "cadre positions can be promoted and demoted, institutions can be increased and reduced, salaries can be high and low, and employees can enter and exit", as well as in the construction of "essential safety oriented, quality efficiency oriented, technological innovation based, resource conservation oriented, and harmonious development oriented" headquarters. With the determination to self-reform and the courage to embrace our mission, we broke through and created new frontiers. The digital transformation empowered changes

# MESSAGE FROM THE BOARD OF DIRECTORS

and upgrades in our production models, management processes, and service systems, ensuring steady and holistic development. Our globalization efforts yielded excellent results, with new contracts and operating income in BRI countries leading among construction central enterprises. The CCCC brand shone even brighter on the global stage.

**这一年，我们行绿色之路，推动产业向新。**践行“两山”理论，推进“智慧建造”与“绿色建造”，生态清淤智能化一体平台船“太湖之星”投入使用，助力太湖全年平均水质 30 年来首次达良好湖泊标准，公司发展的“含绿量”“含新量”“含金量”不断提升。加快培育发展新质生产力，自主研制港口运输设备重型驱动桥工程样机、全球最大国内首艘 LNG 双燃料动力系统耙吸式挖泥船“新海鲟”等一批高端装备。在深地深海领域开展前瞻性布局，农林牧渔和陆上新能源合同额大幅增长，节能环保、新材料、高端装备制造成为“战新”产业主力，在国务院国资委“推动传统产业数字化智能化绿色化转型升级”考核中位居央企首位。

**In this year, we embraced the path of green development, propelling our industry towards the new.** Implementing the "Two Mountains" theory, we advanced smart construction and green construction. The eco-friendly, intelligent dredging platform "Taihu Star" was launched, improving Taihu Lake's average water quality to meet the standards of a good lake for the first time in 30 years, pursuing greener and more innovative development while upgrading the quality of development. We accelerated the development of new quality productive forces, independently developed high-end equipment like the heavy-duty drive axle for port transport and the world's largest, the first domestically built LNG dual-fuel powered cutter suction dredger "Xinhaixun". We strategically expanded into deep-sea and new energy sectors, significantly increasing contracts in agriculture, forestry, animal husbandry, and onshore new energy. Our contributions in energy conservation, new materials, and high-end manufacturing became mainstays in strategic emerging industries, ranking first among central enterprises in SASAC's assessment for transforming traditional industries towards digitalization, intelligence, and greening.

**这一年，我们担央企之责，共建美好世界。**始终坚持“以人民之心为心”，为中国式现代化建设注入温暖力量，在乡村振兴、应急救援、服务民生领域积极作为，涌现出一批优秀履责典范。深化“中交助梦”系列行动，真心实意挂联、真金白银投入、真抓实干推进，实施 140 余个惠民项目，连续 7 年获中央农村工作领导小组定点帮扶成效考核“好”的评价。在海外建设“连心桥”“致富路”“发展港”“幸福城”“清洁电”的同时，积极开展教育援助、社区基础设施援建、文化交流互鉴等公益活动，以真情诠释人类命运共同体内涵，绘就民心相通动人画卷。

**In this year, we upheld our responsibilities as a central enterprise, contributing to a better world.** Always keeping the people's needs at heart, we infused warmth into China's modernization efforts, actively engaging in rural revitalization, emergency rescue, and public service, setting examples of exemplary duty performance. We deepened our Build Your Future Dream initiatives, genuinely connecting, investing, and vigorously advancing over 140 projects benefiting the public, receiving a "good" rating for seven consecutive years in targeted poverty alleviation assessments by the Central Rural Work Leading Group. While building "bridges of connection", "roads to wealth", "development ports", "happy cities", and "clean energy" overseas, we actively participated in educational aid, community infrastructure construction, and cultural exchange, truly embodying the concept of a community with a shared future for mankind, and painting a picture of deepening people-to-people exchanges.

**回望间，山水千万程，风雨未停歇；再出发，胸怀凌云志，关山更峥嵘。**2025 年是进一步全面深化改革的关键之年，是“十四五”收官之年，也是“十五五”谋篇布局之年。我们将更加紧密地团结在以习近平同志为核心的党中央周围，脚踏实地、埋头苦干，众志成城、团结奋斗，以高质量发展的实际成效为强国建设、民族复兴伟业作出新的更大贡献！

**Reflecting on the journey, through countless landscapes and unceasing challenges, we are now poised for another departure, with ambitions that reach beyond the highest peaks.** The year 2025 is significant for further comprehensive deepening of reforms, marking the conclusion of the "14th Five-Year Plan" and the strategic layout for the "15th Five-Year Plan". We will unite even more closely around the CPC Central Committee with Comrade Xi Jinping at its core. With our feet firmly on the ground and a commitment to hard work, we will unite in spirit and effort to make new and greater contributions to the construction of a great nation and the grand cause of national rejuvenation!

# 关于我们

## ABOUT US

### 公司简介

#### COMPANY PROFILE

中国交建是全球领先的特大型基础设施综合服务商，主要从事交通基础设施的投资建设运营、城市综合开发等，为客户提供投资融资、咨询规划、设计建造、管理运营一揽子解决方案和一体化服务。公司拥有 34 家主要全资、控股子公司，业务足迹遍及中国所有省、市、自治区及港澳特区和世界 139 个国家和地区，建设了一大批代表世界、代表时代较高水平的交通基础设施，为客户提供了成熟完备的服务，形成了全球领先的技术体系。中国交建在香港、上海两地上市，公司盈利能力和价值创造能力在全球同行中处于领先地位。2024 年，中国交建居《财富》世界 500 强第 63 位；在国务院国资委经营业绩考核中获“19 连 A”；连续 19 年入选“中国承包商 80 强和工程设计企业 60 强”榜单，位居“2024 最具国际拓展力承包商”榜首。

CCCC is a leading global mega infrastructure service provider, mainly engaged in the investment, construction, and operation of transportation infrastructure and urban development. We offer comprehensive one-stop solutions and integrated services that include investment and financing, consulting and planning, design and construction, and management and operations. CCCC has 34 main wholly-owned and holding subsidiaries, with operations spanning every province, municipality, autonomous region in China, including the Hong Kong and Macao special administrative regions, and 139 countries and regions worldwide. We have constructed a multitude of transportation infrastructure projects that represent the highest levels of our era, providing mature and comprehensive services and forming a globally leading technological system. Listed in both Hong Kong and Shanghai, CCCC stands at the forefront of global peers in profitability and value creation. In 2024, CCCC ranked 63rd on the Fortune Global 500 list, achieved "19 consecutive A's" in SASAC's performance assessment, and was listed among "China's Top 80 Contractors and Top 60 Engineering Design Firms" for the 19 consecutive year, topping the list of "2024 Most Globally Expansive Contractors".

### 企业文化

#### CORPORATE CULTURE

#### 企业使命

固基修道、履方致远

#### CCCC Mission

Consolidate the foundation, cultivate the way, and carry out the CCCC's mission

#### 企业愿景

让世界更畅通、让城市更宜居、  
让生活更美好

#### CCCC Vision

Make the world more smooth, make the city more livable, make the life more colorful

#### 企业精神

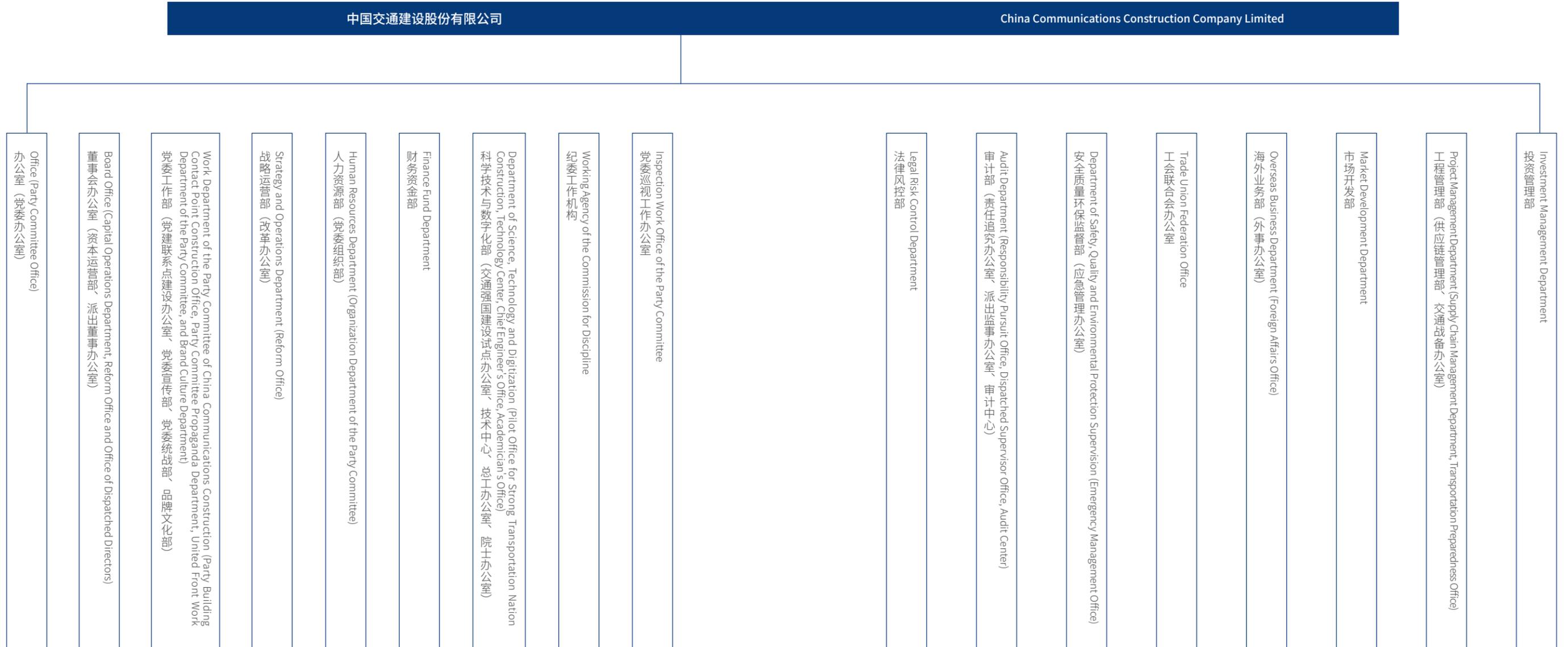
交融天下、建者无疆

#### CCCC Spirit

Blend with the world and build without borders

# 组织架构

## ORGANIZATIONAL STRUCTURE



## 主要子公司名录

### LIST OF MAJOR SUBSIDIARIES

01	中国港湾工程有限责任公司	China Harbour Engineering Company Ltd.	18	中交海西投资有限公司	CCCC Haixi Investment Co., Ltd.
02	中国路桥工程有限责任公司	China Road & Bridge Corporation	19	中交资产管理有限公司	CCCC Asset Management Company Limited
03	中交第一航务工程局有限公司	CCCC First Harbor Engineering Company Ltd.	20	中交设计咨询集团股份有限公司	CCCC Design & Consulting Group Co., Ltd.
04	中交第二航务工程局有限公司	CCCC Second Harbor Engineering Co., Ltd.	21	中交水运规划设计院有限公司	CCCC Water Transportation Consultants Co., Ltd.
05	中交第三航务工程局有限公司	CCCC Third Harbor Engineering Co., Ltd.	22	中交第一航务工程勘察设计院有限公司	CCCC First Harbor Consultants Co., Ltd.
06	中交第四航务工程局有限公司	CCCC Fourth Harbor Engineering Co., Ltd.	23	中交第二航务工程勘察设计院有限公司	CCCC Second Harbor Consultants Co., Ltd.
07	中交一公局集团有限公司	CCCC First Highway Engineering Group Co., Ltd.	24	中交第三航务工程勘察设计院有限公司	CCCC Third Harbor Consultants Co., Ltd.
08	中交第二公路工程局有限公司	CCCC Second Highway Engineering Co., Ltd.	25	中交第四航务工程勘察设计院有限公司	CCCC Fourth Harbor Consultants Co., Ltd.
09	中交路桥建设有限公司	CCCC Road & Bridge International Co., Ltd.	26	中国公路工程咨询集团有限公司	China Highway Engineering Consultants Corporation
10	中交第三公路工程局有限公司	CCCC Third Highway Engineering Co., Ltd.	27	中交铁道设计研究总院有限公司	CCCC Railway Design and Research Institute Co., Ltd.
11	中交建筑集团有限公司	CCCC Construction Group Co., Ltd.	28	中交疏浚（集团）股份有限公司	CCCC Dredging (Group) Co., Ltd.
12	中交机电工程局有限公司	CCCC Mechanical & Electrical Engineering Co., Ltd.	29	中交西安筑路机械有限公司	CCCC Xi'an Road Construction Machinery Co., Ltd.
13	中交华南建设发展有限公司	CCCC South China Construction and Development Co., Ltd.	30	中交天和机械设备制造有限公司	CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd.
14	中交长江建设发展集团有限公司	CCCC Yangtze River Construction & Development Co., Ltd.	31	中交财务有限公司	CCCC Finance Company Limited
15	中交投资有限公司	CCCC Investment Company Limited	32	中交资本控股有限公司	CCCC Capital Holdings Limited
16	中交城市投资控股有限公司	CCCC Urban Investment Holding Company Limited	33	中国交通物资有限公司	CCCC Materials & Equipment Co., Ltd.
17	中交西部投资有限公司	CCCC Western Investment Co., Ltd.	34	中和物产株式会社	Chuwa Bussan Co., Ltd.

# ESG 管治

## ESG GOVERNANCE

### 董事会声明

#### BOARD STATEMENT

中国交建董事会作为公司 ESG 工作的最高统筹及决策机构，对 ESG 相关工作负总体责任，负责制定本公司环境、社会及管治策略，领导及监察本公司可持续发展的政策、措施和绩效，评估及厘定本公司环境、社会及管治相关风险及机遇，审批有关环境、社会及管治报告披露资料，对风险管理及内部监控系统负责，并确保其有效性、可靠性。

As the highest coordinating and decision-making body for ESG work, CCCC Board of Directors takes overall responsibilities for ESG related work and is responsible for making our environmental, social and governance strategies, leading and monitoring the policies, measures and performance of our sustainable development, assessing and identifying environmental, social and governance risks and opportunities, and reviewing disclosure documents of environmental, social and governance report. In addition, it is responsible for risk management and internal monitoring system and ensures effectiveness and reliability.

### ESG 治理架构

#### ESG GOVERNANCE STRUCTURE

公司成立董事会战略与投资及 ESG 委员会，统筹推进公司 ESG 工作。党委工作部是 ESG 工作的牵头部门，公司 ESG 具体工作由党委工作部内设的社会责任处负责，形成党委会和董事会领导、战略与投资及 ESG 委员会统筹推进、党委工作部负责 ESG 报告编制，董事会办公室负责 ESG 报告披露，各部门各单位具体实施的 ESG 工作格局。

The company has established the Strategy & Investment and ESG Committee of the Board of Directors, to coordinate and advance its ESG efforts. This structure is designed to coordinate and advance the company's ESG efforts comprehensively. The Work Department of the Party Committee is the lead department for ESG affairs, with its Social Responsibility Office specifically tasked with the detailed ESG operations. This arrangement ensures that the Party Committee and the Board of Directors are in a leading position, the Committee of the Board of Directors responsible for overall coordination and promotion, the Work Department of the Party Committee responsible for preparation of ESG reports, the office of the Board of Directors responsible for handling the disclosures, and all units responsible for implementation.



### ESG 制度体系

#### ESG SYSTEM FRAMEWORK

公司建立健全社会责任制度体系，制定印发社会责任管理办法、“中交助梦”行动方案、ESG 报告编制发布实施细则、ESG 建设改进提升方案、新时代中交集团高标准履行社会责任的工作方案等，进一步明确社会责任和 ESG 的顶层设计、组织建设、职责权限及工作流程。

The company has established a comprehensive system of social responsibility, issuing social responsibility management measures, the action plan for "Build Your Future Dream", detailed rules for the preparation and release of ESG reports, ESG improvement plans, and China Communications Construction Group (CCCG) high-standard social responsibility fulfillment plan in the new era. These documents further clarify the top-level design, organizational structure, responsibilities, and workflow of social responsibility and ESG.

同时，公司制定了《经理层成员薪酬与考核管理办法》和《高级管理人员薪酬与考核管理办法》，并在此基础上构建了与公司战略规划、改革发展相关联的“1+N”绩效考核管理体系，将 ESG 绩效与薪酬兑现有效挂钩，明确了 ESG 绩效在高管薪酬考核中的重要地位，推动 ESG 与公司主责主业紧密结合，激励管理层人员在生产经营活动中主动推动 ESG 议题相关表现改善。此外，还针对生态环保、绿色低碳、安全质量、科技创新等议题，制定专项制度办法，指导所属企业规范开展 ESG 工作。

At the same time, the company has developed the *Management Team Members' Remuneration and Performance Evaluation Measures* and *Senior Management Remuneration and Performance Evaluation Measures*. Based on these, a "1+N" performance evaluation management system linked to the company's strategic planning and reform development has been established. This system effectively ties ESG performance to remuneration, clarifying the importance of ESG performance in the assessment of senior management's compensation, thereby integrating ESG closely with the company's core responsibilities and encouraging management to proactively improve performance related to ESG topics in operational activities. Moreover, specialized policies for ecological and environmental protection, green and low-carbon initiatives, safety and quality, and technological innovation have been formulated to guide subsidiaries in standardizing their ESG efforts.

## ESG 专业能力

### ESG PROFESSIONAL COMPETENCE

公司加强 ESG 培训，从理念、标准、实践、信息披露、评级评价等维度设置 ESG 培训课程。自 2022 年以来，每年举办覆盖全公司的 ESG 培训班，不定期举办 ESG 报告编制培训会 and ESG 讲座。积极参加国务院国资委和中国企业改革与发展研究会、中国社会责任百人论坛、中国对外承包工程商会等专业力量组织的 ESG 培训，累计线上线下培训员工达 1200 人次。

Stressing the importance of ESG training, the company has designed ESG courses covering key dimensions such as ESG concepts, standards, practices, information disclosure, and ratings. Since 2022, company-wide ESG training sessions, periodic ESG reporting workshops, and lectures have been held each year. The company actively participated in ESG training organized by the State-owned Assets Supervision and Administration Commission, the China Enterprise Reform and Development Society, the China CSR 100 Forum, and the China International Contractors Association, which involved over 1,200 employees both online and in-person.

○ 在国务院国资委指导下，牵头并承担主要工作，开展“建筑央企海外 ESG 工作指引”课题研究，形成《建筑央企海外 ESG 工作指引》《建筑央企海外 ESG 工作报告》课题成果，为央企开展海外 ESG 工作提供参考借鉴。

○ Under the guidance of the State-owned Assets Supervision and Administration Commission of the State Council, the company has led and primarily conducted the "ESG Guidelines for Overseas Operations of Central Enterprises in the Construction Sector" study, producing results such as the *ESG Guidelines for Overseas Operations of Central Enterprises in the Construction Sector* and *ESG Report for Overseas Operations of Central Enterprises in the Construction Sector*, providing references for central enterprises to conduct overseas ESG activities.

○ 参与国务院国资委指导的《ESG 披露指南》《ESG 评价体系》《ESG 报告鉴证指南》等多个 ESG 标准体系编制。

○ Participated in the drafting of several ESG standards under the guidance of the State-owned Assets Supervision and Administration Commission of the State Council, including the *ESG Disclosure Guide*, *ESG Evaluation System*, and *ESG Reporting Verification Guide*.

○ 编制发布国内首个公路运营项目 ESG 评价指南——《项目 ESG 评价指南（公路运营项目）》团体标准，助力构建符合国情、接轨国际的 ESG 标准体系。

○ Developed and released the first ESG evaluation guideline for highway operation projects in China, the *ESG Evaluation Guide for Highway Operation Projects*, as a group standard, aiding in the construction of an ESG standard system that aligns with national conditions and international standards.

## ESG 监督考核

### ESG SUPERVISION AND ASSESSMENT

公司董事会高度重视对 ESG 绩效的管理，将科技创新、绿色低碳、职业健康与安全生产、环境保护等重要议题的绩效纳入考核，与高管薪酬挂钩。针对生态环保、绿色低碳、科技创新、职业健康与安全生产等议题进行专项考核，通过上述措施，推动 ESG 理念与公司业务的深度融合，促进企业可持续发展，建立了高效的 ESG 监督考核体系。公司鼓励员工及外部利益相关方举报违反社会责任的行为，在网站披露举报者政策与要求，公布举报渠道，对举报人个人信息及举报内容严格保密，依法保护举报人信息安全。搭建 ESG 指标体系，积极开展 ESG 考核或评优，连续三年开展“中交助梦”责任品牌优秀案例评选活动。

The Board of Directors of the company places high importance on managing ESG performance, incorporating performance on key issues such as technological innovation, green and low-carbon initiatives, occupational health and safety, and environmental protection into evaluations, which are linked to executive compensation. Special evaluations on ecological and environmental protection, green and low-carbon initiatives, technological innovation, and occupational health and safety are conducted. Through these measures, the company promotes the deep integration of ESG principles with its business operations, fostering sustainable development and establishing an effective ESG oversight and evaluation system. The company encourages employees and external stakeholders to report violations of social responsibilities, with whistleblower policies and requirements disclosed on the website. Reporting channels are published, and confidentiality of the whistleblowers' personal information and the content of reports is strictly maintained, so as to protect their information security according to law. An ESG metrics system is developed, actively carrying out ESG evaluations or commendations, and for three consecutive years, the company has held the "Build Your Future Dream" responsibility brand case competition.

## ESG 战略规划

### ESG STRATEGIC PLANNING

公司制定《新时代中交集团高标准履行社会责任的工作方案》《中国交建 ESG 建设改进提升方案》，为 ESG 工作提供明确指导和要求。开展 ESG 工作方案的宣贯，明确重点议题和责任部门，推动各部门、各单位将责任理念和责任活动融入年度工作计划、内部规章制度，建立推动 ESG 工作长效机制，助力公司在新时代以更高标准履行社会责任，全面贯彻落实系列新理念新思想，加快建设世界一流企业、实现高质量发展。

The company has formulated the *CCCG High-Standard Social Responsibility Fulfillment Plan in the New Era* and the *CCCC ESG Construction Improvement and Enhancement Plan*, providing clear guidance and requirements for ESG activities. These plans are disseminated to clarify key issues and responsible departments, urging all departments and units to integrate responsibility concepts and activities into their annual working plans and internal regulations, establishing a long-term mechanism to promote ESG efforts. This aids the company in fulfilling its social responsibilities to higher standards in the new era, thoroughly implementing new concepts and ideas, and accelerating the construction of a world-class enterprise and achieving high-quality development.

## ESG 影响、风险和机遇管理

### ESG IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

董事会战略与投资及 ESG 委员会每年听取 ESG 重要议题方面的专项汇报，制定年度目标，并对上年度目标完成情况展开检讨与评估。党委工作部作为主要牵头部门，各职能部门及所属企业各司其职，不定期组织召开相关会议，讨论 ESG 政策及现状与生产、市场及客户服务的关系。相关部门在生产与服务过程中亦对 ESG 保持关注，以节能减排、降低能耗等为原则，不断提升生产效率、能耗效率，适时向管理层、董事会汇报工作进度与成果，适配当下 ESG 政策形势的公司政策的制定与修订，以及其他和 ESG 事宜相关的合规资料，持续完善董事会监管流程，推进公司 ESG 工作的落实。

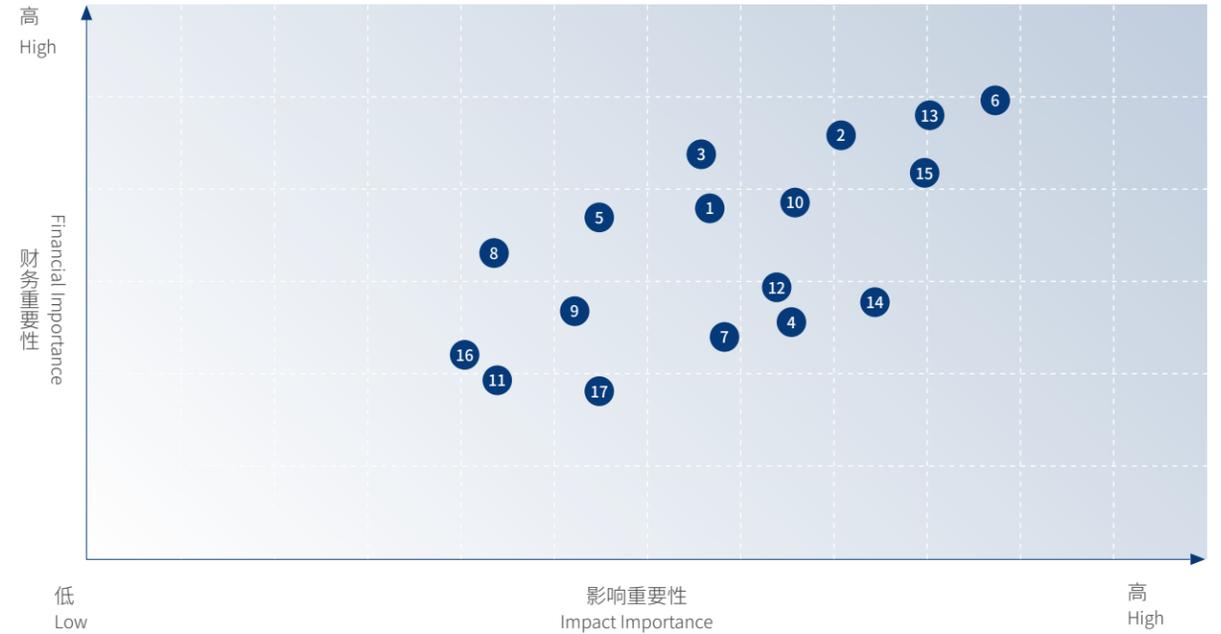
Annually, the Strategy & Investment and ESG Committee of the Board of Directors listens to special reports on important ESG topics, sets yearly goals, and reviews and evaluates the achievement of the previous year's goals. The Work Department of the Party Committee, as the main leading department, along with various functional departments and subsidiaries, performs its respective duties. Periodic meetings are organized to discuss the relationship between ESG policies, current status, production, market, and customer service. Departments also maintain a focus on ESG in production and service processes, adhering to principles of energy conservation and consumption reduction to continually enhance production and energy efficiency. Progress and outcomes are reported to the management and the board in a timely manner, adapting company policies to current ESG policy situations and revising compliance materials related to ESG matters, continuously refining the board's supervisory processes to advance the implementation of the company's ESG efforts.

## ESG 实质性议题

### SUBSTANTIVE ESG TOPICS

实质性议题评估有助于确定与公司可持续性相关的影响、风险和机会，并决定如何披露这些影响。中国交建深入研究国家宏观政策、行业发展形势、监管机构要求，对标 ESG 主流标准和先进企业经验，通过线上问卷的形式邀请内外部利益相关方从自身视角评估不同 ESG 发展议题的重要性，共回收问卷 1800 余份，借助外部专业力量对议题得分进行统计分析，并依据议题风险程度分配各议题权重，按照“影响重要性”和“财务重要性”两大维度综合形成重要性矩阵。

Assessing substantive issues helps identify impacts, risks, and opportunities related to the company's sustainability and determines how these impacts are disclosed. CCCC conducts in-depth studies of national macro policies, industry developments, and regulatory requirements. Aligning with mainstream ESG standards and the experiences of leading enterprises, the company invites internal and external stakeholders to assess the importance of various ESG topics from their perspectives through online surveys. Over 1,800 questionnaires were collected, with external professionals statistically analyzing the scores. The issues were weighted according to their risk levels, and an importance matrix has been formed based on two dimensions: "impact importance" and "financial importance".



1. 产业转型升级与新产业布局	7. 可持续发展相关治理机制	13. 职业健康与安全生产
2. 打造安全优质工程	8. 应对气候变化	14. 人才发展
3. 科技创新	9. 加快绿色发展	15. 服务国家战略
4. 供应链管理	10. 减少污染物排放	16. 社会贡献
5. 海外发展	11. 生态系统与生物多样性保护	17. 海外履责
6. 依法合规经营	12. 资源利用与循环经济	

1. Industrial transformation and new industry layout	9. Accelerating green development
2. Building safe and high-quality projects	10. Reducing pollutant emissions
3. Technological innovation	11. Ecosystem and biodiversity protection
4. Supply chain management	12. Resource utilization and circular economy
5. Overseas development	13. Occupational health and safety
6. Lawful and compliant operations	14. Talent development
7. Governance mechanisms for sustainable development	15. Serving national strategies
8. Addressing climate change	16. Social contribution
	17. Overseas responsibility fulfillment

# 利益相关方沟通

## STAKEHOLDER COMMUNICATION

公司建立常态化、多渠道沟通机制，设立投资者关系处，开展日常沟通交流，识别不同利益相关方关注重点，及时准确回应利益相关方的关注。在官网设立社会责任和投资者关系专栏，不定期发布信息和典型做法，接受利益相关方的监督，并持续改进社会责任与 ESG 策略和实践。

The company has established a regular, multi-channel communication mechanism, including a dedicated Investor Relations Office, to facilitate daily interactions and identify the focal concerns of various stakeholders, ensuring timely and accurate responses. On the official website, special sections for social responsibility and investor relations regularly publish information and best practices, invite stakeholder oversight, and continuously improve social responsibility and ESG strategies and practices.

入选国务院国资委“中央企业责任管理·先锋 30 指数”、央视“中国 ESG 上市公司先锋 100”榜单

Recognized in the State-owned Assets Supervision and Administration Commission of the State Council's "Central Enterprise Responsibility Management · Pioneer 30 Index" and CCTV's "China's Top 100 ESG Listed Companies".

荣获“年度国际可持续发展先锋”等称号

Awarded titles such as "Pioneer of International Sustainable Development of the Year".

20 余个案例被中企研、中央电视台总台、人民日报等评为 ESG 优秀案例

Over 20 cases have been recognized as excellent ESG examples by institutions like China Enterprise Research, China Central Television, and People's Daily.

获中证指数、秩鼎 ESG “AAA” 评级

Received the "AAA" rating in ESG from China Securities Index and QuantData ESG



2024 年 12 月 5 日，中交集团 2024 年 ESG 系列成果暨“中交助梦”责任品牌优秀案例发布会在京举办。会上，发布了中交集团及所属上市公司、品牌企业、重点国别、重要项目共计 20 份 ESG 报告。

On December 5, 2024, CCCC held the 2024 ESG Achievements and "Build Your Future Dream" Responsibility Brand Case Release Event in Beijing. At the event, 20 ESG reports were released, covering CCCC and its listed subsidiaries, brand enterprises, key countries where CCCC operates, and major projects.



# 专题一 TOPIC I

## 服务国家发展战略

SERVING THE NATIONAL DEVELOPMENT STRATEGY



天山胜利隧道  
Tianshan Shengli Tunnel



习近平总书记指出，交通是经济的脉络和文明的纽带；交通成为中国现代化的开路先锋。作为国家交通基础设施建设的重要力量，中国交建始终立足“两个大局”、胸怀“国之大者”，坚持稳中求进、以进促稳、先立后破，紧跟国家战略与政策导向，多措并举扩大有效投资，深度参与国家重大战略任务，坚决打赢高质量稳增长的主动仗，当好稳定经济大盘的交通“稳定器”和“压舱石”。

General Secretary Xi Jinping has stated that transport is the artery of the economy and a bond between civilizations; transport has become a frontier in China's modernization drive. As a significant force in the national transportation infrastructure construction, CCCC always focuses on internal and international imperatives, keep in mind the utmost interests of the nation. CCCC maintains a stable yet progressive approach, guiding and enhancing stability through development and adhering closely to national strategic and policy directions. The company employs multiple measures to expand effective investments, deeply engages in major national strategic tasks, resolutely strives for high-quality and stable growth, and serves as a "stabilizer" and "ballast" in the transport sector for stabilizing the economic landscape.



## 服务交通强国建设

### SUPPORTING THE CONSTRUCTION OF A POWERFUL TRANSPORTATION NATION

作为交通强国建设试点单位，中国交建始终锚定“人民满意、保障有力、世界前列”的建设目标，聚焦加快形成安全、便捷、高效、绿色、经济的现代化综合交通体系持续发力，以实际行动诠释交通强国建设先锋的使命担当。

As a pilot unit for the construction of a powerful transportation nation, CCCC consistently targets the construction goals of "public satisfaction, strong guarantees, and world-leading status". With a focus on accelerating the creation of a safe, convenient, efficient, green, and economical modern comprehensive transportation system, CCCC is contributing to the country's endeavor to build a powerful transportation nation with concrete actions.

### 实现基础设施互联

#### Achieving Infrastructure Interconnectivity

建设现代化高质量综合立体交通网络是交通强国的首要任务。我们依托交通基础设施投资、建设、运营一体化服务的独特优势，逢山开路、遇水架桥，全方位打造交通基础设施立体互联建设的国家队。密集对接重点项目、重要区域、重大市场，实现企业发展与践行国家战略的同频共振、有机统一。

Constructing a modern, high-quality, comprehensive, and multi-dimensional transportation network is a primary task in becoming a powerful transportation nation. Leveraging our unique advantages in integrated services for transportation infrastructure investment, construction, and operation, we forge paths through mountains and build bridges over waters, forming a top-notch team dedicated to creating a fully interconnected transportation infrastructure. Closely connecting with key projects, important regions, and major markets to synchronize and organically unify corporate development with the implementation of national strategies.

#### 一隧贯天山，天堑变通途

#### Tianshan Shengli Tunnel transforming impasse into thoroughfare



乌尉高速是 G0711 乌鲁木齐至若羌高速公路主要组成部分，总长 319.7 公里，是天山南北资源互通和国防大通道，也是构建丝绸之路经济带核心区的重要通道。天山胜利隧道作为全线“咽喉”工程，是乌尉高速公路中难度最大、工期最长的关键控制性工程。2024 年 12 月 30 日，由中国交建承建，总承包分公司管理，一局集团、二公局参建，中交天和生产制造装备的世界最长高速公路隧道——新疆天山胜利隧道正式贯通。作为连接南北疆的最主要公路通道，天山胜利隧道的贯通打通了天山南北，改写了南北疆时空格局，为新疆经济发展、民生改善铺就通途。

The Urumqi-Yuli Expressway, part of the G0711 Urumqi-Ruoqiang Expressway, spans a total length of 319.7 kilometers. It serves as a major resource exchange and national defense corridor between the north and south of the Tianshan Mountain and is a crucial passage for constructing the core area of the Silk Road Economic Belt. The Tianshan Shengli Tunnel, as a key project of the entire route, is the most technically challenging and time-consuming critical control project on the Urumqi-Yuli Expressway. On December 30, 2024, the Tianshan Shengli Tunnel, the world's longest expressway tunnel, was holed through. The project was undertaken by CCCC, managed by its General Contracting Branch, and jointly constructed by CCCC First Highway Engineering Group and CCCC Second Highway Engineering Company, with tunnel boring equipment manufactured by CCCC Tianhe Mechanical Equipment Manufacturing. As the main road corridor connecting the northern and southern parts of Xinjiang, the Tianshan Shengli Tunnel has bridged the north and south of the Tianshan Mountain, reshaping the spatial and temporal layout of the autonomous region and paving the way for economic development and improved living standards in Xinjiang.

### 推动运输方式转变

#### Promoting a Shift in Transportation Modes

我们顺应交通出行从“有没有”向“好不好”的历史性趋势，致力推动交通智慧化、生态化、一体化转型升级，不断提升人民群众出行的幸福感和满意度。

We are adapting to the historic shift in transportation from "quantity" to "quality", dedicated to fostering the intelligent, ecological, and integrated transformation of transportation. This ongoing commitment significantly boosts the happiness and satisfaction of the public regarding their travel experiences.

<p><b>深耕智慧化转型</b></p> <p><b>Intelligent Transformation</b></p> <p>作为首个入选开放 BIM 国际组织建筑智慧国际联盟的中国企业，推广交通工程基础设施数字化建模，以数字化手段促进设计更加精益、施工更加优质。</p> <p>As the first Chinese company to join the OpenBIM International Organization and the Building Smart International Alliance, we promote digital modeling of transportation engineering infrastructure. Through digital means, we ensure designs are more efficient and construction quality is enhanced.</p>	<p><b>深耕生态化转型</b></p> <p><b>Ecology-friendly Transformation</b></p> <p>全面推广绿色施工标准化管理，确保环保理念贯穿交通基础设施规划、设计、建设、运营和养护全过程，筑牢绿色发展屏障。</p> <p>We fully promote the standardized management of green construction, ensuring that environmental protection concepts run through the entire process of transportation infrastructure planning, design, construction, operation, and maintenance, thus guaranteeing green development.</p>	<p><b>深耕一体化转型</b></p> <p><b>Integrated Transformation</b></p> <p>实现公、铁、港、航、桥、隧、机场、城市等交通基础设施业态全覆盖，持续推进各种运输方式综合化转型，优化交通空间布局。</p> <p>We achieve complete coverage of various transportation infrastructure types including public transport, railways, ports, aviation, bridges, tunnels, airports, and urban areas. We continuously push for an integrated transformation of various modes of transportation to optimize the spatial layout of traffic.</p>
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#### 中交蓝途 BIM 平台成功发布

#### Successful launch of CCCC BluePath BIM Platform



2024 年 6 月 28 日，中交蓝途 BIM 平台在 2024 世界交通运输大会创新成果发布环节成功发布。平台打造了交通行业首个工程全生命周期国产自主 BIM 平台，研发 50 余款产品，拥有交通行业最全产品体系，覆盖公路、水运、机场、市政等多个主营业务，部分产品专业性能显著优于国外同类产品。平台积累了近 5 万个数字构件资源，已在深中通道、大连湾海底隧道、平陆运河等 700 余个国内外项目进行了应用验证，推动“BIM+ 生成式 AI”应用研发，全面赋能业务提质增效。

On June 28, 2024, the CCCC BluePath BIM Platform was successfully launched during the Innovation Achievement Release session at the 2024 World Transportation Conference. It is the first domestic BIM platform in the transportation industry to span the entire lifecycle of engineering projects, on which over 50 products were developed. The platform boasts the most comprehensive product system in the transportation industry, covering highways, water transport, airports, and municipal services. Some of its specialized products significantly outperform similar foreign products. The platform has accumulated nearly 50,000 digital component resources and has been applied in more than 700 projects both domestically and internationally, including the Shenzhen-Zhongshan Link, Dalian Bay Undersea Tunnel, and Pinglu Canal. It promotes the research and development of "BIM + generative AI" applications, comprehensively empowering business quality and efficiency enhancement.



中交蓝途 BIM 平台  
CCCC BluePath BIM Platform

### 开展试点先行先试

#### Conducting Pilot Programs

我们牢牢把握交通强国建设试点先行先试重大机遇，真抓实干，敢为人先，形成具有中交特色的试点工作机制、试点经验成果，勇当加快建设交通强国央企主力军。成立试点工作领导小组，设立交通强国办；加强系统谋划，印发试点工作方案和实施方案，明确试点任务推进的“时间表”“路线图”，总部相关部门、所属二级单位以及 73 项重大工程项目组广泛参与，培育交通新质生产力，为加快建设交通强国注入新动能。

We firmly grasp the significant opportunities presented by piloting the construction of a powerful transportation nation, with a focus on practical actions and pioneering innovations. We have established a distinctive mechanism for piloting work, characterized by our corporate identity, which includes experience and achievements that set a benchmark for accelerating the construction of a powerful transportation nation as a state-owned enterprise or central enterprise. A leadership group for the pilot projects, has been set up, alongside a dedicated office responsible for transportation development. We have also enhanced systematic planning, issuing pilot working plans and implementation strategies that specify a "timesheet" and "roadmap" for advancing pilot tasks. Our headquarters, subordinate second-level units, and teams from 73 major engineering projects are all deeply involved, fostering new quality productive forces in transportation and injecting new momentum into the accelerated development of a transportation powerhouse.

试点任务总体推进良好	试点已完成验收并评定为优秀	Six pilot tasks have generally progressed well, with one task already completed, inspected, and rated as excellent
<b>6</b> 项	<b>1</b> 项	
支撑发布国际标准	国家 / 行业标准	We have supported the publication of <b>4</b> international standards and <b>76</b> national/industry standards
<b>4</b> 项	<b>76</b> 项	
获鲁班奖	国家优质工程奖	We have won <b>26</b> Luban Awards and <b>64</b> National Quality Project Awards
<b>26</b> 项	<b>64</b> 项	

### 服务区域发展战略

#### SERVING REGIONAL DEVELOPMENT STRATEGIES

我们紧跟国家区域协调发展战略，持续优化区域布局，按照管理能力与市场范围相结合、主业类型与产业布局相协调原则划分三级公司区域市场，构建“1+X+Y”区域发展格局（1 为属地城市、X 为主营省域、Y 为重点城市）。

In alignment with the national strategy for coordinated regional development, continually optimizing our regional layout based on the principles of combining management capability with market scope and aligning core business types with industry layout. We have defined a three-tier company regional market structure, creating a "1+X+Y" regional development pattern (1 represents the local city, X the main provincial sector, and Y key cities).

## 助力东北全面振兴

### Supporting the Comprehensive Revitalization of Northeast China

在新时代东北全面振兴的宏大战略蓝图中，我们积极投身综合交通枢纽建设，精准布局，让人流、物流、信息流高效流通，全面提升区域交通运输效能。轨道交通、城市环线、高速公路等项目多点开花，构建起纵横交错的交通脉络，为城市发展舒筋通络。持续开展东北域内特色业务，在陆上新能源、盐碱地和高标准农田建设、污染治理与生态修复等方面加大力度，守护东北的绿水青山与沃野千里。

In the grand strategic blueprint for the comprehensive revitalization of Northeast China in the new era, we are actively engaged in the construction of integrated transportation hubs in the region. With precise planning, we facilitate efficient circulation of people, logistics, and information flows, significantly enhancing regional transportation efficiency. Projects such as rail transit, urban ring roads, and expressways are flourishing, forming an intricate network of transport arteries that ease the development of cities. We are continually engaged in distinctive business within the Northeast, intensifying efforts in onshore renewable energy, saline-alkali land and high-standard farmland construction, and pollution control and ecological restoration, thus safeguarding the green waters and lush mountains of the Northeast.

#### 让“粮田”变“良田”，助力高标准农田建设

#### Transforming "grain fields" into "fine fields" to support high-standard farmland construction

党的二十大报告指出，要“逐步把永久基本农田全部建成高标准农田”。高标准农田建设不仅是实施乡村振兴战略、发展农村经济、改善农业生态环境、实现农业可持续发展的需要，更是保障国家粮食安全、维护经济社会平稳发展的重要基础。中交建筑参建的辽中农田改造项目通过土地平整改造和修建节水设施，将“巴掌田”全部实现了“网格化”。区内田、水、渠、路得到综合治理，农田基础设施条件得到明显改善，道路平整开阔，农机来去自如，耕地综合生产能力和抗洪抗旱能力得到显著提高，成功打造了辽宁省内高标准农田建设示范先例，对推动当地农业现代化和高标准农田建设具有重要意义。

The report from the 20th National Congress of the Communist Party of China pointed out the need to "gradually develop all permanent basic cropland into high-standard farmland". The construction of high-standard farmland is vital not only for implementing the rural revitalization strategy, developing the rural economy, improving the agricultural ecological environment, and achieving sustainable agricultural development but also crucial for ensuring national food security and maintaining stable economic and social development. The Liaozhong farmland renovation project undertaken by our company involved leveling the land and constructing water-saving facilities, transforming "segmented fields" into a "grid system". The comprehensive management of fields, water systems, channels, and roads has significantly improved the infrastructure conditions of farmland. Roads are smooth and wide, facilitating the easy movement of farm machinery. The overall productive capacity and flood and drought resistance of the farmland have been significantly enhanced, successfully setting a benchmark for high-standard farmland construction in Liaoning Province, playing a crucial role in promoting local agricultural modernization and high-standard farmland construction.



大片的稻田绿意盎然

The vast expanse of rice paddies is lush with greenery

#### 科企戮力干 碱地变良田

#### Scientific and corporate synergy turns alkali fields into fine fields

“一叶梧桐一报秋，稻花田里话丰收”。在黑龙江省大庆市肇源县新站镇振余村盐碱地“三良一体化”高效治理与综合利用模式测产活动现场，研究员们查看收割进展、统计测产结果，脸上洋溢着丰收的喜悦。此次测产的振余村盐碱地综合整治项目是中交投资所属大庆市肇源县乡村振兴能力高效提升建设项目的重要子项目之一，自 2023 年 9 月起开始投资建设，拟实施盐碱地改造 14268.70 亩。这是中国交建首例“耕地占补平衡类”投资项目，也是中交投资东北区域探索三新业务模式落地的重要实践。该项目以新科技为基础、新产业为主导、新模式为特征，联合科研院所、高校等各方力量，深入开展科技创新工作和数智化工作，打造数智化农业，助推三新业务落实落地。

At the yield testing event for the "three-good integrated" high-efficiency management and comprehensive utilization model of saline-alkali land in Zhenyu Village, Xinzhan Town, Zhaoyuan County, Daqing City, Heilongjiang Province, researchers monitored the harvesting progress and calculated yield results, their faces beaming with the joy of a fruitful harvest. The yield measurement of the Zhenyu Village saline-alkali land comprehensive remediation project is an essential subproject of Daqing's Zhaoyuan County rural revitalization capacity enhancement construction project, owned by CCCC Investment. Since its inception in September 2023, the project has invested in the transformation of 14,268.70 mu of saline-alkali land. This project is the first "land occupation and compensation balance" investment project by CCCC and a significant practice for CCCC's investment in exploring new business models in the Northeast. Based on new technologies, led by new industries, and characterized by new models, the project involves joint efforts with scientific research institutes and universities to carry out technological innovations and digital work, creating digital agriculture and promoting the implementation of three new business practices.



测产活动现场

Yield testing event site

## 助力长江经济带发展

### Supporting the Development of the Yangtze River Economic Belt

2024 年是长江经济带建设上升为国家战略十周年。我们贯彻落实“生态优先、绿色发展，共抓大保护、不搞大开发”方针，实施张靖皋长江大桥、扬州影视基地、杭州富春湾新城、湖州“百漾千河”综合治理等项目，从交通先行到建设美丽乡村，再到跨界文旅和打造未来城市，牢牢把握共抓长江大保护的“中心任务、发展机遇”，以高水平长江大保护助力长江经济带高质量发展。

2024 marks the tenth anniversary of the elevation of the Yangtze River Economic Belt's construction to a national strategy. We implement the policy of "ecological priority, green development, focusing on comprehensive protection, and avoiding over-development", executing projects like the Zhangjinggao Yangtze River Bridge, Yangzhou Airport Film and TV City, Hangzhou Fuchun Bay New City, and Huzhou's comprehensive lakes and rivers management project. From prioritizing transportation to building beautiful rural areas, and crossing into cultural tourism and future city development, we firmly seize the central task and developmental opportunities of comprehensive protection of the Yangtze River, contributing to the high-quality development of the Yangtze River Economic Belt.



张靖皋长江大桥  
Zhangjinggao Yangtze River Bridge



扬州空港影视城项目  
Yangzhou Airport Film and TV City Project



连云港港 30 万吨级航道二期项目  
300,000-ton Channel Phase II Project of Lianyungang Port



江苏常泰长江大桥  
Changtai Yangtze River Bridge of Jiangsu

## 助力京津冀协同发展

### Supporting the Coordinated Development of Beijing, Tianjin, and Hebei

我们深入服务京津冀协同发展，先后落地北京城市副中心站综合交通枢纽、东六环路改造工程、天津地铁 11 号线等多个项目。在石家庄探索“地产+现汇”新型合作机制；在天津武清落地城中村改造项目；以“最高战略定位、最优资源投入、最新方案输出、最佳质量打造、最强责任担当”服务雄安新区高标准高质量建设，被雄安新区评价为理念最新、成果最多、服务最优、贡献最大的央企，是最值得信赖、最值得依靠的合作伙伴。

We have actively served the coordinated development of the Beijing-Tianjin-Hebei region, successfully implementing several projects such as the Beijing Sub-Center Station Integrated Transportation Hub, the East Sixth Ring Road Reconstruction, and the Tianjin Metro Line 11. In Shijiazhuang, we explored a new "real estate + spot exchange" cooperative mechanism; in Wuqing District, Tianjin, we implemented an urban village renovation project; and in Xiong'an New Area, we served with "the highest strategic positioning, the best resource investment, the latest solution output, the finest quality construction, and the strongest sense of responsibility". Xiong'an New Area has recognized us as the central enterprise with the most up-to-date concepts, numerous achievements, optimal services, and significant contributions, making us the most trustworthy and reliable partner.



中交未来科创城雄安项目  
Xiong'an Project of CCCC Future Science and Technology City



北京石景山西部地区城市更新项目  
Urban Renewal Project in the Western Area of Shijingshan, Beijing

## 助力长三角一体化发展

### Supporting the Integrated Development of the Yangtze River Delta

我们全面融入长三角创新共建、协调共进、绿色共保、开放共赢、民生共享，规划设计长三角区域一体化、上海新城、沪宁甬交通枢纽，实施连云港港、南通港、苏州港公铁水联运升级改造，为推动长三角地区全面打造现代化经济体系提供坚实有力支撑。

We are fully integrated into the Yangtze River Delta's initiative for joint innovation, coordinated advancement, shared environmental protection, open cooperation, and mutual benefits. We are planning and designing the integration of the Yangtze River Delta region, the new urban areas in Shanghai, and the Shanghai-Nanjing-Ningbo transportation hub. We are also implementing upgrades and transformations for multimodal transport at Lianyungang Port, Nantong Port, and Suzhou Port, providing strong support for the comprehensive development of a modern economic system in the Yangtze River Delta region.

## 助力海南现代化发展

### Supporting the Modernization of Hainan

自 1952 年建设海榆中线起，我们开始扎根海南、建设海南，设计承建了海南绝大部分港口码头、围海造地、公路桥梁等工程，创造了多项海南省内甚至国内第一。从海榆中线到文临高速，从海口秀英港到三亚邮轮港，从海文大桥到环岛旅游公路……作为交通基础设施建设的主力军和服务国家战略的国家队，我们在琼深耕发展 70 余年，参与和见证了海南的现代化发展。

Since the construction of the China National Highway 224 in 1952, we have rooted ourselves in Hainan and participated in the construction of the majority of the island's ports, land reclamation, and bridges, setting numerous firsts within Hainan and even nationally. From the China National Highway 224 to the Wenchang-Lingao Expressway, from Haikou Xiuying Port to the Sanya Cruise Port, from the Haiwen Bridge to the Hainan Tourism Road around the Island—serving as the main force in transportation infrastructure construction and a national team supporting strategic national policies, we have been deeply involved in Hainan's development for over 70 years, participating in and witnessing its modernization.

#### 一路通串联山海美景

#### A road that connects the scenic beauty of mountains and seas



2024 年 12 月 29 日，三航局、一公局集团、二公局参与建设的海南环热带雨林国家公园旅游公路项目通车。该项目全长 466 公里，途经陵水、保亭、三亚等 9 个市县，有机串联起黎母山、五指山、吊罗山尖峰岭、霸王岭等多个自然保护区，形成一条串联海南岛中南部山区美景的“项链”。该项目的通车，有助于推动海南省交通运输结构调整、促进区域协调和城乡融合发展、带动沿线经济发展和经济结构优化。

On December 29, 2024, the Hainan Tropical Rainforest National Park Scenic Route, constructed by the CCCC Third Harbor Engineering Company, the CCCC First Highway Engineering Group, and the CCCC Second Highway Engineering Company, was opened to traffic. Spanning 466 kilometers, this road passes through nine cities and counties including Lingshui, Baoting, and Sanya, linking natural reserves such as Limu Mountain, Wuzhi Mountain, Diaoluo Mountain Jianfengling, and Bawangling, forming a "necklace" that connects the beautiful mountainous regions in the central and southern parts of Hainan Island. The opening of this project contributes to the adjustment of Hainan's transportation structure, promotes regional coordination and urban-rural integrated development, and drives economic growth and structural optimization along the route.



海南环热带雨林国家公园旅游公路  
Hainan Tropical Rainforest National Park Scenic Route

## 助力粤港澳大湾区建设

### Supporting the Construction of the Guangdong-Hong Kong-Macao Greater Bay Area

在中国改革开放的壮阔历程中，中国交建始终与大湾区的崛起紧密相连。从海珠桥到蛇口港，从港珠澳大桥到南沙港、深中通道，我们以卓越的工程质量和创新精神，陪伴并见证了大湾区从荒芜到繁华的沧桑巨变。从基础设施建设到区域经济发展，我们始终站在时代的前沿，以央企的担当和实力，为大湾区的发展贡献力量。

Throughout the grand journey of China's reform and opening-up, CCCC has been closely linked with the rise of the Greater Bay Area. From Haizhu Bridge to Shekou Port, from the Hong Kong-Zhuhai-Macao Bridge to Nansha Port and the Shenzhen-Zhongshan Link, we have accompanied and witnessed the Greater Bay Area's transformation from barren to flourishing with our exceptional engineering quality and spirit of innovation. From infrastructure construction to regional economic development, we have always been at the forefront of the times, contributing to the development of the Greater Bay Area with the responsibility and strength of a central enterprise.

#### 深中通道踏浪海天

#### Shenzhen-Zhongshan Link riding the waves



七载鏖战伶仃洋，一朝天堑变通途。2024年6月30日，中国交建参建的国家重大工程深中通道正式通车。深中通道全长24公里，集“桥、岛、隧、水下互通”于一体，是当前世界上综合建设难度最高的跨海集群工程之一，也是连接“深莞惠”与“珠中江”两大城市群的唯一直通通道。中交人于2016年12月首个入场，7年建设贯穿始终，高质高效完成了各项施工任务，创造了多项世界纪录、填补了诸多行业空白，持续为加快推动粤港澳大湾区城市群融合发展贡献中交力量，为世界跨海通道建设提供中交方案。

After seven years of intense construction in the challenging waters of Lingdingyang, a natural barrier was transformed into a thoroughfare. On June 30, 2024, the Shenzhen-Zhongshan Link, a major national project involving CCCC, officially opened. Spanning 24 kilometers and integrating bridges, islands, tunnels, and underwater interchanges, the Shenzhen-Zhongshan Link is one of the world's most complex cross-sea cluster projects and the only direct link between the "Shenzhen-Dongguan-Huizhou" and "Zhuhai-Zhongshan-Jiangmen" urban clusters. CCCC personnel began working in December 2016, and over seven years, they consistently delivered high-quality, efficient construction, setting multiple world records and filling many industry gaps. They continue to contribute to the accelerated integration and development of the Guangdong-Hong Kong-Macao Greater Bay Area's urban cluster, offering CCCC solutions for global cross-sea corridor construction.



一体化智能筑塔机应用于深中通道伶仃洋大桥

Integrated intelligent tower building machine used at the Shenzhen-Zhongshan Link and Lingdingyang Bridge

## 助力成渝双城经济圈高质量发展

### Supporting the High-Quality Development of the Chengdu-Chongqing Twin-City Economic Circle

锦绣西部，山川如画。作为首批入选交通强国建设试点的中央企业，我们聚焦大城市、大交通主责主业，坚持生态引领、深化高质量发展，为推动西部大开发、促进成渝地区双城经济圈建设、共同唱好新时代西部“双城记”贡献央企力量，在中国式现代化建设中奋力谱写西部大开发新篇章。

The western region is vast and picturesque. As one of the first central enterprises selected for the pilot program of building China into a transportation powerhouse, we focus on major cities and major transportation as our core responsibilities and business priorities. We prioritize ecological progress, deepen high-quality development, and contribute the strength of a central enterprise to advancing the Western Development Strategy, promoting the Chengdu-Chongqing Twin-City Economic Circle, and jointly composing the new-era "dual-city narrative" for western China. Through these efforts, we are actively writing a new chapter in the Western Development Strategy as part of China's modernization drive.

#### 巴渝深山架高桥

#### Building High Bridges in the Deep Mountain of Bayu



2025年1月2日，二公局负责施工的渝湘复线高速公路双堡特大桥建成通车。项目通车后将极大缓解渝湘高速公路日益增长的交通压力，保障渝东南方向大通道畅通，同时进一步完善渝东南地区的客运、物流网络，为当地生态农业、养老产业、旅游业等绿色产业的发展提供配套的基础设施，对重庆构建内畅外联的快速路网体系、推动区域经济融合发展具有重要意义。

On January 2, 2025, the Shuangbao Grand Bridge on the Chongqing-Hunan Expressway Duplex, constructed by the CCCC Second Highway Engineering Company, was officially opened to traffic. This project will significantly alleviate the increasing traffic pressure on the Chongqing-Hunan Expressway, ensuring smooth transportation along the major corridor in southeastern Chongqing. Additionally, it will further improve the passenger and logistics network in the region, supporting the development of local green industries such as ecological agriculture, elder care, and tourism. The project plays a crucial role in enhancing Chongqing's rapid transportation network, fostering regional economic integration, and optimizing the economic structure.



渝湘复线高速双堡特大桥

Shuangbao Grand Bridge on the Chongqing-Hunan Expressway Duplex

# 专题二

## TOPIC II

## 引领科技自立自强

LEADING TECHNOLOGICAL  
INDEPENDENCE AND  
STRENGTH



习近平总书记强调，中央企业要争当推进高水平科技自立自强的排头兵、建设现代化产业体系的排头兵、发展新质生产力的排头兵。中国交建坚持以核心科技为先导，坚定走自主创新驱动高质量发展道路，围绕国家战略所需、行业转型所期、公司发展所向，形成了一批核心技术、核心装备和数字化成果，为公司加快建设具有全球竞争力的世界一流企业提供重要支撑。

General Secretary Xi Jinping has emphasized that central enterprises should take the lead in promoting high-level technological self-reliance and strength, building a modern industrial system, and developing new quality productive forces. CCCC adheres to a pioneering role of core technology and firmly pursues high-quality development driven by independent innovation. Aligning with national strategic needs, industry transformation expectations, and corporate development goals, we have achieved breakthroughs in core technologies, critical equipment, and digital advancements, providing crucial support for accelerating the company's transformation into a "technology-based, management-oriented, and quality-oriented" world-class enterprise.



## 深化顶层设计

### ENHANCING TOP-LEVEL DESIGN

我们实施科技创新体系优化提升专项行动，出台《关于加快实现高水平科技自立自强和强化企业科技创新主体地位的意见》《发展新质生产力专项工作方案》《数字化发展三年实施方案》等制度文件，填补政策空白，改革优化公司科技创新体系和研发布局，构建“主责部门+二级单位”数字化建设运行体系。统筹推进新型研发机构高质量发展，中央企业交通基础设施绿色低碳原创技术策源地和海洋工程技术创新联合体获批建设，深远海技术装备研发中心高效运行，绿色智慧未来交通研发中心正式揭牌，科技创新整体效能显著提升。

We have launched a special initiative to optimize and upgrade our technological innovation system, issuing key policy documents such as the *Opinions on Accelerating High-Level Technological Self-Sufficiency and Strengthening the Role of Enterprises in Technological Innovation*, *The Special Action Plan for Developing New Quality Productive Forces*, and *The Three-Year Implementation Plan for Digital Development*. These policies address gaps in existing frameworks, enhance the company's innovation system and R&D structure and serve as a "primary department + secondary units" operational system for digital development. We are also advancing the high-quality development of new R&D institutions. Key projects such as the Central Enterprises' Green and Low-Carbon Original Technology Hub for Transportation Infrastructure and the Marine Engineering Technology Innovation Consortium have been approved for construction. The Deep-Sea and Far-Sea Technology and Equipment R&D Center is operating efficiently, while the Green and Smart Future Transportation R&D Center has been officially inaugurated. These initiatives have significantly enhanced the overall effectiveness of technological innovation.

## 服务重大战略

### SUPPORTING MAJOR NATIONAL STRATEGIES

我们坚持“四个面向”，立足“国家战略所需、行业发展所向、中交自身所能”，深度融入国家攻关体系，积极承担国家重大科技任务，着力加强原始创新，紧盯前沿科技和关键核心技术领域集中攻关，加快实现基础软件、核心零部件等关键核心技术自主可控，在智能建造、绿色建造、智慧运维等领域打造人无我有、人有我优的高端装备和优势技术，打破国外技术封锁、填补技术空白，努力开创科技创新新局面。

We adhere to the principle of the "Four Orientations", focusing on "what the nation needs, where the industry is heading, and what CCCC can offer". Actively integrating into the national technological breakthrough system, we take on key national scientific and technological tasks, strengthen original innovation, and strive to make breakthroughs in cutting-edge science and critical core technologies. We are working faster to ensure that core technologies such as basic software and core components are made on our own and are under control, striving for industry-leading advanced equipment and technologies in intelligent construction, green construction, and smart operations. By overcoming foreign technological blockades and filling technological gaps, we are determined to create new milestones in scientific and technological innovation.

“十四五”核心技术成果（部分）  
Core Technological Achievements of the "14th Five-Year Plan" (Partial)



沉管隧道建设技术有力支撑了港珠澳大桥、深中通道、大连湾海底隧道以及襄阳鱼梁洲沉管隧道等重大工程建设，创造了多项世界纪录。  
The immersed tunnel construction technology has strongly supported the construction of major projects such as the Hong Kong-Zhuhai-Macao Bridge, the Shenzhen-Zhongshan Link, the Dalian Bay Undersea Tunnel, and the Xiangyang Yuliangzhou Immersed Tunnel, setting multiple world records.

外海智能高效筑岛技术有力支撑了港珠澳大桥、深中通道、马迹山储运基地等重大工程建设，刷新了世界外海人工岛建设最快纪录。  
The offshore intelligent and high-efficiency island-building technology has significantly contributed to major projects like the Hong Kong-Zhuhai-Macao Bridge, the Shenzhen-Zhongshan Link, and the Majishan Storage and Transportation Base, setting a new world record for the fastest artificial island construction in offshore waters.



青藏高海拔多年冻土高速公路建养技术支撑建设了青藏高速那拉段、共玉高速，树立了国际冻土工程里程碑。  
The high-altitude permafrost highway construction and maintenance technology in the Qinghai-Tibet Plateau has supported the construction of the Nala section of the Qinghai-Tibet Expressway and the Gongyu Expressway, establishing a milestone in international permafrost engineering.

超大跨径桥梁建设技术支撑了深中大桥、常泰大桥等重大工程建设，彰显了引领世界超大跨径桥梁发展的硬核实力。  
The super-long-span bridge construction technology has been instrumental in projects such as the Shenzhen-Zhongshan Link and Changtai Bridge, showcasing world-leading expertise in the development of super-long-span bridges.



新一代集装箱码头智能化技术在广州南沙四期和北部湾钦州港等多个自动化码头成功应用，为全球集装箱自动化码头建设贡献了中交方案。  
The next-generation container terminal automation technology has been successfully applied in automated terminals, including Phase IV of Nansha Port in Guangzhou and Qin Zhou Port in Beibu Gulf, contributing Chinese solutions to the global development of automated container terminals.

内河航道绿色智慧建设技术支撑了平陆运河、三峡船闸等重大内河航道工程建设，打造了全球航运枢纽绿色智能建造新标杆。  
The green and intelligent construction technology for inland waterways has supported the construction of major inland waterway projects such as the Pinglu Canal and the ship locks at the Three Gorges Dam, establishing a new global benchmark for green and smart construction in shipping hubs.



## 提升创新能力 ENHANCING INNOVATION CAPABILITIES

创新平台、科技工作者是公司高质量发展的“源头活水”，是公司不断塑造发展新动能、新优势的关键。我们持续加大科技投入，强化国家战略科技力量“顶格”支持与保障，发布《国家级创新平台建设与管理暂行办法》《国家级创新平台重点激励保障措施》，进一步落实国家战略科技力量管理要求，规范建设运行，实施国家级平台科研项目、科研预算、人才招聘单列管理，探索实施研发准备金机制，在研发投入、资源保障、人才供给、成果激励等方面给予最大支持。2024 年公司承担的 5 个国家级创新平台建设运行情况良好。

Innovation platforms and scientific talent serve as the "lifeline" of the company's high-quality development and are key to continuously fostering new growth drivers and competitive advantages. We continue to increase investment in science and technology, reinforcing the "top-level" support for national strategic scientific and technological capabilities. To this end, we have issued the *Measures for the Construction and Operation of National Innovation Platforms* and the *Key Incentive and Support Measures for National Innovation Platforms*, ensuring the effective implementation of national strategic science and technology initiatives. These policies regulate platform construction and operations, introduce independent management for national-level R&D projects, research budgets, and talent recruitment, and explore a R&D reserve fund mechanism. Maximum support is provided in research investment, resource allocation, talent supply, and innovation incentives. In 2024, the five national innovation platforms undertaken by the company demonstrated sound operation.

持续强化科技人才培养，构建雁阵格局，顾明被授予“国家卓越工程师”称号，汪双杰荣获第十五届光华工程科技奖，5 人入选中国科协第十届青托工程，高水平科技领军人才培养成效显著。

We continue to strengthen the cultivation of scientific and technological talent, fostering a structured talent development framework. Gu Ming was awarded the title of "National Outstanding Engineer", while Wang Shuangjie received the 15th Guanghua Engineering Science and Technology Award. Additionally, five individuals were selected for the 10th China Association for Science and Technology Youth Talent Support Program. They are the shining examples of the company's remarkable achievements in training high-level technological leaders.

深入实施“十百千万”科技人才培养工程，成功推荐 3 人入选国资委中央企业“顶尖科技人才”。

We have fully implemented the "10-100-1,000-10,000" Technology Talent Development Program, successfully recommending three individuals for inclusion in the State-owned Assets Supervision and Administration Commission (SASAC) Central Enterprise Top Technology Talent Program.

实施“优青计划”，遴选首批“科技创新、海外业务、新兴业务”优秀青年人才。

We launched the "Outstanding Young Talent Program", selecting the first batch of exceptional young professionals in technological innovation, overseas operations, and emerging business sectors.

推进工程硕博培养改革专项试点，联合 13 所高校完成 317 名工程硕博招生。

We initiated a special pilot program for reforming postgraduate engineering education, collaborating with 13 universities to enroll 317 engineering master's and doctoral students.

协同大连理工大学、大连海事大学等高校共建国家卓越工程师学院，与同济大学联合编制发布《企业课题库建设工作指南》。

In cooperation with Dalian University of Technology and Dalian Maritime University, we jointly established the National Academy for Outstanding Engineers. Additionally, we worked with Tongji University to develop and publish the Guidelines for Enterprise Research Topic Database Construction.

## 推动成果转化

### ACCELERATING THE COMMERCIALIZATION OF SCIENTIFIC AND TECHNOLOGICAL ACHIEVEMENTS

我们牢牢抓好科技创新这个“源头活水”，坚持科技引领、创新驱动，加强前沿科技发展趋势的前瞻研判，加大战略性新兴产业和未来产业技术的研发力度，加快科技成果转化和产业化，深入推进产业高端化、智能化、绿色化发展，以高水平创新打造新产品、发展新产业、创造新业态，不断开辟发展新领域新赛道，不断塑造发展新动能新优势，力争成为新规则的重要制定者、新赛场的重要主导者。

We firmly grasp technological innovation as the fundamental driver of growth, adhering to a science-led, innovation-driven strategy. We conduct forward-looking assessments of emerging technological trends, intensify research and development in strategic and future industries, and accelerate the transformation and commercialization of technological achievements. By promoting high-end, intelligent, and green industrial development, we strive to create new products, develop new industries, and pioneer new business models—constantly opening up new growth areas and competitive advantages. Our goal is to become a key rule-maker and industry leader in emerging global markets.

持续实施专利质量管理提升行动，修订专利质量评价指标体系，增加发明专利产业化和转化运营等重点指标和权重，发布所属二级企业专利质量评价排序。积极开展专利转化专项行动，组织所属企业参与存量专利盘点盘活，系统梳理形成高端装备、先进设备设施、绿色环保材料、智能化软件系统等已产业化发明专利 1998 项，分级分类盘点形成 949 项可转化专利，建立存量专利资源库和专利成果对外发布共享平台。通过许可转让、专利融资、联合转化等多种方式拓宽产业化渠道，大力推进科技成果向产品端转化、在工程中应用。

To enhance patent quality management, we have revised the Patent Quality Evaluation Index System, added new indicators and increased the weight of patent commercialization and operational transformation. We have also released the patent quality ranking of secondary subsidiaries. We have actively promoted patent commercialization, organizing subsidiaries to assess and utilize existing patents. A systematic review has resulted in the classification of 1,998 industrialized invention patents in areas such as high-end equipment, advanced facilities, green materials, and intelligent software systems. Furthermore, we identified 949 patents suitable for commercialization, established a patent resource database, and launched a public platform for patent achievements sharing. Through license transfer, patent financing, and joint commercialization, we are expanding industrialization channels and accelerating the application of technological innovations into market-ready products and engineering projects.

“首创号”在天山胜利隧道竖井成功掘进 400 米，刷新了竖向掘进的世界纪录；

The "Shouchuang" TBM successfully achieved 400 meters of vertical excavation in the Tianshan Shengli Tunnel, setting a new world record for vertical excavation depth.

自主研发的全球首台一次整体压铸成型工艺“武港号”在麻城基地试生产成功；

The "Wugang" machine, the world's first one-piece integrated die-casting molding system, was successfully tested at the Macheng production base.

“超大吨位油缸”在世界在建 150m 最大打桩船“二航长青”轮上成功安装；

The "Ultra-Large Tonnage Hydraulic Cylinder" was successfully installed on the world's largest (150m) pile-driving vessel under construction, the "Erhang Changqing".

国内首台“25 米主动式波浪补偿栈桥”在风电运维母船“至诚 60”实船应用；

China's first "25-meter active wave compensation gangway" was successfully applied on the Zhicheng 60 wind power service operation vessel.

自主研发的“海水淡化反渗透膜”打破海水淡化核心材料的进口垄断；

The self-developed "reverse osmosis membrane for seawater desalination" broke the foreign monopoly on core desalination materials.

全国首例轻型智能建造装备“造塔机”在厦门新机场塔台建设项目成功应用。

The first lightweight intelligent construction equipment in China, the "Tower Construction Machine", was successfully applied in the Xiamen New Airport Control Tower project.

全球最大打桩船主油缸成功下线

Successful commissioning of the world's largest piling vessel main hydraulic cylinder



2024 年 10 月 15 日，由二航局牵头研发攻关的全球最大打桩船主油缸在江苏常州举行下线仪式。经过专家组评审，该打桩船主油缸及核心部件的各项技术性能指标均达到或超过进口同类产品水平。该组油缸的成功研发，打破了我国大型打桩船核心部件长期依赖进口的局面，实现了超大型打桩船主油缸核心零部件的国产化替代与自主可控，将大幅降低打桩船建造成本，显著提升我国大型海工特种装备制造能力。

On October 15, 2024, the commissioning ceremony for the world's largest piling vessel main hydraulic cylinder, developed under the leadership of the CCCC Second Harbor Engineering Company, was held in Changzhou, Jiangsu. Following expert evaluation, all technical performance indicators of the main hydraulic cylinder and its core components met or exceeded the standards of similar imported products. The successful development of this hydraulic cylinder has broken China's long-standing reliance on imported core components for large-scale piling vessels, achieving domestic substitution and independent control of critical parts. This advancement will significantly reduce construction costs and enhance China's capability in manufacturing large-scale marine engineering and specialized equipment.



全球最大打桩船主油缸  
The world's largest piling vessel main hydraulic cylinder

## 建设数智中交

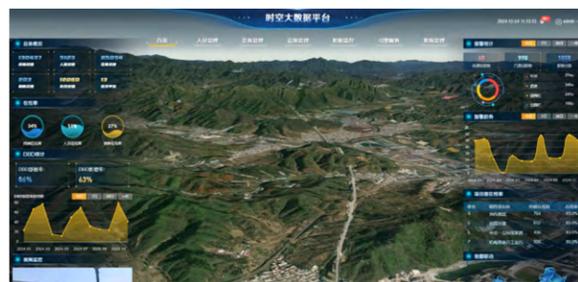
### BUILDING A DIGITAL AND INTELLIGENT CCCC

我们以打造“数智中交”为总体目标，持续加强数字化技术与传统业务的深度融合，遵循“统一架构、统一标准、统分结合、统筹推进”策略，不断优化业务流程、完善架构设计、提高运营效率，加快“管理数字化、产业数字化、数字产业化”三条主线协同推进，全方位开展数字化管控、智能化生产、数据要素化发展、数字设施支撑等重点任务。

With the overarching goal of developing a "digital and intelligent CCCC", we continue to deepen the integration of digital technology with traditional business operations. Adhering to the strategy of "unified architecture, standardized frameworks, integrated yet differentiated implementation, and coordinated advancement", we are optimizing business processes, refining structural designs, and improving operational efficiency. We are accelerating the coordinated promotion of three key digital transformation areas: digitalized management, digitalized industries, and digital industrialization, focusing on digitalized governance, intelligent production, data-driven development, and digital infrastructure support.



数字建造平台  
Digital construction platform



“通导遥”一体化平台  
Integrated platform of positioning, navigation, timing, remote sensing, communication (PNTRC)

# 专题三 TOPIC III

## 助力世界互联互通

FACILITATING GLOBAL CONNECTION



金港高速  
Phnom Penh-Sihanoukville Expressway



新时代以来，我们坚持把基础设施“硬联通”作为重要方向，把规则标准“软联通”作为重要支撑，把共建国家人民“心联通”作为重要基础，坚定不移推动中国交通“走出去”，扩大全球合作、实现发展共赢，已经成为构建人类命运共同体的参与者、贡献者。

In the new era, we remain committed to "hard connection" of infrastructure as a key direction, "soft connection" of standards and regulations as a crucial foundation, and "heart-to-heart connection" among people in partner countries as a fundamental pillar. We are steadfast in promoting China's transportation infrastructure internationally, expanding global cooperation, and fostering mutually beneficial development. Through these efforts, we actively contribute to building a community with a shared future for mankind.



## 瞄准“硬联通”，提供优质产品

### FOCUSING ON "HARD CONNECTION" BY DELIVERING HIGH-QUALITY INFRASTRUCTURE

设施联通是共建“一带一路”的优先领域。我们积极推动中国基建先进生产力走出国门、走向世界，与众多共建国家开展实质性业务合作，提供安全可靠、质量过硬、环境友好的交通基础设施产品。

Infrastructure connection is a priority for the "Belt and Road Initiative". We are proactively extending China's advanced infrastructure expertise worldwide by engaging in substantive business cooperation with partner countries and delivering safe, high-quality, and environmentally friendly transportation infrastructure solutions.

#### 铺就致富路

##### Paving Roads to Wealth

在共建国家修建牙买加南北高速、柬埔寨金港高速等公路里程超过 13000 公里，匈塞铁路、中老铁路等铁路里程超过 3000 公里，使许多原本交通闭塞的地方得以与世界联通。

We have constructed over 13,000 kilometers of highways, including the Jamaica North-South Highway and Cambodia's Phnom Penh-Sihanoukville Expressway, as well as more than 3,000 kilometers of railways, such as the Hungary-Serbia Railway and the China-Laos Railway, linking previously isolated regions to the global economy.



蒙内铁路通车运营 7 年间累计运输 268.4 万个标准集装箱，发送货物 3286.7 万吨，发送旅客 1286.9 万人次，对该国经济增长贡献率达 2%，成为东非乃至整个非洲的重要通道。

Since its inauguration, the Mombasa-Nairobi Standard Gauge Railway has transported 2.684 million TEUs of cargo, 32.867 million tons of freight, and 12.869 million passengers over seven years, contributing 2% to Kenya's economic growth. It has become a vital transportation corridor for East Africa and the entire continent.

#### 架设连心桥

##### Building Bridges of Connection

在共建国家修建克罗地亚佩列沙茨大桥、马尔代夫中马友谊大桥、莫桑比克马普托大桥等跨海跨江大桥超过 200 座，成为打通交通动脉、畅通经济循环的“希望之桥”。

We have built over 200 sea-crossing and river-crossing bridges in partner countries, including the Pelješac Bridge in Croatia, the China-Maldives Friendship Bridge, and the Maputo Bridge in Mozambique, providing critical links for economic circulation and regional development.



克罗地亚佩列沙茨大桥是首个由欧盟基金出资、中国企业建设的大桥，承载着中克两国人民的友谊，有力促进克罗地亚经济社会发展和民生改善。

The Pelješac Bridge is the first EU-funded bridge built by a Chinese company. It embodies the friendship between China and Croatia while significantly boosting Croatia's economic and social development and improving local livelihoods.

#### 建设发展港

##### Developing World-Class Ports

修建巴基斯坦瓜达尔港、尼日利亚莱基港、喀麦隆克里比深水港等重点港口 150 多个，提供集装箱桥吊超过 1000 台，持续提升海上互联互通水平。其中，为希腊比雷埃夫斯港提供 27 台岸桥和 16 台轨道吊，助力港口年货物吞吐量增至 500 万标箱以上，成为欧洲第四大集装箱港口和地中海领先集装箱大港。

We have constructed over 150 major ports, including Gwadar Port in Pakistan, Lekki Port in Nigeria, and Kribi Deep-water Port in Cameroon, and supplied more than 1,000 container cranes, continuously improving maritime connectivity. Specifically, we delivered 27 ship-to-shore cranes and 16 rail-mounted gantry cranes to Piraeus Port in Greece, increasing its annual container throughput to over 5 million TEUs. Piraeus has since risen to become Europe's fourth-largest container port and the Mediterranean's leading transshipment hub.

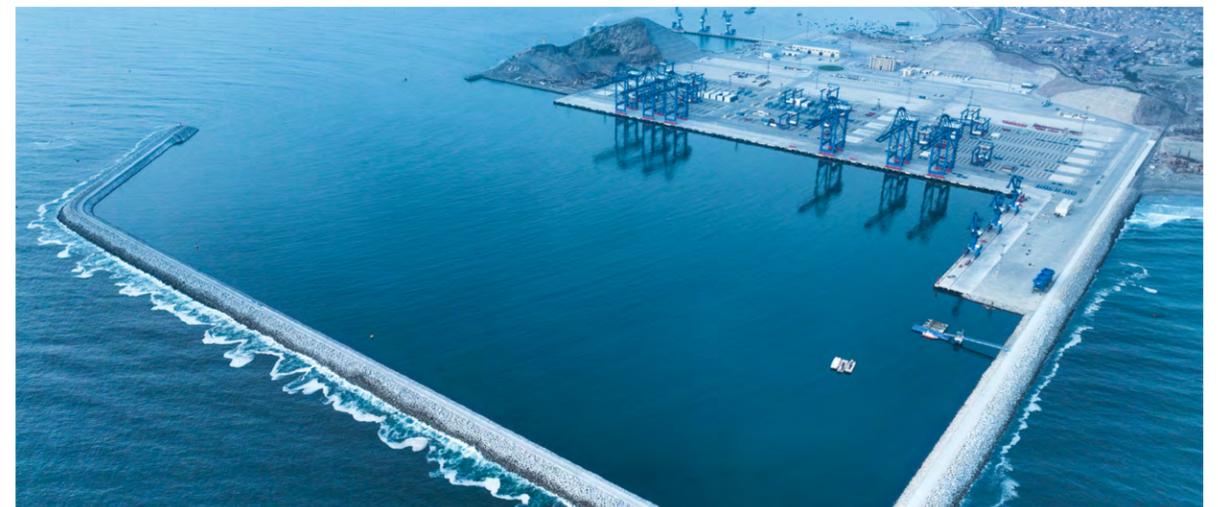
#### 倾力打造新时代亚拉陆海新通道

##### Building the Asia-Latin America Land-Sea Corridor in the new era



当地时间 2024 年 11 月 14 日晚，中国国家主席习近平同秘鲁总统博鲁阿尔特在利马总统府以视频方式共同出席钱凯港开港仪式。钱凯港是中秘共建“一带一路”重要项目，也是南美首个智慧港口。一期工程可以将秘鲁到中国的海运时间缩短至 23 天，节约 20% 以上的物流成本，每年为秘鲁带来 45 亿美元收入，创造 8000 多个直接就业岗位。钱凯港的建成有助于秘鲁构建从沿海到内陆、从秘鲁到拉美和加勒比其他国家的立体、多元、高效互联互通格局，打造以钱凯港为起点的“新时代的印加古道”，带动拉美和加勒比地区整体发展和一体化建设。

On November 14, 2024, local time, Chinese President Xi Jinping and Peruvian President Dina Boluarte attended the inauguration ceremony of Chancay Port via video link at the Presidential Palace in Lima. Chancay Port is a significant project of China-Peru "Belt and Road Initiative" and South America's first smart port. Phase One of Chancay Port will reduce the shipping time from Peru to China to 23 days, cutting logistics costs by over 20%. The port is expected to generate \$4.5 billion in annual operating income for Peru and create over 8,000 direct jobs. The completion of Chancay Port will help Peru establish a comprehensive, diversified, and highly efficient connectivity network linking its coastal regions to the inland areas, as well as connecting Peru with other Latin American and Caribbean countries. It is set to become a starting point of an Inca Trail of the New Era, driving regional development and accelerating Latin America's economic integration.



秘鲁钱凯港  
Chancay Port of Peru

## 打造清洁电

### Developing Clean Energy

在共建国家修建苏丹麦洛维大坝、老挝南立 1-2 水电站、哈萨克斯坦图尔古孙水电站、秘鲁圣加旺水电站等重点水电项目 70 多个，运营的水电站每年为当地民众提供清洁电约 45 亿千瓦时，相当于减排二氧化碳约 370 万吨，造福当地人民。其中，投资建设运营的几内亚凯乐塔水电站和苏阿皮蒂水电站占几内亚全网水电装机总量的 84%，是几内亚重点民生工程。

We have constructed over 70 key hydropower projects in partner countries, including the Merowe Dam in Sudan, Nam Lik 1-2 Hydropower Station in Laos, Turgusun Hydropower Station in Kazakhstan, and San Gaban Hydropower Station in Peru. The hydropower stations we operate generate approximately 4.5 billion kWh of clean electricity annually, equivalent to a reduction of 3.7 million tons of CO<sub>2</sub> emissions, benefiting local communities. Notably, the Kaléta Hydropower Station and Souapiti Hydropower Station, invested, constructed, and operated by us, account for 84% of Guinead's total hydropower capacity, making them key livelihood projects in the country.



老挝南立 1-2 水电站  
Nam Lik 1-2 Hydropower Station of Laos



秘鲁圣加旺水电站  
San Gaban Hydropower Station of Peru

## 打造幸福城

### Building Livable Cities

投资建设运营的斯里兰卡科伦坡港口城，将打造成为立足斯里兰卡、服务南亚区域的经济特区、金融中心和产业新城，预计带动投资近 150 亿美元，创造约 8.3 万个就业机会。

The Port City Colombo in Sri Lanka, invested, constructed, and operated by us, is set to become a special economic zone, financial hub, and industrial city serving Sri Lanka and the broader South Asian region. The project is expected to attract nearly \$15 billion in investment and create approximately 83,000 jobs.



斯里兰卡科伦坡港口城  
Port City Colombo of Sri Lanka

## 瞄准“软联通”，推广中国标准模式

### ADVANCING "SOFT CONNECTION" AND PROMOTING CHINESE STANDARDS AND MODELS

规则标准“软联通”是共建“一带一路”的重要支撑。我们坚持完善标准体系建设、创新合作模式、倡导绿色理念，积极寻求各方发展利益的“最大公约数”，不断推动“软联通”建设取得显著成效。

"Soft connection" in rules and standards is a crucial pillar of the "Belt and Road Initiative". We are committed to enhancing the standardization system, innovating cooperation models, and advocating green development, continuously seeking the widest possible converging interests in development to drive substantial progress in soft connection.

## 制定规则标准

### Establishing Rules and Standards

立足主责主业，积极参与制定国际交通运输领域技术标准和行业规范，开展中国交通行业标准编译工作，先后发布英文、法文、俄文等多个外文版本的中国公路行业和疏浚行业的标准体系。依托重大项目，推广中国标准、中国技术、中国装备属地化应用，有力带动中国铁路全产业链走向世界。

Focusing on our core expertise, we actively participate in formulating international standards for the transportation sector and engage in translating and publishing Chinese industry standards in English, French, Russian, and other languages. Leveraging major projects, we promote the localization of Chinese standards, technologies, and equipment, helping China's railway industry expand globally.

由中交疏浚牵头制修订了 ISO 国际标准《绞吸挖泥船疏浚监控系统》《耙吸挖泥船疏浚监控系统》《抓斗挖泥船疏浚监控系统》《挖泥船 - 分类》和《挖泥船 - 术语》，其中多个是中国疏浚企业首次牵头编制疏浚行业国际标准，标志着中国疏浚业站上了国际标准制定的舞台中央。

Led by CCCC Dredging, we have formulated and revised multiple ISO international standards for the dredging industry, including *Dredging Monitoring Systems for Cutter Suction Dredgers*, *Dredging Monitoring Systems for Trailing Suction Hopper Dredgers*, *Dredging Monitoring Systems for Grab Dredgers*, *Classification of Dredgers*, and *Terminology for Dredgers*. Many of these marks the first time Chinese dredging companies have taken the lead in drafting international dredging standards, demonstrating China's rising influence in global standard-setting.

二航院牵头主编的《IFC 国际标准（水运基础设施部分）（ISO 16739）》填补了水运工程基础设施领域 IFC 国际标准的空白，也加强了与“一带一路”共建国家标准互认和标准共建，实现了中国标准的对外输出，推动中国标准“走出去”。

Led by the CCCC Second Harbor Engineering Company, the development of the *IFC International Standard for Water Transport Infrastructure (ISO 16739)* has filled a critical gap in waterway infrastructure IFC standards, promoting mutual recognition and co-construction of standards with BRI countries, effectively making Chinese standards "go global".

### 创新合作模式

#### Innovating Cooperation Models

秉承开放包容理念，入股葡萄牙最大的建筑企业之一莫塔公司，开创了携手发达国家建筑企业共同开拓第三方市场的先河。积极探索模式创新，在多个国家推广应用一带微笑、一路通达的“笑脸模式”，以交通基础设施先行与产能合作造血实现项目群联动开发，有效促进了与当地的政策沟通、贸易畅通、资金融通和人文交流。发挥全球资源配置和产能承载嫁接优势，依托境外园区载体，打造国际产能合作共享平台，首创“中央企业+地方企业+境外园区+当地企业+国际企业”价值共享模式并广受好评。

Upholding the principles of openness and inclusiveness, we have invested in Mota-Engil Group, one of Portugal's largest construction companies, pioneering a new model of collaboration with developed countries' construction enterprises to explore third-party markets. Actively innovating cooperation models, we have promoted the implementation of the "Smiling Model" in multiple countries, facilitating coordinated project development through the integration of transportation infrastructure and capacity cooperation. This approach has effectively enhanced policy coordination, unimpeded trade, financial integration, and people-to-people bonds with local communities. Leveraging global resource allocation and industrial capacity integration advantages, we have established an international capacity cooperation platform through overseas industrial parks. Our pioneering "Central Enterprises + Local Enterprises + Overseas Parks + Local Enterprises + International Enterprises" value-sharing model has gained widespread recognition.

#### 约翰·霍兰德公司赢得墨尔本有轨电车网络运营权

#### John Holland secured the operation rights of Melbourne's tram network



中国交建子公司约翰·霍兰德和 Transdev 组成的合资企业 Yarra Journey Makers (YJM) 成功赢得澳大利亚墨尔本有轨电车网络的运营权，初步合同期限为 9 年。YJM 从 2024 年 12 月开始接管这个全长 250 公里的有轨电车网络，为墨尔本市民带来更可靠、更高效的有轨电车服务体验，有效提升城市轨道交通的服务质量。

John Holland, a subsidiary of CCCC, in partnership with Transdev, successfully secured the operation rights for Melbourne's tram network under the Yarra Journey Makers (YJM) joint venture. The initial contract term is nine years, beginning December 2024. YJM will manage Melbourne's 250-kilometer tram network, delivering more reliable and efficient services, significantly enhancing the quality of urban rail transit.



### 推广绿色理念

#### Promoting Green Development

坚持绿色规划、绿色施工、绿色运营，大力推进节能减排行动，共建清洁美丽的世界。在加纳特码新集装箱码头、安哥拉洛比托港口等施工中，全面推行绿色标准化管理，最大程度保护生物多样性，增强了可持续发展能力。

Committed to green planning, construction, and operations, we actively implement energy-saving and emission-reduction initiatives to build a cleaner, more beautiful world. Green standardized management practices were widely adopted in projects such as the Tema New Container Terminal in Ghana and Lobito Port in Angola, ensuring maximum biodiversity conservation and enhancing sustainability.



在埃塞俄比亚河岸绿色发展项目中，将当地人视为“天然垃圾场”的河岸荒地打造成非洲功能最多、面积最大的城市综合广场——谢格尔公园友谊广场，赢得了国际社会的普遍赞誉。

In Ethiopia, we transformed a neglected riverside wasteland—once considered a "natural landfill" by locals—into Friendship Square in Sheger Park, the largest and most multifunctional urban plaza in Africa. The project received widespread international recognition for its positive environmental and social impact.

### 瞄准“心联通”，共建人类命运共同体

#### STRENGTHENING "HEART-TO-HEART CONNECTION" TO BUILD A COMMUNITY OF SHARED FUTURE FOR MANKIND

民心相通是共建“一带一路”的社会根基。我们坚持用心用情打造民生项目、解决民生难题、推进文明互鉴，真正做到“工程做到哪里就要在哪里播下友好的种子，项目建在哪里就要在哪里树起友谊的丰碑”，夯实共建“一带一路”的民意基础。

Heart-to-heart connection forms the social foundation of "Belt and Road Initiative". We are committed to delivering impactful livelihood projects, addressing local challenges, and fostering cultural exchange. As we say, "Wherever a project is built, the seeds of friendship must be sown; wherever infrastructure is developed, a monument to friendship must stand". These efforts strengthen public support for "Belt and Road Initiative".

## 打造民生工程

### Building Livelihood Projects

在全球打造“中交助梦”责任品牌，建设塞内加尔火神山医院、巴基斯坦中巴瓜达尔地区法曲尔小学等一系列“小而美”“惠而实”民生工程。其中，在斯里兰卡推出“渔民生计改善计划”，分期提供 5.5 亿卢比（约 330 万美元）经费帮助当地渔民改善教育、医疗、卫生等条件。

We have actively developed the "Build Your Future Dream" global responsibility brand, implementing a series of "small yet impactful" and "practical" livelihood projects, including the Huoshenshan Hospital in Senegal and the Faqir School in Gwadar, Pakistan. Specifically, the "Fishermen's Livelihood Improvement Program" in Sri Lanka has provided phased funding of 550 million rupees (approximately \$3.3 million) to help local fishermen improve education, healthcare, and sanitation conditions.

#### 马东铁“引水入涵”解民烦忧

#### Addressing drainage issues in Malaysia's East Coast Rail Link (ECRL) Project



马来西亚东海岸铁路（马东铁）项目设计全长 600 多公里，建成后有望带动马来西亚东海岸地区经济发展，并极大改善沿线地区互联互通水平。马东铁项目第八分部一工点施工区域位于双溪沙叻村附近。双溪沙叻村地势较低，排水设施老旧且管径较小，一到汛期雨水便无法及时排出，不仅严重影响村民出行，还存在一定安全隐患。为此，项目人员主动与当地主管部门和相关协作单位沟通，并赴现场踏勘，修建一条长约 500 米的排水渠，一次性解决双溪沙叻村的排水问题。如今，双溪沙叻村已多次经受住强降雨考验，应对内涝灾害能力显著提升。

The Malaysia East Coast Rail Link (ECRL) Project spans over 600 kilometers and is expected to drive economic growth in Malaysia's east coast region while significantly improving regional connection. The construction site of Section 8 of the ECRL project is near the Sungai Salak village, which is situated in a low-lying area with outdated and undersized drainage facilities. During the rainy season, floodwaters often failed to drain in time, severely affecting villagers' mobility and posing safety risks. In response, the project team proactively engaged with local authorities and relevant partners, conducted on-site inspections, and built a 500-meter-long drainage channel to resolve the issue in one go. Since then, Sungai Salak village has successfully withstood multiple heavy rain events, significantly enhancing its resilience to flooding disasters.



马东铁项目施工现场

Construction site of the Malaysia East Coast Rail Link Project

## 增进民生福祉

### Enhancing Livelihood and Well-being

在同等条件下，优先聘用社区居民，优先采购当地的原材料、产品和服务等，帮助当地供应商 / 分包商提升产品技术服务水平；开展面向社区居民的公益性职业技能培训活动，向当地转移建筑施工技术。全额资助 400 余名共建国家学生留学深造，为共建国家培养多领域、各层次优秀人才。巴布亚新几内亚公路升级改造项目为当地创造就业岗位超过 2000 个，获评第四届“全球减贫案例征集活动”最佳减贫案例。

Under equal conditions, we prioritize hiring local community residents and sourcing local raw materials, products, and services to support the development of local suppliers and subcontractors while improving their technical service capabilities. We also provide public vocational skills training for community residents, transferring construction expertise to local workforces. We have fully sponsored the overseas education of over 400 students from partner countries, cultivating outstanding talent across various fields and levels. The Papua New Guinea Highway Upgrade and Rehabilitation Project has created over 2,000 local jobs and was recognized as the "Best Poverty Alleviation Case" in the 4th Global Poverty Reduction Case Collection event.

#### 赓续中非传统友谊

#### Strengthening the friendship between China and Africa



2024 年 1 月 17 日，国家主席习近平复信中国交建资助的北京交通大学肯尼亚留学生及校友代表，鼓励他们继续为中肯和中非友好事业发光发热，同时称蒙内铁路是中肯共建“一带一路”旗舰项目和成功典范。蒙内铁路开通 7 年来，中国路桥、非洲之星铁路运营公司按照“当地社区所需、蓝马甲志愿者所能”原则，通过志愿服务铁路旅客、中小学生学习教育、捐资助学、助残助幼、赈灾捐赠及属地员工就业赋能等活动，将志愿服务作为企业履行社会责任、搭建民间沟通桥梁的有效载体，赓续中非传统友谊，共筑“一带一路”幸福梦。

On January 17, 2024, President Xi Jinping replied to a letter from Kenyan students and alumni of Beijing Jiaotong University sponsored by CCCC, encouraging them to continue contributing to China-Kenya and China-Africa friendship. He also highlighted the Mombasa-Nairobi Standard Gauge Railway as a significant project and a successful model of China-Kenya Belt and Road Initiative. Over the past seven years since its inauguration, China Road & Bridge Corporation and Africa Star Railway Operations Company have adhered to the principle of "serving local community needs and leveraging Blue Vest volunteers". Through activities such as volunteer services for railway passengers, open-day education for primary and secondary school students, donations to education, assistance for the disabled and children, disaster relief donations, and localized employment empowerment, the project has effectively facilitated people-to-people bonds and strengthened traditional China-Africa friendship, contributing to the shared prosperity of the "Belt and Road Initiative".



肯尼亚姑娘康西莉亚在中国交建培养下成长为蒙内铁路优秀司机，如今已在用从中国学到的知识培训当地学员

Kenyan locomotive driver Consilia, who trained by CCCC, has now become an outstanding railway operator for the Mombasa-Nairobi Standard Gauge Railway and is currently training local trainees with the knowledge she acquired from China

### 推进文明互鉴

#### Promoting Cultural Exchange and Mutual Learning

充分尊重所在国家和地方的文化习俗，联合所在国大使馆开展跨文化培训交流，“美丽沙滩计划”“民族团结接力行”“长跑接力赛”等品牌活动产生广泛影响，“云上看中国”“丝路书香”“孔子课堂”等人文交流项目赢得广泛赞誉。

We fully respect the cultural customs of the host countries and regions, collaborating with embassies to conduct cross-cultural training and exchange programs. Signature events such as the "Beautiful Beach Initiative", "Ethnic Unity Relay", and "Long-Distance Relay Race" have gained widespread recognition. Additionally, cultural exchange programs like "China Online Tour", "Silk Road Book Charm", and "Confucius Classroom" have received broad acclaim.

##### 开展充分沟通

###### Carrying Out Effective Communication

尊重当地居民的文化、传统、信仰及与土地的联系；尊重当地居民的参与权和知情权，确保以符合当地文化的形式与社区开展互动。遵照执行《建筑央企海外 ESG 工作指引》，在海外项目实施前，全面评估其对社区居民的潜在影响，主动就项目规划设计与社区居民进行沟通，确保其意见和需求得到充分考虑。

We respect local residents' cultures, traditions, beliefs, and ties to their land while ensuring their right to participate in and be informed. We interact with communities in culturally appropriate ways and strictly adhere to the *ESG Guidelines for Overseas Operations of Central Enterprises in the Construction Sector*. Before implementing overseas projects, we comprehensively assess their potential impacts on local communities and proactively communicate project plans and designs to ensure that local residents' opinions and needs are fully considered.

##### 加强文化交流

###### Strengthening Cultural Exchange

主动融入当地社区，尊重当地文化传统，参加节日庆典等当地文化活动，必要时为有关活动提供支持；邀请社区居民和当地媒体参与企业或项目开放日、中国传统节日联欢等活动，加强与社区的文化交流；保护社区历史文化遗产，充分考虑并尽可能降低项目实施对当地文化遗产的负面影响。

We actively integrate into local communities, respect cultural traditions, participate in local festivals, and provide necessary support for cultural events. We also invite community residents and local media to corporate or project open days and Chinese traditional festival celebrations to strengthen cultural exchanges with communities. Moreover, we are committed to protecting historical and cultural heritage, carefully considering and minimizing any adverse impacts that project implementation may have on local cultural sites.

#### 32 国记者“走读中国”，走进中国交建

Journalists from 32 countries participated in the "Travelogue of China" International Media Exchange Program and visited CCCC

2024 年 3 月 22 日—24 日，由中央网信办网络传播局指导，中国公共外交协会和环球网联合主办的“2024 ‘走读中国’国际媒体交流项目”走进中国交建，来自埃及、阿尔及利亚、摩洛哥等 32 个国家的 33 名媒体记者参观了公司在江苏企业及承建项目，近距离感受公司绿色发展实践及重大工程魅力。活动得到外交部发言人华春莹、汪文斌转发点赞。活动相关视频登上互联网平台热搜排行榜第三名。

From March 22 to 24, 2024, foreign journalists participating in the "Travelogue of China" International Media Exchange Program, jointly organized by the China Public Diplomacy Association and Global Times Online under the guidance of the Cyber Communication Bureau of the Office of the Central Cyberspace Affairs Commission, visited CCCC. Thirty-three journalists from 32 countries, including Egypt, Algeria, and Morocco, toured CCCC enterprises and projects in Jiangsu Province, gaining firsthand experience of CCCC's green development practices and major engineering achievements. The event was endorsed by Ministry of Foreign Affairs spokespersons Hua Chunying and Wang Wenbin and ranked third on online trending topic lists.



“2024 ‘走读中国’国际媒体交流项目”走进中国交建  
Foreign journalists from the "2024 'Travelogue of China' International Media Exchange Program" visited CCCC.



二航局参与后续维保技术援助的中马友谊大桥纪念公园正式开园  
The China-Malaysia Friendship Bridge Memorial Park, with subsequent maintenance and technical assistance provided by CCCC Second Harbor Engineering Company, officially opened



柬埔寨金港高速公司举办首个开放日活动  
Cambodian PPSHV Expressway Co., Ltd. held the first open day event



二公局坦桑尼亚分公司在巴杰威罗小学举办儿童节主题活动  
Tanzania Branch of CCCC Second Highway Engineering Company organized a Children's Day themed event at Bajeweiro Primary School



广航局菲律宾项目部开展“童心筑梦 粽享文化”主题文化活动  
CCCC Guangzhou Dredging's Philippines Project Department launched the "Childhood Dreams, Cultural Enjoyment" themed cultural activities

# SCALING GOVERNANCE HEIGHTS

## MARCHING TOWARD HIGH-QUALITY DEVELOPMENT

### 攀治理巅峰 迈向高质量发展广阔新天地

中国交建作为中交集团控股上市公司，坚持把依法合规作为上市公司生命线，切实通过规范企业内部控制，保护公司和全体股东合法权益，夯实上市公司高质量发展的市场基础。致力在构建产业链、供应链、生态链方面发挥引领作用，加快“三链”融合，促进新产业发展，站稳交通强国建设主战场。

As a publicly listed company controlled by CCCG, CCCC adheres to lawful and compliant operations as its lifeline. We are committed to strengthening corporate internal controls, protecting the legitimate rights and interests of the company and all shareholders, and laying a solid market foundation for the high-quality development of listed companies. Additionally, we play a leading role in building and integrating industrial, supply, and ecological chains, accelerating their convergence to foster new industrial growth while maintaining our stronghold in the development of a country with strong transportation networks.



## 优化治理结构

### OPTIMIZING GOVERNANCE STRUCTURE

#### 治理

##### GOVERNANCE

落实中国特色现代企业制度，优化公司治理结构，科学制定公司章程、议事规则，真正做到权责法定、权责透明、协调运转、有效制衡。根据新《中华人民共和国公司法》和上级文件要求，开展全级次章程修订工作，扎实筑牢公司治理的章程基础。完善董事会对总经理（总裁）授权方案及清单，修订公司治理主体议事清单，优化经理层向董事会汇报工作机制，优化应用三会管理系统，推动本级董事会规范高效运行。

We implement the system of modern corporate governance with Chinese characteristics, optimize our governance structures, scientifically formulate articles of association and rules of procedure, ensuring legal authority, transparency, coordinated operation, and effective balance of powers and responsibilities. According to the new *Company Law of the People's Republic of China* and superior directives, we conduct comprehensive revisions of corporate charters at all levels to establish a solid foundation for governance. We improve the Board of Directors' authorization schemes and lists for the General Manager (CEO), revise the list of governance bodies, optimize the mechanism for management reporting to the Board of Directors, enhance the application of the three-meeting management system, and promote standardized and efficient operation of local board meetings.

#### 关键制度列表 Key Regulatory Documents

《公司章程》	<i>Company's Articles of Association</i>
《董事会议事规则》	<i>Rules of Procedure for the Board of Directors</i>
《独立董事工作制度》	<i>Independent Director System</i>
《总裁工作细则》	<i>CEO Working Rules</i>
《法人机构管理办法》	<i>Legal Entity Management Methods</i>
《分支机构管理办法》	<i>Branch Management Methods</i>
《改革领导包保责任制实施办法》	<i>Implementation Measures for Reform Leadership Accountability System</i>
《打通改革“最后一公里”专项工作方案》	<i>Special Working Plan for Breaking Through the "Last Kilometer" of Reform</i>
《改革工作规范指引》	<i>Standards and Guidelines for Reform Work</i>
《关于进一步支持鼓励“科改企业”“双百企业”加大改革创新力度的通知》	<i>Notice on Further Supporting and Encouraging "Science and Technology Reform Enterprises" and "Double Hundred Enterprises" to Enhance Reform and Innovation</i>
《关于支持鼓励“科改企业”“双百企业”履行功能使命深化改革创新的指导意见》	<i>Guiding Opinions on Supporting and Encouraging "Science and Technology Reform Enterprises" and "Double Hundred Enterprises" to Fulfill Their Functional Missions and Deepen Reform and Innovation</i>

## 战略

### STRATEGY

#### ◎ 董事会构成

#### ◎ Board Composition

公司董事会下设战略与投资及 ESG 委员会、提名委员会、薪酬与考核委员会、审计与内控委员会四个专门委员会，其中审计与内控委员会、薪酬与考核委员会全部由外部董事组成，战略与投资及 ESG 委员会、提名委员会由外部董事占多数。公司董事会符合中国特色现代企业制度和上市规则要求，组织机构成熟健全，运行科学规范，作用充分彰显。公司已建立完备、科学的机制，确保公司董事可以充分获知公司相关信息，独立发表观点和意见。公司具有董事会多元化政策，且明确要求董事会提名过程中考虑性别、民族等多元化因素。

The company's Board of Directors includes four specialized committees: Strategy & Investment and ESG Committee of the Board of Directors, Nomination Committee, Compensation and Assessment Committee, and Audit and Internal Control Committee. The Audit and Internal Control Committee and the Compensation and Assessment Committee are composed entirely of external directors, while the Strategy & Investment and ESG Committee of the Board of Directors and the Nomination Committee have a majority of external directors. The company's Board of Directors complies with the requirements of the system of modern corporate governance with Chinese characteristics and listing rules, with a mature and sound organizational structure, scientifically regulated operation, and full demonstration of its functions. The company has established a comprehensive and scientific mechanism to ensure that directors are fully informed of relevant company information and can independently express opinions. The company has a policy of board diversity and explicitly requires consideration of gender, ethnicity, and other diversity factors in the board nomination process.

#### ◎ 董事会建设

#### ◎ Board Construction

完善董事会对总经理（总裁）授权方案及清单，修订公司治理主体议事清单，优化经理层向董事会汇报工作机制，优化应用三会管理系统，推动本级董事会规范高效运行。推进董事会机构的健全化、会议组织的标准化、应审事项的规范化、过程管理的体系化；探索“规范型”“合规型”董事会建设标准及功能定位，推动子企业董事会高质量、差异化落实董事会职权；建立子企业董事会会议派出观察员机制，择优配备派出观察员队伍。优化健全派出外部董事履职指导和沟通机制，召开外部董事沟通会、外部董事培训班，完成外部董事工作组课题评审、外部董事工作组课题库更新、课题立项等。

We improve the Board of Directors' authorization schemes and lists for the General Manager (CEO), revise the list of governance bodies, optimize the mechanism for management reporting to the Board of Directors, enhance the application of the three-meeting management system, and promote standardized and efficient operation of local board meetings. We promote the institutionalization of the Board of Directors, standardize meeting organization, normalize review items, and systematize process management; explore standards and functional positioning for "standardized" and "compliant" board construction, and promote high-quality and differentiated implementation of board powers in subsidiary enterprises. We establish a mechanism for sending observers to subsidiary board meetings and optimize the assignment of observer teams. We improve the guidance and communication mechanism for external directors' performance, hold external director communication meetings and external director training sessions, complete external director working group topic reviews, update the external director working group topic library, and initiate topic proposals, etc.

## ◎ 高管薪酬管理

### ◎ Executive Compensation Management

公司董事会是高管薪酬与考核的最高决策机构，主要负责审批公司高管薪酬与考核管理制度，审批公司高管年度和任期绩效指标、考核结果及薪酬分配方案。公司董事会下设薪酬与考核委员会，负责组织和实施高管薪酬与考核工作。

The company's Board of Directors is the highest decision-making body for executive compensation and assessment, primarily responsible for approving the company's executive compensation and assessment management system, approving annual and tenure performance targets for executives, assessment results, and compensation distribution plans. The company's Board of Directors establishes a Compensation and Assessment Committee responsible for organizing and implementing executive compensation and assessment work.

公司高管薪酬与 ESG 绩效挂钩，制定了严格的薪酬追回和惩罚性扣减制度，通过建立科学合理的薪酬激励与约束机制，进一步完善公司治理结构，提升企业内部管理水平，推动企业高质量发展。如《中国交建高级管理人员薪酬与考核管理办法》第十一条规定：国资委组织开展的高管年度、任期综合考核中被评价为不胜任的，不得领取绩效年薪、任期激励，已发放的应予追回；对于未严格执行公司“三重一大”决策制度或违反国企领导人员廉洁从业有关规定的，按照上级监管机构意见相应扣减薪酬。若高管违反《公司法》《公司章程》等规定的忠实义务，或因触犯法律、违反职业道德、泄露公司机密、失职或渎职等行为损害公司利益或声誉，公司有权追回其已解除限售获得的全部或部分收益。

The company's executive compensation is linked to ESG performance, with strict clawback and punitive deduction systems established. By establishing a scientific and reasonable compensation incentive and constraint mechanism, further improving the company's governance structures, enhancing internal management levels, and promoting high-quality enterprise development. As stipulated in Article 11 of the *CCCC Senior Management Compensation and Assessment Management Measures*: If evaluated as incompetent in the annual or tenure comprehensive assessment organized by the State-owned Assets Supervision and Administration Commission, they shall not receive performance annual salary or tenure incentives, and those already issued shall be recovered; for failure to strictly implement the company's system of "decisions on major matters, appointment and removal of important executives, decisions on investment in major projects, and use of large amounts of funds" or violate the relevant regulations on the integrity of leading cadres in state-owned enterprises, the salary shall be deducted according to the opinions of the superior regulatory authority. If executives violate fiduciary duties stipulated in the *Company Law of the People's Republic of China, Articles of Association*, or other regulations, or harm the interests or reputation of the company through violations of laws, breaches of professional ethics, leakage of company secrets, negligence, or dereliction of duty, the company reserves the right to recover all or part of the unrestricted profits obtained.

目前公司实施了股权激励计划（激励对象包括公司高管），该部分中长期激励相关的薪酬政策是由股东大会批准即股东表决的。公司的薪酬政策由董事会薪酬与考核委员会负责制定和审查。该委员会的主要职责包括：制定公司董事及高级管理人员的考核标准并进行考核；审议董事及高管人员的具体薪酬待遇，包括基本工资、绩效奖金、福利、退休金权利及赔偿金额等；根据公司业绩和市场情况，审阅及批准基于业绩表现的薪酬方案。公司的薪酬政策不仅关注短期激励，还通过股权激励等方式实现长期激励，确保高管薪酬与公司长期业绩挂钩。其中涉及高管的中长期激励薪酬政策需经股东大会批准，即由股东表决通过后实施。

Currently, the company has implemented a stock incentive plan (including company executives), and the compensation policy related to medium- and long-term incentives is approved by the shareholders' meeting and voted by shareholders. The company's compensation policy is formulated and reviewed by the Compensation and Assessment Committee of Board of Directors. The main responsibilities of this committee include: establishing evaluation criteria for company directors and senior management and conducting evaluations; reviewing specific compensation benefits for directors and senior executives, including basic wages, performance bonuses, benefits, retirement benefits, and compensation amounts; reviewing and approving performance-based compensation plans based on company performance and market conditions. The company's compensation policy not only focuses on short-term incentives but also achieves long-term incentives through equity incentives and other means to ensure that executive compensation is linked to long-term company performance. Approval by the shareholders' meeting is required for the medium- and long-term incentive compensation policy involving executives.

## ◎ 股权激励计划

### ◎ Equity Incentive Plan

为推动公司高质量发展，实现股东、公司与核心管理团队利益的深度绑定，公司于 2022 年起实施了限制性股票激励计划。该计划旨在通过股权激励机制，充分调动公司核心管理团队及骨干员工的积极性与创造性，促进公司长期战略目标的实现。根据公司 2022 年限制性股票激励计划草案，激励工具为限制性股票，股票来源为公司向激励对象定向发行的 A 股普通股。激励对象包括公司董事、高级管理人员、中层管理人员及核心骨干人员，但不包括独立董事和监事。该激励计划的实施，将有效促进公司核心管理团队及骨干员工与公司及股东利益的紧密结合，为公司实现高质量发展提供有力保障。

To promote the high-quality development of the company and deeply integrate the interests of shareholders, the company and its core management team, the company implemented a Restricted Stock Incentive Plan starting from 2022. The plan aims to fully mobilize the enthusiasm and creativity of the core management team and key employees through equity incentive mechanisms, thereby promoting the achievement of the company's long-term strategic goals. According to the draft of the company's 2022 Restricted Stock Incentive Plan, the incentive tool is restricted stocks, sourced from A-shares of the company issued to targeted incentive recipients. The incentive targets include directors, senior management, middle management, and core key employees, excluding independent directors and supervisors. The implementation of this incentive plan will effectively strengthen the close connection between the core management team, key employees, and the interests of the company and shareholders, providing strong guarantees for the company's high-quality development.

## ◎ 国企改革

### ◎ State-Owned Enterprise Reform

创新改革方式方法，坚持“1336”改革模式和“8+X”改革全过程推进工作机制，将国企改革与公司高质量发展有机结合，聚焦制约企业发展的痛点难点，坚持问题导向、结果导向，着力推动改革举措层层穿透、刚性落实、取得实效。

Innovative reform methods, adhering to the "1336" reform model and the "8+X" reform throughout the process promotion mechanism, integrate state-owned enterprise (SOE) reform with the high-quality development of the company, focusing on bottlenecks and difficulties that restrict corporate development. Adhering to problem-oriented and results-oriented approaches, efforts are focused on penetrating reforms at all levels, ensuring rigorous implementation and achieving tangible results.

#### 顶层设计引领

#### Top-level design

组织 160 余户二三级企业制定年度工作要点，围绕瓶颈问题谋划改革举措。开展三级企业改革台账专项排查，抽查 28 家二级企业下属的 200 余家三级企业。年度改革主体任务完成率 75%，过程中点对点反馈修改完善意见 130 余条。

Organized over 160 second and third-tier enterprises to formulate annual work priorities, planning reform measures around bottleneck issues. Conducted special inspections of reform accounts for third-tier enterprises, with spot checks on over 200 third-tier enterprises under 28 second-tier enterprises. Annual completion rate of key reform tasks reached 75%, with more than 130 specific feedback suggestions modified and improved during the process.

强化基层穿透

Grassroots-level penetration

开展打通改革“最后一公里”、改革深化提升行动重点任务“回头看”专项行动，建立“交叉互检”、改革协作组等机制，形成改革任务落实督办“组合拳”。编制《改革工作规范指引》《改革学习问答（上下册）》，对改革工作全周期释疑解惑，为基层企业提供“操作指南”。

Initiated a special action to review the key tasks of the "last mile" reform completion and deepening enhancement efforts. Established mechanisms such as "cross-examination" and reform collaboration groups to create a "combined enforcement approach" for the implementation and supervision of reform tasks. Compiled the *Guidelines for Reform Working Standards and Reform Learning Q&A (Volumes I and II)* to clarify and guide reform work throughout the entire cycle, providing operational guidance for grassroots enterprises.

抓实过程督办

Ensure process supervision

建立改革台账编制标准、任务完成标准，细化形成功能使命、量化指标、体制机制、探索推进和制度体系五大类完成标准。常态化推进公司全面深化改革领导小组工作机制，协调解决压减专项、董事会建设等重点领域遇到的问题困难。开展三级及以下企业重点任务推进情况自查，排查反馈问题 70 余项。

Established standards for compiling reform accounts and completing tasks, detailed completion standards for functional missions, quantitative indicators, system mechanisms, and explored progress and system completion standards. Normalized the work mechanism of the company's comprehensive deepening reform leadership group, coordinating solutions to key issues and difficulties in areas such as special reductions and board construction. Conducted self-inspection of the progress of key tasks for third-tier and lower enterprises, identifying and addressing more than 70 feedback issues.

强化示范引领

Leading by example

担任中央企业改革联建互助机制组长单位，组织 10 家组内单位在雄安、北京、鞍山等地召开 6 次专题活动，分享公司改革经验“工具箱”。动态优化支持鼓励“科改、双百”企业专项改革促进高质量发展的指导意见。

Serving as the lead unit of the Central SOE Reform Joint Assistance Mechanism, organized 10 member units to hold six thematic activities in locations such as Xiong'an, Beijing, and Anshan, sharing the company's reform experience "toolbox". Dynamically optimized guiding opinions to support and encourage special reforms for "Science and Technology Reform" and "Double Hundred Enterprises", promoting high-quality development.

开展专项考核

Special assessment

连续三年在国资委改革专项考核中获评 A 级。开展改革深化提升行动“矩阵式”考核，质效类指标占比超过 50%，所属企业改革考核结果实现强制分布，发挥考核“指挥棒”作用。

Achieved an A-level rating for three consecutive years in the special assessment of reforms by the State-owned Assets Supervision and Administration Commission of the State Council. Conducted a "matrix-style" assessment of deepening reforms and enhancements, with quality and effectiveness indicators accounting for more than 50% and achieved mandatory distribution of reform assessment results for affiliated enterprises, leveraging the assessment as a "guiding tool".

影响、风险和机遇管理

IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

国资央企作为国民经济的重要支柱，其改革与发展始终牵动着国家经济的脉搏。国资央企改革聚焦核心功能和核心竞争力深化改革，推动国有资本向关键领域集中，加快战略性重组和专业化整合，不断优化国有经济布局结构，提升科技创新能力，为高质量发展注入强劲动力。我们坚持把深化改革作为推动企业高质量发展的“关键一招”，以改革利剑破藩篱、攻难题、解新题，以改革创新塑体制、建机制、激活力，“破”“立”结合推动企业发展系统性重塑、全局性提升，与时俱进打造时代企业、转型升级建设一流企业，以加快建设世界一流企业新实践，探索新时代国有企业改革发展中之路，绘就中国式现代化中交篇章。

As a significant part of the national economy, central SOEs' reform and development continuously influence the country's economic pulse. Focusing on deepening reforms in core functions and competitive strengths, central SOEs promote the concentration of state-owned capital in critical areas, accelerate strategic restructuring and specialized integration, continually optimize the layout structure of the state-owned economy, enhance technological innovation capabilities, and inject robust momentum into high-quality development. We persist in deepening reform as a "key move" to propel enterprise high-quality development, breaking barriers, tackling difficulties, and resolving new challenges with the sword of reform. Innovating reforms to shape systems, establish mechanisms, and activate vitality, combining "breaking" and "establishing" to promote systematic reshaping and overall enhancement of enterprise development, advancing with the times to create enterprises of the era, transform and upgrade to build first-class enterprises. Accelerating the construction of world-class enterprises with innovative practices, exploring a distinctive path for reform and development of state-owned enterprises in the new era, and outlining a chapter of Chinese-style modernization in communications.

指标与目标

INDICATORS AND OBJECTIVES

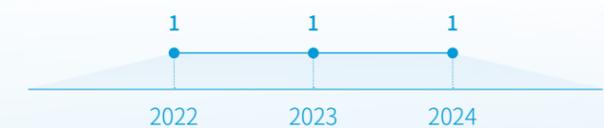
董事会中兼任其他公司 CEO 的成员数量 (人)

Number of board members also serving as CEOs in other companies (Person)



审计委员会中财务专家人数 (人)

Number of Financial Experts in Audit Committee (Person)



## 坚持依法合规

## STAYING COMPLIANT WITH LAWS AND REGULATIONS

### 治理

#### GOVERNANCE

公司聚焦顶层设计，制定《世界一流法治企业建设实施方案》，明确全面创建合规管理、涉外法治、商法体系、案件管理、信息化建设、“四位一体”管理体系“六个一流”的任务目标。强化统筹部署，召开年度法治工作部署会、世界一流法治企业建设试点工作推进会，印发重点任务分解表，确保任务落实到位。重视考核引领，持续提升对合规、重大风险、涉外、专项、案件压控的考核要求，实现二级单位考核全覆盖。突出信息一体化，集成法治综合管理、合同管理、合规风险管理、案件管理信息系统，实现公司内法治信息资源动态共享，不断推进合规管理质的提升。

The company focuses on top-level design, formulating the *World-Class Legal Enterprise Construction Implementation Plan*, defining comprehensive creation of compliance management, foreign-related legal systems, commercial law systems, case management, information technology development, and the "Four-in-One" management system's "Six World-Class" task goals. Strengthening overall deployment, holding annual legal work deployment meetings and world-class legal enterprise construction pilot project advancement meetings, issuing key task breakdown tables to ensure task implementation. Emphasizing performance assessment, continuously enhancing assessment requirements for compliance, major risks, foreign affairs, special tasks, and case control, achieving full coverage assessment of secondary units. Highlighting information integration, integrating legal comprehensive management, contract management, compliance risk management, and case management information systems, achieving dynamic sharing of legal information resources within the company, and continuously improving the quality of compliance management.

#### 关键制度列表 Key Regulatory Documents

《世界一流法治企业建设实施方案》	<i>World-Class Legal Enterprise Construction Implementation Plan</i>
《内部控制手册》	<i>Internal Control Manual</i>
《内部控制评价手册》	<i>Internal Control Evaluation Manual</i>
《构建“不能腐”体制机制实施意见》	<i>Implementation Opinions on Building a System Mechanism for Corruption Prevention</i>
《关于禁止与干部亲属所办企业发生业务往来的暂行规定》	<i>Provisional Regulations on Prohibiting Business Transactions with Cadres' Relatives</i>
《廉洁风险防控工作指导意见（试行）》	<i>Guiding Opinions on Anti-Corruption Risk Prevention Work (Trial)</i>
《加强境外“四位一体”监督体系建设的指导意见》	<i>Guiding Opinions for Strengthening the Supervision System of the "Four-in-One" Overseas</i>
《合作单位黑名单和重点关注名单管理办法》	<i>Management Measures for Cooperation Unit Blacklists and Key Watchlists</i>
《纪检机构执纪审查工作指引》	<i>Guidelines for Disciplinary Inspection Work of Discipline Inspection Agencies</i>

### 战略

#### STRATEGY

##### ◎ 合规管理

##### ◎ Compliance Management

全面落实公司党委、董事会、经理层等治理主体的合规管理职责，压实主要领导法治建设第一责任人，进一步加强重大合规风险、重大决策合规问题管控。全面建立合规管理委员会工作机制，定期召开合规专题会议，听取合规管理工作汇报，安排部署合规管理工作，统筹研究重大决策合规性问题，及时应对存在的决策合规风险。将合规管理纳入所属企业负责人绩效考核，通过考核结果的运用，不断强化激励约束机制，持续推动各单位合规管理建设。

Fully implement the compliance management responsibilities of corporate party committees, boards of directors, and management teams, strengthen the accountability of key leaders for rule of law construction, and further enhance the control of major compliance risks and compliance issues in major decision-making. Establish a comprehensive compliance management committee mechanism, regularly convene compliance thematic meetings to hear reports on compliance management, arrange and deploy compliance management work, coordinate the study of major decision-making compliance issues, and promptly respond to decision-making compliance risks. Incorporate compliance management into the performance evaluation of enterprise leaders, continuously strengthen incentive and constraint mechanisms through the application of evaluation results, and continuously promote the construction of compliance management in various units.

##### ◎ 合规审查

##### ◎ Compliance Review

持续建立健全合规运行审查机制。严格落实经济合同、重大决策、规章制度、授权委托书四项审核 100% 的要求，切实做到合同不审核不签约、制度不审核不上会、材料不审核不用印。针对“三重一大”经济性决策事项严格履行决策程序，避免违规违法决策。

Continuously establish and improve the compliance operation review mechanism. Strictly implement the 100% review requirement for economic contracts, major decisions, regulations and systems, and authorized powers and delegation letters. Ensure that contracts are not signed without review, systems are not discussed without review, and documents are not used without stamps. Strictly follow the decision-making procedures for "triple controls and one major" economic decision-making matters to avoid illegal decision-making.

##### ◎ 内部控制

##### ◎ Internal Control

始终坚持党对内控工作的全面领导，构建了党委、董事会、经理层引领、决策、监督及日常运行的内控治理机制。党委发挥领导作用，统筹把握内控管理工作的原则和方向；董事会负责内控体系的建立健全及有效运行；经理层负责内控体系的日常运行。

Always adhere to the overall leadership of the Party over internal control work, and establish a governance mechanism with the Party committee providing political leadership, the board of directors responsible for decision-making and oversight, and the management team in charge of daily operations. The Party committee plays a leading role in grasping the principles and directions of internal control management work; the board of directors is responsible for the establishment, improvement, and effective operation of the internal control system; and the management team is responsible for the daily operation of the internal control system.

成立中交集团暨中国交建监督委员会。委员会以发现和解决问题为导向，推动各类监督贯通融合、系统集成、协同高效。公司及所属企业进一步完善由法律风控部门统筹履行全面风险、合规管理、法治建设及内部控制管理四项职能，构建“四位一体”内控工作体系。建立日常监督和专项监督的内部控制监督评价管理机制，对内部控制的建立与实施进行常规、持续的日常监督检查，促进内控体系持续优化。

Established the Supervisory Committee of CCGG and CCCC. The Committee is oriented towards discovering and resolving problems, promoting the integration of various types of supervision, system integration, and efficient collaboration. The company and its subsidiaries further improved the comprehensive risk, compliance management, rule of law construction, and internal control management functions coordinated by the legal risk control department and built a "four-in-one" internal control work system. Established daily supervision and special supervision internal control supervision and evaluation management mechanisms, conducted routine and continuous supervision and inspection of the establishment and implementation of internal control systems, and promoted continuous optimization of the internal control system.

## ◎ 内部审计

### ◎ Internal Audit

内部审计机构受公司董事会审计与内控委员会指导和监督，在公司党委直接领导下开展工作。2024 年，成立党委领导下的审计与追责委员会，研讨重大审计追责事项。依据《中华人民共和国审计法》《中国内部审计准则》等法律法规，制定发布《内部审计管理办法》及相关审计实施细则等制度，适用于总部及海内外分、子公司，确保审计制度全面完整。按照相关监管要求和公司内部管控需求，制定发布《财务决算审核发现问题责任追究工作实施细则》《审计整改成效评价工作细则》等，规范审计整改与责任追究工作。

The internal audit institution operates under the guidance and supervision of the company's Audit and Internal Control Committee of Board of Directors, under the direct leadership of the company's Party committee. In 2024, the Audit and Accountability Committee under the leadership of the Party Committee was established to discuss major audit accountability matters. In accordance with the *Audit Law of the People's Republic of China*, *National Auditing Standards of the People's Republic of China*, and other laws and regulations, systems such as the *Internal Audit Management Measures* and related audit implementation rules were formulated and issued, applicable to headquarters and overseas subsidiaries and branches, to ensure the comprehensive integrity of the audit system. In accordance with relevant regulatory requirements and internal control needs, the *Implementation Rules for the Audit of Financial Settlement and Problem Discovery Responsibility* and the *Evaluation Rules for Audit Rectification Effectiveness* were formulated and issued, standardizing audit rectification and accountability work.

根据公司反腐败政策等内部制度文件规定，每三年开展一次全公司层面的商业道德及反腐败全面审计，审核内容覆盖所有业务，包括但不限于工程建设、采购、销售等业务环节。审计结果将作为公司改进商业道德及反腐败措施的重要依据。公司制定了专门的审计制度和流程，明确商业道德及反腐败审计的目标、范围、方法和责任分工。这些制度通常会涵盖反腐败、反贿赂、诚信经营、环境保护、劳动权益保护等多个方面，确保审计工作有章可循。根据廉洁风险点的表现形式、产生原因和评定等级，结合政策规定、管理职责、工作标准和岗位特点，分别制定有针对性、可操作性、实用性较强的防控措施。

According to internal system documents such as the company's anti-corruption policy, a comprehensive company-wide business ethics and anti-corruption audit was conducted every three years, covering all businesses, including but not limited to engineering construction, procurement, and sales. The audit results serve as an important basis for the company to improve business ethics and anti-corruption measures. The company has established special audit systems and processes, clarifying the goals, scope, methods, and division of responsibilities for business ethics and anti-corruption audits. These systems typically cover aspects such as anti-corruption, anti-bribery, integrity in business operations, environmental protection, and protection of labor rights, ensuring that audits follow a structured approach. Based on the forms, causes, and rating of integrity risks, combined with policy provisions, management responsibilities, work standards, and job characteristics, targeted and operational control measures are formulated.

## ◎ 风险管理

### ◎ Risk Management

公司重视对风险管理的培训，对所有董事会成员（包括非执行董事）培训内容涵盖公司治理、内部控制、战略风险决策等核心领域。并通过学习国际公司治理准则、中国上市公司治理准则以及新《公司法》等法规，提升董事对合规与风险防控的全局认知。公司注重将风险标准纳入产品和服务开发流程，在项目立项阶段，通过市场调研、合规尽职调查及技术可行性研究，对潜在风险（如合规风险、汇率风险、施工安全风险等）进行系统识别和分级评估。

The company attaches importance to risk management training for all members of the board of directors (including non-executive directors), covering core areas such as corporate governance, internal control, and strategic risk decision-making. By studying international corporate governance guidelines, China's listed company governance guidelines, and the new *Company Law of the People's Republic of China*, directors' overall awareness of compliance and risk prevention is enhanced. The company emphasizes incorporating risk standards into the product and service development processes, identifying and assessing potential risks (such as compliance risks, exchange rate risks, and construction safety risks) through market research, due diligence investigations, and technical feasibility studies during project initiation.

## ◎ 商业道德

### ◎ Business Ethics

公司致力于打造廉洁、诚信的企业形象，维护公平竞争的商业环境，保障公司、股东及利益相关方的合法权益。为实现这一目标，公司对腐败、商业贿赂、特殊关系回避与利益冲突等重点议题作出规定，规范全体员工及合作伙伴的从业行为，确保公司在反贿赂和反腐败方面的合规性。公司对任何形式的腐败行为采取零容忍态度，建立廉洁从业管理办法和约束机制，有效开展廉洁风险评估和监督检查，积极预防腐败行为的发生。所有员工承诺遵守反腐败行为准则及商业活动的反腐败法律法规，不从事任何腐败或不当的行为。

The company is committed to building a clean and honest corporate image, maintaining a fair competitive business environment, and safeguarding the legitimate rights and interests of the company, shareholders, and stakeholders. To achieve this goal, the company has established regulations on key issues such as corruption, commercial bribery, avoidance of special relationships, and conflicts of interest, standardizing the conduct of all employees and partners to ensure compliance with anti-bribery and anti-corruption laws and regulations. The company adopts a zero-tolerance attitude towards any form of corruption, establishing measures and mechanisms for clean employment management and constraints, actively conducting clean risk assessments and supervisory inspections, and actively preventing corrupt practices. All employees are committed to complying with anti-corruption codes of conduct and anti-bribery laws and regulations, refraining from any corrupt or improper conduct.

公司高度重视商业道德相关事项的监督与管理，密切关注包括反腐败、运营管理、风险管理等领域工作进展，严格遵循《反腐败工作要点》《供应链管理办法》《采购合规程序要点指引》等制度要求。公司设立监督委员会，印发《监督委员会工作规则》，建立跨部门会商研判机制，对实施违反商业道德行为人员严肃追责问责，2024 年召开公司监督委员会及办公室会议 7 次，推动跨部门监督事项 17 项。聚焦筑牢“不能腐”的笼子，制定《构建“不能腐”体制机制的实施意见》《廉洁风险防控工作指导意见》等系列制度，组织集团总部和所属单位聚焦“两类人员、七个关键环节、八类重点职权”，全方位编制廉洁风险防控手册，建立廉洁风险排查、预警、处置全链条机制。研究起草《“四位一体”境外廉洁合规体系建设的指导意见》，境外廉洁合规治理水平持续提升。

The company places great emphasis on the supervision and management of business ethics-related matters, closely following the progress of work in areas such as anti-corruption, operational management, and risk management, strictly following requirements such as the *Key Points of Anti-Corruption Work*, *Supply Chain Management Measures*, and *Guidelines for Procurement Compliance Procedures*. The company has established a Supervisory Committee, issued the *Rules of Supervisory Committee Work*, established cross-departmental

consultation and judgment mechanisms, and seriously holds accountable those who implement violations of business ethics. In 2024, the company convened 7 meetings of the company's supervisory committee and office, promoting 17 cross-departmental supervision matters. Focusing on securing the "no corruption" framework, series of documents such as the *Implementation Opinions on Building a "No Corruption" System Mechanism and Guiding Opinions on Clean Risk Prevention and Control Work* were formulated, organizing group headquarters and affiliated units to focus on "two types of personnel, seven key links, eight key authority powers", comprehensively compiling clean risk prevention and control manuals, and establishing a full-chain mechanism for clean risk identification, early warning, and disposal. The company has drafted the *Guiding Opinions on the Construction of the "Four-in-One" Overseas Clean Compliance System*, continuously improving the level of overseas clean compliance governance.

公司不仅关注自身运营环节的风控、合规等管理体系的执行情况，还结合不同业务单元的风险评估结果，动态确定审计覆盖形式和范围。针对可能涉及的道德风险、市场竞争公平性等制定专门审计方案，运用大数据技术对海量业务数据进行深度挖掘与分析，构建风险预警模型，快速精准识别异常情况，如潜在的欺诈交易、利益输送行为等。审计范围还会延伸供应链环节的商业道德，对供应商的生产环境、劳工权益、环保举措等方面进行细致审查，确保从原材料采购到产品交付的全流程都符合高标准商业道德。制定施行《纪检机构执纪审查工作指引》等制度规定，明确信访保密工作及信访举报线索管理要求，做到对信访举报人的姓名、工作单位、住址等有关情况以及信访举报内容严格保密。

The company not only focuses on the execution of risk control, compliance, and other management systems in its operation but also dynamically determines the audit coverage form and scope based on risk assessment results from different business units. Special audit schemes are formulated for ethical risks, market competition fairness, etc., using big data technology to deeply mine and analyze massive business data, construct risk warning models, and quickly and accurately identify abnormal situations such as potential fraudulent transactions and benefit transfers. The audit scope also extends to the business ethics of the supply chain link, conducting detailed reviews of suppliers' production environments, labor rights, environmental protection measures, etc., ensuring that the entire process from raw material procurement to product delivery meets high standards of business ethics. The company also formulates and implements system provisions such as the *Disciplinary Inspection and Review Work Guidelines* to clarify the requirements for confidentiality of petition work and management of petition reports, ensuring strict confidentiality of information related to petitioners' names, work units, addresses, and petition content.

公司持续巩固及拓展廉洁教育成效。提炼并推广“心至廉 路致远”中交特色廉洁文化理念，2024 年连续第十年开展党风廉政宣教月活动，推动各单位举办廉洁道德讲堂 529 场、各级党组织书记和领导班子成员讲授纪律党课 5000 余次，层层签订廉洁从业承诺书，推进廉洁文化进项目、进车间、进船舶，确保廉洁教育培训覆盖各层级全体员工。建立常态化反腐败警示教育机制，定期通报内部违纪违法典型案例，2024 年召开 3 次全集团警示教育大会。商业道德、反商业贿赂及反贪污培训的员工（包含外包员工）覆盖率为 100%。

The company continues to consolidate and expand the effectiveness of integrity education. It refines and promotes the distinctive clean culture concept of "maintaining integrity and self-discipline enables one to go further and more steadily" of CCCC, and for the tenth consecutive year in 2024, it carried out the Party's integrity and anti-corruption education month activities, promoting various units to hold 529 clean ethics classrooms, and all levels of Party organizations and leadership teams to deliver more than 5,000 discipline lectures, signing clean employment commitment documents, promoting clean culture into projects, workshops, and ships, ensuring clean education and training coverage for all employees at all levels. Establish a regular anti-corruption warning and education mechanism, regularly report typical cases of internal violations of discipline and law and held 3 group-wide integrity warning sessions in 2024. All employees (including outsourced employees) have participated in business ethics, anti-commercial bribery, and anti-corruption training.

## ◎ 举报人保护

### ◎ Whistleblower Protection

公司重视信访举报。中国交建明确开通来信举报、电话举报、网络举报等信访举报方式，在官方网站公布了举报地址、电话和邮箱。公司鼓励实名举报，接受匿名举报。为保障举报人合法权益，支持和保护单位和个人依法举报违法违规行

为，促进公司党风廉政建设和反腐败工作，公司禁止一切威胁、打击、报复举报人的行为，必要时将给予举报人法律支持和保护。对举报信息设置查阅权限，严禁向被举报人和无关人员泄露相关信息。公司对举报人的姓名、工作单位、家庭住址等个人信息和举报内容、审计调查人员姓名等信息进行严格保密。举报材料纳入密件管理。

The company highly values whistleblower reports. CCCC has established multiple reporting channels, including written submissions, telephone hotlines, and online platforms, and has published the reporting address, telephone number, and email on its official website. The company encourages named reports but also accepts anonymous reports. To protect the legal rights and interests of whistleblowers and to support and protect units and individuals in legally reporting illegal and non-compliant behaviors, thereby promoting the company's integrity and anti-corruption efforts, the company prohibits any threats, attacks, or retaliation against whistleblowers and provides legal support and protection when necessary. Access to whistleblower information is restricted to authorized personnel only, strictly prohibiting the disclosure of relevant information to the reported parties and unrelated individuals. The company maintains strict confidentiality of the whistleblowers' personal information such as names, workplaces, home addresses, as well as details of the reports and names of audit investigators. All materials related to reports are managed as confidential documents.

## ◎ 公平竞争

### ◎ Fair Competition

深入落实《公平竞争审查条例》，牢固树立“市场为大、市场为先”的经营理念，做到全国范围内的区域市场分级和资源配置优化。加强地方合作，打造央地合作新样板。公司始终坚持公平、公正、公开的原则，采取一系列措施来消除隐形壁垒，维护公平竞争的市场环境。

The company deeply implements the *Regulations on Fair Competition Review*, firmly following a "market-oriented, market-first" business philosophy to ensure regional market segmentation and optimal resource allocation nationwide. It strengthens local collaborations to create new models of central-local cooperation. The company always adheres to the principles of fairness, justice, and transparency, implementing a series of measures to eliminate invisible barriers and maintain a fair competitive market environment.

## ◎ 境外合规

### ◎ Overseas Compliance

公司印发《“四位一体”境外廉洁合规体系建设的指导意见》，全面构建“四位一体”境外廉洁合规体系，通过统筹指导、相关单位积极探索，打通廉洁合规内在联系，有效整合境外监督力量，推动公司及所属海外平台公司和涉外业务单位完善跨境腐败治理协调机制，严肃查办一批跨境腐败典型案件，处置化解一批境外廉洁合规突出风险，建立健全一批境外廉洁合规管理制度，培育打造一批境外廉洁合规监督力量，护航公司境外业务高质量发展。

The company has issued the *Guiding Opinions for the Construction of the "Four-in-One" Overseas Integrity Compliance System*, comprehensively building a "Four-in-One" overseas integrity compliance system. By coordinating guidance and proactive exploration by relevant units, it integrates internal connections of integrity compliance, effectively integrates overseas supervision forces, and drives the company and its overseas companies and foreign business units to perfect the cross-border corruption governance coordination mechanism. It investigated a batch of cross-border corruption cases, addressed a series of prominent overseas integrity compliance risks, established a comprehensive set of overseas integrity compliance management systems, cultivated a series of overseas integrity compliance supervision forces, and has safeguarded the high-quality development of the company's overseas operations.

◎ 数据安全

◎ Data Security

为全面建设数据安全防护体系，可持续性应对数据安全风险，公司围绕“三大体系”绘制数据安全工作总体蓝图，以数据安全管理体系建设为顶层治理，以数据技术工具和平台为技术支撑，数据安全运营实现持续保障，全面构建数据安全能力，为公司数字化转型提供保驾护航。

To comprehensively build a data security protection system and sustainably address data security risks, the company has drafted a comprehensive blueprint for data security work, with data security management system construction as the top-level governance, supported by data technology tools and platforms, and operational data security for continuous protection. This comprehensive approach builds the company's data security capabilities, safeguarding its digital transformation.

运用 DSMM（数据安全能力成熟度模型）评估公司的数据安全整体水平；核心系统定期进行数据安全风险评估，识别控制数据安全风险；对各业务系统按照数据全生命周期技术要求核查，验证数据安全防护落实情况。制定数据安全专项实施方案和计划，根据风险重要程度拆解行动项，形成整改行动计划，分阶段进行加固整改，确保数据安全工作全面落实。

“十四五”期间，数据安全规划通过数据安全三年攻坚战建成与世界一流企业相匹配的数据安全能力，成为建筑类企业数据安全示范样板。

Using the Data Security Capability Maturity Model (DSMM), the company assesses its overall level of data security; core systems undergo regular data security risk assessments to identify and control data security risks. Business systems are checked according to the full lifecycle technical requirements for data, verifying the implementation of data security protections. The company formulates specific data security implementation plans and schedules, breaks down actions based on the severity of risks, forms rectification action plans, and conducts phased reinforcements and rectifications to ensure comprehensive implementation of data security measures. During the "14th Five-Year Plan" period, the company built data security capabilities matching those of world-class companies through a three-year data security campaign, setting a benchmark for data security among construction companies.



**政策机制**  
Policies and Mechanisms

编制完善网络安全管理制度与网络安全技术规范，指导、规范二级单位、三级单位及项目部针对性开展网络安全建设及运维工作。通过公司统建网络安全工作管理平台，每月逐级向各单位下发《网络安全信息通报月刊》，供全体员工查阅学习，提高网络安全意识。

Comprehensive guidelines for network security management and technical standards are compiled to guide and standardize the network security construction and operation work of secondary and tertiary units and project departments. Through the company's centralized network security work management platform, the *Monthly Network Security Information Bulletin* is distributed monthly to all units for all employees to read and learn, enhancing network security awareness.

**信息上报**  
Information Reporting

制定信息通报工作相关制度规范，按照“谁运营、谁负责，谁发现、谁报告”的原则以及“即现即报、处报同步、分级处置、措施高效”的工作要求，第一时间报告同级及上一级处置机构，根据事件等级继续落实事件下一步报告工作。

Establish relevant system standards for information reporting work. Based on the principles of "those who operate are responsible, those who discover must report", and the work requirements of "immediate reporting upon discovery, simultaneous reporting and handling, tiered response, and efficient measures", incidents shall be promptly reported to both the corresponding and higher-level handling units. Follow-up reporting procedures shall be carried out based on the classification of the incident.

**能力建设**  
Capacity Building

开展网络安全红队能力培训，通过体系化培训学习全面提升攻击队攻防技术能力；组织开展 2 期网络安全意识宣贯培训，全公司参与员工达 8 万余人次。

Conduct network security red team capability training to comprehensively enhance the attack and defense technical capabilities of the attack team through systematic training; organize two phases of network security awareness training, involving over 80,000 employees company-wide.

**绩效评估**  
Performance Evaluation

统筹组织网络安全绩效评估考核工作，从网络安全月度评价、年度专项保障评价、年度加分指标三个方面对网络安全绩效进行评估，明确各单位及员工奖惩机制，有效促进公司网络安全防护工作。

Organize network security performance assessment and evaluation, assess network security performance on monthly network security evaluations, annual special security evaluations, and annual bonus indicators, clarify the reward and punishment mechanisms for units and employees, and effectively promote the company's network security protection work.

**应急响应**  
Emergency Response

全面落实业务连续性工作要求，组织 10 次应急演练，进一步提升对复杂突发事件的综合应对能力，检验应急预案的完整性和可用性，为业务持续运行及企业高质量发展筑牢安全屏障。

Fully implement business continuity requirements, organize 10 emergency drills to further enhance comprehensive response capabilities to complex emergencies, test the completeness and usability of emergency plans, and build a solid safety barrier for continuous business operation and high-quality corporate development.

管理体系

Management System

建立标准化信息安全管理... 有效保护信息资源...

Establish a standardized information security management system. IT infrastructure and information security management systems have obtained ISO 27001 certification...

系统安全

System Security

高质量通过 18 个信息系统等级保护测评工作... 有效提升应用系统的安全防护能力。

Successfully pass security assessments for 18 information systems at a high-quality level, ensuring the security and reliability of company information systems.

客户隐私保护

Customer Privacy Protection

制定详尽的客户隐私保护规范... 以确保客户信息的安全。

The company has established detailed customer privacy protection standards that explicitly define the rules for the collection, use, storage, and sharing of customer information.

影响、风险和机遇管理

IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

风险识别

Risk Identification

持续创新风险评估工作方法... 保障业务合规性、数据安全性和风险可控性。

The company continuously innovates its risk assessment methodologies, using comprehensive tools such as surveys, expert consultations, discussion interviews, and risk coordinate mapping...

风险控制

Risk Control

全方位多角度开展重大风险评估... 为公司进一步防范化解重大风险打下坚实基础。

The company conducts comprehensive and multi-dimensional assessments of significant risks and focuses on key risk control measures. It systematically analyzes major operational risks and devises prevention and control plans...

指标与目标

INDICATOR AND OBJECTIVE

接受反商业贿赂及反贪污培训的员工占比 (%)

Percentage of employees who received anti-commercial bribery and anti-corruption training (%)



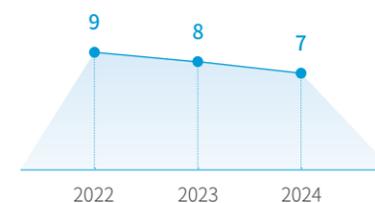
经济合同履约率 (%)

Contract fulfillment rate (%)



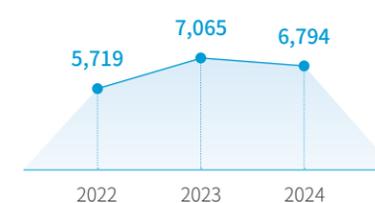
接受反商业贿赂及反贪污培训的董事总数 (人)

Total number of directors who received anti-commercial bribery and anti-corruption training (Person)



接受反商业贿赂及反贪污培训的管理层人员总数 (人)

Total number of management personnel who received anti-commercial bribery and anti-corruption training (Person)



接受反商业贿赂及反贪污培训的员工总数 (人次)

Total number of employees who received anti-commercial bribery and anti-corruption training (Person-time)



## 维护股东权益

## SAFEGUARDING SHAREHOLDER RIGHTS

### 治理

#### GOVERNANCE

持续完善股东事务和公司章程管理，提升股东事务管理的流程化、标准化、信息化，上线股东事务管理流程并动态优化调整，加大子企业相关业务人员培训力度，规范高效履行出资人权利义务。董事长是公司投资者关系管理第一负责人，负责审批重大投资者关系活动计划，主持、参加重大投资者关系活动，包括股东大会、业绩说明会、新闻发布会、路演、重要境内外资本市场会议和重要的财经媒体采访等。

The company continuously improves the management of shareholder affairs and company bylaws, enhancing process standardization and digitalization in shareholder affairs management. It launches an online shareholder affairs management process and dynamically adjusts it, intensifying training for related personnel in its subsidiaries to standardize and efficiently fulfill the rights and obligations of investors. The chairman is the primary person responsible for investor relations management, approving major investor relations activity plans, presiding over and participating in significant investor relations activities, including shareholder meetings, performance briefings, press conferences, roadshows, significant domestic and international capital market meetings, and important financial media interviews.

#### 关键制度列表 Key Regulatory Documents

《股东大会议事规则》

《信息披露及重大信息内部报告管理办法》

《投资者关系管理办法》

《股东及董事、监事和高级管理人员持股变动管理制度》

《股东沟通政策》

*Rules of Procedure for Shareholder Meetings*

*Information Disclosure and Internal Reporting of Significant Information*

*Investor Relations Management Measures*

*Shareholding Change Management System for Shareholders, Directors, Supervisors, and Senior Management*

*Shareholder Communication Policy*

## 战略

### STRATEGY

#### ◎ 市值管理

#### ◎ Market Value Management

高质量完成国资委控股上市公司质量提升三年专项活动，上报工作成果、总结工作成效。根据证监会、国资委有关市值管理的要求和考核导向，起草完成控股上市公司市值管理指引、市值管理考核标准、市值管理工作思路报告、大股东增持及上市公司回购指引等文件，进一步强化市值管理工作。

The company successfully completed the three-year special project for improving the quality of state-owned enterprises listed by the State-owned Assets Supervision and Administration Commission, reporting work achievements and deliverables. The company drafted and completed guidelines for market value management of controlled listed companies, market value management assessment standards, market value management work approaches, and guidelines for major shareholders' share increases and company buy-backs based on the requirements and assessment guidance of the China Securities Regulatory Commission and State-owned Assets Supervision and Administration Commission, further strengthening market value management efforts.

#### ◎ 信息披露

#### ◎ Information Disclosure

及时、全面发布财务报告、经营数据报告、董事会决议、股东会决议等重要信息。组织召开 2023 年度股东周年大会，顺利完成对 A 股、H 股股东合计 47 亿元（含税）的分红派息工作。

Timely and comprehensively publish financial reports, operational data reports, board resolutions, shareholder resolutions, and other critical information. Organize the 2023 Annual Shareholders' Meeting, smoothly completing the distribution of dividends and interest totaling RMB 4.7 billion (including tax) to A-share and H-share shareholders.

连续 11 年获评信息披露最高等级 A 类评价（优秀）

The company has been rated with the highest-level A classification (Excellent) for information disclosure for 11 consecutive years

获评中国上市协会“董事会最佳实践案例”“董办最佳实践案例”“业绩说明会最佳实践”

The company was awarded "Best Practice Case of the Board of Directors", "Best Board Secretariat Practices Award", and "Best Practice Case of Performance Briefing" by the China Association For Public Companies

荣获香港大公报“金紫荆奖 - 卓越投资者关系管理”

Received the "Golden Bauhinia Award - Excellence in Investor Relations Management" from Hong Kong Ta Kung Pao

荣获中国证券报“金牛奖 - 最具投资价值”“金牛奖 - 金信披奖”

Awarded the "Golden Bull Award - Most Investable Company" and "Golden Bull Award - Golden Information Disclosure Award" by China Securities Journal

◎ 投资者沟通

◎ Investor Communications

公司多渠道、多平台、多方式开展投资者关系管理工作。通过公司官网、新媒体平台、电话、传真、电子邮箱、投资者教育基地等渠道，利用中国投资者网和证券交易所、证券登记结算机构等的网络基础设施等平台，采取股东大会、投资者说明会、路演、分析师会议、接待来访、座谈交流，以及监管机构、交易所组织的投资者教育等活动、财经媒体采访和报道等方式，与投资者进行沟通交流。

The company employs multiple channels, platforms, and measures for managing investor relations. By making use of the company website, new media platforms, telephone, fax, email, investor education bases, and the infrastructure of the China Investor Network and stock exchanges and securities registration and settlement institutions, it engages in shareholder meetings, investor briefings, roadshows, analyst meetings, reception visits, discussion exchanges, investor education activities organized by regulatory bodies and exchanges, and financial media interviews and reports, facilitating communication with investors.

◎ 拓宽融资渠道

◎ Broadening Financing Channels

公司密切跟踪发行窗口，通过对全球投资者的持续摸排和精准判断，顺利发行 71 亿元离岸点心债，保障了永续债到期赎回。本次发行创下非金融企业三年期点心债最低票息纪录，拓宽了中国交建在国际资本市场的融资渠道，荣获国际知名财经杂志《财资》颁发的最佳绿色债券奖项。通过发行市场首单建筑类央企境外绿色债券，公司在境外债市场积累了良好的口碑和投资人基础，展示了优质的信用形象，为建筑类央企在境外资本市场的发展树立了全新标杆。

The company closely monitors issuance windows and, through continuous engagement with and precise assessments of global investors, successfully issued RMB 7.1 billion in offshore Dim Sum bonds, ensuring the redemption of perpetual bonds upon maturity. This issuance set a record for the lowest coupon rate for a non-financial corporate's three-year Dim Sum bond, expanding CCCC's financing channels in the international capital markets and winning the Best Green Bond award from the internationally renowned finance magazine, *The Asset*. By issuing the first green bond by a central enterprise in the construction sector in the overseas market, the company has built a strong reputation and investor base abroad, demonstrating a high-quality credit image and setting a new benchmark for central enterprises in the overseas capital markets.

发行人	担保人	发行规模	发行期限	票面利率	峰值认购倍数
CCCCI Treasure Limited	中国交通建设股份有限公司	21亿人民币	3年	2.90%	4.0x

担保人：中国交通建设股份有限公司

联席全球协调人、联席簿记管理人、联席牵头经办人：中信证券、华泰国际、中银国际、DBS

联席簿记管理人、联席牵头经办人：中国工商银行、中国工商银行（香港）、渣打银行、交通银行

绿色结构顾问：华泰国际

发行首单建筑类央企绿色债券，创非金融企业 3 年期点心债票面利率新低

The first green bond issued by a central enterprise in the construction field achieved the lowest face value interest rate for a non-financial enterprise's three-year dim sum bonds

影响、风险和机遇管理

IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

面对资本市场波动加剧与中小股东参与机制不足的双重挑战，公司高度重视股东权益保护的潜在风险，持续完善“定期沟通 + 动态响应”的股东对话机制，通过优化分红政策稳定投资回报预期，并依托数字化平台实现信息披露全流程穿透式管理；同时强化董事会战略引领作用，将股东权益保护纳入 ESG 治理专项议程，严控关联交易风险，确保投资者平等受惠于企业高质量发展。

Faced with the dual challenges of increased volatility in the capital markets and insufficient mechanisms for the participation of small and medium shareholders, the company places high importance on the potential risks to shareholder rights. It continuously perfects a "regular communication + dynamic response" shareholder dialogue mechanism, stabilizes investment return expectations through optimized dividend policies, and achieves full-process transparent information disclosure via digital platforms. Simultaneously, it strengthens the strategic guidance role of the board of directors, incorporating shareholder rights protection into the ESG governance agenda, strictly controlling related-party transaction risks, and ensuring that investors equitably benefit from the company's high-quality development.

在国企改革深化与 ESG 投资浪潮交汇的机遇期，公司主动将股东权益保护转化为价值创造动能。一方面，借力“双碳”目标下的绿色金融工具创新，发行碳中和债券、基础设施 REITs 等融资产品，拓宽股东价值增长路径；另一方面，以“治理国际化”对接全球投资者诉求，通过 ESG 评级提升、发布多语种投资者关系报告，增强国际资本市场的品牌认同。公司更将股东长期利益融入发展战略，以科技创新与绿色转型驱动资产结构优化，实现权益保障与可持续发展的同频共振。

During a period where state-owned enterprise reform intersects with the surge in ESG investing, the company proactively transforms shareholder rights protection into a driver of value creation. On one hand, leveraging green financial tools under the "dual carbon" goals, it issues carbon-neutral bonds and infrastructure REITs, broadening paths for shareholder value growth. On the other hand, it aligns with global investor demands through "governance internationalization", enhancing its ESG ratings, and publishing investor relations reports in multiple languages to strengthen brand recognition in international capital markets. The company integrates long-term shareholder interests into its development strategy, driving asset structure optimization through technological innovation and green transformation, achieving concurrent advancements in equity protection and sustainable development.

指标与目标

INDICATOR AND OBJECTIVE



## 新旧动能转换

### TRANSITIONING FROM OLD TO NEW DRIVERS OF GROWTH

#### 治理

##### GOVERNANCE

修订《子企业主业管理办法》，优化主业管理服务公司产业转型升级。完成子企业 2025—2027 年主责、主业、拟培育主业和产业负面清单核定，采取线上和电话方式与各单位逐一沟通超 100 次、会议沟通超 10 次，在坚持主责主业管理要求的同时充分听取和考虑各方诉求。完善战新产业发展顶层设计，研究制定 8 个方向 25 个细分赛道的公司新兴产业总体方案和产业目录。制定《加快战略性新兴产业发展首批支持政策（2024 版）》，为公司战新产业发展赋能加力。

The company revises the *Management Measures for the Main Business of Subsidiaries* to optimize core business management and support the company's industrial transformation and upgrading. It completes the confirmation of core responsibilities, core businesses, prospective core businesses, and an industrial negative list for subsidiaries for 2025-2027. The company conducted over 100 consultations with various units via online platforms and phone calls. It adheres to core business management requirements while fully considering and listening to all parties. It perfects the top-level design for the development of strategic emerging industries, formulating a comprehensive plan and industry catalog for emerging industries in 8 directions and 25 specialized subsectors. It establishes the *First Batch of Supporting Policies for the Accelerated Development of Strategic Emerging Industries (2024 Edition)*, empowering and accelerating the development of new industries within the company.

#### 关键制度列表 Key Regulatory Documents

《子企业主业管理办法》

*Management Measures for the Main Business of Subsidiaries*

《战略性新兴产业发展总体工作方案》

*Comprehensive Working Plan for the Development of Strategic Emerging Industries*

《加快战略性新兴产业发展首批支持政策（2024 版）》

*First Batch of Supporting Policies for the Accelerated Development of Strategic Emerging Industries (2024 Edition)*

## 战略

### STRATEGY

#### ◎ 传统产业升级

#### ◎ Upgrading of Traditional Industries

##### 延伸“大交通”产业链

##### Expanding the "major transportation" industry chain

紧盯国家综合运输大通道、大枢纽、综合立体交通网和物流网络建设，坚持做强做专大交通主责主业，坚定服务交通强国战略，在“大交通”领域勇当行业标兵，分区域梳理穿城高速公路市政化改造、繁忙路段提级扩容、干线通道、过江跨海等关键性工程，投资建设了诸如乌尉高速在内的多个国家战略性、服务国家战略的重大交通项目。

We focus on the national integrated transportation corridors, major hubs, comprehensive three-dimensional transportation networks, and logistics networks. We strive to strengthen and specialize in the major transportation business, which is in line with China's national strategy of build China into a country with a strong transport industry. As an industry pioneer in the "major transportation" sector, the company systematically reviews and invests in critical projects such as urban expressway municipal transformations, upgrades and expansions of busy sections, main traffic corridors, and cross-river and sea projects, including the Urumqi-Yuli Expressway and other major national strategic transport projects that serve the national strategy.

##### 打通疆煤外运新通道

##### Opening new channels for Xinjiang Coal transportation



2024 年 1 月 15 日，由二公局、三公局参与投资建设的新疆将淖铁路正式通车运营。将淖铁路位于新疆昌吉回族自治州和哈密市，正线长度 429.9 公里，设计时速 120 公里，为电气化货运 I 级铁路。将淖铁路是中交主导投资建设的首条 BOO（建设—拥有一运营）模式货运铁路。该铁路的通车，标志着新疆铁路货运北通道彻底贯通，铁路运输辐射范围将从河西走廊延伸到华北等地，打通“疆煤外运”北部黄金通道，为保障国家能源安全发挥重要作用。

On January 15, 2024, the Xinjiang Jiangnao Railway, invested in and built by the CCCC Second Highway Engineering Company and the CCCC Third Highway Engineering Company, officially commenced operations. Located between Changji Hui Autonomous Prefecture and Hami City in Xinjiang, the railway has a main line extending 429.9 kilometers with a design speed of 120 kilometers per hour and is an electrified freight railway of Class I standards. The Jiangnao Railway, the first BOO (Build-Own-Operate) model freight railway led by CCCC, marks the complete connection of Xinjiang's northern freight rail corridor, extending the railway transport coverage from the Hexi Corridor to regions like North China. It opens the "golden channel" in north Xinjiang for transporting Xinjiang coal, playing a vital role in ensuring national energy security.



新疆将淖铁路正式通车

Xinjiang Jiangnao Railway officially opened

构建“大城市”新生态

Building new ecology for metropolises

深度参与各地城市项目，创新优化投资模式，因城施策，构建“未来城市”新生态，以打造“大城市”的全产业链服务能力为顶层指引巩固提升企业核心竞争力，投资实施了上海新风溪城中村改造、宁波奉化中交未来城、深圳市龙华区民治街道国润电器片区城市更新项目等许多具有示范引领意义的城市开发项目，探索形成了一套“规划、造城、注能、运营”的独特商业模式。

Deeply involved in urban projects across regions, the company innovates investment models tailored to different cities, creating a new ecology for "future cities" and aiming to construct a full-industry-chain capability for metropolises as the top-level guide, enhancing the company's core competitiveness. It invests in projects like the upgrading of Shanghai Fengxi Urban Village, Ningbo's Fenghua "Future City" project, and the urban renewal project themed on Guorun electrical appliances in Minzhi Sub-district, Longhua District, Shenzhen, exploring a unique business model of "planning, city-building, energizing, and operation".

央地合作打造都市工业新样板

Cooperation between a central enterprise and local area to create a new industrial model in urban areas



中交·壹里科创云廊项目位于宁波市奉化区中交未来城核心，是中交城投与地方政府合作的旗舰项目，占地约 180 亩，建面约 26 万平方米，总投资约 10 亿元。项目以智能制造、新材料、文化创意为产业主导方向，打造集产、创、展、商功能于一体的产业社区，通过金融服务、技术服务、企业服务、产业链服务、配套服务等五大服务体系，形成企业加速成长生态圈，致力于成为长三角远端科创企业成长基地。

The CCCC · Yili Science and Technology Innovation Cloud Corridor Project, located in the core area of CCCC Future City in Fenghua District, Ningbo, is a flagship project of CCCC Urban Investment in cooperation with the local government. Covering approximately 180 acres with a construction area of about 260,000 square meters and a total investment of about RMB 1 billion, the project leads in intelligent manufacturing, new materials, and cultural creativity, creating an industrial community that integrates production, creativity, exhibition, and commerce. Through a comprehensive service system including financial, technical, enterprise, industry chain, and supporting services, it forms a rapid growth ecosystem for enterprises, aiming to become a growth base for science and technology enterprises in the Yangtze River Delta region.



中交·壹里科创云廊项目全景

Panoramic view of Yili Science and Technology Innovation Cloud Corridor Project

◎ 战新产业布局

◎ Layout of Strategic Emerging Industries

在新一代信息技术产业方向，将“IDC 数据与算力中心”列为战新产业细分赛道之一，以中交投资为主体，投资实施了中交（中卫）云数据中心项目，致力于打造建筑类央企数智化转型标杆示范，为公司数字化转型和发展提供算力保障。在清洁能源产业方向，聚焦公司内外部高速公路、机场、轨道交通等大交通场景，创新“交能融合”业务模式，以中交光伏公司为主体，定位为新能源产业投资和研发的高科技平台，打造光伏专业板块投资及运营平台，打造了一批具有中交特色的光伏、储能、充电桩等新能源示范工程，形成具有市场竞争力的系统解决方案和品牌价值。

In the direction of next-generation information technology industries, the "IDC Data and Computing Power Center" is designated as one of the specialized sector of the strategic emerging industry. Led by CCCC Investment Company Limited, the CCCC (Zhongwei) Cloud Data Center project is committed to creating a benchmark for the digital transformation of construction-related central enterprises, providing computing power support for the company's digital transformation and development. In the clean energy industry direction, focusing on major transportation scenes such as internal and external high-speed highways, airports, and rail transit, it innovates the "energy integration" business model. With CCCC Photovoltaic Technology Co. Ltd. as the main body, positioned as a high-tech platform for investment and research and development in the new energy industry, it builds a professional investment and operation platform for the photovoltaic sector, creating a series of new energy demonstration projects with CCCC's characteristic including photovoltaic, energy storage, and charging pile, forming competitive market solutions and brand value.



江苏扬州新能源产业园东区建设项目的投用有效完善了扬州新能源的产业设施基础，助力扬州先进制造业集群高质量发展以及加快建设产业科创名城。

The launch of the Jiangsu Yangzhou New Energy Industry Park East Area project effectively enhanced the industrial facilities foundation of Yangzhou's new energy sector, aiding the high-quality development of Yangzhou's advanced manufacturing industry cluster and accelerating the city's transformation into a renowned industrial and innovation hub.



中交（中卫）云数据中心项目是中交投资响应国家“东数西算”工程号召，通过建立一个集数据中心、云计算、大数据于一体的新型算力网络体系，提供投融资、建设、运营的管理平台。

The CCCC (Zhongwei) Cloud Data Center Project responded to China's national move to channel more computing resources from its eastern areas to its less developed western regions. It is a management platform for investment, financing, construction and operation by constructing a new network system integrating data centers, cloud computing, and big data.

## 影响、风险和机遇管理

### IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

2024 年，国家相关机构密集出台一系列重大政策，有效提振市场信心，为企业发展提供更加稳定的外部环境。经济社会发展全面绿色转型，交通网和能源网深度耦合发展，培育新产业、催生新模式、形成新动能已成为当前企业发展的主旋律。随着“一揽子增量政策”的逐步落地，基建投资继续发挥稳增长的关键作用。同时，国务院国资委先后启动产业焕新和未来产业启航行动，鼓励国资央企大力发展战略性新兴产业，前瞻布局未来产业。

In 2024, a series of significant policies were introduced by national authorities, effectively boosting market confidence and providing a more stable external environment for corporate development. The comprehensive green transformation of economic and social development, deeply integrated development of transportation and energy networks, and the cultivation of new industries, new models, and new momentum have become the main theme of corporate development. With the gradual implementation of "a raft of incremental policies", infrastructure investment continues to play a key role in stabilizing growth. Moreover, the State-owned Assets Supervision and Administration Commission of the State Council has initiated the industry renewal and future industry pioneering actions, encouraging state-owned enterprises and central enterprises to vigorously develop strategic emerging industries and strategically plan for future industries.

我们瞄准新业态、新赛道、新模式，加快节能环保、水利水电、新材料、高端装备制造等战略性新兴产业和深海深地等未来产业前瞻性布局。明确战新产业细分赛道实施主体，着力培育一批重点方向专业化平台公司、若干产业细分领域“专精特新”企业。不断加快 BIM 应用产品化、产业化，达到行业领先水平。力争到 2025 年末战新产业营业收入占比达到 30%。

We are focusing on new forms, new sectors, and new models, accelerating the forward-looking layout of strategic emerging industries such as energy conservation and environmental protection, water conservancy and hydropower, new materials, and high-end equipment manufacturing, as well as future industries like deep-sea and deep-earth exploration. We have identified main bodies for implementing niche tracks in emerging strategic industries, striving to cultivate a number of specialized platform companies in key directions and several enterprises that apply special, sophisticated techniques to produce unique and novel products in various industry segments. We are continuously accelerating the commercialization and industrialization of BIM applications, achieving industry-leading standards. By the end of 2025, we aim for the business operating income from emerging strategic industries to account for 30%.

## 指标与目标

### INDICATOR AND OBJECTIVE

各业务来自于新兴业务领域的新签合同额为	同比增长	New contracts from emerging business areas totaled RMB <b>705.347</b> billion, an increase of <b>46.43%</b> year-over-year.
<b>7,053.47</b> 万元	<b>46.43%</b>	
战新产业营收占比达	同比增长	位居建筑央企前列
<b>24.8%</b>	<b>43.7%</b>	Operating income share from emerging strategic industries reached <b>24.8%</b> , up <b>43.7%</b> year-over-year, placing the company at the forefront among construction central enterprises.
在建、已签及上报的交能融合项目覆盖	里程超	Ongoing, signed, and reported integrated transportation-energy projects cover nine provinces and cities, with a total mileage exceeding <b>4,000</b> kilometers.
<b>9</b> 省市	<b>4,000</b> 公里	
举办“战新”暨“三新”专题业务培训		Conducted "emerging strategic industries" and "three new" business training sessions for three times.
<b>3</b> 次		

## “三链”融合建设

### INTEGRATING THE "THREE CHAINS"

## 治理

### GOVERNANCE

公司开展“三链”融合建设，以供应链安全稳定、分包链支撑有力、产业链价值创造为目标，成立“三链”管理质量提升领导小组，组织协调“三链”管理提升工作。领导小组下设产业链、供应链、分包链 3 个专项工作组。新产业发展事业部牵头产业链专项工作组，负责推进产业链管理提升工作；供应链管理事业部牵头供应链、分包链专项工作组，负责推进供应链、分包链管理提升工作。

The company has initiated the integration of the "three chains" – supply, subcontracting, and industrial chains – aiming for a secure and stable supply chain, robust subcontracting support, and value creation in industrial chains. A "three chains" management quality improvement leadership group has been established to coordinate the enhancement efforts of the three chains. The New Industries Development Division leads the industrial chain specialized group, responsible for advancing industrial chain management; the Supply Chain Management Department takes the lead in the specialized groups of supply and subcontracting chains, driving their management improvements.

公司成立供应链管理委员会，统一领导供应链建设工作，负责供应链安全的整体规划、监督。公司设立专门的供应链管理部，负责监督供应链安全相关的风险管理和内部控制。内部审计部门定期对供应链安全进行审计，确保合规性和有效性。

The company has set up a Supply Chain Management Committee, oversees the overall planning and supervision of supply chain security. A dedicated Supply Chain Management Department is responsible for monitoring risks and internal controls related to supply chain security. The Internal Audit Department regularly audits the supply chain security to ensure compliance and effectiveness.



关键制度列表 Key Regulatory Documents

《“三链”融合发展顶层设计》	"Three Chains" Integrated Development Top-Level Design
《“三链”融合数字化建设方案》	"Three Chains" Integration Digital Construction Scheme
《采购交易共享平台方案》	Procurement Transaction Sharing Platform Scheme
《供应链管理办法》	Supply Chain Management Measures
《供应链管理信息系统运行管理办法》	Supply Chain Management Information System Operation Management Measures
《货物采购供应管理办法》	Goods Procurement and Supply Management Measures
《物资集中采购供应实施细则》	Centralized Procurement and Supply Implementation Rules
《服务采购供应管理办法》	Service Procurement and Supply Management Measures
《电子商城采购供应管理办法》	E-commerce Mall Procurement and Supply Management Measures
《分包管理体系优化提升指导意见》	Guiding Opinions for Subcontractor Management System Optimization and Enhancement
《供应链风险与合规管理办法》	Supply Chain Risk and Compliance Management Measures
《供应商管理办法》	Supplier Management Measures
《供应链管理工作考核办法》	Supply Chain Management Performance Assessment Measures

## 战略

### STRATEGY

#### ◎ 供应链安全

#### ◎ Supply Chain Security

将供应链安全纳入公司整体可持续发展战略，建立“创新、协同、安全、绿色、智慧、高效”的供应链管理体系，明确供应链安全目标和实施路径，确保供应链的稳定性、韧性和可持续性。

Supply chain security is integrated into the company's overall sustainability strategy. The company established an "innovative, collaborative, secure, green, smart, and efficient" supply chain management system. Goals and implementation paths for supply chain security are made clear to ensure its stability, resilience, and sustainability.

◎ 推行大宗商品集中采购策略，建立与核心供应商长期合作关系，确保大宗商品的稳定供应，减少因市场波动或突发事件导致的供应链中断风险，降低对单一供应商的依赖，增强供应链抗风险能力。

◎ The company has implemented a centralized procurement strategy for commodities, established long-term cooperative relationships with core suppliers, ensure stable supply of commodities, reduce risks of supply chain disruptions due to market fluctuations or emergencies, and decrease reliance on one single supplier, thus enhancing the ability to resist risks.

◎ 建立业财一体化的供应链数字化平台，通过大数据分析和人工智能技术优化采购决策，实现供应链全流程的可视化和实时监控。

◎ The company has established an integrated business and finance digital supply chain platform, which optimizes procurement decisions through big data analysis and artificial intelligence, achieving full-process visibility and real-time monitoring of the supply chain.

◎ 通过政府、施工企协、对外承包商会等行业协会和行业企业间的多层次合作，将单一企业的供应链管理升级为行业生态协同，不仅有效应对价格波动、地缘政治等传统风险，更在绿色转型、数字化创新等领域形成差异化竞争力。

◎ Through multi-level cooperation with government, construction enterprise associations, international contracting associations, and other industry associations and enterprises, supply chain management of an individual company has been upgraded to industry ecosystem collaboration. This not only effectively addresses traditional risks such as price fluctuations and geopolitical issues but also creates differentiated competitive advantages in fields like green transformation and digital innovation.

#### 赋能建筑行业供应链转型升级

#### Empowering supply chain transformation and upgrade of the construction industry



中交雄安与物资公司共同推出“联合采购 + 金融赋能 + 价值共享”的商业模式创新业务。中交雄安以实质参与采购过程的方式进行联合采购，依托自身较强的融资信用和风控能力取得金融机构低成本融资支持，采用商业承兑汇票的出票人和承兑人相分离的新型融资方式，全面压缩联合采购过程中供应链资金成本，形成采购规模大、供应链资金成本低的联合体优势。商业模式创新业务构建了多方共赢的价值生态，供应链资金成本较行业平均融资成本降低了近 2%，解决了物资集采融资成本高企、产业链协同不足的行业痛点；既保障了项目工程物资供应的充足性和及时性，又延长了资金付款期限、缓解了物资公司集中大量预付贷款的资金压力。

CCCC Xiong'an Construction Group Co. Ltd. and the material company have jointly launched an innovative business model of "joint procurement + financial empowerment + shared value". Through substantive participation in the procurement and sales process, CCCC Xiong'an Construction Group Co. Ltd. leverages its strong financing credit and risk control capabilities to secure low-cost financing support from financial institutions, employing a novel financing method where the drawer and acceptor of commercial acceptance bills are separated. This has systematically reduced supply chain financing costs, creating a competitive consortium advantage characterized by both procurement scale efficiency and optimized working capital costs. This innovative business model has built a multi-win value ecosystem, reducing supply chain financing costs by nearly 2% compared to the average industry financing costs, addressing the industry pain points of high financing costs in centralized procurement and insufficient industry chain collaboration. It ensures sufficient and timely supply of project engineering materials and extends the payment period, alleviating the financial pressure on the material company due to the centralized advance payment for goods.

#### ◎ 供应商管理

#### ◎ Supplier Management

制定《中交集团暨中国交建供应商管理办法》，在供应商管理中遵循分级建设、一体化管理、动态调整、净化生态圈。公司各层级供应商实行统一的准入条件，包含必要的法律主体资格、生产经营许可、质量、环境、职业健康等三标管理体系及售后服务跟踪体系等，依法平等对待各类所有制和不同地区的市场主体。供应商在注册时须签署《供应商商业道德协议》，遵循诚信条款，维护公平竞争的市场环境。建立供应链管理信息系统，覆盖供应链端到端全过程，提升资源配置效率，防控合作风险。

The company has established the *CCCC and CCCC Supplier Management Measures*, adhering to graded construction, integrated management, dynamic adjustment, and ecosystem purification in supplier management. Suppliers at all levels comply with uniform entry conditions, including necessary legal entity qualifications, business licenses, quality, environmental, occupational health management systems, and after-sales service tracking systems, treating all types of ownership and market entities of different regions equally under the law. Suppliers must sign the "Supplier Business Ethics Agreement" during registration, adhering to integrity clauses and maintaining a fair competitive market environment. A supply chain management information system is established, covering the entire end-to-end supply chain process, enhancing resource allocation efficiency, and preventing cooperative risks.

中国交建坚持把反腐败工作要求向分包商、供应商延伸。公司将反腐败的零容忍原则传达到各商业合作伙伴，避免与已知或涉嫌腐败行为的人员及公司进行业务往来。与第三方开展的合作应真实、合法，并要求第三方遵守《中国交建廉洁从业准则》《中国交建供应商行为准则》等要求。中国交建要求所有供应商签订《信用承诺书》。《信用承诺书》要求供应商做出反腐败相关承诺，即对项目单位的让利应放在明处，不得与项目单位员工就合同的谈判、签订、履行及违约责任追究等事项进行私下交涉；不向项目单位员工及其亲属提供财物或者输送利益等。

CCCC extends anti-corruption requirements to subcontractors and suppliers, sharing the zero-tolerance policy for corruption with all business partners to avoid dealings with individuals and companies known or suspected of corrupt activities. Cooperation with third parties should be genuine and legal, and third parties are required to comply with the *CCCC Clean Practice Guidelines and the CCCC Supplier Code of Conduct*. All suppliers are required to sign a *Credit Commitment Letter*, which includes anti-corruption commitments of suppliers, ensuring that concessions to project units are transparent and not negotiated privately with project unit employees regarding contract negotiations, signing, performance, and breach of contract responsibilities; nor should suppliers provide assets or benefits to project unit employees and their relatives.

## ◎ 分包商管理

### ◎ Subcontractor Management

贯彻落实分包资源生态融合共享理念，构建分包管理体系，印发《分包管理体系优化提升指导意见》及配套管理办法、标准、手册、文件范本等 18 个制度体系文件。改造升级分包管理系统平台，将管理创新举措落实到系统平台，包括分级分类入库、带“鲶鱼效应”的分包采购、落实“无采购不签约”约束机制的合同管理、全级次信用评价等，并完成监控预警和考核奖惩两个管理保障措施。已在分包管理系统上线“插手、干预”分包采购登记功能、上线分包商问卷调查功能，采购人和投标人均可反馈违法违规影响公平竞争的问题。“无采购不签约”约束机制启动以来，境内工程施工分包采购全面线上实施；分包公开采购率持续提升，公开采购占比已超过 52%；分包商投标积极性持续提升，采购节约率较 2023 年提高 1.4 个百分点。

The company implements the concept of integrated sharing of subcontractor resources, establishing a subcontractor management system, and issuing 18 system documents including *Subcontractor Management System Optimization and Enhancement Guidelines* along with relevant management methods, standards, manuals, and document templates. The upgraded subcontractor management system platform incorporates management innovations, including graded categorization into the database, a subcontractor procurement approach featuring "catfish effect", and the implementation of a "no procurement, no contract" binding mechanism in contract management, full-level credit evaluation, and completes monitoring, warning, and assessment reward and punishment measures. The "intervention in subcontractor procurement registration" function and "subcontractor questionnaire survey" function have been launched on the

subcontractor management system platform. Purchasers and bidders can both report illegal and unfair competition issues. Since the launch of the "no procurement, no contract" binding mechanism, domestic construction subcontractor procurement has been fully implemented online; the public procurement rate of subcontractors continues to increase, already exceeding 52%; the enthusiasm of subcontractor bidders continues to rise, with a procurement saving rate 1.4 percentage points higher than in 2023.

公司制定了《工程施工分包商信用评价及动态管理办法》，贯彻落实国家社会信用体系建设有关要求，发挥“红白黑”名单管理作用，对分包商按品德（不廉洁、不诚信）和能力两条线管理。对信用评价高、具有核心技术的分包商经过推荐、认定为红名单分包商；对不廉洁、不诚信分包商根据情况列入管控、重点关注、黑名单，实行靶向管控；对正常履约的分包商根据施工能力全面信用评价，按照 A、B、C、D 共 4 个等级进行管理。

The company has formulated the *Construction Subcontractor Credit Evaluation and Dynamic Management Measures*, implementing national social credit system construction requirements, utilizing the "red, white, black" list management approach to manage subcontractors based on integrity (dishonesty, lack of integrity) and capability. Subcontractors with high credit ratings and core technologies are recommended and recognized as red list subcontractors. Dishonest and unethical subcontractors are placed under control, key focus, or blacklisted. Each is based on violation severity. normal contractors are comprehensively evaluated based on construction capability, managed in four levels: A, B, C, D.

## ◎ 平等对待中小企业

### ◎ Equal Treatment of Small and Medium Enterprises (SMEs)

将平等对待中小企业纳入可持续发展战略，明确其在供应链、合作伙伴关系中的重要性。供应链管理委员会负责监督平等对待中小企业的相关政策和实践，供应链管理部门负责中小企业合作的政策制定和执行。制定《供应商管理办法》，明确中小企业在采购、合作中的平等地位。建立中小企业投诉和反馈机制，确保其权益得到及时响应。优化升级公司采购管理系统，帮助中小企业接入公司供应链体系，提升其竞争力。

Incorporating equal treatment of SMEs into our sustainable development strategy, we recognize their importance within the supply chain and partnerships. The Supply Chain Management Committee oversees policies and practices for treating SMEs fairly, while the Supply Chain Management Department is responsible for policy development and implementation regarding SME cooperation. We have established the *Supplier Management Measures*, which affirm the equal status of SMEs in procurement and cooperation. An SME complaint and feedback mechanism has been set up to ensure their rights are promptly addressed. We optimize and upgrade our procurement management system to help SMEs integrate into our supply chain system and enhance their competitiveness.

公司定期开展中小企业合作风险评估，识别潜在的支付延迟、合作中断等风险。实时开展中小企业信用评价，评估中小企业合作对公司声誉、供应链稳定性的影响。定期举办中小企业合作培训，优化合作机制。通过支持中小企业创新，获取新技术和新产品，提升公司竞争力。借助中小企业的灵活性和本地化优势，拓展市场和业务机会。

The company regularly conducts risk assessments on SME cooperation, identifying potential risks such as payment delays and disruptions in cooperation. Real-time SME credit evaluations are carried out to assess the impact of SME cooperation on our reputation and supply chain stability. We regularly host SME cooperation training sessions to optimize cooperation mechanisms. By supporting SME innovation and accessing new technologies and products, we enhance our competitiveness. Utilizing the flexibility and localization advantages of SMEs, we expand market and business opportunities.

## 影响、风险和机遇管理

### IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

我们定期开展供应链安全风险评估，识别潜在的供应链中断、原材料短缺、物流延误等风险。建立供应链风险预警机制，实时监控供应链关键节点的运行状态，与核心供应商签订长期合作协议，推动关键零部件的国产化研发和生产，降低对进口零部件的依赖，建立关键零部件安全库存，确保供应的稳定性。建立快速响应团队，负责在断供情况下协调资源、解决问题。

We regularly conduct supply chain security risk assessments to identify potential disruptions, raw material shortages, and logistics delays. A supply chain risk early-warning mechanism is established to monitor the operational status of key supply chain nodes in real-time. We sign long-term cooperation agreements with core suppliers to promote the domestic research and development and production of critical components, reducing reliance on imported parts. We establish safety stocks for key components to ensure supply stability. A rapid response team is in place to coordinate resources and solve problems in case of supply disruptions.

通过技术创新和业财一体数字化转型，提升供应链效率；推行集中采购策略，通过整合需求、提高采购规模，增强议价能力，从而获得更优惠的价格和付款条件，降低运营成本。积极探索绿色供应链建设，建立绿色采购、绿色供应商管理体系，将绿色产品、再制造产品采购赋予一定权重，在考虑经济效益的前提下，鼓励采购单位应用，推动供应商采用环保材料和可持续生产方式。

Through technological innovation and an integrated business-finance digital transformation, we enhance supply chain efficiency; we implement a centralized procurement strategy by consolidating demand and increasing procurement scale to strengthen bargaining power, thus securing better prices and payment terms, reducing operational costs. We actively explore green supply chain construction, establishing green purchasing and green supplier management systems. Green and remanufactured products are given certain weight in procurement decisions, encouraging purchasing units to use them under economic considerations, pushing suppliers to adopt environmentally friendly materials and sustainable production methods.

## 指标与目标

### INDICATOR AND OBJECTIVE

供应商数量 (个)  
Number of suppliers (Units)



报告期审查的供应商数量 (个)  
Number of suppliers reviewed during the reporting period(Units)



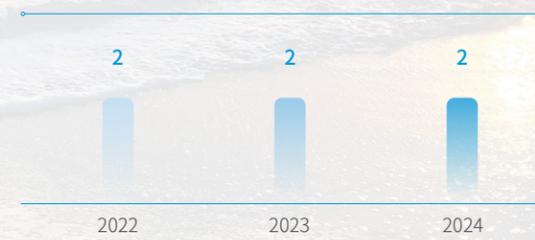
供应商 / 分包商通过质量、环境和职业健康安全管理体系认证的比率 (%)  
Ratio of suppliers/subcontractors certified by quality, environmental, and occupational health and safety management systems (%)



因社会责任不合规被否决的潜在供应商数量 (个)  
Number of potential suppliers denied due to non-compliance with social responsibilities(Units)



供应商社会责任培训次数 (次)  
Number of supplier social responsibility training sessions (Times)



因社会责任不合规被中止合作的供应商数量 (个)  
Number of suppliers with whom cooperation was suspended due to non-compliance with social responsibilities(Units)



# STRENGTHENING ENVIRONMENTAL PROTECTION

SHAPING A VIBRANT VISION OF SUSTAINABLE, GREEN DEVELOPMENT

## 筑环境屏障 织就可持续绿色壮美新画卷

建设美丽中国是全面建设社会主义现代化国家的重要目标，是实现中华民族伟大复兴的中国梦的重要内容。中国交建自觉践行“绿水青山就是金山银山”理念，全力当好建筑行业绿色低碳转型引领者、重点区域绿色低碳发展推动者、绿色工程优质建设者、绿色低碳技术革新领跑者、全球生态文明价值贡献者，不断推进美丽中国建设走深走实。

Building a beautiful China is a crucial goal for fully constructing a modern socialist country and a key part of achieving the Chinese dream of the great rejuvenation of the Chinese nation. CCCC actively practices the concept that "lucid waters and lush mountains are valuable assets", striving to lead the construction industry's green and low-carbon transformation, promote green and low-carbon development in key regions, construct high-quality green projects, lead in green and low-carbon technological innovations, and contribute to the global ecological civilization.



福厦高铁泉州湾跨海大桥

Fuzhou-Xiamen High-Speed Railway and the Quanzhou Bay Cross-Sea Bridge

## 应对气候变化

### ADDRESSING CLIMATE CHANGE

#### 治理

##### GOVERNANCE

公司始终将应对全球气候变化作为践行央企使命的核心战略支点，以“构建人类命运共同体”的全球视野全面深化气候治理体系建设，在战略引领、技术创新、国际合作等领域形成多层次、立体化的气候行动框架，彰显了世界一流基建领军企业的责任担当。公司构建“董事会-管理层-执行层”的气候变化治理架构，明确各层级监督和管理职责。董事会负责决策、监管气候变化政策与战略规划，听取管理层汇报并提出建议；管理层统筹制定低碳发展方针、规划，推动绿色低碳体系建设，明确重点业务绿色举措，推进“双碳”工作；各部门/单位严格执行低碳规划，落实减排措施，确保目标如期实现。

CCCC consistently focuses on global climate change as a core strategic pivot in fulfilling the central enterprise's mission. With a global perspective of building a community with a shared future for mankind, we comprehensively deepen the construction of the climate governance system, forming a multi-layered, three-dimensional climate action framework in strategic guidance, technological innovation, and international cooperation, demonstrating the responsibility of a world-class infrastructure leader. We establish a board of directors-management-executive climate change governance structure, specifying supervision and management responsibilities at each level. The board is responsible for decision-making and supervising climate change policies and strategic planning, listening to management reports and providing suggestions. The management team coordinates the formulation of low-carbon development policies and plans, pushing forward the construction of green and low-carbon systems, implementing green initiatives in key businesses, and adhering to commitments to carbon peak and carbon neutrality. Each department/unit strictly implements low-carbon planning, carries out emission reduction measures, and ensures targets are achieved on schedule.

#### 关键制度列表 Key Regulatory Documents

《绿色低碳发展管理指导意见（试行）》

*Guiding Opinions for Green and Low-Carbon Development Management (Trial)*

《绿色低碳管理工作考核办法（试行）》

*Green and Low-Carbon Management Work Assessment Measures (Trial)*

《碳资产管理办法》

*Carbon Asset Management Measures*

《“十四五”绿色低碳发展规划》

*"14th Five-Year Plan" for Green and Low-Carbon Development*

《低碳发展研究中心及碳资产管理中心工作管理办法》

*Work Management Measures for Low-Carbon Development Research Center and Carbon Asset Management Center*

#### 战略

##### STRATEGY

公司不断提升绿色低碳品牌和影响力，共促全行业全社会绿色转型，走出一条高质低碳、科学发展、融合创新的央企“双碳”发展之路。

The company continuously enhances its green and low-carbon brand and influence, promoting green transformation across the industry and society, and paving a high-quality, low-carbon, scientific, and innovative path for central enterprises in achieving the carbon peak and carbon neutrality goals.

#### 一个愿景

##### One vision

成为“中国及全球交通基建领域绿色设计、施工与运营全生命周期碳中和解决方案的引领者”

Become a "leader in green design, construction, and operation across the entire lifecycle of carbon-neutral solutions in the transportation infrastructure sector globally and in China".

#### 三个阶段战略目标

##### Three-phase strategic objectives

▷ 到 2025 年，减排降碳工作取得突破性进展，能源利用效率大幅提升，基础设施建设、装备制造等碳排放重点业务领域碳排放强度大幅下降，绿色生产方式基本形成。

▷ 展望 2030 年，减排降碳工作取得实质性进展，能源利用效率达到国内先进水平，与国际先进水平接轨。

▷ 展望 2060 年，为国家碳中和目标的顺利实现贡献了应有的配额，绿色供应链管理全面实施，绿色低碳技术和管理水平世界领先，引领全球绿色低碳行业技术发展，成为在全球绿色基础设施建设和运营中具有决定性地位和影响力的领军企业。

▷ By 2025, achieve breakthrough progress in emissions reduction and carbon reduction work, significantly enhance energy utilization efficiency, and substantially decrease the carbon intensity in key business areas like infrastructure construction and equipment manufacturing, with green production methods fundamentally established.

▷ By 2030, achieve substantial progress in emissions reduction and carbon reduction efforts, reaching advanced domestic levels of energy utilization efficiency and aligning with international standards.

▷ By 2060, contribute the appropriate quota toward the carbon neutrality goal, fully implement green supply chain management, and achieve world-leading standards in green, low-carbon technologies and management, leading global technological advancement in the green and low-carbon industry and becoming a decisive and influential leader among the world's green infrastructure builders and operators.

四大重要手段

Four key approaches

- 以绿色低碳战略做好前端引领和总体架构
- 以碳排放考核评价推动实践落地
- 以绿色金融政策工具提高企业发展质量
- 以碳交易市场机制破除企业未来发展约束
- Lead and structure overall frameworks with a green low-carbon strategy.
- Drive practical implementation through carbon emissions assessments and evaluations.
- Enhance corporate development quality with green financial policy tools.
- Break future development constraints with carbon trading market mechanisms.

五大业务领域

Five major business areas

- 推动传统产业绿色低碳转型升级，开拓新型绿色产业，形成绿色产业链；
- 推动绿色低碳装备研发与应用，提升科技能力和水平；
- 发展绿色金融等相关衍生业务，提高企业融资和盈利能力；
- 开展公司碳资产管理，提高企业能效管理水平；
- 做好绿色供应链管理与低碳社会服务，体现央企社会责任和担当。
- Drive the green and low-carbon transformation and upgrading of traditional industries, develop new types of green industries, and form green industrial chains.
- Promote the research, development, and application of green and low-carbon equipment, enhancing technological capabilities and standards.
- Develop green finance and other related derivative businesses to enhance corporate financing and profitability.
- Manage corporate carbon assets to improve enterprise energy efficiency management.
- Manage green supply chains and low-carbon community services, demonstrating the social responsibility and commitment of central enterprises.

六大工作体系

Six major work systems

- 通过开展绿色低碳顶层设计，参与国家重大战略规划的制订，形成绿色低碳战略规划体系；
- 制订国家和行业的相关标准规范，建立相关领域技术规则，形成绿色低碳标准规范体系；
- 开展关键技术的研发，突破一批绿色低碳“卡脖子”技术，形成绿色低碳技术创新体系；
- 延伸拓展传统产业领域，打造绿色产业链，形成绿色低碳产业布局体系；
- 提供多种类型的债券、基金、保险等金融产品服务，打造绿色金融服务创新能力，形成绿色金融政策工具体系；
- 开展全覆盖全方位的动态碳资产盘查，试点开展内部碳交易，形成碳资产管理与碳交易体系。
- Engage in green and low-carbon top-level design and participate in the formulation of national major strategic plans, forming a green and low-carbon strategic planning system.
- Establish national and industry-specific standards and specifications, set up technical rules in relevant fields, and develop a green and low-carbon standards and specifications system.
- Conduct research and development on core technologies, break through a series of critical green and low-carbon "bottleneck" technologies and establish a green and low-carbon technological innovation system.
- Extend and expand traditional industrial fields to create green industrial chains and develop a green and low-carbon industry layout system.
- Offer a variety of financial products and services such as bonds, funds, and insurance, build capabilities in green financial services innovation, and develop a green financial policy tools system.
- Conduct comprehensive and dynamic carbon asset inventories, pilot internal carbon trading, and establish a carbon asset management and trading system.

八项重大战略举措

Eight major strategic actions

- 加强绿色低碳战略顶层设计
- 助推基础设施建设低碳转型
- 形成新型绿色产业架构体系
- 构建海外绿色发展新优势
- 加快低碳装备研发制造与应用
- 提高科技成果的支撑作用
- 探索碳资产管理和碳交易模式
- 提升绿色服务和低碳管理能力
- Strengthen the top-level design of the green and low-carbon strategy.
- Promote low-carbon transformation in infrastructure construction.
- Establish a new green industry framework.
- Build new advantages in green development overseas.
- Accelerate the research, development, and application of low-carbon equipment.
- Enhance the supportive role of scientific and technological achievements.
- Explore carbon asset management and carbon trading models.
- Improve green services and low-carbon management capabilities.

◎ 气候韧性策略

◎ Climate Resilience Strategy

公司高度重视气候变化带来的挑战与机遇，通过系统性的气候风险识别、评估与管理，持续提升企业气候韧性；将气候韧性建设视为企业可持续发展战略的核心组成部分，致力于打造能够适应气候变化、抵御气候风险并把握气候机遇的韧性企业；依据 IPCC SSP1-2.6、SSP2-4.5、SSP5-8.5 情景，结合自身业务布局，了解风险影响的财务、地域、业务模式和价值链差异，评估自身气候韧性；将核心风险纳入重点管理清单，并通过碳资产管理、财务保险、气候行动等形式不断提升物理和转型风险韧性。此外，密切关注国内外气候政策、行业政策的动态变化，适时调整气候战略和行动路径，增强经营韧性，确保在 1.5°C 至 2.4°C 升温情景下保持业务可持续增长。2024 年，公司未发生因气候变化导致的风险事件。

The company attaches great importance to the challenges and opportunities brought about by climate change. Through systematic climate risk identification, assessment, and management, we continuously enhance the company's climate resilience. Climate resilience is considered a core component of the company's sustainable development strategy, with a focus on building a resilient enterprise capable of adapting to climate change, mitigating climate risks, and seizing climate opportunities. Based on the IPCC SSP1-2.6, SSP2-4.5, and SSP5-8.5 scenarios, and considering our own business layout, we assess the financial, regional, business model, and value chain differences in risk impacts, evaluating our climate resilience. Core risks are included in the key management list, and we continuously improve physical and transition risk resilience through carbon asset management, financial insurance, and climate actions. Furthermore, we closely monitor the dynamic changes in domestic and international climate policies and industry regulations, adjusting our climate strategy and action plans in a timely manner to enhance business resilience, ensuring sustainable business growth under 1.5 °C to 2.4 °C temperature rise scenarios. In 2024, the company did not experience any risk incidents caused by climate change.

开发中国首个交通基建领域 CCER 方法学

Developing China's first CCER methodology for transportation infrastructure



公司深度参与生态环境部《温室气体自愿减排项目方法学 公路隧道照明系统节能》（CCER-07-001-V01）的编制工作，由生态环境部和交通运输部联合发布实施，为方法学的完善和优化贡献了实际场景数据支撑与专业建议。该方法是交通运输领域首个温室气体自愿减排项目方法学，可支撑十余万吨公司运营隧道节能照明减碳资产储备。

CCCC actively participated in the creation of the Methodology for Greenhouse Gas Voluntary Emission Reduction Projects: Energy Saving for Highway Tunnel Lighting Systems (CCER-07-001-V01), jointly issued and implemented by the Ministry of Ecology and Environment and the Ministry of Transport. This methodology, the first in the transportation sector for greenhouse gas voluntary emission reduction projects, supports the carbon asset reserves of the company's operational tunnel energy-saving lighting, potentially covering over 100,000 tonnes of carbon assets.

首单蓝碳交易成交

The first blue carbon transaction completed



中交城投投资建设的广西钦州孔雀湾区域新增红树林项目产生的蓝碳（海洋碳汇）于 2023 年 9 月 15 日在北部湾产权交易所集团广西（中国—东盟）蓝碳交易服务平台挂牌成交，交易量为 500 吨 CO2，这是中国交建首单、广西首单蓝碳交易。

The blue carbon (marine carbon sink) generated by the newly added New Mangrove Project in Peacock Bay Area, Qinzhou, Guangxi, constructed by CCCC Urban Investment, was successfully traded on September 15, 2023, at the Guangxi (China-ASEAN) blue carbon trading service platform of Beibu Gulf Equity Exchange Group. The transaction volume was 500 tonnes of CO2, marking the first blue carbon order of CCCC and Guangxi.



中交天津航道局自主研发的“江河湖库生态清淤及底泥处置智能-绿色水上一体化成套装备”——“太湖之星”取得中国机械工业联合会“江河湖库生态清淤及底泥处置智能-绿色水上一体化成套-鉴定证书”及“温室气体减排项目核查证书”。

CCCC Tianjin Dredging independently developed the "Taihu Star", an integrated green waterborne complete set of equipment for ecological dredging and sediment disposal, which obtained the "Identification Certificate for Ecological Dredging and Sediment Disposal Intelligence - Green Waterborne Integrated Complete Set" and the "Greenhouse Gas Emission Reduction Project Verification Certificate" from the China Machinery Industry Federation.



试点碳排放权交易

Pilot carbon emissions trading



公司探索建立内部碳交易市场，试点进行碳排放权的分配和交易，提高清洁能源使用比例和能源利用效率，降低公司的生产运营综合成本；参与相关行业碳交易规则制订，积极参与国家和区域碳排放权交易。2024 年 11 月 28 日，成功实现了基建行业首笔公路施工阶段碳排放额度的内部交易签约，交易量为 891 吨，按当日收盘价约合 9.17 万元。这是国内基建行业碳交易领域的首次成功实践，是中国交建应用市场化手段促进降碳场景积累的一次重大实践。

The company explored establishing an internal carbon market, piloting the allocation and trading of carbon emission rights to increase the proportion of clean energy use and energy utilization efficiency, and reduce the comprehensive production and operational costs of the company. The company participated in the formulation of related industry carbon trading rules and actively engaged in national and regional carbon emissions trading. On November 28, 2024, the company successfully completed the first internal trading contract for carbon emission quotas during highway construction in the infrastructure sector, trading 891 tonnes at a closing price of approximately RMB 91,700. This marks the first successful practice in the domestic infrastructure sector's carbon trading field and represents a significant practice in CCCC's use of market mechanisms to promote carbon reduction scenarios.



中交（中卫）云数据中心项目通过 PUE 降低及绿电应用，实现碳减排 6.1 万吨 / 年。项目全部投产后，通过分布式光伏及集中式光伏建设，并辅以绿电交易，预计 2032 年实现 100% 绿电应用，即绿电规模为 9.26 亿度 / 年，实现碳减排 5.28 万吨 / 年。

CCCC (Zhongwei) Cloud Data Center Project, through reducing PUE and applying green electricity, achieves an annual carbon emission reduction of 61,000 tonnes. Once fully operational, the project is expected to achieve 100% green electricity application by 2032 through distributed and centralized photovoltaic construction and green electricity trading, with a green electricity scale of 926 million kWh/year, resulting in an annual carbon reduction of 52,800 tonnes.

# 影响、风险和机遇管理

## IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

公司设立绿色低碳发展研究中心和碳资产管理中心。研究中心定位于国家级或具有行业影响力的绿色低碳技术研发和推广中心，整合公司在绿色交通、节能低碳、生态环保等专业研究力量开展相关领域技术研究和成果转化应用，打造国内外具有影响力的绿色低碳技术服务品牌，创新盈利模式，降低相关制约风险，为公司完成“双碳”指标、实现绿色高质量发展提供前瞻策划和技术支撑。管理中心定位于国家级或具有行业影响力的碳交易平台、节能减排和碳核算智库服务中心，为公司提供专业化碳资产统计管理、碳资产开发等咨询服务，开展碳资产交易、碳减排融资等绿色金融业务，为公司绿色低碳发展提供金融支撑服务。

The company has established a Green Low-Carbon Development Research Center and a Carbon Asset Management Center. The Research Center is positioned as a national or industry-influential center for the research and development and promotion of green low-carbon technologies. It integrates the company's expertise in green transportation, energy-saving and low-carbon initiatives, and ecological protection to conduct technical research and transform outcomes into applications. This initiative aims to create a domestically and internationally influential brand of green and low-carbon technology services, innovate profit models, reduce related risks, and provide foresight planning and technical support for the company to achieve the carbon peak and carbon neutrality goals and realize green and high-quality development. The Management Center serves as a national or industry-influential carbon trading platform and a think tank for energy-saving, emission reduction, and carbon accounting, offering specialized services in carbon asset management and development, conducting carbon asset trading, carbon reduction financing, and other green financial services to support the company's green and low-carbon development.

<p>气候变化相关风险 / 机遇 Climate change-related risks / opportunities</p>	<p>物理风险：极端天气（洪水、台风等） Physical risk: Extreme weather (floods, typhoons)</p>	<p>物理风险：海平面上升 Physical risk: Rising sea levels</p>	<p>转型风险：碳减排政策收紧 Transition risk: Tightening carbon reduction policies</p>	<p>市场风险：绿色基建需求增长 Market risk: Growing demand for green infrastructure</p>	<p>供应链风险：原材料价格波动 Supply chain risk: Raw material price volatility</p>	<p>机遇：气候适应性技术输出 Opportunity: Export of climate adaptability technologies</p>	<p>机遇：碳资产开发 Opportunity: Carbon asset development</p>	<p>机遇：数字化减碳 Opportunity: Digital carbon reduction</p>
<p>对公司的影响 Impact on the company</p>	<p>项目施工中断、基础设施损毁、维修成本增加、工期延误。 Disruptions to project construction, infrastructure damage, increased maintenance costs, and project delays.</p>	<p>沿海港口、航道项目面临淹没风险，长期运营稳定性下降。 Coastal ports and waterway projects are at risk of submersion, reducing long-term operational stability.</p>	<p>传统高碳业务（如水泥生产、重型机械）面临成本上升（碳税、排放配额）；项目审批难度增加。 Traditional high-carbon industries (such as cement production, heavy machinery) face rising costs (carbon taxes, emission quotas); increased difficulty in obtaining project approvals.</p>	<p>政府和社会资本对低碳交通、生态修复工程的投资增加，带来新业务增长点。 Increased investments by governments and private capital in low-carbon transportation and ecological restoration projects, creating new growth opportunities.</p>	<p>高温 / 暴雨导致砂石、钢材产能受限，价格上涨；物流受阻影响工程进度。 High temperatures / heavy rainfall limit the production capacity of sand and steel, leading to price increases; logistics disruptions affect project progress.</p>	<p>在发展中国家承接气候韧性基建项目（防洪堤、耐高温公路），扩大海外市场份额。 Undertake climate resilience infrastructure projects (flood barriers, heat-resistant roads) in developing countries, expand international market share.</p>	<p>通过林业碳汇（如公路沿线植树）、蓝碳（红树林修复）项目创造额外收益 参与 CCER 交易。 Generate additional operating income through forestry carbon sinks (e.g., tree planting along highways) and blue carbon (mangrove restoration) projects; participate in CCER trading.</p>	<p>BIM、智能施工（无人机巡检、AI 能耗优化）降低项目全生命周期碳排放，提升能效竞争力。 Use BIM and smart construction technologies (drone inspections, AI energy optimization) to reduce the carbon footprint across the project lifecycle, enhancing energy efficiency and competitiveness.</p>
<p>应对措施 Response measures</p>	<p>加强气候风险评估与选址规划；采用抗灾设计标准；建立应急响应机制；投保气候相关保险。 Strengthen climate risk assessments and site planning; employ disaster-resistant design standards; establish emergency response mechanisms; insure against climate-related risks.</p>	<p>在项目设计中纳入海平面上升预测数据；采用可调节式防波堤或填海技术；优先在内陆或高海拔区域布局关键设施。 Incorporate predictions of sea-level rise into project designs; utilize adjustable breakwaters or land reclamation techniques; prioritize key facility placements in inland or elevated areas.</p>	<p>加速低碳技术研发；推动供应链绿色化；参与碳交易市场抵消排放；拓展零碳交通等新兴领域。 Accelerate research and development of low-carbon technologies; promote greening of the supply chain; engage in carbon trading to offset emissions; expand into emerging fields like zero-carbon transportation.</p>	<p>设立新产业发展事业部；加强与新能源企业合作；获取绿色金融工具支持；参与国际 ESG 标准认证提升竞争力。 Establish a new industry development division; strengthen cooperation with new energy companies; secure support from green financial instruments; participate in international ESG standard certifications to enhance competitiveness.</p>	<p>建立多元化供应商网络；储备关键物资；采用替代材料；投资数字化供应链管理系统提升响应效率。 Establish a diversified supplier network; stockpile key materials; use alternative materials; invest in digital supply chain management systems to improve response efficiency.</p>	<p>与当地政府合作开展气候脆弱性研究；推广模块化快速建造技术；争取国际气候基金支持项目。 Collaborate with local governments on studies of climate vulnerability; promote modular rapid construction technologies; seek support from international climate funds.</p>	<p>设立碳资产管理中心；与生态科研机构合作开发碳汇方法学；在项目规划中预留碳汇空间。 Establish a Carbon Asset Management Center; collaborate with ecological research institutions to develop carbon sequestration methodologies; reserve space for carbon sequestration in project planning.</p>	<p>加大智慧工地技术投入；开发碳排放监测平台；申请数字化减碳专利形成技术优势。 Increase investments in smart construction technologies; develop carbon emission monitoring platforms; apply for patents in digital carbon reduction to create a technological advantage.</p>

## 指标与目标

### INDICATOR AND OBJECTIVE

#### 温室气体减排目标

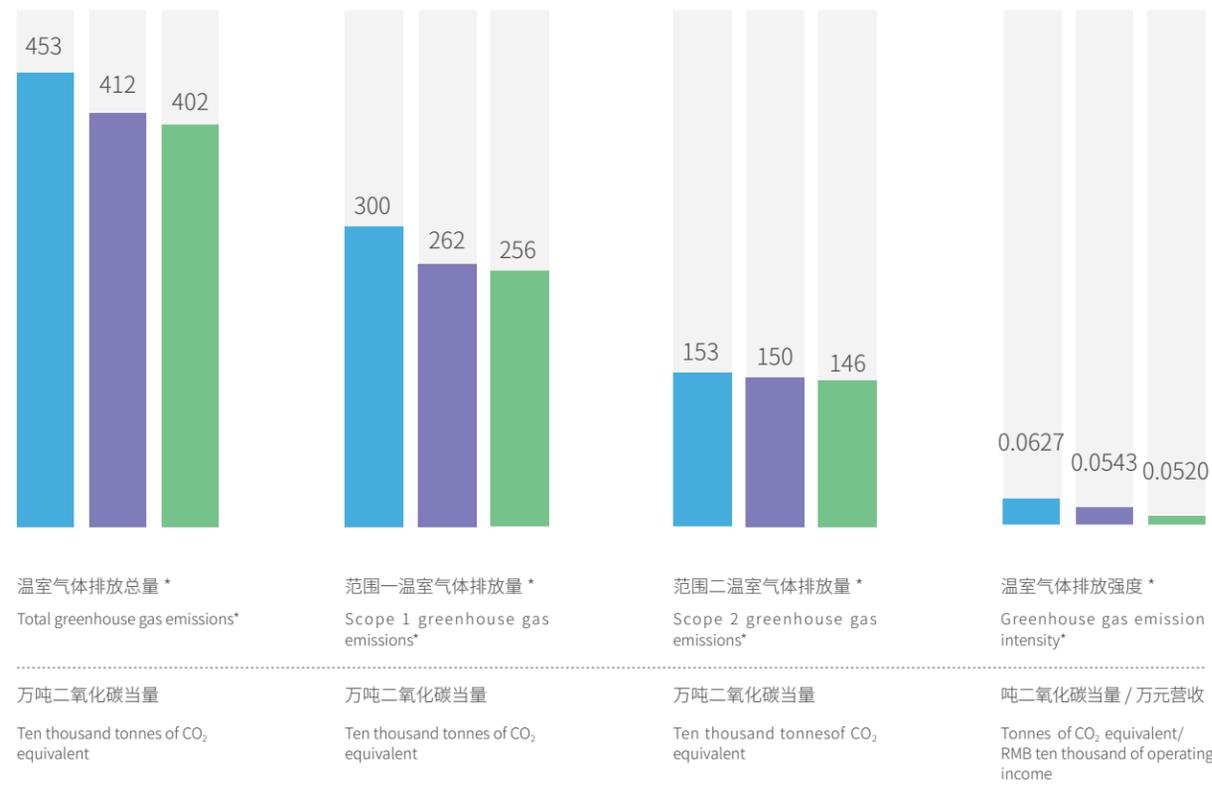
##### Greenhouse Gas Emission Reduction Targets

到 2025 年，公司减排降碳工作取得突破性进展，能源利用效率大幅提升，为 2030 年或更早实现碳排放达峰奠定坚实基础。万元产值二氧化碳排放较“十三五”末期下降 18%。

By 2025, the company will make breakthrough in emissions reduction and carbon reduction efforts, with a significant increase in energy utilization efficiency, laying a solid foundation for peaking carbon emissions by 2030 or earlier. The carbon dioxide emissions per unit of GDP will decrease by 18% compared to the end of the "13th Five-Year Plan" period.

展望 2030 年，万元产值二氧化碳排放比 2005 年下降 65% 以上，碳排放总量达到峰值并实现稳中有降，步入低碳发展新征程。基础设施建设、装备制造等重点业务领域碳排放强度持续下降，基础设施建设领域 2030 年达到峰值，装备制造领域 2028 年达到峰值。

By 2030, the carbon dioxide emissions per unit of GDP will be reduced by more than 65% compared to 2005, achieving a peak and then a gradual decline in total carbon emissions, embarking on a new journey of low-carbon development. The carbon emission intensity in key business sectors such as infrastructure construction and equipment manufacturing will continue to decrease, with infrastructure construction peaking in 2030 and equipment manufacturing in 2028.



\* 说明详见附录 - 关键绩效。\*Note: For detailed explanations, see Appendix - Key Performance Indicators.

■ 2022 年 ■ 2023 年 ■ 2024 年

## 环境风险管理

### MANAGING ENVIRONMENTAL RISKS

#### 治理

##### GOVERNANCE

公司遵循“党政同责、一岗双责”原则，建立环保领导机构，以董事会为最高决策机构承诺和监督环境管理政策的实施和改善环境绩效，并负责制定 ESG 战略、审批环境目标及行动方案。在环境政策制定过程中，严格遵循《中华人民共和国环境保护法》关于污染防治、生态保护及环境监督管理的核心要求，并落实《中华人民共和国环境影响评价法》对建设项目全周期环境影响评价的强制性规定等相关国家环境法律法规。持续开展节能环保“三年行动”、环保管理“五个到位”专项工作，并印发实施方案。编制并印发生态环境保护监督、检查、奖惩、考核、追责等 9 项环保管理制度，制定并颁布 30 余项指导性手册指南，夯实环保管理基础。

The company adheres to the principle of "both Party and government officials are held accountable and officials take responsibility for workplace safety in performing their duties", establishing an environmental leadership structure. The board of directors serves as the highest decision-making body, committing to and overseeing the implementation and improvement of environmental performance, and is responsible for formulating the ESG strategy and approving environmental objectives and action plans. In the process of developing environmental policies, the company strictly follows the core requirements of the *Environmental Protection Law of the People's Republic of China* regarding pollution prevention, ecological protection, and environmental supervision and management, and implements the *Environmental Impact Assessment Law of the People's Republic of China* for mandatory full-cycle environmental impact assessments of construction projects and other related national environmental laws and regulations. The company continually carries out a "Three-Year Action Plan" for energy conservation and environmental protection, "Five Adequacies" in environmental management special tasks, and issues implementation plans. It compiles and issues nine environmental management systems covering ecological environment protection supervision, inspections, rewards and penalties, assessments, and accountability, and formulates and publishes over 30 guidance manuals to solidify the foundation of environmental management.

#### 环保培训

##### Environmental training

- 举办二级单位专职环保监管人员培训班，聚焦生态文明建设、中央生态环境保护督察、公司生态环境保护考核、绿色交通绿色建筑前沿技术等内容，开展政策解读、理论教学、成果观摩和经验交流。同时，在中交网院平台的“环保监督管理人员岗前培训”模块中新增关于环保考核制度宣贯、当前生态环境保护形势、绿色建造案例解析 3 门年度继续教育课程，目前已开设必修课 9 门，选修课 14 门。各二级单位专兼职环保监管人员已完成上岗取证和年度继续教育。
- Conduct training classes for full-time environmental supervision personnel at secondary units, focusing on ecological civilization construction, central ecological and environmental protection inspections, company ecological and environmental protection assessments, and cutting-edge technologies in green transportation and green buildings. The training includes policy interpretation, theoretical teaching, observation of achievements, and exchange of experiences. Additionally, in the "Environmental Supervision and Management Personnel Pre-job Training" module on the CCCC Web Academy platform, three annual continuing education courses on the promotion of environmental assessment systems, the current situation of ecological and environmental protection, and analysis of green construction cases have been added. To date, nine required courses and 14 elective courses have been offered. All full-time and part-time environmental supervision personnel at secondary units have completed certification and annual continuing education.

环保督查 Environmental inspection

- 开展首次内部环保督查工作，从编程序化文件、对接生态环境部所属机构、遴选外部环保专家等方面开展前期准备，在全公司范围内召开环保督查工作动员会，选取一家二级单位作为综合督查试点单位开展先行先试，针对青藏高原开展试点专项督查，督查了西藏自治区、青海省、甘肃省的在建项目。
- Conduct the first internal environmental inspection, preparing by drafting procedural documents, coordinating with institutions under the Ministry of Ecology and Environment, and selecting external environmental experts. A mobilization meeting for environmental inspection work is held across the company, selecting one secondary unit as a comprehensive inspection pilot unit to conduct preliminary trials, with pilot special inspections carried out in the Qinghai-Tibet Plateau, inspecting ongoing projects in the Xizang Autonomous Region, Qinghai Province, and Gansu Province.

关键制度列表 Key Regulatory Documents

《绿色低碳管理工作考核办法（试行）》	<i>Green and Low-Carbon Management Work Assessment Measures (Trial)</i>
《生态环境保护考核办法》	<i>Ecological Environment Protection Assessment Measures</i>

战略 STRATEGY

◎ 污染物排放  
◎ Pollutant Emissions

将挥发性有机物合规排放纳入《节能环保工作三年行动方案（2023—2025）》，开展挥发性有机物超标排放问题排查整治，全面梳理装备制造、交通运输、基础设施建设等生产活动中的挥发性有机物排放情况，并持续健全完善长效管理机制，完善重点领域挥发性有机物管控文件、组织废气超标现场应急处置演练、开展环保设施设备改造升级，全面提升挥发性有机物排放管控水平。2024年，未出现超标排放情况，未对员工、当地社区居民等群体产生健康影响、导致空气质量下降、水源污染或其他环境问题。

Include compliant emissions of volatile organic compounds in the *Three-Year Action Plan for Energy Conservation and Environmental Protection (2023—2025)*, conduct investigations and rectifications of excessive emissions of volatile organic compounds, thoroughly review the emissions of volatile organic compounds in production activities such as equipment manufacturing, transportation, and infrastructure construction, and continue to improve long-term management mechanisms. Enhance the control of volatile organic compounds in key areas, organize emergency on-site response drills for excessive emissions, and carry out upgrades and renovations of environmental protection equipment and facilities, comprehensively improving the control level of volatile organic compounds emissions. In 2024, there were no instances of excessive emissions, health impacts on employees or local residents, or environmental issues such as air quality degradation or water pollution.

大气污染物 Atmospheric pollutants

严格遵守《中华人民共和国大气污染防治法》，严格管控生产过程中的废气排放，重点推进重污染天气扬尘控制、施工车辆污染治理，有效落实 VOCs 控制措施，通过推行低排放、低污染、高效率的生产施工工艺技术，降低废气产生量，持续深入打好蓝天保卫战。

Strictly comply with the *Atmospheric Pollution Prevention and Control Law of the People's Republic of China*, rigorously control emissions during production, with a particular focus on dust control during heavy pollution weather and pollution management of construction vehicles. Effectively implement VOCs control measures and reduce emissions through the adoption of low-emission, low-pollution, high-efficiency production and construction technologies, continuing the effort to protect blue skies.

水污染物 Water pollutants

严格遵守《中华人民共和国水污染防治法》，加强生产废水和生活污水的处理，推广污水处理技术和设备，提高重复用水比例，积极开展水污染防治监测，严格按照《污水综合排放标准》的要求进行处理和排放。

Strictly adhere to the *Law of the People's Republic of China on Prevention and Control of Water Pollution*, enhance the treatment of production and domestic wastewater, promote wastewater treatment technologies and equipment, increase the proportion of recycled water usage, and actively conduct water pollution prevention monitoring, strictly treating and discharging according to the *Integrated Wastewater Discharge Standard*.

土壤污染物 Soil pollutants

坚持全方位提升绿色施工水平，轨道交通分公司厦门地铁 3/4 号线、成都地铁 30 号线等项目均建立盾构渣土处理站，将盾构泥浆中的石、沙、水分离回收利用，实现资源再循环再利用；三航局大唐华银株洲码头工程项目以复杂岩溶条件下钻孔灌注桩施工溶洞回填材料再利用技术为依托，实现超灌桩头无害化和资源化，有效解决了施工渣土环境污染问题。

Commit to comprehensively improving green construction standards, projects like the Xiamen Metro Lines 3/4 and Chengdu Metro Line 30 of the Rail Transit Branch have established shield construction waste treatment stations, recycling stone, sand, and water from shield mud to achieve resource recycling; the Datang Huayin Zhuzhou Terminal Project of the CCCC Third Harbor Engineering Company, relying on the technology of reusing backfill materials for bored pile construction under complex karst conditions, achieved harmlessness and resource utilization of superfluous pile heads, effectively solving the environmental pollution problems caused by construction waste.



## “吐”白烟的土壤净化器

Soil remediation project equipped with gas treatment system



东丽天钢地块土壤污染治理修复工程是全国首例采用“环境修复+地块开发”创新模式试点项目。天航局项目团队针对高温加热土体将产生大量废气的问题，开展多次研究讨论，决定配备有针对性的尾气处理系统。经过层层处理，排放气体中的二氧化硫、氮氧化物及颗粒物含量仅为国家规定排放浓度要求的三分之一，受到当地环保部门的一致好评。工地现场，两个烟囱每天可产生超 80 万立方米的白色气体混合物，在“吐”出“白烟”的同时，也见证着这片土地逐渐恢复生机。

The Dongli Tiangang site soil remediation project is the first in the country to adopt an "environmental remediation + site development" innovative pilot model. The project team of CCCC Tianjin Dredging, facing the issue of significant emissions from heating the soil, conducted multiple studies and discussions and decided to equip a targeted exhaust gas treatment system. After multiple stages of processing, the emissions of sulfur dioxide, nitrogen oxides, and particulate matter were only one-third of the national emission concentration requirements, earning unanimous praise from local environmental authorities. At the construction site, two chimneys produce over 800,000 cubic meters of gas daily, witnessing the gradual revival of the site.



天钢土壤污染治理修复项目现场  
Tiangang Soil Pollution Remediation Project Site

## ◎ 废弃物处理

## ◎ Waste Management

严格遵守《中华人民共和国固体废物污染环境防治法》等相关法律法规规定，施工过程中及时清运建筑垃圾，暂时不利用或者不能利用的，按照生态环境主管部门规定建设贮存设施、场所，安全分类存放。高度重视有害废物管理，涉及危险废物的相关企业按照相关要求合规贮存危险废物，并委托具有相应资质的第三方机构进行转运、处置，严禁擅自倾倒、堆放。此外，公司鼓励所属单位、项目积极采用先进技术、工艺、设备和管理措施，通过源头减量、过程控制、末端利用等方式，构建布局合理、管理规范、技术先进的建筑垃圾资源化利用体系，实现建筑垃圾资源化、减量化、无害化的目标，改善城市人居环境，促进经济社会可持续发展。

Strictly adhering to the *Solid Waste Pollution Prevention and Control Law of the People's Republic of China* and other relevant laws and regulations, the construction process involves timely removal of construction waste. For materials that are temporarily unusable or cannot be used, storage facilities are constructed as per environmental authorities' regulations, and materials are safely and categorically stored. The management of hazardous waste is given high priority, with relevant enterprises storing hazardous waste in compliance with regulations and entrusting qualified third parties for transportation and disposal, strictly prohibiting unauthorized dumping. Additionally, the company encourages its units and projects to adopt advanced technologies, processes, equipment, and management measures, aiming to construct a well-planned, regulated, and technologically advanced system for the resource utilization of construction waste. This system aims for the resource recovery, reduction, and harmlessness of construction waste, enhancing the urban living environment and promoting sustainable economic and social development.

## ◎ 绿色供应链

## ◎ Green Supply Chain

聚焦供应链绿色低碳策略制定、制度流程标准化等方面，完善相关重点制度，细化绿色供应链内容，推动设计、采购、生产、运输等部门深度参与绿色供应链管理工作。完善绿色低碳红名单资源库，持续推动红名单资源库推广、应用；在供应商合同条款中增设“绿色条款”，建立供应商的绿色化准入及定期评估机制，筛选符合绿色要求、碳足迹要求的供应商，优化供应商结构。有序开展产品碳足迹、供应商评估与管理制度研究，为绿色供应链体系建设夯实理论依据基础。

Focusing on the development of green and low-carbon strategies and standardizing processes and systems, the company refines the content of green supply chains and encourages deep involvement from design, procurement, production, and transportation departments in green supply chain management. Enhancements are made to the green and low-carbon "red list" resource pool, continuously promoting its application. "Green clauses" are added to supplier contracts to establish green access and regular assessment mechanisms for suppliers, selecting those who meet green and carbon footprint criteria and optimizing supplier structures. Systematic research on product carbon footprints and supplier assessment and management systems is conducted to solidify the theoretical foundation for the construction of a green supply chain system.

## 影响、风险和机遇管理

## IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

公司高度重视环境风险管理，全力确保项目建设与生态环境保护协调共进。组建专业团队，运用先进技术和丰富经验，针对各类工程项目开展全面细致的风险评估，提前识别潜在环境风险，并制定切实可行的预防措施，从源头上降低环境事件发生的可能性。建立完善且系统的应急预案体系，涵盖不同类型和规模的突发环境事件，明确责任单位和责任人，定期开展应急演练，检验和提升突发环境事件应急响应能力。

The company places high importance on environmental risk management, coordinating project construction and ecological environment protection progress. A professional team utilizes advanced technology and extensive experience to conduct comprehensive and detailed risk assessments for various types of engineering projects, identifying potential environmental risks early and devising practical prevention measures to minimize the likelihood of environmental incidents from the source. A comprehensive and systematic emergency response plan system is established, covering various types and scales of sudden environmental events, clarifying responsible units and individuals, and regularly conducting emergency drills to test and enhance emergency response capabilities.

## ◎ 积极培育绿色低碳产业

## ◎ Actively Cultivating Green and Low-Carbon Industries

公司深入布局绿色低碳环保产业，在流域综合治理、河湖生态系统修复、土壤环境修复、城镇污水处理、垃圾治理、海上风电、光伏发电等新领域取得突破。在白洋淀内源污染治理试点项目和孝义河河口湿地水质净化工程打造绿色智慧湿地“雄安样板”。在海上风电桩基、导管架、单桩等基础结构施工方面具有丰富经验，依托大型打桩船、起重船等装备，完成多个项目的沉桩、安装作业。

The company strategically positions itself in green and low-carbon environmental industries, achieving breakthroughs in new areas such as integrated watershed management, river and lake ecosystem restoration, soil environmental remediation, urban sewage treatment, waste management, offshore wind power, and photovoltaic power generation. In projects like the internal pollution control pilot in Baiyangdian and the Xiaoyi River estuary wetland water purification project, the company has created a "Xiong'an model" for green intelligent wetlands. With extensive experience in the construction of foundation structures such as offshore wind power foundations, monopiles and jackets, and relying on large pile-driving ships and cranes, the company has completed numerous piling and installation operations.

### ◎ 充分利用可再生能源

#### ◎ Fully Utilizing Renewable Energy

公司积极抢抓新质生产力发展机遇，推进光伏产业高质量发展，助力碳达峰、碳中和目标实现。公司牵头的海洋工程创新联合体聚焦海洋交通基础设施海洋风电光伏建设与运维这一海上可再生能源产业的关键核心技术攻关，提升科技创新能力，加速打造世界级海洋经济产业集群。在潮汐能技术研发方面持续投入，开展大型海洋潮流能发电机组基础结构型式及施工技术、新型 VIVACE 海流能利用装置关键技术等 10 余项研究。

Seizing opportunities for high-quality development in the photovoltaic industry, the company leads an ocean engineering innovation consortium focusing on key core technologies for the construction and maintenance of marine traffic infrastructure and offshore wind photovoltaic systems. This enhances technological innovation capabilities and accelerates the creation of a world-class marine economic industry cluster. Continuous investment is made in tidal energy technology development, conducting over 10 research projects on foundation structures for large marine tidal power generators, innovative VIVACE ocean current energy devices, and other key technologies.

### ◎ 大力开展污染预防与控制

#### ◎ Vigorously Conducting Pollution Prevention and Control

在污染预防与控制方面，中国交建不仅严格遵守国家和地方的环保法规，还积极采取一系列创新措施，致力于环境修复工作，努力实现企业发展与环境保护的和谐共生，承担对环境保护的重大责任。在基于底质改良和沉水植物恢复的湖泊污染底泥原位修复技术中，针对湖泊中沉水植物难以定植扩繁的问题，通过恢复沉水植被，利用沉水植物的根系直接吸收底泥中的营养盐，降低污染底泥中的营养盐含量。在常用生态护岸水工结构项目中，通过孔隙材料，将传统石、混凝土等护岸材料与植物系统结合，营造微生环境，提高护岸粗糙度，恢复植被及生境，对河流生态环境起到了防洪减灾、提高多样性、美化人居环境的作用。此外，还有基于加载功能性填料的人工湿地构建技术、基于增殖放流的生态环境修复与补偿技术、红树林修复及生态效益评估技术等。

In pollution prevention and control, CCCC not only strictly complies with national and local environmental regulations but also adopts a series of innovative measures committed to environmental restoration. It strives to achieve harmonious coexistence between corporate development and environmental protection, taking significant responsibility for environmental protection. In technologies based on sediment amendment and submerged plant restoration for in-situ remediation of polluted lake sediments, issues with the propagation of submerged plants in lakes are addressed by restoring submerged vegetation, which directly absorbs nutrients from the sediments through their roots, reducing nutrient levels in the polluted sediments. In common ecological riprap water engineering projects, traditional materials like stone and concrete are combined with plant systems through porous materials, creating micro-environments, increasing the roughness of riprap, restoring vegetation and habitats, and enhancing river ecology with flood control, biodiversity improvement, and improvement of living environment. Additionally, technologies like artificially constructed wetlands with functional filler loading, ecological restoration and compensation through stock enhancement, and mangrove restoration and ecological benefit assessment are employed.

### ◎ 积极布局可持续水资源

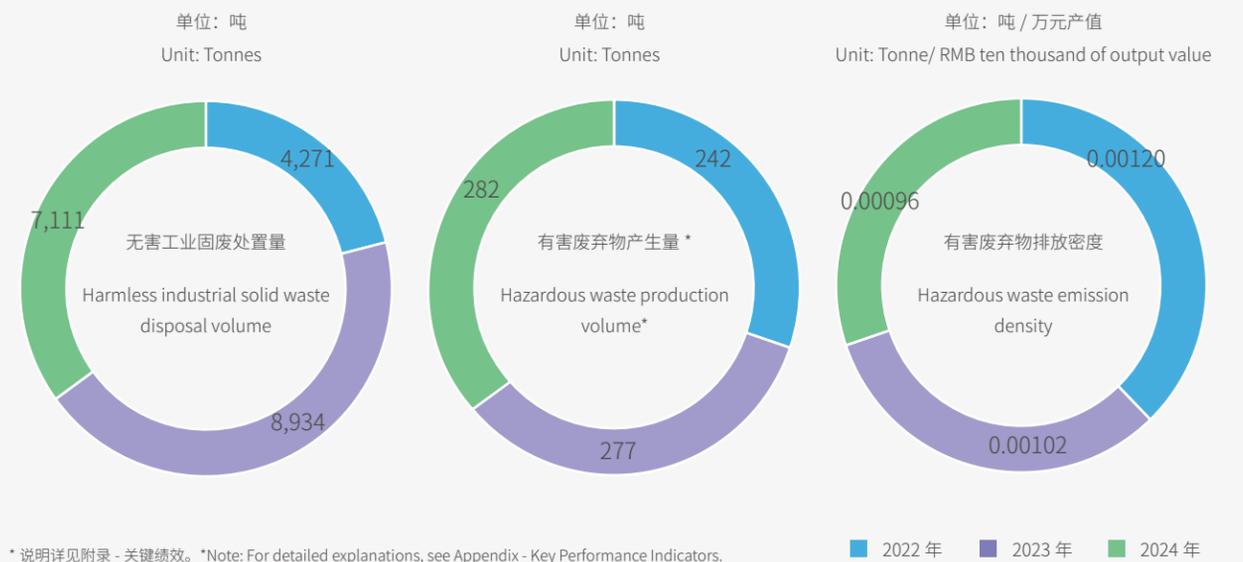
#### ◎ Actively Planning for Sustainable Water Resources

公司高度重视水资源的可持续利用，积极探索雨水收集与利用的有效途径，以实现水资源的高效利用和生态环境的保护。2024 年 3 月，中国交建取得一项名为“一种用于绿色建筑的雨水收集装置”的专利，授权公告号 CN222025168 U，该装置包括箱体和第一过滤机构，箱体内腔的上部设置有用于对第一过滤机构清扫的清理机构，第一过滤机构的外侧卡接有拆装机构，拆装机构的内侧安装有安装框，安装框内腔的底部固定安装有第二滤网。通过清理机构的设置，可用于进行移动以及旋转清扫的方式进行落叶以及杂物的清扫，从而提高防堵和清理的效果和效率，而拆装机构可用于安装框和第二滤网的快速安装、拆卸或更换，其操作简单便捷，而安装框和第二滤网的设置可起到二次过滤的作用，以提高对雨水收集时的滤除效果。

The company places great importance on the sustainable use of water resources, actively exploring effective methods for rainwater collection and utilization to achieve efficient use of water resources and protection of the ecological environment. In March 2024, CCCC obtained a patent for "a rainwater collection device for green buildings", patent announcement number CN222025168U. This device includes a casing and a first filtration mechanism, with a cleaning mechanism set up above the inner cavity of the casing to clean the first filtration mechanism. The outer side of the first filtration mechanism is connected to a detachable mechanism, which is fitted with an installation frame. The bottom of the inner cavity of the installation frame is fixed with a second filter screen. The cleaning mechanism allows for movement and rotational sweeping to clean leaves and debris, thus improving the effectiveness and efficiency of prevention and cleaning. The detachable mechanism facilitates the rapid installation, removal, or replacement of the installation frame and second filter screen. The operation is simple and convenient, and the setup of the installation frame and second filter screen provides a secondary filtering effect to enhance the filtration performance during rainwater collection.

## 指标与目标

### INDICATOR AND OBJECTIVE



## 资源高效利用

## EFFICIENT RESOURCE UTILIZATION

### 治理

### GOVERNANCE

公司严格遵守《中华人民共和国节约能源法》等有关法律法规，严格执行国家相关产业政策和规划，制定《节约能源监督管理办法》，遵循合理用能、节约优先的基本原则，加强节能管理，采取技术上可行、经济上合理的各项节能措施，优化能源结构，提升能源利用效率，有效控制能源消费量，建设节能型企业。

The company strictly adheres to the *Energy Conservation Law of the People's Republic of China* and other relevant laws and regulations, and rigorously implements national policies and plans related to various industries. It has formulated the *Energy Conservation Supervision and Management Measures*, following the basic principles of rational energy use and prioritizing conservation. This enhances energy management, adopts technically feasible and economically reasonable energy-saving measures, optimizes the energy structure, improves energy utilization efficiency, effectively controls energy consumption, and strives to build an energy-saving enterprise.

#### 关键制度列表 Key Regulatory Documents

《节能环保工作三年行动方案（2023—2025）》	<i>Three-Year Action Plan for Energy Conservation and Environmental Protection (2023—2025)</i>
《节约能源监督管理办法》	<i>Energy Conservation Supervision and Management Measures</i>

### 战略

### STRATEGY

#### 能源利用

#### Energy Utilization

公司大力发展建筑清洁能源利用技术，在新建（改扩建）住宅、商业、办公建筑中推广应用空气能、地热能、光伏等多种可再生能源，在自有建筑开展新能源改造试点。通过智慧能源数字化业务、能源综合管控技术等，推动建筑能耗智慧化精细化管控，在建筑板块打造绿色节能运营模式，逐步形成基于不同业态可复制、可推广的产品方案，协同打造绿色低碳建筑品牌。

The company vigorously develops clean energy technologies for buildings, promoting the application of air energy, geothermal energy, photovoltaics, and other renewable energy sources in newly constructed (or expanded) residential, commercial, and office buildings. It conducts pilot projects for new energy transformations in its own buildings. Through smart energy digital services and integrated energy control technologies, it drives smart and refined control of building energy consumption, creating green energy-efficient operation models in the construction sector. Gradually, it forms replicable and promotable product solutions based on different business types, collaboratively building a green and low-carbon building brand.

#### 开启绿色能源新篇章

#### Opening a new chapter in green energy



为积极响应国家“碳达峰、碳中和”号召，践行绿色发展理念，佛山广明高速建设了总面积约2万平方米的分布式光伏系统，总容量达1MWp。该系统采用“自发自用，余电上网”的模式，年发电量可达100万度，每年可消纳75万度电，节约电费超过11万元。该项目的建设和运行，不仅为公司带来了经济效益，更为社会树立了节能减排的标杆。

In response to the national call for "carbon peak and carbon neutrality" and to practice green development principles, the Foshan Guangming Expressway has installed a distributed photovoltaic system covering an area of about 20,000 square meters, with a total capacity of 1MWp. The system operates on a "self-generated, surplus to grid" model, generating 1 million kWh of electricity annually, consuming 750,000 kWh of electricity per year, and saving more than RMB 110,000 in electricity costs annually. The construction and operation of this project not only bring economic benefits to the company but also set a benchmark for energy conservation and emission reduction.



佛山广明高速分布式光伏项目成功并网

Foshan Guangming Expressway Distributed Photovoltaic Project successfully connected to the grid

#### 水资源利用

#### Water Resource Utilization

严格遵守《中华人民共和国水法》等有关法律法规，严格执行国家相关产业政策和规划，加强生产废水和生活污水的处理，推广污水处理技术和设备，提高重复用水比例。大力推广节水工艺技术，提升生产用水效率，降低水资源的消耗。

Strictly complying with the *Water Pollution Prevention and Control Law of the People's Republic of China* and other relevant laws and regulations, the company enforces national policies and plans related to the industry, enhances the treatment of production and domestic wastewater, promotes wastewater treatment technologies and equipment, and increases the proportion of water reuse. It extensively promotes water-saving technologies to improve the efficiency of water use in production and reduce water resource consumption.



天山胜利隧道智能生产废水处理厂

Tianshan Shengli Tunnel Intelligent Production Wastewater Treatment Plant



海南省定安县新竹镇滩村“人工湿地”生活污水处理设施

"Artificial Wetland" domestic wastewater treatment facility of Tancun Village, Xinzhu Town, Ding'an County, Hainan Province

◎ 循环经济

◎ Circular Economy

聚焦“碳达峰试点城市建设”“‘无废城市’建设”和“循环经济产业园的建设”，推进装配式建筑重点区域及产业布局，重点在生物质燃料的制备和深度资源化利用、一般工业固废的综合利用和建筑垃圾、煤矸石的资源化利用等新兴业务开拓新的竞争优势。

Focusing on the "carbon peak pilot city construction", "waste-free city" construction, and "circular economy industrial park construction", the company advances the regional and industrial layout of prefabricated buildings, focusing on the preparation and deep resource utilization of biomass fuel, comprehensive utilization of general industrial solid waste, and the resource utilization of construction waste and coal gangue in emerging business areas to develop new competitive advantages.

土石方原料资源化利用 Resource utilization of excavation materials

中交疏浚所属技术研究中心成立了平陆运河现场科研团队，通过开展大量室内掺配、种植试验，成功研发了“复配改良种植土技术”，实现多种类土石方原料的资源化利用，彻底解决了巨量土石方高成本处置和循环再利用的难题。该项技术已在平陆运河 8 标、12 标等多个标段进行示范应用，实现了观赏性花卉、边坡草种以及多品种农作物等成功种植，且存活率超 90%，成本更是较耕植土降低 5% 以上。

The CCCC Dredging Research Center under CCCC has established an onsite research team for the Pinglu Canal, conducting extensive indoor blending and planting experiments. They have successfully developed "composite improved planting soil technology", achieving resource utilization of various types of excavation materials and thoroughly solving the problem of high-cost disposal and recycling of massive amounts of excavation materials. This technology has been demonstrated in multiple segments of the Pinglu Canal, including segments 8 and 12, successfully planting ornamental flowers, slope grass species, and a variety of crops with a survival rate exceeding 90%, and reducing costs by more than 5% compared to cultivated soil.



平陆运河  
Pinglu Canal

◎ 绿色办公

◎ Green Office

在绿色办公和绿色运营方面采取一系列具体措施，不断增强资源节约、环境保护的意识，践行“节约一度电、节约一滴水、节约一张纸”的绿色办公理念。

The company adopts a series of specific measures in green office operations and continuously enhances awareness of resource conservation and environmental protection, practicing the green office philosophy of "saving electricity, water, and paper".

 <p>节约用电 Electricity Conservation</p>	 <p>节约用水 Water Conservation</p>	 <p>节约纸张 Paper Conservation</p>
<p>积极推广、使用绿色照明技术和相关产品；在人员离开办公室时立即关闭照明设备和其他用电设备；夏季中央空调温度设定不低于 26 摄氏度。</p> <p>Actively promote and use green lighting technology and related products; immediately turn off lighting and other electrical devices when leaving the office; set the central air conditioning temperature not lower than 26 degrees Celsius during summer.</p>	<p>积极推广、使用节水技术和相关产品；如发现供水系统有跑、冒、滴、漏的现象，立即报告物业公司进行维修；用水时水龙头适当开小，不用水时立即关闭。</p> <p>Actively promote and use water-saving technologies and related products; immediately report any leaks in the water supply system to the property management company for repair; adjust the tap flow appropriately when using water and shut it off immediately when not in use.</p>	<p>充分利用电子文件资料，减少纸质文件资料；打印内部使用不需长期保留的资料，或撰写文件草稿时，利用已用过纸张的背面；文件资料正反面印制，并合理确定印制的数量，避免浪费。</p> <p>Fully utilize electronic documents to reduce the use of paper documents; use the back of already used paper for printing internal documents that do not require long-term retention or for drafting; print documents on both sides and determine the quantity of prints reasonably to avoid waste.</p>

# 影响、风险和机遇管理

## IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

工业革命以来，“获取—生产—废弃”的线性经济发展模式不仅会消耗和浪费大量的资源，而且会产生严重的温室气体排放、废物和污染，长此以往将难以为继，亟待寻求经济增长与资源脱钩的绿色低碳、循环利用资源的发展模式。经过多年探索和实践，从资源粗放利用的线性经济向资源集约利用的循环经济转型已成为新的发展趋势。

中国交建通过构建覆盖全生命周期的资源管理体系，系统识别、评估并管控资源利用与循环经济领域的可持续发展影响与风险。结合项目环境尽职调查与动态监测机制，优先筛选低环境负荷的再生建材与清洁工艺，并依托 BIM 数字化平台实现施工废弃物追踪与再利用率最大化。针对循环技术成本高、政策执行差异等风险，公司通过绿色供应链协同创新、碳资产开发及区域环保标准预研，形成风险对冲机制，确保项目全周期合规性与经济性平衡。在机遇管理维度，通过参与国家绿色基建标准制定、搭建产学研用平台孵化固废再生技术，并创新“工程+产业”模式布局循环经济园区，加速抢占新兴市场。同时，结合绿色金融工具拓宽融资渠道，推动资源循环类项目的规模化落地，实现风险可控前提下的价值链升级。

Since the Industrial Revolution, the linear economic development model of "acquire-produce-dispose" has not only consumed and wasted a vast amount of resources but also generated significant greenhouse gas emissions, waste, and pollution. If this continues, it will be unsustainable, and there is an urgent need to seek a development model that decouples economic growth from resource use, focusing on green and low-carbon and resource recycling. After years of exploration and practice, transitioning from a linear economy of extensive resource use to a circular economy of intensive resource use has become a new development trend.

CCCC has built a resource management system covering the entire lifecycle, systematically identifying, assessing, and controlling the sustainable development impacts and risks in resource use and the circular economy. Combining project environmental due diligence with dynamic monitoring mechanisms, it prioritizes the selection of recycled building materials and clean processes with low environmental loads and relies on the BIM digital platform to maximize the tracking and reuse rate of construction waste. Addressing risks such as high costs of recycling technologies and policy execution differences, the company forms risk hedging mechanisms through green supply chain collaborative innovation, carbon asset development, and pre-research on regional environmental standards, ensuring a balance between compliance and economic viability throughout the project lifecycle. In managing opportunities, by participating in the establishment of national green infrastructure standards, building industry-academia-research-application platforms to incubate solid waste recycling technologies, and innovatively planning "engineering + industry" models for circular economy parks, the company accelerates its entry into emerging markets. Simultaneously, it broadens financing channels through green financial instruments, promoting the large-scale implementation of resource recycling projects, and achieving value chain upgrades under a risk-controlled premise.

# 指标与目标

## INDICATORS AND OBJECTIVES



## 推行绿色建造

## PROMOTING GREEN CONSTRUCTION

### 治理

#### GOVERNANCE

公司制定印发《绿色工程体系建设方案》，推进绿色工程体系建设。从规范项目驻地建设要求、推行项目办公驻地建设标准和集约化管控、强化专业化建设和运维服务、加强项目驻地绿色化智慧化、推进典型示范项目引领等方面开展工作，推进项目驻地降本增效和绿色化智慧化提升。印发《关于下达公司绿色工程（项目标准化驻地）建设试点任务的通知》，要求总承包分公司、一航局、一公局集团等 14 家主要施工单位 2024 年度至少在 3 个新开工项目上进行绿色项目驻地建设典型示范。目前，有 18 个项目驻地已完成、5 个项目驻地正在实施、18 个项目驻地正在推进。

The company has formulated and issued the *Green Project System Construction Scheme* to advance the construction of the green project system. Efforts include standardizing project site construction requirements, implementing standardized and intensive management for project offices and sites, enhancing specialized construction and operational services, strengthening the greening and intelligentization of project sites, and promoting exemplary demonstration projects to lead cost reduction, efficiency enhancement, and green and smart advancements. The company has issued the *Notification on Assigning the Pilot Task of Green Project (Standardized Site) Construction*, requiring major construction units such as the General Contracting Branch Company, the CCCC First Harbor Engineering Company, and the CCCC First Highway Engineering Group to implement green project site construction in at least three new projects in 2024. Currently, 18 project sites have been completed, 5 are under implementation, and 18 are being advanced.

#### 关键制度列表 Key Regulatory Documents

《绿色工程体系建设方案》	<i>Green Project System Construction Scheme</i>
《项目驻地降本增效和绿色化智慧化提升方案》	<i>Plan for Cost Reduction, Efficiency Enhancement, and Green and Smart Improvement of Project Sites</i>
《绿色智慧项目驻地建设指南（试行）》	<i>Guide for Green Smart Project Site Construction (Trial)</i>
《关于下达公司绿色工程（项目标准化驻地）建设试点任务的通知》	<i>Notification on Assigning the Pilot Task of Green Project (Standardized Site) Construction</i>

## 战略

### STRATEGY

#### ◎ 推进设计源头减碳

#### ◎ Advancing Design for Carbon Reduction at the Source

在公路、水运、城市开发等重点业务领域优先应用公司绿色低碳技术成果和专项方案模板，推广绿色低碳公路、绿色低碳港口、零碳服务区、零碳建筑等方案策划与设计，依托宁波梅山等重点项目打造全生命周期绿色智慧自动化集装箱码头和干散货码头，落实各设计阶段碳排放测算和软件应用，在传统产业市场开拓高端方案咨询与绿色低碳特色设计业务。

In key business areas such as highways, water transportation, and urban development, the company prioritizes the application of its green, low-carbon technological achievements and specialized solution templates. It promotes the planning and design of green, low-carbon highways, ports, zero-carbon service areas, and zero-carbon buildings. Leveraging key projects such as Ningbo Meishan, it aims to create a full lifecycle green, smart and automated container terminal and bulk cargo terminal. The company implements carbon emission calculations and software applications at various design stages, expanding high-end solution consulting and green, low-carbon specialized design services in traditional industries.

#### 发布 5 项绿色低碳企业标准

#### Issuance of 5 green, low-carbon corporate standards



中国交建正式发布 5 项绿色低碳企业标准，包括《港口工程绿色低碳设计评价标准》《港口工程绿色低碳设计指南》《水运工程绿色低碳施工技术指南》《水运工程绿色低碳施工评价标准》《城市综合开发项目碳排放估算与测算标准（试行）》，覆盖了水运工程的设计、施工、评价，以及城市综合开发碳排放测算等关键环节，为行业绿色低碳转型提供了全面的技术支撑和规范化指导。作为落实国家“双碳”战略的重要举措，5 项标准的发布和实施将有助于完善公司绿色低碳标准体系，提升公司水运与城市业务绿色低碳技术水平，促进资源高效利用和碳排放精准管控。

CCCC has officially released 5 green, low-carbon corporate standards, including *Green, Low-Carbon Design Evaluation Standards for Port Engineering*, *Green, Low-Carbon Design Guide for Port Engineering*, *Green, Low-Carbon Construction Technical Guide for Water Transport Engineering*, *Green, Low-Carbon Construction Evaluation Standards for Water Transport Engineering*, and *Carbon Emission Estimation and Calculation Standards for Urban Integrated Development Projects (Trial)*. These standards cover the design, construction, and evaluation of water transport engineering and carbon emission calculations for urban development, providing comprehensive technical support and standardized guidance for the industry's green, low-carbon transformation. As a crucial measure to implement the national "dual carbon" strategy, the release and implementation of these standards will help improve the company's green, low-carbon standards system, enhance the green, low-carbon technology level of its water transport and urban services, and promote efficient resource use and precise carbon emission control.



## ◎ 提升绿色施工技术

### ◎ Enhancing Green Construction Technology

围绕主业推动节能降耗工艺工法、装配式建造、绿色新材料、资源循环利用等核心技术攻关与成果转化，扩充、提升和完善公司绿色低碳技术资源储备库，加大技术推广应用力度。推动各施工单位全面开展绿色低碳施工组织方案策划工作，推进临建设施集约化、装配化，在预制场、钢筋加工场等推行“黑灯工厂”建设标准；加强施工工地的“油改电”和“油改气”，降低柴油等主要化石能源使用比例，提高无人化、电动化施工水平，研究制定绿色低碳工地建设标准，在公路、水运工程领域率先完成绿色低碳工地试点示范。全面应用业务板块绿色低碳施工技术指南、评价标准，将绿色低碳施工纳入考核评价体系。

Focusing on its core business, the company pushes forward breakthroughs in and application of core technologies, including energy-saving construction processes, prefabricated construction, green new materials, and resource recycling. It expands, enhances, and perfects the company's green, low-carbon technology reserves and intensifies the promotion and application of these technologies. It encourages all construction units to comprehensively carry out the planning of green, low-carbon construction and organization plans, promote intensive and modularized temporary facilities, and implement the construction standards of "dark factories" in prefabrication sites and rebar processing sites. It promotes the "oil-to-electricity" and "oil-to-gas" transitions at construction sites, reduces the use of diesel and other main fossil fuels, enhances unmanned and electrified construction levels, and conducts research to develop green, low-carbon construction site standards. It takes the lead in implementing pilot demonstration of green, low-carbon construction sites in highway and water transport engineering sectors. It comprehensively applies green, low-carbon construction technology guides and evaluation standards across business sectors, integrating green, low-carbon construction into the assessment and evaluation system.

### 践行绿色理念 建设绿色工地

#### Practicing green concepts and building green construction sites



福州机场第二高速公路项目牢固树立“绿水青山就是金山银山”的建设理念，引入了环保管家和水管家一站式综合服务管理模式，有效加强了项目建设生态环境动态化监管，高效解决了建设中的各类扬尘等生态环境污染问题。此外，项目在桩基施工过程中，采用旋挖钻替代传统的钻机施工，有效降低桩基施工噪声，最大程度减少对湿地公园候鸟的影响，让项目“抑”尘不染，共同守护好我们的蓝天白云。

The Fuzhou Airport Second Highway Project firmly followed the construction concept that "lucid waters and lush mountains are invaluable assets", introducing an integrated management model with environmental and water conservation stewards. This effectively strengthened the dynamic supervision of the project's ecological environment during construction and efficiently resolved various problems of ecological environmental pollution such as dust. Additionally, during the pile foundation construction, the project used rotary drilling instead of traditional drilling, significantly reducing noise and minimizing the impact on migratory birds in the nearby wetland park, ensuring that the project reduced dust and kept blue skies and white clouds.



福州机场第二高速公路项目  
Fuzhou Airport Second Highway Project

### 澳大利亚约翰·霍兰德公司观摩学习绿色建造技术

#### John Holland Group from Australia observes green construction technologies



2024年3月20日，澳大利亚约翰·霍兰德公司到深惠城际大鹏支线一工区项目观摩学习。在龙坪2号工作井现场，代表团一行详细了解了项目关于绿色建造经验及做法，细致地考察了渣土筛分厂、“垂直+水平”皮带机系统、盾构施工废水一体化处理设备，并针对盾构渣土处理、皮带机出土转运、盾构废水处理等进行了现场交流学习。

On March 20, 2024, the John Holland Group from Australia visited the Dapeng branch of the Shenzhen-Huizhou Intercity Railway Project to learn about green construction practices. At the Longping No. 2 work well site, the delegation thoroughly explored the project's green construction experiences and practices, examining the slag screening plant, the "vertical + horizontal" conveyor belt system, and the integrated treatment equipment for shield construction wastewater, and engaged in onsite exchanges on shield slag treatment, conveyor belt earth transport, and shield construction wastewater treatment.



观摩学习现场  
Observation and learning site

## ◎ 研发应用绿色装备

### ◎ Research and Development of Green Equipment

推进氢能、低碳甲醇等可再生能源港机设备研发，加强锂电池系统集成技术研究，提升港机设备能效和清洁能源使用比例。推广单起升自动化岸桥等绿色设备，进行智能装卸、智能维保、远程监测系统升级，打造新一代高效、绿色、智慧码头。充分发挥国家级创新平台力量，产出一批具有重大影响力的原创低碳科技成果和具有自主知识产权的绿色施工重器。自有大型施工机械装备中，对仍以柴油为主要供能单元的，研究推进其电气化升级改造。积极推进低碳型污水资源化装备研发，形成一套完整的低碳污水资源化利用装备与工艺技术。

The company advances the development of renewable energy port machinery and equipment such as hydrogen and low-carbon methanol, strengthens research on lithium battery system integration technologies, and increases the energy efficiency and clean energy usage proportion of port machinery and equipment. It promotes single-lift automated gantry cranes and other green equipment, and carry out intelligent loading and unloading, intelligent maintenance, and remote monitoring system upgrades to create a new generation of efficient, green, and smart terminals. Leveraging national-level innovation platforms, it produces a series of significant low-carbon scientific and technological achievements and green construction heavy equipment with independent intellectual property rights. For owned large construction machinery still primarily powered by diesel, research is conducted to advance their electrification upgrades. The company actively advances the development of low-carbon wastewater recycling equipment, forming a complete set of low-carbon wastewater recycling equipment and process technologies.



狮子洋通道项目砂石料采用皮带机从趸船直达拌和站料仓一站式卸料技术，转传统燃油机械为电力运输，过程全部采用清洁能源无污染

In the Lion Ocean Channel Project, sand and gravel materials were transported directly from the barge to the mixing station storage bins using a conveyor belt system, transitioning traditional fuel machinery to electric transport, using clean energy throughout the process with no pollution

### ◎ 布局绿色建造认证

### ◎ Planning for Green Construction Certification

深入研究绿色建造水平认证方法与评价标准，抓住行业标准空白期，构建公路、港口工程绿色低碳建造水平评价指标体系，编制绿色低碳水平评价标准，探索考核评价制度，为项目考核管理、评定评奖提供助力。积极布局绿色建造认证咨询业务，提升行业话语权。

The company deeply studies green construction certification methods and evaluation standards, seizing the opportunity during the industry standard gap period, establishing evaluation indicator systems for green, low-carbon construction for highways and port projects, compiling green, low-carbon evaluation standards, exploring assessment and evaluation systems, and aiding project assessment management and award evaluations. It actively plans for green construction certification consulting services, amplifying its voice in the industry.

## 影响、风险和机遇管理

### IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

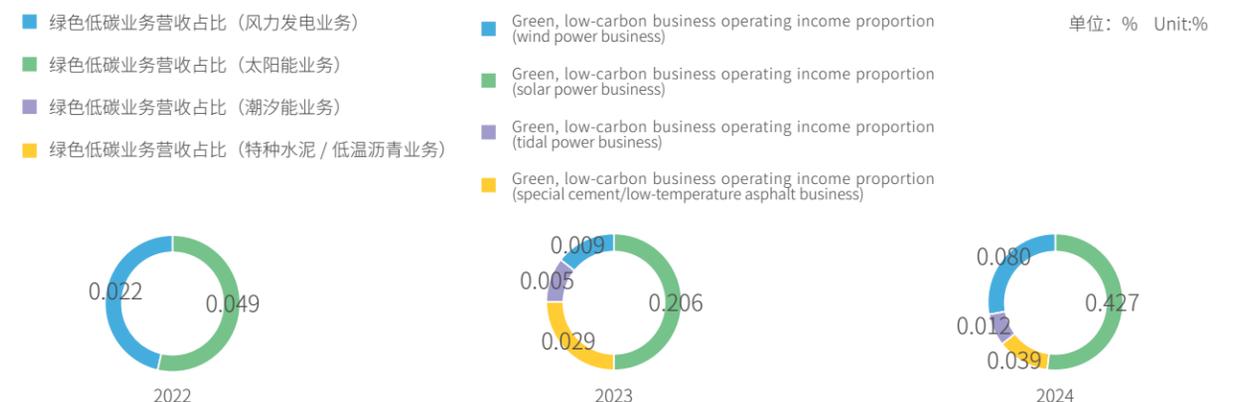
在“双碳”目标引领下，建筑行业正向绿色低碳加速转型，中国交建投身绿色建造领域，既面临风险挑战，也迎来发展机遇。绿色建造涉及新型材料、先进技术应用，成本较高，且受市场需求波动、政策变化影响，运营管理不善也易导致项目效益受损。但绿色建造也为我们带来了诸多机遇——国家大力倡导绿色发展，出台了一系列补贴、税收优惠等利好政策，全球绿色建筑市场规模持续扩张……我们依托基础设施全产业链和综合一体化服务优势，秉持“国家所需、人民所盼、中交所能”理念，致力将国家重大工程打造成绿色标杆，不断增强高质量发展的绿色底色。坚持不懈推进绿色低碳技术重大突破和前沿技术研究，引领构建绿色低碳循环产业体系，既积极推进绿色公路、绿色桥梁、绿色航道、绿色港口、绿色空港等绿色交通基础设施建设，又不断在绿色低碳环保产业、流域综合治理、海上风电等新兴前沿领域取得重大突破，全方位厚植绿色发展优势，推动高质量发展与高水平保护相辅相成、相得益彰。

Under the guidance of the "dual carbon" goals, the construction industry is accelerating its transition to green and low-carbon practices, and CCCC is actively engaging in green construction. This sector faces risks and challenges due to high costs associated with new materials and advanced technologies, market demand fluctuations, and policy changes, which can lead to poor operational management and impact project profitability. However, green construction also presents numerous opportunities—national policies strongly advocate for green development, offering subsidies and tax incentives, and the global green building market is continuously expanding. Leveraging our full industry chain and integrated service advantages and guided by the philosophy of "meeting national needs, people's expectations, and our capabilities", we are committed to transforming major projects into green benchmarks, continually enhancing our capacity for high-quality green development. We persistently push for major breakthroughs in green, low-carbon technologies and frontier research, leading the creation of a green, low-carbon circular industry system. We are actively advancing the construction of green highways, bridges, waterways, ports, and airports, and continuously achieving significant breakthroughs in green, low-carbon environmental industries, integrated watershed management, and offshore wind power, thereby solidifying our green development advantages and promoting the complementary and mutually beneficial relationship between high-quality development and high-level protection.

## 指标与目标

### INDICATOR AND OBJECTIVE

2024 年绿色低碳领域总投资目标 **18** 亿元 The total investment target for green and low-carbon sectors in 2024 is RMB **1.8** billion



# 生态系统保护

## ECOSYSTEM CONSERVATION

### 治理

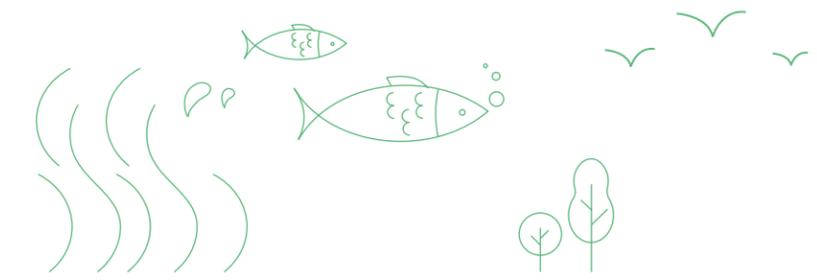
#### GOVERNANCE

公司积极探索监管方式创新和管理机制改革，开展试点生态环境保护督查。召开生态环境保护督查动员会，制定印发生态环境保护试点督查工作方案，明确环保督查工作内容。主动引入第三方力量，邀请生态环境领域相关领导、专家参与其中。2024 年试点以来，对 1 家二级单位开展了综合督查，对位于青藏高原环境敏感区青海、西藏、甘肃等 3 个省区的在建项目开展专项督查。通过环保督查提高了公司上下生态环保意识，查明了存在的环境问题，强化了做好生态环保工作的行动自觉。

The company actively explores innovative regulatory approaches and management mechanism reforms, conducting pilot ecological environmental protection inspections. It has held ecological environmental protection inspection mobilization meetings, developed and issued pilot ecological environmental protection inspection working plans, and clearly defined the content of environmental protection inspections. By proactively involving third-party entities, including leaders and experts in the ecological environment field, we have conducted comprehensive inspections at one secondary unit since the pilot began in 2024 and carried out specialized inspections of ongoing projects in environmentally sensitive areas of Qinghai and Gansu provinces and Xizang autonomous region on the Tibetan Plateau. These environmental inspections have heightened ecological and environmental awareness throughout the company, identified existing environmental issues, and reinforced the commitment to ecological and environmental protection actions.

#### 关键制度列表 Key Regulatory Documents

《生态环境保护试点督查工作方案》	<i>Pilot Ecological Environmental Protection Inspection Working Plan</i>
《生态环境保护监督管理办法》	<i>Ecological Environmental Protection Supervision and Management Measures</i>
《生态环境保护责任追究管理规定》	<i>Ecological Environmental Protection Accountability Management Regulations</i>
《生态环境保护考核办法》	<i>Ecological Environmental Protection Assessment Measures</i>



### 战略

#### STRATEGY

#### ◎ 生态环境综合治理

#### ◎ Integrated Ecological Environmental Management

公司向水而兴、向海图强，加快生态环保市场的集约化拓展，持续跟踪各地环保集团重组机遇，适时参与股权投资，结合地方特点整合技术与资源，做大做强做优环保产业。推进产业基础绿色提升、产业链条绿色升级、产业服务绿色覆盖，率先形成山水林田湖草沙一体化保护和系统治理新模式，力争成为行业领先的全国一流生态治理商。

Rooted in waterways and empowered by the sea, the company forges ahead toward greater strength and prosperity, intensifying the intensive expansion of the ecological environmental protection market, continuously tracking the restructuring opportunities of local environmental protection groups, timely participating in equity investments, and integrating technology and resources according to local characteristics to enhance the environmental protection industry. It advances the green enhancement of industrial bases, the green upgrading of industrial chains, and the green coverage of industrial services, striving to become a national leader in ecological management by pioneering integrated and systemic new models of protection and management for mountains, waters, forests, farmlands, lakes, grasslands, and deserts.



福建厦门筭筭湖生态整治提升工程  
Xiamen Yundang Lake Ecological Restoration Project



洋浦港区航道改扩建工程生态环保技术服务项目  
Yangpu Port Area Waterway Expansion and Ecological Environmental Protection Technical Service Project

人海和谐的共生宣言

A coexistence manifesto between humans and the sea



2024 年 11 月，自然资源部 2024 年海洋生态保护修复典型案例名单公布，中交一公局集团承建的孔雀湾红树林修复与岸线生态化项目《钦州市孔雀湾海洋生态保护修复案例》入选。建设期间，项目团队实地考察种植案例，聘请专家开展技能培训，不断总结经验、优化工艺，在滩涂高程、生态环境改造和持续管护上狠下功夫。项目已累计完成红树林自然恢复与改造总计 41.25 公顷、红树林宜林地生态重塑 53.24 公顷，海鸟栖息地生态恢复 1.96 公顷、海湾水质净化 5.71 公顷、养殖围堤拆除 6.39 公里以及岸线生态化 5.39 公里。

In November 2024, the Ministry of Natural Resources announced the 2024 list of typical cases for marine ecological protection and restoration, including the *Peacock Bay Marine Ecological Protection and Restoration Case* managed by CCCC First Highway Engineering Group. During construction, the project team conducted on-site planting inspections, hired experts for skill training, continuously refined experiences and optimized processes, focusing efforts on tidal flat elevation, ecological environment transformation, and sustained management. The project has completed a total of 41.25 hectares of natural mangrove restoration and transformation, 53.24 hectares of suitable mangrove reforestation, 1.96 hectares of seabird habitat ecological restoration, 5.71 hectares of bay water purification, 6.39 kilometers of aquaculture embankment removal, and 5.39 kilometers of shoreline ecological enhancements.



红树林种植  
Mangrove Planting



孔雀湾红树林修复与岸线生态化项目  
Peacock Bay Mangrove Restoration and Shoreline Ecological Transformation Project

◎ 生物多样性保护

◎ Biodiversity Protection

作为全球生态文明建设的践行者，我们坚持走生态优先的绿色发展道路，积极参与保护生物多样性。坚决杜绝在生态保护红线区域开展任何破坏生态的建设活动，为珍稀物种的栖息繁衍保留净土；积极开展保护与利用工作，与科研机构合作，深入研究沿线地区生物遗传资源，建立数据库，为资源的合理利用和保护提供科学依据。在项目全周期管理中，充分考量对生态系统和生物多样性的影响，从项目规划设计阶段，就运用生态友好理念，最大程度减少对生态环境的破坏；施工过程中，采用环保材料与工艺，降低对生物栖息地的干扰；运营阶段，持续监测对生态系统的影响，主动采取措施修复和改善生态环境，实现经济效益与生态效益的平衡发展，为生物多样性保护贡献力量。

As a practitioner of global ecological civilization, we adhere to a green development path that prioritizes ecology and actively participate in biodiversity protection. We firmly prohibit any ecologically damaging construction activities in the ecological conservation red line areas, reserving suitable habitats for rare species; actively carry out protection and utilization efforts, collaborate with scientific research institutions to study the genetic resources of species along project areas, establish databases, and provide scientific bases for the rational use and protection of resources. Throughout the project lifecycle management, we fully consider the impacts on ecosystems and biodiversity. From the planning and design stages, we apply eco-friendly concepts to minimize ecological damage; during construction, we use environmentally friendly materials and processes to reduce disturbances to habitats; during the operational phase, we continuously monitor impacts on ecosystems, proactively take measures to restore and improve the ecological environment, and achieve balanced development between economic and ecological benefits, contributing to biodiversity protection.



二公局坦桑尼亚分公司开启“净滩行动”  
Tanzania Branch of CCCC Second Highway Engineering Company initiated the "Clean Beach Action"



二航局大安风电项目、引嫩入白项目开展生态保护“护飞行动”  
The Da'an Wind Power Project and City Water Diversion Project of CCCC Second Harbor Engineering Company, carried out an initiative for "protecting migratory birds"

## 影响、风险和机遇管理

### IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

随着全球对可持续发展和环境保护的关注度日益增强，“生物多样性丧失”已成为备受关注的国际议题。各国政府、国际机构和企业界逐渐意识到，生物多样性的丧失不仅是生态问题，更是对经济发展、社会稳定和企业可持续经营的重大挑战。世界经济论坛的《2024 年全球风险报告》明确将“生物多样性丧失和生态系统崩溃”列为全球最严峻的风险之一。《生物多样性公约》第 16 次缔约方大会进一步凸显了问题的紧迫性，促使全球对生物多样性保护的重要性有更深刻的认识。各国监管机构和政策制定者也纷纷加大相关政策要求，督促企业在运营中切实保护生态系统和生物多样性、承担更多环境责任。

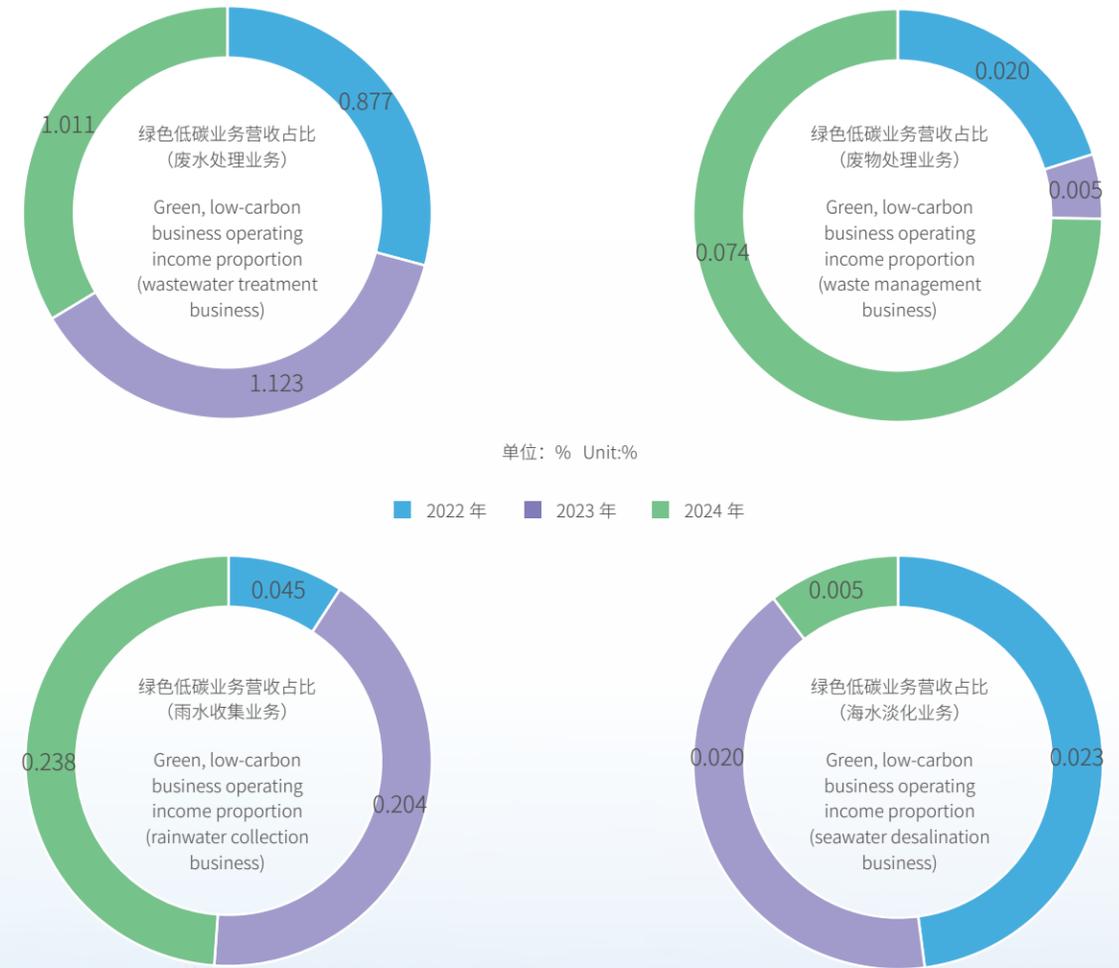
我们构建全面科学的风险管理体系，应对生态系统保护方面的风险。在项目前期，专业团队结合项目地生态特征，识别施工及运营中植被破坏、水土流失、环境污染等风险；运用生态监测数据与专业模型，定性定量评估风险发生可能性和影响程度；针对不同风险，制定多元应对措施，如移栽珍稀植物、设置防护设施、引入环保设备；项目全周期通过长期监测站点实时收集数据，一旦实际情况偏离预期，及时调整策略，保障生态系统稳定。

As global attention to sustainable development and environmental protection increases, "biodiversity loss" has emerged as a critical international issue. Governments, international institutions, and the corporate sector are increasingly recognizing that biodiversity loss is not only an ecological issue but also poses significant challenges to economic development, social stability, and corporate sustainability. *Global Risks Report 2024* of the World Economic Forum explicitly lists "biodiversity loss and ecosystem collapse" as one of the gravest global risks. The 16th Conference of the Parties to the *Convention on Biological Diversity* further underscored the urgency of the issue, deepening global understanding of the importance of biodiversity protection. Regulatory bodies and policymakers worldwide are intensifying policy requirements, urging corporations to actively protect ecosystems and biodiversity and assume greater environmental responsibilities.

We have established a comprehensive and scientific risk management system to address risks associated with ecosystem protection. In the early stages of projects, professional teams assess risks such as vegetation damage, soil erosion, and environmental pollution based on the ecological characteristics of the project locations, utilizing ecological monitoring data and professional models to qualitatively and quantitatively evaluate the likelihood and impact of these risks. For different risks, diverse mitigation measures are formulated, such as transplanting rare plants, installing protective facilities, and introducing environmental equipment. Throughout the project lifecycle, data is continuously collected via long-term monitoring stations, allowing for immediate strategy adjustments whenever actual conditions deviate from expectations, thus ensuring ecosystem stability.

## 指标与目标

### INDICATOR AND OBJECTIVE



# ENHANCING SOCIAL WELFARE

## BUILDING A HARMONIOUS AND PROSPEROUS NEW WORLD

### 增社会福祉

### 共建惠民生和谐幸福新世界

民生是人民幸福之基、社会和谐之本。中国交建坚持以人民为中心，落实安全责任，打造优质工程；坚持以人为本，全方位助力员工发展；秉持开放共赢理念，与各方伙伴携手同行；积极投身乡村振兴，为广袤大地注入发展活力；深度融入社区建设，传递温暖与和谐。我们不断提升服务人民美好生活水平，当好中央企业保障民生福祉排头兵。

Public welfare is the foundation of people's happiness and social harmony. CCCC adheres to a people-centered approach, implements safety responsibilities, and creates high-quality projects; it prioritizes human development in all aspects, supports employees' growth, embraces an open and win-win philosophy, cooperates with various partners, actively participates in rural revitalization, and injects vitality into vast regions. It deeply integrates into community building, spreading warmth and harmony. We continually enhance the standard of living for the people, serving as a leading central enterprise in safeguarding public welfare.



“平安六一 你我童行”志愿服务活动

Volunteer service activity of "Safe Children's Day, Join with Us"

# 工程安全优质

## ENSURING QUALITY AND SAFETY IN ENGINEERING

### 治理

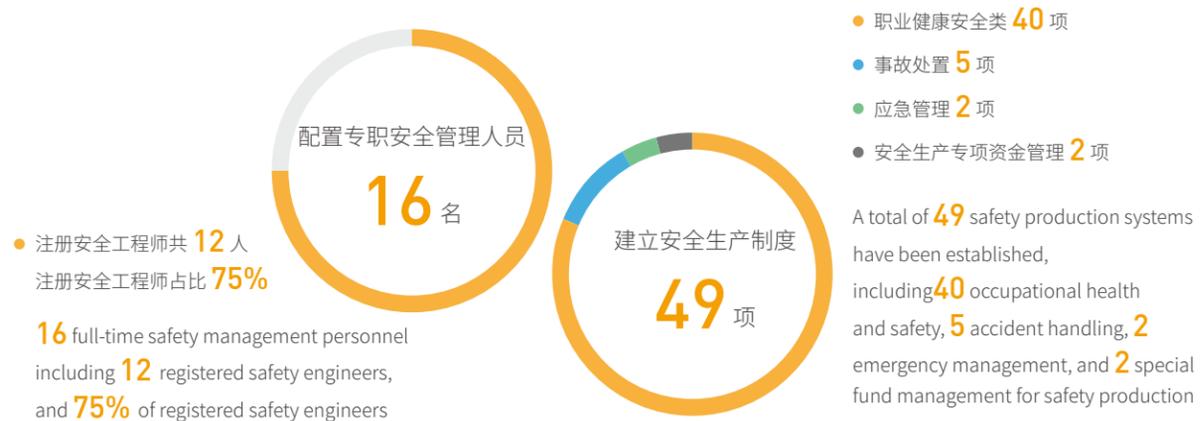
#### GOVERNANCE

安全生产委员会是公司职业健康安全监督管理工作的领导机构。安委会由公司领导及各部门、事业部主要负责人共同组成。董事长为安委会主任，总经理为执行主任，党委副书记、纪委书记、副总经理（副总裁）、总工程师、安全总监为副主任，各部门和事业部主要负责人为安委会成员。安委会下设办公室，负责安委会的日常工作，主要职责包括根据国家法律法规和职业健康安全政策及公司安委会的决定，组织安委会组成部门研究具体落实的措施和计划等。

The Safety Production Committee is the leading organizational body for occupational health and safety supervision and management within the company. It is comprised of company leaders and key personnel from various departments and business units, with the Chairman serving as the head of the committee, and the General Manager as the executive director. The Deputy Secretary of the Party Committee, Secretary of the Discipline Inspection Committee, Deputy General Managers (Vice Presidents), Chief Engineer, and Safety Director serve as deputy directors, with key personnel from departments and business units as members. The committee has an office responsible for its daily operations, which organizes the implementation of specific measures and plans in accordance with national laws, regulations, occupational health and safety policies, and the decisions of the Safety Committee.

公司总部设置独立安全管理机构，并配置 16 名专职安全管理人员，其中注册安全工程师共 12 人，注册安全工程师占比 75%。共建立安全生产制度 49 项，其中职业健康安全类 40 项、事故处置 5 项、应急管理 2 项、安全生产专项资金管理 2 项。所属企业均按照要求设置安全生产监督管理机构，总部对所属企业的安全生产监督管理机构设置考核。

The headquarters has an independent safety management organization with 16 dedicated safety management personnel, including 12 registered safety engineers, accounting for 75% of the team. A total of 49 safety production systems have been established, including 40 for occupational health and safety, 5 for accident handling, 2 for emergency management, and 2 for management of special funds for safety production. All affiliated companies are required to establish safety supervision and management organizations, with the headquarters assessing the setup of these organizations.



#### 关键制度列表 Key Regulatory Documents

《职业健康安全监督管理办法》	Occupational Health and Safety Supervision and Management Measures
《职业健康安全责任制规定》	Occupational Health and Safety Responsibility System Regulations
《安全风险分级管控和隐患排查治理管理办法》	Safety Risk Grading Control and Hidden Danger Inspection and Management Measures
《突发事件应急管理办法》	Emergency Management Measures
《突发事件报告及生产安全事故责任追究管理规定》	Emergency Reporting and Safety Accident Accountability Management Regulations
《重点项目高质量管理实施方案》	High-Quality Management Implementation Plan for Key Projects
《重点项目监督专项工作组组建方案》	Special Working Group Establishment Plan for Key Project Supervision

### 战略

#### STRATEGY

##### ◎ 管理筑基

##### ◎ Management Foundations

全面贯彻落实习近平总书记重要指示批示精神和国资委工作要求，践行“隐患就是事故”理念，通过系统推进安全生产治本攻坚三年行动，建立健全制度体系，强化关键人员管理，完善风险分级管控，从严从快事故处理，开展安全生产专项检查，强化重大事故隐患专项整治，多措并举实现高质量发展和高水平安全良性互动。

Fully implementing the spirit of General Secretary Xi Jinping's important instructions and the requirements of the State-owned Assets Supervision and Administration Commission and practicing the philosophy that "hidden dangers are accidents", the company systematically advances a three-year action plan to address the root causes of workplace accidents and ensure production safety. It establishes a comprehensive system, strengthens key personnel management, enhances risk grading controls, enforces stringent and swift accident handling, conducts special inspections for safety production, intensifies special rectifications for major accident hazards, and employs multiple measures to achieve high-quality development and a high level of safety in a mutually beneficial manner.

公司重视安全生产管理，认真吸取安全事故教训，编制《中国交建安全生产管理规章制度汇编》，逐级宣贯职业健康安全考核办法与职业健康安全奖罚办法。生产安全事故情况直接关联国资委对中国交建的考核评级，与公司高级管理人员的年度薪酬挂钩。

The company prioritizes safety management, earnestly learns from safety accident lessons, compiles the CCCC Safety Management Regulations Compilation, and thoroughly disseminates occupational health and safety assessment methods and reward and penalty measures. The safety accident situation is directly linked to the assessment and rating of CCCC by the State-owned Assets Supervision and Administration Commission of the State Council and is tied to the annual compensation of senior management.

此外，公司重视外包员工的健康与安全。健康与安全政策将安全生产管理体系延伸到供应商及承包商，监督供应商及承包商建立健全安全生产管理体系，落实全员安全生产责任。公司建立安全考核制度和黑名单、白名单、红名单制度，从风险管理、安全检查、应急处置、教育培训等方面对供应商及承包商进行管理、监督与评价。

Additionally, the company values the health and safety of outsourced employees. Its health and safety policy extends the safety management system to suppliers and contractors, overseeing their establishment of comprehensive safety management systems and implementing universal safety responsibilities. The company has established safety assessment systems and lists for black, white, and red categories, managing, supervising, and evaluating suppliers and contractors in risk management, safety inspections, emergency handling, and education and training.

公司制定了《职业健康安全考核办法》《安全生产、环境保护与职业健康、工程质量、节能减排督查办法》《安全监管评价办法》，对各单位职业健康安全进行考核，将承包分包管理作为管理考核指标，并将分包项目的日常安全生产与职业健康管理情况、劳务协作队伍评审情况、对分包商的监管情况作为监督检查内容，严格考核下属单位是否执行承包/分包安全管理制度，按相关规定选定合格的承包/分包单位，签订安全生产管理协议，按相关规定对承包/分包单位开展安全监督检查，对所属单位承包/分包管理情况进行检查。《职业健康安全考核办法》明确规定：在各项目的承包/分包管理中，要求各项目严格执行承包/分包安全管理制度；按相关规定选定合格的承包/分包单位，签订安全生产管理协议；按相关规定对承包/分包单位开展安全监督检查；对所属单位承包/分包管理情况进行检查。

The company has formulated the *Occupational Health and Safety Assessment Measures, Safety Production, Environmental Protection and Occupational Health, Engineering Quality, Energy Conservation and Emission Reduction Inspection Measures, and Safety Supervision Evaluation Measures*, assessing the occupational health and safety of all units, and including subcontractor management as a management assessment indicator. The company also includes the daily safety production and occupational health management of subcontracted projects, evaluation of labor collaboration teams, and supervision of subcontractors as part of the supervision and inspection content. It strictly assesses whether subordinate units implement the subcontracting safety management system, selects qualified contracting/subcontracting units according to regulations, signs safety production management agreements, conducts safety supervision inspections of contracting/subcontracting units according to regulations, and inspects the subcontracting management of subordinate units. The *Occupational Health and Safety Assessment Measures* specifically stipulate that each project must strictly implement the contracting/subcontracting safety management system; select qualified contracting/subcontracting units according to regulations, sign safety production management agreements, conduct safety supervision inspections of contracting/subcontracting units according to regulations, and inspect the contracting/subcontracting management of subordinate units.

### 调研项目现场

### Field research at project sites

- 对新疆乌尉公路包项目、重庆地铁 15 号线、盐田港项目及中国香港、新加坡等地区和项目开展安全质量管理体系调研工作，及时总结提炼工作成果，提升安全质量管理体系改进建议，促进项目现场安全质量管理体系提升。
- Field research on the safety and quality management systems has been conducted at various project sites, including the Xinjiang Urumqi-Yuli Expressway Project, Chongqing Metro Line 15, Yantian Port Project, and in regions like China's Hong Kong, and Singapore. The results were promptly summarized to enhance the recommendations for improving the safety quality management systems, thereby advancing the management systems at the project sites.

### 完善管理体系

### Enhancing management systems

- 完成对安全生产一类企业 49 家的安全监管评价，狠抓体系建设；制修订重大危险源监督管理办法、质量奖评选办法等制度 7 项，编制印发建筑废弃物填筑路基施工技术指南等 3 个指南手册，为开展安全环保管理工作提供标准指导；指导阿尔及利亚等 62 个境外组织组织的安委会与安全管理中心的建设，进一步支撑发挥境外“大安全、大应急”统筹机制效能。
- The company completed safety supervision evaluations for 49 Type I safety production enterprises, focusing on system construction. Seven systems, including the Major Hazard Source Supervision Management Method and Quality Award Selection Method, were revised or developed. Additionally, three guidelines, such as the Construction Technology Guide for Using Building Waste in Road Base, were compiled and published to standardize safety and environmental management. Guidance was also provided for the construction of the Safety Committees and Safety Management Centers in 62 foreign countries, including Algeria, further supporting the effectiveness of the "Broad Safety and Emergency" coordination mechanism abroad.

### 强化安全培训

### Strengthening safety training

- 开展二、三级单位主要负责人 4 期安全环保培训和安全总监、专职安全管理人员安全应急培训，累计培训 420 余人，大力提升“关键少数”安全责任意识。开展对《安全管理标准指南 1.0 版》再培训、再学习，将学习情况列入日常检查和安全监管评价必查项，狠抓工作落实。
- Four training sessions on safety and environmental protection were conducted for the principals of secondary and tertiary units, along with emergency training for safety directors and dedicated safety management personnel, training over 420 individuals in total. This aimed to enhance the safety accountability of "key individuals". Further training and re-learning of the Safety Management Standards Guide 1.0 were conducted, integrating learning outcomes into routine checks and safety supervision evaluations to ensure thorough implementation of practices.

### 强化信息赋能

### Enhancing information empowerment

- 与中国气象局在重大项目气象服务、气象观测站共建、信息技术服务等方面达成战略合作；持续推动应急管理平台（二期）建设，组织开展二三级单位、项目调研，了解不同层级、不同专业平台使用情况和二期建设需求，针对性改造预警推送、信息穿透、应急一张图等模块。
- Strategic cooperation was established with the China Meteorological Administration in areas such as major project meteorological services, joint construction of weather stations, and information technology services. The continuation of the Emergency Management Platform (Phase II) was promoted, organizing research across secondary and tertiary units and projects to understand the usage of different levels and professional platforms, and the construction needs of Phase II. This was aimed at targeted enhancements of modules such as warning delivery, information penetration, and integrated emergency response maps.

◎ 质量创优

◎ Quality Excellence

修订并印发质量奖评选办法和质量考核办法，细化创优评奖标准，加大优质工程建设和创优考核力度，激发优质工程建设内生动力。抓实质量创优提升三年行动，开展质量奖评选工作，严控优质工程、优秀设计项目和质量先进类奖项指标，提升创优创奖的质量水平。组织各单位参加行业协会设计水平评价、质量技术奖、铁路优质工程奖和质量信得过班组等评优活动，全方位做好优质工程建设。2024 年，公司未发生产品和服务相关的安全与质量重大责任事故。

Revisions were made and published to the Quality Award Selection and Quality Assessment Measures, refining the standards for excellence awards and intensifying the assessment of high-quality construction and excellence assessments to stimulate the internal dynamics of high-quality construction projects. A three-year action plan for enhancing quality excellence was implemented. The company carries out quality award evaluations, strictly controls indicators for high-quality engineering, outstanding design projects, and advanced quality awards to enhance the overall standards for excellence awards. Involving industry associations in evaluations of design levels, quality technology awards, railway quality engineering awards, and reliable quality team awards, to comprehensively promote high-quality construction. In 2024, the company did not have any major accidents related to product and service safety and quality.



影响、风险和机遇管理

IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

◎ 开展风险排查整改

◎ Conducting Risk Investigation and Rectification

各单位均建立了安全风险分级管控和隐患排查治理双重预防制度，建立重大风险管控清单，明确风险管控责任人，各单位每月在安全监管评价系统中对双控体系运行情况进行自评。针对涉及公司业务的公路运营领域、公路水运工程建设领域、极端恶劣天气及自然灾害风险防范、安全管理 4 个重点领域开展全面深入自查排查工作。对排查的风险严格落实管控措施，对排查的隐患立行立改、闭环整改。

All units have established a dual prevention system for safety risk classification control and hidden danger investigation and management, and a major risk control list that clearly assigns risk control responsibilities. Each unit conducts a self-assessment of the operation of the dual control system monthly within the safety supervision evaluation system. Comprehensive and in-depth self-inspections were carried out in four key areas related to the company's business: highway operation, highway and waterway project construction, extreme weather and natural disaster risk prevention, and safety management. Rigorous measures were enforced for identified risks and immediate rectifications were made for identified hidden dangers to ensure closed-loop rectifications.

1 十浙高速丹江口水库特大桥荣获国际桥梁及结构工程协会大型公路与铁路桥梁工程技术奖

The Shixi Expressway Danjiangkou Reservoir Bridge received the International Association for Bridge and Structural Engineering's Award For Large Highway and Rail Bridges

2 福厦高铁泉州湾跨海大桥荣获西奥多·库珀奖（铁路桥奖）和菲迪克卓越奖

The Fuzhou-Xiamen High-Speed Railway and the Quanzhou Bay Cross-Sea Bridge received the Theodore Cooper Award (Railway Bridge Award) and the FIDIC Award of Excellence

3 几内亚苏阿皮蒂水利枢纽项目荣获境外“鲁班奖”

Guinea's Souapiti Hydropower Project won the International "Luban Award"

◎ 提升应急处突能力

◎ Enhancing Emergency Response Capabilities

设立应急领导小组，并下设应急领导小组办公室。应急领导小组组长由公司董事长担任，设常务副组长，由公司总裁担任，副组长由公司分管生产经营、安全生产、海外业务和行政后勤等副职领导担任，并明确一位分管安全生产领导具体分管应急领导小组的日常工作，成员由董事会秘书、各部门主要负责人组成。应急领导小组下设应急办，应急办设在公司安全质量环保监督部，为公司应急管理工作的综合协调机构。

An emergency response leadership team was established, with the company chairman serving as the team leader and the president as the deputy leader. Other deputy leaders included vice-presidents in charge of production, safety production, overseas business, and administrative logistics. A specific safety production leader was designated to manage the day-to-day operations of the emergency response team, with members including the board secretary and heads of various departments. The Emergency Office was set up within the Safety, Quality, and Environmental Protection Supervision Department, serving as the comprehensive coordination agency for the company's emergency management.

制定《突发事件应急管理办法》《突发事件总体应急预案》等管理办法和应急预案，要求应急预案编制遵循统筹考虑、分类编制、分级负责、动态管理的原则，分为总体（综合）应急预案、专项应急预案和现场处置方案，形成“横向到边、纵向到底、上下对应、内外衔接”的应急预案体系。公司及各单位每年制定应急预案演练计划，定期组织应急演练。

The company has formulated *Emergency Management Measures* and *General Emergency Response Plans* among other management measures and emergency plans. These plans are required to adhere to principles of comprehensive consideration, categorized formulation, tiered responsibility, and dynamic management, dividing into general (comprehensive) emergency plans, specialized emergency plans, and on-site handling schemes, creating an emergency response system that is extensive, vertically integrated, and thoroughly coordinated internally and externally. The company and all units annually establish emergency response drill plans and routinely organize emergency drills.



三航局六公司开展厦门地铁建设工程防灾减灾应急演练

The Sixth Company of CCCC Third Harbor Engineering Company conducted an emergency drill for disaster prevention and reduction at the Xiamen Metro Construction Project

指标与目标

INDICATOR AND OBJECTIVE

工伤保险人员覆盖率 (%)  
Workplace injury insurance coverage rate (%)



安全风险防护培训覆盖率 (%)  
Safety risk protection training coverage rate (%)



因健康与安全原因召回的产品数量 (个)  
Number of products recalled for health and safety reasons (Pieces)



因健康与安全原因召回的产品百分比 (%)  
Percentage of products recalled for health and safety reasons (%)



报告期内发生的产品和服务相关的安全与质量重大责任事故损害涉及的金额 (万元)  
Amount involved in damages from major safety and quality accidents related to products and services during the reporting period (RMB ten thousand)



# 员工成长成才

## FACILITATING EMPLOYEE GROWTH AND TALENT DEVELOPMENT

### 治理

#### GOVERNANCE

公司持续完善员工责任管理体系，持续做优所属企业人才管理建议书机制，按年度对子企业开展管理诊断、明确提升目标，将员工责任工作纳入各级管理层责任分工；发布《人力资源管理手册》，创刊《组织人事工作交流》，持续打造更完善更高效的管理支撑体系。持续推进并不断完善以职代会为基本形式的民主管理制度，积极推进公司民主化管理进程，保障广大职工的知情权、参与权、表达权和监督权；不断提高职代会的质量和职工代表参政议政能力，积极收集并反馈民主决策中职工的意见、诉求，全面增强公司决策的民主性、科学性和可行性。

The company continuously improving the employee responsibility management system and enhancing the talent management suggestion mechanism for subsidiaries. Annual management diagnostics are conducted for subsidiary companies to set clear improvement targets, integrating employee responsibility tasks into the responsibility division of all management levels. *Human Resources Management Manual* has been published, and the *Organizational Personnel Work Exchange* has been launched, continually developing a more comprehensive and efficient management support system. The company persistently advances and refines the democratic management system primarily through the Workers' Representative Conferences, actively promoting the democratization of management and safeguarding employees' rights to know, participate, express, and supervise; continuously enhancing the quality of these conferences and the political participation capabilities of worker representatives, actively collecting and addressing employees' feedback and demands in democratic decisions, thus significantly enhancing the democracy, scientific basis, and feasibility of company decisions.

#### 关键制度列表 Key Regulatory Documents

《人力资源管理手册》	<i>Human Resources Management Manual</i>
《2024—2025 “人才强基” 工作实施意见》	<i>2024—2025 "Talent Strong Foundation" Implementation Opinions</i>
《厂务公开实施办法》	<i>Factory Affairs Transparency Implementation Measures</i>
《海外员工薪酬福利指导意见》	<i>Guiding Opinions for Overseas Employee Compensation and Benefits</i>
《海外员工休假管理办法》	<i>Overseas Employee Leave Management Measures</i>
《企业领导人员薪酬管理办法》	<i>Enterprise Leadership Compensation Management Measures</i>
《员工绩效考核工作指引》	<i>Employee Performance Evaluation Guidelines</i>

### 战略

#### STRATEGY

#### ◎ 权益保障

#### ◎ Rights Protection

我们尊重和维持国际公认的各项人权，坚决不参与任何漠视与践踏人权的行。公司承诺的议题包括但不限于人口贩卖、强迫劳动、童工、结社自由、集体谈判权、同工同酬、歧视等。公司不仅对自身的生产运营活动提出要求，同时将上述因素纳入对供应商和合作伙伴的考察中。

We respect and uphold internationally recognized human rights and firmly abstain from any involvement in actions that disregard or violate human rights. Commitments include, but are not limited to, issues such as human trafficking, forced labor, child labor, freedom of association, collective bargaining, equal pay for equal work, and discrimination. The company not only sets standards for its own production and operational activities but also integrates these factors into the evaluation of suppliers and partners.

公司严格遵守《中华人民共和国劳动法》《中华人民共和国劳动合同法》及相关国家的劳动法律法规，制定规范化的员工招聘管理办法，搭建统一的员工招聘管理平台，坚持以公开、公正、竞争、择优为原则进行人才招聘，坚决杜绝针对国籍、性别、年龄、孕残的歧视行为，严禁雇用童工，平等对待全体员工，致力为员工提供平等、多元、包容的职场环境。严格执行工作时间和休息休假制度，依规保障女性职工、患病员工权益；对员工的个人信息严格做好保密管理工作，保护员工的个人信息和隐私权，积极践行人文关怀，持续提升员工满意度，为企业可持续发展奠定基础。

The company strictly adheres to the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, and related labor laws and regulations of other countries, establishing standardized employee recruitment management measures and creating a unified recruitment management platform. Recruitment is based on the principles of openness, fairness, competition, and merit, firmly eliminating discrimination based on nationality, gender, age, or disabilities, and strictly prohibiting child labor. We are committed to providing an equal, diverse, and inclusive workplace environment. Strict adherence to working hours and rest policies is maintained, and the rights of female and sick employees are protected as per regulations; employee personal information is confidentially managed to protect their privacy rights, actively practicing humanitarian care and continuously enhancing employee satisfaction, laying the foundation for sustainable corporate development.

2024 年，公司坚持合法合规用工，新进入人员 100% 公开招聘；采用线上线下相结合形式开展员工政策宣贯，有效帮助员工了解企业管理动态及自身合法权益。报告期内，未发生任何歧视、雇用童工或强迫劳动的争议事件。

In 2024, the company adhered to legal and compliant employment practices, with 100% of new hires recruited openly; employee policies were disseminated both online and offline, effectively helping employees understand corporate management updates and their legal rights. During the reporting period, there were no incidents of discrimination, employment of child labor, or forced labor.



中国交建 2025 届全球校园招聘会上海大学专场  
CCCC 2025 Global Campus Recruitment at Shanghai University



二分局坦桑尼亚分公司“2024 中交校园招聘会”活动  
Tanzania Branch of CCCC Second Highway Engineering Company held the "2024 CCCC Campus Recruitment Event"

◎ 职业发展

◎ Career Development

构建 M-P-PM-S 多序列（管理、技术、项目、技能）职业发展通道，分类分级开展职级认定工作，引导人才队伍专业化发展；围绕公司国际化升维，制定《海外属地化员工职级管理办法》，拉通海内外职级体系，致力打造一支具有国际竞争力的人才队伍。持续推动全级次总部与基层单位员工双向交流，推进境内外交流，形成制度化培养机制，增强多岗位历练和解决问题能力，提升人才综合素质。

The company has established M-P-PM-S multi-sequence (Management, Technical, Project, Skills) career development channels, conducting classified and tiered job level identification work to guide professional development of the talent pool; focusing on the company's internationalization efforts, the Overseas Localized Employee Job Level Management Measures have been developed, bridging domestic and international job level systems, aiming to build a globally competitive talent force. Continuous promotion of bilateral exchanges between headquarters and grassroots unit employees, both domestically and internationally, has established a systematic training mechanism, enhancing multi-position experience and problem-solving capabilities, thus improving the overall quality of talents.

在“十四五”期间，公司大力推进技能和人才发展“育才”工程，建立覆盖各级各类员工的全面教育培训体系，通过培训班、网络课程、海外交流、技能竞赛等多种渠道，为员工提供科学、系统、差异化的培训，集聚人才，加快世界一流企业建设。目前，公司同时实行多项人才培养计划，包含“鲲鹏工程”“鹰隼工程”等，为企业在市场竞争中占据优势提供坚实的人才支撑。

During the "14th Five-Year Plan" period, the company vigorously promoted the "Talent Cultivation" project, establishing a comprehensive education and training system covering all levels and types of employees, providing scientific, systematic, and differentiated training through classes, online courses, international exchanges, and skills competitions, gathering talents and accelerating the construction of a world-class enterprise. Currently, the company implements multiple talent cultivation plans, including the "Kunpeng Project" and "Eagle Falcon Project", providing solid talent support for the company to gain advantages in market competition.

◎ 教育培训

◎ Education and Training

公司长期致力于加强培训资源共建共享，打造中青班、企业领导人员班、技能人才高端培训班等特色培训品牌。聚焦新质生产力，开展人工智能、低空经济、深海深地系列专题培训；围绕业务转型与项目履约，举办水利、房建等转型业务示范班，集中组织一级建造师、注册安全工程师等职业资格考前培训，组织开展全级次、全覆盖安全生产管理培训。加强中交网院“大平台+小专区”建设，丰富完善关键岗位课程体系，大力推进内训师队伍建设。



二公局举办工程测量员职业技能竞赛  
CCCC Second Highway Engineering Company hosted an Engineering Surveyor Professional Skills Competition

The company is committed to strengthening the co-construction and sharing of training resources, creating distinctive training brands such as the Youth Class, Corporate Leaders Class, and High-End Skills Talent Class. Focusing on new quality productive forces, specialized training sessions on artificial intelligence, low-altitude economy, and deep-sea and underground topics are conducted; around business transformation and project compliance, classes on transformation businesses such as water conservancy and building construction are held, centrally organizing pre-exam training for professional qualifications like first-level construction engineers and registered safety engineers, and conducting comprehensive safety production management training covering all levels. Enhancements to the CCCC Online Academy's "Large Platform + Special Areas" construction are pursued, enriching and perfecting the course system for key positions, and vigorously advancing the development of the internal trainer team.



中交城投举办第二十期中层管理人员素质提升高级研修班  
CCCC Urban Investment organized the 20th Middle Management Personnel Quality Enhancement Advanced Training Class

建设首个产业工人队伍培训基地

Establishment of the first industrial workers training base



2024 年 12 月 11 日，公司举行首个产业工人队伍培训基地揭牌仪式暨产业工人队伍建设调研座谈会。建设产业工人队伍培训基地是公司贯彻落实习近平总书记关于产业工人队伍建设改革的重要指示精神的有力举措，是培养产业工人队伍的重要抓手，对于提升公司内部人才供给保障水平，推动公司高质量发展具有重要意义。

On December 11, 2024, the company's first industrial workers training base and the industrial workers construction research symposium was held in Xi'an. The establishment of this training base is a powerful measure in implementing the important instructions made by General Secretary Xi on the reform of the industrial workers' team. It serves as a crucial lever in cultivating an industrial workforce, significantly enhancing the internal talent supply and propelling high-quality development of the company.



努力培育产业工人队伍懂技术、会创新  
Strive to cultivate a skilled and innovative industrial workforce

设立首个属地员工技能培训基地

Establishment of the first local employee skills training base



当地时间 2024 年 9 月 22 日，中国交建肯尼亚属地员工技能培训基地揭牌仪式在肯尼亚首都内罗毕隆重举行。该基地是中国交建在海外设立的首个技能培训基地，标志着公司在属地化人才培养领域迈出了重要一步。培训基地将通过培养一批高素质的技能人才，助力公司培养一支规模适当、满足需求、素质优良、长期稳定的属地化技能人才队伍，为高质量打造世界一流企业、推动构建高水平中非命运共同体作出新的更大贡献。

On September 22, 2024, the unveiling ceremony of CCCC's first overseas skills training base was held in Nairobi, Kenya. This base marks a significant step in the company's efforts in local talent cultivation, aiming to train high-quality skilled personnel. This initiative supports the development of a scalable, demand-responsive, high-quality, and long-term stable local talent pool, making new contributions to the company's ambition to become a technology-based, management-oriented, and quality-oriented world-class enterprise and to foster a high-level China-Africa community of a shared future.

薪酬激励

Compensation Incentives

公司聚焦价值创造，按照市场化机制持续完善薪酬激励体系，让员工干事有劲头、企业发展显活力。推进岗位契约化管理，根据不同岗位价值要素，设计差异化的薪酬结构、标准等级，合理设置考核指标和权重，科学评价员工价值贡献，确保薪酬激励与市场化业绩基准相匹配。多领域扩围中长期激励，在科技创新和战新业务领域推进科技型企业股权与分红激励、战新业务项目跟投，将中国交建限制性股票激励计划激励范围向高层次科技研发、项目管理、高技能人才延伸覆盖，实现企员共享发展成果。

The company focuses on value creation, continuously refining the compensation and incentives system according to market mechanisms, ensuring employees are motivated and the company remains dynamic. Advancements in job contractual management are made by designing differentiated compensation structures and standards based on the value elements of different positions, setting reasonable assessment indicators and weights, scientifically evaluating employee contributions, and aligning compensation incentives with market performance benchmarks. The scope of long-term incentives is expanded across multiple fields, pushing forward equity and dividend incentives in technology innovation and strategic new business areas, and involving employees in new project investments. The scope of CCCC's restricted stock incentive plan is extended to cover high-level technology research and development, project management, and high-skilled talents, facilitating shared development outcomes between the company and its employees.

职业健康

Occupational Health

公司通过实施全面的健康与安全管理体系，将职业健康风险降至最低。制定健康与安全标准，适用于所有承包商及外包人员，包括但不限于：提供必要个人防护用品、进行定期的安全培训和教育、确保工作场所符合职业健康法规等。

The company implements a comprehensive health and safety management system to minimize occupational health risks. Health and safety standards are established, applicable to all contractors and outsourced personnel, including but not limited to providing necessary personal protective equipment, conducting regular safety training and education, and ensuring workplace compliance with occupational health regulations.

风险辨识

Risk identification

- 将职业病风险评估作为项目风险辨识的重要组成部分，定期对作业员工在生产、作业过程中可能对自身健康和劳动能力产生影响的职业性有害因素充分进行辨识，编制《职业病危害因素清单》，制定职业病防治工作方案。
- Occupational disease risk assessment is an integral part of project risk identification. CCCC regularly identifies occupational hazards that may impact the health and working capacity of employees during production and operations, compiles an *Occupational Disease Hazard Factors List*, and develops occupational disease prevention and control plans.

危害告知

Hazard notification

- 将职业病风险告知纳入进场教育培训内容，告知工人在工作过程中可能产生的职业危害及防范措施。在项目施工过程中，充分利用班前会、宣传栏、培训学习、知识问答等多种形式，宣传《中华人民共和国职业病防治法》等相关法律法规及职业病防治知识。
- Occupational disease risk notifications are included in induction training, informing workers of potential occupational hazards and prevention measures during work. Throughout project construction, various measures such as pre-shift meetings, notice boards, training sessions, and knowledge quizzes are utilized to promote the *Prevention and Control of Occupational Diseases Law of the People's Republic of China* and other relevant laws and regulations, as well as knowledge on occupational disease prevention.

劳动防护

Labor protection

- 按照接触职业危害因素的不同，为作业员工配备合格的个人劳动防护用品，加强个体防护，建立防护用品台账，同时加大现场监督力度，保障每一位作业人员都能够正确使用防护用品，为员工建立自身安全防线。
- According to different occupational hazard factors, qualified personal protective equipment is provided to workers, strengthening individual protection, establishing a protective equipment ledger, and enhancing on-site supervision to ensure every worker correctly uses protective gear, establishing a personal safety line for employees.

全年职业健康档案覆盖率达

100%

Annual occupational health records coverage rate reached 100%

取得 GB/T 45001、ISO 45001 职业健康安全管理体系认证证书，该认证覆盖中国交建全部业务，覆盖率为

100%

Received GB/T 45001 and ISO 45001 Occupational Health and Safety Management System certification, covering all of CCCC's operations, with a coverage rate of 100%



索通产业人才公寓  
Sunstone Industrial Talent Apartment



二公局开展职业健康技能竞赛  
CCCC Second Highway Engineering hosted the Occupational Health Skills Competition

### ◎ 员工关爱

### ◎ Employee Care

加强职工人文关怀，建立健全职工服务保障体系，大力推广首批 20 个工会服务职工优质示范项目做法；召开在京劳模先进、科技工作者新春慰问座谈会，下发困难职工慰问金 73.4 万元，筹措 3200 万元在两节慰问 3.4 万名职工和 600 余名劳模先进；为 158 名困难职工发放在京单位职工救助基金 138.6 万元。广泛开展单身青年联谊、子女托管班、职工集体婚礼等活动，帮助员工实现工作生活平衡。

The company enhances its support for workers by improving the employee service guarantee system and actively promoting the first 20 union service projects aimed at providing high-quality services for workers. CCCC held a New Year's symposium for model workers and technology workers in Beijing, distributing funds of RMB 734,000, raising RMB 32 million for festival support for 34,000 employees and over 600 model workers, distributing RMB 1.386 million from the Beijing Units' Employee Assistance Fund to 158 employees in need. Various activities such as young workers social mixers, children's daycare classes, and collective weddings for employees are extensively carried out, helping employees achieve a work-life balance.



职工集体婚礼  
Collective wedding ceremony for employees



为员工举办生日会  
Employee birthday celebration



第七届“缘来你也在这里”青年职工联谊活动  
7th "You Are Here Too" Young Workers Networking Event



第五届男子篮球暨女子啦啦操大赛  
5th Men's Basketball and Women's Cheerleading Competition

## 影响、风险和机遇管理

## IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

人力资源是企业最核心的资源，在劳动密集型的建筑行业尤为如此。核心技术与管理人才流失可能引发项目进度的延误，人才结构不合理会成为公司业务拓展与转型升级道路上的绊脚石，对公司的正常运营与市场竞争力造成负面影响。随着国家产业升级的持续推进，数字化、智能化等前沿领域涌现出大量发展契机。中国交建凭借自身的行业影响力与平台优势，能够吸引和培育一批适应时代发展需求的新型人才，为公司注入新鲜血液与创新活力，打造稳定且高素质的人才队伍。

Human resources are the most critical assets for companies, especially in the labor-intensive construction industry. The loss of core technology and management talent could delay project progress, and an irrational talent structure could become an obstacle in the company's path toward business expansion and transformational upgrades, negatively affecting normal operations and competitive edge in the market. With the continued advancement of national industry upgrades, numerous opportunities have arisen in cutting-edge fields such as digitalization and intelligence. CCCC leverages its industry influence and platform advantages to attract and cultivate a new generation of talents suited to modern developmental needs, injecting fresh vitality and innovative energy into the company, and building a stable, high-quality workforce.

面对上述风险与机遇，中国交建积极布局，构建起一套全方位、多层次的应对体系。引入先进的大数据分析技术，搭建动态人才风险评估机制，实时监测员工离职倾向、人才结构健康度等关键指标，对潜在风险提前发出预警，制定针对性的应对策略。在培训管理方面，完善需求调研流程，深入了解员工的职业规划与公司战略目标，精准定制培训内容。与业内知名专业机构开展深度合作，充分利用其优质资源确保培训质量，并通过培训效果跟踪反馈机制，及时调整和优化培训方案，实现培训效果的最大化。主动对接产业升级需求，深入挖掘和培养相关领域的优秀人才。加强与高校、科研机构的产学研合作，建立起人才联合培养与输送机制，拓宽人才引入渠道，实现公司与员工在可持续发展道路上的携手共进、互利共赢。

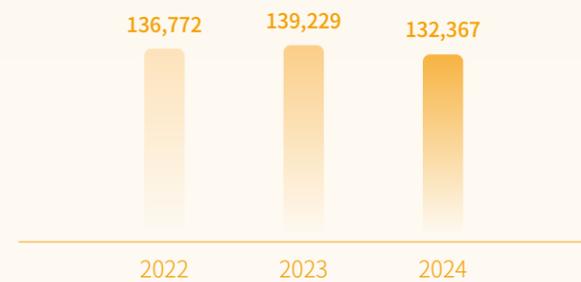
Faced with these risks and opportunities, CCCC actively strategizes, creating a comprehensive, multi-level response system. Advanced big data analytics technologies are introduced to establish a dynamic talent risk assessment mechanism, continuously monitoring key indicators such as employee turnover tendencies and the health of the talent structure, issuing early warnings for potential risks, and devising targeted response strategies. In training management, the needs assessment process is refined to deeply understand employees' career plans and the company's strategic goals, customizing training content precisely. Deep cooperation with renowned professional institutions in the industry is pursued, fully utilizing their high-quality resources to ensure training quality, and through training effect tracking and feedback mechanisms, training schemes are timely adjusted and optimized to maximize training outcomes. Proactively aligning with industry upgrade demands, the company digs deep and cultivates outstanding talents in relevant fields. Strengthening cooperation with universities and research institutions in industry-academic-research collaboration, a joint talent cultivation and delivery mechanism is established, broadening channels for talent introduction, achieving mutual progress and win-win outcomes in sustainable development for the company and its employees.

## 指标与目标

### INDICATOR AND OBJECTIVE

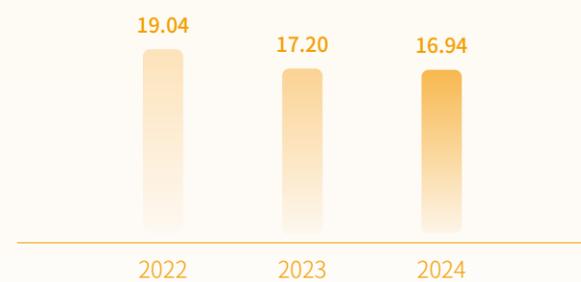
#### 员工总数 (人)

Total number of employees (Person)



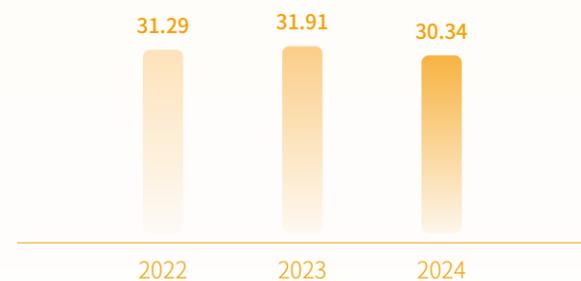
#### 全体员工中女性比例 (%)

Percentage of women among all employees (%)



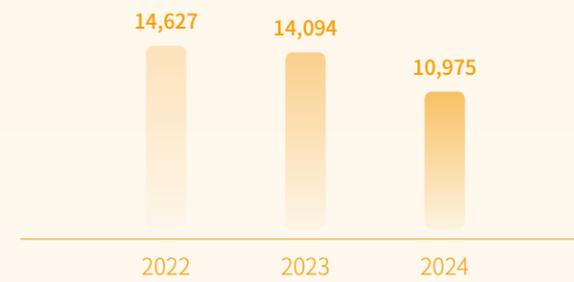
#### 女性在所有管理职位中所占的比例 (%)

Percentage of women in all management positions (%)



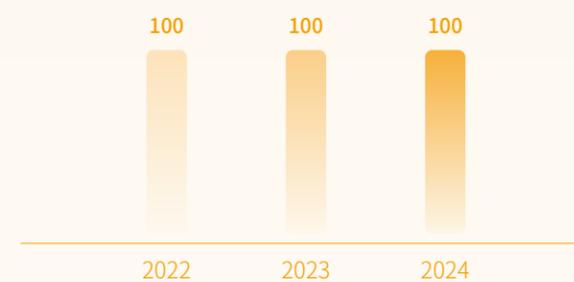
#### 报告期内吸纳就业人数 (人)

Number of employees hired during the reporting period (Person)



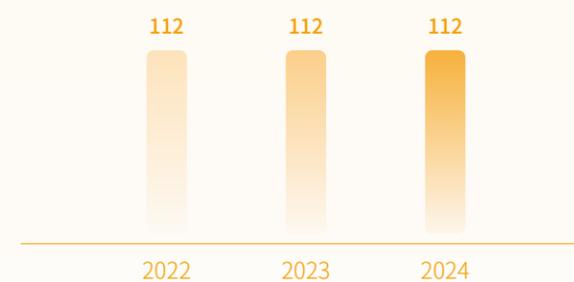
#### 社会保险覆盖率 (%)

Social insurance coverage rate (%)



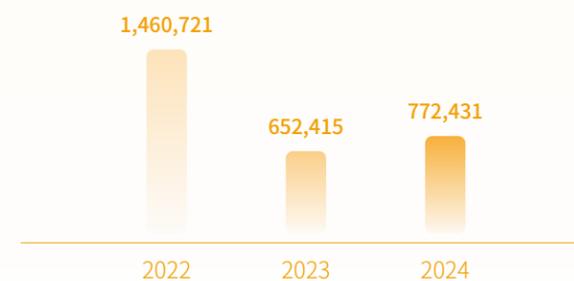
#### 员工平均培训时间 (小时)

Average training hours per employee (Hours)



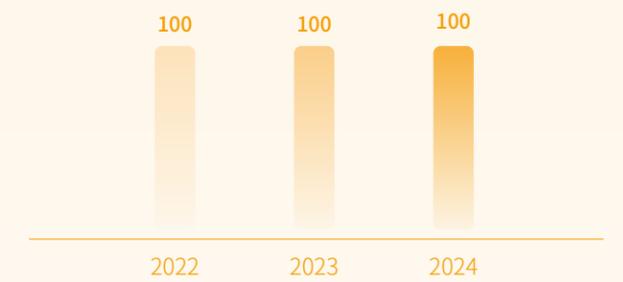
#### 员工培训次数 (次)

Number of employee training sessions (Times)



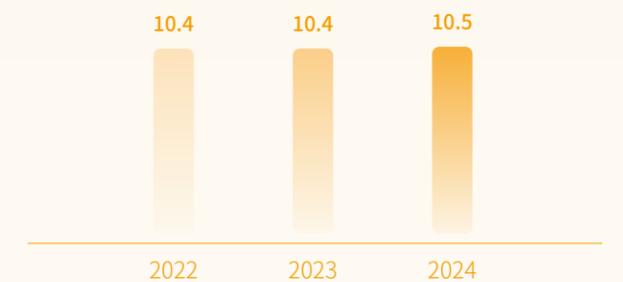
#### 劳动合同签订率 (%)

Labor contract signing rate (%)



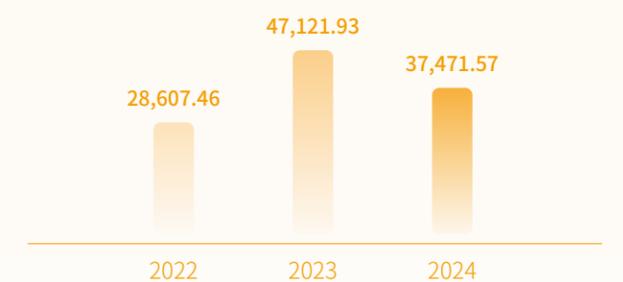
#### 人均带薪年假天数 (天)

Average annual paid leave days per employee (Days)



#### 员工培训支出总额 (万元)

Total expenditure on employee training (RMB ten thousand)



# 伙伴合作共赢

## PARTNERING FOR MUTUAL SUCCESS

### 治理

#### GOVERNANCE

对市场经营体系进行全面评估与高效修订，形成具有前瞻性和实用性的“1+N+X”制度体系，确保市场经营管理的科学性与实用性，为公司的稳健发展提供了坚实的制度保障。成功获取 2 个特级资质，使公司整体资质水平得到了提升。

A comprehensive assessment and efficient revision of the market management system were conducted, forming a forward-looking and practical "1+N+X" system architecture that ensures the scientific and practical nature of market operations management, providing a solid institutional guarantee for the company's stable development. The successful acquisition of two top-level qualifications has enhanced the overall qualification level of the company.

#### 关键制度列表 Key Regulatory Documents

《合作单位黑名单和重点关注名单管理办法》

Management Measures for Cooperation Unit Blacklists and Key Watchlists

### 战略

#### STRATEGY

#### ◎ 深化战略合作

#### ◎ Deepening Strategic Cooperation

签署 35 份战略合作协议，涵盖多个领域，为公司的业务发展提供有力支撑。项目类协议的签署不仅推动了项目的落地实施，还储备了一大批战略合作项目。同时，公司建立 96 家客户名单，明确对接联系责任部门，其中 41 家已建立战略合作关系，进一步巩固和扩大“朋友圈”。

CCCC signed 35 strategic cooperation agreements, covering various fields, providing strong support for the company's business development. The signing of project-related agreements not only facilitated the implementation of projects but also reserved a large batch of strategic cooperative projects. Moreover, the company established a list of 96 clients, clearly assigning responsible departments for interaction, among which 41 have established strategic cooperation relationships, further solidifying and expanding the company's "circle of friends".

#### ◎ 参与行业交流

#### ◎ Participating in Industry Exchanges

参与 36 次重要活动，如中法城市可持续发展论坛、世界 500 强对话湖北活动等，公司品牌形象得到广泛传播。同时在微信公众号发布大量关于公司品牌、业务、文化等方面的文章，关注人数持续增长，不仅提升了公司的知名度和美誉度，还为公司的市场拓展和业务合作提供了有力支持。

CCCC participated in 36 significant events, such as the Urban Sustainable Development Forum between China and France and the Global Fortune 500 Dialogue in Hubei, widely disseminating the company's brand image. Additionally, numerous articles about the company's brand, business, and culture were published on its WeChat public account, steadily increasing followers, enhancing the company's reputation, and providing strong support for market expansion and business cooperation.



## 影响、风险和机遇管理

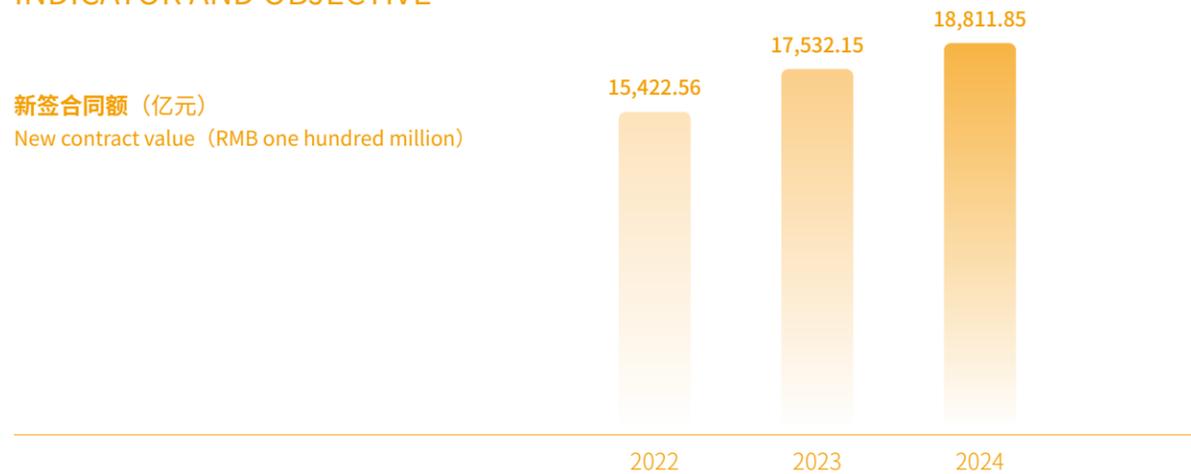
### IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

市场环境的复杂性使得合作充满变数，经济形势波动、政策法规调整都可能打乱合作节奏。若合作方在技术能力、财务状况或信誉方面存在问题，可能引发工程质量隐患、资金链断裂或违约纠纷，严重影响项目推进。因此，我们建立完善《合作单位黑名单和重点关注名单管理办法》，遵循依法依规、公平公正、问题导向、预防为主原则，保护公司采购、分包、设备租赁、咨询服务等领域商务合作中合同各方的正当权益，预防和治理破坏社会经营正常秩序的不诚信行为及商业贿赂等不廉洁行为；对经认定存在不诚信及不廉洁行为被列入公司黑名单和重点关注名单的市场主体施行“一处失信、处处受限”联合惩戒，在全公司、全业务领域实施全面禁入或者重点监管措施，以维护风清气正、公开透明的市场环境。在合作过程中，建立动态风险监测机制，实时跟踪市场变化和合作方动态，及时调整合作策略，将风险化解在萌芽状态，充分把握合作机遇，实现互利共赢。

The complexity of the market environment makes cooperation full of uncertainties, with economic fluctuations and regulatory adjustments potentially disrupting the rhythm of cooperation. If partners have issues with technical capabilities, financial conditions, or credibility, it could lead to potential engineering quality risks, financial disruptions, or contract disputes, severely affecting project progress. Therefore, we have established and perfected the *Management Measures for Cooperation Unit Blacklists and Key Watchlists*, following the principles of legality, fairness, problem orientation, and prevention. This protects the legitimate rights and interests of all parties involved in the company's procurement, subcontracting, equipment leasing, and consulting services, preventing and managing acts of dishonesty and commercial bribery that disrupt the normal social operational order. Entities identified with dishonesty and unethical behaviors are included in the company's blacklist and key watch list, subject to a "one breach, restrictions everywhere" joint disciplinary action, implementing comprehensive entry bans or focused monitoring measures across all company operations and business areas to maintain a clean, open, and transparent market environment. During cooperation, a dynamic risk monitoring mechanism is established, constantly tracking market changes and dynamics of partners, timely adjusting cooperation strategies, resolving risks at their inception, fully seizing cooperation opportunities, and achieving mutual benefits.

## 指标与目标

### INDICATOR AND OBJECTIVE



## 乡村全面振兴

### COMPREHENSIVE REVITALIZATION OF RURAL AREAS

## 治理

### GOVERNANCE

公司将乡村振兴纳入“十四五”战略规划，完善顶层设计，坚持“中央所托、地方所需、中交所能”原则，秉承真心实意、真金白银、真抓实干的“三真”帮扶精神，建立“351”定点帮扶工作体系，统筹开展“中交助梦”系列行动，助力巩固拓展脱贫攻坚成果、推进乡村全面振兴。

The company has integrated rural revitalization into its "14th Five-Year" strategic planning, refining the top-level design, adhering to the principles of "Honoring the Central Government's Trust, Meeting Local Needs, and Striving for Excellence at CCCC", and embracing the "three genuine" support spirit of genuine commitment, substantial investment, and practical actions. A "351" targeted assistance work system was established, coordinating the "Build Your Future Dream" series of actions to consolidate and expand the achievements of poverty alleviation and promote comprehensive rural revitalization.

#### 关键制度列表 Key Regulatory Documents

《“中交助梦”行动方案》

Action Plan for "Build Your Future Dream"

## 战略

### STRATEGY

#### ◎ 产业振兴

#### ◎ Industrial Revitalization

全年投入产业帮扶资金 7700 万元，有效拓宽帮扶地区振兴渠道。建好中交怒江建筑产业园，全年完成建筑业产值 73.01 亿元，占怒江建筑业总产值的 62.85%，联动解决 7760 名人员务工；截至 2024 年，产业园贡献建筑业产值 112.9 亿元，上缴税金 1.1 亿元，带动怒江州建筑业产值增速连续三年蝉联云南省第一。支持农特产业发展，帮助怒江州发展苹果加工、特色养殖等集体经济，助力怒江香料产业园发展绿色产业，扶持 20 个农村合作社、帮扶车间发展。支持文旅产业发展，连续 8 年赞助“中国交建杯”怒江皮划艇野水公开赛，助力英吉沙县乌恰镇发展以婚庆为主题的农文旅融合项目。



中交溪湾湾农文旅综合示范园

CCCC Xiwang Bay Agro-Cultural-Tourism Comprehensive Demonstration Garden

Throughout the year, the company invested RMB 77 million in industrial assistance funds, effectively broadening the revitalization channels in the assisted areas. The CCCC Nujiang Industrial Park of Construction achieving an annual construction industry output value of RMB 7.301 billion, accounting for 62.85% of Nujiang's total construction industry output, providing jobs for 7,760 individuals. As of 2024, the industry park contributed RMB 11.29 billion to the construction industry output, with taxes paid amounting to RMB 110 million, driving Nujiang Lisu Autonomous Prefecture's construction industry growth to lead Yunnan for three consecutive years. CCCC supported the development of specialty agricultural industries, aiding Nujiang Lisu Autonomous Prefecture in developing Tsaoko processing and specialty breeding, boosting the Nujiang Spice Industry Park's development into green industries, supporting 20 rural cooperatives, and aiding workshops. The company supported the cultural and tourism industry, sponsoring the "CCCC Cup" Open Tournament for Kayak of Nujiang River in Wild Water for eight consecutive years, assisting Wuqia Town, Yingjisha County in developing a wedding-themed agro-cultural-tourism integration project.



“中国交建杯” 2024 中国怒江皮划艇野水国际公开赛  
"CCCC Cup" 2024 Open Tournament for Kayak of Nujiang River in Wild Water



一公局集团七鲤古镇创新开展“助农采摘+合作基地+脐橙旅游套票”农旅融合活动

CCCC First Highway Engineering Group innovatively carried out "Agricultural Picking + Cooperative Base + Navel Orange Tourism Package" agro-tourism integration activities in Qili Ancient Town



三航局六公司根据达友村茶产业发展所需，着力推动茶园“产业路”提升改造

The Sixth Company of CCCC Third Harbor Engineering Company focused on the needs of Dayou Village's tea industry, actively promoting the "Industry Road" enhancement and transformation for tea gardens

### 人才振兴

#### Talent Revitalization

全年无偿投入教育人才帮扶资金 6127 万元，援建中交兰坪翠屏九年一贯制学校、贡山县丙中洛中学宿舍楼和教学楼等，广泛设立“中交奖学金”“中交园丁奖”等奖学金教金，2024 年怒江州民族中学“中交班”50 名同学高考成绩均超云南省一本线。助力培养综合人才，全年培训基层干部 12177 人、乡村振兴带头人 952 人次、技术人员 3142 人次。

Throughout the year, a total of RMB 61.27 million was voluntarily invested in educational talent support funds. Significant projects include the construction of the CCCC Nine-year System School in Cuiping, Lanping, the Gongshan Bingzhongluo Middle School dormitory and classroom buildings, among others. Scholarships such as the "CCCC Scholarship" and "CCCC Teacher Reward" were extensively set up, with all 50 students of the "CCCC Class" at the Ethnic Middle School of Nujiang Lisu Autonomous Prefecture in 2024 scoring above the Yunnan Province's first-tier university admission line. The company has also assisted rural areas in nurturing well-rounded talents, providing training for 12,177 grassroots cadres, 952 leaders of rural revitalization, and 3,142 technicians throughout the year.

感谢中交的资助和帮扶，让我走出大山，圆了上大学的梦。我一定会好好学习，来回报社会的关心关爱。

Thanks to CCCC's funding and support, I was able to leave the mountains and fulfill my dream of attending university. I will study hard to give back to the society that cared for me.

——怒江州北甸村黑苏鲁村组第一个大学本科生 朵马蚕  
——Duoma Can, the first undergraduate from Heisulu Village Group in Beidian Village, Nujiang Lisu Autonomous Prefecture



二航院向洛本卓白族乡俄嘎完小捐赠助学金及学习用品  
CCCC Second Harbor Consultants donated scholarships and educational supplies to Ega Wan Primary School in Luobenzhuo Bai Ethnic Township

### 文化振兴

#### Culture Revitalization

援建英吉沙县中交公园，建设边境小康村、文化广场等民族文化站点，支持民族文艺队、百姓大舞台等品牌建设，打造 9 个乡村振兴示范点，开展传承传统文化、推进移风易俗工作，推动形成文明乡风。“中交助梦·同心梦圆”铸牢中华民族共同体意识示范工作室扩展到 8 个，邀请“三农”专家温铁军赴怒江州开展“专家讲座到边疆”活动。

The company has supported the construction of the CCCC Park in Yingjisha County, established well-off border villages, cultural squares, and other ethnic cultural sites, supported ethnic art troupes and the "People's Grand Stage" brand, created 9 rural revitalization demonstration points, engaged in the inheritance of traditional culture, promoted reforms of local customs, and fostered civilized rural ethos. The "Building Your Future Dream, Working Together to Fulfill Dreams" initiative aimed at reinforcing the sense of a community for the Chinese nation has expanded to 8 studios, inviting agricultural economist Wen Tiejun to Nujiang Lisu Autonomous Prefecture for the "Expert Lectures to the Borderlands" event.

### 生态振兴

#### Ecological Revitalization

在完善基础设施上，援建中交怒江架科底大桥、中交怒江石月亮大桥等，持续打通出行路、旅游路、致富路。在村容村貌治理上，持续支持驻村第一书记所在村开展卫生净化、夜间亮化工作，自扁王基村现代化边境幸福村建设通过国家卫生乡镇创建省级评审。在美丽乡村打造上，持续打造秋那桶村，助其荣获“国家森林乡村”“省级绿美村庄”等称号。

In terms of infrastructure improvement, CCCC supported the construction of the Nujiang Jiakedi Bridge and the Nujiang Shiyueliang Bridge, continually facilitating the development of roads for travel, tourism, and wealth generation. In village appearance management, continued support was provided for sanitation and nighttime illumination initiatives led by the first secretary stationed in villages, with the modern border village of Zibianwangii passing the provincial-level evaluation in the national hygienic township construction initiative. In creating beautiful villages, efforts continued in Qiunatong Village, which earned titles such as "National Forest Village" and "Provincial-Level Eco-Friendly Village".

“自从中交集团开始帮助我们建设美丽乡村，我们的生活发生了巨大的变化。生活环境变得更加宜居，游客越来越多，收入也随之增加。非常感谢中交集团的帮助，让我们看到了致富的希望。”

Since CCCC began helping us build a beautiful village, our lives have changed dramatically. The living environment has improved, we have more tourists, and our income has increased. We are very grateful to CCCC for helping us see a path to prosperity.

——秋那桶村党总支书记 余贵林  
——Yu Guilin, Party Secretary of Qiunatong Village



上航局承建的上海市奉贤区吴房村乡村振兴示范村项目  
The rural revitalization demonstration village project in Wufang Village, Fengxian District, Shanghai, undertaken by CCCC Shanghai Dredging.



中交路建承建的海南省五指山市毛纳村旅游提升项目  
The tourism enhancement project in Maona Village, Wuzhishan City, Hainan Province, undertaken by CCCC Road and Bridge International.

### 组织振兴

#### Organizational Revitalization

突出党建共建，组织 53 个基层党组织与帮扶地区结对联建，开展“五个一”特色活动，帮助泸水市政府、上帕镇泽福社区、马登乡亚坪村改造党建活动阵地。突出教育培训，支持帮扶地区开展党组织书记、党务干部培训，联合英也乡坎特艾日克村党支部对全村青少年开展爱国主义教育。突出作用发挥，泸水市六库街道团结社区党总支获评云南省“云岭先锋红旗党支部”。

The company has paid great attention to joint party-building efforts, arranging for 53 grassroots party organizations to partner with counterparts in assisted regions for "Five Best Ones" characteristic activities, aiding the Lushui Municipal Government, Zefu Community in Shangpa Township, and Yaping Village in Lumadeng Township in transforming their party-building sites. The company has highlighted education and training by supporting party secretary and party affairs cadre training in assisted regions, and jointly carried out patriotic education with the party branch of Kante'airike Village, Yingye'er Township for all the village's youths. CCCC has played a significant role in helping the general party branch of Tuanjie Community in Liuku Subdistrict, Lushui City win the honorary title of "Yunling Pioneer Red Flag Party Branch" in Yunnan Province.



二公局五公司库尔勒城市经营中心党支部与艾古斯乡康帕一村党支部签订党建共建协议

The Fifth Company of CCCC Second Highway Engineering Company's Kuerle Urban Operations Center Party Branch signed a joint party-building agreement with the Kangpa First Village Party Branch in Aigus Township

## 影响、风险和机遇管理

### IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

乡村是中国的根脉。乡村振兴战略是关系国计民生的根本。推进乡村全面振兴是新时代新征程“三农”工作的总抓手。国有企业是中国特色社会主义的重要物质基础和政治基础，是党执政兴国的关键支柱和依靠力量，是推进国家现代化、保障人民共同利益的重要力量，参与乡村振兴战略既是天然使命，也具有独特优势。乡村振兴之于国有企业，挑战与机遇并存。机遇在于，自中央提出新农村建设以来，国家财政向三农领域的投资巨大，企业可借此拓展新的业务领域，增加收入来源，实现多元化发展。挑战在于，乡村振兴面临诸多堵点，基础设施落后、产业结构单一、人才流失、生态环境问题和治理体系不健全等，只有解决好上述问题，才能推动乡村振兴战略的顺利实施。中国交建充分发挥在交通、市政房建、生态治理等领域的专业优势，致力于为乡村地区打造坚实的基础设施支撑。公司积极响应国家乡村振兴战略号召，广泛参与到乡村基础设施建设的浪潮中，以坚实的步伐丈量着每一寸需要发展的土地。

The countryside is the root of China. The rural revitalization strategy is fundamental to national welfare and livelihood. Advancing comprehensive rural revitalization is the central task for work related to agriculture, rural areas, and farmers in the new era and new journey. State-owned enterprises are an important material and political foundation of socialism with Chinese characteristics, a crucial pillar and reliance for the governance and prosperity of the country, and a significant force in advancing national modernization and ensuring the common interests of the people. Participating in the rural revitalization strategy is a natural mission and a unique advantage for these enterprises. For state-owned enterprises, the rural revitalization strategy presents both challenges and opportunities. The opportunities lie in the central government's substantial fiscal input into the rural sector since the initiative to develop a new socialist countryside was launched, allowing enterprises to expand into new business areas, increase operating income sources, and achieve diversified development. The challenges include overcoming various bottlenecks such as outdated infrastructure, a monolithic industrial structure, talent drain, environmental issues, and an inadequate governance system. Only by addressing these issues can the smooth implementation of the rural revitalization strategy be promoted. CCCC leverages its professional strengths in fields like transportation, municipal infrastructure, and ecological management to provide solid infrastructure support for rural areas. The company actively responds to the national call for rural revitalization, extensively participating in the wave of rural infrastructure construction, measuring every inch of land that needs development with steadfast steps.

## 指标与目标

### INDICATOR AND OBJECTIVE

共投入无偿帮扶资金	投入有偿资金	引入无偿资金
<b>21,918</b> 万元	<b>4,550</b> 万元	<b>148</b> 万元
A total of RMB <b>219.18</b> million of non-repayable aid funds invested	RMB <b>45.5</b> million of compensatory funds invested	RMB <b>1.48</b> million of non-repayable funds introduced

## 社区共建共享

### COMMUNITY CO-CONSTRUCTION AND SHARING

#### 治理

##### GOVERNANCE

建立董事会战略与投资及 ESG 委员会，积极将 ESG 理念融入企业战略、经营、管理和文化中，持续加强 ESG 体系建设，深入开展全球履责行动，打造了“中交助梦”责任品牌，有力有效扛起央企使命担当，促进公司品牌提升和企业高质量可持续发展。

The company established the Strategy & Investment and ESG Committee of the Board of Directors, actively integrating ESG concepts into the corporate strategy, operations, management, and culture, and continuously strengthening the ESG system. It has deeply engaged in global responsibility actions and created the "Build Your Future Dream" responsibility brand, effectively upholding the mission of central enterprises and promoting brand enhancement and high-quality, sustainable development.

#### 关键制度列表 Key Regulatory Documents

《社会责任管理办法》	<i>Social Responsibility Management Measures</i>
《中国交建 ESG 建设改进提升方案》	<i>CCCC ESG Construction Improvement and Enhancement Plan</i>
《“中交助梦”行动方案》	<i>Action Plan for "Build Your Future Dream"</i>
《新时代中交集团高标准履行社会责任的工作方案》	<i>CCCCG High-Standard Social Responsibility Fulfillment Plan in the New Era</i>

#### 战略

##### STRATEGY

##### ◎ 责任品牌

##### ◎ Responsibility Brand

公司以“愿景驱动型”社会责任管理模式打造“中交助梦”社会责任品牌，致力于在新发展理念指引下，围绕联合国可持续发展目标倡议，在全球范围内持续开展“中交助梦”履责行动。2024 年，公司对“中交助梦”品牌开展了满意度评价，共回收有效问卷 1500 余份，满意度达 98%，充分展示世界一流企业负责任、有担当的良好形象。

The company has crafted the "Build Your Future Dream" social responsibility brand with a "vision-driven" management model, committed to pursuing the United Nations Sustainable Development Goals, continuously engaging in "Build Your Future Dream" responsibility actions globally. In 2024, the company conducted a satisfaction survey on the "Build Your Future Dream" brand, collecting over 1,500 valid responses, with a satisfaction rate of 98%, fully demonstrating the responsible and committed image of a world-class enterprise.

#### “中交助梦”社会责任品牌满意度调查

##### Social responsibility brand satisfaction survey of "Build Your Future Dream"

为系统评估近年来“中交助梦”社会责任品牌打造成效，有针对性地加强品牌效果提升，我们诚挚地邀请您参与本次调查，调查采用不记名方式，我们非常重视您的反馈和建议，承诺将保密所收集到的信息，请您根据实际情况真实反馈评价。

To systematically assess the recent achievements in building the "Build Your Future Dream" social responsibility brand and specifically enhance the brand's effectiveness, we sincerely invite you to participate in this survey. The survey is anonymous; we highly value your feedback and suggestions and commit to keeping the information collected confidential. Please provide your genuine feedback based on your actual experiences.



扫码参与问卷调研  
Scan the QR code to participate in the survey

#### 大美高速 通达幸福

##### Gorgeous Expressway, Access to Happiness



中国路桥所属柬埔寨金港高速公路有限公司着眼长期可持续发展，以金港高速公路运营为载体，以 ESG 能力提升为牵引，不断探索适合央企海外投建营项目的 ESG 全周期、全要素管理经验，凝练形成“大美高速 通达幸福”ESG 品牌文化，以切实、丰富的责任行动不断为“中交助梦”责任品牌增光添彩。金港高速施工期间，中方员工约 900 人，柬埔寨当地员工在建设高峰期达 3300 余名，中柬人员比例最高时达 1:3.6。公司以“打造属地化名片、培育柬籍人才、促进中柬友谊”为指导思想，积极探索“授人以渔、合规管理、共融留人”的属地化人才培养和管理做法，持续提升金港高速属地化经营的标准化、精细化水平，构建与驻地国更为紧密的共同体、发展共同体和命运共同体。

The Cambodian PPSHV Expressway Co., Ltd., a subsidiary of China Road & Bridge Corporation, focuses on long-term sustainable development. Using the operation of the Phnom Penh-Sihanoukville Expressway as a platform and leveraging ESG capabilities, the company continually explores and refines comprehensive ESG management experiences suitable for central SOEs' overseas investment and construction projects. This has led to the creation of the "Gorgeous Expressway, Access to Happiness" ESG brand culture, significantly enhancing the "Build Your Future Dream" brand through dedicated and impactful responsibility actions. During the construction phase of the Phnom Penh-Sihanoukville Expressway, approximately 900 Chinese employees and over 3,300 Cambodian employees worked at the peak of construction, with the highest staff ratio reaching 1:3.6. Guided by the principles of "creating localized success, cultivating Cambodian talents, and enhancing Chinese-Cambodian friendship", the company actively explores localized talent training and management practices under the "Teach a Man How to Fish, Compliant Management, and Inclusive Talent Retention" framework. This continuously improves the standardization and refinement of localized operations for the Phnom Penh-Sihanoukville Expressway, fostering a closer community of shared interests, development, and destiny with the host country.



金港高速公路项目践行属地化深耕战略

The Phnom Penh-Sihanoukville Expressway Project implemented in-depth localization strategy

◎ 志愿服务

◎ Volunteer Services

立足志愿服务“实践育人”定位，以“青春志愿行 奋进新征程”为主题策划“学雷锋”主题月和全年“蓝马甲”志愿服务工作，2.3万余名志愿者就近参与帮学济困、助老助残、文明劝导等活动 13.1 万余小时。

Rooted in the "Education through Practice" philosophy of volunteer service, activities are planned under the theme "Youth Volunteer Action, Advancing a New Journey". These include organizing a "Learn from Lei Feng" themed month and year-round "Blue Vest" volunteer service program, with over 23,000 volunteers participating in approximately 131,000 hours of activities, such as educational support for students in need, assistance for the elderly and disabled, and the promotion of public civility.

帮学济困

Educational Support and Relief



天航局在“天天向上”志愿服务活动中与西藏类乌齐县孩子们上手工课  
Staff members from Tianjin Dredging engaged with children in Riwoqe County, Xizang, in hands-on craft classes as part of the "Upward Every Day" volunteer service activities



水规院举办“水陆纵横圆梦行”泸水优秀学生暑期研学活动  
The CCCC Water Transportation Consultants hosted the "Dreams Across Water and Land" summer study tour for outstanding students from Lushui City

助老助残

Assisting the Elderly and Disabled



上航局在月浦恬逸养老院开展以“青春志愿行 奋进新征程”为主题的学雷锋志愿服务活动  
Shanghai Dredging conducted volunteer activities at the Moon Bay Nursing Home under the theme "Youth Volunteer Action, Advancing a New Journey"



中交疏浚中交海建蓝马甲志愿者在第十八次“全国特奥日”前往阳光家园启智托养院开展特奥志愿服务  
Volunteers from CCCC Marine Construction, a subsidiary of CCCC Dredging, participated in Special Olympics volunteer activities at the Sunshine Home Intelligence Care Institute to mark the 18th National Special Olympics Day

文明劝导

Civility Promotion



四航局五公司开展“雷锋月 我们在行动”交通安全宣导活动  
The Fifth Construction Company, a subsidiary of CCCC Fourth Harbor Engineering Company, organized traffic safety awareness activities as part of the "Lei Feng Month - We Are in Action" event



中交铁道志愿者于春运期间在天津地铁 11 号线、3 号线开展志愿服务  
Volunteers from CCCC Railway Design and Research Institute provided services during the Spring Festival travel rush on Tianjin Metro Lines 11 and Lines 3

### ◎ 抢险救灾

#### ◎ Emergency Response and Rescue

牢固树立人民至上、生命至上的发展理念，以“时时放心不下”责任感，积极参与社会抢险救援工作，全力以赴保障人民生命财产安全。

Firmly upholding the principle of "putting people first and placing life above all else", the company actively engages in emergency rescue operations to ensure the safety of people and property.

#### 在云南昭通 In Zhaotong, Yunnan

发挥国家隧道救援重庆队装备技术优势，参与现场山体安全监测、失联人员搜救等抢险任务，受到有关部委及地方政府的高度赞扬。

Leveraging national tunnel rescue team equipment and technology advantages for on-site mountain safety monitoring and missing persons search, earning high praise from various ministries and local governments.

#### 在湖南岳阳 In Yueyang, Hunan

发挥水上专业优势，组织平板驳船运送封堵石料，为决口成功封堵贡献了重要力量。

Utilizing water-based expertise to transport sealing materials by flat barge, playing a critical role in successful dam breach sealing.

#### 在辽宁葫芦岛 In Huludao, Liaoning

星夜驰援，第一时间深入受灾最严重的建昌县，争分夺秒抢通了救援“生命线”。

Providing rapid assistance, prioritizing the most affected areas in Jianchang County, and quickly restoring the "lifeline" for rescue efforts.

#### 在海外 Internationally

广航局“浚洋 1”救援 4 名菲律宾落水渔民，获国家海上搜救领域最高荣誉——“2023 年度国家海上搜救奖”；马东铁项目二分部积极参与登嘉楼地区特大洪灾救援，赢得当地居民广泛赞誉。

The CCCC Guangzhou Dredging's "Junyang 1" rescued four Filipino fishermen, earning the highest national honor in maritime search and rescue - the "2023 National Maritime Search and Rescue Award"; the ECRL Project Division II actively participated in major flood rescue and relief operations in Terengganu, receiving extensive local acclaim.

#### 在广东 In Guangdong

火速奔赴第一线，出动抢险人员 61 人次、调配装备 46 台套，挺进孤岛，历时十天抢通道路 54 个点位约 63.1 公里。

Rushing to the front lines, deploying 61 personnel and 46 sets of equipment, reaching isolated areas, and clearing approximately 63.1 kilometers of roads at 54 points over ten days.

#### 在西藏 In Xizang

成立地震灾害应急救援指挥部，第一时间与自治区交通运输厅、应急管理厅联系请战救援，开展地震救援工作。

Establishing an earthquake disaster emergency response command, promptly coordinating with the regional transportation and emergency management departments to initiate rescue operations.

#### 在海南 In Hainan

连续奋战 43 小时抢通道路 460 余公里，有力支援当地尽快恢复生产生活。

Working tirelessly for 43 hours to clear over 460 kilometers of roads, supporting local efforts to resume normal production and life swiftly.

“感谢你们在关键时刻挺身而出，不讲条件、不计代价开展抢险救灾，用实际行动诠释央企责任担当。”

Thank you for stepping up in critical moments, unconditionally conducting emergency and disaster relief efforts. You have demonstrated the strong sense of responsibility of central enterprises through practical actions.

——广东省防汛抗旱防风总指挥部办公室、广东省应急管理厅  
— Office of the Guangdong Provincial Flood Control, Drought Relief, and Wind Prevention Headquarters, Department of Emergency Management of Guangdong Province

“以高度的社会责任感和央企担当迅速抵达灾情前线，倾力投入大量人员、设备及物资等进行抢险救灾，最大程度地保护了人民群众的生命财产安全。”

With a high sense of social responsibility and corporate commitment, you rapidly reached the disaster front, dedicating extensive personnel, equipment, and resources to emergency rescue efforts, thereby maximizing the protection of the people's life and property.

——海南省住房和城乡建设厅  
— Hainan Provincial Department of Housing and Urban-Rural Development

“第一时间组织专业救援队伍，调配急需物资和设备，与地方政府和其他救援单位紧密合作……展现了贵公司作为央企的高度责任感和担当精神。”

Mobilizing professional rescue teams and coordinating urgently needed supplies and equipment, closely collaborating with local governments and other rescue units... demonstrating your company's high sense of responsibility and commitment as a central enterprise.

——西藏自治区日喀则市定日县人民政府  
— People's Government of Dingri County, Xigaze City, Xizang Autonomous Region



助力北京受灾地区灾后重建  
Aiding in the post-disaster reconstruction of affected areas in Beijing



第一时间前往辽宁葫芦岛受灾现场  
Immediately rushing to the disaster scene in Huludao, Liaoning



紧急驰援日喀则市定日县地震受灾现场  
Rapidly responding to the earthquake-affected area in Dingri County, Xigaze City



“浚洋 1” 成功营救菲律宾落水渔民  
Successfully rescuing Filipino fishermen with "Junyang 1"

### ◎ 海外履责

#### ◎ Overseas Responsibility Fulfillment

在海外发展过程中，公司积极投身当地社区发展、教育提升、医疗救助等多个领域，通过组织各类公益慈善项目，努力改善当地民众生活质量，增进与当地社区的友好关系，促进文化交流与融合，展现出负责任的中国企业形象，有效推动民心相通与共同发展。

During development of operations overseas, the company actively participates in local community development, educational advancement, and medical assistance by organizing various public welfare and charity projects, aiming to improve the quality of life for local people, enhance friendly relations with local communities, promote cultural exchange and integration, and demonstrate the responsible image of a Chinese company, effectively fostering mutual understanding and shared development.



一公局集团喀麦隆雅杜高速项目举办“一带一路一抹蓝”之“中交助梦”公益行动  
CCCC First Highway Engineering Group's Yadu Expressway Project in Cameroon hosted the "Belt and Road Initiative: A Touch of Blue" as part of the "Build Your Future Dream" charity action



中交马来西亚在槟城开展“塑造洁净沙滩、保护地球家园”主题公益志愿活动  
CCCC Malaysia conducted a "Clean Beaches, Protect Our Earth" themed public welfare volunteer activity in Penang, Malaysia

## 影响、风险和机遇管理

### IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

社区共建是一项长期且持续的事业，需要源源不断地投入人力、物力和财力。社区的需求呈现出复杂多元且动态变化的特性，地理环境、人口结构、文化背景不同，其需求也千差万别，并且会随着时间推移、社会发展而不断演变。如果在开展活动前未能深入了解社区居民的真实需求，项目就可能与社区实际需求脱节，救灾场景下的安全与资源调配压力以及公众舆论对公益成效的敏感性质疑也可能引发声誉风险。不过，通过抢险救灾展现社会责任担当能够提升公司品牌形象，志愿服务与社区深度互动则能积累在地化资源，助力海外项目减少文化冲突，形成差异化竞争优势，并推动 ESG 评级提升以吸引长期资本。

Community co-construction is a long-term and ongoing endeavor that requires a continuous investment of human, material, and financial resources. The needs of communities are complex, diverse, and dynamic, varying significantly due to differences in geographical environments, demographic structures, and cultural backgrounds. These needs evolve over time with social development. If the real needs of community residents are not thoroughly understood before initiating activities, projects may become disconnected from the actual needs of the community. In disaster relief scenarios, the pressures related to safety and resource allocation, combined with public scrutiny of the effectiveness of philanthropic efforts, may also lead to reputational risks. However, demonstrating social responsibility through emergency rescue can enhance a company's brand image. Deep interaction with the community through volunteer services can benefit the accumulation of localized resources, help reduce cultural conflicts in overseas projects, create a competitive advantage, and promote ESG ratings to attract long-term capital.

中国交建构建“预防 - 响应 - 反馈”全周期管理体系。前端通过社区需求分析及利益相关方协商机制，将公益行动与业务布局协同规划（如优先在重点基建区域开展志愿服务），降低资源错配风险；中端建立灾害应急资源储备网络与跨部门快速响应机制，依托数字化平台实时监测舆情与项目动态，确保风险预警与危机公关时效性；后端完善公益效果量化评估体系，重点关注社区满意度、应急响应效率等指标，同时不断强化员工社会责任培训，将社区共建纳入绩效考核，形成内生驱动力。

CCCC has established a "Prevention-Response-Feedback" full-cycle management system. At the prevention stage, community needs analysis and stakeholder negotiation mechanisms are used to align philanthropic initiative with business strategies (such as prioritizing volunteer services in key infrastructure areas), reducing the risk of resource misallocation. At the response stage, a disaster emergency resource reserve network and a cross-departmental rapid response mechanism are in place. Relying on digital platforms, the system monitors public sentiment and project developments in real-time, ensuring timely risk alerts and effective crisis communication. At the feedback stage, a system for quantifying the effects of philanthropic efforts is perfected, focusing on community satisfaction, emergency response efficiency, and other indicators, while continuously strengthening employee training in social responsibility. The company has integrated community co-construction into performance evaluations to foster intrinsic motivation.



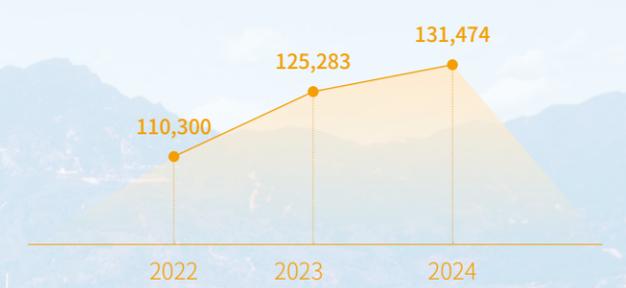
### 指标与目标

#### INDICATOR AND OBJECTIVE

对外捐赠总额 (万元)  
Total external donations (RMB ten thousand)



员工志愿者活动累计参与时长 (小时)  
Total hours of employee volunteer activity (Hours)



员工志愿者人数 (人)  
Number of employee volunteers (Person)



员工志愿者活动参与人次 (人次)  
Employee volunteer participants (Person-time)



社会贡献活动惠及群体范围与数量 \* (人)  
Scope and number of beneficiaries from social contribution activities \* (Person)



\* 说明详见附录 - 关键绩效。

\*Note: For detailed explanations, see Appendix - Key Performance Indicators.

# 未来展望 OUTLOOK

征途回望千山远，前路放眼万木春。2025 年是高质量完成“十四五”规划目标任务，为实现“十五五”良好开局打牢基础的关键一年。中国交建将继续以习近平新时代中国特色社会主义思想为指导，全面贯彻党的二十大和二十届二中、三中全会精神以及中央经济工作会议精神，认真落实中央企业负责人会议部署，坚持稳中求进工作总基调，锚定建设世界一流企业的战略目标不动摇，以价值创造为主线，在深化改革、市场开拓、科技创新、数字化转型、风险防控、党的建设六大方面持续发力、精准突破，奋力推动公司“十四五”平稳收官，在更好履行央企“三个责任”、发挥“三个作用”、当好“三个排头兵”中走在前、做表率，为中国式现代化贡献更大力量！

With thousands of mountains already behind, the road ahead is full of promises of a budding spring. The year 2025 is significant for achieving the high-quality completion of the objectives set in the "14th Five-Year Plan", laying a solid foundation for a successful start to the "15th Five-Year Plan". Guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, CCCC will continue to fully implement the spirit of the 20th National Congress of the Communist Party of China, and the Second and Third Plenary Sessions of the 20th CPC Central Committee, as well as the tasks outlined at the Central Economic Work Conference. We will faithfully execute the strategies outlined in the meeting of the heads of central enterprises. Adhering to the general principle of pursuing progress while maintaining stability, we are committed to the strategic goal of becoming a technology-based, management-oriented, and quality-oriented world-class enterprise, and with value creation as our main focus. In our pursuit, we will strengthen efforts in deepening reforms, expanding markets, fostering technological innovations, embracing digital transformation, enhancing risk management, and bolstering the Party's leadership. These six areas will be our focus for precise breakthroughs to ensure a smooth conclusion to the "14th Five-Year Plan". We aim to be at the forefront of fulfilling the central enterprises' "three responsibilities", "three roles", and "three leadership positions", setting an example and contributing significantly to the Chinese path to modernization.

# 附录

## APPENDIX

### 关键绩效表

#### KEY PERFORMANCE

##### 经济绩效

##### Economic Performance

指标名称 Name of Indicator	指标单位 Unit of Indicator	2022	2023	2024
资产总额 Total assets	亿元 RMB one hundred million	15,167.12	16,844.12	18,582.72
净资产 Net assets	亿元 RMB one hundred million	4,261.76	4,591.25	4,659.27
新签合同额 Newly contract amount	亿元 RMB one hundred million	15,422.56	17,532.15	18,811.85
营业收入 Operating incomes	亿元 RMB one hundred million	7,218.87	7,587.18	7,719.44
利润总额 Total profit	亿元 RMB one hundred million	312.69	363.78	363.81
资产负债率 Debt-to-asset ratio	%	71.80	72.74	74.54
全员劳动生产率 Overall labor productivity	万元/人 RMB ten thousand /Person	58.71	64.12	66.66
营业收现率 Operating cash flow ratio	%	94.95	94.48	99.23

##### 环境绩效

##### Environmental Performance

指标名称 Name of Indicator	指标单位 Unit of Indicator	2022	2023	2024
温室气体排放总量 <sup>①</sup> Total greenhouse gas emissions <sup>①</sup>	万吨二氧化碳当量 Ten thousand tonnes of CO <sub>2</sub> equivalent	453	412	402
范围一温室气体排放量 <sup>②</sup> Scope 1 greenhouse gas emissions <sup>②</sup>	万吨二氧化碳当量 Ten thousand tonnes of CO <sub>2</sub> equivalent	300	262	256
范围二温室气体排放量 <sup>③</sup> Scope 2 greenhouse gas emissions <sup>③</sup>	万吨二氧化碳当量 Ten thousand tonnes of CO <sub>2</sub> equivalent	153	150	146

指标名称 Name of Indicator	指标单位 Unit of Indicator	2022	2023	2024
温室气体排放强度 <sup>④</sup> Greenhouse gas emission intensity <sup>④</sup>	吨二氧化碳当量 / 万元营收 Tonnes of CO <sub>2</sub> equivalent/RMB Ten thousand of operating income	0.0627	0.0543	0.0520
无害工业固废处置量 Amount of non-hazardous industrial waste processed	吨 Tonnes	4,271	8,934	7,111
有害废弃物产生量 <sup>⑤</sup> Quantity of hazardous waste produced <sup>⑤</sup>	吨 Tonnes	242	277	282
有害废弃物排放密度 Hazardous waste emission density	吨 / 万元产值 Tonne/ RMB ten thousand of output value	0.00120	0.00102	0.00096
能源总消耗量 Total energy consumption	万吨标煤 Ten thousand tonnes of standard coal	172	153	150
化石能源消耗量 Fossil energy consumption	吨标煤 Tonnes of standard coal	1,398,148	1,216,172	1,190,845
能源消耗强度 <sup>⑥</sup> Energy consumption intensity <sup>⑥</sup>	吨标煤 / 万元营收 Tonnes of standard coal/ RMB ten thousand operating income	0.0239	0.0202	0.0194
年度耗电量 Annual electricity usage	万千瓦时 Ten thousand kWh	259,727	253,292	246,309
年度耗气量 Annual gas consumption	万立方米 Ten thousand cubic meters	4,417	2,341	2,398
年度燃油量 Annual fuel consumption	万吨 Ten thousand tonnes	91	81	80
绿色低碳领域总投资目标 Total investment target in green and low-carbon sector	亿元 RMB one hundred million	/	/	18
绿色低碳业务营收占比（风力发电业务） Green and low-carbon business operating income proportion (wind power business)	%	0.022	0.009	0.080
绿色低碳业务营收占比（废水处理业务） Green and low-carbon business operating income proportion (wastewater treatment business)	%	0.877	1.123	1.011
绿色低碳业务营收占比（太阳能业务） Green and low-carbon business operating income proportion (solar power business)	%	0.049	0.206	0.427
绿色低碳业务营收占比（潮汐能业务） Green and low-carbon business operating income proportion (tidal power business)	%	/	0.005	0.012
绿色低碳业务营收占比（废物处理业务） Green and low-carbon business operating income proportion (waste management)	%	0.020	0.005	0.074
绿色低碳业务营收占比（雨水收集业务） Green and low-carbon business operating income proportion (rainwater harvesting)	%	0.045	0.204	0.238
绿色低碳业务营收占比（海水淡化业务） Green and low-carbon business operating income proportion (desalination)	%	0.023	0.020	0.005
绿色低碳业务营收占比（特种水泥 / 低温沥青业务） Green and low-carbon business operating income proportion (special cement/low-temperature asphalt)	%	/	0.029	0.039

## 社会绩效

## Social Performance

指标名称 Name of Indicator	指标单位 Unit of Indicator	2022	2023	2024
乡村振兴总投入金额 Total investment in rural revitalization	万元 RMB ten thousand	26,605.03	23,771.50	21,918.79
对外捐赠总额 Total external donations	万元 RMB ten thousand	28,736	27,359	24,115
员工志愿者人数 Number of employee volunteers	人 Person	21,985	22,719	23,864
员工志愿者活动参与人次 Employee volunteer participants	人次 Person-time	36,597	38,146	40,110
员工志愿者活动累计参与时长 Total hours of employee volunteer activity	小时 Hours	110,300	125,283	131,474
社会贡献活动惠及群体范围与数量 <sup>①</sup> Scope and number of beneficiaries from social contribution activities <sup>①</sup>	人 Person	800,000	800,000	800,000
研发投入 R&D investment	亿元 RMB one hundred million	235.43	275.30	263.93
研发投入占主营业务收入比例 R&D investment as a percentage of main operating income	%	3.27	3.63	3.42
新技术、新装备研发项目数 Number of new technology and equipment R&D projects	个 Pieces	48	56	60
每百万元营收有效专利数 Number of valid patents per RMB million of operating income	件 Pieces	375.77	419.82	481.33
著作权数量 Number of copyrights	件 Pieces	6,131	7,498	7,962
每百万元营收软件著作权数 Number of software copyrights RMB million of operating income	件 Pieces	10.99	16.63	18.33
专利申请数 Number of patent applications	件 Pieces	44,618	52,392	60,326
发明专利申请数 Number of invention patent applications	件 Pieces	14,824	18,977	22,974
新增专利申请数 Number of new patent applications	件 Pieces	6,685	7,773	7,661
专利授权数 Number of patents granted	件 Pieces	31,802	38,448	45,301
发明专利授权数 Number of invention patents granted	件 Pieces	4,399	5,886	8,138
新增专利授权数 Number of new patents granted	件 Pieces	7,537	6,646	6,853
有效专利数 Number of valid patents	件 Pieces	27,126	31,850	36,663
应用于主营业务的发明专利数量 Number of invention patents applied to main business	件 Pieces	4,053	5,511	6,319
数字化转型投入 Investment in digital transformation	万元 RMB ten thousand	/	/	256,000
公司信息安全泄露事件总数 Total number of company information security breaches	个 Pieces	0	0	0
受公司信息安全泄露事件影响的客户和员工总数 Total number of customers, clients, and employees affected by company information security breaches	个 Pieces	0	0	0

指标名称 Name of Indicator	指标单位 Unit of Indicator	2022	2023	2024
供应商数量 Number of suppliers	个 Units	2,736	2,965	3,357
一级供应商数量 Number of tier 1 suppliers	个 Units	1,005	1,386	1,400
一级重要供应商数量 Number of critical tier 1 suppliers	个 Units	130	132	136
一级重要供应商支出占总支出的百分比 Percentage of total expenditure on critical tier 1 suppliers	%	45	46	50
公司通过案头评估 / 现场评估进行评估的供应商百分比 Percentage of suppliers assessed via desk reviews/site assessments	%	100	100	100
接受评估的重要供应商百分比 Percentage of critical suppliers assessed	%	100	100	100
经评估具有重大实际 / 潜在负面影响的供应商数量 Number of suppliers assessed with significant actual/potential negative impact	个 Units	0	19	25
具有重大实际 / 潜在负面影响并商定纠正措施 / 改进计划的供应商百分比 Percentage of suppliers with significant actual/potential negative impact and agreed upon corrective actions/improvement plans	%	/	0.7	1
被终止的具有重大实际 / 潜在负面影响的供应商数量 Number of suppliers with significant actual/potential negative impact terminated	个 Units	/	14	16
支持实施纠正措施计划的供应商总数 Total number of suppliers supporting implementation of corrective action plans	个 Units	/	5	9
被评估具有重大实际 / 潜在负面影响并支持纠正行动计划实施的供应商百分比 Percentage of suppliers assessed with significant actual/potential negative impact and supporting implementation of corrective action plans	%	/	53	60
中国大陆供应商 Suppliers in Chinese Mainland	个 Units	2,419	2,637	3,025
港澳台及海外供应商 Suppliers from Hong Kong, Macao, Taiwan, and overseas	个 Units	317	328	332
报告期审查的供应商数量 Number of suppliers reviewed during the reporting period	个 Units	2,736	2,965	3,357
供应商 / 分包商通过质量、环境和职业健康安全管理体系认证的比率 Ratio of suppliers/subcontractors certified in quality, environmental, and occupational health and safety management systems	%	100	100	100
供应商社会责任培训次数 Number of supplier social responsibility training sessions	次 Times	2	2	2
因社会责任不合规被否决的潜在供应商数量 Number of potential suppliers rejected due to non-compliance with social responsibility	个 Units	0	0	0
因社会责任不合规被中止合作的供应商数量 Number of suppliers whose cooperation was terminated due to non-compliance with social responsibility	个 Units	8	14	16
因健康与安全原因召回的产品数量 Number of products recalled for health and safety reasons	个 Pieces	0	0	0
因健康与安全原因召回的产品百分比 Percentage of products recalled for health and safety reasons	%	0	0	0

指标名称 Name of Indicator	指标单位 Unit of Indicator	2022	2023	2024
报告期内发生的产品和服务相关的安全与质量重大责任事故损害涉及的金 额 Amount involved in significant incidents of product and service-related safety and quality liability during the reporting period	万元 RMB ten thousand	0	0	0
客户投诉数量 Number of customer complaints	个 Pieces	0	0	0
数据安全事件涉及的具体金额 Specific amount involved in data security incidents	万元 RMB ten thousand	0	0	0
发生泄露客户信息事件数量 Number of customer information leakage incidents	件 Pieces	0	0	0
客户隐私泄露事件涉及的具体金额 Specific amount involved in customer privacy leakage incidents	万元 RMB ten thousand	0	0	0
员工总数 Total number of employees	人 Person	136,772	139,229	132,367
男性全职员工数 Number of full-time male employees	人 Person	110,731	115,283	109,945
女性全职员工数 Number of full-time female employees	人 Person	26,041	23,946	22,422
30 岁以下员工人数 Number of employees under 30 years old	人 Person	42,008	40,877	35,961
30 至 40 岁员工人数 Number of employees aged 30 to 40	人 Person	55,420	55,851	53,229
40 至 50 岁员工人数 Number of employees aged 40 to 50	人 Person	25,214	27,845	28,997
50 岁以上员工人数 Number of employees over 50 years old	人 Person	14,130	14,656	14,180
研究生及以上员工人数 Number of employees with graduate degrees or higher	人 Person	14,838	17,157	17,594
大学本科员工人数 Number of employees with bachelor's degrees	人 Person	91,187	100,619	98,119
大学专科员工人数 Number of employees with associate degrees	人 Person	19,337	13,118	10,093
高中及以下员工人数 Number of employees with high school education or below	人 Person	11,410	8,335	6,561
中国大陆员工数 Number of employees in Chinese mainland	人 Person	130,889	133,684	132,367
港澳台及海外员工数 Number of employees in Hong Kong, Macao, Taiwan, and overseas	人 Person	23,512	23,229	23,054
技术人员人数 Number of technical staff	人 Person	92,938	94,792	90,120
市场人员人数 Number of marketing staff	人 Person	9,798	9,994	9,501
经理人员人数 Number of managerial staff	人 Person	2,947	3,006	2,858
综合人员人数 Number of general staff	人 Person	25,283	25,787	24,516
技能人员及船员 Number of skilled workers and crew members	人 Person	5,540	5,650	5,372

指标名称 Name of Indicator	指标单位 Unit of Indicator	2022	2023	2024
全体员工中女性比例 Percentage of female employees among all staff	%	19.04	17.20	16.94
女性在所有管理职位（包括初级、中级和高级管理职位）中所占的比例（占 管理职位总数的百分比） Percentage of women in all management positions (including junior, middle, and senior levels) (as a percentage of total management positions)	%	31.29	31.91	30.34
高级管理层中女性比例 Percentage of women in senior management	%	4.62	4.71	4.48
初级管理层中女性比例 Percentage of women in junior management	%	45.95	46.87	44.56
在创收职能（如销售）管理职位上任职的女性占所有此类管理人员的比 例（即不包括支持职能，如人力资源、IT、法律等） Percentage of women in operating income-generating roles (such as sales management positions) relative to all such managers (excluding support functions like HR, IT, legal, etc.)	%	21.49	21.92	20.84
女性在科学、技术、工程和数学相关职位中所占比例 Percentage of women in science, technology, engineering, and mathematics (stem) related positions	%	10.13	10.33	9.82
报告期内吸纳就业人数 Number of jobs created during the reporting period	人 Person	14,627	14,094	10,975
年度新入职员工总数 Total number of new employees hired annually	人 Person	13,297	12,813	9,978
新入职女性员工总数 Total number of new female employees hired	人 Person	1,900	1,831	1,202
新入职男性员工总数 Total number of newly hired male employees	人 Person	11,397	10,982	8,776
新聘员工总数 Total number of newly hired staff	人 Person	22,553	21,874	17,659
新聘员工中，由内部候选人（内部聘用）填补的空缺职位百分比 Percentage of vacant positions filled by internal candidates (internal hiring) among newly hired staff	%	41.04	41.42	43.50
平均雇佣成本（单位 FTE 的雇佣成本） Average hiring cost (cost per FTE)	万元 RMB ten thousand	28.45	30.16	30.04
员工总数中加入了独立工会或签署了集体谈判协议的比例 Percentage of employees who are members of an independent union or have signed a collective bargaining agreement	%	100	100	100
少数民族员工数 Number of minority employees	人 Person	7,268	7,926	7,486
劳动合同签订率 Rate of labor contract signing	%	100	100	100
社会保险覆盖率 Social insurance coverage rate	%	100	100	100
人均带薪年假天数 Average number of paid annual leave days per employee	天 Days	10.4	10.4	10.5
员工流失率 Employee turnover rate	%	3.11	3.67	6.42
员工主动离职率 Employee voluntary resignation rate	%	1.86	1.97	3.44

指标名称 Name of Indicator	指标单位 Unit of Indicator	2022	2023	2024
员工流失率、员工自愿离职率数据覆盖率 Coverage rate of data on employee turnover and voluntary resignation rates	%	100	100	100
人工费 Labor costs	亿元 RMB one hundred million	491.64	527.24	527.86
人力资本回报率 Return on human capital	%	176	186	185
人力成本回报率计算中，所覆盖的 FTE 比例 Percentage of FTE covered in the calculation of return on human capital costs	%	100	100	100
工伤保险人员覆盖率 Workers' compensation coverage rate	%	100	100	100
员工体检覆盖率 Employee health check coverage rate	%	100	100	100
工作场所员工发生事故的数量 Number of workplace accidents involving employees	起 Pieces	5	4	3
因工死亡人数总计（包括全职员工、兼职员工、外包员工） Total number of work-related fatalities (including full-time employees, part-time employees, and contractors)	人 Person	6	6	7
因工死亡比率 Work-related fatality rate	%	0.0013	0.0015	0.0014
因工死亡人数（全职员工、兼职员工） Number of work-related fatalities (full-time and part-time employees)	人 Person	0	0	0
因工死亡人数（外包员工） Number of work-related fatalities (contractors)	人 Person	6	6	7
因工伤损失的工作日数 Number of workdays lost due to occupational injuries	天 Days	72,000	84,000	66,000
公司健康与安全绩效目标统计覆盖公司员工的比例 Percentage of employees covered by the company's health and safety performance goals	%	100	100	100
健康与安全系统（GB/T 45001、ISO 45001）等对公司业务覆盖比例 Coverage ratio of health and safety systems (such as GB/T 45001, ISO 45001) across company operations	%	100	100	100
职业健康档案覆盖率 Occupational health record coverage rate	%	100	100	100
安全风险防护培训覆盖率 Safety risk prevention training coverage rate	%	100	100	100
公司所有员工参加培训的比率 Percentage of all employees participating in training	%	100	100	100
高层管理人员参加培训的比率 Percentage of senior management participating in training	%	100	100	100
中层管理人员参加培训的比率 Percentage of middle management participating in training	%	100	100	100
普通员工参加培训的比率 Percentage of general staff participating in training	%	100	100	100
员工平均培训时间 Average training hours per employee	小时 Hours	112	112	112
高层管理人员平均参加培训时间 Average training hours for senior management	小时 Hours	141	143	143
中层管理人员平均参加培训时间 Average training hours for middle management	小时 Hours	145	145	145

指标名称 Name of Indicator	指标单位 Unit of Indicator	2022	2023	2024
普通员工平均参加培训时间 Average training hours for general staff	小时 Hours	108	109	109
高层管理人员参加培训的比率 Percentage of senior management participating in training	%	100	100	100
中层管理人员参加培训的比率 Percentage of middle management participating in training	%	100	100	100
普通员工参加培训的比率 Percentage of general staff participating in training	%	100	100	100
女性员工参加培训的时间 Training hours for female employees	小时 Hours	118	121	121
男性员工参加培训的时间 Training hours for male employees	小时 Hours	109	110	110
女性员工参加培训的比率 Percentage of female employees participating in training	%	100	100	100
男性员工参加培训的比率 Percentage of male employees participating in training	%	100	100	100
员工培训支出总额 Total expenditure on employee training	万元 RMB ten thousand	28,607.46	47,121.93	37,471.57
员工培训次数 Number of employee training sessions	次 Times	1,460,721	652,415	772,431
人均培训投入 Average training investment per employee	万元 RMB ten thousand	0.20	0.33	0.28
高层管理人员接受培训的人数 Number of senior managers receiving training	人 Person	566	556	556
中层管理人员接受培训的人数 Number of middle managers receiving training	人 Person	9,198	9,223	9,160
普通员工接受培训的人数 Number of general staff receiving training	人 Person	126,742	129,450	122,651
员工关爱帮扶投入 Investment in employee assistance and care	万元 RMB ten thousand	13,277.19	7,520.00	16,412.00
员工满意度 Employee satisfaction	%	97	97.5	98
员工满意度统计数据覆盖范围 Coverage of employee satisfaction data	%	96	96.5	97

## 治理绩效

## Governance Performance

指标名称 Name of Indicator	指标单位 Unit of Indicator	2022	2023	2024
董事会中兼任其他公司 CEO 的成员数量 Number of board members who also serve as CEOs of other companies	人 Person	0	0	0
审计委员会中财务专家人数 Number of financial experts on the audit committee	人 Person	1	1	1
公司总裁年度薪酬总额（包括固定薪酬、浮动薪酬） Total annual compensation of the company president (including fixed and variable pay)	万元 RMB ten thousand	86.84	89.01	93.09
员工薪酬平均值 Average employee compensation	万元 RMB ten thousand	19.46	20.00	20.02

指标名称 Name of Indicator	指标单位 Unit of Indicator	2022	2023	2024
总裁年度薪酬总额与员工薪酬平均数的比值 Ratio of total annual compensation of the president to the average employee compensation	/ (无单位) /(No unit)	4.46	4.45	4.65
社会责任相关工作向董事会汇报频率 Frequency of reporting on social responsibility-related matters to the Board of Directors	次/年 Times/Year	2	2	2
发表信息披露文件 Publication of information disclosure documents	份 Pieces	254	345	231
期末控股股东持股比例 End-of-period shareholding percentage of the controlling shareholder	%	59.63	59.47	59.42
已审结的贪污诉讼案件数目 Number of corruption lawsuits concluded	起 Pieces	0	0	0
接受反商业贿赂及反贪污培训的董事总数 Total number of directors who have received anti-bribery and anti-corruption training	人 Person	9	8	7
接受反商业贿赂及反贪污培训的董事占比 Percentage of directors who have received anti-bribery and anti-corruption training	%	100	100	100
接受反商业贿赂及反贪污培训的管理层人员总数 Total number of management personnel who have received anti-bribery and anti-corruption training	人 Person	5,719	7,065	6,794
接受反商业贿赂及反贪污培训的管理层人员占比 Percentage of management personnel who have received anti-bribery and anti-corruption training	%	100	100	100
接受反商业贿赂及反贪污培训的员工总数 Total number of employees who have received anti-bribery and anti-corruption training	人次 Person-time	221,017	223,671	204,994
接受反商业贿赂及反贪污培训的员工占比 Percentage of employees who have received anti-bribery and anti-corruption training	%	100	100	100
报告期内，公司发生的贪污、行贿事件数目 Number of corruption and bribery incidents occurring during the reporting period	个 Pieces	0	0	0
报告期内公司发生的歧视或骚扰事件数目 Number of discrimination or harassment incidents occurring during the reporting period	个 Pieces	0	0	0
报告期内公司发生的侵犯客户隐私数据的事件数目 Number of incidents involving breaches of customer privacy data during the reporting period	个 Pieces	0	0	0
报告期内公司发生的利益冲突事件数目 Number of conflict of interest incidents occurring during the reporting period	个 Pieces	0	0	0
报告期内公司发生的洗钱或内幕交易事件数目 Number of money laundering or insider trading incidents occurring during the reporting period	个 Pieces	0	0	0
报告期内因公司不正当竞争行为导致诉讼或重大行政处罚的涉案金额 Amount involved in lawsuits or major administrative penalties due to the company's unfair competitive practices during the reporting period	万元 RMB ten thousand	0	0	0
经济合同履行率 Contract fulfillment rate	%	100	100	100
守法合规培训时长 Duration of legal and compliance training	小时 Hours	21	20	26

指标名称 Name of Indicator	指标单位 Unit of Indicator	2022	2023	2024
守法合规培训人次 Number of participants in legal and compliance training	人次 Person-time	1,000	1,690	2,043
守法合规培训次数 Number of legal and compliance training sessions	次 Times	2	4	2
<b>备注</b> <b>Note</b>				

<sup>①</sup> 根据《工业其他行业企业温室气体排放核算方法与报告指南（试行）》规定，纳入碳排放核算的能源种类包括原煤（实物量）、焦炭、电力、原油、汽油、煤油、柴油、燃料油、天然气、热力和其他能源。

<sup>②</sup> According to the *Guidelines for Greenhouse Gas Emission Accounting Measures and Reporting for Other Industrial Enterprises (Trial)*, the types of energy included in carbon emission accounting are raw coal (physical quantity), coke, electricity, crude oil, gasoline, kerosene, diesel, fuel oil, natural gas, thermal energy, and other sources of energy.

<sup>②③</sup> 范围一碳排放主要包括化石燃料燃烧产生的二氧化碳排放，根据燃料消耗量、元素碳含量、氧化率、分子转换比等参数乘积得出。范围二碳排放主要包括外购电力和热力的二氧化碳排放，根据外购电力、热力数量和相应排放因子乘积得出。电网排放因子根据生态环境部《关于做好2022年企业温室气体排放报告管理相关重点工作的通知》，取5.810tCO<sub>2</sub>/万千瓦时；热力碳排放因子按照《工业其他行业企业温室气体排放核算方法与报告指南（试行）》规定“热力供应的CO<sub>2</sub>排放因子暂按0.11吨CO<sub>2</sub>/GJ计”。根据公司“数字双碳”平台对在执行公路项目的碳排放自动核算，2024年开展了范围三排放核算的107个项目，其范围三排放总量为922.54万吨CO<sub>2</sub>e。（1）107个重点项目开展了范围三排放核算内容包括建筑材料的生产和场外运输过程排放；（2）由于基础数据欠缺，目前平台汇总的公路项目的范围三排放均无法覆盖全年12个月份。本次统计的107个项目，在2024年均均有4个月以上的范围三排放月度数据。

<sup>②④</sup> Scope 1: Carbon emissions primarily include carbon dioxide emissions from the combustion of fossil fuels, calculated by multiplying the amount of fuel consumed, the carbon content of the fuel, oxidation rates, and molecular conversion ratios. Scope 2: Carbon emissions mainly include carbon dioxide emissions from purchased electricity and thermal energy, calculated using the amount of purchased electricity and thermal energy and the corresponding emission factors. The emission factor for the power grid is based on the *Notice on Key Tasks for Enterprise Greenhouse Gas Emission Reporting Management in 2022* by the Ministry of Ecology and Environment, set at 5.810 tCO<sub>2</sub>/MWh; the emission factor for thermal energy carbon emissions is provisionally set at 0.11 tons CO<sub>2</sub>/GJ according to the *Guidelines for Greenhouse Gas Emission Accounting Measures and Reporting for Other Industrial Enterprises (Trial)*. According to the company's "Digital Dual-Carbon" platform, which automatically calculates carbon emissions for highway projects, 107 projects were conducted for Scope 3 emissions accounting in 2024, with a total Scope 3 emission of 9.2254 million tons of CO<sub>2</sub>e. (1) The 107 key projects included in the Scope 3 emissions accounting cover emissions from the production of building materials and off-site transportation processes. (2) Due to the lack of basic data, the Scope 3 emissions of the highway projects aggregated on the platform currently cannot cover all 12 months of the year. For the 107 projects included in this statistics, each project has Scope 3 emissions data for more than 4 months in 2024.

<sup>④</sup> 这里指的是“万元营业收入温室气体排放”，数据为报告期内温室气体排放量（以二氧化碳当量计）与营业收入的比值。

<sup>④</sup> This refers to "Greenhouse Gas Emissions per RMB Ten Thousand of Operating Income", a ratio of greenhouse gas emissions (in terms of carbon dioxide equivalents) to operating income during the reporting period.

<sup>⑤</sup> 统计内容为危险废物，统计范围为工业企业。公司危险废物主要为机械施工企业产生的废机油、废油漆桶、废油抹布、吸附棉等。公司在经营过程中，严格遵循《中华人民共和国固体废物污染环境防治法》《危险废物转移联单管理办法》等相关法律标准，秉持减量化原则，通过严格执行危险废物分类制度、源头减量、建立危废管理台账等多个方面强化危废管理工作，各类危废在危废库中暂存后，交由有资质单位转运、处置。

<sup>⑤</sup> The statistics cover dangerous waste, specifically for industrial enterprises. The company's hazardous waste primarily includes waste engine oil, waste paint cans, waste oil rags, and absorbent cotton generated by mechanical construction enterprises. In its operations, the company strictly adheres to the *Solid Waste Pollution Prevention and Control Law of the People's Republic of China, Measures for the Administration of Permit for Operation of Dangerous Wastes*, and other relevant legal standards. Embracing the principle of reduction, the company strengthens dangerous waste management through strict implementation of hazardous waste classification systems, source reduction, and establishing dangerous waste management ledgers. Various types of dangerous waste are temporarily stored in hazardous waste facilities before being transferred and disposed of by qualified entities.

<sup>⑥</sup> 这里指的是“万元营业收入能耗”，数据为报告期内能源总消耗量与营业收入的比值。

<sup>⑥</sup> This refers to "Energy Consumption per RMB Ten Thousand of Operating Income", a ratio of the total energy consumption to operating income during the reporting period.

<sup>⑦</sup> 社会贡献活动惠及群体包含定点帮扶地区，未包含定点帮扶地区以外的省区市及海外。

<sup>⑦</sup> The beneficiary group of social contribution activities includes designated support regions but does not extend beyond these regions to other provinces, regions, cities, or overseas areas.

# 指标索引

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# 质量管理体系认证证书

## QUALITY MANAGEMENT SYSTEM CERTIFICATE

格式: TR07001R01



**中国船级社质量认证有限公司**  
CHINA CLASSIFICATION SOCIETY CERTIFICATION CO., LTD.

**质量管理体系认证证书**  
QUALITY MANAGEMENT SYSTEM CERTIFICATE

编号: No.00523Q2946R5M

兹证明

**中国交通建设股份有限公司**  
(注册/运营地址: 北京市西城区德胜门外大街 85 号 邮编: 100088;  
统一社会信用代码: 91110000710934369E)

This is to certify that the Quality Management System (QMS) of

**CHINA COMMUNICATIONS CONSTRUCTION COMPANY LTD.**

(Registered/Operation Add: No.85, DESHENG MENWAI STREET, BEIJING, 100088, P.R.CHINA; Uniform Code of Social Credit: 91110000710934369E)

建立的质量管理体系符合标准: **GB/T19001-2016/ISO9001:2015.**  
has been found to conform to standard: **GB/T19001-2016/ISO9001:2015.**

本证书对下述范围的质量管理体系有效: \*港口工程、航道工程、公路(桥梁、隧道)工程、铁路工程及市政工程等建设项目的工程总承包, 船舶建造总承包, 国际技术交流与合作, 进出口贸易, 船舶及港口配套设备的技术咨询服务; 对下属公司从事的前述业务, 工业与民用建筑、冶金、石化、电力、矿山、水利的建设工程总承包, 工程技术研究、咨询, 工程勘察、设计、施工、监理等业务的管理(含投资管理、监控管理)及服务\*。

This certificate is valid to the following scope for QMS: \*GENERAL CONTRACTING FOR HARBOUR ENGINEERING, DREDGING, ROAD (BRIDGE, TUNNEL) ENGINEERING, RAILWAY ENGINEERING AND MUNICIPAL ENGINEERING; GENERAL CONTRACTING FOR SHIP CONSTRUCTION; INTERNATIONAL TECHNOLOGY COOPERATION; IMPORT AND EXPORT TRADING; CONSULTING SERVICE FOR TECHNOLOGY OF SHIP AND PORT AUXILIARY EQUIPMENT; MANAGING (INCLUDING INVESTMENT MANAGING AND MONITORING MANAGING) AND SERVICE FOR OUR SUBSIDIARIES' GENERAL CONTRACTION THAT MAINLY INVOLVES IN AFORESAID BUSINESS, INDUSTRIAL AND CIVIL CONSTRUCTION, METALLURGY, PETROCHEMICAL, ELECTRIC POWER, MINING AS WELL AS WATER CONSERVANCY ENGINEERING, AND ENGINEERING TECHNOLOGY RESEARCH AND CONSULTING, ENGINEERING INVESTIGATION, DESIGN, CONSTRUCTION AND SUPERVISION\*.

上一认证周期截止时间: 2023 年 8 月 1 日/Last cycle Deadline: 1 August 2023  
再认证审核时间: 2023 年 7 月 17 日-2023 年 7 月 19 日/Recertification audit time: 17 July 2023-19 July 2023

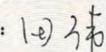
本证书有效期至: **2026 年 8 月 1 日.**  
This certificate is valid until: **1 August 2026.**





中国认可  
国际互认  
管理体系  
MANAGEMENT SYSTEM  
CNAS C005-M

发证日期: **2023 年 7 月 26 日.**  
Issued on: **26 July 2023.**

签发:   
Issued by: **Tian Wei**



证书专用章  
Seal for Certificate  
(00-01)

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中国船级社质量认证有限公司 北京市东城区皇城根南街 40 号 100006 / No.40 Dong Huan Cheng Gen Nan Jie, Beijing, 100006, China 电话 / Tel: +8610156113400 网址 / Website: www.ccs-c.com

格式: TR07001R05



**中国船级社质量认证有限公司**  
CHINA CLASSIFICATION SOCIETY CERTIFICATION CO., LTD.

**环境管理体系认证证书**  
ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATE

编号: No.00523E2948R5M

兹证明

**中国交通建设股份有限公司**  
(注册/运营地址: 北京市西城区德胜门外大街 85 号 邮编: 100088)

This is to certify that the Environmental Management System (EMS) of

**CHINA COMMUNICATIONS CONSTRUCTION COMPANY LTD.**

(Registered/Operation Add: No.85, DESHENG MENWAI STREET, BEIJING, 100088, P.R.CHINA)

建立的环境管理体系符合标准: **GB/T24001-2016/ISO14001:2015.**  
has been found to conform to standard: **GB/T24001-2016/ISO14001:2015.**

本证书对下述范围的环境管理体系有效: \*港口工程、航道工程、公路(桥梁、隧道)工程、铁路工程及市政工程等建设项目的工程总承包, 船舶建造总承包, 国际技术交流与合作, 进出口贸易, 船舶及港口配套设备的技术咨询服务; 对下属公司从事的前述业务, 工业与民用建筑、冶金、石化、电力、矿山、水利的建设工程总承包, 工程技术研究、咨询, 工程勘察、设计、施工、监理等业务的管理(含投资管理、监控管理)及服务; 港口工程、航道工程、公路(桥梁、隧道)工程、铁路工程及市政公用工程建设项目工程施工总承包\*。

This certificate is valid to the following scope for EMS: \*GENERAL CONTRACTING FOR HARBOUR ENGINEERING, DREDGING, ROAD (BRIDGE, TUNNEL) ENGINEERING, RAILWAY ENGINEERING AND MUNICIPAL ENGINEERING; GENERAL CONTRACTING FOR SHIP CONSTRUCTION; INTERNATIONAL TECHNOLOGY COOPERATION; IMPORT AND EXPORT TRADING; CONSULTING SERVICE FOR TECHNOLOGY OF SHIP AND PORT AUXILIARY EQUIPMENT; MANAGING (INCLUDING INVESTMENT MANAGING AND MONITORING MANAGING) AND SERVICE FOR OUR SUBSIDIARIES' GENERAL CONTRACTION THAT MAINLY INVOLVES IN AFORESAID BUSINESS, INDUSTRIAL AND CIVIL CONSTRUCTION, METALLURGY, PETROCHEMICAL, ELECTRIC POWER, MINING AS WELL AS WATER CONSERVANCY ENGINEERING, AND ENGINEERING TECHNOLOGY RESEARCH AND CONSULTING, ENGINEERING INVESTIGATION, DESIGN, CONSTRUCTION AND SUPERVISION; GENERAL CONTRACTING FOR HARBOUR ENGINEERING, DREDGING, ROAD (BRIDGE, TUNNEL) ENGINEERING, RAILWAY ENGINEERING AND MUNICIPAL PUBLIC ENGINEERING\*.

上一认证周期截止时间: 2023 年 7 月 29 日/Last cycle Deadline: 29 July 2023  
再认证审核时间: 2023 年 7 月 17 日-2023 年 7 月 19 日/Recertification audit time: 17 July 2023-19 July 2023

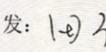
本证书有效期至: **2026 年 7 月 29 日.**  
This certificate is valid until: **29 July 2026.**





中国认可  
国际互认  
管理体系  
MANAGEMENT SYSTEM  
CNAS C005-M

发证日期: **2023 年 7 月 26 日.**  
Issued on: **26 July 2023.**

签发:   
Issued by: **Tian Wei**



证书专用章  
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# 评级报告



## 《中国交通建设股份有限公司 2024 年度环境、社会及管治报告》评级报告

受中国交通建设股份有限公司委托，“中国企业社会责任报告评级专家委员会”抽选专家组成评级小组，对《中国交通建设股份有限公司 2024 年度环境、社会及管治报告》（以下简称《报告》）进行评级。

### 一、评级依据

中国企业改革与发展研究会、责任云研究院《中国企业可持续发展报告指南 (CASS-ESG 6.0) 之一般框架》暨“中国企业社会责任报告评级专家委员会”《中国企业可持续发展报告评级标准 (2025)》。

### 二、评级过程

1. 评级小组审核确认《报告》编写组提交的《企业社会责任报告过程性资料确认书》及相关证明材料；
2. 评级小组对《报告》编写过程及内容进行评价，拟定评级报告；
3. 评级专家委员会副主席、评级小组组长、评级小组专家共同签审评级报告。

### 三、评级结论

#### 过程性 (★★★★★)

公司董事会及下设指导小组、统筹小组和推进小组共同参与报告编制工作，董事会战略与投资及 ESG 委员会作为指导小组督促并审议报告，党委工作部作为归口管理部门统筹推动报告编制工作，各职能部门作为推进小组提供报告资料并审核相关内容，董事会作为 ESG 工作最高统筹及决策机构负责报告终审；将报告定位为合规披露履责信息、强化利益相关方沟通、展示负责任品牌形象的重要工具，功能价值定位明确；根据国家宏观政策、行业发展趋势、监管机构要求、国内外主流标准、先进企业对标、利益相关方调查等识别实质性议题；将以印刷品、电子版、微信版、网页版等多种形式呈现，通过公司官网、交易所网站、行业交流会等多元化渠道发布报告，过程性表现卓越。

#### 实质性 (★★★★★)

《报告》披露了应对气候变化、污染物排放、建筑废弃物管理、发展循环经济、打造绿色建筑、生态系统与生物多样性保护、产品和技术创新、可持续供应链、产品和服务安全与质量、员工权益保障、职业健康与安全生产、可持续治理机制、反商业贿赂及反贪污等所在行业关键性议题，叙述详尽充分，实质性表现卓越。

#### 完整性 (★★★★★)

《报告》主体内容从“攀治理巅峰 迈向高质量发展广阔新天地”“筑环境屏障 织就可持续绿色壮美新画卷”“增社会福祉 共建惠民生和谐幸福新世界”等角度披露了所在行业核心指标的 90.12%，完整性表现卓越。

#### 平衡性 (★★★★★)

《报告》披露了“员工流失率”“员工主动离职率”“工作场所员工发生事故的数量”“客户投诉数量”“因社会责任不合规被中止合作的供应商数量”“已审结的贪污诉讼案件数目”等负面数据信息，并简述处置化解境外廉洁合规风险情况，平衡性表现卓越。





### 可比性 (★★★★★)

《报告》披露了“利润总额”“全员劳动生产率”“范围一温室气体排放量”“范围二温室气体排放量”“能源消耗强度”“研发投入”“乡村振兴总投入金额”“对外捐赠总额”“供应商数量”“员工平均培训时间”“员工满意度”等 173 个关键指标连续 3 年的对比数据，并就“2024 年，中国交建居《财富》世界 500 强第 63 位；连续 19 年入选‘中国承包商 80 强和工程设计企业 60 强’榜单，位居‘2024 最具国际拓展力承包商’榜首”等情况进行横向比较，可比性表现卓越。

### 可读性 (★★★★★)

《报告》采用议题型框架，从环境、社会和治理角度系统呈现了企业的重要议题及应对措施和成效，全面回应利益相关方关注；封面设计高端大气，章节跨页采用具有企业特点的高清大图，内页中英文排版凸显国际化气质；报告语言简洁、案例丰富、多处引用利益相关方证言，可读性表现卓越。

### 创新性 (★★★★★)

《报告》开篇设置“服务国家发展战略”“引领科技自立自强”“助力世界互联互通”责任专题，积极响应国家大政方针，聚焦企业履责重点，彰显了中央企业的责任担当；创新报告编写方式，重要议题均从“治理”“战略”“影响、风险和机遇管理”“指标与目标”四要素披露，增强信息披露的规范性；编制发布国内首个公路运营项目 ESG 评价指南《项目 ESG 评价指南（公路运营项目）》团体标准，有利于进一步增强企业可持续发展管理水平和推动行业可持续发展，具有卓越的创新性表现。

### 综合评级 (★★★★★+)

经评级小组评价，《中国交通建设股份有限公司 2024 年度环境、社会及管治报告》的过程性、实质性、完整性、平衡性、可比性、可读性、创新性均达到五星级，综合为“五星佳”级，是企业 ESG 报告中的典范。



中国交建 ESG 报告连续第三次获得五星级及以上评价

### 四、改进建议

增加行业核心指标的披露，进一步提高报告的完整性。

评级专家委员会副主席

评级小组组长

评级小组专家



扫码查看企业评级档案

出具时间：2025 年 4 月 25 日

## 意见反馈

尊敬的读者：

您好！十分感谢您阅读《中国交建 2024 年度环境、社会及管治报告》。我们非常重视并期望聆听您对中国交建在环境、社会及管治方面的管理、实践和报告的反馈意见。为进一步提升我们的工作水平并使下一份报告更符合您的期望，恳请您协助完成反馈意见表中提出的相关问题，并选择以下方式反馈给我们。

联系电话：86-10-82016824

联系地址：中国北京市西城区德胜门外大街 85 号

姓名：

联系电话：

工作单位：

传真：

职务：

E-mail：

### 1. 您对本报告的总体评价是？

好  较好  一般

### 2. 您认为本报告是否能反映中国交建对经济、社会和环境的重大影响？

高  较高  一般  较低  低

### 3. 您认为本报告所披露信息、数据、指标的清晰、准确、完整度如何？

好  较好  一般  差  不了解

### 4. 您最满意本报告哪一方面？

---

### 5. 您希望进一步了解哪些信息？

---

### 6. 您对我们今后发布报告还有哪些建议？

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# FEEDBACK

Dear Readers,

Greetings! Thank you for reading the *2024 Environmental, Social and Governance Report of China Communications Construction Company Limited (CCCC)*. We value and look forward to hearing your feedback on China Communications Construction's management, practices and reports on environmental, social and governance. Please assist us in completing the relevant questions raised in the feedback form to further improve our work level and make the next report more in line with your expectations, please choose the following ways to feedback to us.

Tel.: 86-10-82016824

Address: No. 85, Deshengmenwai Street, Xicheng District, Beijing

Name:	Tel.:
Employer:	Fax:
Title:	E-mail:

**1. Your overall assessment of the report is**

Good    Better    Average

**2. Do you think this report can reflect the great impact of China Communications Construction on economy, society and environment?**

High    Relatively high    Fair    Relatively low    Low

**3. What do you think of the clarity, accuracy and completeness of the information, data and indicators disclosed in this report?**

Good    Better    Average    Poor    Don't know

**4. Which aspect of this report are you most satisfied with?**

---

**5. What information do you want to know more?**

---

**6. What other suggestions do you have for us to publish reports in the future?**

---



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# 交融天下 建者无疆



**中国交通建设股份有限公司**  
CHINA COMMUNICATIONS CONSTRUCTION COMPANY LIMITED

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