



# 中国交建 环境、社会及管治报告

Environmental, Social and Governance Report of China Communications Construction

# 报告编制说明

# NOTES ON THE PREPARATION OF THE REPORT

# 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 2023 年 1 月 1 日至 2023 年 12 月 31 日,部分内容适当超出。

# 编制依据

国务院国资委《关于中央企业履行社会责任的指导意见》《关于国有企业更好履行社会责任的指导意见》

香港联合交易所《环境、社会及管治报告指引》

上海证券交易所《上市公司自律监管指引第1号——规范运作》

中国社会科学院《中国企业社会责任报告指南(CASS-ESG5.0)》

联合国《2030 可持续发展议程》

全球可持续发展标准委员会(GSSB)《GRI 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

国际标准化组织(ISO)《社会责任指南(ISO 26000)》

本报告遵循港交所《环境、社会及管治报告指引》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。若对本报告有任何建议和意见,您可按以下方式联系我们:

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# Report scope

**Organizational scope of report:** 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 holding subsidiary of China Communications Construction Group Ltd., 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 range:** This report is an annual report spanning from January 1, 2023 to December 31, 2023, within which some content is appropriately exceeded.

# **Preparation Basis**

Guiding Opinions on Fulfilling Social Responsibilities by Central Enterprises and Guiding Opinions on Better Fulfilling Social Responsibilities by State-owned Enterprises released by State-owned Assets Supervision and Administration Commission of the State Council

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

Supervision Guidelines on Self-regulation of Listed Companies No. 1- Standardized Operation released by Shanghai Stock Exchange

Guidelines on Social Responsibility Report of Chinese Enterprises (CASS-ESG5.0) released by Chinese Academy of Social Sciences

UN 2030 Agenda for Sustainable Development

GRI Sustainable Development Reporting Standards (GRI Standards) released 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 released by International Sustainability Standards Board (ISSB)

The Ten Principles of United Nations Global Compact

Guidelines on Social Responsibilities (ISO 26000) released by International Organization for Standardization (ISO)

This report follows the principles of "significance", "quantification", "balance" and "consistency" in the Guidelines on Environmental, Social and Governance Report released by The Hong Kong Exchanges and Clearing Limited. 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 notes

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 China Communications Construction Company. If you have any suggestions or comments on this report, contact us as follows:

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# 领导致辞

# SPEECH BY LEADERS



董事长: 王彤宙 Chairman: Wang Tongzhou



总裁: 王海怀

CEO: Wang Haihuai



# 星霜荏苒,居诸不息。

时间是开拓者前进的刻度,是奋斗者筑梦的见证。在风雨无阻的跋涉中,我们走过不平凡的 2023 年。这一年,习近平总书记先后 4 次实地考察公司承建项目并作出重要指示批示,为新时代公司改革发展指明了方向、点亮了灯盏。公司坚持以习近平新时代中国特色社会主义思想为指导,深入学习宣贯党的二十大精神,扎实开展学习贯彻习近平新时代中国特色社会主义思想主题教育,紧扣"高质量发展深化年"主线,满怀信心阔步走在新征程上,在时间坐标上镌刻下新的奋斗足迹。

# The years roll on. How time flies!

Time is the scale for pioneers to move forward, and the witness for dream builders. In the tough journey, we experienced an extraordinary 2023. In this year, H.E General Secretary Xi Jinping visited our construction projects 4 times and made important instructions which pointed out the direction and lit the lamp for the reform and development of the company in the new era. We adhered to the guidance of the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, profoundly learned and publicized the 20th CPC National Congress, practically carried out the education on learning and publicizing Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, focused on the main line of "deepening year of high quality development" and confidently marched on a new journey with new striving footprints on the time coordinates.

这一年,我们坚定"千磨万击还坚劲"的信念,奋斗的步伐铿锵有力。一路披荆斩棘,一路凯歌行进。作为"三个试点"于一身的中央企业,我们在攻坚克难中砥砺奋进,在服务大局中担当作为,在高质量发展的道路上书写了不负韶华的时代答卷。公司牢牢坚持"三重两大两优"策略,紧盯传统产业升级和战略性新兴产业布局两端发力,全年新签合同额17532.15亿元,营业收入7586.76亿元,利润总额363.64亿元,海外业务遍布全球157个国家和地区,"优布局、调结构、促转型"成果更加丰硕;中水对外完成划转,A股市值最大设计咨询公司中交设计正式诞生,中交长江建设、中交华南建设、中交管道等专业化、区域化平台揭牌运行,市场化机制为高质量发展增添更多活力。公司连续18年获评国资委经营业绩考核A级企业,连续2年获评国资委改革三年行动专项考核A级企业,位列《财富》杂志世界500强第63位,位列ENR全球最大250家国际承包商第3位,连续17年荣膺ENR全球最大国际承包商中国企业第1位。我们在化危机、闯难关、应变局中创造了崭新机遇,以"大国重器"的担当和实力,为全面建成社会主义现代化强国作出应有贡献。

In this year, we firmly believed in the "perseverance", and moved forward firmly. We marched on a rugged road leading to success. As a central enterprise of "three pilots", we forged ahead in overcoming difficulties and facing challenges, took responsibilities in serving the overall situation, and wrote an prosperous chapter of high-quality development. We firmly persisted in the strategy of "key projects, key regions, key markets, major transportation, major cities, priority overseas, priority rivers, lakes and seas", and focused on both ends of traditional industry upgrading and strategic emerging industry layout. The annual new contract amount was RMB 1.753215 trillion, the operating income was RMB 758.676 billion, the total profits were RMB 36.364 billion, and the overseas business spread in 157 countries and regions. The results of "layout optimization, structure adjustment and transformation promotion" were more fruitful. China International Water & Electric Corporation (CWE) completed transfer externally. CCCC Design, the largest design consulting company by market value in A-shares, was officially established. CCCC Yangtze River Construction, CCCC South China Construction, CCCC Pipeline and many other professional and regional platforms started operation. The market-oriented mechanism added more vitality to high-quality development. We have been rated as an A-level enterprise in the business performance assessment by the State-owned Assets Supervision and Administration Commission for 18 consecutive years, and as an A-level enterprise in the special assessment for the three-year reform action by the State-owned Assets Supervision and Administration Commission for 2 consecutive years. In addition, we ranked 63rd of Fortune Global 500 and 3rd of the ENR's Top 250 International Contractors. We ranked 1st among Chinese enterprises of the ENR's largest global international contractors for 17 consecutive years. We created new opportunities in eliminating crises, overcoming difficulties and responding to the changing situation, and made due contributions to building a great modern socialist country in all respects with our responsibilities and strengths as a "Pillar of a Great Power".

这一年,我们坚持"为有源头活水来"的实践,奋斗的步伐意气风发。我们坚定扛起科技强国、交通强国、海洋强国、美丽中国建设的政治责任,高质量打造了系列"超级工程""世界之最",在服务和融入国家重大发展战略中展现积极作为,平陆运河全线动工、深中通道主线贯通、新疆乌尉项目天山胜利隧道迎来重大节点、内蒙古乌梁素海流域生态保护修复试点工程通过验收。作为中国最早开拓海外市场并且国际化经营最具代表性的企业之一,我们以共建"一带一路"倡议提出十周年为契机,高起点参与第三届"一带一路"国际合作高峰论坛、中国-东盟博览会等高端论坛活动,参与发起设立全球可持续交通创新联盟,成功落地一批标志性工程和"小而美"民生项目,尼日利亚莱基深水港开港运营、孟加拉国国父隧道建成通车、马来西亚东海岸铁路开始铺轨,与世界相交,与时代相通,为构建"一带一路"立体互联互通网络贡献了中交力量。我们积极打造原创技术策源地,勇当现代产业链"链长",以高水平科技创新铸就"国之重器",研发建造的"天鲲号""天和号""首创号"等一批核心装备成为国家重点工程建设的核心利器。2023年,公司牵头组建智慧港航产业高质量发展联盟,2个全国重点实验室通过科技部优化重组,深远海工程技术与装备研发中心、粤港澳大湾区创新研究院挂牌运行。牵头发布19项国家和行业标准,6项工程获评中国土木工程詹天佑奖,1个团队荣获第三届全国创新争先奖牌,1人荣获"国家卓越工程师"称号……我们一步一个脚印,在建设具有全球竞争力的科技型、管理型、质量型世界一流企业的道路上志气高昂、骨气坚定、底气充足。

In this year, we adhered to the practice of "for fresh water comes from its source" and had high and vigorous spirits. We firmly shouldered our political responsibilities of building a strong country with great technological, transportation, marine and ecological strengths. We created "super projects" and "world greatest" with high quality and took positive actions in serving and integrating major national development strategies. In addition, the whole line of Pinglu Canal was commenced, the main line of Shenzhen-Zhongshan Bridge was connected, Tianshan Shengli Tunnel of Xinjiang Wuwei Project was in major node, and ecological protection and restoration pilot project of Ulansuhai Lake in Inner Mongolia passed acceptance. As one of the earliest and most representative enterprises in China to explore overseas markets and start international operation, we took the opportunity of the 10th anniversary of "the Belt and Road" Initiative, and participated in many high end forum activities from the high starting point, such as the Third Belt and Road Forum for International Cooperation and China-ASEAN Expo. We participated in setting up a Global Alliance for Sustainable Transport Innovation

and successfully implemented a batch of landmark projects and "small yet smart" livelihood projects. Nigeria LEKKI deep-water port started operation. Bangabandhu Sheikh Mujibur Rahman Tunnel was completed and started operation. As for Malaysia East Coast Rail Link, the rail was laid. These projects link the world and connect the times and contributed to the construction of "the Belt and Road Initiative three-dimensional connectivity network. We actively created the source of original technology, bravely acted as a "chain leader" of modern industrial chain and built "pillar of the nation" with high-level technology and innovation. Our core equipment, such as "Tiankun", "Tianhe", and "Shouchuang" became the core equipments of construction of national key projects. In 2023, we led to organize smart port and shipping industry high-quality development alliance. Two national key laboratories were optimized and reorganized by the Ministry of Science and Technology of the People' s Republic of China. Besides, we established Deep and High Sea Engineering Technology and Equipment Research and Development Center and Guangdong-Hong Kong-Macao Greater Bay Area Innovation Research Institute. We led to publish 19 national and industry standards. Six projects was awarded the Tien-yow Jeme Civil Engineering Prize. One team was awarded the third national innovation medal. One employee was awarded the "national outstanding engineer" title......We developed steadily. We held high ambition, firm backbone and sufficient confidence on the road of building a world-class enterprise with global competitiveness in science and technology, management and quality.

这一年,我们坚守"一枝一叶总关情"的初心,奋斗的步伐自信从容。前进道路上,无论是风高浪急还是惊涛骇浪,人民至上始终是最终的价值指向,是我们砥砺前行的力量源泉。公司牢记央企职责使命,高标准履行社会责任,在京津冀暴雨洪涝、甘肃积石山 6.2 级地震等重大灾害面前第一时间扛起责任、全力抢险,得到党中央、国务院及国资委等有关部委和地方省委省政府的点名表扬;我们积极践行全球企业公民责任,挺膺担当参与苏丹撤侨,获得社会各界高度认可,以实际行动擦亮"中交助梦"全球责任品牌形象。2023年,公司案例《立足区位优势深化产业帮扶打造新疆特色纺织服装业基地》和中国港湾巴新项目部公路升级改造案例《在践行"一带一路"中为全球减贫贡献力量》荣获"第四届全球减贫案例征集活动"最佳减贫案例。荣获第十二届"中华慈善奖",在国务院国资委通报的 2022年度中央企业定点帮扶工作成效考核评价结果中,公司连续第5年获最高等次"好"的评价,位列委管央企排名第1名,"让世界更畅通、让城市更宜居、让生活更美好",代代中交人为之不懈努力的事业,正在一步步由梦想照进现实。

In this year, we kept our original aspiration of "people-centered" and were confident in development. On the road forward, no matter what tough situation, the people supremacy is always the ultimate value direction and the strength source of us to forge ahead. We kept in mind our responsibilities and missions as a central enterprise, and fulfilled our social responsibilities with high standards. In major disasters such as heavy rains and floods in Beijing, Tianjin and Hebei, and 6.2-magnitude earthquake in Jishishan, Gansu Province, we shouldered our responsibilities and made all-out efforts to relief the disaster, and were praised by relevant ministries and commissions such as the Party Central Committee, the State Council and SASAIC and local provincial Party committees and governments. We actively practiced our global corporate citizenship responsibilities, won high appraise from all sectors of society in participating in Sudan evacuation. We built the global responsibility brand image of "Build Your Future Dream" through practical actions. In 2023, our cases were awarded the best poverty reduction cases of "the 4th Global Poverty Reduction Case Collection Activity", such as case "Root in geographical advantages, deepen industrial assistance, and build a textile and clothing industry base with Xinjiang characteristics" and case of highway upgrading and renovation of China Harbour Papua New Guinea Project Department "Contribute to global poverty reduction in the implementation of "the Belt and Road" Initiative". We won the 12th "Chinese Charity Award". We obtained the highest evaluation "Excellence" in 5 consecutive years in the evaluation of 2022 Annual Performance Assessment of Targeted Assistance from Central Enterprises by SASAC and ranked 1st in central enterprises managed by SASAC. "Making the world more open, the city more livable and the life more beautiful" is our permanent career and is gradually becoming a reality.

借势启程绘宏图,砺志前行续佳篇。2024年是新中国成立75周年,是实现"十四五"规划目标任务的关键一年,也是公司高质量发展提升的关键一年。中国交建将更加紧密地团结在以习近平同志为核心的党中央周围,锚定"三型"世界一流企业建设目标,守正创新、锐意进取,奋力推动高质量发展迈上新台阶,为全面推进强国建设、民族复兴伟业贡献新的更大力量!

Take current advantages for great development and forge ahead with determination. The year 2024, as the 75th anniversary of the founding of New China, is a crucial year for achieving the goals and tasks of the "14th Five-Year Plan", and for improving the high quality development of the company. We will uphold the firm leadership of the Party Central Committee with Comrade Xi Jinping at its core, determine to build a world-class enterprise in terms of science and technology, management and quality.keep integrity, realize innovation and forge ahead with determination. We will strive to promote high-quality development to a new level, and make new and greater contributions to comprehensively promoting country building and national rejuvenation!

# 关于我们 ABOUT US

# 中国交建之"最"

Records set by China Communications
Construction Company

- 型 世界最大的港口设计建设公司
  The world's largest port design and construction company
- 世界最大的公路与桥梁设计建设公司
  The world's largest highway and bridge design and construction company
- 世界最大的疏浚公司
   The world's largest dredging company
- 型 世界最大的海上石油钻井平台设计公司
  The world's largest offshore oil drilling platform design company
- 亚洲最大的国际工程承包公司
   The largest international project contracting company in Asia
- 中国最大的高速公路一体化服务商
   The largest highway integration service provider in China

# 企业文化 CORPORATE CULTURE

# 企业使命

固基修道、履方致远

#### **Corporate Mission**

Only solid foundation, good morality and proper behavior could lead to a better future

#### 企业愿景

让世界更畅通、让城市更宜居、让生活更美好

#### Corporate vision

We make the world more connected, the city more livable and the life more beautiful

#### 企业精神

交融天下、建者无疆

#### **Enterprise spirit**

Transportation integrates the world; the builder's field is boundless

## 企业目标

打造具有全球竞争力的科技型、管理型、 质量型世界一流企业

#### Enterprise goal

To build a world-class enterprise with global competitiveness in terms of science and technology, management and quality

#### 价值导向

以业绩论英雄、英雄不问出处

#### Value orientation

Evaluate heroes by their performance instead of background

# 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。

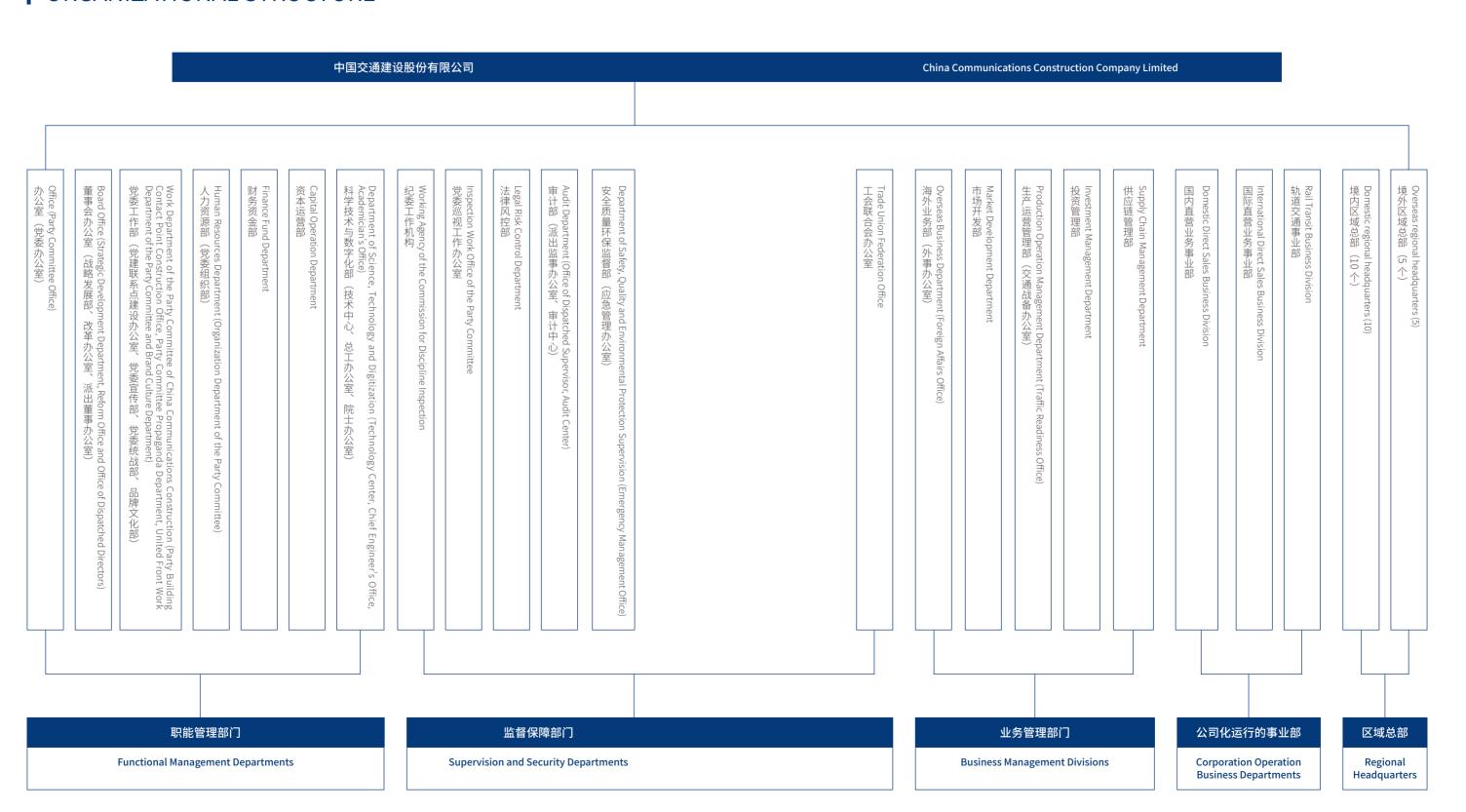
As the world's leading oversize infrastructure integrated service provider, China Communications Construction Company is mainly engaged in investment, construction and operation of transportation infrastructure, urban comprehensive development, etc., and provides customers with package solutions and integrated services of investment financing, consulting planning, design and construction, management and operation.

中国交建从事基础设施相关产业已有一百多年历史,产品和服务遍及 150 多个国家,建设了一大批代表世界、代表时代最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;旗下拥有 34 家主要全资、控股子公司。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。2023 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"18 连 A";连续十八年入选"中国承包商 80 强和工程设计企业 60 强"榜单,位居"最具国际拓展力承包商"榜首。

China Communications Construction Company has been engaged in infrastructure-related industries for more than 100 years and its products and services cover more than 150 countries. It has built a large number of transportation infrastructure representing the highest level of the world and the Times, provides customers with mature and complete services and has formed a global leading technology system. It has 34 main wholly-owned and holding subsidiaries. China Communications Construction Company was listed in Hong Kong and Shanghai and takes the leading position in profitability and value creation ability among global peers. In 2023, China Communications Construction Company ranked 63rd in Fortune Global 500, was awarded "Grade A for 18 consecutive years" in the business performance assessment of the State-owned Assets Supervision and Administration Commission of the State Council, was included in the list of "Top 80 Chinese Contractors and Top 60 Engineering Design Enterprises" for 18 consecutive years and ranked the top in "the most international expandable contractors".

# 组织架构

# **ORGANIZATIONAL STRUCTURE**



# 主要子公司名录 LIST OF MAIN SUBSIDIARIES

01	中国港湾工程有限责任公司	China Harbour Engineering Company Ltd.
02	中国路桥工程有限责任公司	China Road & Bridge Corporation
03	中交第一航务工程局有限公司	CCCC First Harbor Engineering Company Ltd.
04	中交第二航务工程局有限公司	CCCC Second Harbor Engineering Company Ltd.
05	中交第三航务工程局有限公司	CCCC Third Harbor Engineering Co., Ltd.
06	中交第四航务工程局有限公司	CCCC Fourth Harbor Engineering Co., Ltd.
07	中交疏浚 (集团)股份有限公司	CCCC Dredging (Group) Co., Ltd.
08	中交一公局集团有限公司	CCCC First Highway Engineering Group Co., Ltd.
09	中交第二公路工程局有限公司	CCCC Second Highway Engineering Co., Ltd.
10	中交路桥建设有限公司	CCCC Road & Bridge International Co., Ltd.
11	中交第三公路工程局有限公司	CCCC Third Highway Engineering Co., Ltd.
12	中交建筑集团有限公司	CCCC Construction Group Co., Ltd.
13	中交华南建设发展有限公司	CCCC South China Construction and Development Co., Ltd.
14	中交基础设施养护集团有限公司	CCCC Infrastructure Maintenance Group Co., Ltd.
15	中交机电工程局有限公司	CCCC Mechanical & Electrical Engineering Co., Ltd.
16	中国公路工程咨询集团有限公司	China Highway Engineering Consultants Corporation
17	中交长江建设发展集团有限公司	CCCC Yangtze River Construction & Development Co., Ltd.

18	中交设计咨询集团股份有限公司	CCCC Design & Consulting Group Co., Ltd.
19	中交水运规划设计院有限公司	CCCC Water Transportation Consultants Co., Ltd.
20	中交第一航务工程勘察设计院有限公司	CCCC First Harbor Consultants Co., Ltd.
21	中交第二航务工程勘察设计院有限公司	CCCC Second Harbor Consultants Co., Ltd.
22	中交第三航务工程勘察设计院有限公司	CCCC Third Harbor Consultants Co., Ltd.
23	中交第四航务工程勘察设计院有限公司	CCCC-FHDI engineering Co., Ltd.
24	中交第一公路勘察设计研究院有限公司	CCCC First Highway Consultants Co., Ltd.
25	中交第二公路勘察设计研究院有限公司	CCCC Second Highway Consultants Co., Ltd.
26	中国公路车辆机械有限公司	China Highway Vehicle & Machinery Co., Ltd.
27	中交西安筑路机械有限公司	CCCC Xi'an Road Construction Machinery Co., Ltd.
28	中交天和机械设备制造有限公司	Tianhe Mechanical Equipment Manufacturing Co., Ltd
29	中交投资有限公司	CCCC Investment Company Limited
30	中交城市投资控股有限公司	CCCC Urban Investment Holding Company Limited
31	中交海洋投资控股有限公司	CCCC Ocean Investment Holding Company Limited
32	中交西部投资有限公司	CCCC Western Investment Co., Ltd.
33	中交海西投资有限公司	CCCC Haixi Investment Co., Ltd.
34	中交资产管理有限公司	CCCC Asset Management Company Limited

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# ESG 管治

# **ESG GOVERNANCE**

# **董事会声明**STATEMENTS OF THE BOARD

ESG 合规是企业主动适应国际经济变化,破解高质量发展难题的重要一环。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。

ESG compliance is important for an enterprise to actively adapt to international economic changes and solve the challenges of high-quality development. 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 理念 ESG CONCEPT

中国交建践行新发展理念,秉承"让世界更畅通、让城市更宜居、让生活更美好"的企业愿景,弘扬"交融天下,建者无疆"企业精神,坚持"打造具有全球竞争力的科技型、管理型、质量型世界一流企业",努力成为"让出资人放心、客户满意、相关利益方信任、经营者安心、员工幸福、社会赞誉"的受人尊敬企业。公司在长期的实践中,探索形成"愿景驱动型"社会责任管理之道,通过"责任驱动、品牌带动"开展 ESG 实践,不断擦亮"中交助梦"全球责任品牌。

China Communications Construction implements the new development concept, adheres to the corporate vision of "make the world more connected, the city more livable and the life more beautiful", advocates the enterprise spirit of "Transportation integrates the world; the builder' s field is boundless", persists in "building an internationally competitive world-class enterprise in terms of science and technology, management and quality orientation", and makes efforts to become a respected company that "reassures investors, satisfies customers, trusts relevant stakeholders, comforts operators, provides happiness for employees, and enjoys wide social praise". In long-term practice, the company explores to form a "vision driven" social responsibility governance approach, holds ESG practices through "responsibility promoted, brand driven" method, and continuously builds the "Build Your Future Dream" global responsibility brand.

# ESG 治理 ESG GOVERNANCE

中国交建将 ESG 治理作为建立健全 ESG 体系的基础,为 ESG 战略和目标提供系统性、一致性支撑,积极争当管理规范、治理高效的表率。公司将社会责任与 ESG 融入公司战略、经营、管理和文化,推进全要素、全流程、全链条履责。

China Communications Construction regards ESG governance as the foundation for establishing a sound ESG system, and providing systematic and consistent support for ESG strategies and goals. The company actively strives to be a model for standardized management and efficient governance. The company integrates social responsibility and ESG into its strategy, operation, management and culture with a view to promoting responsibility fulfillment in full element, full process and full chain.

公司成立中国交建董事会战略与投资及 ESG 委员会,明确 ESG 工作职责,要求制定及审查企业 ESG 战略规划及实施进展,识别对公司业务有重大影响的 ESG 相关风险和机遇,审议公司 ESG 年度报告,并向董事会提出建议。公司党委工作部是社会责任 /ESG 报告编制归口管理部门,形成董事会领导、董事会战略与投资及 ESG 委员会统筹推进、党委工作部负责报告编制、董事会办公室负责报告发布、各单位具体实施的 ESG 工作格局。

The company establishes the Strategy & Investment and ESG Committee of the Board of Directors to identify the ESG work responsibilities. The company requires the preparation and review of its ESG strategic plan and implementation progress, identification of ESG risks and opportunities with significant impact on the company's business, review of its ESG annual report, and making of recommendations to the board of directors. The Work Department of the Party Committee is a preparation and management department of social responsibility/ ESG report. The ESG work landscape is established with the Board of Directors at the leader postion, the Strategy & Investment and ESG Committee of the Board of Directors responsible for overall coordination and promotion, the Work Department of the Party Committee responsible for preparation of reports and the office of the Board of Directors responsible for releasing the reports and all units responsible for implementation.



# 利益相关方沟通

# **COMMUNICATION WITH STAKEHOLDERS**

中国交建积极建立常态化、多渠道沟通机制,力求准确及时回应利益相关方的关注。公司充分考虑业务性质、经营状况及行业发展,识别不同利益相关方关注重点,并通过多样化沟通渠道及时回应问询,全面识别 ESG 风险与机遇,持续改进 ESG 策略和实践。

The company actively establishes a normalized and multi-channel communication mechanism with a view to accurately and timely responding to the concerns of stakeholders. The company fully considers the business nature, operational status and industry development, identifies the key concerns of different stakeholders, timely responds to inquiries through diversified communication channels, comprehensively identifies ESG risks and opportunities, and continuously improves ESG strategies and practices.

	政府及监管机构	股东	业主和客户	供应商	员工	社区与公众	NGO 等第三方机构
利益相关方 Stakeholders	Government and regulatory authority	Shareholders	Owners and customers	Supplier	Employees	Community and the public	NGO, etc. Third party institution
主要关注点 Main concerns	遵章守法 安全环保 促进经济发展 依法纳税 创造就业 稳健经营	公司治理 ESG 表现 业绩增长 股息分配 投资者关系 股价表现 碳减排目标及规划	保障工程质量 完善沟通服务 创新工程技术	重合同守信誉 平等长期合作 互利共赢	合法权益 薪酬福利 职业发展 培训发展 职业健康及工作环境 员工关爱	环境保护 安全稳定 和谐社区 公益事业 公共关系	信息公开 与媒体互动 对非政府组织的贡献
	Compliance with regulations and laws  Safety and environmental protection  Promotion of economic development  Paying tax according to law  Creating job opportunities  Stable operation	Corporate governance ESG performance Performance increase Dividend distribution Investor relations Stock price performance Carbon reduction targets and planning	Guaranteeing construction quality  Perfecting communication service  Innovative engineering technology	Contract emphasis and reputation keeping Equal long-term cooperation Mutual benefit and win- win situation	Legal rights and interests  Salary and welfare  Career development  Training and development  Occupational health and working environment  Employee care	Environmental protection  Safety and stability  Harmonious community  Public welfare undertakings  Public relations	Information disclosure Interaction with media Contributions to non-governmental organizations
公司回应	守法合规经营 可持续发展 信息报送 工作汇报 统计报表	保持稳定盈利 维护股东权益 良好的信用等级 完善降碳管理	按时保质交工 技术创新 提升工程质量 保护客户隐私	坚持诚信守信 平等协商原则 良好合作关系 供应商培训	稳定薪酬激励 保障员工权益 关注员工发展 开展各类活动	慈善活动 社区共建 日常沟通	开放日活动 共赢合作 保持沟通渠道畅通
Company response	Law-abiding and compliant operations  Sustainable development  Information submission  Work report  Statistics statement	Maintaining stable profit Safeguarding shareholders' equities Good credit rating Perfect carbon reduction management	Timely and high-quality delivery of work Technical innovation Improvement of project quality Protect customer privacy	Adherence to good faith and trustworthiness Equal negotiation Good cooperation relationship Supplier training	Stable salary incentive  Protecting employees' rights and interests  Focus on staff development Implementing various activities	Charity activity  Community co- construction  Daily communication	Open day activity Win-win cooperation Keeping the communication channels open

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董事长王彤宙参加国务院国资委"中央企业和地方国资国企社会责任系列蓝皮书集中发布活动"并作主旨发言

Chairman Wang Tongzhou attended SASAC Social Responsibility Blue Book Release Activities of Central Enterprises and Local State-owned Enterprises with State Assets and made a keynote speech



董事长王彤宙出席央视总台"中国 ESG(企业社会责任)发布活动"并作主题发言

Chairman Wang Tongzhou attended the CCTV Headquarters "China ESG (Corporate Social Responsibility) Launch Event" and made a keynote speech

# 2023 年,集团首次集中发布系统内 15 本 ESG 报告

In 2023, the group collectively released 15 ESG reports for the first time



# 中交"1+1+M+N"报告矩阵

CCCC "1+1+M+N" report matrix



# 集团年度社会责 任报告

Group annual social responsibility report



# 集团"一带一路" 专项报告

Special "BRI" report of the Group



# 5家所属上市公司 ESG 报告,2023年,实现上市公司 ESG 信息披露全覆盖

ESG reports of 5 affiliated listed companies. In 2023, all affiliated listed companies disclosed ESG information



# 品牌企业、重点国别、 重点项目 FSG 报告

ESG reports of brand enterprises, key countries and key projects

# ESG 制度 ESG SYSTEM

中国交建持续建立健全 ESG 制度体系,制定了《社会责任管理办法》《ESG 报告编制发布实施细则》《"中交助梦"行动方案》,以及生态环保、绿色低碳、安全质量、科技创新等有关制度办法,明确社会责任 /ESG 工作职责及流程,将 ESG 绩效与高管薪酬挂钩,推动社会责任 /ESG 与业务有效融合。

China Communications Construction continues to establish sound ESG systems. We formulated the Social Responsibility Management Measures, Implementation Rules for Preparation and Release of ESG Report, Action Plan for "Build Your Future Dream", as well as relevant institutional measures such as ecological protection, green and low-carbon, safety and quality, and technological innovation. We have clarified the responsibilities and processes of social responsibility/ESG work, linked ESG performance with executive compensation, and promoted the effective integration of social responsibility/ESG and business.

同时,作为中国本土 ESG 建设的积极探索者,我们与国务院国资委、中国社会科学院、中国企业改革与发展研究会、中国质量协会等各主管部门、高校院所、协会单位、智库机构协同发力,为构建具有中国特色、国际认同的 ESG 体系贡献了中交力量。

In addition, as an active explorer of ESG construction in China, we have collaborated with various competent departments such as the State owned Assets Supervision and Administration Commission of the State Council (SASAC), the Chinase Academy of Social Sciences (CASS), the China Enterprise Reform and Development Society (CERDS), the China Association for Quality (CAQ), as well as universities, associations, and think tanks to contribute to the construction of internationally recognized ESG system with Chinese characteristics.

# ESG 培训 ESG TRAINING

中国交建每年组织 ESG 工作专项培训,及时把握 ESG 发展前沿动态、宣贯 ESG 工作最新要求,不断提高全体员工 ESG 的系统认知、工作能力和业务水平,实现 ESG 管理向基层穿透。2023 年,公司举办了以"ESG 建设与世界一流企业价值创造"为主题的高质量大讲堂,举办 ESG 工作专项培训班。此外,公司还积极组织参加国务院国资委"中央企业上市公司 ESG 培训"、中国社会责任百人论坛"分享责任公开课"、中国上市公司协会"可持续发展大会"等培训讲堂,不断增强经济、环境和社会综合价值创造能力。

The company organizes special ESG training every year to timely grasp the cutting-edge trends of ESG development, promote the latest requirements of ESG work, continuously improve the systematic awareness, work ability and business level of all employees in ESG, and achieve the penetration of ESG management to the grassroots level. In 2023, the company held a high-quality lecture with the theme of "ESG construction and world-class enterprise value creation" and held special ESG training classes. In addition, the company also organized to receive "ESG training for listed central enterprises", China social responsibility hundred people forum "sharing responsibility open course", and "sustainable development conference" held by China Association for Public Companies to continuously enhance the ability to create comprehensive economic, environmental, and social value.

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# 实质性议题识别 IDENTIFICATION OF SUBSTANTIVE TOPICS

为了更好地回应利益相关方的期待和要求,明确 ESG 信息实践和披露重点,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,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 94 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"对利益相关方的重要性"和"对企业发展的重要性"两大维度综合形成重要性矩阵。

To better respond to the expectations and requirements of stakeholders and clarify the focus of ESG information practice and disclosure, CCCC has conducted in-depth research on national macro policies, industry development situation, and regulatory requirements. With ESG mainstream standards and advanced enterprises as benchmark, the company invites internal and external stakeholders in form of online questionnaire to evaluate importance of different ESG development topics from their own perspectives. The company collected 94 questionnaires, cooperated with external experts to make statistical analysis of the scores, assigned the weight of topics according to the risk degree of the topics and comprehensively made importance matrix in two dimensions, i.e. "importance to stakeholders" and "importance to enterprise development".

经济议题
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- 1. 收益与业绩
- 2. 优化产业布局
- 3. 工程建设
- 4. 科技创新驱动
- 5. 质量管控
- 6. 服务国家战略
- 7. 供应商管理

20

- 8. 优化客户服务
- 9. 行业合作与进步

# 管治议题

- 10. 加强党的建设
- 11.ESG 管治
- 12. 完善治理结构
- 13. 合规风险管控
- 14. 信息透明
- 15. 投资者关系管理
- 16. 反商业贿赂及反腐败
- 17. 利益相关方沟通

# 社会议题

- 18. 推动承包商 / 分包商履行社会责任
- 19. 安全生产
- 20. 保障员工权益
- 21. 发展与培训
- 22. 职业健康
- 23. 关爱员工生活
- 24. 进城务工人员权益保障
- 25. 抢险救灾
- 26. 志愿服务
- 27. 社区建设
- 28. 乡村振兴
- 29. 助力属地经济发展

# 环境议题

- 30. 环境管理
  - 31. 绿色施工及技术
  - 32. 开发清洁能源
  - 33. 资源利用
  - 34. 节能减排
  - 35. 应对气候变化
  - 36. 落实"双碳"目标
  - 37. 碳市场交易
  - 38. 污染治理
  - 39. 发展循环经济
  - 40. 环保培训宣教
  - 41. 生物多样性保护
  - 42. 海外环境保护

#### **Economic topics**

- Income and performance
- 2. Optimization of industrial distribution
- 3. Engineering construction
- 4. Driven by scientific and technological innovation
- 5. Quality control
- Serving the national strategy
- 7. Supplier management
- 8. Optimize customer service
- 9. Industry cooperation and progress

#### Governance topic

- 10. Strengthening the construction of the Party
- 11. ESG governance
- 12. Improvement of the governance structure
- 13. Compliance risk control
- 14. Information transparency
- 15. Investor relations management
- 16. Anti-commercial bribery and anti-corruption
- 17. Communication with stakeholders

#### Social topic

- 18.Promoting the fulfillment of social responsibility among contractors/subcontractors
- 19. Safe production
- 20. Protecting employees' rights and interests
- 21. Development and training
- 22. Occupational health
- 23. Care for employees' life
- 24. Guarantee of rights and interests of migrant workers
- 25. Rescue and relief work
- 26. Volunteer service
- 27. Community construction
- 28. Rural revitalization
- 29. Supporting to the economic development of the territories

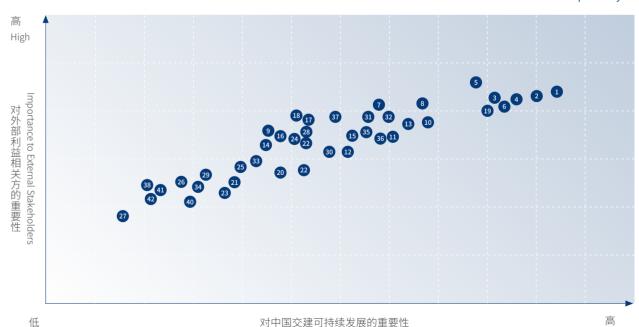
#### Environmental topic

- 30. Environmental management
  - 31. Green construction and technology
  - 32. Development of clean energy
  - 33. Resource utilization
  - 34. Energy conservation and emission reduction
  - 35. Tackling climate change
  - 36. Implementation of the "carbon peak and carbon neutrality" goal
  - 37. Carbon market trading
  - 38. Pollution control
  - 39. Developing the circular economy
  - 40. Environmental training and education
  - 41. Biodiversity protection42. Overseas environmental protection

# 实质性议题分析二维矩阵

High

Two-dimensional matrix for substantive topic analysis



Importance to sustainable development of CCCC

21

Low

# ESG 荣誉

# **ESG HONORS**



# 指数篇

# Indexes



入选国务院国资委 2023 年 "央企 ESG·先锋 100 指数"

Included in 2023 SASAC

"Central Enterprise ESG · Pioneer 100 Index"



荣获中国社会科学院"2023 中国企业300 强社会责任发展指数"第十三名

Won the 13th place of CASS "2023 Social Responsibility Development Index of Top 300 Chinese Enterprises"



入选国务院国资委 2023 年 "央企责任管理·先锋 30 指数"

Included in 2023 SASAC the "Central Enterprises Responsibility Management • Pioneer 30 Index"



荣获中国社会科学院 "2023 重点行业社会责任发展指数" 建筑行业三强

Ranked among Top 3 in CASS "2023 Key Industry Social Responsibility Development Index" in construction industry



位列央视总台 2023 "中国 ESG 上市公司先锋 100" 榜单第 36 位 (建筑企业首位)

Ranked 36th among CCTV headquarters 2023 "Chinese ESG Listed Company Pioneer 100" (1st among construction industry)

#### 案例篇

#### Cases

7 个案例获评中国经济信息社"新华信用金兰杯" ESG 优秀案例。

7 cases were awarded as "Xinhua Credit Jinlan Cup" ESG excellent cases by China Economic Information Agency.

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6 个案例荣获中国上市公司 2023 年 ESG"最佳实践案例"和"优秀实践 案例"。

6 cases were awarded as ESG "Best Practice Cases" and "Excellent Practice Cases" of listed companies in China in 2023.

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荣获中国上市公司协会 2023 年"上市公司董办最佳实践案例"荣誉。

Won the honor of "Best Practice Case of Director Office of Listed Companies" by China Association of Listed Companies in 2023.





案例荣获央视"2023年度中国 ESG 卓越实践"奖

Won CCTV "2023 China ESG Excellence Practice" award







案例入选国务院国资委《中央企业海外社会责任蓝皮书 (2023)》《中央企业社会责任蓝皮书 (2023)》《中央企业上市公司 ESG 蓝皮书 (2023)》优秀案例

Included in the excellence cases of SASAC Blue Book on Overseas Social Responsibilities of Central Enterprises (2023), Blue Book on Social Responsibilities of Central Enterprises (2023) and ESG Blue Book of Listed Central Enterprises (2023)

#### 荣誉篇

# Honors

连续 10 年获得上交所"上市公司信息披露 A 类评价"

Won the Shanghai Stock Exchange "Listed Company Information Disclosure Class A Evaluation" for 10 consecutive years

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荣获 Wind ESG 评级 "A级"

Won the Wind ESG rating  $\mbox{\tt "A"}$ 



荣获我国政府在慈善事业领域的 最高奖项——"中华慈善奖"

Won "China Charity Award", the highest award of Chinese government in charity field



荣获中国社会责任百人论坛"2023 责任犇牛奖——责任企业奖"

Won "2023 Responsibility Bellwether Award-Responsible Enterprise Award" issued by China Social Responsibility Hundred People Forum 专题一

# **TOPICI**

# ます。 大道致远,筑十年丝路历历宏图

CONNECTING THE WORLD FOR FURTHER DEVELOPMENT, BUILDING THE PROSPEROUS SILK ROAD FOR TEN YEARS



"五色交辉,相得益彰;八音合奏,终和且平。"2013年金秋,习近平主席先后提出共建"丝绸之路经济带"和"21世纪海上丝绸之路"重大倡议,"一带一路"倡议由此掀开了中国与世界发展新的篇章。

"Mixture of five colors creates brilliance and ensemble of eight music notes creates harmony and peace." In the autumn of 2013, H.E President Xi Jinping successively proposed to jointly build the "Silk Road Economic Belt" and the "21st Century Maritime Silk Road". "The Belt and Road" Initiative opened a new chapter in the development of China and rest of the world.

作为全球领先的特大型基础设施综合服务商,中国交建坚决贯彻落实习近平总书记关于共建"一带一路"的重要论述和党中央决策部署,秉持人类命运共同体理念,积极发挥中央企业勇担使命的职责作用,聚焦高标准、可持续、惠民生目标,在全球范围内打造"中国港、中国路、中国桥、中国岛、中国站、中国装备"等国家名片,不断推进"一带一路"合作走深走实,以一系列实打实、沉甸甸的成果,让绵亘千年的驼铃古道焕发新的华彩风貌。

As the leading comprehensive service provider of super large infrastructure in the world, CCCC firmly implements H.E. General Secretary Xi Jinping's important statement on jointly building "the Belt and Road" Initiative and the decisions and deployment of the CPC Central Committee. By adhering to the concept of a community with a shared future for mankind, CCCC actively plays the role of central enterprises in shouldering its mission, focuses on the goal of high standards, sustainability and benefiting people's livelihood, creates a national business card such as "China Port, China Road, China Bridge, China Island, China Station and China Equipment" in the world, and constantly promotes "the Belt and Road" Initiative cooperation to go deep and solid. The company obtains a series of practical and impressive results, bringing new splendor to the millennium old camel road.





# 十年·书写跨越山海的光辉岁月

# TEN YEARS · RECORDING OVERSEAS GLORIOUS HISTORY

时间是伟大的书写者,忠实记录着奋进者的步伐。回顾十年,共建"一带一路"倡议从理念提出到行动落实、从总体布局到高质量发展,走过了极不寻常的发展历程。十年来,一代又一代中交人怀着"交融天下,建者无疆"的大爱精神,薪火相承、继往开来,在"一带一路"铺展共建发展的壮美画卷。

Time is a great writer, and faithfully records the steps of persons who go ahead. Retrospecting the past decade, "the Belt and Road Initiative" has gone through an extraordinary development process from concept to action and from overall layout to high-quality development. Over the past decade, generations of CCCC people held the great love spirit of "Transportation integrates the world; the builder's field is boundless", inherited from the past, and continuously grew, and drew the magnificent picture of jointly building and developing "the Belt and Road" Initiative.

作为最早"走出去"的中国企业之一,中国交建的"出海史"始于 20 世纪 50 年代。多年来,我们积极践行"海外优先"战略,提出海外发展从"业务国际化"向"公司国际化"的升级思路,不断重塑和集成新的国际化竞争优势,打造新的海外发展体系、管控体系,积极引导不同主体"走出去",持续增强全球资源配置能力,海外业务的发展映射着时代的变迁,镌记着大国的崛起。

As one of the earliest Chinese companies to "go global", CCCC started going global in the 1950s. Over many years, we actively implemented the "overseas priority" strategy and proposed an upgrading approach for overseas development from "business internationalization" to "company internationalization". We continuously reshaped and integrated new international competitive advantages, created new overseas development systems and control systems, and actively guided different entities to "go global". In addition, we continuously enhanced global resource allocation capabilities. The development of overseas business reflects the changes of the times and marks the rise of major powers.

专题一 中国交建 2023 年环境、社会及管治报告 Topic I 2023 CCCC ESG Report

#### 海外发展三个阶段

Mainly overall contracting of

# Three stages of overseas development

Foreign aid

改革开放"走出去"

Reform and opening up "going global'

以整体承建援外项目为主 由劳务服务逐步向施工总承包拓展 和升级

foreign aid projects Gradually expanded and upgraded from labor services to general construction contracting

# 21 世纪以来,特别是近年来

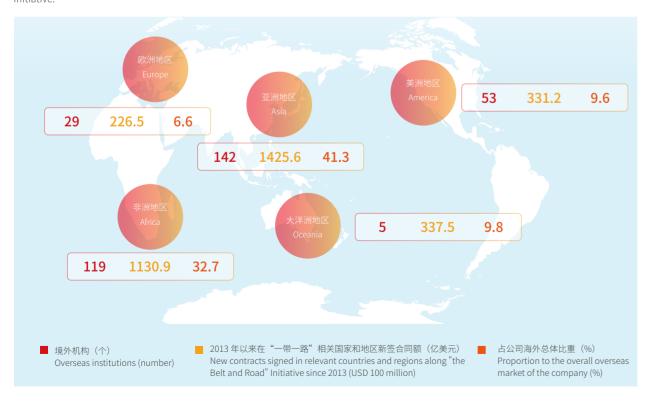
Since the 21st century, especially in recent years

全面提升国际业务发展能级,提出从"业务国际化" 向"公司国际化"升维,成为全球基建行业领军 者和综合一体化服务商

Comprehensively enhanced the level of international business development, proposed upgrading from "business internationalization" to "company internationalization", and became a global leader and comprehensive integrated service provider in the infrastructure industry

我们充分发挥集"规划、设计、投资、融资、建设、运营"于一体的全产业链综合服务能力,推动企业从"业务国际化"向"公 司国际化"升维,已在全球157个国家和地区开展实质性业务,在126个国家和地区设立348个境外机构。2013年以来, 公司在"一带一路"相关国家和地区新签合同额3400多亿美元,参与规划咨询、设计、投资、建设和运营3000多个项目, 成为践行"一带一路"倡议的重要参与者、建设者和贡献者。

We fully leverage our comprehensive service capabilities that integrate planning, design, investment, financing, construction and operation in the full industrial chain, and promote the upgrading of enterprises from "business internationalization" to "company internationalization". We have conducted substantive business in 157 countries and regions worldwide, and established 348 overseas institutions in 126 countries and regions. Since 2013, the company has signed more than USD 340 billion of new contracts in countries and regions related to "the Belt and Road" Initiative, participated in planning consultation, design, investment, construction and operation of more than 3,000 projects, and became an important participant, builder and contributor in the implementation of "the Belt and Road" Initiative.



Statistics review ten years on 数看·丝路十年 "the Belt and Road " Initiative 海外业务占中国对外承 近三年获中国建设工 在全球开展实质性业务 累计投资建设基础设 包工程业务总体比重 合作的国家和地区 程鲁班奖的海外项目 施项目 **157**<sup>^</sup> In the past three Overseas business Substantive business Invested in more than 3 000 infrastructure accounted for 12% of years, overseas projects cooperation in 157 won the Luban Award total overseas contracted countries and regions projects in total of China Construction around the world projects from China Engineering 修建桥梁 修建重点港口 新建或翻修机场 提供集装箱桥吊 **31**座 Provided more than Built more than 200 Built 150 key ports Built or renovated 31 bridges airports cranes

# 十年·擘画工程建设的宏伟蓝图

# TEN YEARS DRAWING UP GRAND PLAN FOR CONSTRUCTION

古往今来,人类"连接互通"的梦想从未停止。习近平总书记强调: "丝绸之路首先得要有路,有路才能人畅其行、物 畅其流。"十年来,我们秉承"让世界更畅通、让城市更宜居、让生活更美好"的企业愿景,跨越江海阻隔、凿穿群山 屏障,建设了一大批高质量、可持续、抗风险、价格合理、包容可及的基础设施,全面推进陆、海、天、网"四位一体" 互联互通,为所在国家织就交通路网,畅通发展动脉。

Throughout the ages, the dream of "connectivity" has never stopped. H.E Secretary General Xi Jinping highlighted: "First of all, the Silk Road needs a road for people and cargoes." Over the past decade, adhering to the corporate vision of "making the world better connected, the city more livable and the life more beautiful", we have built a large number of high-quality, sustainable, risk-resistant, affordable, inclusive and accessible infrastructure across rivers, oceans, mountains to comprehensively promote land, sea, air and cyber connectivity, making the transportation network and smoothing the development artery in relevant countries.

中国交建 2023 年环境、社会及管治报告 专题一 Topic I 2023 CCCC ESG Report

# 架设"连心桥"跨越天堑

Building "bridges linking hearts" crossing deep chasm

# 莫桑比克 | 马普托跨海大桥

Mozambique | Maputo · Katembe Bridge

是非洲**第一**大悬索桥,也是中资企业承建海外**第一**大悬索桥,被莫桑比克总统 纽西誉为"中莫两国团结的象征"。

It is the largest suspension bridge in Africa and the largest overseas suspension bridge contracted by Chinese enterprises. It is praised by Mozambican President Nyusi as "a symbol of unity between China and Mozambique".



# 刚果(布) | 布拉柴沿河大道斜拉桥

Republic of the Congo Brazzaville cable-stayed bridge along river

是非洲第一座大型斜拉桥,填补国内外曲线斜拉桥设计施工领域中的空白。 It is the first large cable-stayed bridge in Africa, and fills the gap in the design and construction of curvilinear cable-stayed bridges at home and abroad.



是中国企业**首次**中标欧盟基金项目,也是中企承建的由欧盟基金出资的单体<mark>最</mark> 大项目。

It is the first time that a Chinese enterprise won the bid for an EU fund project, and it is also the largest single project undertaken by a Chinese enterprise and funded by EU funds.





# 塞尔维亚 | 泽蒙 - 博尔查大桥

Serbia|Zemun-Borca Bridge

是欧洲首座"中国造"大桥,也是中国基建企业进入欧洲的第一个项目。 It is the first "made in China" bridge in Europe and the first project contracted by Chinese infrastructure enterprises in Europe.



# 马尔代夫 | 中马友谊大桥

Maldives | China-Maldives Friendship Bridge

是印度洋上的**第一**座跨海大桥,改写了马尔代夫没有桥梁的历史,使首都马累 与机场岛之间畅通无阻。

It is the first sea-crossing bridge in the Indian Ocean, rewrites the history of the Maldives without bridges, and brings the unblocked connection between capital Male and airport island.



# 铺就"致富路"联通世界

Building "roads to prosperity" to connect the world



Jamaica north-south expressway

是中企在海外运营的首条高速公路,全长约65公里。

It is the first highway operated by a Chinese company overseas, with a total length of about 65km.



# 肯尼亚 | 蒙内铁路

Kenya|Mombasa-Nairobi Standard Gauge Railway

是肯尼亚独立以来最大基础设施建设项目,是肯尼亚实现 2030 年国家发展愿 景"旗舰工程"。

It is the largest infrastructure construction project in Kenya since its independence, and is the "flagship project" for Kenya to achieve the National Development Vision 2030.



Malaysia|East Coast Rail Link

是中国企业海外在建的最大单体交通基础设施项目,建成后将填补马来半岛东 西岸没有铁路贯通的空白。

It is the largest single transport infrastructure project constructed by Chinese enterprises overseas and will fill the gap of no railway between the east and west coasts of the Malay Peninsula after completion.



# 巴基斯坦 | 喀喇昆仑公路

Pakistan | Karakoram Highway

是世界海拔**最高**的跨边境公路,被称为"世界第八大奇迹"。

It is the highest trans-border road in the world and is called the "eighth wonder of the



# 柬埔寨 | 金港高速公路

Phnom Penh-Sihanoukville Expressway in Cambodia

是柬埔寨首条最大规模高速公路投资项目,也是中交全面落实"一带一路"倡 议旗舰项目。



专题一 中国交建 2023 年环境、社会及管治报告 Topic I 2023 CCCC ESG Report

# 打造"发展港"承载希望

Building "ports for development " to carry hope

# 菲律宾 | 迪格宁燃煤电厂配套码头

The Philippines Dinginin coal power plant supporting wharf

是菲律宾在建的最大吨位码头工程,将助力整个吕宋岛电力能源供应。

It is the largest tonnage terminal project under construction in the Philippines and will contribute to the power supply of the entire Luzon Island.



# 喀麦隆 | 克里比深水港

Cameroon|Kribi Deepwater Port

是喀麦隆首个大型深水港口,在整个中非及几内亚湾航运中转、货物流通、进 出口贸易中发挥着重要作用。

It is the first large deepwater port in Cameroon and plays an important role in shipping transit, cargo circulation, import and export trade in the Central Africa and the Gulf of Guinea.

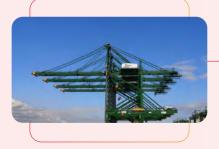
# 沙特阿拉伯 | 吉赞经济城港口

Saudi Arabia|Jazan City for Primary and Downstream Industries Port

是"一带一路"倡议和沙特"2030愿景"成功对接的证明,建成后将是沙特 连通欧亚贸易的重要经济支点。

It is a proof of the successful connection of "the Belt and Road" Initiative and Saudi Arabia's "Vision 2030", and will be an important economic fulcrum for Saudi Arabia to link Eurasian trade.





# 新加坡 | 大士港自动化码头项目

Singapore | Tuas Port Automated Terminal Project

是新加坡政府规划的超级港口建设工程,也是世界规模最大的全自动化码头。 It is a super port construction project planned by the Singapore government and the largest fully automated terminal in the world.

# 建设"幸福城"惠及民生

Building "cities for happiness" to benefit people's livelihood

# 斯里兰卡 | 科伦坡港口城

Sri Lanka|Colombo Port City



是斯里兰卡历史上外商投资单体规模最大项目,被美国《福 布斯》杂志评选为"影响未来的五座新城"之一。

It is the largest single foreign investment project in the history of Sri Lanka, and was selected by Forbes magazine as one of the "Five new cities affecting the future".

# 埃塞俄比亚 | 河岸绿色发展项目

Ethiopia|Riverbank Green Development Project



是中国政府**首个**对外援建的市政园林项目,是中国与埃塞 俄比亚建交50周年的献礼项目,被埃塞俄比亚总理称为 "美化亚的斯"项目的核心示范工程。

It is the first municipal garden project assisted by the Chinese government overseas, a gift project for the 50th anniversary of the establishment of diplomatic relations between China and Ethiopia, and is called the core demonstration project of the "beautify Addis" project by the Ethiopian Prime Minister.

# 斯里兰卡 | 香格里拉酒店

Sri Lanka|Shangri-la Hotel



是中国交建第一个海外超高层建筑,为斯里兰卡超高层建 筑施工与技术管理提供了样板。

It is the first overseas super high-rise building of CCCC, which It is the largest rail transit investment project of Chinese enterprises provides a model for the construction and technical management of super high-rise buildings in Sri Lanka.

# 哥伦比亚 | 波哥大地铁一号线项目

Colombia|Bogota Metro Line 1 Project



是中企在南部拉美地区**最大**轨道交通投资项目,也是哥伦 比亚历史上规模最大市政民生项目。

in southern Latin America and the largest municipal livelihood project in the history of Colombia.

中国交建 2023 年环境、社会及管治报告 Topic I Topic I Topic I

# 开发"清洁站"点亮未来

Developing "cleaning station" to light the future

# 哈萨克斯坦 | 玛依纳水电站

Kazakhstan|Moinak Hydropower Plant

是中哈两国非资源领域首个重大基础设施合作项目,也是该国独立以来**第一个**大型水电站,被誉为哈萨克斯坦"水电明珠"。

It is the first major infrastructure cooperation project between China and Kazakhstan in the non-resource field and the first large hydropower station since the country's independence. It is known as the "hydropower pearl" of Kazakhstan.





老挝 | 南立 1-2 水电站

Laos | Nam Lik 1-2 Hydropower Station

是中资企业在老挝投资的**第一个**水电项目, 也是中资公司走出国门成功开发的**第一个**清 洁发展机制项目。

It is the first hydropower project invested by Chinese companies in Laos and the first clean development mechanism project successfully developed by a Chinese company going abroad.

#### 几内亚 | 凯乐塔水电站

Guinea Kaleta Hydroelectric Project

是几内亚重要的民生工程,项目的建成彻底 改变了首都科纳克里的供电状况,极大缓解 了几内亚电力紧缺局面,被誉为西非水电能 源领域一颗闪耀的明珠。

It is an important livelihood project in Guinea, completely changes the power supply situation in the capital Conakry, and greatly alleviates the power shortage in Guinea. It is known as a shining pearl in the field of hydropower and energy in West Africa.



同时,我们将规则标准"软联通"作为促进互联互通的重要桥梁和纽带,牵头制定发布5项挖泥船和3项起重机ISO国际标准,先后发布英文、法文、俄文等多个外文版本的中国公路、水运行业工程标准规范,并依托肯尼亚内马铁路、哥伦比亚波哥大地铁等重大项目,广泛推广了中国标准、中国技术、中国装备的属地化应用,不断提高规则标准"软联通"水平,为促进全球互联互通做足"增量"。

In addition, we take the rule standard of "soft connectivity" as an important bridge and link to promote connectivity. We have taken the lead in preparation and publication of 5 dredger international ISO standards and 3 crane international ISO standards. We have published several foreign language versions of China's highway and water transport industry engineering standards and specifications in English, French, Russian and other languages. Relying on many major projects, such as Nairobi-Malaba SGR in Kenya and Bogota Metro Line Project in Colombia, we have extensively promoted the localized application of Chinese standards, technologies and equipment, and constantly improved the level of "soft connectivity" of rules and standards, so as to make full "increment" to promote global connectivity.

成为全球可持续交通创新联盟发起单位、首个 入选开放 BIM(建筑信息模型)国际组织建筑 智慧国际联盟的中国企业

Became the initiator of the Global Sustainable Transportation Innovation Alliance and the first Chinese enterprise selected into the Building Intelligence International Alliance of Open BIM (Building Information Modeling) International Organization

在南亚、西非、东非等区域设置海外研发中心

Set up overseas R&D centers in South Asia, West Africa, East Africa and other regions

在全球范围内开展国际创新加速活动,推动联合实验室建设

Carried out international innovation acceleration activities on a global scale and promoted the construction of joint laboratories

# 十年· 演绎民心相通的和美乐章

# YEARS · INTERPRETING THE BEAUTIFUL MUSIC OF PEOPLE-TO-PEOPLE BOND

"亲仁善邻,立己达人"是中华民族坚守的处世邦 交之道。十年来,中国交建与共建国家传承和弘扬 丝绸之路友好合作精神,广泛开展多层次、多领域 人文交流,推动文明互学互鉴和文化融合创新,打 造一批"小而美"民生工程,铺就出通民心、达民 意、惠民生的阳光大道。

"Amity, good neighborliness and helping others to succeed while seeking our own success" is the principle of friendship of Chinese nation. Over the past decade, keeping good friendship spirit with joint construction countries to carry forward and promote the Silk Road, CCCC has extensively carried out multi-level and multi-field cultural exchanges, promoted mutual learning of civilizations and cultural integration and innovation, created a small batch of "small yet smart" livelihood projects, and paved a public road open to all to connect the people's heart, express the public opinion and benefit the people.

此外,我们积极发挥"一带一路"布局优势,自加入共享基金会以来,积极助力基金会与老挝、柬埔寨、塞内加尔、毛里塔尼亚、吉布提等"一带一路"共建国家不同机构合作,开展一系列促进当地民众健康、惠及民生及可持续发展的援助项目,协助应对当地卫生及人道主义需求,进一步促进了与共建国家的民心相通。

Furthermore, we have actively leveraged the advantages of "the Belt and Road" Initiative. Since joining the GX Foundation, we have helped the Foundation to cooperate with different institutions in Laos, Cambodia, Senegal, Mauritania, Djibouti and other countries jointly building "the Belt and Road" Initiative. We have carried out a series of assistance projects that promote local people's health, benefit people's livelihood and promote sustainable development. We helped to respond to local health and humanitarian needs, further promoting people-to-people ties with countries jointly building "the Belt and Road" Initiative.

中国交建 2023 年环境、社会及管治报告 Topic I Topic I

# 解决一批民生问题

# **SOLVING A NUMBER OF LIVELIHOOD ISSUES**

我们将民心相通视为最基础、最坚实、最持久的互联互通,大力贯彻本地化用工原则,海外项目员工本地化率超过80%,与联合国教科文组织共同成立"全球领导力发展基地",实施"铁路人才培训合作计划",全额资助400余名共建国家学生来华留学深造,为共建国家培养多领域、各层次优秀人才,给当地人民带来了增加的收入、改善的生活和值得期待的明天。

We regard people-to-people connectivity as the most basic, solid and lasting connectivity. We vigorously implement the principle of local employment. The localization rate of overseas project employees exceeds 80%. We jointly set up the "Global Leadership Development Base" with UNESCO and takes the "Railway Talent Training Cooperation Program". We fully fund more than 400 students from co-building countries to study in China, and cultivate outstanding talents in various fields and at all levels for co-building countries. We increase their incomes, improve their lives and bring a desirable future.



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。

The road upgrading project in Papua New Guinea brought more than 2,000 local jobs and won the best poverty reduction case in "the 4th Global Poverty Reduction Case Collection Activity".



中方员工传授经验 Chinese employee shared experience



中国交建培养的 31 名安哥拉留学生获得学位

31 Angolan students cultivated by CCCC were granted with certificate of degree

# 与中国建造的铁路共成长!

Grow together with Chinese built railway!

2017年5月31日,由中企承建的蒙内铁路建成通车。这条铁路是肯尼亚独立以来最大的基建项目,也是肯尼亚实现 2030年国家发展愿景的旗舰工程。6年来,这条世纪铁路加快了肯尼亚现代化步伐,促进了东非地区互联互通和中非合作共赢,也为肯尼亚培养了大量铁路专业人才,康西莉亚就是其中之一。

On May 31, 2017, the Mombasa-Nairobi Standard Gauge Railway built by Chinese enterprise was completed and opened to traffic. This SGR is the largest infrastructure project in Kenya since its independence and a flagship project to achieve the country's 2030 national development vision. Over the past six years, this century railway has accelerated the modernization of Kenya, promoted the connectivity of East Africa and the win-win cooperation between China and Africa, and also trained a large number of railway professionals for Kenya, including Concilia.

肯尼亚姑娘康西莉亚·奥维尔 2016 年加入中国路桥非洲之星铁路运营公司,现担任内罗毕机务运用车间副主任。加入公司以来,康西莉亚全身心投入到工作中,成为肯尼亚标轨铁路首批最优秀的机车乘务员之一,她两次在前总统乌胡鲁·肯雅塔的见证下驾驶旅客列车。截至 2022 年,她已独立安全驾驶机车超过 14 万公里,成为肯尼亚家喻户晓的明星人物,她的优秀事迹及成长经历,被收录于肯尼亚铁路博物馆。康西莉亚在"一带一路"的蒙内铁路上实现了梦想,用坚韧不拔的奋斗故事证明了人生价值。

A Kenyan girl Concilia Owire joined the China Road & Bridge Africa Star Railway Operating Company in 2016, and now serves as the deputy director of the Nairobi machinery operation workshop. Since joining the company, she has been fully dedicated to her work and has become one of the first and most outstanding locomotive crew members of Kenya's standard gauge railway. She drove passenger trains twice under the witness of former President Uhuru Kenyatta. As of 2022, she independently and safely driven train for over 140,000km, and became a well-known celebrity in Kenya. Her outstanding deeds and growth experience are included in the Kenya Railway Museum. She realized her dream on the Mombasa-Nairobi SGR on "the Belt and Road" Initiative and proved her value of life with her tenacious stories.





"虽然我现在没有在机车乘务员的岗位上了,但我要将自己已经学习和掌握的知识和技能毫不保留地传授给其他肯尼亚员工。"

"Although I am no longer a train crew member, I will transfer my knowledge and skills I have learned and mastered to other Kenyan employees without any reservation."

———康西莉亚·奥维尔

— Concilia Owire



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# 打造一批民生工程

# CREATING A BATCH OF LIVELIHOOD WORKS

架起一座座沟通桥梁,打开一扇扇心灵之窗。我们依托"蓝马甲"志愿服务体系,以"百企千村"惠民行动与"中交助梦"行动为双引擎,在全球范围内广泛开展履责实践行动。建成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;向共建国家捐赠抗疫物资总价值约人民币600万元;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,谱写了一曲曲与共建"一带一路"国家人民相知相亲的友谊赞歌。

Build communication bridges and open windows of the soul. We rely on the "Blue Vest" volunteer service system, take the "Hundred Enterprises and Thousand Villages" Benefiting Action and the "Build Your Future Dream" Action as dual engines, and widely carry out practical actions to fulfill our responsibilities on a global scale. We have built a series of "small yet smart" and "beneficial and practical" livelihood projects, such as the Huoshen Mountain Hospital in Senegal and the Faqur Primary School in Gwadar, Pakistan. We donated anti-epidemic materials with a total value of approximately RMB 6 million to the co-building countries; made "Fishermen's Livelihood Improvement Plan" in Sri Lanka. We provided INR 550 million (approximately USD 3.3 million) in installments to help local fishermen improve their education, healthcare, and other conditions. We have written songs of friendship for people of the countries along "the Belt and Road"Initiative.

# 17087 只非洲小海龟在"中国产房"出生

17087 African turtlets were born in the "Chinese delivery room"

加纳特码新集装箱码头工程位于非洲西部几内亚湾,是加纳最大的水上工程项目。项目周边是世界级濒危物种海龟主要栖息地,全球 7 大类海龟中有 5 类在此出生。项目团队仿造海龟孵化环境,在海滩上建立"中国产房"——海龟孕育中心,组建专业团队,24 小时轮流在周边海滩巡查收集海龟蛋,为海龟保驾护航。截至 2021 年项目完工,孕育中心累计收集海龟蛋 21684 枚,孵化并放生海龟 17087 只。2022 年,《非洲小海龟在"中国产房"出生》获"中国企业国际形象十大优秀案例"。

The new container terminal project in Ghana is located in the Gulf of Guinea in western Africa and is the largest water work project in Ghana. The surrounding area of the project is the main habitat for the world's endangered species of sea turtles, with 5 out of 7 major sea turtle species born here. The project team imitated the hatching environment for sea turtles and established a "Chinese spawning house" - the Sea Turtle Breeding Center on the beach. We organized a professional team and took turns patrolling and collecting sea turtle eggs on the surrounding beaches 24h a day to protect the sea turtles. As of the completion of the project in 2021, the breeding center collected a total of 21,684 turtle eggs and incubated and released 17,087 sea turtles. In 2022, African Little Turtle Born in the "Chinese Delivery Room" was awarded one of the Top Ten Excellent Cases of International Image of Chinese Enterprises.



放生大海的小海龟

"Turtlet" released into the sea

# 推广一批文化项目

# PROMOTE A BATCH OF CULTURAL PROJECTS

漫长的历史长河中,人类创造并发展了灿烂多姿的文明。 我们以海纳百川的胸怀,在交流中吸纳外来、在互鉴中发展自我,充分尊重驻在国文化习俗,积极传播中华传统文化,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。在埃塞俄比亚,推动中国端午文化和当地咖啡文化相互融合,形成"左手粽子,右手咖啡"的独特吃法。在斯里兰卡,将中国传统文化典籍《弟子规》、员工自发创作的《填海造城》等科学绘本翻译成僧伽罗语、英语等多国语言版本,捐赠给当地学校和国家图书馆,成为推进民心相通的重要载体。 In the long history, people has created and developed brilliant and diverse civilizations. With a broad mind, we introduce foreign cultures through communication and develop ourselves through mutual learning. We fully respect the cultural customs of the host country, actively promote traditional Chinese culture, and collaborate with the host country's embassy to carry out cross-cultural training and exchanges. Brand activities such as the "Beautiful Beach Plan", "National Unity Relay", and "Long Distance Running Relay Race" have had a wide impact. Cultural exchange projects such as "Looking at China on the Cloud", "Silk Road Scholarly", and "Confucius Classroom" have won widespread praise. In Ethiopia, we promote the integration of Chinese Dragon Boat Festival culture and local coffee culture to form a unique way of "left hand Zongzi, and right hand coffee". In Sri Lanka, we translated traditional Chinese cultural classics such as "Di Zi Gui", "Reclamation and City Building" spontaneously created by employees and scientific picture books into many languages such as Sinhalese and English, and donated them to local schools and national libraries. We have become an important carrier for promoting people-to-people connectivity.



2023年12月15日,中国交建以"繁华丝路·交筑美好"为主题举办共建"一带一路"十周年发布会,中央主流媒体及美国美联社等400家境外主流媒体报道,覆盖北美洲、欧洲、亚洲、大洋洲等地区,形成报道超千条,总传播量超1亿。

On December 15, 2023, CCCC held a press conference on the tenth anniversary of the jointly building "the Belt and Road" Initiative with the theme of "Prosperous Silk Road · Beautiful Communications". 400 domestic and overseas mainstream media, including the central mainstream media and the Associated Press of the United States, reported on it, covering North America, Europe, Asia, Oceania and other regions. More than 1000 reports were formed, with a total circulation of more than 100 million.



"路连五洲 桥通四海"中国路桥第二届留学生汉语演讲比赛决赛现场

Final live of the Second Chinese Speech Contest for International Student Sponsored by China Road and Bridge Corporation



扫码观看十周年形象片《共同的建造》 Scan the QR code to watch 10th Anniversary Image Film "Building Together"



扫码观看主题曲《一带繁华一路歌》 Scan the QR code to watch the theme song "Prosperity on the Belt and Songs on the Road"



扫码观看"一带一路"中交助梦暨形象建设十佳案例

Scan the QR code to watch top ten cases of "the Belt and Road" Initiative Dream Building and Image Construction





向巴基斯坦瓜达尔法曲尔学校捐赠教学物资 Donated teaching materials to Gwadar Faqur School in Pakistan



中马友谊大桥开放日活动 China-Maldives Friendship Bridge Open Day Activity



源问题 Donated teaching materials to the Gwadar Fadul School in Pakistan



亚的斯亚贝巴长跑接力赛 Addis Ababa Long Distance Relay Race



向坦桑尼亚儿童福利院进行爱心捐赠 Donated teaching materials to the Gwadar Fadul School in Pakistan

忆往昔,驼铃悠扬、马蹄清脆、舟楫相望;看今朝,云帆高挂、班列飞驰、路通八方。共建"一带一路"是构建人类命运共同体的伟大实践,未来,中国交建将全方位践行全球发展倡议、全球安全倡议、全球文明倡议,全力助推共建"一带一路"高质量发展,为以中国式现代化全面推进中华民族伟大复兴作出更大贡献,为构建人类命运共同体注入更强动力!

The previous scene merged the camel bells, horse hooves and boats. The current scene integrates the clouds, sails, trains and roads. Jointly building "the Belt and Road" Initiative is a great practice of building a community with a shared future for mankind. In the future, CCCC will comprehensively implement the global development initiative, the global safety initiative, and the global civilization initiative. We fully promote the high-quality development of "the Belt and Road" Initiative, make greater contributions to comprehensively promoting the great rejuvenation of the Chinese nation with Chinese path to modernization, and inject stronger impetus into building a community with a shared future for mankind!

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专题二

# TOPIC II

# 建元多書,普永续发展熠熠答卷

BOUNDLESS CONSTRUCTION FOR CLEAR WATERS AND BLUE SKIES, CONTINUING SUSTAINABLE DEVELOPMENT

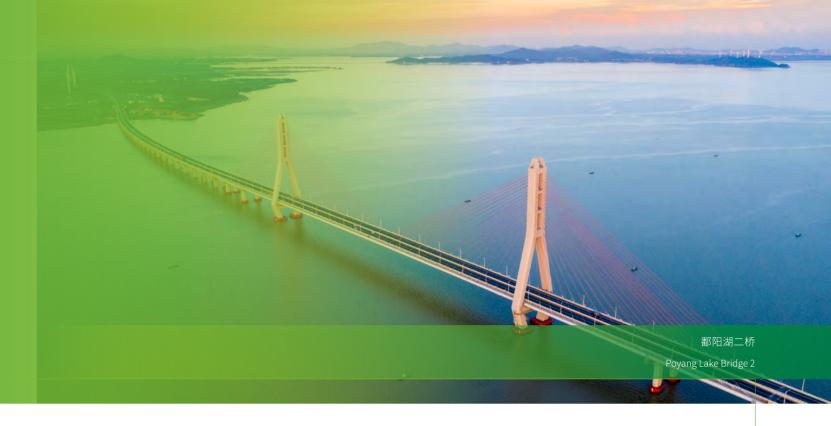
随着碳达峰碳中和目标的提出,一场广泛而深刻的经济社会变革正全面展开,这既对工程建筑行业发展提出了更高要求,同时也提供了转型升级的重大机遇。中国交建作为全球领先的特大型基础设施综合服务商,紧跟"碳达峰碳中和"步伐,坚持以绿色低碳转型作为保障科技型、管理型、质量型世界一流企业建设的有力支撑,将气候风险管理纳入公司战略规划与经营实践,积极主动顺应绿色低碳发展潮流,以高质量绿色低碳发展的中交实践,为国家"3060"双碳目标如期实现贡献力量。本部分按照"治理、战略、风险管理、指标和目标"四支柱框架披露公司气候变化的工作计划和实施成果。



# **GOVERNANCE**

中国交建建立由"董事会-管理层-执行层"构成的气候变化相关事宜治理架构,明确各层级的监督和管理责任。董事会对公司气候变化相关政策和战略规划进行决策和监管,听取管理层对气候变化事宜的汇报并提出建议。公司管理层统筹制定低碳发展政策方针和战略规划,编制《绿色低碳发展管理指导意见》《绿色工程体系建设方案》,对公司《碳达峰碳中和行动方案》《"十四五"绿色低碳发展规划》进行修订,推动公司建立健全绿色低碳发展体系,明确重点业务领域绿色低碳发展举措,稳步推进双碳相关工作。公司各部门/单位严格执行低碳发展规划,扎实落实低碳减排措施,保障低碳减排各项目标如期实现。

CCCC has established a governance structure for climate change related matters, consisting of the board of directors, management, and executive levels to clarify the supervision and management responsibilities at each level. The board of directors makes decisions and supervises the company's climate change related policies and strategic planning, listens to management reports on climate change matters, and puts forward suggestions. The management team of the company coordinates the preparation of low-carbon development policies and strategic plans. We prepared the Guidelines for Green and Low-carbon Development Management and Green Engineering System Construction Plan, revised the Action Plan for Carbon Peak and Carbon Neutrality and "14th Five-Year Plan" for Green and Low-carbon Development, promoted the establishment and improvement of the company's green and low-carbon development system, clarified green and low-carbon development measures in key business areas, and steadily promoted dual carbon related work. All departments/units of the company strictly implement low-carbon development plans, solidly take low-carbon emission reduction measures, and ensure the timely achievement of various low-carbon emission reduction goals.



With the proposal of carbon peak and carbon neutrality goals, a broad and profound economic and social transformation comprehensively happens, which puts higher requirements on the development of the engineering and construction industry, but provides significant opportunities for transformation and upgrading. As a leading global comprehensive service provider for large infrastructure, CCCC closely follows the pace of "carbon peak and carbon neutrality", adheres to the green and low-carbon transformation as a strong support for the construction of world-class enterprises in technology, management, and quality and incorporates climate risk management into the company's strategic planning and business practices. In addition, CCCC actively conforms to the trend of green and low-carbon development, and contributes to the timely realization of the national "3060" dual carbon goals through high-quality, green and low-carbon development practices. This section discloses the company's climate change work plan and implementation results in accordance with four pillar framework integrating "governance, strategy, risk management, indicators and goals".

# 战略

# **STRATEGY**

在全球气候危机不断加剧的背景下,气候变化可能对企业可持续发展产生重大风险,包括政策、技术和市场等不同层面带来的转型风险,以及极端天气和气候特征的长期变化等带来的实体风险。企业作为应对气候变化的重要力量,减缓和适应气候变化将为企业带来积极而广阔的发展机遇。中国交建全面贯彻党中央、国务院、国资委关于碳达峰、碳中和工作的决策部署,修订《碳达峰碳中和行动方案》《中国交建"十四五"绿色低碳发展规划》,推动公司建立健全绿色低碳发展体系,为加快基础设施绿色转型升级,促进公司绿色低碳可持续发展做实强基固本,夯实本质根基。下表中列出中国交建气候风险和机遇识别评估的具体结果:

In the context of escalating global climate crisis, climate change may pose significant risks to the sustainable development of an enterprise, including transformation risks brought by policies, technologies, and markets at different levels, as well as physical risks brought by long-term changes in extreme weather and climate characteristics. The enterprise is an important force in addressing climate change. Mitigating and adapting to climate change will bring positive and broad development opportunities to an enterprise. CCCC fully implements the decisions and deployments of the Party Central Committee, the State Council, and SASAC on carbon peak and carbon neutrality. CCCC revised the Action Plan for Carbon Peak and Carbon Neutrality and CCCC 14th Five-Year Green and Low-carbon Development Plan. The company establish and improve the green low-carbon development system, laying the solid foundation for accelerating the green transformation and upgrading of infrastructure and promoting green, low-carbon, and sustainable development, and strengthening its foundation. The following table includes specific results of climate risk and opportunity identification and assessment of CCCC

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# 气候变化相关风险

# CLIMATE CHANGE RELATED RISKS

	转型风险 T	ransform risk
	风险类型①政策与法规风险 Risk	type ① Policy and regulatory risks
更严格的政策监督和 减排要求 Stricter policy supervision and emission reduction requirements	国内国际对碳排放管控趋严,对企业温室气体排放管理提出更高要求。长期来看,低碳技术革新、购买低碳设备等可能导致管理成本提高,影响相关业务的营收  China and foreign countries control carbon emissions in a stricter way, and put forward higher requirements on the management of greenhouse gas emissions by enterprises. In the long term, low-carbon technological innovation and the purchase of low-carbon equipment may increase management costs and affect the revenue of related businesses	修订《碳达峰碳中和行动方案》《中国交建"十四五"绿色低碳发展规划》,细化了绿色低碳服务和管理能力提升的重点内容,对国家及运营地最新的相关法律法规、监管要求和国家目标等保持高度关注  CCCC revised Action Plan for Carbon Peak and Carbon Neutrality and CCCC 14th Five-Year Green and Low-carbon Development Plan. The new version refines key contents for improving green and low-carbon services and management capabilities. We keep high attention to the latest laws and regulations, regulatory requirements, and national goals of China and local countries.
欢盟征收碳税 Levy of carbon tax by the EU	2023 年 5 月 17 日,欧盟碳边境调节机制 (CBAM) 正式生效,进入欧盟港口的船舶须每年缴纳足够碳配额,否则将会受到 100 欧元 / 吨的罚款或禁止航行  On May 17, 2023, the EU Carbon Border Adjustment Mechanism (CBAM) officially came into effect. Ships entering EU ports are required to pay sufficient carbon quotas annually, otherwise they will be fined EUR 100 per ton or prohibited from sailing.	中国交建作为 CBAM 潜在征税对象,组织推动一系列座谈调研工作,邀请外部行业专家参与研讨,初步对 CBAM 概况趋势、基本判断、对国家及中交业务主要影响进行研究,更好应对外部低碳规则影响以及绿色低碳高质量转型  As a potential tax target of CBAM, CCCC has organized and promoted a series of discussions and researches, and invited external industrial experts to participate in discussions to carry out preliminary research on CBAM overview trend, basic judgment and main impact on China and CCCC business. We can better cope with the impact of external low-carbon rules and the high-quality transformation on green, low-carbon and sustainable development

气候变化相关风险 Climate change related risks	风险对公司可能产生的影响 Potential impact of risks on the company	应对措施 Countermeasures			
碳交易价格上升 Increase of carbon trading price	各碳市场逐步收紧碳配额发放,各国制定更高的自愿减排贡献目标,企业正面临更大的合规压力 Various carbon markets are gradually reducing carbon quota distribution. Many countries are setting higher voluntary emission reduction contribution goals. Enterprises are facing greater compliance pressure. 碳交易价格上升可能会提高公司的运营成本 The increase in carbon trading prices may increase the company's operating costs	提高水电、风电、太阳能光伏发电等可再生能源的使用率 Improve the utilization rate of renewable energy sources such as hydropower, wind power, and solar photovoltaic power generation 加大对新能源技术的研发和使用 Increase research and use of new energy technologies 推进绿色金融支持,发行绿色债券等绿色信贷产品 Promote green finance support and launch green credit products such as green bonds 构建"1+2"内部碳交易制度体系,开展碳资产管理、碳交易试点 Build a "1+2" internal carbon trading system and carry out carbon asset management and carbon trading pilot projects 建立各业务板块碳排放量核算体系,推进碳排放数据监测平台建设,初步构建了涵盖公路、水运、机场、市政、地铁、铁路、建筑、水利、水环境治理、城市综合开发等 10 类工程的建设碳排放测算标准体系框架 Establish a carbon emission accounting system for various business sectors, promote the construction of a carbon emission data monitoring platform, and preliminarily construct a construction carbon emission measurement standard system framework covering 10 types of projects, including highways, water transportation, airports, municipal engineering, subways, railways, construction, water conservancy, water environment governance and urban comprehensive development.			
	风险类型②技术风险 Risk type ② Technical risks				
低碳改造 Low-carbon transformation	受 "双碳" 政策推动,公司绿色低碳化改造和节能降耗设备引进需求上升,投资成本增加  Affected by the "carbon peak and carbon neutrality" policy, the company's demand for green and low-carbon transformation and the introduction of energy-saving and consumption reducing equipment has increased, resulting in increase of investment costs	加强绿色低碳装备研发与改造,持续优化船舶装备梯队结构,研发港口施工船机环保节能技术和港口生产作业机械智能低碳技术Strengthen the R&D and transformation of green low-carbon equipment, continue to optimize the echelon structure of ship equipment, research and develop environmental protection and energy saving technologies for port construction ship machinery and intelligent low-carbon technologies for port production and operation machinery  推动低碳技术研发和推广应用,创新研发大直径盾构同步双液注浆绿色低碳技术、海上风电大直径单桩绿色低碳智能生产技术等绿色低碳关键技术  Promote the research and application of low-carbon technologies, innovate, research and develop the green and low-carbon key technologies such as synchronous dual liquid grouting for large-diameter shield tunneling, green and low-carbon intelligent production technology for large-diameter single pile in offshore wind power, etc			

气候变化相关风险 Climate change related risks	风险对公司可能产生的影响 Potential impact of risks on the company	应对措施 Countermeasures
	需要加大对低碳节能环保技术、设备方面的	积极推进绿色工厂、绿色矿山和生态厂区建设,加大环保技术研发和推广应用的投入
更严格的排放 标准要求 Stricter emission	投入 Increase investment in low-carbon, energy-saving and environmental protection technologies and equipment	Actively promote the construction of gree factories, green mines, and ecological factor areas, and increase investment in the research and development, promotion, and application cenvironmental protection technologies
standards requirements	需要增加清洁能源、循环经济方面的投入 Increase investment in clean energy and circular	制定《绿色工程体系建设方案》,推广绿色施工方案, 减少碳排放
	economy	Make a Green Engineering System Construction Plan ar promote green construction plan to reduce carbon emissions
	风险类型③市场风险 Risk ty	pe ③ Market risks
		加强绿色装备技术研发,推动工程建造绿色转型,打造 更多绿色低碳先进技术示范工程
市场萎缩	各国出台支持绿色低碳发展、限制高碳经济活动的政策法规,工程建筑企业可能面临萎缩的市场需求等冲击  Many countries have released policies and regulations to support green and low-carbon development, and restrict high carbon economic activities. Therefore, construction companies may face shocks such as market shrinkage.	Strengthen the research and development of green equipme technologies, promote the green transformation of engineeric construction, and create more green and low-carbon advance technology demonstration projects
Market shrinkage		发展战略性新兴产业,形成绿色低碳产业竞争优势, 力向全球产业链价值链中高端跃升
		Develop strategic emerging industries, form a competiti advantage in green and low-carbon industries, and focus leaping towards the mid-high end of the global industrial cha value chain
原材料和能源	钢材、水泥等主要原材料价格和能源价格全 面上涨,工程项目成本增加	制定《绿色低碳预算管理办法》等管理制度,打造绿产业链,完善绿色产品研发机制,为工程项目提供质量高工期短、造价低的绿色建筑产品,加强项目成本管控
价格上涨 Increase of price of raw materials and energy	The prices of major raw materials such as steel and cement, as well as energy prices, increase comprehensively, leading to an increase in project costs	Formulate management systems such as Green and Locarbon Budget Management Measures, build a green indust chain, improve the research and development mechanis of green products, provide green building products with his quality, short construction period and low costs, and strength project cost control



# 气候变化相关机遇

# OPPORTUNITIES RELATED TO CLIMATE CHANGE

气候变化相关机遇 Opportunities related to climate change	机遇对公司可能产生的影响 Potential impact of opportunities on the company		
机遇类别①政策机遇 Opportur	nity type ① Policy opportunities		
制定气候适应风险解决方案	更好地了解和适应气候政策和市场的变化		
Develop climate adaptation risk solutions	Better know and adapt to changes in climate policies and markets		
机遇类别②技术机遇 Opportunity type ② Technology opportunities			
	降低对环境造成的负面影响		
	Reduce the negative impact on the environment		
	提升资源使用效率,降低生产经营成本		
使用绿色低碳技术,减少资源使用量 Use green and low-carbon technologies to reduce resource usage	Improve resource utilization efficiency and reduce production and operating costs		
	占领低碳技术先发优势,提升公司声誉和负责任形象		
	Occupy the first mover advantage of low-carbon technology and enhance the company's reputation and responsible image		
机遇类别③市场机遇 Category of opportunities ① Policy opportunities			
使用可再生能源或替代高排放能源	降低生产、运营成本		
Use renewable energy or replace high emission energy sources	Reduce production and operation costs		
	增加公司营收		
开展碳交易市场	Increase company revenue		
Develop a carbon trading market	提高公司绿色低碳发展能力		
	Enhance the company's green and low-carbon development capabilities		
布局低碳产业,创新研发绿色低碳产品和服务	增加公司营收,绿色产品竞争力提升		
Layout low-carbon industries, innovate research and development of green low-carbon products and services	Increase company revenue and enhance competitiveness of green products		



# 风险管理

# **RISK MANAGEMENT**

中国交建编制《节能环保工作三年行动方案(2023-2025 年)》《绿色低碳发展管理指导意见》《绿色低碳管理工作考核办法》等管理规范,提出绿色低碳发展的管理目标、管理职责、管理模式和过程管控方法,形成 1 个中心 +N 个分中心的协同工作机制,对气候风险制定科学的管控制度,完善节能降碳、碳核算体系建设,细化风险管理能力,提升绿色低碳技术研发能力,及时监测、分析气候风险对公司业务产生的负面影响,避免出现重大误述或损失,将风险带来的不利性降至最低。

CCCC prepared the management codes, such as Three-year Action Plan for Energy Conservation and Environmental Protection (2023-2025), Guiding Opinions on Green and Low-carbon Development Management and assessment method for green and low-carbon management work. The company proposed management goals, responsibilities, models and process control methods for green and low-carbon development to form 1 center +N sub-centers collaborative working mechanism. In addition, the company formulated scientific control systems for climate risks, and improved the construction of energy conservation, carbon reduction, and carbon accounting systems. The company refined risk management capability, improved green and low-carbon technology research and development capabilities, timely monitored and analyzed the negative impact of climate risks on the company's business so as to avoid significant misstatement or loss and minimize the disadvantages brought by risks.

# 中交集团绿色低碳发展研究中心

China Communications Construction Group Green and Low-Carbon Development Research Center

# 大交通 Transport upgradation

(路工程绿色低碳分中心) reen and Low-Carbon Highway

A大乔梁泉到低告分中心 A大乔梁泉到低告分中心

en and Low-Carbon Water nsportation Engineering Subter ter

Technology R&D

Green and Low-Carbon Airpor
Construction and Operation
机场绿色低碳建设运维

Dredging, Land Reclamation,
River Basin Governance,

大城市 City regeneration

Green and Low-Carbon Water Environment Sub-Center 水环境绿色低碳分中心 Green and Low-Carbon Constructional Engineering Sub-Center

Green and Low-Carbon Building Technology R&D

风电光伏抽水蓄能 Wastewater and Sewag Treatment, Seawater

nd Power, Photovoltaics, mped Hydro Energy Storage 电光伏抽水蓄能

绿色低碳发展研究中心与分中心组织架构图

 $Organizational\ structure\ of\ green\ and\ low-carbon\ development\ research\ center\ and\ sub\ centers$ 

# 指标和目标

# INDICATORS AND GOALS

习近平总书记强调"降低二氧化碳排放、应对气候变化不是别人要我们做,而是我们自己要做。"中国交建结合自身实际细化制定"三个目标",即到2025年重点业务领域碳排放大幅下降、2030年基础设施建设领域达到峰值、2060年全面实现碳中和发展目标,并以制定优化低碳标准体系为牵引,健全绿色管理体制机制,打好碳排放测定与考核、碳交易、绿色金融等行动"组合拳",在交通行业碳资产管理、碳汇交易等方面勇于探索、示范带动。

H.E General Secretary Xi Jinping highlighted that reducing carbon dioxide emissions and addressing climate change are not things required by others, but things we should do. CCCC has refined and formulated "three goals" based on its own actual situation, i.e., a significant reduction in carbon emissions in key business areas by 2025, a peak in infrastructure construction by 2030, and the comprehensive achievement of carbon neutrality development goals by 2060. Driven by formulation and optimization of low-carbon standard systems, CCCC improves green management system and mechanism, and effectively combines actions such as carbon emission measurement and assessment, carbon trading, and green finance. CCCC is proactive in exploring and demonstrating in carbon asset management and carbon trading in the transportation industry.



# UNDER THE DREAM OF REJUVENATION OPENING UP UNIMPEDED ROADS

# 复兴梦之下 开拓中分词道路

作为唯一一家集国有资本投资公司试点、国有企业党建联系点、交通强国建设试点于一身的中央企业,中国交建坚决扛起"三个试点"先行示范的政治责任,围绕高质量"两保一争"的战略目标,紧扣"高质量发展深化年"总体要求,着力提升科技创新能力,着力推进企业管理体系和管理能力现代化,着力提高发展质量效益,坚定不移做强做优做大,向着建成具有全球竞争力的科技型、管理型、质量型世界一流企业阔步前进,为实现中华民族伟大复兴的中国梦作出中交贡献!

As the only central enterprise integrating the pilot of state-owned capital investment company, the contact point of Party construction of state-owned enterprises and the pilot project of building a transportation power, CCCC firmly shoulders the political responsibility of "three pilot projects" to demonstrate in advance. Centering on the strategic goal of "two guarantees and one strive" of high quality, adhering to the general requirements of "high-quality development deepening year", CCCC makes great efforts to promote scientific and technological innovation, promote the modernization of enterprise management system and management ability, and improve the development quality and benefit. CCCC is steadfastly committed to becoming stronger, better, and bigger, marches forward to become a world-class enterprise with global competitiveness of science and technology, management and quality, and makes contribution to realizing the Chinese dream of the great rejuvenation of the Chinese nation!



# 科技向前新动能

# NEW DRIVING FORCES FOR ADVANCING SCIENCE AND TECHNOLOGY

科技创新催生新产业、新模式、新动能,是发展新质生产力的核心要素。作为落实国家重大战略、服务构建新发展格局的"主力军"和"排头兵",中国交建把创新摆在发展全局的核心位置,面向世界科技前沿、面向国家重大需求,坚决打赢关键核心技术攻坚战,同时,积极促进产业链和价值链向高端攀升,积极发展新业态、新模式,培育新增长点、形成新动能,努力开创自主创新发展的中交路径。

Scientific and technological innovation creates new industries, new modes and new driving forces, which is the core factor of developing new quality productivity. As the "main force" and "pioneer" for implementing the major national strategy and serving and constructing the new development pattern, CCCC put innovation at the core position of the overall development. Facing the world's leading edge of science and technology and the major national demand, CCCC is determined to win the battle of key core technologies. At the same time, it actively promotes the industrial chain and value chain to ascend to the high end, actively develops new business forms and new modes, cultivates new growth points and forms new momentum, and strives to create a CCCC path of independent innovation and development.

# 创新管理

# INNOVATION MANAGEMENT

# ◎提升创新能力

Improve innovation ability

#### 优化创新顶层布局

Optimize innovation top-level layout

开展"十四五"科技发展规划中期评估与修编,优化公司四个结构层次的研发方向、五类研发项目类型和经费重点支持方向。

Carry out the mid-term evaluation and revision of the "14th Five-Year Plan" science and technology development plan, and optimize the research and development direction of the company at four structural levels, five types of research and development project types and key funding support directions.

#### 融入央企创新体系

Integration into the innovation system of central enterprises

积极融入未来产业布局, 承担 / 参与 28 项重点技术、12 项典型应用场景和 3 项重大工程任务。

Actively integrate into the future industrial layout, undertake/participate in 28 key technologies, 12 typical application scenarios and 3 major engineering tasks.

# 打造创新平台标杆

# Build the benchmark of innovation platform

- "极端环境绿色长寿道路工程全国重点实验室"和"长大桥梁安全长寿与健康运维全国重点实验室"通过科技部优化重组。
- "National Key Laboratory of Green and Long-life Road Engineering in Extreme Environment" and "National Key Laboratory of Safe, Long-life and Health Operation and Maintenance of Long Bridge" have been optimized and restructured by Ministry of Science and Technology.
- 深远海工程技术与装备研发中心正式揭牌。
- Deep Sea Engineering Technology and Equipment R&D Center has been officially unveiled.

# ◎培养创新人才

# Cultivate innovative talents

我们将人才发展作为科技创新的内生动力,积极构建"人才雁阵",建立健全科技人才全链条培养机制,不断完善有利于激发创新活力的激励保障机制,着力构建专业覆盖、年龄合理、层次衔接的高水平科研人才队伍,努力让各类人才成长有机会、干事有舞台、发展有空间。

We regard talent development as the endogenous driving force of scientific and technological innovation, actively build a "talent group", establish and improve the whole-chain training cultivation mechanism for scientific and technological talents, constantly improve the incentive guarantee mechanism conducive to stimulating innovation vitality, make great efforts to build a high-level scientific research talent team with professional coverage, reasonable age and level connection, and strive to provide opportunities for growth, stage and space for development of various talents.

#### 构建良好创新生态

Build a good innovation ecology

- •连续第六年组织开展"科技月"活动。
- "Science and Technology Month" activities has been organized for six consecutive year.
- 粤港澳大湾区创新研究院挂牌运行。
- The Guangdong-Hong Kong-Macao Greater Bay Area Innovation Research Institute has been listed for operation.



组建中交科协青年科技工作者协会

The Association of Young Scientific and Technological Workers of CCCC Association for Science and Technology Was Established

# 厚植科技人才沃土

Cultivate a fertile ground for scientific and technological talents

- ●正式组建林鸣院士工作室,张喜刚院士工作室成员获评"中国公路学会百优工程师"等荣誉称号。
- Lin Ming Academician Studio was officially established, and the members of Zhang Xigang Academician Studio were awarded the honorary titles of "100 Excellent Engineers of China Highway and Transportation Society".
- ●11人入选中国科协第八届、第九届青年人才托举工程。
- 11 people were selected for the eighth and ninth youth talent lifting project of the China Association for Science and Technology.
- ●1个团队荣获第三届全国创新争先奖牌,1人荣获"国家卓越工程师"称号,3人被授予"全国水运工程勘察设计建造大师"称号。
- 1 team won the 3rd National Innovation Medal, 1 person won the title of "National Excellent Engineer", and 3 persons were awarded the title of "Master of National Survey, Design and Construction of Water Transportation Engineering".

# ◎海外创新合作

# © Engage in overseas innovation cooperation

我们主动融入全球创新体系,参与全球科技治理,致力为应对全球重大挑战、增进人类共同福祉提供科技综合解决方案。公司持续深入参与建筑智慧国际联盟(bSI)的标准研究与制定工作,牵头组建海洋工程研究专项工作组(Maritime Domain),正式启动水运基础设施 IFC 国际标准第二阶段研究项目。同时,积极打造高端国际联合研发平台,在斯里兰卡、科特迪瓦、肯尼亚、埃塞俄比亚等国设立海外区域研发中心,与国际科研院校开展联合研究,与拉豪集团和西卡集团在全球范围内开展国际创新加速活动,与联合国教科文组织国际工程教育中心共同成立"全球领导力发展基地",在对外合作、科技研发、标准国际化、重大工程建设等方面为建筑央企走出去、全球竞争力提升探索了优质经验。

We actively integrate into the global innovation system, participate in global science and technology governance, and strive to provide comprehensive solutions for science and technology to address major global challenges and enhance the common well-being of mankind. The company has continued to deeply participate in the research and formulation of standards of the building SMART International (bSI), taken the lead in establishing the Maritime Domain, and officially launched the Phase II research project of IFC international standards for water transport infrastructure. At the same time, it has actively built high-end international joint R&D platform, establishes overseas regional R&D centers in Sri Lanka, Côte d'Ivoire, Kenya, Ethiopia and other countries, carried out joint research with international scientific research institutions, carried out international innovation acceleration activities with LafargeHolcim and Sika Group in the global scope, and established the "Global Leadership Development Base" together with United Nations Educational, Scientific and Cultural Organization International Center for Engineering Education, and explored high-quality experiences for central construction enterprises to go global and enhance their global competitiveness in areas such as international cooperation, science & technology research and development, internationalization of standards and construction of major projects.

中国港湾与阿尔及利亚胡阿里·布迈丁科技大学 ~ 联合举办"绿色港口·智慧港口"专题技术交流

CHEC and University of Sciences and Technology Houari Boumediene in Algeria jointly held the thematic technical exchange of "Green Port · Smart Port" 中交一航局与南洋理工大学、万隆理工学院联 ← 合共建"中交一航局东南亚研发中心"

CCCC First Harbor Engineering Company Ltd., Nanyang University of Technology and Institut Teknologi Bandung jointly built "CCCC First Harbor Engineering Company Ltd. Southeast Asia R&D Center"

中国路桥与贝尔格莱德大学 等单位共建"中东欧区域科 技中心"

CRBC, University of Belgrade and Other Units Jointly Built the "Central and Eastern Europe Regional Science and Technology Center"



# 创新成果

# **INNOVATION ACHIEVEMENTS**

# ◎攻关核心技术

# ○ Tackling core technologies

"自主创新是企业的生命,是企业爬坡过坎、发展壮大的根本。关键核心技术必须牢牢掌握在自己手里。"中国交建牢牢把握高端化、智能化、绿色化发展大势,瞄准大交通、大城市、江河湖海和核心装备主攻方向,着力锻造召之能战、战之能胜的科研攻关能力,确保产业链、供应链自主可控、安全可靠,勇当原创技术策源地、现代产业链"链长"。公司形成首研首创 30 余项,新一代港机及自动化码头、超大直径盾构机、"天鲲号"挖泥船等核心装备打破国外技术垄断,港机、海工、盾构等关键核心装备自主可控水平和国产化率大幅提升。2023 年,公司高站位攻关港机重型驱动桥、盾构机主轴承、疏浚控制软件等 5 项"卡脖子"技术,"1025"二期 6 项专项攻关任务顺利推进。

"Independent innovation is the life of an enterprise and the foundation of its development. Key core technologies must be firmly in our own hands." CCCC firmly grasps the development trend of high-end, intelligent and green development, aims at the main attack direction of major transportation, major cities, rivers, lakes and seas and core equipment, and strives to forge the scientific research and key problem tackling capability capable of winning the battle, ensures that the industrial chain and the supply chain are independent, controllable, safe and reliable, and bravely serves as the source of original technology and the "chain leader" of the modern industrial chain. The company has developed more than 30 projects for the first time. The core equipment such as new-generation port machinery and automatic wharf, ultra-large diameter shield machine, "Tiankun" dredger, etc. broke the foreign technology monopoly, and the independent controllable level and localization rate of key core equipment such as port machinery, marine engineering and shield machine greatly increased. In 2023, the company tackled 5 "bottleneck" technologies such as heavy-duty drive axle of port machinery, main bearing of shield machine, and dredging control software, and successfully carried out 6 special research tasks in Phase II of "1025".





荣获建筑智慧国际联盟(bSI)"openBIM"大奖的特别提名殊荣

Won the honor of special nomination for the "openBIM" Award of the building SMART International (bSI)

# 交流大国重器

是世界在建跨径最大的双跨连续拱桥。两架跨径 405米的连续拱桥,创下三项世界第一:双联拱跨径世界第一、独立吊塔的缆索吊跨径世界第一、同等结构的缆索吊吊重世界第一。

It is the largest double-span continuous arch bridge under construction in the world. Two continuous arch bridges with a span of 405 meters set three records of first in the world: The double arch span is the first in the world, the cable crane span of the independent tower is the first in the world, and the cable crane of the same structure is the first in the world.



**3**月 **17**日 March 17

重庆武隆双堡特大桥主拱成功合龙

The main arch of Chongqing Wulong Shuangbao Bridge has been closed successfully

是我国研制的首台直径最大、单体最重的盾构 机用主轴承,打通了国产超大直径盾构机全国 产化"最后一公里"。

It is the first main bearing for shield machine with the largest diameter and heaviest single body developed in China, opening up the "last kilometer" of national production of domestic super-large diameter shield machine.

首创"半潜驳浅吃水干式出运+船管协同变形系统"技术,实现了新式非自浮沉管干式运输,为大体积沉管长距离运输提供重要借鉴思路。

The technology of "semi-submersible barge shallow draft dry shipping+ship pipe cooperative deformation system" was initiated to realize the new non-self-floating immersed tube dry transportation and provide important reference ideas for long-distance transportation of large-volume immersed tube.



**8月25**日 August 25

全球最大江海两用半潜驳船——4.5 万吨宽扁 浅吃水型半潜驳"四航永兴"号正式交付使用

The world's largest river-sea dual-purpose semisubmersible barge - 45,000-ton wide, flat and shallow draft semi-submersible barge "Four Harbor Yongxing" was officially delivered for use

**6**月**9**日 June 9

国产首台超大型盾构机用主轴承"破壁者"通过专家组评审

The first domestic main bearing for the ultra-large shield machine, "wall breaker", passed the expert group review



是全球首创打击能量最大、技术水平和科技含量 最高的液压打桩锤。

It is the world's first hydraulic piling hammer with the strongest blow energy, the most advanced technology level and the maximum contents of technology.



全球首台 6000 千焦 + 超大型液压打桩锤的技术攻关全面启动

The world's first 3500kJ 8.88m hydraulic piling hammer replacement system was successfully delivered

**10月28**日 October 28

在海工装备核心材料制造领域打破了技术壁垒,突破了 长期以来海上风电施工打桩设备的瓶颈,实现了由中国 制造向中国创造的转变。

In the field of core material manufacturing of offshore engineering equipment, it has broken through technical barriers, broken through the bottleneck of offshore wind power construction piling equipment for a long time, and realized the transformation from Chinese manufacturing to Chinese creation.



全球首台 3500 千焦 8.88 米液压打桩锤替打系统顺利交付

The world's first 3500kJ 8.88m hydraulic piling hammer replacement system was successfully delivered

# 9月2日 September 2

QMD-2000 型全球最大吨位桥面吊机

QMD-2000, the world's largest tonnage deck crane



在全球范围内刷新了桥面起重装备的最大吨位 纪录,正式投用标志着我国在高端桥面吊机技术 研发和产业化进程中取得了又一里程碑式成就。

It has broken the record of the largest tonnage of the bridge deck crane equipment in the world, and has been officially put into use, indicating that China has made another milestone achievement in the technological research and development and industrialization process of high-end bridge deck crane.

**12**月 **24**日 December 24

全球最大、国内首艘双燃料动力系统耙吸式挖 泥船"新海鲟"号顺利下水

The world's largest and first domestic dragsuction dredger with dual-fuel power system "Xinhaixun" launched successfully



泥舱设计最大舱容达 1.7 万立方米,是目前全球舱容最大的液化天然气动力耙吸式挖泥船,填补了国内清洁能源挖泥船的空白。

With a designed maximum capacity of the hopper of 17,000m3, it is the largest LNG-powered drag-suction dredger in the world, filling the gap of domestic clean energy dredgers.

# ◎支撑重大工程

# Supporting major projects

我们聚力发挥科技创新支撑引领作用,在离岸深水港、外海筑岛、深水航道、超大跨径桥梁、超长隧道、高原冻土地区高速公路建设等领域集成了一批世界领先的关键技术,助力国家重大工程建设,以科技之力撬动发展"撑杆跳"。2023年,公司6项工程入选第二十届中国土木工程詹天佑奖。

We strive to play a leading role in supporting technological innovation, and have integrated a number of world-leading key technologies in the fields of offshore deepwater ports, offshore islands, deep-water channels, super long-span bridges, super-long tunnels, expressway construction in plateau frozen soil areas, etc., assist the construction of major national projects, and leverage the power of technology to promote development. In 2023, 6 projects of the company were selected into the 20th Tienyow Jeme Civil Engineering Prize.



世界最大跨度公铁两用钢桁拱桥——江苏常泰长江大桥天星洲专用航道桥顺利合龙,该桥研发使用行业内最大吨位 WD100 型拱上 吊机,解决了大吨位杆件吊装、钢桁梁上弦行走等难题。

The world's largest span dual-purpose steel trussed arch bridge - Jiangsu Changtai Yangtze River Bridge Tianxingzhou special channel bridge successfully closed, the bridge developed and used the industry's largest tonnage WD100 arch crane, to solve the large tonnage rod lifting, steel trussed beam string walking and other problems.



全球最大塔式起重机在湖南常德下线,该塔机拥有性能超强、 技术先进、专利众多等特点,是塔机制造史上一次重要的突破, 将应用于巢马长江公铁大桥等世界级桥梁工程建造。

The largest tower crane in the world was launched on the market in Changde, Hunan. The tower crane has the characteristics of superstrong performance, advanced technology and numerous patents. It is an important breakthrough in the manufacturing history of tower crane and will be applied to the construction of world-class bridge projects such as Chaohu-Ma'anshan Yangtze River Highway and Railway Bridge.

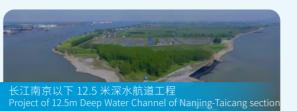


世界在建最长高速公路隧道——新疆乌尉项目天山胜利隧道出口端左右主洞突破8千米大关。

The longest expressway tunnel under construction in the world - the main tunnel at the exit end of Shengli Tunnel in Tianshan Mountain of Xinjiang Urumqi - Weili Project broke through the 8km mark.

# 6 项工程入选我国土木工程建设领域科技创新的最高奖项——詹天佑奖

6 projects selected as the highest award for scientific and technological innovation in the field of civil engineering construction—— Tien-yow Jeme Prize



总投资 66.53 亿元。是建设长江经济带,打造"黄金水道"的重点工程,也是"十二五"期间全国内河水运投资规模最大、技术最复杂的重点工程。

The total investment is RMB 6.653 billion. It is a key project for the construction of the Yangtze River Economic Belt and building a "golden waterway", and is also the key project with the largest investment scale and the most complicated technology in the domestic river water transportation during the "12th Five-Year Plan".



是安徽省"四纵八横"高速公路网"纵二"的重要部分,项目荣获第35届国际桥梁大会最高奖——乔治理查德森奖。

It is an important part of the "two verticals" of Anhui province's "four vertical and eight horizontal" expressway network. The project won the highest award of the 35th International Bridge Conference - George S. Richardson Medal.



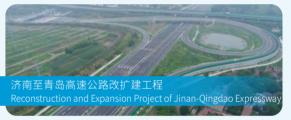
项目的建成不仅是完善广东省南北高速公路网的需要,同时对缓解京港澳高速公路粤北段的交通压力,加快武广高速铁路和京广铁路人货集散有重大意义。

The completion of the project is not only the need to improve the north-south expressway network of Guangdong Province, but also has great significance for relieving the traffic pressure of the northern Guangdong section of Beijing-Hong Kong-Macao Expressway and accelerating the distribution of people and goods of Wuhan-Guangzhou High-speed Railway and Beijing-Guangzhou Railway.



作为浙江省唯一代表参加交通运输部首批"品质工程"创建,是打造甬台温都市圈、联通浙东南沿海产业带的重要通道。

As the only representative of Zhejiang Province to participate in the establishment of the first batch of "quality engineering" of the Ministry of Transport, it is an important channel to build Ningbo-Taizhou-Wenzhou metropolitan area and connect the coastal industrial belt of southeast Zhejiang.



是国内一次性改扩建里程最长、投资最大的高速公路工程项目,有力促进了黄河流域生态保护和高质量发展。

It is the expressway engineering project with the longest reconstruction and expansion mileage and the largest investment at one time in China, which has greatly promoted the ecological protection and high-quality development of the Yellow River Basin.



项目的运营对加强上海城市西部内外环线之间的服务,完善综合交通枢纽配套,带动区域经济发展具有 重要作用。

The operation of the project plays an important role in strengthening the service between the inner and outer ring roads in the western part of Shanghai, improving the supporting facilities of the comprehensive transportation hub and driving the regional economic development.

# ◎保护知识产权

# Protect intellectual property rights

保护知识产权就是尊重创造、保护创新。我们严格遵守《中华人民共和国专利法》《中华人民共和国反不正当竞争法》 《中华人民共和国科学技术进步法》等知识产权保护相关法律法规,加强专利发展顶层设计,注重高价值专利挖掘培育, 推行专利质量评价排序,强化专利考核激励引导,构建全公司上下联通的专利管理平台,持续保护知识产权,不断提升 专利的投入产出效率。2023年,公司深入实施专利质量管理提升专项行动,专利发展实现量质齐升。

Protecting intellectual property rights means respecting creation and protecting innovation. We strictly abide by the Patent Law of the People's Republic of China, the Anti-Unfair Competition Law of the People's Republic of China, the Law of the People's Republic of China on Science and Technology Progress and other relevant laws and regulations on intellectual property protection, strengthen the toplevel design of patent development, pay attention to the excavation and cultivation of high-value patents, promote the evaluation and sequencing of patent quality, strengthen the incentive guidance of patent assessment, build the patent management platform of the whole company, continuously protect the intellectual property rights and constantly improve the input-output efficiency of patents. In 2023, the company deeply implemented the special action of patent quality management improvement, and realized the improvement of patent development in both quantity and quality.

数读・2023

Data Reading • 2023

截至 2023 年底 拥有有效专利

拥有有效发明专利

**5402**<sup>#</sup>

海外专利

By the end of 2023

patents, **5,402** valid

invention patents and 97 overseas patents.

年度新获得专利授权量

6795<sup>#</sup>

其中发明专利授权量

**1514**<sup>#</sup>

It has obtained 6.795 new patent authorizations annually, including

1\_5 14 invention patents

authorizations

民航总院专利"交运行李处理系统"获第24届中 国专利奖银奖

CAAC Patent "Hand-in Baggage Processing System" won the Silver Award of the 24th China Patent Award



一公院专利"基于 BIM 仿真环境的驾驶模拟控制 系统",一航局专利"一种自航式水下隧道沉管运 载安装一体船",二航局、武港院专利"一种超大 型变截面索塔钢筋部品制作方法"等3项专利获 第24届中国专利奖优秀奖。

3 patents, including the patent from CCCC First Highway Consultants Co., Ltd. titled "Driving Simulation Control System Based on BIM Simulation Environment", the patent from CCCC First Harbor Engineering Company Ltd. titled "Self-propelled Underwater Tunnel Immersed Tube Transportation and Installation Integrated Ship" and the patent from Second Harbor Engineering Company Ltd. and CCCC Wuhan Harbor Engineering Design & Research titled "Manufacture Method of Ultra-large Variable Cross-Section Cable Tower Reinforcement Parts", received the Excellent

Award of the 24th China Patent Award.

# 数智转型

# DIGITAL AND INTELLIGENT TRANSFORMATION

生产力的数字化、智能化是新质生产力的重要特征,也是新一轮科技革命和产业变革条件下生产力发展的基本趋势。我 们以建设"数智中交"为目标,推进《"十四五"数字化发展规划》全面实施落地,将数字技术融入生产运营全过程, 努力打造下一代交通基建产品和服务能力,积极推进公司内外数字生态融合发展。2023年,公司业财平台圆满通过验收, 数字化转型成熟度和数据管理能力成熟度均达到三级水平;BIM 技术、北斗导航、高分遥感、大数据等应用技术有力提 升交通行业智能化和信息化水平,为助推新质生产力发展、加快建设交通强国作出积极贡献。

The digitalization and intellectualization of productivity is an important feature of new quality productivity, and it is also the basic trend of productivity development under the new round of scientific and technological revolution and industrial reform. We take the construction of "digital and intelligent CCCC" as the goal, promote the implementation of Digital Development Plan in the 14th Five-Year Plan, integrate digital technology into the whole process of production and operation, strive to create the next generation of transportation infrastructure products and service capacity, and actively promote the ecological integration of digital ecology inside and outside the company. In 2023, the company's business and finance platform passed the acceptance inspection, and the maturity of digital transformation and data management capability reached Level III; BIM technology, Beidou navigation, high-score remote sensing, big data and other application technologies have greatly improved the intelligence and informatization level of the transportation industry, and made positive contributions to boosting the development of new quality productivity and accelerating the construction of a transportation power.

# ◎管理数字化

Management digitization

# 打通业财流程 推进业财一体化

Open up the business and finance process and promote the integration of business and finance

- 六大区域财务共享中心全面建成,统一口径,数据入湖,完善司库系统,财务云实现"业、财、资、税、融"一体化 业财协同。
- The six regional financial sharing centers have been fully completed, with unified caliber and data lake access, and the improved treasury system. The financial cloud realizes the integration of "business, finance, capital, tax and finance" business and finance collaboration.
- 项目管理系统全面试点。
- The project management system has been fully piloted
- "一岗一界面"试点应用。
- "One interface for one post" has been carried out pilot application.
- 合同审批一体化系统全面上线运行,实现"全口径、全层级、全流程"穿透。
- The integrated contract examination and approval system has been fully put into operation, realizing the penetration of "full caliber, full level and whole process".

中国交建 2023 年环境、社会及管治报告 Under the dream of rejuvenation · Opening up the unlimited roads 2023 CCCC ESG Report

按照总体规划,财务云业财协同的工作可以分为八个部分。

The "process of major decisions, major matters, important personnel appointments and dismissals, and the use of large amounts of funds" has been fully digitized online

# ル务端 Business end 分包管理 供应链管理 Subcontract management Supply chain management 项目管理 合同管理 Project management Contract management



流程优化 Process optimization

数据治理 Digital governance

协同 保障

Coordinated guarantee

#### "三重一大流程"全面线上化

The "process of major decisions, major matters, important personnel appointments and dismissals, and the use of large amounts of funds" has been fully digitized online

- 实现了从 OA 系统的剥离,解决了流转效率低、数据结构化程度低、流程跨组织跨部门穿透程度不够等问题,推动形成决策科学、执行高效、监督有力的管理机制。
- Itrealizes the separation from the OA system, solves the problems of low flow efficiency, low data structuralization degree, insufficient cross-organization and cross-department penetration degree of processes and the like, and promotes the formation of a management mechanism with scientific decision-making, efficient execution and powerful supervision.

### 提升系统覆盖率 支撑业务发展

Improve system coverage to support business development

- •人力、党建、战略、档案、科数等 43 个统建系统持续优化提升,统建系统业务覆盖率提升至 81%。
- 43 unified construction systems such as human resources, Party construction, strategy, archives and technology information and data management have been continuously optimized and improved, and the business coverage of unified construction systems has been increased to 81%."
- 国资监管数字化智能化提升专项行动第一阶段实施情况验收评估名列前茅。
- The acceptance inspection and evaluation of the implementation of the first stage of the special action on digitalization and intelligence promotion of state-owned assets supervision ranked top.

# ◎产业数字化

# O Industrial digitalization

我们积极推动传统产业全方位、全链条改造,持续加快互联网、大数据、人工智能和传统业务深度融合,推进大交通、 大城市业务数字化、网络化、智能化发展。同时,我们积极参与国资委工业软件"焕新行动",申报工业软件创新联合体, 对接交通运输部公路局,推进智慧公路相关工作,将产业数字化成果推向行业,赋能行业高质量发展。

We actively promote the all-round and all-chain transformation of traditional industries, continue to accelerate the deep integration of Internet, big data, artificial intelligence and traditional business, and promote the digitalization, networking and intelligent development of transport infrastructures and urban infrastructures. At the same time, we has actively participated in the "Rejuvenation Action" of SASAC Industrial Software, declared the industrial software innovation consortium, promoted related work of the smart highway through the Highway Bureau of the Ministry of Transport, promoted the industrial digitalization achievements to the industry, and enabled the industry to develop with high quality.



评选 60 个优质典型业务场景形成示范效应

Selected 60 high-quality typical business scenarios to form demonstration effect

发布国产化 BIM 设计基座及 10 余款公路、水运、机场行业专业产品

Released domestic BIM design base and more than 10 professional products for highway, water transportation and airport industries

完善 BIM 中心、分中心的协同机制,完成分中心年度考核,并增选 7家 BIM 分中心

Improved the coordination mechanism of BIM center and sub-center, completed the annual assessment of sub-center, and selected 7 BIM sub-centers

围绕重点施工局、骨干设计院、行业重大项目开展平台应用,累计推广了317个项目

Carried out platform application around key construction bureaus, key design institutes and major projects in the industry, and promoted 317 projects in total

国内首个高精度波浪数据基础研究项目实现全球波浪数据自给,打破国外技术垄断,填补国内空白

Undertook the first high-precision wave data basic research project in China, realizing the global wave data self-sufficiency, breaking the foreign technological monopoly, and filling the domestic gap.

# ◎数字产业化

# O Digital industrialization

我们积极顺应科技革命和产业变革大趋势,加快推动数字产业化,逐步建立完善数据资产管理模式,不断拓展应用场景, 提升和丰富数据资产现有价值,推进数据资产全过程管理以及合规化、标准化、增值化。

We actively comply with the general trend of scientific and technological revolution and industrial reform, accelerate the promotion of digital industrialization, gradually establish and improve the data asset management mode, constantly expand application scenarios, enhance and enrich the current value of data assets, and promote the whole-process management, compliance, standardization and value-added of data assets.

#### 开展数据治理

#### Data governance

- 开展数据分级分类,积累 10 亿余条数据入湖,有效推动数据资源的积累与整合,支撑企业运营监控、11 个统建系统、 11 家二级单位数据共享
- Carried out data classification and accumulated more than 1 billion pieces of data into the lake, to effectively promote the accumulation and integration of data resources, and support enterprise operation monitoring, 11 unified systems and 11 secondary units data sharing
- •累计集成 26 套统建系统和 38 套自建系统,上线数据共享目录,推动数据在全公司内的贯通应用
- Accumulated integration of 26 sets of unified systems and 38 sets of self-built systems and launched data sharing directory, to promote the data application throughout the company

#### 建设数字化架构体系

#### Construct digital architecture system

- 完成数字化架构资产梳理,初步形成数字化架构管理办法和架构设计标准
- Completed the sorting of digital architecture assets, and initially formed the digital architecture management methods and architecture design standards
- 研究制定集成架构设计方法并在项目中试点应用,为解决复杂系统集成问题提供了方法论
- Studied and developed integrated architecture design methods and piloted their application in projects, which provides the methodology for solving the problem of complex system integration.
- 建设数字化架构管理系统,实现了架构在线协同设计和架构资产的线上管理
- Built a digital architecture management system to realize online collaborative design of architecture and online management of architecture assets

#### 北斗应用不断突破

#### Continuously break through in Beidou application

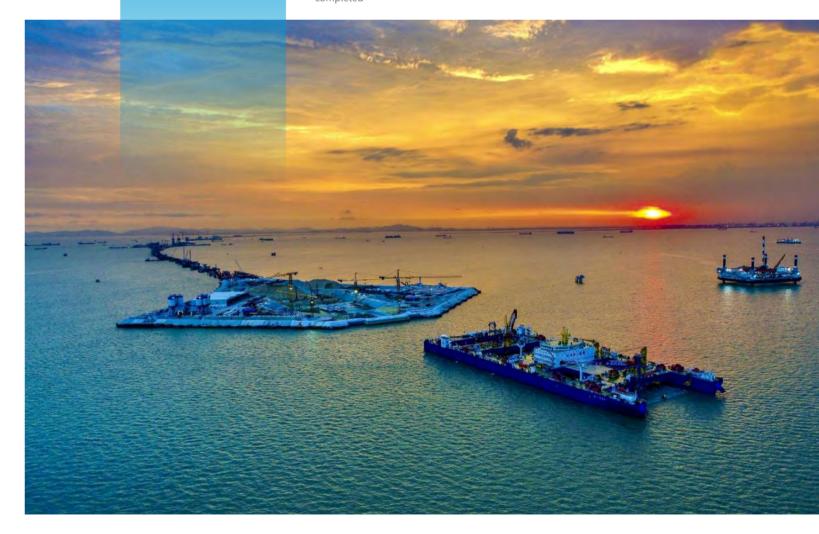
- 完成国资委北斗三年行动计划任务 19 项,形成成果 49 项,任务完成率达到 100%
- Completed 19 tasks of SASAC Beidou three-year action plan, resulting in 49 achievements, with a task completion rate of 100%
- •3 家北斗应用单位获批国家专精特新"小巨人"企业
- 3 Beidou application units have been approved as "small giant" enterprises with the characteristics of specialization, refinement, uniqueness, and novelty

#### 深中诵道沉管隧道

Deep and medium channel immersed tube tunnel

首次将国产北斗卫星定位系统应用于水下沉管隧道施工领域,同时完成了基于"北斗+"的沉管出坞、系泊、沉放、对接、安装等全工艺数字化测控系统一体船的设计建造

The domestic Beidou satellite positioning system has been applied to the underwater immersed tube tunnel construction field for the first time, and the design and construction of a full-process digital measurement and control system integrated ship based on "Beidou+" such as undocking, mooring, sinking, docking and installation of the immersed tube have been completed



# 管理向精新跨越

# THE LEAP OF MANAGEMENT TOWARDS REFINEMENT AND NOVELTY

良好的公司治理是企业高质量发展的坚实基础。中国交建始终坚持"两个一以贯之",不断完善中国特色国有企业现代公司治理,全力打造充满生机活力的现代新国企。

Good corporate governance is a solid foundation for high-quality development of enterprises. CCCC always adheres to the principle of "two consistency rules", constantly improves the modern corporate governance of state-owned enterprises with Chinese characteristics, making every effort to build a new modern state-owned enterprise full of vitality.

# 董事会治理

# **GOVERNANCE OF THE BOARD OF DIRECTORS**

公司严格贯彻国务院国资委、中国证监会、交易所有关公司治理规范运作要求,坚持将党的领导融入公司治理体制机制,充分发挥董事会"定战略、作决策、防风险"作用。2023年,公司通过厘清各级决策主体的权责边界、优化董事会授权管理机制、强化董事会监督职能等措施,进一步完善"权责法定、权责透明、协调运转、有效制衡"的公司治理体系,企业经营质效和核心竞争力得到有力增强,荣获中国上市公司协会"上市公司董办最佳实践案例"。

The company strictly implements the requirements of the State-owned Assets Supervision and Administration Commission of the State Council, China Securities Regulatory Commission and the Exchange Office for standardized operation of corporate governance, adheres to integrating the leadership of the Party into the corporate governance system and mechanism, and gives full play to the role of the Board of Directors in "determining strategies, making decisions and preventing risks". In 2023, the company further improved the corporate governance system of "statutory rights and responsibilities, transparent rights and responsibilities, coordinated operation and effective checks and balances" by clarifying the boundaries of rights and responsibilities of decision-making bodies at all levels, optimizing the authorization management mechanism of the Board of Directors and strengthening the supervisory functions of the Board of Directors, greatly enhancing the quality and efficiency of enterprise operation and core competitiveness, winning the "Best Practice Case of Board Office of Listed Companies" by China Association of Public Companies.

#### 完善董事会建设

#### Improve the Construction of the Board of Directors

- 制定《中国交建公司治理主体议事清单(2023 年版)》,将董事会议事清单与党委会、总办会议事清单衔接融合,进一步厘清各治理主体权责界面;
- Formulated the List of Proceedings of Governing Bodies (2023 Edition) of CCCC, link and integrate the list of proceedings of the Board of Directors with the lists of Proceedings of the Party Committee and the General Office, and further clarified the power-responsibility interface of each governing body;
- 制定《董事会对总裁授权方案及授权清单》,在董事会充分落实职权的基础上,促进经理层依法行权履职,提高经营决策效率,提升公司治理效能;
- Formulated the Authorization Scheme and Authorization List of the Board of Directors to the President, promoted the management to exercise their powers and perform their duties in accordance with the law to improve the efficiency of business decision-making and the efficiency of corporate governance on the basis of the full implementation of the functions and powers of the Board of Directors;
- ●制定《中国交建高级管理人员薪酬及考核管理办法》,进一步完善公司高级管理人员薪酬激励与约束机制。
- Formulated the Measures for the Management of Compensation and Assessment of Senior Management Personnel of CCCC to further improve the incentive and restriction mechanism for senior management personnel of the company.

#### 发挥董事会职能作用

#### Play the Role of the Board of Directors

- **定战略**:分别召开外部董事务虚会和公司年度务虚会暨战略研讨会,就公司深化改革提升行动方案、公司高质量发展 重点工作思路和工作举措等开展研讨。
- Determine strategies: Held external directors' retreat meeting and annual retreat meeting and strategy seminar of the company respectively to discuss the action plan of deepening reform and improvement of the company, the key work ideas and work measures for high-quality development of the company, etc.
- 作决策: 厘清各治理主体权责界面,实现了三会协调运转,2023年,董事会共召开会议16次,审议议案88项。
- Make decisions: Clarify the power-responsibility interface of each governance body and realize the coordinated operation of the Board of Directors, Board of Supervisors, and shareholders' meeting. In 2023, the Board of Directors held 16 meetings and deliberated 88 proposals.
- **防风险**: 完善董事会决策事项合规性审查及风险评估程序;发挥董事会专门委员会作用,就公司投资项目总体执行情况开展评估。
- Prevent risks: Improved the compliance review and risk assessment procedures for decision-making matters of the Board of Directors; Play the role of the special committee of the Board of Directors to evaluate the overall implementation of the Company's investment projects.

## 提升子企业董事会运行质量

#### Improved the operation quality of the Board of Directors of subsidiaries

- 制定《高质量深化提升子企业董事会建设工作方案》,明确不同类型董事会建设标准;
- Formulated the Work Plan for the Construction of High-Quality and Deepening the Board of Directors of Subsidiaries to clarify the construction standards of different types of boards of directors;
- ●制定《落实子企业董事会重点职权"工作到位"标准》,推动子企业董事会职权落实、落细;
- Formulated the Standards for "Properly Implementing" the Key Functions and Powers of the Board of Directors of Subsidiaries to promote the practical and detailed implementation of the functions and powers of the Board of Directors of subsidiaries;
- 制定《所属企业董事会建设标杆创建工作方案》,强化典型带动作用;
- Formulated the Work Plan for Benchmarking in the Construction of the Board of Directors of the Affiliated Enterprises to strengthen the typical driving role;



- 完成派出外部董事管理系统向子企业董事会建设运行系统的升级改造,优化健全派出外部董事履职指导和沟通机制,举办第三期外部董事培训班,进一步提升外部董事履职能力。
- Completed the upgrading and transformation of the management system of dispatched external directors to the construction and operation system of the Board of Directors of subsidiaries, optimize and improved the duty performance guidance and communication mechanism of dispatched external directors, and held the third external director training class to further improve the performance capability of external directors.



2023年,集团首次举办上市公司集体业绩说明会

In 2023, the Group Held the Collective Performance Briefing of Listed Companies for the First Time

多元化的董事会是现代公司治理的重要特点。我们从教育背景和专业经验维度全面推进董事会成员构成的多元化,目前已涵盖公路、桥梁、铁路、港口、航道、电力等基础设施建设管理及经济、财务、金融、企业管理、公共管理等领域,董事会成员具有代表性、专业性和多样性,能够从不同的角度和层面分析问题,有利于做出更全面、更客观的决策,从而更好地维护公司整体利益。

Diversified Board of Directors is an important feature of modern corporate governance. We comprehensively promote the diversification of the membership of the Board of Directors from the perspective of educational background and professional experience. At present, we have covered the construction and management of infrastructure such as roads, bridges, railways, ports, waterways, electric power and other fields such as economy, finance, enterprise management, public management, etc. The members of the Board of Directors are representative, professional and diverse and can analyze problems from different angles and levels, which is conducive to making more comprehensive and objective decisions, so as to better safeguard the overall interests of the Company.

# 投资者关系管理

# INVESTOR RELATIONS MANAGEMENT

中国交建作为沪港两地上市公司,一直以来都把信息披露视为企业责任的重要一环。公司将信息披露作为与广大投资者建立信任的桥梁,始终坚持、秉承两地信息披露的一致性和同步性,持续优化披露内容,做到简明清晰、通俗易懂,上市以来保持信息披露工作零差错。

As a listed company in Shanghai and Hong Kong, CCCC has always regarded information disclosure as an important part of corporate responsibility. The company regards information disclosure as a bridge to build trust with investors and always adheres to the consistency and synchronization of information disclosure of the two place. Meanwhile, the company continuously optimizes the disclosure content to make it concise, clear, and easy to understand, and keeps the information disclosure work with zero errors since the listing.

面对超过 13 万名的中小股东,公司安排专人负责接听 IR 热线、处理 IR 邮件,并对上证 E 互动的投资者关切的主要问题做到"应回尽回";通过"现场+视频直播+电话+网络互动"四维互动方式举办说明会并将会议纪要在官网展示,以方便投资者了解公司,参与说明会互动;公司业绩发布期间,内容以可视化年报等形式披露,加深投资价值解读。2023 年,公司参加机构峰会及投资者调研会共计 110 场,与会投资者超过千余人次。

In the face of more than 130,000 small and medium-sized shareholders, the company arranges specially-assigned person to answer IR hotline, handle IR mail, and "respond to" the main issues concerned by the investors of Shanghai Stock Exchange E Interaction"; holds briefings through the four-dimensional interaction mode of "site + live video + telephone + network interaction" and display the minutes on the official website, so as to facilitate investors to understand the company and participate in the briefings; discloses the content in the form of visual annual report during the release period of the company's performance to deepen the interpretation of investment value. In 2023, the company participated in a total of 110 institutional summits and investor research meetings, with more than 1,000 participants.

# 持续深化改革

# CONTINUE TO DEEPEN REFORM

2023 年是国企改革深化提升行动的开局之年。中国交建深入落实中央决策部署和国务院国资委要求,坚持不懈向改革要活力、要动力,国企改革三年行动高质量收官,精准发力推动改革深化提升,"四能"改革和"五型"总部建设取得进展,集团连续第18年在国务院国资委经营业绩考核中保持A级荣誉,也是建筑行业中唯一获得"18连A"的中央企业。

2023 is the opening year for the deepening and upgrading of state-owned enterprise reform. CCCC thoroughly implements the decision-making and deployment of the Central Committee and the requirements of the State-owned Assets Supervision and Administration Commission of the State Council, and makes unremitting efforts for the vitality and motivation of the reform. It has successfully completed the three-year action of the state-owned enterprise reform was completed with high quality, and made precise efforts to promote the deepening and upgrading of the reform with precision, and has 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. For the 18th consecutive year, the Group has maintained the A-level honor in the operation performance assessment of the State-owned Assets Supervision and Administration Commission of the State Council. It is also the only central enterprise in the construction industry that has won "18 consecutive A".

# ○国有资本专业化整合

# O Professional integration of state-owned capital

我们积极遵循市场经济规律和企业发展规律,推进战略性重组和专业化整合,助力现代产业体系建设,服务加快构建新发展格局。2023年,中水对外完成重组划转,中交设计成功登陆A股,中交长江建设、中交华南建设、中交管道等专业化、区域化平台揭牌运行,市场化机制为高质量发展增添更多活力。

We actively follow the law of market economy and the law of enterprise development and promote strategic restructuring and professional integration to help the construction of modern industrial system and to accelerate the construction of new development pattern. In 2023, China International Water & Electric Group completed reorganization and transfer. CCCC Design successfully landed in A-share, and professional and regional platforms such as CCCC Yangtze River Construction, CCCC South China Construction and CCCC Pipeline were opened for operation. The market-oriented mechanism added more vitality to high-quality development.



2023 年 12 月 28 日,中交设计在上海证券交易所主板重组上市,A 股市值最大的设计咨询公司诞生

On December 28, 2023, CCCC Design was restructured and listed on the Main Board of Shanghai Stock Exchange, and the design consulting company with the largest stock market value A was born.

# ◎国企改革三年行动

# ○ Three-year action of the state-owned enterprise reform

公司系统落实《关于抓好国企改革三年行动高质量收官的工作方案》,以工作台账为抓手,全面梳理改革任务举措落实情况,推动改革三年行动圆满收官,公司高质量收官典型经验在国资委改革三年行动简报刊载。

The company has systematically implemented the Work Plan for High-Quality Completion of Three-Year Action of State-owned Enterprise Reform, comprehensively sorted out the implementation of reform tasks and measures, and promoted the successful completion of the three-year action of reform by taking the working ledger as the starting point. The high-quality completion typical experience of the company was published in the three-year action brief of SASAC.



在国资委改革三年行动专项考核 A 级企业中位列中央企业第 13 名

Ranked 13th among A-level enterprises in special assessment of three-year reform action of SASAC

全面深化改革典型经验做法获评 2023 中国企业改革发展优秀成果特等奖

Its typical experience and practice of comprehensively deepening the reform was awarded the Special Prize for Excellent Achievements in the Reform and Development of Chinese Enterprises in 2023

所属振华重工、二航局、一公局集团成功入选国资委世界一流专业领军示范企业

The affiliated Zhenhua Port Machinery Company Limited, the Second Harbor Engineering Company Ltd. and CCCC First Highway Engineering Group Co., Ltd. were successfully selected as the world-class professional leading demonstration enterprises of SASAC.

# ◎改革深化提升行动

# © Reform deepening and upgrading action

公司制定改革深化提升行动实施方案及工作台账,形成"1336"改革模式、"1+N"改革工作体系、"8+X"改革推进体系。组织所属二级企业和重要三级企业制定实施方案及工作台账,总部各部门开展联审逐一反馈修改意见;升维公司全面深化改革领导小组工作机制,研究改革重点工作,协调解决推进中遇到的困难问题;开展改革深化提升行动专项培训,累计培训近1600名管理人员和业务人员。

The company has formulated the reform deepening and upgrading action implementation plan and working ledger to form the "1336" reform mode, "1+N" reform work system and "8+X" reform promotion system. Organized the subordinate second-level enterprises and important third-level enterprises to formulate the implementation plan and working ledger, and each department of the headquarters to carry out joint review and provide feedback on the modification opinions one by one; upgraded and maintained the working mechanism of the company's comprehensive deepening reform leadership group, studied the key work of reform, and coordinated and solved the difficult problems encountered in the promotion; conducted special training on reform deepening and upgrading action, and trained nearly 1,600 managers and business personnel.

# ◎改革专项工程

70

# Reform special projects

公司将改革深化提升行动与"双百行动""科改行动"等改革专项工程同步部署、共同推进。在国务院国资委"双百企业""科改企业"2022年专项考核结果中,公司6家"双百企业"和3家"科改企业"获得8家标杆、1家优秀的优异成绩,总体成绩在中央企业中排名第二。

The company simultaneously deploys and promotes the reform deepening and upgrading action with special reform projects such as "Double Hundred Action" and "Science and Technology Reform Action". In the 2022 special assessment results of "Double Hundred Enterprises" and "Science and Technology Reform Enterprises" of the State-owned Assets Supervision and Administration Commission of the State Council, 6 "Double Hundred Enterprises" and 3 "Science and Technology Reform Enterprises" of the company obtained result of 8 benchmarks and 1 excellence, ranking the second place among the central enterprises in overall performance.

# 依法合规经营

# OPERATING IN COMPLIANCE WITH THE LAW

公司以习近平法治思想为指导,旗帜鲜明尊法治、强合规,以落实《中央企业合规管理办法》为主线,锚定世界一流企业法治建设创建目标,加快推进境内外一体化合规管理体系建设,深化法治对改革发展和生产经营的服务保障,不断提高依法依规治企能力,在深化提升、发挥作用上下功夫、求实效。

Guided by Xi Jinping's thought of rule of law, the company has a clear banner of respecting the rule of law and strengthening compliance. With the implementation of the Compliance Management Measures for Central Enterprises as the main line, the company has determined the construction goal of world-class enterprises under the rule of law and accelerated the construction of integrated compliance management system at home and abroad. The company has deepened the service guarantee of the rule of law on reform, development and production and operation, continuously improved the ability of running enterprises according to laws and regulations, and made great efforts to deepen the promotion and play a role and seek practical results.

# ○法律管理

# O Legal Management

# 建设法律合约体系

Law construction contract system

- **持续深化法治组织体系建设**:出台《关于强化三级工程公司法务合约管理体系建设的指导意见》,构建上下贯通、法商融合的大法务合约体系;强化"源头预控、过程监控、事后闭合"的项目合同管理机制,从源头减少合同风险发生。
- Continue to deepen the construction of the legal organization system: Issued the Guiding Opinions on Strengthening the Construction of Legal Contract Management System of Three-level Engineering Companies, and built a large legal contract system that connects the upper and lower levels and integrates legal and commercial aspects; Strengthened the project contract management mechanism of "source precontrol, process monitoring and post-closure" to reduce contract risks from the source.
- 提升重点环节法务合约管理水平: 出台分包供应商反索赔应对指引,建立索赔调差案例库,建立健全二次经营常态化交流机制,推动基层单位和基层项目价值创造能力不断提升;强化合同行权能力建设,紧抓中间计量和竣工结算等关键环节,用足、用好法律手段降低合同资产。
- Improve the management level of legal contracts in key links: Issued anti-claim response guidelines for subcontracting suppliers, established case base for claim adjustment, established and improved secondary business normalization communication mechanism to promote the continuous improvement of value creation ability of grass-root units and grass-root projects; Strengthened the construction of contract exercise capacity, payed close attention to the key links such as intermediate measurement and completion settlement to reduce contract assets with sufficient and good legal means.
- **建立精准授权管控机制**:编制《建设工程项目经理授权管理指导意见》《驻外机构负责人授权管理指导意见》,明确 法人与基层项目、法人与机构权责界面,强化分级分类授权管理。
- Establish a precise authorization management and control mechanism: Prepared the Guiding Opinions on the Management of Authorization of Construction Project Managers and the Guiding Opinions on the Management of Authorization of Heads of Overseas Organizations, defined the power-responsibility interface between the legal person and the grass-roots projects, and between the legal person and the organization, and strengthened the hierarchical and classified authorization management.

### 防范涉外合规风险

### Prevent foreign-related compliance risks

- 境外构建"首席合规官 + 区域合规官 + 国别合规官"组织体系,共设境外合规官 245 名。
- Established the organization system of "Chief Compliance Officer + Regional Compliance Officer + Country Compliance Officer" overseas, with 245 overseas compliance officers.

- ●加强境外项目重要决策、规章制度、经济合同、授权委托书和银行保函"五项法律审核"全覆盖。
- Strengthened the coverage of "five legal audits" of important decisions, rules and regulations, economic contracts, letters of authorization and bank guarantees of overseas projects.

### 法治支撑保障发展

# Provide legal support to guarantee development

- •支撑业务经营:强化投资项目合法合规性论证,把控收益与风险的平衡;强化对专项改革和"三新"业务的法律支撑。
- Support business operations: Strengthened the demonstration of legal compliance of investment projects, and control the balance between income and risk; Strengthen the legal support for special reform and "three new" business.
- 支撑品牌建设:持续推进"中国交建"等核心商标注册,加强海外商标注册和保护,加快构建统一、协调、有序的中交商标体系;制定商标规范使用指引,提升商标使用的规范化水平。
- Support brand building: Continued to promote the registration of core trademarks such as "China Communications Construction", strengthened the registration and protection of overseas trademarks, accelerated the construction of a unified, coordinated and orderly trademark system of CCCC; formulated guidelines for the standardized use of trademarks to improve the standardized level of trademark use.
- **服务债权清收**: 持续开展法律服务债权清收攻坚战活动,形成长效机制; 平衡市场开发和依法维权关系,加强案件可执行性策划,加大主动维权力度。
- Serve the clearing and collection of creditor's rights: Continued to carry out the activities to use the law to serve the battle of clearing and collecting creditor's rights to form a long-term mechanism; Balanced the relationship between market development and legal rights protection to strengthen case execution planning, and increase the degree of active power maintenance.

## 中国交建境外 "1+7+N" 合规制度体系 CCCC Overseas "1+7+N" Compliance System

《中国交建海外员工合规行为准则》

Compliance Code of Conduct for Overseas Employees of

涉及标、现金

涉及第三方代理、采购、投标、合同、招待、捐赠和赞助、现金支付等7个境外合规高风险环节的制度流程

Institutional process including 7 highrisk links of overseas compliance, including third-party agency, procurement, bidding, contract, entertainment, donation and sponsorship, and cash payment



包括《海外合规工作管理 办法》及海外合规调查等 在内的配套制度体系

Supporting system including the Overseas Compliance Management Measures and overseas compliance investigation

# ○风险管控

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# Risk management and control

公司深入贯彻国务院国资委关于防范化解重大风险决策部署,不断提升自身风险防控能力和水平,牢牢守住不发生重大风险底线。

The company thoroughly implements the decision-making deployment of the State-owned Assets Supervision and Administration Commission of the State Council on prevention and resolution of major risks to continuously improves its risk prevention and control capability and level, and to firmly holds the bottom line that major risks do not occur.

# 风险评估

### Risk assessment

组织开展年度重大风险预测 评估工作,形成重大风险评 估报告并制定针对性的风险 防控工作要求下发给各单位。

Organized and carried out annual major risk prediction and assessment to form major risk assessment report, and formulated targeted risk prevention and control requirements to issue them to each unit.

### 风险防范

### Risk prevention

印发合规风险识别清单,在 战略规划、市场开发及财务 金融等 14 个领域识别合规风 险 190 余项,夯实合规管理 基础。

Issued the compliance risk identification list, identified more than 190 compliance risks in 14 fields such as strategic planning, market development and finance to lay a solid foundation for compliance management.

# 风险监测

### Risk monitoring

持续优化季度风险监测机制, 有效改善传统机制数据时效 性差、误差较高等问题。

Continued to optimize the quarterly risk monitoring mechanism and effectively improve the problems of poor timeliness and high error of the data of the traditional mechanism.

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# ◎正风反腐

# ○ Improving conduct, building integrity, and combat corruption

中国交建坚持以习近平新时代中国特色社会主义思想为指导,深入贯彻落实中央纪委重要会议精神,坚守职责定位,坚持问题导向,有序推进正风肃纪反腐各项工作,为公司实现高质量"两保一争"提供坚强保障。

CCCC adheres to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics, thoroughly implements the spirit of important meetings of the Central Commission for Discipline Inspection, adheres to the responsibility orientation, adheres to the problem orientation, and orderly promotes the work of good Party conduct promotion, bad discipline elimination and anti-corruption, so as to provide a strong guarantee for the Company to realize the high-quality "two guarantees and one strive".

# 政治监督保障更加有力

# Stronger political supervision and guarantee

- 制定《贯彻落实习近平总书记在本单位重要指示批示精神再巩固再提升专项行动方案》;
- Formulated the Special Action Plan for Implementing the Spirit of Important Instructions of H.E General Secretary Xi Jinping in the Unit;
- 聚焦贯彻"一利五率"考核导向、国企改革深化提升行动、防范化解重大风险等关键任务,印发政治监督重点事项清单,逐项紧盯落实;
- Focused on the implementation of the assessment orientation of "one profit and five rates", the deepening and upgrading of the state-owned enterprise reform, and prevention and resolution of major risks and other key tasks, printed and issued the list of key matters of political supervision to keep an eye on the implementation one by one;
- ●制定《加强政治监督工作指引》,初步构建以工作指引为统领、以日常监督实施意见等为配套的政治监督制度体系。
- Formulated the Guidelines for Strengthening Political Supervision, and initially established a political supervision system based on the guidance of the work guidelines and the opinions on the implementation of daily supervision.

中国交建 2023 年环境、社会及管治报告 Under the dream of rejuvenation · Opening up the unlimited roads 2023 CCCC ESG Report

### 监督制约体系更加健全

### More perfect supervision and restriction system

- •全年组织召开监督委员会、监督委员会办公室会议7次,"大监督"体系规范运行;
- Organized and held 7 meetings of the supervision committee and the office of the supervision committee throughout the year, and operated the "Large Supervision" system in a standardized way;
- 总结第一批廉洁风险防控联系点建设成果,以基层项目为重点确定第二批 20 个联系点,廉洁风险防控体系拓展延伸;
- Summarized the construction achievements of the first batch of integrity risk prevention and control contact points, determined the second batch of 20 contact points focusing on grass-roots projects, expanded and extended the integrity risk prevention and control system;
- ●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。
- Studied and drafted the Guiding Opinions on the "Four-in-one" Overseas Integrity and Compliance System Construction to improve the overseas integrity and compliance governance level.

# 腐败治理效能更加凸显

### More prominent effectiveness of corruption governance

- ●聚焦工程建设领域关键环节精准发力,结合国资委党委巡视整改,加大力度处置工程项目问题线索;
- Focused on the key links in the field of engineering construction, and made efforts to deal with the clues of engineering project problems in combination with the inspection tour by the Party Committee of SASAC;
- ●推进驻委纪检监察组《纪检监察建议》的整改落实,制定专项整改方案;
- Promoted the rectification and implementation of the Discipline Inspection and Supervision Suggestions of the Discipline Inspection and Supervision Team of the Standing Committee, and formulated special rectification plans;
- 召开 2 次全集团警示教育大会,创新形式举办党风廉政宣教月和廉洁家风建设活动,"心至廉路致远"廉洁文化理念更加深入人心。
- Held group-wide warning and education conferences for two times, and the Party conduct and clean government publicity and education month and clean family style construction activities in an innovative manner, and made the integrity culture concept of "maintaining integrity and self-discipline enables one to go further and more steadily" more popular.

### 作风建设堤坝更加牢固

### Firmer work style construction embankment

- 坚持常态长效,开展风腐一体课题研究,总结推广部分单位制定运用《贯彻落实中央八项规定精神正负面清单》经验做法;
- Adhered to the normal and long-term effect, carried out research on the close relationship between formalism, bureaucracy, hedonism, and extravagance with corruption issues, summarized and popularized the experience and practice of some units in formulating and applying the List of Positive and Negative Examples for Implementing the Spirit of the Eight Regulations of the Central Government;
- 坚持倡导新风,组织各单位选树勤廉楷模,举办道德讲堂,开展主题宣讲,企业新风正气进一步充盈。
- Insisted on advocating the new style, organized each unit to select the model of honesty and integrity, held moral lecture, and carried out theme presentation to further enrich the new spirit of the enterprise.

### 纪检队伍建设更加过硬

### Better discipline inspection team construction

• 深入开展主题教育和教育整顿,全年组织集体学习18次、举办主题教育专题读书班8期;

- Conducted in-depth thematic education and education rectification, organized 18 times of collective learning throughout the year, and held 8 thematic education reading classes;
- 举办集团执纪审查专题培训班,组织开展集团纪检业务"大比武",开展执纪审查专项检查,锻造高素质专业化纪检监察干部队伍;
- Held the special training class of discipline inspection of the Group, organized and carried out a "competition" for discipline inspection business of the Group and the special discipline inspection to forge a contingent of high-quality professional discipline inspection and supervision cadres;
- 通过外派中央纪委国家监委等方式"以干带训"28人次,在实战中增强斗争本领;组织16家二级单位纪委开展大监督体系等课题研究,以理论研究提升实践能力。
- Carried out 28 person-times of "taking cadres as a guide for training" by means of dispatching members of the Central Commission for Discipline Inspection and State Committee of Supervisory to enhance their fighting ability in actual combat; and organized discipline inspection committees of 16 secondary units to carry out research on major supervision system and other subjects, so as to improve practical ability through theoretical research.



召开 2023 年党风廉政建设和反腐败工作会议、警示教育大会暨监督委员会会议

Held 2023 working conference on Party conduct and clean government construction and anti-corruption, warning education conference and supervision committee meeting

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# 质量向优新突破

# NEW BREAKTHROUGH IN THE TRANSFORMATION OF QUALITY TOWARDS EXCELLENCE

质量是人类生产生活的重要保障,是兴国之道、强国之策,更是企业发展的生命线。中国交建坚持质量第一、效益优先,统筹做好量的合理增长和质的稳步提升,努力当好解决发展不平衡不充分问题和满足人民美好生活需要的主力军。

Quality is an important guarantee for human production and life, the path to national prosperity, the strategy for national strength, and the lifeline of enterprise development. CCCC adheres to the principle of quality first and benefit first, makes overall plans for reasonable growth of quantity and steady improvement of quality, and strives to be the main force to solve the problem of unbalanced and insufficient development and meet the needs of people for a better life.

# 强化质量管理

# STRENGTHENING QUALITY MANAGEMENT

中国交建长期以来高度重视质量管理工作,秉承以质量求生存、以质量促发展、以质量谋效益的质量价值观,不断完善质量管理体系,逐步实现智能质量管控模式,大力推进质量文化建设,全面提升公司项目质量管理水平。

CCCC has long attached great importance to quality management work, adhering to the quality value of "surviving by quality, promoting development by quality and seeking benefits by quality", constantly improving the quality management system, gradually realizing the intelligent quality management and control mode, vigorously promoting the construction of quality culture and comprehensively improving the project quality management level of the company.

# 优化质量管理体系

Optimize the quality management system

颁布公司《高质量项目管理体系》等制度,明确各个环节质量 控制工作;

Issue the company's High Quality Project Management System and other systems to clarify the quality control work of each link;

通过中国船级社质量认证年度质量管理体系外部认证审核。

Passed the annual quality management system external certification audit of China Classification Society.

## 推进质量管控数字化

Promote the quality control digitalization

深入推进质量监控专业化监控中心建设运行,加速推广质量管 理数字化应用,全面提升质量管理专业化、智慧化水平。

Further promoted the construction and operation of specialized monitoring centers for quality monitoring, accelerate the promotion of digital application of quality management, and comprehensively improved the professional and intelligent level of quality management.

# 扫码观看央视《了不起的工程》 中国港

Watch the Great Engineering on CCTV - China Port by scanning the QR code





Season 1

Season 2

# 扫码观看央视《了不起的工程》 中国桥

Watch the Great Engineering on CCTV - China Bridge by scanning the QR code

Season 2





Season 1





# 截至 2023 年 10 月 31 日

集团及子公司获取壹级及以上资质 the Group and subsidiaries

# As of October 31, 2023,

have obtained 19 Grade A and above qualifications

# 港口与航道工程 施工总承包特级

● 项

3 special-grade qualifications for general contracting of port and channel engineering construction

公路工程施工总 承包特级资质

3项

3 special-grade qualifications for general contracting of highway engineering

设计水运行业甲 级资质

Grade A qualifications for design water transportation industry

设计公路行业甲 级资质

Grade A qualifications for design highway industry

其他甲级及壹级 以上资质

7 Grade A and above qualifications for others

### 深化质量文化培育

Deepen the quality culture cultivation

开展员工质量文化的培养工作,每年开展"质量月"等多样化质量宣传活动,让质量第一理念深入人心。 Carried out the training of employee quality culture and diversified quality publicity activities such as "Quality Month" every year, so that the concept of quality first can be deeply rooted in people's hearts.

# 建造质量标杆

# ESTABLISH A QUALITY BENCHMARK

质量是工程和产品的生命。我们围绕"大交通、大城市"两大核心业务,全面对接交通强国、海洋强国、制造强国等国 家重大战略,深度融入京津冀、长三角、粤港澳、雄安新区等国家区域发展规划,以一个个"了不起的工程"铭刻时代 印记。公司 18 个项目荣获 2022-2023 年度中国建设工程鲁班奖, 67 个项目荣获 2022-2023 年度国家优质工程奖。

Quality is the life of engineering and product. Centering on the two core businesses of "transport infrastructures, major cities", we comprehensively connect with the national major strategies of transportation power, marine power and manufacturing power, deeply integrate into the state regional development plans of Beijing-Tianjin-Hebei Urban Agglomeration, Yangtze River Delta, Guangdong, Hong Kong and Macao, Xiong' an New Area, and impress the era with "Great Engineering". 18 projects of the company won the 2022-2023 China Construction Engineering Luban Prize and 67 projects won the 2022-2023 National Quality Engineering Award.

# 〇 "大交通"建设国家队

O National team for construction of "transport upgradation"

从阡陌稀疏到枢纽纵横,综合立体的交通路网正从蓝图走向现实。作为基础设施建设领域的领军企业,我们不断巩固"大 交通"领域的传统优势地位,筑港通航、修路架桥,积极融入交通强国战略,依托现代综合交通全领域、全产业链优势, 以设计咨询为引领,以商业模式创新为手段,推进基础设施建设互联互通。2023年,狮子洋过江通道、新疆 G219线、 北京地铁 22 号线、重庆市郊铁路、海太长江隧道等重大项目先后中标;福建罗源牛坑湾填海工程、海南洋浦集装箱枢 纽港扩建、黄骅港综合港区自动化改造、南通港洋口金牛码头、湛江宝满集装箱码头扩建等港航项目顺利推进;参建的 北京新机场荣获公司首个、全国第二个民航飞行区工程领域国家优质工程金奖。一条条道路畅通南北,一座座桥梁跨越 东西,一个个港口迎来送往,勾勒出新时代城市发展的富美图景。

From the sparse paths to crisscrossing hubs, the comprehensive three-dimensional traffic network is moving from blueprint to reality. As a leading enterprise in the field of infrastructure construction, we have continuously consolidated the traditional advantageous position in the field of "transport upgradation", built ports and navigation, constructed roads and bridges, actively integrated into the strategy of building a transportation power, and relied on the advantages of modern comprehensive transportation in the whole field and the whole industry chain to promote the connectivity of infrastructure construction with design consulting as the guide and business model innovation as the mean. In 2023, major projects such as Shiziyang River-crossing Channel, Xinjiang national highway G219, Beijing Metro Line 22, Chongqing Suburb Railway, Haitai Yangtze River Tunnel and other major projects successively won the bid; Port and shipping projects such as the Luoyuan Niukeng Bay reclamation project, Fujian, the expansion of Yangpu container hub port in Hainan, the automation transformation of Comprehensive Port Area of Huanghua Port, the expansion of Yangkou Jinniu Wharf of Nantong Port, and the expansion of Zhanjiang Baoman Container Terminal were carried out smoothly; Beijing New Airport won the National Gold Award for Prime-quality Projects in the field of civil aviation airfield engineering, which is the first of the company and the second in China. Roads connect the south and north, bridges span the east and west, and ports welcome and bid farewell to people coming and going outlining the rich and beautiful prospect of urban development in the new era.

# 交通效例

• **1**月**6**日 January 6

成通车。

世界最大跨径部分地锚式混合梁斜拉

桥——十淅高速丹江口水库特大桥建

The world's largest span cable-stayed

bridge with partially anchored hybrid

girder, Danjiangkou Reservoir Bridge

实现了鄂西北到豫西南1小时快速直达,

It realized one-hour fast direct access from

northwest Hubei to southwest Henan, and

promoted the high-quality economic and

social development of the regions along

推动沿线区域经济社会高质量发展。

of Shiyan-Xichuan Expressway, was

completed and opened to traffic.

# • **1**月**23**日 January 23

# 尼日利亚首个现代化深水港——莱基 深水港码头正式开港

The first modern deepwater port in Nigeria, Leki Deepwater Port, was officially opened.



项目的建成有效提升尼日利亚海运能力和 区域物流枢纽作用,极大促进尼日利亚进 出口贸易和社会经济发展。

The completion of the project can effectively improved the maritime transport capacity and the role of regional logistics hub in Nigeria, and greatly promote the import and export trade and social and economic development of Nigeria.

# 4月19日 April 19

# 港珠澳大桥主体工程通过竣工验收

The main works of Hong Kong-Zhuhai-Macao Bridge passed the completion acceptance.



完善了国家和粤港澳三地的综合运输体系 和高速公路网络。

It has improved the comprehensive transportation system and expressway network of the country and Guangdong, Hong Kong and Macao.

# •**5**月**1**日 May 1

# 我国北方首条跨海沉管隧道——大连湾 海底隧道和光明路延伸工程正式通车

Dalian Bay Undersea Tunnel, the first cross-sea immersed tube tunnel in northern China, and Guangming Road Extension Project, were officially opened to traffic.



项目有力推动了我国外海沉管隧道建设技术的进步,缓解当地交通压力、优化城市功能,推动了大连湾两岸一体化建设,助力大连挺进"万亿城市"。

The project has greatly promoted the progress of China's offshore immersed tube tunnel construction technology, relieved the local traffic pressure, optimized the urban function, promoted the integrated construction of both sides of Dalian Bay, and helped Dalian advance into the team of "Trillion City".

# • **5月23**日 May 23

交通强国建设标志性工程、西部陆海 新通道骨干工程——广西平陆运河全 线动工建设

The construction of the whole line of Guangxi Pinglu Canal, a landmark project for the construction of a transportation power and the backbone project of the New Western Land-sea Corridor, was commenced.



建成后,将成为我国西南地区运距最短、最经济、最便捷的出海通道。

After completion, it will become the shortest, most economical and most convenient passage to the sea in southwest China.

# • **7**月 **10**日 July 10

# 贵州德江(合兴)至余庆高速公路全线 建成通车

Dejiang (Hexing), Guizhou - Yuqing Expressway was completed and opened to traffic



其中,控制性工程乌江特大桥是世界最大跨度 的上承式钢管混凝土拱桥。项目完善了贵州省 高速公路网络结构,促进了沿线资源开发和引 资开放,推动了区域经济快速发展。

Among them, Wujiang Grand Bridge, the controlling engineering, is the largest deck concrete filled steel tube arch bridge in the world. The project has improved the expressway network structure of Guizhou Province, promoted the development of resources along the line and the opening of investment attraction, and promoted the rapid development of regional economy.

# • 9月28日 September 28

# 世界首条时速 350 公里的跨海高铁——福厦高铁开通运营

The world's first cross-sea high-speed railway with a speed of 350 kilometers per hour - Fuzhou-Xiamen high-speed railway, was put into operation.



项目将东南沿海城市群串联成一条"黄金旅游带",在厦门、漳州、泉州等地形成"半小时交通圈",将极大便利沿线人民群众 x 往来,促进区域经济社会协调发展。项目全线控制性工程——泉州湾跨海大桥为国内首座跨海高速铁路桥。

The project has connected the southeast coastal cities into a "golden tourism belt" and formed a "half-hour traffic circle" in Xiamen, Zhangzhou and Quanzhou, which will greatly facilitate the communication of people along the line and promote the coordinated development of regional economy and society. Controlling engineering for the entire project line - Quanzhou Bay Sea-Crossing Bridge, is the first sea-crossing high-speed railway bridge in China.

# • **10**月**28**日 October 28

# 中国在海外首条大直径水下盾构隧 道——孟加拉国国父隧道建成通车

China's first large-diameter underwater shield tunnel overseas - the Bangladesh Sheikh Mujibur Rahman Tunnel, has been completed and opened to traffic.



在大大改善吉大港交通条件,带动孟加拉 区域经济发展的同时,完善了亚洲公路网, 促进了孟加拉与周边国家的互联互通。

While greatly improving the traffic conditions of Chittagong and driving the economic development of Bangladesh, it has improved the Asian Highway Network and promoted the connectivity between Bangladesh and neighboring countries.

# **12月27**日 December 27

### 深圳地铁 8 号线二期举行开通仪式

The opening ceremony of Phase II of Shenzhen Metro Line 8 was held.



通过技术创新赋能建设,实现提前半年完工并高质量开通。

Through technical innovation to enable construction, the project was completed half a year ahead of schedule and opened with high quality.

# • **12**月**28**日 December 28

# 京雄高速公路全线通车运营

The whole line of Beijing-Xiong'an Expressway was open to traffic.



与京港澳高速和大广高速共同形成便捷顺 畅、功能互补、安全可靠的区域高速公路 网,有力支撑雄安新区建设,促进京津冀 协同发展。

Together with Beijing-Hong Kong-Macao Expressway and Daqing-Guangzhou Expressway, it forms a convenient and smooth, complementary, safe and reliable regional expressway network, which strongly supports the construction of Xiong'an New Area and promotes the coordinated development of Beijing, Tianjin and Hebei.

# • **12**月 **13**日 December 13

# 宁波舟山港梅山港区 6 号至 10 号集装箱码头工程三阶段顺利通过竣工验收

The Phase III of the construction of container terminals No. 6 to No. 10 in Meishan Port Area of Ningbo Zhoushan Port passed the completion acceptance.



至此,宁波舟山港成为目前全球唯一拥有双"千万箱级"单体集装箱码头的港口。
So far, Ningbo Zhoushan Port has become

So far, Ningbo Zhoushan Port has become the only port with double "ten million containers" single container terminal in the

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the line.

# 深中通道主线贯通!

The Connection of the Main Line of Shenzhen-Zhongshan Bridge!

11月28日,浩瀚的珠江口上烟波浩渺、碧水接天。随着最后一方压仓混凝土浇注完成,中交一航局承建的世界最长最宽钢壳沉管隧道—深中通道海底隧道全幅贯通,自此,深圳与中山跨海直达,紧密"相拥"。

On November 28, on the vast the Pearl River Estuary, there were faint water waves and clear waters reflecting the blue sky. With the completion of concrete pouring of the last cubic meter, the world's longest and widest steel shell immersed tube tunnel - Shenzhen-Zhongshan Bridge Submarine Tunnel, which was constructed by CCCC First Harbor Engineering Company Ltd., has been fully penetrated. Since then, cross sea direct transportation and close embrace between Shenzhen and Zhongshan can be achieved.

七载鏖战珠江口,一朝天堑变通途。深中通道主线顺利贯通,彰显了我国在跨海通道建设领域的领先优势和技术实力。 项目建成通车后,中山至深圳可实现跨江直达,车程从一个半小时缩减至半小时内,有效推动珠江两岸产业互联互 通以及粤港澳城市群深度融合发展。

After seven years of fighting at the mouth of the Pearl River, a natural cut became a thoroughgoing road. The main line of the Shenzhen-China Passage has been successfully connected, demonstrating China's leading advantage and technical strength in the field of cross-sea passage construction. After the project is completed and opened to traffic, Zhongshan and Shenzhen can achieve direct cross-river travel, reducing the drive from one and a half hours to half an hour, effectively promoting industrial connectivity on the two sides of the Pearl River and deeply integrated development of Guangdong, Hong Kong and Macao city clusters.



# ◎ "大城市"发展主力军

# The main force for the development of "city regeneration"

我们始终遵循以人为核心的新型城镇化战略,坚持"建设城市、运营城市、发展城市"理念,抢抓人文城市、宜居城市、 韧性城市、绿色城市、智能城市建设重大机遇,集中精力将房建、市政、城市综合开发、房地产开发业务做精做细,协 同拓展新基建、智慧城市等业务,以具有中交特色的城市建设产业链和价值链,让城市的颜值不断刷新,让城市的速度 不断加快,塔吊林立、机械轰鸣,一砖一瓦间,挺立起城市蓬勃发展的钢筋骨架。

We always follow the new-type urbanization strategy with people as the core, adhere to the concept of "building a city, operating a city, and developing a city", seize the major opportunities for the construction of a humanistic city, a livable city, a resilient city, a green city and a smart city, concentrate on refining housing construction, municipal administration, comprehensive urban development and real estate development, and cooperate to expand new infrastructure, smart city and other businesses, so as to build a city construction industrial chain and a value chain with the characteristics of CCCC to constantly refresh the city's beauty and accelerate the city's speed, and erect the bones of a thriving city with a forest of tower cranes, roaring machinery and bricks and tiles

2023 年,房建业务已跻身公司基建业务第二大细分板块,覆盖 285 个地市,公司首次在一线城市落地超 200 米超高层建筑——深圳至正大厦项目,建造实力、市场竞争力稳步提升;高质量落地武汉左岸大道、广州南沙地下环路及地下空间项目大型现汇项目,聚焦综合管廊、管网升级、老旧改造、新基建等财政支持领域持续发力,中标广州南沙地下空间、5G 通信基站、重庆停车楼等市政工程项目;不断做大做稳城综业务底盘,中标赣州水西组团、荆州关沮新城、杭州良渚新城等大型综合开发项目,积极稳步推进城市更新和城中村改造,落地广州珠江村旧村改造、深圳民治街道更新、海口横沟村更新等一批标志性项目,为建设官居、韧性、智慧的现代化城市贡献中交方案。

In 2023, the housing construction business has become the second largest subdivision of the company's infrastructure business, covering 285 cities. For the first time, the company has achieved the landing of the Shenzhen Zhizheng Building project, a super high-rise building of over 200 meters, in a first tier city for the first time, steadily improving its construction strength and market competitiveness; has successfully implemented large-scale spot exchange projects such as Wuhan Left Bank Avenue, Guangzhou Nansha Underground Ring Road and underground space project, focusing on the sustainable development of financially supported fields such as comprehensive pipe corridor, pipe network upgrading, old reconstruction and new infrastructure, and won the bid for Guangzhou Nansha underground space, 5G communication base station, Chongqing parking building and other municipal engineering projects; has continued to expand and stabilize the urban comprehensive business chassis, won the bid for large-scale comprehensive development projects such as Shuixi Zutuan, Ganzhou, Guanju New Town, Jingzhou and Liangzhu New Town, Hangzhou, actively and steadily promoted urban renewal and village-in-city transformation, and implemented a number of landmark projects such as the old village reconstruction of Zhujiang Village in Guangzhou, the renewal of Minzhi Street in Shenzhen, and the renewal of Henggou Village in Haikou, and contributed to the CCCC plan for the construction of a livable, resilient and intelligent modern city.

# 在广州明珠湾"量身定制"国际化滨海新城

"Customized" International Binhai New Town in Guangzhou Pearl Bay

由中交城投投资,四航局、二航局承建的灵山岛尖项目开发面积 3.5 平方公里,采用"投资+施工总承包"模式,建设内容涵盖市政路网及配套工程、桥梁工程、地下综合管廊工程、海岸及滨海景观带建设工程、城市公共服务设施等,是广州市首次引进央企合作投资建设的大型基础设施综合项目。

The Lingshan Daojian Project invested by CCCC Urban Investment Holding Company Limited and undertaken by the CCCC Fourth Harbor Engineering Co., Ltd. and the CCCC Second Harbor Engineering Company, Ltd. with a development area of 3.5 square kilometers, adopts the mode of "investment + construction general contracting". The construction contents covers municipal road network and supporting works, bridge works, underground comprehensive pipe gallery works, coastal and coastal landscape belt construction works, urban public service facilities, etc. It is the first large-scale infrastructure comprehensive project invested and constructed by central enterprises in Guangzhou.

该项目建设团队提出要创广州市最好的建设工地,建广州市最好的样板工程,对标世界一流,打造精品国际化滨海 新城。目前,灵山岛尖已成为南沙乃至广州对外展示的窗口,也成为广大市民"打卡点"。

The construction team of the project has proposed to create the best construction site in Guangzhou, build the best model project in Guangzhou, compete with the world-class projects, and build a fine international Binhai New Town. At present, Lingshan Daojian has become the window of Nansha and even Guangzhou to showcase to the outside world, as well as the "place worth experiencing" for the general public.



# 交流后城市



# 西昌市航天大道东延线道路建 设工程高枧乡棚户区改造拆迁 安置点项目

The Gaojian Township Shantytown Reconstruction and Resettlement Site Project in the Construction Project of East Extension Line of Aerospace Avenue in Xichang City

是四川省首批列入财政部和社会资本合作的重点建设项目,是凉山州最大的棚户区改造工程,也是凉山州扶贫攻坚的重点推进项目。

It is one of the first batch of key construction projects listed in the Ministry of Finance and social capital cooperation in Sichuan Province, the largest shantytown reconstruction project in Liangshan Prefecture, and the key promotion project for poverty alleviation in Liangshan Prefecture.

# 海南三亚中交国际自贸中心项目

CCCC International Free Trade Center in Sanya, Hainan



以建设成为海南自贸港一流的商务综合体为目标,荣获海南首批国际最高标准的绿色建筑预认证 LEED 金级、"中国总部办公新地标""智慧楼宇创新奖""2023 中国房地产城市运营典范案例"等荣誉。

With the goal of becoming a first-class business complex of Hainan Free Trade Port, it has won the honors of the first batch of green building pre-certification LEED Gold Class of the highest international standard, "New Landmark of China Headquarter Offices", "Smart Building Innovation Award", "Model Case of China Real Estate City Operation in 2023", etc.





Urban Renewal Project of Dongdu Area, Huli District, Xiamen

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在福建省城乡建设品质提升行动中被评为"城市更新样板项目",通过打造安全便民的生活环境,进一步提升了城市品质,展示出一张厦门城市更新的示范"名片"。

In the action of improving the quality of urban and rural construction in Fujian Province, it was awarded as the "Model Project of Urban Renewal", which has further improved the quality of the city by creating a safe and convenient living environment, showing a demonstration "business card" of urban renewal in Xiamen.

# 

Zhongguancun Information Valley Science Park Project in Nanning, Guangxi



位于南宁市高新区,项目建成后,将打造与城市共融、产城共生的智慧园区,助力城市新兴科技高地建设,为广西科技产业发展并带动辐射东盟"一带一路"作出积极贡献。

Located in the High-tech Zone of Nanning City, after the completion, the project will create a smart park that is integrated with the city and coexists with industry and city, assist the construction of emerging scientific and technological highlands in the city, and make positive contributions to the development of science and technology industry in Guangxi and promote the "Belt and Road" radiating ASEAN.

# 提供优质服务

# PROVIDE HIGH-QUALITY SERVICES

中国交建以相关方利益为中心,坚定维护客户的合法权益,并通过全流程、精细化的投诉处理机制,对客户反馈进行及时高效处理,确保客户投诉得到满意解决,以项目全周期的优质服务,兑现美好交付承诺。公司 2023 年未发生客户隐私泄露事件。

Centering on the interests of interested parties, CCCC firmly protects the legitimate rights and interests of customers, and handles customer feedback in a timely and efficient manner through the whole-process and refined complaint handling mechanism to ensure that customers' complaints are solved satisfactorily, and achieves the promise of good delivery with high-quality service in the whole project cycle. There was no customer privacy breach in 2023.



"CCCC" brand has won the title of "Top 500 World Brands" and "Top 500 Chinese Brands"

### 保沟通

**Ensure communication** 

- 中国路桥建立畅通的信息反馈渠道,落实业主在项目建设全周期的合法权益
- CRBC establishes a smooth information feedback channel and implements the legal rights and interests of the Employer during the whole construction period of the project
- 东北区域总部通过客户满意度调查了解客户意见并进行针对性改进
- Northeast regional headquarters shall understand customer opinions through customer satisfaction survey and make targeted improvement
- 三航局每年按一定比例的项目对客户进行回访,倾听客户的反馈
- CCCC Third Harbor Engineering Co., Ltd. shall pay a return visit to customers according to a certain proportion of projects every year, and listen to the feedback of customers.

# 保隐私

### Protect privacy

- •中交长江建设常态化做好客户信息的建档管理工作,并规定客户来访来电数据需另行存档
- CCCC Yangtze River Construction shall carry out the filing management of customer information on a regular basis, and stipulate that the data of customers' visiting calls shall be separately archived.
- 中国港湾总部建设知识管理系统,有效保存企业及客户(业主)的信息和资料
- CHEC Headquarters shall establish the knowledge management system to effectively preserve information and data of enterprises and customers (owners)
- 中交华南建设明确客户信息的使用范围、披露及移交流程,定期做好审查工作且制定了违规处罚机制
- CCCC HN Construction Co., Ltd. Shall clarify the use scope, disclosure and handover process of customer information, carry out regular review and formulate the punishment mechanism for violation

### 保权益

### Safeguard rights and interests

- 水规院制定并颁布《顾客服务质量投诉管理办法》
- CCCC Water Transportation Consultants Co., Ltd. shall formulate and promulgate the Measures for the Management of Customer Service Quality Complaints
- 西筑公司在接到投诉后第一时间召开专题会,及时采取相应的解决措施
- After receiving the complaint, CCCC Xi'an Road Construction Machinery Co., Ltd. shall hold the special meeting as soon as possible, and take corresponding measures in time.
- 二航局责任部门对投诉事件密切进行信息跟踪、过程监督, 直至妥善解决
- The responsible department of the Second Harbor Engineering Company Ltd. shall closely follow up the information and supervise the process of the complaint until it is properly solved



# SURROUNDED BY MOUNTAINS AND RIVERS

ENABLING A LIVABLE ECOLOGY.

# 山水卷之中 浸染 **企 人** 生态

我们以打造习近平生态文明思想实践新高地为统领,坚持"绿水青山就是金山银山"理念,牢牢把握经济社会发展全面绿色转型趋势,深入实施碳达峰碳中和"3060"行动,积极投身蓝天、碧水、净土保卫战,持续做大生态环保产业,努力提供更多优质生态产品以满足人民日益增长的优美生态环境需要,坚定做绿色发展的重要参与者、贡献者、引领者。

Under the leadership of building a new highland of Xi Jinping's ecological civilization thought practice, we adhere to the concept of "lucid waters and lush mountains are invaluable assets", firmly grasp the overall green transformation trend of economic and social development, deeply implement the "3060" action of carbon peak and carbon neutrality, actively participate in the defense for blue sky, clear water and pure land, continue to expand ecological and environmental protection industry, strive to provide more high-quality ecological products to meet the people's growing needs for beautiful ecological environment, and firmly become an important participant, contributor and leader of green development.



# 产业升级新篇章 NEW CHAPTER OF INDUSTRIAL UPGRADING

中国交建持续加速产业转型升级,优化布局战略性新兴产业,凝聚区域经营合力,加快布局"三新"业务拓展赛道,培育战略性新兴产业与未来产业,探索形成更具示范意义、更有推广价值的绿色发展模式与建设方案。

CCCC continues to accelerate the industrial transformation and upgrading, optimize the layout of strategic emerging industries, condense the combined force of regional operation, accelerate the layout of expansion tracks for the businesses of "new industries, new formats, and new modes", cultivate strategic emerging industries and future industries, and explore and form a green development mode and construction scheme with more demonstration significance and more promotion value.

# 发展"三新"业务

# DEVELOPE MENT OF THE BUSINESSES OF "NEW INDUSTRIES, NEW FORMATS, AND NEW MODES"

在以中交智慧和力量服务中国式现代化建设的过程中,中国交建大力推动公司新兴业务结构转型,提出"三重两大两优两强基",积极拓展"三新"业务,统筹抽水蓄能、水利业务、海洋牧场、东数西算健康发展,促进产业转型升级。

In the process of serving the Chinese-style modernization construction with the wisdom and strength of CCCC, CCCC has vigorously promoted the structural transformation of the company's emerging business, put forward the "key projects, key regions, key markets, transport infrastructures, major cities, priority overseas, priority rivers, lakes and seas, strengthening the foundations of science and technology and strengthening the foundations of talents", actively expanded the businesses of "new industries, new formats, and new modes", made overall plans for the healthy development of pumped storage, water conservancy business, marine pasture, and channel computing resources from the East to the West, and promoted industrial transformation and upgrading.

# ◎把握新兴业务发展方向

# © Grasp the development direction of emerging business

中国交建多角度研判市场发展趋势,召开新兴业务发展专题推进会,总体把握公司新兴业务的发展方向。推动城综"1+3"体系研究,完成城综重点城市、房地产新政、海洋牧场、"三新"业务等投资模式研究;统筹召开"海洋牧场专题会议""水利业务发展推进会""抽水蓄能业务专题推进会"等专题业务推进会,为新兴业务发展提供指引。2023年,中国交建落地宁夏(中卫)云数据中心、广东英德砂石矿、大连海洋牧场、黑龙江肇源高标准农田整治等项目,在绿色能源、数字经济、矿产资源、海洋经济、乡村振兴等新产业领域取得突破。

CCCC has studied and judged the market development trend from various angles, held the special promotion meeting on the development of new business, and generally grasped the development direction of the company's new business. It has promoted the research on the "1+3" system of urban comprehensive development, and completed the research on investment modes of key cities of urban comprehensive development, new policies of real estate, marine pasture and the businesses of "new industries, new formats, and new modes"; held the special business promotion meetings such as "marine pasture special meeting", "water conservancy business development promotion meeting", "pumped storage business special promotion meeting", etc. to provide guidance for the development of new business. In 2023, CCCC launched the Ningxia (Zhongwei) Cloud Data Center, Guangdong Yingde Sand and Gravel Mine, Dalian Marine Pasture, and Heilongjiang Zhaoyuan High-standard Farmland Regulation projects, making breakthroughs in green energy, digital economy, mineral resources, marine economy, rural revitalization and other new industries.

# 数读·2023

# Data Reading • 2023

"三新"业务快速扩容, Realize rapid expansion 新签合同额同比增长 of the businesses of "new

129%

营业收入同比增长

97%

Realize rapid expansion of the businesses of "new industries, new formats, and new modes", with a year-on-

year growth of 129% in newly signed contracts and a year-on-year growth of

**97**% in operating revenue

承担未来产业技术任务

14项

"三新"业务营收占比达到

21%

Undertake 11 future

industrial and technological tasks, with the revenue of the businesses of "new industries, new formats, and new modes" accounting for

219

新能源业务极速增长,新签合同额

535 亿元

Realize rapid growth of new energy business, with newly signed contract amount of RMB **53 5** billion

海洋牧场业务实现突破,新签合同额

6亿元

Realize breakthrough in marine ranch business, with newly signed contract amount of RMB fin million

# ◎推进新兴业务建设实施

O Promote the construction and implementation of emerging business

# 水利水电

Enhance innovation capability

中国交建抢抓国家水网建设、水电建设蓬勃发展的行业机遇,统筹资源打造水利水电业务高地。2023年,公司与中水 对外顺利交接,推动水利水电业务新突破;完成库底数字孪生在水利工程管理中的应用研究项目的立项,水利业务科技 投入持续加强;中标重庆市藻渡水库工程 EPC 总承包,为国家重大水利工程落地保驾护航。

Water conservancy and hydropower CCCC has seized the industrial opportunity for the vigorous development of national water network construction and hydropower construction, and planned resources to build a high place for water conservancy and hydropower business. In 2023, the company successfully handed over with China International Water & Electric Corp. to promote new breakthroughs in water conservancy and hydropower business, completed the establishment of the application research project of the digital twin at the bottom of the reservoir in water conservancy project management, and continued to strengthen the scientific and technological investment in water conservancy business, and won the bid for the EPC general contracting of Chongqing Zaodu Reservoir Project to protect the implementation of major national water conservancy projects.



与中国三峡集团开展关于中水对外交接仪式

Carry out the handover ceremony of China International Water & Electric Corp. with China Three Gorges Corporation

QΩ

### 一渠江水入淮来

Diversion of Water from Yangtze River to Huaihe River

引江济淮工程自上世纪50年代起开始谋划,是皖豫人民的世纪夙愿。2022年12月30日,经过5年施工建设,一航局、 二航局、四航局参建,水规院参与技术审查的引江济淮一期工程实现试通水试通航,开始全面发挥效益。与此同时, 引江济淮二期工程开工建设。

The project of Diversion of Water from Yangtze River to Huaihe River has been planned since the 1950s, which is the long-cherished wish of Anhui and Henan people in the century. On December 30, 2022, after 5 years of construction, the Phase I of Project of Diversion of Water from Yangtze River to Huaihe River, whose construction was participated in by the First Harbor Engineering Company Ltd., the Second Harbor Engineering Company Ltd. and the Fourth Harbor Engineering Co., Ltd., and whose technical review was participated in by CCCC Water Transportation Consultants Co., Ltd., realized the trial operation of water and navigation, and began to give full play to benefits. At the same time, the construction of the Phase II of Project of Diversion of Water from Yangtze River to Huaihe River was started.

该工程是目前国内在建规模最大的跨流域引调水工程,沟通长江、淮河两大水系,是跨流域、跨省重大战略性水资源配置和综合利用工程,是国务院确定的 172 项节水供水重大水利工程之一,发挥着润泽安徽、惠及河南、造福淮河、辐射中原的重大作用。工程建成后,将结束淮河中游与长江中下游之间水运不畅的历史,千吨货轮可直接通江达海,最长可缩短航运里程 600 公里,形成平行于京杭大运河的我国第二条南北水运大动脉。

The project is the largest inter-basin water diversion project under construction in China at present, connecting the Yangtze River and Huaihe River two major water systems. It is a cross-basin and inter-provincial major strategic water resources allocation and comprehensive utilization project. It is one of the 172 water conservation and water supply major water conservancy projects determined by the State Council, and plays an important role in moistening Anhui, benefiting Henan and Huaihe River, and radiating the Central Plains. After the completion of the project, the history of poor water transportation between the middle reaches of the Huaihe River and the middle and lower reaches of the Yangtze River will come to an end, and 1,000-ton cargo ships can directly arrive rivers and seas, which can shorten the shipping mileage by 600 kilometers, forming the second north-south water transportation artery parallel to the Beijing-Hangzhou Grand Canal.

在深度参与这项汇集航运、供水、生态环保多功能 于一体的综合性工程的过程中,中交建设者创新思 维、创新工艺、创新设备,解决千年难题,终见长 江淮河顺利"牵手"。

In the process of deeply participating in the comprehensive project integrating shipping, water supply, ecological and environmental protection, CCCC builders have innovated their thinking, technology and equipment, solved the long-standing difficult problems, and finally achieve the smooth connection between the Yangtze River and the Huaihe River.



引江济淮一期工程江淮沟通段

Phase I of the Yangtze River-Huai River Water Transfer Project: Yangtze River-Huai River Communication Section

### 抽水蓄能

Pumped storage

中国交建深入贯彻落实党中央关于"碳达峰碳中和"决策部署,谋划推进建设抽水蓄能电站项目,中水对外抽水蓄能项目稳步推进。2023年,宁夏牛首山二期、辽宁兴城等抽蓄项目成功中标,项目建成后,将进一步增强地区电网调峰能力,优化电源结构,促进地区能源绿色发展,助力"双碳"战略目标实现。

CCCC thoroughly implements the Party Central Committee's decision and deployment on "carbon peak and carbon neutrality", plans to promote the construction of pumped-storage power station projects, and steadily promotes pumped-storage projects of China International Water & Electric Corp.. In 2023, it successfully won the bid for Ningxia Niushoushan Phase II, Liaoning Xingcheng and other pumped storage projects. The completion of the projects will further enhance the peak load regulation capacity of regional power grid, optimize the power structure, promote the green development of regional energy, and help to realize the strategic goal of "carbon peaking and carbon neutrality".

# 张掖抽水蓄能电站项目枢纽工程开工建设

Commencement of Construction of Pivotal Engineering of Zhangye Pumped Storage Power Station Project

2023年12月28日,甘肃张掖抽水蓄能电站项目举行主厂房动工仪式,标志着该项目枢纽工程开工建设。由中水对外参建的张掖抽水蓄能电站为一等大型水利工程,枢纽工程由上水库、下水库、输水系统、地下厂房和开关站等建筑物组成,电站位于甘州区与肃南县交界处,总装机容量140万千瓦,额定水头573m,设计年发电量16.37亿千瓦时。电站建成后,将承担甘肃电网调峰、填谷和调频、调相、储能,以及紧急事故备用等任务,提高电网供电质量和系统安全稳定运行水平,增强电网快速响应能力。

On December 28, the commencement ceremony of the main power house of Zhangye Pumped Storage Power Station Project in Gansu Province was held, marking the commencement of the pivotal engineering of the project. Zhangye Pumped-storage Power Station, constructed by China International Water & Electric Corp., is a first-class large-scale water conservancy project. The pivotal engineering consists of upper reservoir, lower reservoir, water conveyance system, underground powerhouse, switch station and other buildings. The

power station is located at the junction of Ganzhou District and Sunan County, with a total installed capacity of 1.4 million kilowatts, a rated head of 573m and a designed annual power generation of 1,637 billion kilowatt-hours. After completion, the power station will undertake the tasks of peak load regulation, valley filling, frequency modulation, phase modulation, energy storage and emergency standby of Gansu power grid, improve the power supply quality of the power grid and the safe and stable operation level of the system, and enhance the rapid response capability of the power grid.



# 光伏发电

Photovoltaic power generation

光伏产业对于我国调整能源结构、推进能源生产和消费革命、促进生态文明建设具有重要意义。中国交建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。机电局开发大量集中式光伏、分布式光伏、农光互补和渔光互补等光伏项目,全年先后中标十余个光伏项目;中交光伏投资、中交路建承建的清远高速公路"交能融合"示范项目 12 月份并网发电,顺利获评"三星级零碳服务区",成为该标准推出后首个获得该零碳服务区认证的高速公路;山东垦利、江苏田湾海上光伏项目中标,公司海上光伏业务取得突破。

Photovoltaic industry is of great significance for adjusting energy structure, promoting energy production and consumption revolution and promoting ecological civilization construction. CCCC actively seizes opportunities for development of new quality productivity, promotes high-quality development of photovoltaic industry, and helps achieve the goal of carbon peaking and carbon neutrality. CCCC Mechanical and Electrical Engineering Co., Ltd. has developed a large number of photovoltaic projects such as centralized photovoltaic, distributed photovoltaic, agricultural photovoltaic complementary projects and fishing photovoltaic complementary projects, and has successively won the bid for more than ten photovoltaic projects throughout the year; In December, the Qingyuan Expressway "Transport and New Energy Integration" Demonstration Project, invested by CCCC Photovoltaic and constructed by CCCC Road & Bridge International Co., Ltd., was connected to the grid for power generation, and was successfully rated as "three-star zero-carbon service area", becoming the first expressway certified by the zero-carbon service area after the standard was launched; The company has won the bid for offshore photovoltaic projects in Shandong Kenli and Jiangsu Tianwan, achieving breakthroughs in offshore photovoltaic business.

# 交领追"光"之行



广东佛山水产养殖场"渔光互补"光伏电站项目

"Fishery-light Complementary" Photovoltaic Power Station Project of Guangdong Foshan Aquaculture Farm



巴拿马"普罗维登斯之家"光伏电站项目

"Providence House" Photovoltaic Power Station Project in Panama

# "交能融合"助力绿色交通远行

'Transport and New Energy Integration" to Help Green Transportation Travel

作为交通基础设施领域建设排头兵,中交光伏紧抓国家"双碳"发展契机,立足"大交通""大城市"主业,全力拓展"交通+新能源",形成"光路互补"模式,努力实现交通领域产业升级。2023年12月,由中交光伏投资运营、中交路建承建的清远高速公路"交能融合"示范项目正式并网发电,项目采用许广高速公路回澜服务区停车场地,清西大桥管理中心绿地、建筑屋顶等基础设施"+光伏"的建设方案,光伏总装机容量为983.4kW,投产后年均发电量可达94.7万度,与同等火电相比,每年可节约标准煤约285.4吨,减少二氧化碳排放约783.4吨/年。项目顺利获评"三星级零碳服务区",也是该标准推出后首个获得该零碳服务区认证的高速公路,为实现集团高速公路绿色能源"源网荷储一体化"、充分掌握电力运营和智能化管理提供了经验参考,为集团进军更高端的能源产业打下坚实基础。

As a vanguard in the construction of transportation infrastructure, CCCC Photovoltaic firmly grasps the opportunity of national "carbon peaking and carbon neutrality" development, bases on the main business of "transport infrastructures" and "urban infrastructures", makes every effort to expand "transport + new energy", forms the mode of "light-path complementary" and strives to realize the industrial upgrading in transportation field. In December 2023, the Qingyuan Expressway "Transport and New Energy Integration" Demonstration Project invested and operated by CCCC Photovoltaic and contracted by CCCC Road & Bridge International Co., Ltd. was formally connected to the grid for power generation. The project adopts the construction scheme of "+PV" for the parking lot in Huilan service area of Xuchang–Guangzhou Expressway, green space of Qingxi Bridge Management Center, building roof and other infrastructures, with a total installed capacity of PV of 983.4kW, and an annual average power generation capacity reaching 947,000 kwh after being put into operation. Compared with the same thermal power, it can save about 285.4 tons of standard coal and reduce the emission of carbon dioxide by about 783.4 tons/year. The project was successfully rated as "three-star zero-carbon service area", which is also the first expressway certified by the zero-carbon service area after the standard was launched, providing experience reference for realizing the "integration of power supply, power grid, charge and energy storage" of green energy of expressway of the Group, fully mastering electric power operation and intelligent management, and laying a solid foundation for the Group to enter higher-end energy industry.

### 海上风电

# Offshore wind power

中国交建始终胸怀"国之大者",着力夯实风电发展基础设施,提升在"中国绿色能源"名片中的品牌影响力。自 2008 年承建亚洲首个海上风电场——东海大桥海上风电场以来,中国交建已参建了全国一半以上的海上风电场,攻克了一系列关键核心技术,塑造了我国海上风电自主品牌,实现我国海上风电开发从无到有的关键转变。

CCCC has always been concerned with "Major issues related to the overall, global, and long-term interests of the country", and focused on strengthening the infrastructure for wind power development and enhancing the brand influence in the business card of "China Green Energy". Since the construction of East Sea Bridge Offshore Wind Farm, the first offshore wind farm in Asia, in 2008, CCCC has taken part in the construction of more than half of the offshore wind farms in China, captured a series of key core technologies, shaped the independent brand of offshore wind power in China, and realized the key transformation of offshore wind power development in China from scratch.

# 交领 弘"风"之旅



亚洲最大海上风电场——华能如东海上风电场

The Largest Offshore Wind Farm in Asia - Huaneng Rudong Offshore Wind Farm



国内首个在强台风海域条件下施工的风电场——国电舟山普陀 6号海上风电场 2 区工程

The First Wind Farm Constructed under the Condition of Strong Typhoon Sea Area in China - Zone 2 Project of Guodian Zhoushan Putuo No. 6 Offshore Wind Farm

### 氢能源

### Hydrogen energy source

氢能作为一种清洁、高效、可再生的能源,被视为未来能源的重要选择之一。中国交建持续加强清洁低碳、安全高效的 能源体系探索和建设,在氢能关键核心技术攻关、完善氢气供应体系,以及推进氢能基础设施建设中善作善成,牵头制 定了我国第一部城镇用氢相关标准,参编了氢能利用方面的多部国家和行业标准,填补了工程行业空白。

As a clean, efficient and renewable energy source, hydrogen energy is regarded as one of the important choices of future energy sources. CCCC has continuously strengthened the exploration and construction of a clean, low-carbon, safe and efficient energy system, made good achievements in tackling key core technologies of hydrogen energy, improving the hydrogen supply system and promoting the construction of hydrogen energy infrastructure, taken the lead in formulating the first urban hydrogen-related standards in China, and participated in the compilation of a number of national and industrial standards for hydrogen energy utilization, filling the gap in the engineering industry.

# 强化"三链"管理

# STRENGTHEN THE "INDUSTRIAL CHAIN, SUPPLY CHAIN AND SUBCONTRACTING CHAIN" MANAGEMENT

党的二十大报告中明确指出,"着力提升产业链供应链韧性和安全水平。"中国交建立足新发展阶段、贯彻新发展理念、融入新发展格局,以提高发展质量和效益为中心,以制度化、信息化、标准化为路径,以"产业链价值引领、供应链安全稳定、分包链支撑有力"协同高质量发展为目标,高效整合各类资源和要素,全面推动"三链"融合发展、协同发展、优质发展。一年来,"三链"协同已初步构建数智化融合生态场景框架,资源配置模式升级初具雏形,公司内部交易效率效益能力、服务城综开发能力、产业孵化能力、中交特色产业体系与产业导入能力"四项能力"持续提高,有力促进工程项目降本增效,核心竞争力进一步提升。

In the report of the 20th National Congress of the Communist Party of China (CPC), it has been clearly pointed out that "significantly improving the toughness and safety level of industrial chain and supply chain" and "ensure the safety of important industrial chain and supply chain". Based on the new development stage, implementing the new development concept and integrating into the new development pattern, with the improvement of development quality and efficiency as the center, institutionalization, informatization and standardization as the path, and the coordinated and high-quality development of "the leading value of the industrial chain, the safe and stable supply chain and the strong support of the subcontracting chain" as the goal, CCCC efficiently integrates various resources and elements, and promotes the integrated development, coordinated development and high-quality development of the "industrial chain, supply chain and subcontracting chain" throughout the year. In the past year, the "industrial chain, supply chain and subcontracting chain" collaboration has preliminarily constructed the ecological scene framework integrating digital and intellectualization, the upgrading of resource allocation mode has begun to take shape. And the company has continuously improved its "four capabilities", capability of internal transaction efficiency and benefit, capability of service for urban comprehensive development, capability of industry incubation, and capability of CCCC' s characteristic industrial system and industry introduction, which strongly promotes the cost reduction and efficiency increase of engineering projects and further improves the core competitiveness.

# ◎打通高效产业链

# Open up the high-efficiency industrial chain

中国交建以打造布局科学、发展协调、环节畅通、引领未来的产业链为目标,助力提升产业链供应链韧性和安全水平, 扎实开展现代产业链"链长"行动,优化产业链整体效率,提升竞争力。

With the goal of creating an industrial chain with scientific layout, coordinated development, smooth links and leading the future, CCCC helps to improve the toughness and safety level of industrial chain and supply chain, carries out the "chain leader" action of the modern industrial chain, optimizes the overall efficiency of the industrial chain and improves the competitiveness.

# 基础固链

# Consolidate the industrial chain from the foundation

建立产业链数据库,夯实产业链管理基础,摸清产业链分布底数; 动态跟踪产业链发展前沿,建立部门定期会商机制,把准产业链发展趋势; 针对关键技术和产品,研究建立产业链备份及替代工作机制,提升产业链安全稳定性。

Establish the industrial chain database, consolidate the management foundation of the industrial chain, and find out the distribution base of the industrial chain; Dynamically track the development front of the industry chain, establish the regular consultation mechanism of the department, and control the development trend of the industry chain; Study and establish the backup and replacement working mechanism of the industrial chain aiming at key technologies and products to improve the safety and stability of the industrial chain.

# 技术补链

# Complement the industrial chain with technology

开展科技攻关,加快战略性、前沿性、关键性核心技术创新,发展壮大新兴产业,加速孵化未来产业;整合内外部创新资源,打造工程大数据中心,通过数据深度挖掘利用赋能产业发展;发挥公司产业链主体地位等优势,推进产学研用深度融合,带动产业链上下游、大中小企业融通发展。

Tackle key problems in science and technology, accelerate strategic, cutting-edge and key core technology innovation, develop and strengthen emerging industries, and accelerate incubation of future industries; Integrate internal and external innovation resources, build a engineering big data center, and enable industrial development through deep data mining; Give full play to the company's advantages in the industrial chain, promote the deep integration of industry, university, research and practical application, and drive the integrated development of upstream and downstream of the industrial chain, as well as large, medium and small enterprises.

### 融合强链

# Strengthen the industrial chain through integration

建立产业链协调会商和利益共享机制,组建产业链联盟,资源共享、优势互补,打造产业链发展共同体;研究建立公司内部子产业链之间的协同联动发展机制,促进不同产业链实现优势互补、集聚竞合效益;通过股权投资、并购重组、创新孵化等多种途径,加快建设一批专业化产业链平台。

Establish an industrial chain coordination consultation and benefit sharing mechanism, establish an industrial chain alliance, share resources and complement each other's advantages, and build an industrial chain development community; Study and establish a collaborative development mechanism among subindustry chains in the company to promote different industrial chains to realize complementary advantages and gather competitive benefits; Speed up the construction of a number of specialized industrial chain platforms through equity investment, M&A restructuring, innovation incubation and other channels.

# 优化塑链

# Remodel the industrial chain through optimization

以"三新"业务为重点,加快推进新产业培育孵化,构建产业链发展新优势;把握产业链数字化、网络化、智能化发展机遇,引领产业链绿色低碳化重塑;研究制定产业链开放合作方案,加快推进与共建"一带一路"国家产业链的全面融合。

Focus on the businesses of "new industries, new formats, and new modes", accelerate the cultivation and incubation of new industries and build new advantages for the development of industrial chain; Grasp the opportunities for digitalization, networking and intelligent development of the industrial chain, and lead the green and low-carbon remodeling of the industrial chain; Study and formulate the open cooperation scheme for the industrial chain, and accelerate the comprehensive integration of the national industrial chain of the "Belt and Road" Initiative.

# ◎建立稳定供应链

# © Establish a stable supply chain

中国交建深入贯彻落实党中央、国务院关于供应链工作的决策部署,积极构建"创新、协同、安全、绿色、智慧"五位一体供应链管理体系,向着具有全球竞争力的"科技型、管理型、质量型"世界一流企业的奋斗目标不断迈进。

CCCC thoroughly implements the decision and deployment of the Party Central Committee and the State Council on supply chain work, and actively builds a five-in-one supply chain management system of "innovation, coordination, safety, green and wisdom", and is moving forward to the goal of a world-class enterprise with global competitiveness, which is characterized by "science and technology, management and quality".

# 强化供应链协同

### Strengthen supply chain collaboration

建立采购供应的一体化管控机制,降低供应链全过程运营成本,打造高效协同的内部供应链体系,以平台公司支撑专业公司高质量发展;加快推进供应链系统与金融服务平台对接,构建供应链金融平台;完善海外供应链建设方案,持续提升海外供应链管理水平。

Establish an integrated management and control mechanism for procurement and supply, reduce the whole process operation cost of the supply chain, create an efficient and collaborative internal supply chain system, and support the high-quality development of professional companies with the platform company; Accelerate the connection between the supply chain system and the financial service platform, and build the supply chain financial platform; Improve the overseas supply chain construction scheme and continuously improve the management level of overseas supply chain.

# 提升集采规模成效

Improve the effect of scale of centralized procurement

与其他建筑央企联合开展跨央企间物资区域联采,加大集采谈判筹码,进一步放大集采成效;拓展集中采购目录,开展 地材、商混物资集采试点,推进贸易企业物流服务采购上线竞拍;加强对集采执行进展、执行比例的监督,监督集采成 果的规范应用。

Jointly carry out regional joint procurement of materials across central enterprises with other central construction enterprises, increase the bargaining chips of centralized procurement, and further amplify the effect of centralized procurement; Expand the centralized procurement catalog, carry out the pilot of centralized procurement of materials used to build buildings or roads and commercial concrete, and promote the online auction of logistics service procurement of trade enterprises; Strengthen the supervision over the implementation progress and proportion of centralized procurement, and supervise the standardized application of centralized procurement results.

## 健全供应商管理体系

Improve supplier management system

建立供应商"白名单""红名单"管理体系,明确供应商准入标准、评价标准等一系列全周期动态管理机制;构建供应商智能化评价体系,完成大数据平台测试,加强采购风险、供应风险的大数据分析及智能监控。

Establish a supplier "white list" and "red list" management system, define a series of full-cycle dynamic management mechanisms such as supplier access standards and evaluation standards; Build a supplier intelligent evaluation system, complete big data platform test, and strengthen big data analysis and intelligent monitoring of procurement risk and supply risk.

### 加强绿色供应链建设

Strengthen the construction of green supply chain

研究建立包括绿色设计、绿色供应商选择、绿色采购、绿色运输与仓储、绿色施工、逆向物流的绿色供应链评价体系; 实施绿色供应商培育行动,提升供应商绿色供应链意识;规范闲置物资设备回收处置流程,推动新材料、新工艺应用, 合理降低资源消耗。

Study and establish a green supply chain evaluation system including green design, green supplier selection, green procurement, green transportation and storage, green construction and reverse logistics; Implement green supplier cultivation actions to improve the green supply chain awareness of suppliers; Standardize the recovery and disposal process of idle materials and equipment, promote the application of new materials and new processes, and reasonably reduce resource consumption.



中国交建第五届供应链大会在京 召开,董事长王彤宙出席会议并 作发言

The 5th Supply Chain Conference o CCCC was held in Beijing. Chairman Wang Tongzhou attended the meeting and made a speech

# ◎完善合规分包链

○ Improve the compliance subcontracting chain

中国交建紧紧围绕科学管理和高质量发展内涵,严格分包管理,筑牢"三道防线",把准分包准入关,规范分包合同,深入推进分包业务形式合法、程序合规、管理受控,构筑"运作规范、服务优质、竞争充分、优胜劣汰"的分包链。

CCCC closely focuses on the connotation of scientific management and high-quality development, strictly manages the subcontracting, builds the "three lines of defense", controls subcontracting access, standardizes the subcontracting contracts, deeply promotes the legal form, procedural compliance, and controlled management of subcontracting business, and constructs the subcontracting chain of "standard operation, high-quality service, sufficient competition and survival of the fittest".

## 强化分包商管理

Enhance management of subcontractors

建立健全分包商资源库,严格分包商准入管理;完善分包商资信等级管理制度,提升优秀分包商信息共享能力;定期开展分包商信用评价,严格执行正反激励标准。

Establish and improve the subcontractor resource base, and strictly manage the subcontractor access; Improve the subcontractor credit rating management system and improve the information sharing ability of excellent subcontractors; Regularly carry out credit evaluation on subcontractors and strictly implement positive and negative incentive standards.

## 加强线上采购

Enhance online procurement

将分包管理要求嵌入信息化管理系统,规范线上分包采购行为;注重引用第三方信用平台核对分包商过往信用情况,明确分包商信用资质;提高电子化采购占比。

Embed the subcontracting management requirements into the information management system to standardize online subcontracting procurement; Pay attention to reference the third-party credit platform to check the past credit status of subcontractors, and clarify the credit qualification of subcontractors; Increase the proportion of electronic procurement.

## 抓好过程管理

Do a good job of process management

强化过程监管,严格分包采购申请审批;研究建立分包实行限价管理机制;强化分包商清 退管理。

Strengthen the process supervision, and strictly approve the subcontracting procurement application; Study and establish the management mechanism of implementing price limit for subcontracting; Strengthen the management of subcontractor liquidation.

# 安全为基新作为

# **NEW ACTIONS BASED ON SAFETY**

中国交建严格遵守《中华人民共和国安全生产法》等相关法律法规,全力做好"高质量发展深化年"各项工作统筹部署,扎实推进"五型"总部建设,聚焦安全环保"五个到位",不断夯实重点领域、重大项目、关键环节和重要时期的安全风险防控和应急管理能力建设,持续提升员工安全知识能力,增强质量核心竞争力,为公司高质量发展和加快推进世界"三型"一流企业建设打下坚实的基础。

CCCC strictly abides by the Law on Production Safety of the People's Republic of China and other relevant laws and regulations, makes every effort to make overall arrangements for the "high-quality development deepening year", promotes the construction of "learning-oriented, efficiency-oriented, innovative, pragmatic and harmonious" headquarters, focuses on the "appropriateness in five aspects" of safety and environmental protection, constantly strengthens the construction of safety risk prevention and control and emergency management capacity in key fields, major projects, key links and important periods, continuously improves the safety knowledge ability of employees and enhances the core competitiveness of quality, to lays a solid foundation for the company's high-quality development and accelerating the construction of a world's "hub type, platform type, and sharing type" first-class enterprise.

# 强化安全管理

# STRENGTHENING SAFETY MANAGEMENT

中国交建持续深化安全管理建设,立足"建体系、定战略、定规则、强监管"和向"后台"体系性保障转变的功能定位,建立突出问题和制度措施"两个清单",强化责任落实、责任追究和责任考核工作机制,推进安全生产治理水平持续提升,实现境内外安全风险同步有效管控,保障公司安全形势稳定。

CCCC continues to deepen the construction of safety management, establishes "two lists" of prominent problems and system measures based on the functional orientation of "establishing system, defining strategy, setting rules and strengthening supervision" and transforming to "background" systematic guarantee, strengthens the working mechanism of responsibility implementation, responsibility investigation and responsibility assessment, promotes the continuous improvement of safety production governance level, realizes the simultaneous and effective management and control of domestic and overseas safety risks, and ensures the stable safety situation of the company.

# ◎基础管理建设

# Basic management construction

公司加强基础管理建设,制、修订全员责任制、事故督导、责任追究等方面制度、指南 16 项,持续推进现场作业标准化指南编制,系统梳理形成风险隐患清单,配合相关部门建立隐患数据库;开展隧道施工安全标准化专题调研,完成10 个区域31 家重点三级单位安全环保管理提升调研,形成专项提升报告;深入推进质量监控专业化监控中心建设运行,加速推广质量管理数字化应用,全面提升质量管理专业化、智慧化水平。

The company has strengthened the basic management construction, formulated and revised 16 systems and guidelines in respect of full-staff responsibility system, accident supervision and accountability, continued to promote the preparation of standardized guidelines for on-site operation, systematically combed to form a list of potential risks, and cooperated with relevant departments to establish a database of potential hazards; carried out special investigation on safety standardization of tunnel construction, completed investigation on safety and environmental protection management improvement of 31 key three-level units in 10 regions, and formed special improvement report; further promoted the construction and operation of specialized monitoring centers for quality monitoring, accelerated the promotion of digital application of quality management, and comprehensively improved the professional and intelligent level of quality management.

# ◎安全监管评价

# Safety supervision evaluation

公司完善自上而下安全监管评价体系,强化区域总部安全监管评价和交叉互检机制,将评价结果与评优评先挂钩;完成所有一类企业安全监管评价,并延伸至重点三级单位,有效提升各级安全监管体系规范化水平。

The company has improved the top-down safety supervision evaluation system, strengthened the safety supervision evaluation and cross-check mechanism of regional headquarters, and linked the evaluation results with the excellent evaluation; completed the safety supervision evaluation of all Class I enterprises, and extended it to the key three-level units to effectively improve the standardization level of the safety supervision system at all levels.

# ○信息化赋能

# © Empowerment of informatization

公司大力推进科技兴安战略,完成船舶、特种设备、桥梁监控、沥青路面和试验检测质量监控平台全面上线运行,推进隧道监控中心、安全监管平台、应急管理平台、混凝土质量监控系统迭代更新,加快推进信息化平台向一体化建设方向融合。

The company has vigorously promoted the strategy of expanding the application of technology in the field of safety, completed the comprehensive online operation of ship, special equipment, bridge monitoring, asphalt pavement and test and detection quality monitoring platform, promoted the iterative updating of tunnel monitoring center, safety supervision platform, emergency management platform and concrete quality monitoring system, and accelerated the integration of information-based platforms in the direction of integrated construction.

# ◎专项治理提升

# Promotion of special governance

公司扎实开展安全管理强化年、重大事故隐患专项排查整治 2023 行动等重点专项任务,聚焦重大项目开展安全监管,统筹"10+2"专项工作组对 208 个项目开展专项督查,突出抓好燃气安全、消防安全、隧道施工等重点领域,分类制定"1+5"安全检查范本,狠抓检查质效。

The company has carried out key and special tasks such as safety management strengthening year, 2023 action plan for special investigation and rectification of major accident hazards, focused on safety supervision of major projects, carried out special supervision on 208 projects by the "10+2" special working group, focused on key areas such as gas safety, fire safety and tunnel construction, developed "1+5" safety inspection model by classification, and paid close attention to the quality and effectiveness of inspection.

# ◎重点事项督办

# Supervision of key matters

公司超前部署重要时间节点的各项安全防范工作,保障境内外安全管理同频共振;及时、科学处置 4 起生产安全事故和其他突发事件,对内外部发生的典型事故,深入分析薄弱环节,及时印发《风险提示函》《风险警示函》《事故警示函》等7个文件。按照"从速从严、分批处理"原则,对事故单位主要负责人开展安全生产约谈,对发生较大事故单位成立专项督导组开展进驻帮扶指导,及时督促事故单位对相关责任人员进行严肃追责问责。

The company has deployed various safety precautions at important time nodes in advance to ensure the same-frequency resonance of safety management at home and abroad; timely and scientifically handled 4 production safety accidents and other emergencies, deeply analyzed the weak links of typical internal and external accidents, and timely printed and issued 7 documents including the Risk Alert Letter, the Risk Warning Letter, the Accident Warning Letter, etc. In accordance with the principle of "strict requirements and improved efficiency, and batch handling", it conducts safe production interviews with the main responsible persons of the accident units, sets up special supervision and guidance groups for the units with major accidents to carry out stationed help and guidance, and timely supervise and urge the accident units to make serious accountability for relevant responsible personnel.

# ◎境外安全防范

# Overseas safety precautions

公司持续完善境外"大安全、大应急"管控体系,组建境外工作组赴肯尼亚等 7 个国别 21 个机构、项目开展安全督查调研;召开区域或国别安全座谈会,统筹制定安全管理提升举措;召开境外安全监管体系专题研讨会,开展"一国一策"境外安全监管体系建设专项工作,组织推动马来西亚等 3 个试点境外国别安全管理手册编制。

The company has continued to improve the overseas "big safety and big emergency" management and control system, set up overseas working groups for safety supervision and investigation in 21 institutions and projects in 7 countries including Kenya; held regional or national safety symposiums, and formulated safety management improvement measures as a whole; held special seminars on overseas safety supervision system, carried out special work on the construction of "one policy for one country" overseas safety supervision system, and organized and promoted the preparation of foreign safety management manuals for 3 pilot countries including Malaysia.



董事长王彤宙在马来西亚开展项目安全检查

Chairman Wang Tongzhou carried out project safety inspection in Malaysia

# 提升应急能力

# IMPROVING EMERGENCY RESPONSE CAPABILITY

中国交建系统搭建公司应急管理体系,修订应 急预案 6 项,开展集团级应急演练 5 次,构建 "大安全、大应急"工作格局;举办 2023 年应 急办主任专项培训,采取现场授课、情景模拟、 应急装备观摩、分组研讨等多种教学方式,强 化思想认识;建立"一极端天气一策略,一极 端天气一调度"工作机制,精准施策,确保安 全度汛。

CCCC has set up its emergency management system, revised 6 emergency plans, carried out 5 times of group-level emergency drills, and constructed the working pattern of "big safety and big emergency"; held special training for directors of emergency response office in 2023, and adopted various teaching methods such as onsite teaching, scenario simulation, emergency equipment observation, group discussion and so on to strengthen ideological understanding; established the working mechanism of "one strategy for one kind of extreme weather, and one dispatching for one kind of extreme weather" to ensure safe flood control.



# 培育安全文化

# CULTIVATING SAFFTY CULTURE

中国交建持续培育安全文化氛围,完成基于近十年的较大及以上事故场景《安全管理标准指南 1.0 版》专项成果;加强安全宣传引导,开展"安全生产月""质量月""青年安全生产示范岗创建"等系列活动。2023年,公司共组织 20 期项目负责人安全环保培训班,累计培训 2400余人次,累计完成各级管理人员培训 6.8 万人次、一线作业人员 18 万人次。

CCCC has continued to cultivate a safety culture atmosphere, and completed the special achievement of the Safety Management Standard Guide Version 1.0 based on the large and above accident scenarios in the past ten years; strengthened safety publicity and guidance, and carried out a series of activities such as "Safety Production Month", "Quality Month" and "Establishment of Youth Safety Production Demonstration Post". In 2023, the company organized 20 phases of project leader safety and environmental protection training classes, with more than 2400 person-times of training, 68,000 person-times of training for management personnel at all levels and 180,000 person-times of training for front-line operators.

基层在行动・2023



水规院: 开展安全生产培训

China Communications Planning and Design Institute for Water Transportation: Provided safety production training



三航局: 参与消防官传活动

CCCC Third Harbor EngineerinG: Participated in fire safety promotion activities

# **绿色低碳新机遇**GREEN AND LOW-CARBON NEW OPPORTUNITIES

习近平总书记强调,建立"健全绿色低碳循环发展经济体系、促进经济社会发展全面绿色转型是解决我国生态环境问题的基础之策。"中国交建全面贯彻关于碳达峰碳中和工作的决策部署,推动公司建立健全绿色低碳发展体系,加快基础设施绿色转型升级,全面提升公司绿色低碳可持续发展竞争力。

General Secretary Xi Jinping emphasized that establishing and improving the green low-carbon circular development economic system and promoting the comprehensive green transformation of economic and social development are the basic measures to solve the ecological environment problems in China. CCCC has fully implemented the decision and deployment on carbon peak and carbon neutrality, promoted the establishment and improvement of green low-carbon development system, accelerated the green transformation and upgrading of infrastructure, and comprehensively improved the competitiveness of green and low-carbon sustainable development of the company.

# 绿色技术

# **GREEN TECHNOLOGY**

中国交建作为交通基础设施建设的骨干力量,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,不断提升能源工艺、技术、装备水平。

As the backbone of transportation infrastructure construction, CCCC has made unremitting efforts to promote major breakthroughs in green low-carbon technology and cutting-edge technology research, led the construction of green low-carbon circular industry system, and continuously improved the level of energy process, technology and equipment.

### 修订完善标准体系

### Revise and improve the standard system

- 行业和团体: 开展《高速公路零碳管理服务设施碳排放评价标准》《公路基础设施建设碳排放计算标准》《绿色公路建设管理标准》等团体标准立项和编制。
- Industry and groups: Carried out the project establishment and preparation of such group standards as Evaluation Standard for Carbon Emission of Expressway Zero-carbon Management Service Facilities, Calculation Standard for Carbon Emission of Highway Infrastructure Construction, Management Standard for Green Highway Construction, etc.
- 企业:组织完成了《公路绿色低碳设计评价标准》《公路绿色低碳设计技术指南》等企业标准编制和发布试行。
- Enterprises: Organized and completed the preparation and release on a trial basis of enterprise standards such as the Evaluation Standard for Green Low-carbon Design of Highway and the Technical Guide for Green and Low-carbon Design of Highway.

# 筛选发布关键技术

## Screen and publish key technologies

- 系统梳理了公司 23 家二级单位 83 项绿色低碳技术,编制了《中国交建适用性绿色低碳技术调研报告》和《中国交建绿色低碳技术清单及提升建议报告》初步成果。
- Systematically sorted out 83 green low-carbon technologies of 23 secondary units of the company, and prepared the preliminary results of the Investigation Report on Green Low-carbon Technologies Applicable to CCCC and the Report on List of Green Low-carbon Technologies and Suggestions for Improvement of CCCC.
- 评选发布 2023 年度十大绿色低碳关键技术成果 10 项。
- Selected and released ten key green and low-carbon technology achievements in 2023.

## 打造实施技术策源地

## Create a driving force and origin for implementing technology

- 明确绿色结构设计、绿色建造、低碳运维、环保及绿色材料利用、交通设施与能源融合等五个交通基础设施绿色低碳子领域和技术研发方向,研究实施路径。
- Define the green and low-carbon sub-fields and technical research and development directions of transportation infrastructure, including green structure design, green construction, low-carbon operation and maintenance, environmental protection and green material utilization, transportation facilities and energy integration, and study the implementation path.
- 推动绿色低碳技术升级突破,形成中交品牌绿色低碳技术标准体系,积极推进基础设施建设行业绿色发展。
- Promote the upgrading and breakthrough of green low-carbon technology, form the standard system of green low-carbon technology of CCCC brand, and actively promote the green development of infrastructure construction industry.

### 多方面推进技术研发

# Promote technological research and development in multiple aspects

- 公路工程:开展基于"北斗+5G"的沥青混凝土路面及沿线生态环境质量数字化监测关键技术及应用、绿色公路建设中设计关键技术研究。
- Highway engineering: Carried out the key technology and application of digital monitoring of asphalt concrete pavement and ecological environment quality along the line based on "Beidou+5G", and research the key technology of design in green highway construction.
- 水运工程: 推进港口、航道工程全生命周期绿色低碳技术研究,聚焦重点环节,深入开展基于多能融合的自动化集装箱码头、 高效节地省水船闸等节能降碳技术研究。

- Water transportation engineering: Promoted the research on green and low-carbon technology for the whole life cycle of port and channel engineering, focused on key links, and carried out in-depth research on energy-saving and carbon-reducing technologies such as automated container terminals based on multi-energy integration and efficient land-saving and water-saving locks.
- 建筑工程: 从全寿命周期角度出发,开展绿色低碳建筑技术体系研究,形成绿色低碳建筑建设适用的成套技术清单。
- Construction engineering: Carried out the research on the technology system of green and low-carbon buildings from the perspective of the whole life cycle, and formed the list of complete sets of technologies applicable to the construction of green and low-carbon buildings.

### 推广应用技术成果

Promote the application of technological achievements

- 公路工程: 打造了承平高速雾灵山零碳示范性服务区、宁夏海平高速"分布式光伏+储能+充电桩"一体化建设等示范项目。
- Highway engineering: Built the demonstration projects of Wuling Mountain zero-carbon demonstration service area of Chengping Expressway and the integrated construction of "distributed photovoltaic + energy storage + charging pile" of Ningxia Haiping Expressway.
- 海洋生态修复: "港口岸线生态化重构再造技术与应用"关键技术在公司承建的辽宁、天津、山东、江苏、浙江、福建、海南等地的海洋生态保护修复项目中得到广泛应用。
- Marine ecological restoration: The key technology of "port shoreline ecological reconstruction technology and application" has been widely applied in the marine ecological protection and restoration projects in Liaoning, Tianjin, Shandong, Jiangsu, Zhejiang, Fujian, Hainan and other places undertaken by the company.

# 绿色施工

# **GREEN CONSTRUCTION**

为深入贯彻落实习近平总书记关于打造优质工程、绿色工程、廉洁工程的重要指示批示精神,中国交建紧扣"高质量发展深化年"总体要求,聚焦公路、水运、桥梁、城综业务开展绿色低碳工程实践;研究制定了《公路工程绿色低碳专项方案模板》《水运工程绿色低碳专项方案模板》和《城市综合开发工程绿色低碳专项方案模板》3个领域绿色低碳专项方案模板;组织筛选出覆盖公司多种业务领域的绿色典型示范项目,树立公司在基建类业务领域的绿色低碳品牌,全力推进示范项目的实施建设,全面提升公司绿色施工能力。

In order to thoroughly implement the spirit of General Secretary Xi Jinping's important instructions on building high-quality projects, green projects and integrity projects, CCCC has been closely adhering to the general requirements of "high-quality development deepening year" and focusing on highway, water transportation, bridge and urban comprehensive business to carry out green and low-carbon engineering practice; has studied and formulated three green and low-carbon special scheme templates, i.e. the Template of Green and Low-carbon Special Scheme for Highway Engineering, the Template of Green and Low-carbon Special Scheme for Water Transportation Engineering and the Template of Special Scheme for Green and Low-carbon Special Scheme of Urban Comprehensive Development Engineering; has organized and screened out typical green demonstration projects covering various business fields of the company, established the green and low-carbon brand of the company in the field of infrastructure business; has made every effort to promote the implementation and construction of demonstration projects, and improved the green construction capacity of the company in an all-round way.

# 数读·2023 Date·2023 全年能源消耗总量 150万吨标煤

Total annual energy consumption was

1.53 million tons of

二氧化碳排放总量 The total CO2 emission

was **4.09** million tons

102

# 交统绿色未来

平陆运河工程积极应用超大高陡边坡开挖与防护技术、超大体积混凝 土温度控制与防裂技术、超深基坑开挖与防渗技术、复杂结构船闸 建设技术等新型绿色低碳先进技术,减少碳排放量17.6万吨标准煤。

Actively applied new green and low-carbon advanced technologies such as super-large high-steep slope excavation and protection technology, super-large volume concrete temperature control and anti-cracking technology, ultra-deep foundation pit excavation and anti-seepage technology, and complex structure ship lock construction technology, reducing the carbon emission by 176,000 tons of standard coal.

### 平陆运河青年枢纽

New Western Land-sea Corridor (Pinglu) Canal Engineering



**狮子洋通道工程**Shiziyang Corridor Engineering



通过优化工程设计和施工工艺,减少植被破坏,优化施工组织, 合理划定施工线路,落实各项水土保持和生态保护措施,有效减 缓生态影响,确保区域的生态安全。

Reduced vegetation damage by optimizing engineering design and construction process, optimized construction organization, reasonably delineated construction route, and implemented various water and soil conservation and ecological protection measures, effectively reducing ecological impact and ensuring regional ecological safety.

采用高性能围护结构等多项绿色建筑技术以及分布式光伏、地源热泵、智慧管控平台、综合能源等智能低碳技术和设备设施,目前实现综合节能率居住建筑≥75%,公共建筑≥72%,且能源消耗降低 12%以上。

Adopted a plurality of green building technologies such as high-performance enclosure structure and intelligent low-carbon technologies such as distributed photovoltaic, ground source heat pump, intelligent management and control platform, comprehensive energy and other equipment and facilities. At present, the comprehensive energy saving rate is  $\geqslant 75\%$  for residential buildings,  $\geqslant 72\%$  for public buildings, and the energy consumption is reduced by more than 12%.

# 雄安中交未来科创城综合开发项目

Xiong'an CCCC Future Science and Technology Innovation City Comprehensive Development Project



优化变更钢护筒设计,并采用装配式可周转承重组合钢盖板进行孔口防护、罐车直灌浇筑方式、智能云工厂等措施,提升建造效率,减少碳排放 9806.65 吨标准煤。

Optimized and changed the steel casing design, and took measures such as adopting prefabricated reusable load-bearing composite steel cover plates for orifice protection, tank truck direct pouring and intelligent cloud factory, improving the construction efficiency and reducing the carbon emission by 9806.65 tons of standard coal.

# 张靖皋长江大桥项目

Zhangjinggao Yangtze River Bridge Project



# 首都地区环线高速公路承德(李家营) 至平谷(冀京界)段项目

Project from Chengde (Lijiaying) to Pinggu (Beijing-Hebei boundary) of Ring Expressway in Capital Region



通过桥梁墩身和承台动态调整,智慧梁场建设,特长隧道低碳施工,雾灵山零碳服务区建设,施工管理体系数字化建设,分布式光伏设施建设,交旅融合建设等一系列举措,可实现该项目建设期碳减排量约109万吨。

Through a series of measures such as dynamic adjustment of bridge pier body and bearing platform, construction of intelligent beam yard, low-carbon construction of extra-long tunnel, construction of zero-carbon service area of Wuling Mountain, digital construction of construction management system, construction of distributed photovoltaic facilities and construction of traffic and tourism integration, the carbon emission reduction of about 1.09 million tons during the construction period of the project can be achieved.

项目充分利用上海南汇河网密布优势,将工程渣土通过水路运输消纳,采用低能耗、新能源设备,促进了渣土消纳过程的节能减排。 截至 2023 年 6 月,相较于传统陆运方式,累计减少二氧化碳排放量约 7 万吨。

The Project makes full use of the densely distributed advantages of Shanghai Nanhui River Network to transport and absorb the engineering waste soil by waterway, and adopts low energy consumption and new energy equipment to promote energy conservation and emission reduction in the waste soil consumption process. As of June 2023, compared to conventional land transport methods, it has cumulatively reduced CO2 emissions by about 70.000 tons.

上海渣土消纳项目

Shanghai Waste Soil Consumption Project



中国交建 2023 年环境、社会及管治报告 U水卷之中·浸染宜居生态 Surrounded by mountains and rivers, enabling a livable ecology. 2023 CCCC ESG Report

# 绿色运营

# **GREEN OPERATIONS**

# ○绿色管理

# O Green management

中国交建强化节能环保体系顶层设计,编制印发了《节能环保工作三年行动方案(2023-2025 年)》,从落实习近平生态文明思想、节能环保合规性管理等 7 方面 23 项重点任务进行发力;深入推进节能环保标准化建设,印发《投资建设项目环保管理指南》《公路工程边坡生态修复技术指南》等 5 本专业指南;组织各单位总结提炼节能环保指导手册、清单模板等标准化文件,推出 29 项"节能环保三年行动"优秀案例,并在"工程技术知识库平台"线上展示,推进节能环保监督管理专业化、标准化建设,加快探索节能环保监督管理的新路径、新模式,推进生态环境治理体系和治理能力现代化。

CCCC has strengthened the top-level design of energy conservation and environmental protection system, prepared and issued the Three-year Action Plan for Energy Conservation and Environmental Protection (2023-2025), and made efforts from 23 key tasks in 7 aspects such as the implementation of Xi Jinping's thought of ecological civilization and compliance management of energy conservation and environmental protection; further promoted the standardization of energy conservation and environmental protection, and issued 5 professional guides, including the Environmental Protection Management Guide for Investment and Construction Projects and the Technical Guide for Ecological Restoration of Side Slope of Highway Engineering; organized all units to summarize and refine standardized documents such as energy conservation and environmental protection instruction manual and list template, launched 29 excellent cases of "three-year action for energy conservation and environmental protection" and displayed them on the "engineering technology knowledge base platform" online, promoted the professional and standardized construction of energy conservation and environmental protection supervision and management, accelerated the exploration of new paths and new modes of energy conservation and environmental protection supervision and management, and promoted the modernization of ecological environment governance system and governance capacity.

# ◎污染防治

# O Pollution prevention and control

中国交建坚持"绿水青山就是金山银山"理念,坚持把绿色发展理念贯穿到生产经营的各个环节,从源头上减少生产经营过程中大气污染、水污染和固体废弃物污染,全力减少对环境的扰动。

CCCC adheres to the concept of "lucid waters and lush mountains are invaluable assets", and adheres to the green development concept throughout all links of production and operation, so as to reduce the air pollution, water pollution and solid waste pollution in the production and operation process from the source, and make every effort to reduce the disturbance to the environment.

# 大气污染防治

# Air pollution prevention and control

- 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。
- Strictly manage and control the waste gas emission in the production process, focus on dust control in heavy pollution weather and pollution control of construction vehicles, effectively implement VOCs control measures, and reduce the amount of waste gas by implementing low-emission, low-pollution and high-efficiency production and construction technology.
- 一航局新疆 Q5000 环保型沥青搅拌站通过喷淋冷却处理,给沥青烟气粒子增湿,再通过离心除雾,去除固、液相物质。然后通过静电除油装置电击穿污染物气体,再经光氧催化裂解剩余气体,最后使用活性炭吸附,将有害气体转化为二氧化碳和水,实现有害气体零排放,该处理工艺设备综合处理效率可达 95% 以上。

• Xinjiang Q5000 environment-friendly asphalt mixing plant of CCCC First Harbor Engineering Company Ltd. humidifies asphalt smoke particles through spraying cooling treatment, and then removes solid and liquid substances through centrifugal demisting; then electrically breaks the pollutant gas through an electrostatic deoiling device, further decomposes the residual gas through photo-oxygen catalysis, and finally uses activated carbon for adsorption, to convert the harmful gas into carbon dioxide and water, and realize zero emission of the harmful gas. The processing equipment has a comprehensive processing efficiency of over 95%.

### 水污染防治

### Water pollution prevention and control

- 高度重视水资源使用和污水防治,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。
- Attach great importance to the use of water resources and sewage control, strengthen the treatment of production wastewater and domestic sewage, promote sewage treatment technologies and equipment, increase the proportion of repeated use of water, actively carry out water pollution prevention and monitoring, and treat and discharge in strict accordance with the requirements of the Integrated Wastewater Discharge Standards.
- 积极使用盾构渣土循环利用技术,厦门地铁 3/4 号线、成都地铁 30 号线等项目积极使用盾构渣土环保处理工艺,渣土和淤泥经设备分解成泥饼、泥沙、碎石和清水,泥沙碎石和清水经过检测可实现循环利用,少量干硬的泥饼不仅大大减少了渣土外运放量,也避免了污水渗漏,真正做到环保化处理、减量化运输、资源化利用。
- Actively use the shield-driven slag and soil recycling technology. Xiamen Metro Line 3/4 and Chengdu Metro Line 30 and other projects actively use the shield-driven slag and soil environmental protection treatment process. The slag and sludge are decomposed into mud cakes, silt, gravels and clean water through equipment. The silt, gravels and clean water can be recycled through detection. A small amount of dry and hard mud cakes not only greatly reduce the amount of slag and soil transported outside, but also avoid sewage leakage, so as to truly achieve environmental protection treatment, reduced transportation and resource utilization.
- 马来西亚东海岸铁路项目聘请第三方环境监测单位开展月度环境监测工作,因部分施工线路位于水源地上游,项目部设置环境污染预警装置进行网络实时监控,严控污水排放,防止水源地水质被破坏,确保实现"零污染"。
- The Project of East Coast Rail Link in Malaysia has employs a third-party environmental monitoring unit to carry out monthly environmental monitoring. As part of the construction line is located at the upstream of the water source, the Project Department sets up environmental pollution early warning device for real-time network monitoring, strictly controls the sewage discharge, prevents the water quality of the water source from being damaged, and ensures the realization of "zero pollution".

## 固体废弃物污染防治

## Solid waste pollution prevention and control

- 重视废旧建筑材料的再生利用,遵循"减量化、资源化、无害化"的原则,全面推进"垃圾减量与资源化"工作,积极开展渣土、建筑垃圾的无害化处理和综合利用工作,减少固体废物的产生量,促进固体废物的综合利用,以实现资源的最大化利用和环境的可持续发展。
- Pay attention to the recycling of waste building materials, follow the principle of "reduction, recycling and harmlessness", comprehensively promote the work of "waste reduction and recycling", actively carry out the harmless treatment and comprehensive utilization of slag soil and construction wastes, reduce the production of solid wastes and promote the comprehensive utilization of solid wastes. so as to realize the maximum utilization of resources and the sustainable development of the environment.
- 二航局海口中交国际中心项目将建筑垃圾投入二次利用,进行临时道路的铺设,卫生间走廊的回填,肥槽的回填等资源化回收再利用。严格对出场的建筑垃圾进行动态管控、分类称重,禁止运输车辆携载未分类垃圾出场。每天的建筑垃圾回收利用率高达 80%,每年能节省近 100 万元运费,且远高于"建筑垃圾力争再利用率大于 50%"的国家标准。
- The Haikou CCCC International Center Project of the Second Harbor Engineering Company, Ltd. puts the construction waste into secondary utilization, and carries out the recycling and reuse of temporary roads, the backfilling of toilet corridors and the backfilling of fertilizer tanks. Strictly carry out dynamic control and classified weighing on the discharged construction wastes, and prohibit transportation vehicles to carry unsorted wastes out of the site. The recycling rate of the construction waste is as high as 80% every day, which can save nearly RMB 1 million of freight cost every year, and is far higher than the national standard that "the recycling rate of the construction waste shall be more than 50%".

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- 中交建筑集团宿松县 S249 路面修复项目施工中大范围采用就地冷再生、水泥混凝土面板破碎生产再利用等工艺,对资源节约及循环再利用等发挥了极大作用。
- In the construction of S249 pavement repair project in Susong County of CCCC Construction Group Co., Ltd., the processes of cold recycling in situ, crushing, production and reuse of cement concrete panel are adopted in a large scale, which play a great role in resource saving and recycling.

# ◎ 绿色办公

# O Green Working

中国交建倡导绿色生产生活方式,合理安排公务用车,提倡拼车出差;推广自行车+公共交通出行模式,引导员工少开车,多步行;更新公务用车,优先采购新能源汽车;加快办公区充电桩规划建设,促进办公出行用能清洁化,降低二氧化碳排放;鼓励并引导职工践行低能量、低消耗、低开支、低代价的绿色低碳生活方式,树立节俭文明的生活消费理念,营造绿色低碳生产生活新风尚。

CCCC advocates green production and living mode, reasonably arranges official cars, and advocates carpool travel; promotes bicycle + public transport travel mode and guides employees to drive less and walk more; updates official vehicles and gives priority to purchase new energy vehicles; accelerates the planning and construction of charging piles in the office area, promotes the clean use of energy for office travel and reduces the emission of carbon dioxide; encourages and guides the employees to practice the green and low-carbon lifestyle with low energy, low consumption, low expenditure and low cost, establishes the life consumption concept of thrifty civilization, and creates the green and low-carbon production and living new fashion.

### 绿色办公,从我做起

Green Working, Starting with Me

三公局日常物业巡逻加强节能监督、对用水设备加强日常巡检及维修,对于用电设备,做到随用随关,中央空调均设置为节能温度,员工上下班提供免费班车,倡导员工绿色低碳出行。与此同时,公司领导带头节能,三层以内楼层步行上下,会议材料均要求双面打印,从节约用电、用水、能源及办公用品等点滴细微方面入手,倡导低能耗的工作生活学习方式,以促进资源节约和综合利用,降低办公成本,提高行政效能,全力打造"低碳"机关。

CCCC Third Highway Engineering Co., Ltd. strengthens the energy-saving supervision in the daily property patrol, strengthens the daily inspection and maintenance of water equipment, implements on-demand shutdown of electric equipment, sets the central air conditioner at the energy-saving temperature, provides free shuttle buses for employees and advocates the green and low-carbon travel of the employees. At the same time, the leaders of the company take the lead in energy conservation, and walk up and down the floors within three floors; It is required to print the meeting materials on both sides, start from the subtle aspects such as saving electricity, water, energy and office supplies, and advocate a low-energy-consumption working life and learning style, so as to promote resource saving and comprehensive utilization, reduce office costs, improve administrative efficiency, and strive to create a "low-carbon" organization.

# 绿色金融

# **GREEN FINANCE**

中国交建打好碳排放测定与考核、碳交易、绿色金融等行动"组合拳",在交通行业碳资产管理、碳汇交易等方面勇于探索、示范带动,积极参与碳市场交易,提升全产业链的绿色竞争力。

CCCC has done a good job in carbon emission measurement and assessment, carbon trading, green finance and other actions, and has the courage to explore, demonstrate and drive carbon asset management and carbon sink trading in the transportation industry, actively participates in carbon market trading, and improves the green competitiveness of the whole industry chain.

# ◎探索碳交易、碳资产管理模式

Surrounded by mountains and rivers, enabling a livable ecology.

# © Explore carbon trading and carbon asset management mode

中国交建积极探索碳交易碳资产管理新模式,通过建立各业务板块碳排放量核算体系,推进碳排放数据监测平台建设,科学开展企业年度碳排放核算工作,初步构建了涵盖公路、水运、机场、市政等 10 类工程的建设碳排放测算标准体系框架。在此基础上,开展碳边境调节机制研究,研究构建"1+2"内部碳交易,积极探索基建企业碳交易实施路径研究,顺利完成首单"蓝碳"交易挂牌成交。

CCCC actively explores a new mode of carbon asset management for carbon trading, promotes the construction of a carbon emission data monitoring platform by establishing a carbon emission accounting system for each business sector, and scientifically carries out the annual carbon emission accounting work of enterprises, and has preliminarily constructed the framework of construction carbon emission measurement standard system covering 10 types of projects such as highway, water transportation, airport and municipal administration. On this basis, it carries out the research on the carbon border regulation mechanism, studies and constructs the "1+2" internal carbon trading, and actively explores the implementation path of carbon trading of infrastructure enterprises, and has successfully completed the listing of the first "blue carbon" trading.

### 碳边境调节机制

# Carbon border adjustment mechanism

- 聚焦欧盟碳边境调节机制(CBAM)等国际低碳规则,重点围绕中交装备制造产品,了解相关产品生产制造、出口规模,以及产品碳足迹、绿色供应链等情况,形成 CBAM 对中交业务影响初步思考并提出相关工作建议。
- Focus on international low-carbon rules such as EU Carbon Border Adjustment Mechanism (CBAM), focus on the equipment manufacturing of CCCC, understand the production and manufacturing scale and export scale of relevant products, as well as product carbon footprint, green supply chain, etc., form preliminary thinking on the impact of CBAM on CCCC business, and put forward relevant work suggestions.

## "1+2"碳交易制度体系

### "1+2" carbon trading system

- 组织对《中国交建碳交易管理办法》《中国交建碳资产信息化管理实施细则》《中国交建碳排放定额管理实施细则》开展研究,明确了交易要素、管理职责、机制设计等内容,规范了公司内部碳交易行为。
- Organize to carry out research on the Measures for the Administration of Carbon Trading of CCCC, the Detailed Rules for the Implementation of Information Management of Carbon Assets of CCCC, and the Detailed Rules for the Implementation of Carbon Emission Quota Management of CCCC, define the trading elements, management responsibilities, mechanism design and other contents, and standardize the internal carbon trading behavior of the Company.

# 基建企业碳交易实施路径

# Implementation path of carbon trading for infrastructure enterprises

- 借鉴国家温室气体自愿减排交易(CCER)机制、区域生态产品价值实现机制和各地碳普惠机制的成功经验,提出中国交建推动内部试点碳减排交易的总体思想、基本原则、实现路径和核算方法等核心要素。
- Drawing on the successful experience of Chinese Certified Emission Reduction (CCER) trading mechanism, regional ecological product value realization mechanism and regional carbon inclusive mechanism, put forward the core elements such as the overall thought, basic principles, realization path and accounting method of CCCC to promote internal pilot carbon emission reduction trading.



# 我们的成绩·2023 ★ Our achievements · 2023

编制中国交建光伏绿证开发指导手册,促成公司第一笔 I-REC 国际绿证交易。

Compiled the guidance manual for the development of photovoltaic green certificate of CCCC and facilitated the first I-REC international green certificate transaction of the company.

由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)交易,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。该"蓝碳"交易是公司首单,也是广西首单。

The "blue carbon" (marine carbon sink) transaction generated by New Mangrove Project in Peacock Bay Area, Qinzhou, Guangxi invested and constructed by CCCC Urban Investment Holding Company Limited was listed on the Guangxi (China-ASEAN) blue carbon trading service platform of Beibu Gulf Equity Exchange Group. The "blue carbon" transaction is the first order of the company and Guangxi.

# ◎推进绿色金融支持

# O Promote green financial support

中国交建抢抓绿色金融机遇,发行绿色资产支持证券和绿色可续期公司债券。根据集团业务领域和产业分类,遴选出符合各类绿色贷款、绿色债券支持和适用范围的绿色金融项目目录,制定绿色金融项目实施方案,通过绿色金融与生态环保新兴业务相结合,实现了环境效益、社会效益和经济效益的共赢。

CCCC has seized green financial opportunities and issued green asset-backed securities and green renewable corporate bonds. According to the business field and industry classification of the Group, it has selected the list of green financial projects that meet the support and application scope of various green loans and green bonds, formulated the implementation scheme of green financial projects, and realized the win-win results of environmental benefit, social benefit and economic benefit through the combination of green finance and ecological and environmental protection emerging business.

# 我们的成绩·2023 ★ Our achievements · 2023

中交 - 泰兴经济开发区污水处理及生态环境提升 PPP 项目绿色资产支持证券在上海证券交易所成功完成发行, 是江苏省的首单绿色 PPP-ABS 产品,也是公司规模最大的生态环保单体项目成功发行 PPP-ABS 产品。

The green asset-backed securities of the Sewage Treatment and Ecological Environment Improvement PPP Project of CCCC - Taixing Economic Development Zone have been successfully issued at Shanghai Stock Exchange, which is the first green PPP-ABS product in Jiangsu Province and the largest ecological and environmental protection single project of the company.

2023年绿色可续期公司债券(第一期)成功发行,创 2023年建筑业央企同期限永续债票面利率新低。

In 2023, green renewable corporate bonds (Phase I) were successfully issued, hitting the lowest coupon rate of the same-term perpetual bonds of central enterprises in the construction industry in 2023.

# 美丽生态新画卷 NEW PICTURE SCROLL OF BEAUTIFUL ECOLOGY

中国交建以习近平生态文明思想为指导,坚持"两个确立"、做到"两个维护"的有效检验,坚定不移把"绿水青山就是金山银山"理念贯穿企业发展全过程,以生态环保理念引领高质量发展,以实际行动奋力谱写绿水青山的"美丽中国"新画卷。

Guided by H.E President Xi Jinping's thought of ecological civilization, CCCC adheres to "two establishment" and the effective inspection of "two maintenance", unswervingly runs the concept of "lucid waters and lush mountains are invaluable assets" throughout the whole process of enterprise development, leads high-quality development with ecological and environmental protection concept, and strives to compose a new picture of "beautiful China" of green water and green mountain with practical actions.

# 开展生态修复

# CARRY OUT ECOLOGICAL RESTORATION

作为全球生态文明建设的践行者,中国交建积极落实企业环保主体责任,全面推进美丽中国建设的战略任务,充分发挥 百余年来深厚积淀的江河湖海治理优势,在流域生态治理、高寒区域生态修复、海洋可持续发展等方面贡献独特的中交 方案,让天更蓝、山更绿、水更清,让生活更美好。

As the practitioner of the global ecological civilization construction, CCCC actively implements the environmental protection main body responsibility of enterprises, comprehensively promotes the strategic task of building beautiful China, gives full play to the advantages of river, lake and sea governance which has been deeply accumulated for more than one hundred years, and offers unique CCCC schemes in the aspects of river basin ecological governance, ecological restoration of high and cold regions, marine sustainable development and other aspects, so as to make the sky more blue, the mountains be greener, the water be clearer, and the life be better.

# 流域生态治理 Ecological management of river basin



内蒙古乌梁素海山水林田湖草沙修复试点工程 Ulansuhai Mountain-Water-Forest-Farmland-Lake-Grassland-Desert Restoration Pilot Project in Inner Mongolia



广西中马产业园钦州金鼓江城市综合开发项目

Guangxi Sino-Malaysian Industrial Park Qinzhou Jingu River Urban Integrated Development Project



三亚崖州湾科技城水系工程项目 Yazhou Bay Science City Water System Project, Sanya



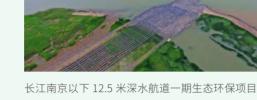
重庆万州区龙宝河综合治理工程(一期) Longbao River Comprehensive Treatment Project (Phase I), Wanzhou District, Chongqing

# 草原及土壤修复

Grassland and Soil Restoration



内蒙古科尔沁草原山水林田湖草沙一体化保护和修复项目 Integrated Protection and Restoration Project of Mountains, Rivers, Forests, Fields, Lakes, Grasslands and Sands in the



Ecological and Environmental Protection Project of Phase I of 12.5m Deep Water Channel below Naniing on the Yangtze



天津河西陈塘土壤修复项目 Tianjin Hexi Chentang Soil Remediation Project

Horgin Grassland of Inner Mongolia



青岛上合如意湖综合建设项目

Qingdao Shanghe Ruyi Lake Comprehensive Construction Project

# "千年秀林" 染绿雄安新貌

"Forest of Xiong'an". Adding Greenery to New Look of Xiong'an

擘画雄安千年大计,从"千年秀林"起笔。习近平总书记强调: "先植绿、后建城,是雄安新区建设的一个新理念。"

The planning of the Xiong'an Millennium Plan should start with the Xiong'an Forest. General Secretary Xi Jinping pointed out that it is a new concept for the construction of Xiong' an New Area to plant trees before building the city.

六年多来,中交雄安统筹集团驻雄各单位积极参与"千年秀林"第一标——雄安新区9号地块—区造林等生态项目,累计植树超200万棵,新区天更蓝、水更清、树更多,"生态之城"正在拔节生长。

For more than six years, all units of CCCC Xiong' an Overall Planning Group in Xiong' an have actively participated in the first bid of "Forest of Xiong'an" - afforestation and other ecological projects in No. 9 Plot of Xiong' an New Area, with over 2 million trees planted, thereby creating a crystal-clear blue sky, clearer water and more trees in the new area. The "Ecological City" is growing rapidly.



# 打造"京津后花园"! 废弃矿山披绿装

Creation of "Beijing-Tianjin Backyard Garden"! Green Covering of Abandoned Mines

拥有"京津后花园"美名的天津蓟州区地处华北平原与燕山山脉之交,是两地游客休闲旅游的好去处。然而,由于上世纪八九十年代,这里丰富的矿石资源遭到无序开采,生态环境遭受很大破坏。中国交建勇担天津蓟州区废弃矿山生态修复综合治理工程重任,开始了约637公顷别山矿区和西五百户矿区的治理工作,让"荒山铺绿装,沟壑变平川,废地成资源"。未来,在绿意盎然的蓟州,中交建设者还将为其引入新能源、共享农业、特色旅游等系列项目,真正通过优化生产生活方式实现人与自然和谐共生。

Jizhou District, Tianjin, with the reputation of "Beijing-Tianjin Backyard Garden", is located at the intersection of North China Plain and Yanshan Mountains, which is a good place for tourists to travel and relax. However, due to the 1980s and 1990s, the rich mineral resources here were mined in disorder, and the ecological environment suffered great damage. CCCC has taken on the important task of ecological restoration and comprehensive treatment of abandoned mines in Jizhou District of Tianjin, and has started the treatment of about 637 hectares of Beishan mining area and West Wubaihu mining area, making "the barren mountains greener, the ravines flatter, and the waste land become resources". In the future, in green Jizhou, CCCC builders will also introduce new energy, shared agriculture, characteristic tourism and other series projects to truly realize the harmonious coexistence between human and nature by optimizing production and living ways.

# 保护生物多样性

# PROTECTING BIOLOGICAL DIVERSITY

生物多样性是维系地球健康、人类福祉和经济繁荣的基础。中国交建积极响应"构建人与自然生命共同体""共建地球生命共同体"倡议,将共生理念贯穿到设施规划、设计、建设、运营和养护全过程,采取各种措施守护项目所在地动植物生存环境与生物多样性,为实现"人与自然和谐共生"的美好愿景不断努力。

Biodiversity is the basis for sustaining the health of the planet, human well-being and economic prosperity. CCCC actively responds to the initiative of "building a community of human and natural life" and "co-constructing a community of earth life", running the concept of symbiosis through the whole process of facility planning, design, construction, operation and maintenance, taking various measures to protect the living environment and biodiversity of animals and plants in the project site, and making continuous efforts to realize the beautiful vision of "harmonious coexistence between man and nature".



蒙巴萨港新建 KOT 油码头项目保护自然生态案例《用科技与责任呵护海洋生物的蔚蓝家园》入选《2023"百企千村"中国在非企业履行社会责任经典案例》。

The case of protecting natural ecology of the new KOT oil terminal project at Mombasa Port, Care for The Blue Home of Marine Life with Science and Technology and Responsibility, was selected as the Classic Case of "A Hundred Enterprises and Thousand Villages" in 2023 for China to Fulfil Social Responsibility in Non-enterprises.

秘鲁钱凯多功能港口新 I 期工程项目部积极落实当地环评要求,常态化做好湿地生态保护和动物救助工作,多次救助企鹅、海豹及鸟类动物,切实改善湿地、海滩及其他生物栖息地的环境状况。

The Project Department of New Phase I Project of Chancay Multi-functional Port, Peru, has actively implemented the local environmental assessment requirements, normalized wetland ecological protection and animal rescue, rescued penguins, seals and birds for many times, and effectively improved the environmental conditions of wetlands, beaches and other biological habitats.



# 给牡蛎造个坚固的"家"

Creation of A Solid "Home" for Oysters

作为上海市历年来规模最大的海洋生态保护修复项目,三航局项目团队正在努力为牡蛎建造坚固的新"家"。新"家"坐落在上海临港南汇嘴观海公园的堤外潮间带,与东海大桥遥相呼应。该区域由泥沙淤积而成,承载能力弱,若把牡蛎新"家"直接建在滩地上,不出月余就会被海浪冲垮。为此,项目团队采用"抛石船+3GPS 定位系统"工艺,让抛石作业的工效提高了近一倍,并节省约 10% 的石料损耗,使新"家"的地基打得又快又牢。海面上的起重船缓缓将一个个透空式混凝土半圆体吊起,搭积木式安放于平整而坚实的地基上,拼成一个个巨大的扇贝形礁体结构。这是为牡蛎修筑的新"家",也是中国交建助力上海保护和修复海洋生态多样性的开端,沙鸥翔集、锦鳞游泳的画面指日可待。

The project team of CCCC Third Harbor Engineering Co., Ltd. is striving to build a solid new "home" for oysters, which is the largest marine ecological protection and restoration project in Shanghai over the years. The new "home" is located in the intertidal zone outside the embankment of Nanhuizui Sea View Park, Lingang, Shanghai, echoing with the East Sea Bridge. This area is formed by sediment deposition, with weak bearing capacity. If the new "home" for oysters is directly built on the beach, it will be washed down by the waves within one month. For this reason, the project team adopts the process of "stone riprap + 3GPS positioning systems", so that

the work efficiency of stone dumping operation is nearly doubled, and about 10% of stone loss is saved, so that the foundation of the new "home" is fast and firm. The crane boats on the sea slowly lift the hollow concrete semi-circles one by one and put them on the flat and solid foundation in the form of building blocks to form a huge scallop-shaped reef structure. This is a new "home" for oysters. It is also the beginning of CCCC's efforts to protect and restore Shanghai's marine biodiversity. Pictures of sand gulls gathering and fish swimming will be just around the corner.



# 践行环保公益

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# PRACTISE ENVIRONMENTAL PROTECTION AND PUBLIC WELFARE

中国交建积极探索促进人与自然和谐共生的有效途径,开展"世界环境日""全国节能宣传周""全国低碳日"等各类环保宣传教育活动,向公众广泛宣传环保理念和知识,调动社会力量积极开展环保行动,努力激发全社会共同呵护生态环境的内生动力。

CCCC actively explores effective ways to promote the harmonious coexistence between human and nature, and actively carries out various environmental protection publicity and education activities such as World Environment Day, National Energy Conservation Publicity Week, National Low Carbon Day, etc., to widely publicize environmental protection concepts and knowledge to the public, mobilize social forces to actively carry out environmental protection actions, and strive to stimulate the endogenous power of the whole society to take care of the ecological environment.



中交雄安组织"中交筑梦植绿雄安"义务植树活动

CCCC Xiong'an organized the "CCCC Building Dreams, Greening Xiongan" tree-planting volunteer activities



中交四航局在秘鲁钱凯港项目开展湿地保护活动

CCC Fourth Harbor Engineering conducted wetland protection activities at the Chancay Port Project in Peru



一公局开展马尼拉白沙滩 "CLEAN UP DAY" 海洋环境保护活动

China First Highway Engineering held a "CLEAN UP DAY" marine environment protection activity at Manila's White Beach

# 开展环保宣教

# CARRY OUT ENVIRONMENTAL PROTECTION PROPAGANDA AND EDUCATION

中国交建重视员工环保知识与能力的提升,在中交网院平台"环保监督管理人员岗前培训"模块中新增关于节能环保政策宣贯等6门年度继续教育课程,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工作;邀请生态环境部、上海市政总院、研促会绿色交通分会外部专家组织开展专题培训;推动集团总部专家走进各级单位10余次宣贯公司节能环保制度,并对项目经理进行专题环保培训;充分利用交建通平台,每季度编发绿色低碳工作简报,做好公司绿色低碳工作宣贯。

CCCC attached importance to the improvement of staff's environmental protection knowledge and ability, and has added 6 annual continuing education courses such as promotion and implementation of energy-saving and environmental protection policies in the module of "pre-job training for environmental protection supervision and management personnel" on the online college platform of CCCC, and has made full-time and part-time environmental protection supervisors of secondary units complete the post certification and annual continuing education; It invited external experts from the Ministry of Ecological Environment, Shanghai Municipal Engineering Design Institute (Group) Co., Ltd. and Green Transportation Branch of China Ecological Civilization Research and Promotion Association to organize special training; urged the experts from the headquarters of the Group to walk into units at all levels for more than 10 times to publicize and implement the company's energy-saving and environmental protection system and provided special environmental protection training to project managers; It made full use of the platform of CCCC to compile and distribute green and low-carbon work bulletins on a quarterly basis, and publicized and implementd the company's green and low-carbon work.

### 数读:2023

评选出环保示范企业

Data Reading • 2023

开展首次中交"环保奖"的评选工作,

评选出环保优秀团队 评选出环保标兵

**5**<sup>^</sup>

**30**<sup>^</sup>

**50**<sup>4</sup>

Carried out the selection of the first "Environmental Protection Award" of CCCC, and selected **5** environmental protection demonstration enterprises, **31** 

environmental protection excellent teams and  $\overline{\bf 50}$  environmental protection pacesetter.

荣获中国节能协会、中施企协、中建协、 研促会节能环保奖项

31项

Won 31 energy conservation and environmental

protection awards from China Energy Conservation Association, China Association of Construction Enterprise Management, China Construction Industry Association and China Ecological Civilization Research and Promotion Association.

# ON THE NEW JOURNEY

CREATING A BRIGHT FUTURE

新征程之上
浇筑美好未来

"坚定不移走共同富裕的道路""人民对美好生活的向往,就是我们的奋斗目标"。我们始终牢记央企的职责使命,探索形成愿景驱动型社会责任管理之道,按照"责任驱动,品牌带动"要求,高标准履行社会责任,不断擦亮"中交助梦"全球责任品牌,为成为"让出资人放心、客户满意、相关利益方信任、经营者安心、员工幸福、社会赞誉"的受人尊敬企业而不懈奋斗。

"We unswervingly take the road of common prosperity". "People's yearning for a better life is our goal." We always keep in mind the responsibilities and missions of central enterprises, explore ways to form vision-driven social responsibility management perform social responsibilities with high standards according to the requirement of "drive of responsibility and brand", constantly brighten the global responsibility brand of "CCCC Helping Achieve Dreams", and make unremitting efforts to become respected enterprise that "assures investors, satisfies customers, trusts stakeholders reassures operators, brings happiness to employees, and receives social praise".



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# 振兴乡村新风貌

# RURAL REVITALIZATION FOR A NEW LOOK

中国交建深入学习贯彻习近平总书记关于"三农"工作的重要论述和重要指示批示精神,深入学习中央农村工作会议精神和"千万工程"经验,认真落实国务院国资委工作要求,以助力全面乡村振兴为目标,以增强脱贫地区和脱贫群众内生发展动力为着力点,按照"351"定点帮扶工作体系,统筹推进"157"行动,创新载体,以"四个千百"促发展惠民生,培训千名头雁、千名医务人员、千名人民教师、千名技术工人,打造百个集体经济企业、百个教育设施、百个健康保健室、百个党建阵地,不断增强脱贫群众的获得感、幸福感。2023年,公司连续5年获中央企业定点帮扶工作考核最高等次评价。

CCCC carries out in-depth study and implementation of General Secretary Xi Jinping's important exposition and important instruction on "Agriculture, Rural Area and Rural Areas" work, in-depth study of the spirit of the Central Rural Work Conference and the experience of "Ten Thousand Projects", earnestly implements the work requirements of the State-owned Assets Supervision and Administration Commission of the State Council, takes the overall rural revitalization as the goal and strengthening the endogenous development power of poverty-relief areas and people as the focal point, promotes the "157" action as a whole according to the "351" targeted assistance work system, innovates the carrier, and promotes the development and benefit the people's livelihood through the "Four Thousand and Four Hundred" Plan, namely training thousands of leading figures, medical personnel, people's teachers, and technical workers, and creating hundreds of collective economic enterprises, educational facilities, health care rooms, and party building positions, and continuously enhancing the sense of gain and happiness of the people out of poverty. In 2023, the company won the highest grade evaluation of the designated help work assessment of central enterprises for 5 consecutive years.

数读 . 2023

Data Reading • 2023

投入帮扶资金

25050万元

Invested support fund of RMB

**250**<sub>-</sub>**5** million



其中 where

投入无偿帮扶资金

**23772**<sup>57</sup>

Invested free support fund of RMB

**237.72** million

引进无偿帮扶资金

178万元

Introduced free support fund

of RMB 1.78 million

引进有偿帮扶资金

1100万元

Introduced paid support fund

of RMB 11 million

# 产业筋骨壮起来

# STRENGTHEN INDUSTRIES

产业振兴是乡村振兴的重中之重,也是定点帮扶工作的切入点。中国交建积极开展"中交助梦·产业振兴"行动,全年产业帮扶无偿投入6340万元,助力帮扶地区产业提质升级,同时,在帮扶地区打造46个小集体经济企业,以新型农村集体经济赋能乡村产业振兴,多措并举奏响"产业富民曲",筑牢农民"幸福梦"。2023年,公司与怒江州举行"同心梦圆"铸牢中华民族共同体意识示范工作室授牌仪式,签署2023面向怒江建筑产业园产业帮扶协议。

Industrial revitalization is the top priority of rural revitalization, and also the cut-in point of targeted support work. CCCC has actively carried out the action of "CCCC Helping Achieve Dreams · Industrial Revitalization" and invested RMB 63.4 million in industrial support for free in the year to help improve the quality and upgrade of regional industries. At the same time, it has built 46 small collective economic enterprises in the assisted areas, to enliven the rural industry revitalization with the new rural collective economy, and taken various measures to enable the realization of "enriching the people through industry" and build a "happy dream" for farmers. In 2023, the company and Nujiang Lisu Autonomous Prefecture held the licensing ceremony of "Working Together to Fulfill Dreams" Model Studio for Firming the Consciousness of Chinese National Community, and signed the 2023 industrial support agreement for Nujiang Construction Industrial Park.

## 农特产业 ~~~

### Characteristic Agricultural Industry

食为人天,农为正本,农业是国民经济基础产业。中国交建积极支持帮扶地区农特产业发展,拨付5000万元,助力怒 江香料产业园发展峡谷特色香料产业;支持独龙江乡、米俄洛村、北甸村等第一书记所在村发展草果加工、特色养殖、 食用菌、中草药等小型集体经济产业。

Food is the first necessity of the people, and agriculture is the foundation of the country. Agriculture is the basic industry of the national economy. CCCC has actively supported the development of special agricultural industries in the assisted areas, allocating RMB 50 million yuan to assist Nujiang Spice Industrial Park to develop the characteristic spice industry in the valley; supported the development of small-scale collective economic industries such as tsaoko processing, characteristic breeding, edible fungi and Chinese herbal medicine in the villages where the first secretary is stationed, such as Dulongjiang Township, Mi'eluo Village and Beidian Village.



中交建筑为自扁王基村的火龙果种植基地里配置 LED 节能补光灯,实现年产量的突破

CCCC Equips the Dragon Fruit Planting Base of Zibianwangji Village with LED Energy-saving Light-supplementing Lights, Realizing the Breakthrough of Annual Output.

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### 交通业 ⊶

### Transportation industry

中国交建聚焦地方需求,发挥主业优势,捐资援建中交 大道改造工程,以推动英吉沙县畅通交通网络,增强发 展动能,加快振兴发展。中交大道改造项目通车后,将 有效缓解交通压力,提升通行水平,改善城市形象和投 资环境,成为"发展大道";进一步巩固人居环境整治 成果,带动当地群众就业,提升人民群众幸福指数,成 为"幸福大道";连接当地重点打造的旅游景点土陶村、 小刀村及南湖旅游度假区,促进旅游业发展,成为"旅 游大道"。

CCCC focuses on local demand, gives full play to the advantages of its main business, and contributes to the CCCC road reconstruction project, so as to promote the smooth transportation network, enhance the development momentum and accelerate the development of Yingjisha County. After opening to traffic, the CCCC road reconstruction project will effectively relieve the traffic pressure, improve the traffic level, improve the urban image and investment environment, and become the "development road"; further consolidate the achievements in the improvement of human settlement environment, promote the employment of the local people, improve the happiness index of the people and become the "happy road"; It is connected with Tutao Village, Xiaodao Village and South Lake Tourist Resort, which are the key tourist attractions to promote the development of tourism, becoming the "tourist road".



英吉沙县标志性帮扶项目——中交大道项目建成通车 Iconic Support Project of Yengisar County – CCCC Road Project Has

Been Completed and Opened to Traffic

# 建筑业 ----

### Construction industry

发挥中国交建优势,举办面向建筑产业园产业帮扶签约活动,提供项目 58 个,提供合同额 4.43 亿元;重点在习近平总书记最牵挂的独龙江乡和派驻第一书记所在村采取"村集体+致富带头人+村民"的模式发展村集体建筑公司,引入市场机制,有效激发脱贫群众的内生发展动力。全年带动中交怒江建筑产业园入园企业为 2400余名脱贫群众发放劳务工资 4500余万元,其中独龙江乡集体建筑公司带动了 784 名村民就近务工,发放工资420万元,发放集体经济分红 236 万元。

It has given full play to the advantages of CCCC to hold the industrial assistance signing activities for the construction industrial park, providing 58 projects with a contract amount of RMB 443 million; focused on the development of village collective construction companies with the contribution mode of "rural collectives + leaders to achieve prosperity + villagers" in Dulongjiang Township where General Secretary Xi Jinping cares most and the village where the first secretary is stationed, and introduced the market mechanism to effectively stimulate the endogenous development power of the people out of poverty. More than 2,400 enterprises have been attracted to join the CCCC Nujiang Construction Industry Park throughout the year, and labor wages of over RMB 45 million have been provided to people out of poverty. The collective construction company in Dulongjiang Township has driven 784 villagers to work nearby, providing wages of RMB 4.2 million and distributing collective economic dividends of RMB 2.36 million.



贡山县秋那桶村举行 2023 年度村集体经济收益分红大会 Qiunatong Village, Gongshan County Holds 2023 Village Collective Economic Income Dividend Sharing Conference

### 服装小 ----

### Garment industry

针对新疆英吉沙县产业发展动能不足、脱贫群众就业不充分等问题,中国交建立足当地资源禀赋,发挥自身优势,帮助打造以英吉县沙倩丽服装农民专业合作社为龙头的特色纺织服装业基地,有效推动英吉沙县巩固拓展脱贫攻坚成果,接续迈向乡村振兴。该案例荣获"第四届全球减贫案例征集活动"最佳减贫案例。

In view of the insufficient industrial development momentum of Yengisar County in Xinjiang and the insufficient employment of the people out of proverty, CCCC, based on local resource endowments and leveraging its own advantages, helped build a characteristic textile and garment industry base led by Shaqianli Clothing Farmer Professional Cooperative of Yengisar County, effectively promoting Yengisar County to consolidate and expand the achievements of poverty alleviation, and continue to move towards rural revitalization. This case was awarded the Best Poverty Alleviation Case of the "Fourth Global Poverty Alleviation Case Collection Campaign".

# 文旅业 ⊶

### Cultural tourism industry

中国交建充分利用怒江资源禀赋,通过赞助举办"中国怒江皮划艇野水公开赛"、助力特色民族文化底蕴升级、高标准打造特色旅游基础设施等一系列举措,推介"秘境怒江·户外天堂"旅游品牌,全面带动怒江州文旅产业可持续健康发展。

CCCC has made full use of the natural resources of Nujiang to promote the tourism brand of "Mysterious Nujiang, Outdoor Paradise" and comprehensively promote the sustainable and healthy development of the cultural tourism industry of Nujiang Lisu Autonomous Prefecture through a series of measures such as sponsoring the "China Nujiang Canoeing Wild Water Open Championship", promoting the upgrading of characteristic national cultural heritage, and creating characteristic tourism infrastructure with high standards.



Chairman Wang Tongzhou Inspects Liangli Guli Sewing Cooperative Union in Yengisar County



"中国交建杯" 2023 中国怒江皮划艇野水国际公开赛

<sup>&</sup>quot;China Communications Construction Cup" 2023 China Nujiang Canoeing Wild Water International Open Championship

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# 人才发展强起来

# STRENGTHEN THE TEAM OF TALENTS

乡村振兴,关键在人。中国交建持续开展"中交助梦·教育提升"行动,通过教育提升、产业工人培养、选育致富带头人等措施,不断壮大乡村人才队伍,增强人才素质能力。2023年,公司教育人才帮扶无偿投入8685万元,为"富脑袋"带动"富口袋"提供了有力支撑。

People are the key to rural revitalization. CCCC has continued to carry out the action of "CCCC Helping Achieve Dreams · Education Promotion" to continuously expand the rural talent team and enhance the talent quality capacity through measures such as education promotion, industrial worker training, and selection and training of rich leaders. In 2023, the company invested RMB 86.85 million in education of talents free of charge, providing strong support for the "rich head" to drive the "rich pocket".

# ◎教育设施

# © Educational facilities

中国交建持续助力乡村振兴定点帮扶地区完善教育基础设施建设,拨付 6353 万元援建中交兰坪翠屏九年一贯制学校、福贡县上帕中学综合楼、泸水市民族中学梦想教室、贡山一中爱心食堂等,帮助改善教学及附属设施;推动 18 个"中交书屋"、235 个中交健康保健室正常有序运转,教育教学环境得到有力提升。

CCCC has continued to assist the rural revitalization and the designated areas to improve the construction of educational infrastructure, and allocated RMB 63.53 million to help build CCCC Nine-year System School in Cuiping, Lanping, the Comprehensive Building of Shangpa Middle School in Fugong County, the Dream Classroom of Lushui Nationalities Middle School, and the Caring Canteen of Gongshan First Middle School to help improve teaching and ancillary facilities; It has promoted the normal and orderly operation of 18 "CCCC book houses" and 235 CCCC health care rooms, and vigorously improved the education and teaching environment.

# 夯实教育基础 赋能乡村振兴

Tamping Education Foundation and Enabling Rural Revitalization

临江依山、占地80余亩的中交泸水希望学校是由中国交建母公司中交集团援助1.2亿元建设的一所现代化、智能化学校,建设有7个单体建筑,建筑面积达23953.87平方米,可容纳学位2100个,是怒江傈僳族自治州、泸水市两级党委政府的"十件惠民实事""十大重点项目"之一。学校于2023年8月27日正式投入使用,该学校的建成和使用,有力推进怒江民族教育健康发展,进一步优化泸水城区教育资源配置,缓解义务教育阶段学位供给紧张的矛盾,为怒江学子撑起了一片蓝天。

CCCC Lushui Hope School, near the mountains and rivers, is a modernized and intelligent school built by the parent company of CCCC with the assistance of RMB 120 million. It has 7 single buildings with a floor area of 23,953.87 square meters and can accommodate 2,100 students. It is one of the "ten practical projects of benefiting the people" and "ten key projects" of the two-level party committee governments of Nujiang Lisu Autonomous Prefecture and Lushui City. The school was officially put into use on August 27, 2023. The completion and use of the school has vigorously promoted the healthy development of Nujiang ethnic education, further optimized the allocation of educational resources in Lushui urban area, and relieved the contradiction of degree shortage in compulsory education stage, thus supporting a blue sky for the students of Nujiang.

# ◎ 师资能力

# Teacher ability

中国交建积极参与中组部、教育部教育人才"组团式"帮扶工作,在定点帮扶县开展 10 项教育帮扶工作,实施教师素质提升工程,在帮扶地区广泛设立"中交奖学金""中交园丁奖"等奖学奖教金,助力教师素质提升、学生向善向上;开展"中交班"京津研学、崇仁完小沪上游学、"点燃科技梦想"研学营及各类主题夏令营,让边疆的孩子们开拓眼界、增长见闻。

CCCC has actively participated in the "group-type" support work for education talents of the Organization Department of the CPC Central Committee and the Ministry of Education, carried out 10 educational assistance work in the designated counties, implemented the teacher quality improvement engineering, and widely set up scholarships and education grants such as "CCCC Scholarship" and "CCCC Teacher Award" in the assisted areas to help improve teachers' quality and improve students' quality; carried out "CCCC Class" Beijing-Tianjin research, Chongren Complete Primary School Students' Study Tour to Shanghai, "Realizing Science and Technology Dream" research camp and various theme summer camps, so that children in the border areas could expand their horizons and increase their knowledge.



云南怒江 "中交班" 研学活动
The Research Activity of "CCCC Class" in Nujiang, Yunnan Province



与对口帮扶的福贡县子里甲完小合影
Group photo with Ziliajia Primary School in Fugong County

Group photo with Ziliajia Primary School in Fugong County, the paired assistance recipient



中交泸水希望学校 CCCC Lushui Hope School

中国交建 2023 年环境、社会及管治报告 新征程之上·浇筑美好未来 On the New Journey · Creating a Bright Future 2023 CCCC ESG Report

# ○技能人才

# Skilled talents

公司积极举办 2023 年"中交助梦"乡村振兴干部素质能力提升培训班,围绕乡村产业、集体经济、文旅融合、互联网 +农业等开展专题讲座和现场教学,为全面推进乡村振兴提供人才支撑。

The company has actively held the 2023 "CCCC Dream Workshop" rural revitalization cadres quality and ability improvement training class, and carried out special lectures and on-site teaching around rural industry, collective economy, cultural and tourism integration, Internet + agriculture, etc., so as to provide talent support for the overall promotion of rural revitalization.

全年在帮扶县开展基层干部及乡 村振兴带头人素质能力提升

Carried out 51 rounds of quality and ability improvement for grassroots cadres and leaders of rural revitalization in the assisted counties throughout the year

培训基层干部

培训乡村振兴带头人 培训技术人员

13429 \text{ \text{ } 1095 \text{ \text{ } 2096 \text{ \text{ } \text{ } }}

Trained 13.429 person-times of grass-roots cadres, 1.095 person-times

of leaders in rural revitalization, and 2096 person-times of technical personnel



引进帮扶地区工人 Introduce Workers from Assisted Areas

# 文化积淀厚起来

# **ENHANCE CULTURAL ACCUMULATION**

习近平总书记指出,"实施乡村振兴战略要物质文明和精神文明一起抓,培育文明乡风、良好家风、淳朴民风,提高乡 村社会文明程度。"中国交建积极开展"中交助梦·文化振兴"行动,不断传承发扬民族文化,让文化成为激励村民奔 赴美好生活的不竭动力,持续为乡村振兴铸魂赋能。

General Secretary Xi Jinping pointed out that the implementation of the rural revitalization strategy requires the focus on both material civilization and spiritual civilization, cultivating a civilized village style, a good family style and a simple folk style, and improving the civilization level of rural society. CCCC has actively carried out the action of "Build Your Future Dream • Culture Revitalization" to continuously inherit and carry forward the national culture, so as to make culture become the inexhaustible power to encourage villagers to go to a better life, and continue to empower rural revitalization.

# 以文塑形

# **Create Styles with Culture**

- ●支持怒江州举办"减贫治理与全球发展国际论坛",为促进世界可持续发展贡献智慧和力量
- Support Nujiang Lisu Autonomous Prefecture to hold the "International Forum on Poverty Alleviation Governance and Global Development" to contribute wisdom and strength to the promotion of sustainable development of the world
- 助力打造乡村振兴示范点 7 个,持续支持北甸村史馆、秋那桶怒族文化街建设,帮助建设边境小康村、文化广场、民 族特色美丽庭院等民族文化站点,增强乡村文化软实力
- Assist in building 7 rural revitalization demonstration sites, continue to support the construction of Beidian Village Historical Hall and Qiunatong Nu Nationality Cultural Street, help to build ethnic cultural sites such as the border well-off village, cultural square, beautiful courtyard with ethnic characteristics, and enhance the soft power of rural culture

# 以文铸魂

# Cast Souls with Culture

- 分别在新疆和云南设立铸牢中华民族共同体意识示范工作室6个,开展"同心梦圆•科技讲座到边疆"系列活动,推 动民族交往交流交融不断深入
- Set up 6 demonstration workshops for strengthening the sense of community for the Chinese nation in Xinjiang and Yunnan respectively, and carry out a series of activities of "Working Together to Fulfill Dreams • Holding Science and Technology Lectures in Border Areas" to promote the continuous deepening of ethnic exchanges and exchanges
- 举办各类文化节、舞台剧、农民运动会、民族文艺晚会等多样新时代文明实践活动,助力少数民族特色文化活动蓬勃
- Hold various cultural festivals, stage dramas, peasant games, national literary and art parties and other cultural and practical activities in the new era to promote the vigorous development of cultural activities with ethnic minority characteristics
- ●深化乡风文明建设,在兰坪县中排乡举办"感党恩、树新风、促振兴"迎"七一"红歌演唱、经典诵读大赛,展示边 疆民族风采, 歌颂幸福美好生活
- Deepen the construction of township culture and civilization, and hold a red song singing and classic recitation competition to celebrate the "Party' s Day" with the theme of "thanking the party, establishing new style, and promoting revitalization" in Zhongpai Township of Lanping County to display the style of the border ethnic groups and praise the happy life

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### 以文易俗

### Transform Customs with Culture

- 注重培育文明乡风、良好家风、淳朴民风,开展传承传统文化、推进移风易俗
- Focus on fostering a civilized local style, a good family style and a simple folk style, and carry forward traditional culture, and promote the change of old customs and habits
- 参与修订村规民约,创新乡村治理方式方法,积极推广应用人居环境整治积分奖励制度,推动形成文明乡风
- Participate in the revision of village and civil regulations, innovate ways and methods of rural governance, actively promote and apply the reward system for improving the living environment, and promote the formation of a civilized village style

# 科技讲座到边疆

Holding Science and Technology Lectures in Border Areas

2023年7月10日至12日,"中交助梦·同心梦圆——科技讲座到边疆"首次活动在英吉沙县成功举办。活动依托中交科技创新优势,按照年度援疆工作计划安排和"一地方一特色"考量进行策划。中交科协资深专家委员会两位专家结合中国交建坚持科技自立自强的实践故事,与现场科技工作者互动交流,分享对科技创新的体会和感悟,受到了现场听众的热烈欢迎和一致好评。英吉沙县各单位、学校及各领域代表共2000余人通过线上线下方式聆听讲座。

From July 10th to 12th, 2023, the first activity of "Building Your Future Dream · Working Together to Fulfill Dreams – Holding Science and Technology Lectures in Border Areas" was successfully held in Yengisar County. Relying on the scientific and technological innovation advantages of CCCC, the activity has been planned according to the annual work plan for support Xinjiang's development and the consideration of "unique characteristics for each place". The two experts from the Committee of Senior Experts of the CCCC Association for Science and Technology, combined with the practical story of CCCC's adherence to self-reliance and self-improvement in science and technology, interacted with the on-site scientific and technological workers, shared their experience and understanding of scientific and technological innovation, and received warm welcome and unanimous praise from the on-site audience. More than 2,000 representatives from all units, schools and fields in Yengisar County listened to the lecture online and offline.

# 书香润乡村,阅读促振兴

Enriching Rural Areas with knowledge and Promoting Revitalization through Reading

文化振兴需要实践养成,更要宣传倡导。为了在怒江州兰坪县中排乡北甸村营造更加浓厚的文化氛围,一航局为中交文化广场新修建的图书室捐赠了涵盖党建、种植、养殖、百科、童话等各种类型书籍。许多村民主动到图书室读书,小小的图书室里阅读者络绎不绝,大家的文化知识在一本本图书的浇灌下日渐丰富。

Cultural revitalization requires practical cultivation, as well as propaganda and advocacy. In order to create a stronger cultural atmosphere in Beidian Village, Zhongpai Township, Lanping County, Nujiang Lisu Autonomous Prefecture, CCCC First Harbor Engineering Company Ltd. donated various types of books covering party construction, planting, breeding, encyclopedia and fairy tales to the newly built library of CCCC Cultural Plaza. Many villagers took the initiative to the library to read, which resulted in a continuous stream of readers in the small library, and everyone's cultural knowledge became increasingly rich under the nourishment of each book.



中交文化广场上的文化活动中心 Cultural Activity Center on CCCC Cultural Plaza

# 乡村面貌靓起来

# MAKE THE COUNTRYSIDE LOOK BEAUTIFUL

生态环境是农村最大优势和宝贵财富。中国交建积极开展"中交助梦·和美乡村"行动,以满足当地群众美好生活需要为目标,助力绿色发展,提升乡村颜值。

Ecological environment is the greatest advantage and precious wealth of rural areas. CCCC has actively carried out the action of "Build Your Future Dream · Harmonious and Beautiful Rural Areas" to meet the needs of local people for a better life, promote green development and enhance rural beauty.

# 完善乡村设施

### Improve rural facilities

- 在秋那桶村实施怒族传统文化展演中心建设、污水管网改造、尼达当小组供水保障提升等项目等
- Implement the Nu Nationality traditional culture exhibition center construction, sewage pipe network reconstruction, water supply guarantee improvement of Nidadang Group and other projects in Qiunatong Village.

# 改善人居环境

# Improve the living environment

- 开展乡村绿化、厕所革命、房屋外墙粉刷等工作
- Carry out greening of rural areas, revolution of toilets and painting of outer walls of houses
- ●推动乡村道路硬化、村内绿化、卫生净化、夜间亮化,治理乡村环境污染、保护乡村生态系统
- Promote the hardening of rural roads, greening of villages, sanitation and purification, and lighting at night, so as to control rural environmental pollution and protect rural ecosystem

# 打造美丽乡村

### Creat a beautiful village

- 援建的泸水市三河村美丽乡村项目成为当地旅游新景观
- The beautiful village project of Sanhe Village in Lushui City has become a new local tourism landscape
- 支持独龙江乡巴坡村美丽庭院、美丽村道、美丽江堤建设
- Support the construction of beautiful courtyards, beautiful village roads and beautiful river embankments in Bapo Village, Dulongjiang Township
- 将娜洛底片区打造成边境和美乡村示范点
- Build the Naluodi Area into a harmonious and beautiful rural demonstration site on the border
- 秋那桶村荣获"国家森林乡村""省级绿美村庄"等荣 誉称号
- Qiunatong Village won the honorary titles of "National Forest Village" and "Provincial Green Village"



# 守护生态底蕴,让村落韵味悠长

Protecting the Ecological Heritage to Ensure the Long-lasting Charm of the Village

丙中洛是怒江州最北边的乡镇,每天都有大量的进藏车队来到这里,而茶腊村又是丙中洛最大的村落,因其保留着诸多古老的怒族风俗文化,被冠以"怒族桂冠"的美名。然而,村里的基础设施严重落后,雨后泥泞的步道让人寸步难行。一公局集团在最大限度保留这里原有的布局和环境的条件下对茶腊村进行升级改造,夯实既有的土路并铺设碎石板,在既有房屋的基础上优化了房屋结构,在美化村内人居环境的同时,保留乡村风貌,留住田园乡愁。

Bingzhongluo is the northernmost township of Nujiang Lisu Autonomous Prefecture, where a large number of cars come to Tibet every day, and Chala Village is also the largest village in Bingzhongluo, which is named as "the laurel crown of Nu Nationality" because it retains many ancient customs and cultures of the Nu nationality. However, the village's infrastructure is severely backward, and the muddy trail after rain makes it difficult for people to walk. Under the condition of keeping the original layout and environment here to the maximum extent, First Highway Engineering Group Co., Ltd. has upgraded and reconstructed the Chala Village, tamped the existing earth roads and paved gravel slabs, optimized the house structure on the basis of the existing houses, and while beautifying the living environment in the village, it kept the rural style and landscape and retained the rural homesickness.



# 北甸村: 古村蝶变焕新颜

Beidian Village: The Tremendous Changes in the Ancient Village Give It A New Look

- 一航局项目部积极打造农民安居乐业的美丽家园,翻修的管网、道路已经成为北甸村的经脉
- The Project Department of CCCC First Harbor Engineering Company Ltd. Has actively built a beautiful home for farmers to live and work in peace and contentment, and the renovated pipe network and road have become the channel of Beidian Village
- •投入560万元支持北甸村灌溉管网和高标准农田建设,从根本上解决北甸村1900余亩农田灌溉用水困难问题
- It has invested RMB 5.6 million to support the construction of irrigation pipe network and high-standard farmland in Beidian Village to fundamentally solve the problem of difficult irrigation water for more than 1,900 mu farmland in Beidian Village



# "一村千树"项目

"One Village and Thousand Trees" project

- ●即村集体与花卉苗木企业签订合同引进苗木种植,通过市场化运营管理,有效解决农村人居环境治理难题,形成"生态效益+经济效益"双赢的局面。"美"了村庄,也"富"了村民。
- That is, the village collective signs a contract with the flower and plant nursery stock enterprise to introduce the nursery stock planting, to effectively solves the problem of rural human settlement environment governance through the market-oriented operation management, and form a win-win situation of "ecological benefit + economic benefit". It has not only "beautified" the village, but also "enriched" the villagers.



# 堡垒作用实起来

# PLAY THE ROLE OF A FORTRESS

习近平总书记强调: "推动乡村组织振兴,建立健全现代乡村社会治理体制,确保乡村社会充满活力、安定有序。"自开展定点帮扶工作以来,中国交建倾力倾注,开展"中交助梦·强基固本"行动,通过党建共建、活动共办、数字共享等形式,助力帮扶地区提升基层党组织的组织力、凝聚力、战斗力,以组织振兴助力乡村全面振兴,以党建引领乡村提升治理水平。

The Secretory General Xi Jinping highlighted: "Promote the revitalization of rural organizations, establish and improve the modern rural social governance system, and ensure that rural society is full of vitality, stability and order." Since the implementation of fixed-point assistance work, CCCC has devoted all efforts to the implementation of the action of "Build Your Future Dream · Strengthen the Foundation" to help the assisted areas to improve the organizational capacity, cohesion and combat effectiveness of grass-roots Party organizations through the forms of party co-construction, activity co-operation and digital sharing, so as to promote the overall revitalization of villages through organization revitalization and lead the improvement of governance level of villages through Party construction.

# 组织共建

Organization Co-building

- 帮助建立 37 个党建阵地,引导 40 个结对支部开展"一次调研互访、一次共同学习、一次主题党日、一次发展共商、一件实事共办""五个一"活动,规范开展党建活动,切实提升脱贫村的组织力、战斗力和执行力。
- Help establish 37 Party building positions, guide 40 paired branches to carry out "Five Ones" activities of "one investigation and mutual visit, one common study, one theme Party day, one development consultation and one practical matter co-handling" to carry out Party construction activities in a standardized manner, and effectively improve the organizational capacity, fighting capacity and execution capacity of poverty-relief villages.



艾古斯乡康帕一村党建活动室

Party Building Activity Room of Kangpa First Village, Aigusi Township

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### 队伍共育

### Team co-cultivation

- 邀请宣讲团深入结对村宣传党的二十大精神以及习近平新时代中国特色社会主义思想,把宣传触角延伸到田间地头、院坝、火塘,推动党的创新理论深入人心。
- Invite the propaganda group to carry out in-depth propaganda of the spirit of the 20th National Congress of the Party and Xi Jinping's new era of socialism with Chinese characteristics in the new era, and extend the propaganda to fields, courtyards and fire ponds, so as to promote the Party's innovative theory into the hearts of the people.
- 设立 300 万元奖励基金,支持怒江州委组织部开展"头雁培养"三年行动,帮助其培养打造一支高素质农村党组织和支部书记队伍,带动农村经济快速发展。
- Establish an incentive fund of RMB 3 million to support the Organization Department of Nujiang Lisu Autonomous Prefecture to carry out the three-year action of "Leading Eagles Cultivation", and help it cultivate and build a high-quality team of Party organizations and branch secretaries in rural areas to promote the rapid development of rural economy

# 乡村共治

### Rural co-governance

- 完善"积分超市"奖罚标准,开展"和美庭院""巾帼美丽庭院"创建评比,提高村民参与乡村治理的主动性和积极性。秋那桶村被授予怒江州提升边疆民族地区治理能力先进集体,结对共建的秋那桶村党支部和泸水市六库街道团结社区党总支获得云南省"云岭先锋红旗党支部"荣誉称号。
- Improve the reward and punishment standards of the "Point Supermarket", carry out the appraisal on the creation of "Harmonious and Beautiful Courtyard" and "Women' s Beautiful Courtyard", and enhance the villagers' initiative and enthusiasm in participating in rural governance. Qiunatong Village was awarded as the advanced collective of Nujiang Lisu Autonomous Prefecture for improving the governance capacity of frontier ethnic areas. The Party Branch of Qiunatong Village and the Party General Branch of Tuanjie Community of Liuku Street, Lushui City were awarded the honorary title of "Yunling Pioneer Red Flag Party Branch" in Yunnan Province.

# 活动共办

# Activity co-organizing

- 一公局五公司联合地方社区与中交兰坪新时代希望学校开展"书香中交,图书漂流"活动,让社区小朋友和一公局五公司员工子女闲置的书籍"流动"起来,"流动"至需要图书的兰坪新时代希望学校,通过书籍搭起了爱与知识的桥梁。活动中,108 本书籍、73 封读书分享信件和 45 张明信片从苏州抵达兰坪。
- Fifth Engineering Co., Ltd of CCCC First Highway Engineering Co., Ltd. cooperated with local communities and CCCC Lanping New Era Hope School to carry out the activity of "Book Fragrance by CCCC · Book Flow", so that the idle books of community children and children of employees of Fifth Engineering Co., Ltd of CCCC First Highway Engineering Co., Ltd. were "flowing" to Lanping New Era Hope School in need of books, thus building a bridge between love and knowledge through books. During the activity, 108 books, 73 reading sharing letters and 45 postcards arrived in Lanping from Suzhou.



"书香中交·图书漂流"活动赠送书籍

Gift of Books in the "Book Fragrance by CCCC · Book Flow" Activity

# 合作共赢新蓝图

# NEW BLUEPRINT FOR WIN-WIN COOPERATION

我们始终以开放的态度吸引全球资源要素,增强国内国际两个市场两种资源联动效应,提升贸易投资合作质量和水平,推动基础设施"陆海天网"四位一体联通,着力落地"一揽子"合作项目,努力为开放型世界经济创造更大价值。

We have always been attracting global resources with an open attitude, enhancing the linkage effect of domestic and international markets and resources, improving the quality and level of trade and investment cooperation, promoting the connectivity over "land, maritime, air and cyberspace" of infrastructure, focusing on implementing "package" cooperation projects, and striving to create greater value for the open world economy.

# 政企合作

# **GOVERNMENT-ENTERPRISE COOPERATION**

中国交建充分发挥专业和资源优势,积极参与国家、区域发展重大战略,持续拓展与各省市级政府的战略合作,打造央地合作标杆,谱写地方经济高质量发展新篇章。

CCCC gives full play to its professional and resource advantages, actively participates in major national and regional development strategies, continues to expand strategic cooperation with provincial and municipal governments, creates a benchmark for central-local cooperation, and writes a new chapter for high-quality development of local economy.



与安徽省政府签署战略合作协议

Sign a Strategic Cooperation Agreement with Anhui Provincial Government



与内蒙古自治区政府签署战略合作框架协议

Sign a Strategic Cooperation Framework Agreement with the Government of Inner Mongolia Autonomous Region

中国交建 2023 年环境、社会及管治报告 <u>新征程之上·浇筑美好未来</u> On the New Journey·Creating a Bright Future 2023 CCCC ESG Report

# 企企合作

# **ENTERPRISE-ENTERPRISE COOPERATION**

中国交建积极探索与行业上下游伙伴高效务实的合作模式,不断拓宽合作领域、深化合作层次、提高合作质效,努力实现与各方伙伴的互利共赢。

CCCC actively explores the efficient and practical cooperation mode with upstream and downstream partners of the industry, constantly expands the cooperation field, deepens the cooperation level, improves the quality and efficiency of cooperation, and strives to achieve mutual benefit and win-win with all partners.



与国机集团签署战略合作协议

Sign a Strategic Cooperation Agreement with China National Machinery Industry Corporation



与中信集团签署战略合作协议

Sign a Strategic Cooperation Agreement with CITIC Group



与法国达飞集团签署战略合作协议

Sign a Strategic Cooperation Agreement with France CMA-CGM

# 校企合作

# **COLLEGE-ENTERPRISE COOPERATION**

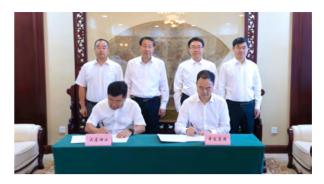
中国交建高度重视与知名高校在人才培养、科技研发、产 教融合等领域的合作交流,协同创建校企联合人才培养新模式,打造校企合作典范。

CCCC attaches great importance to cooperation and exchange with well-known colleges and universities in the fields of talent training, scientific and technological research and development, integration of industry and education, etc., and collaborates to create a new mode of school-enterprise joint talent training and a model of school-enterprise cooperation.



与北京理工大学签署战略合作协议

Sign Strategic Cooperation Agreement with Beijing University of Technology



与大连理工大学签署战略合作协议

Sign a Strategic Cooperation Agreement with Dalian University of Technology



联合高校举办"卓越中交研学夏令营"

Cooperate with Colleges and Universities to Hold "Excellent CCCC Summer Camp"

# 高端交流

# HIGH-END EXCHANGE

此外,作为"走出去"的龙头企业,在"一带一路"倡议提出十周年之际,我们先后参与中非经贸博览会、首届全球可持续交通高峰论坛、第三届"一带一路"国际合作高峰论坛、第 20 届南宁东盟博览会等系列多边活动,以实际行动参与全球交通运输治理,努力为推动共建"一带一路"国家交通基础设施"硬联通"贡献"中交之智"和"中交之力"。

In addition, as a leading enterprise of "going global", on the occasion of the 10th anniversary of the initiative of the "Belt and Road Initiative", we have successively participated in a series of multilateral activities such as China-Africa Economic and Trade Expo, the First Global Sustainable Transport Summit Forum, the 3rd "Belt and Road" International Cooperation Summit Forum, and the 20th Nanning-ASEAN Expo, participated in global transport governance with practical actions, and made efforts to contribute "the wisdom of CCCC" and "the strength of CCCC" to promote the "hard connectivity" of the transport infrastructure of the "Belt and Road Initiative" countries.

高质量策划第三届"一带一路"峰会等国际多双边活动

签署项目合作协议

涉及合同规模超

12场

30多个

7 亿美元

Conducted high-quality planning for 12 international multi-bilateral events including the 3rd "Belt and Road Initiative"

Summit, signed more than 30 project cooperation agreements, involving a contract scale of more than USD 12 billion

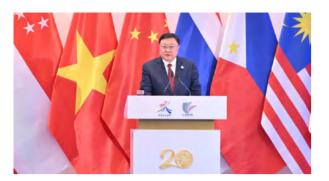
在第六届进博会期间合作签约金额超

35亿元人民币

同比增长 40.67%,创历史新高

Realized the signed amount of cooperation exceeding RMB 3.5 billion during the 6th China International Import Expo, with a year-on-year increase of 40.67%, hitting a new high

中国交建 2023 年环境、社会及管治报告 新征程之上·浇筑美好未来 2023 CCCC ESG Report



董事长王彤宙参加第二十届中国—东盟博览会和中国—东盟商 务与投资峰会开幕式并致辞

Chairman Wang Tongzhou attended the opening ceremony of the 20th China-ASEAN Expo and China-ASEAN Business and Investment Summit and delivered a speech



董事长王彤宙在 2023 全球可持续交通高峰论坛开幕式作主旨 发言

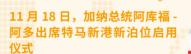
Chairman Wang Tongzhou Delivered Keynote Speech at the Opening Ceremony of 2023 Global Sustainable Transport Forum

# 交领世界蓝色



8月12日,科特迪瓦总统阿拉萨内·瓦塔拉出席科科迪斜拉桥通车剪彩仪式

On August 12, President Alassane Ouattara of Côte d'Ivoire Attended the Opening Ceremony of the Cocody Cable-stayed Bridge



On November 18, President Akoufo-Ado of Ghana Attended the Opening Ceremony of the New Berth of Tema New Port





12月11日,时任马来西亚最高元首阿卜杜拉出席马东铁路项目轨道工程启动仪式

On December 11, Abdullah, Then the Supreme Head of State of Malaysia, Attended the Launching Ceremony of Track Project of East Coast Rail Link Project.

# 员工和谐新家园

# **NEW HARMONIOUS HOME FOR EMPLOYEES**

# 保障员工权益

# PROTECT EMPLOYEES' RIGHTS AND INTERESTS

员工是推动中交可持续发展的强大动力和力量源泉,我们尊重和维护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为,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》等法律法规要求,致力为员工提供平等、多元、包容的职场环境。

Employees are the powerful driving force and source of strength to promote the sustainable development of CCCC. We respect and safeguard internationally recognized human rights, resolutely refrain from any act of ignoring and trampling on human rights, strictly abide by the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China and other laws and regulations, and strive to provide an equal, diversified and inclusive workplace environment for employees.

# ◎平等雇佣

# © Equal employment

公司高度重视并保障员工的基本权益,积极推进人才本地化政策,根据所在国家政策法规持续完善用工管理制度和动态监控通报机制,坚决杜绝雇佣童工、强迫劳动、骚扰虐待等现象,公正对待不同国籍、种族、性别、宗教信仰和文化背景的员工,坚决禁止和反对任何形式的歧视。2023年,公司持续健全海外人力资源政策库,累计上线50个国家(地区)政策法规,编制海外劳动争议案例集,进一步保障了境外员工的权益。

The company attaches great importance to and guarantees the basic rights and interests of employees, actively promotes the policy of talent localization, continuously improves the employment management system and dynamic monitoring and reporting mechanism according to the policies and regulations of the country where it is located, resolutely puts an end to child labor, forced labor, harassment and abuse, treats employees of different nationalities, races, genders, religious beliefs and cultural backgrounds fairly, and resolutely prohibits and opposes any form of discrimination. In 2023, the company continued to improve the overseas human resources policy database, put the policies and regulations of 50 countries (regions) online in total, and prepared the set of overseas labor dispute cases, further protecting the rights and interests of overseas employees.



■ 男性: 82.8 ■ Male:82.8

女性: 17.2 Female:17.2



■ 研究生及以上: 17,157 ■ Postgraduate and above:17,157

■ 大学本科: 100,619
■ Undergraduate degree:100,619

■ 大学专科: 13,118 ■ College degree:13,118

■ 中专及以下: 8,335 ■ Special secondary school and below:8.335 人才类型 Talent type (人) (Person)

■ 管理人才: 14,754

■ Management talent :14,754 ■ 专业技术人才: 108,868 ■ Professional technical talents:108,868

技能人才: 15,607

Skilled talents:15,607



■ 35 岁以下: 74,905 ■ Less than 35 years old:74,905

36-40 岁: 10,176

■ 36-40 years old :10,176 ■ 41-45 岁: 10,176

■ 41-45 years old: 10,176 ■ 46-50 岁: 15,280

■ 46-50 years old:15,280 ■ 51-54 岁: 7,548

■ 51-54 years old:7,548 ■ 55 岁及以上: 5,125

55 years and older:5,125

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# ○ 合理薪酬

# Reasonable remuneration

我们积极为员工提供具有市场竞争力的薪酬福利,让员工干事有劲头、企业发展显活力。2023年,公司扩围升级中长期激励,完成中国交建首期限制性股票激励计划授予工作,实现658名核心骨干与企业未来经济效益深度绑定;实现科技型企业中长期激励全覆盖,实施首家混合所有制企业员工持股计划,印发《项目超额利润分享工作指引》,推动激励穿透至项目一线。

We actively provide employees with market competitive compensation and benefits, so that staff officers have momentum, and the development of the enterprise shows vitality. In 2023, the company expanded and upgraded medium and long-term incentives, completed the award of the first restricted stock incentive plan of CCCC, and realized the deep binding of 658 core backbones with the future economic benefits of the enterprise; realized full coverage of medium- and long-term incentives for technology-based enterprises, implemented the employee stock ownership plan of the first mixed ownership enterprise, printed and issued the Guidelines for Project Excess Profit Sharing, and promoted incentive penetration to the front line of the project.

# ○民主管理

# O Democratic management

公司持续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 continues to improve the democratic management system with the Workers' Congress as a basic form, actively promotes the democratic management process of the company, and guarantees the right of the employees to know, participate in, express and supervise; continuously improves the quality of the Workers' Congress and the ability of employee representatives to participate in politics and discussion, actively collects and provides feedback on the opinions and demands of employees in democratic decision-making, and comprehensively enhances the democratic, scientific and feasible decision-making of the company.



公司召开第一届二次职代会暨 2023 年工作会议

The Company Holds the Second Workers' Congress and 2023 Working Conference

# 助力员工成长

# **HELP EMPLOYEES GROW**

我们将坚持把人才作为支撑发展的第一资源,推动人力资源规划与战略需求相匹配,合理控制总量,重点优化结构,坚 持高端引领,加强培养开发,强化激励约束,提升人才质效,夯实高质量发展的人才支撑。

We will insist on treating talents as the first resource to support development, promote human resource planning to match strategic needs, reasonably control the total amount, focus on optimizing the structure, adhere to high-end leadership, strengthen training and development, strengthen incentives and constraints, improve the quality and efficiency of talents, and consolidate Talent support for high-quality development.

# ○员工培训

# © Employee Training

公司积极完善专业人才内培外引机制,通过开展"入职第一课""导师带徒"、财务"菁英"班等活动大力培养专业化团队,构建多元化职级序列与多样化职业发展路径,以一系列务实行动为高质量发展夯实人才支撑力。

The company actively improves the mechanism of internal training and external introduction of professional talents, vigorously cultivates professional teams by carrying out activities such as "First Course of Entry", "Mentors Guiding Students" and "Elite" Class in Finance, constructs diversified rank sequence and diversified career development path, and tamps talent support for high-quality development with a series of practical actions.



Data Reading • 2023

员工培训投入

**47**,121.93<sup>万元</sup>

Invest RMB **471,219,300** to train

emplove

员工培训人数

652,415<sup>A</sup>

With **652.415** trainees







# **头雁工程**(领导人员队伍)

eading Fagles Project (Leadership team)

贯彻落实习近平总书记关于国企领导人员的"20字"要求,努力培养造就一支对党忠诚政治强、勇于创新担当强、治企有方能力强、清正廉洁自律强、兴企有为业绩好的"四强一好"领导人员队伍。

Implement General Secretary Xi Jinping's "20-word" requirements for leaders of state-owned enterprises, and strive to cultivate a team of leaders with "four strong and one good" who are loyal to the Party, have the courage to take responsibility for innovation, have a good ability to manage the enterprise, are honest, uprighr and self-disciplined, and have a good performance in developing the enterprise.

# **鹰隼工程**(经营管理人才队伍)

Eagle Falcon Project (Operation and management talent team)

以提高现代企业经营管理水平为目标,聚焦"大交通、大城市"领域,培养造就一批具有敏锐商业洞察力、战略执行能力、市场开拓精神和管理创新能力的高素质经营管理人才队伍。

Aiming at improving the operation and management level of modern enterprises, focus on the field of "transport infrastructures and urban infrastructures", and cultivate a group of high-quality operation and management talents with keen business insight, strategic execution ability, market development spirit and management innovation ability

# **鲲鹏工程**(科技人才队伍)

Kunpeng Project (Technological talent team)

紧盯打造原创技术"策源地"和现代产业链"链长"的目标,聚焦解决企业"卡脖子"技术难题,持续建设一支高端战略科技人才队伍。

Focus on the goal of creating "source" of original technology and "chain leader" of modern industrial chain, focus on solving the "neck-sticking" technical problems of enterprises, and continue to build a high-end strategic scientific and technological talent team.

# **海鸥工程**(海外人才队伍)

Seagull Project(Overseas talent team)

深度融入"以国内大循环为主体、国内国际双循环相互促进"的新发展格局,以海外人才优先发展推动"业务国际化"向"公司国际化"升级,以人才队伍国际化水平提升公司国际化管理能力,加快培养造就一支具有全球竞争力的海外人才队伍。

Conduct in-depth integration into the new development paradigm "with domestic circulation being the mainstay and the two circulations reinforcing each other", promote the upgrading from "business internationalization" to "company internationalization" with the priority development of overseas talents, improve the international management capability of the company based on the internationalization level of talent team, and accelerate the cultivation of an overseas talent team with global competitiveness.

# **鸿鹄工程**(党群人才队伍)

Swan Project (Party and mass talent team)

聚焦全面提升新时代党的建设质量,打造中央企业党建排头兵、示范点和试验田。努力建设一支政治素质好、业务能力强、工作作风优、熟悉生产经营、善做党建和群众工作的复合型党群人才队伍。

Focus on comprehensively improving the quality of Party building in the new era, and build the leader, demonstration point and experimental field of Party building in central enterprises. Strive to build a team of compound Party-mass talents that have good political quality, strong professional ability, excellent work style, and familiarity with production and management, and are good at Party building and mass work.

# **雨燕工程**(技能人才队伍)

Swift Project (Skilled talent team)

以保障公司在"大交通、大城市"领域的自主核心施工能力为目标,统筹推进和科学建设一支满足需要、结构合理、技艺精湛、充满活力的技能人才队伍。

With ensuring the company's independent core construction capability in the field of "transport infrastructures and urban infrastructures" as the goal, promote and scientifically build a skilled talent team that meets the needs, has a reasonable structure, excellent skills and is full of vitality.

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# ○人才管理

# Talent management

中国交建深刻落实"以业绩论英雄、英雄不问出处"用人导向,通过完善六大体系、推进六化建设、建强六支队伍等举措, 全面构建具有中交特色的人才管理模式,努力形成支持大胆干、大胆闯,鼓励敢担当、敢作为的良好氛围。

CCCC deeply implements the employment orientation of "evaluating heroes by performance, without asking where the heroes come from". Through measures such as improving the six systems, promoting the six constructions and strengthening the six teams, CCCC comprehensively builds a talent management mode with the characteristics of CCCC, and strives to form a good atmosphere that supports boldness and encourages to undertake and act.

# 完善六大体系

### Perfect six systems

健全组织管理体系

Improve the organizational management system

升级人才引进体系

Upgrade the talent introduction system

优化人才选用体系

Optimize the talent selection system

革新人才发展体系

Innovate the talent development system

创新人才培训体系

Innovate the talent training system

丰富人才激励体系 Enrich the talent incentive system

### 建强六支队伍

Build and strengthen six teams

领导人员队伍

Leadership team

科技人才队伍

Scientific and technological talent team

经营管理人才队伍

Operation and management talent team

海外人才队伍

Overseas talent team

党群人才队伍

Party and mass talent team

技能人才队伍

Skilled talent team

### 推进六化建设

Promote the construction of six constructions

建设标准化的人力资源业务体系

Build a standardized human resources business system

夯实国际化的人力资源管理能力

Tamp the international human resource management ability

塑造专业化的人力资源管理队伍

Shape a professional human resource management team

实行差异化的人力资源管控方式

Implement differentiated management and control of human resources

推进集约化的人力资源运营管理

 $Promote\ intensive\ human\ resources\ operation\ and\ management$ 

建设数字化的人力资源管理平台

Construct a digital human resources management platform

# ○产业工人

# Industrial workers

中国交建深入贯彻落实习近平总书记关于工人阶级和工会工作重要论述,积极探索产业工人赋能成长的现实路径,扎实推进产业工人队伍建设改革,推进"塑魂、赋能、维权"三大工程,全力打造适应中交高质量深化发展的知识型、技能型、创新型产业工人大军。

CCCC thoroughly implements the important statements made by General Secretary Xi Jinping on the working class and labor union work, actively explores the realistic path for the empowerment and growth of industrial workers, pushes forward the reform of the construction of industrial workers team in a down-to-earth manner, promotes the three major projects of "shaping the soul, empowering the abilities and protecting the rights", and makes every effort to build a knowledge-based, skill-based and innovative industrial worker army suitable for the high-quality deepening development of CCCC.

### 加强政治建设

### Strengthen political construction

- 把产业工人作为参与主题教育的重点对象,推动党组织有形有效覆盖
- Take industrial workers as key objects to participate in thematic education, and promote tangible and effective coverage of Party organizations

# 升维技能竞赛

### Conduct a skills competition for promotion

- ●6人成为"全国技术能手"
- 6 persons become "National Technical Experts"
- ●1家单位获"国家技能人才培育突出贡献单位"
- 1 unit won the title of "Outstanding Contribution Unit to the Cultivation of National Skilled Talents"
- 3 人满额入选国资委第二批"大国工匠"培养支持计划
- 3 persons were fully selected into the second batch of "Craftsmen of the Nation" training support plan of SASAC

# 抓实技能培训

# Implement skills training

- ●举办盾构操作工、工程测量员、(BIM)技术员、试验员高端示范班各1期,培训高技能人才239名
- Hold 1 high-end demonstration class for shield operators, engineering surveyors, (BIM) technicians and testers respectively, and train 239 high-skilled talents

# 突出制度引导

# Give prominence to system guidance

- 印发实施《技能序列职级管理办法(试行)》
- Print and implement the Measures for the Management of Skill Sequence and Rank (Trial)
- 建立 9 级技能序列职级通道
- Establish a sequence rank channel for the 9-level skill

# 推进集体入会

# Promote collective membership

- ●制订《关于加快培育新时代中交产业工人队伍的指导意见》
- Formulate the Guiding Opinions on Accelerating the Cultivation of Workers for China Communications Construction Group Industry in the New Era

# 加强基础保障

# Strengthening basic support

- 改善一线工人生产生活条件
- Improve the production and living conditions of front-line workers
- ●增强与优秀合作队伍的"黏性",培育战略伙伴型合作队伍
- Strengthen the "stickiness" with excellent cooperative teams and cultivate strategic partner cooperative teams



中国交建 2023 年环境、社会及管治报告 新征程之上·浇筑美好未来 On the New Journey·Creating a Bright Future 2023 CCCC ESG Report

# 平陆运河马道枢纽产业工人园区

Pinglu Canal Horseway Hub Industrial Worker Park

二航局平陆运河马道枢纽产业工人园区占地面积约 185.5 亩,设有绿色型产业、社区型产业以及学习型产业 3 个营房区,配备安全积分超市、产业工人广场、教育培训中心等多类设施,可容纳 5000 人居住。园区积极贯彻打造绿色工程的理念,综合利用土石方填筑建设产业工人营地,最大程度减少土资源的浪费。同时,实行社区化管理,创建景色优美、设施齐全的生活环境,着力打造有温度、有感情的职工家园。

Pinglu Canal Horseway Hub Industrial Worker Park of CCCC Second Harbor Engineering Company Ltd. covers an area of about 185.5 mu, with three camp areas of green industry, community industry and learning industry, equipped with various facilities such as safety points supermarket, industrial worker square and education and training center, which can accommodate 5,000 people. The park actively implements the idea of creating green projects, and comprehensively utilizes earthwork to fill and construct the industrial worker camp, so as to minimize the waste of soil resources. At the same time, it implements community management, creates a living environment with beautiful scenery and complete facilities, and strives to create a warm and emotional home for employees.



# 关心员工生活

# CARE FOR THE LIFE OF EMPLOYEES

# ◎保障职业健康

# © Ensure occupational health

中国交建认真贯彻落实《职业病防治法》《国家职业病防治规划》(2021-2025 年)等要求,通过开展"走基层 送职业健康""青年安全生产示范岗创建"系列活动、推进"健康中交,你我同行"职工健康工程、举办劳模疗休养服务等,不断普及职业病防治知识,增强职业健康意识,维护员工健康权益。2023 年,公司在雄安项目、广州展览路西过江隧道项目等举办职业健康、应急救护系列讲座,不断提升员工职业健康管理意识。此外,公司积极开展职业病危害源头治理,改善劳动者作业环境,从源头筑牢安全健康防控屏障。

CCCC earnestly implements the requirements of the Law on the Prevention and Control of Occupational Diseases and the National Plan for the Prevention and Control of Occupational Diseases (2021-2025). By carrying out a series of activities of "Going to the Grass-roots Level to Send Occupational Health" and "Establishment of Youth Safety Production Demonstration Post", promoting the health engineering of employees of "Healthy CCCC · Walk Together", and holding model worker recuperation service, etc. The company continuously popularizes the knowledge of occupational disease prevention, enhances occupational health awareness and protects the health rights and interests of employees. In 2023, it held a series of lectures on occupational health and emergency rescue in Xiong' an Project, Guangzhou Exhibit Road West Crossing River Tunnel Project, etc., to continuously improve the employees' occupational health management awareness. In addition, the Company actively carries out the source control of occupational hazards, improves the working environment of workers, and builds a solid safety and health prevention and control barrier from the source.



在雄安中交未来科创城项目举办"走基层,送职业健康"讲座活动,向一线管理人员和产业工人讲解心肺复苏、AED 使用、创伤包扎及中暑处置等紧急救护知识和急救实操步骤

In Xiong' an CCCC Future Science and Technology City Project, The Lecture Activity of "Going to the Grass-roots Level to Send Occupational Health" Was Held to Explain to the First-line Management Personnel and Industrial Workers about the First-aid Knowledge and Practical Steps of First Aid Such as Cardiopulmonary Resuscitation, AED Use, Wound Dressing and Heatstroke Treatment.

# ◎关怀特殊员工

# Care for special employees

中国交建充分关心退休员工、困难员工、病患员工、女性员工和海外员工等各类特殊群体,在建筑央企首家印发《总部职工婚丧喜庆、到龄退休等关爱慰问实施细则》;完善病困职工救助互助保障,全年下发救助基金 142.36 万元;调研境外员工关心关爱工作,印发"进一步加强境外员工关爱工作九条意见";各级工会筹措 3100 万元在两节慰问 2.9 万名职工 400 余名劳模先进,以更具温度的职场环境,推动行业良性竞争、有序创新。

CCCC fully cares for various special groups, such as retired employees, employees in difficulty, sick employees, female employees and overseas employees, and is the first central enterprise of construction to issue the Detailed Rules for the Implementation of Care and

Consolation for Headquarters Employees at Wedding and Funeral Celebration and Retirement at Age; improves assistance and mutual-aid security for sick and underprivileged workers, and issues a relief fund of RMB 1.4236 million throughout the year; investigates the concern and care work of overseas employees, issues the "Nine Opinions on Further Strengthening the Care Work of Overseas Employees"; labLabor unions at all levels raised RMB 31 million to offer sympathy to 29,000 employees and more than 400 model workers in the two periods, so as to promote benign competition and orderly innovation in the industry in a more warm workplace environment.



董事长王彤宙慰问海外员工

Chairman Wang Tongzhou comforts overseas employees.

# ◎丰富文体活动

# © Enrich cultural and sports activities

中国交建围绕员工所需、所急、所思、所盼,立体打造员工的"幸福港湾"。公司全年开展第六届在京单身青年联谊、 "小童星才艺展示"、机关职工趣味运动会、子女暑期托管班等各类活动,全力做好广大员工温暖如家的坚强后盾。

CCCC aims to build a "happiness bay" for its employees, focusing on their needs, urgency, thoughts and expectations. Throughout the year, the company carries out various activities such as the 6th single youth association in Beijing, "child star talent exhibition", the fun sports meeting for the staff, the children's summer trusteeship class and so on, and makes every effort to provide strong support for the warmth of the staff.



"中交助梦·点燃科技梦想"路桥研学营

"CCCC Fueling Technology Dreams" Bridge and Road Research

# **民生幸福新诗篇**NEW CHAPTER OF PEOPLE'S LIFE AND HAPPINESS

中国交建始终秉承"不忘初心、回馈社会"的理念,在践行企业商业责任的同时,积极履行社会责任。公司多年来持续 关注民生问题,在灾难救助、公益慈善、社区建设等方面不断投入和探索,用实际行动为社会发展作出积极贡献。

CCCC always adheres to the concept of "not forgetting the original intention and giving back to the society", and actively performs the social responsibility while fulfilling the business responsibility of the enterprise. For many years, the company has been continuously paying close attention to people's livelihood, and continuously investing and exploring in disaster relief, public welfare charity, community construction and other aspects, and making positive contributions to social development with practical actions.

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# 支援抢险救灾

# SUPPORT EMERGENCY RESCUE AND DISASTER RELIEF

中国交建全体员工以保障人民生命财产安全为己任,本着"灾情就是命令、抢险就是责任"的宗旨,在京津冀暴雨洪涝、甘肃积石山 6.2 级地震等重大灾害面前第一时间扛起责任、全力抢险,得到党中央、国务院及国资委等有关部委和地方省委省政府的点名表扬,挺膺担当参与苏丹撤侨获得社会各界高度认可。

With the responsibility of protecting people's lives and property, the staff of CCCC, in line with the principle of "disaster is order, and emergency rescue is responsibility", took the responsibility and made all efforts to rescue the disaster in the face of major disasters such as Beijing-Tianjin-Hebei torrential rain and flood, Jishishan M6.2 earthquake in Gansu Province, etc., which were praised by the CPC Central Committee, the State Council, the State-owned Assets Supervision and Administration Commission of the State Council and other relevant ministries and commissions as well as local provincial committees and governments, and were highly recognized by all sectors of the society for taking part in the evacuation of overseas Chinese from Sudan.

# 风雨战讯登









# 增进民生福祉

# ENHANCE PEOPLE'S LIVELIHOOD AND WELL-BEING

中国交建勇当履行社会责任的国家队,积极组织爱心助学、公益捐赠等各类志愿活动,"中交蓝马甲"逐渐成为城乡街景里的靓丽风景,走进了世界各地越来越多人心里。2023年,公司志愿者人数33,719人,志愿者活动时长125,283小时。

CCCC bravely serves as a national team to fulfill its social responsibilities, and actively organizes various volunteer activities such as caring students, public welfare donation and so on. "CCCC Blue Vest" has gradually become a beautiful scenery in urban and rural streetscape, and has entered the hearts of more and more people around the world. In 2023, the number of volunteers in the company was 33,719 and the duration of volunteer activities was 125,283 hours.

# 交统美好明天



非洲之星"蓝马甲"走进社区

African Star "Blue Vest" Walks into Community



成都大运会志愿服务小站

Chengdu FISU World University Games Volunteer Service Station

### 昔日荒漠"变身"生态公园

"Transformation" of A Former Desert into A Ecological Park

吉赞经济城是沙特"2030愿景"重点建设的经济城之一。白石公园位于城市西北侧,沿红海海岸铺展开来,总长度约 1.7 千米,宽约 130 米,包含沙滩、滨海道路、运动场、游乐场等。如今,这里已成为附近居民的休闲娱乐胜地,也是沙特西南地区面积最大、设施最齐全的休闲公园。

Gizan Economic City is one of the key economic cities in Saudi Arabia's "2030 Vision". Baishi Park is located in the northwest of the city, spreading along the Red Sea coast, with a total length of about 1.7 kilometers and a width of about 130 meters, including beaches, coastal roads, playgrounds, amusement parks, etc. Today, it has become a recreational resort for nearby residents, and is also the largest and most well-equipped leisure park in southwestern Saudi Arabia.

白石公园由中国港湾承建,其作为综合性滨海市政开发项目,涉及景观工程、建筑结构、土方道路、设备安装、电力系统等多个领域。施工完成后,公园内椰林婆娑、水清沙白,提供了丰富多样的健身设施,拓展了民众的休闲空间。该项目目前已对公众开放,极大提升了当地民众的民生福祉,获得当地政府和民众的广泛好评,进一步提升了公司品牌形象,且多次被其他主流媒体报道,其中人民日报以《从"硬联通""软联通"到"心联通"》为题进行专版报道。

Baishi Park is constructed by China Harbour Engineering Company. As a comprehensive coastal municipal development project, it involves landscape engineering, building structure, earthwork road, equipment installation, power system and other fields. After the completion of the construction, the park, with swaying coconut forest, clear water and white sand, provides a variety of fitness facilities and expands the leisure space for the people. At present, the project has been opened to the public, greatly improving the livelihood and well-being of the local people, and has been widely praised by the local government and people, further improving the brand image of the company, and has been reported by other mainstream media for many times, among which the People's Daily conducted a special edition report with the title of From "Hard Connectivity", "Soft Connectivity" to "Heart Connectivity".



未来展望

FUTURE PROSPECT 光辉荣耀既往事,策马扬鞭奔前程。2024年是新中国成立75周年,是实现"十四五"规划目标任务的关键一年,也是公司高质量发展提升的关键一年。中国交建将紧密地团结在以习近平同志为核心的党中央周围,深化落实习近平总书记"2·26"重要批示精神,锚定"三型"世界一流企业建设目标,守正创新、锐意进取,奋力推动高质量发展迈上新台阶,为全面推进强国建设、民族复兴伟业贡献更大力量!

Glory and honor are in the past. Let's move forward for another brilliance. The year 2024, as the 75th anniversary of the founding of China, is a crucial year for achieving the goals and tasks of the "14th Five-Year Plan", and for improving the high quality development of the company. CCCC will closely unite around the CPC Central Committee with Comrade Xi Jinping as the core, deepen the implementation of General Secretary Xi Jinping's important instruction spirit of "2·26", anchor the construction goal of "technology-based, management-oriented, and quality-oriented" world-class enterprise, keep upright, innovate and forge ahead, strive to push high-quality development to a new stage, and make greater contribution to comprehensively promoting the construction of a strong country and the great cause of national rejuvenation!

# 附录

# **APPENDIX**

# 关键绩效表

# THE KEY PERFORMANCE TABLE

类别 Category	指标 Indicators	单位 Unit	2021	2022	2023			
	经营绩效 <sup>1</sup> Operational performance <sup>1</sup>							
	资产总额 Total assets	亿元 RMB 100 Million	13,908.37	15,113.50	16,842.63			
经济	净资产 Net assets	亿元 RMB 100 Million	3,913.54	4,261.76	4,591.25			
Economy	新签合同额 New contract amount	亿元 RMB 100 Million	12,679.12	15,422.56	17,532.15			
	营业收入 Operating incomes	亿元 RMB 100 Million	6,856.39	7,202.75	7,586.76			
	利润总额 Total profits	亿元 RMB 100 Million	287.44	309.68	363.64			
	公司治理 Corporate governance							
	董事会中兼任其他公司 CEO 的成员数量 Number of members of the board 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			
管治 Governance	社会责任相关工作向董事会汇报频率 Frequency of reporting social responsibility related work to the board of directors	次 / 年 Time/year	2	2	2			
	外部审计费用 External audit expense	万元 RMB ten thousand	2,570	2,570	2,570			
	发表信息披露文件 <sup>2</sup> Publish information disclosure documents <sup>2</sup>	份 Copy	201	254	335			
	期末控股股东持股比例 Shareholding ratio of controlling shareholders at the end of the period	%	58.51	59.63	59.47			

类别 Category	指标 Indicators		单位 Unit	2021	2022	2023
	反贪污 Anti-corruption					
	反贪污培训覆盖的员工比 Proportion of employees training	例 covered by anti-corruption	%	100	100	100
hele > l.	员工人均接受反贪污培训 Hours of anti-corruption		HH 小时	3.3	3.3	3.7
管治 Governance	反贪污培训覆盖的董事会 Proportion of board men corruption training		%	100	100	100
	董事人均接受反贪污培训 Hours of anti-corruption		HH 小时	7.1	7.4	7.8
	针对公司或员工的贪污诉 Number of corruption lav employees	讼案件数 wsuits against companies or	件 Pcs	0	0	0
	资源使用 <sup>3</sup> Resource Util	ization <sup>3</sup>				
	全年能源消耗总量 Total annual energy cons	年能源消耗总量 万吨标煤 Ten thousand tons of standard coal		195	172	153
	年度耗电量 Annual power consumption		万千瓦时 10,000 kWh	315,138	259,727	253,292
	年度耗气量 Annual gas consumption		万标准立方米 Ten thousand standard cubic meters	2,266	4,417	2,341
环境 Environment	年度燃油量 Annual fuel volume		万吨 10,000 tons	104	91	81
LIIVIIOIIIIICIIC	万元营业收入综合能耗 Comprehensive energy consumption of RMB 10,000 operating income		吨标煤 / 万元(现价) Tons of standard coal/RMB 10,000 (current price)	0.0284	0.0239	0.0200
	排放物 <sup>4</sup> Emissions <sup>4</sup>					
	二氧化碳排放总量 Total carbon dioxide emissions		万吨 10,000 tons	522	468	409
	单位营业收入二氧化碳排放量(现价值) Carbon dioxide emissions per unit operating income (current value)		吨 / 万元 ton/RMB 10,000	0.0761	0.0650	0.0533
社会 Society	员工总数 Total number of employ	/ees	人 Person	136,772	136,506	139,229
		男性 Male	人 Person	113,039	110,731	115,283
	按性别划分	女性 Female	人 Person	23,467	26,041	23,946
	By gender	男性比例 Male proportion	%	82.81	80.96	82.8
		女性比例 Female proportion	%	17.19	19.04	17.2

<sup>1</sup>经营绩效:中国交建中国会计准则下数据。

<sup>&</sup>lt;sup>1</sup> Operational performance: Data under China Communications Construction Chinese Accounting Standards.

<sup>&</sup>lt;sup>2</sup> 发表信息披露文件: 含 A 股发布的公告及挂网文件,H 股发布公告及通函等。

<sup>&</sup>lt;sup>2</sup> Publish information disclosure documents: Including announcements and online documents issued by A shares, announcements and circulars issued by H shares, etc.

<sup>3.4</sup> 资源使用、排放物: 2022 年,公司开展了能源节约统计报送排查整治活动,各单位查漏补缺、准确核实,加强能源数据源头防控,修正了 2021 年的能源消费量和二氧化碳排放量相关数据。

<sup>&</sup>lt;sup>3. 4</sup> Resource use, emissions: In 2022, the Company carried out an energy saving statistical reporting inspection and remediation activity, with each unit checking for omissions, accurately verifying data, and strengthening the prevention and control of the source of energy data, and correcting the data fo energy consumption and CO2 emissions in 2021.

别 ategory	指标 Indicators		单位 Unit	2021	2022	2023
	按民族划分 By ethnic groups	少数民族员工 Employees of ethnic minorities	人 Person	8,715	7,268	7,926
	by etillic gloups	汉族员工 Han employees	人 Person	127,791	129,504	131,30
		30 岁以下 Less than 30 years old	人 Person	48,382	42,008	40,877
	按年龄划分	30-40 岁 30-40 years old	人 Person	52,490	55,420	55,851
	By age	40-50 岁 40-50 years old	人 Person	23,271	25,214	27,845
		50 岁以上 Above 50 years old	人 Person	12,363	14,130	14,656
		5 年以上 More than 5 years	人 Person	101,743	102,758	95,632
	按年资划分 By seniority	3-5 年 3-5 years	人 Person	13,652	12,987	16,620
		3年以下 Within 3 years	人 Person	21,111	21,027	26,977
		研究生及以上学历 Graduate degree and above	人 Person	15,501	14,838	17,15
	按学历分 By academic qualifications	本科学历 Bachelor degree	人 Person	94,285	91,187	100,61
		大专学历 College degree	人 Person	16,142	19,337	13,11
会		中专及以下学历 Technical secondary school and below	人 Person	10,578	11,410	8,335
ciety	按雇佣类型划分 By type of employment	全职 Full-time	人 Person	136,506	136,772	139,22
		兼职 Part-time	人 Person	0	0	0
	按地区划分	中国 China	人 Person	131,756	130,889	133,68
	By region	海外 Overseas	人 Person	4,750	5,883	8,064
	员工流失率 Loss rate of employees		%	3.17	3.11	3.67
	按性别划分	男性 Male	%	80.26	80.71	80.79
	By gender	女性 Female	%	19.74	19.29	19.21
		30 岁以下 Less than 30 years old	%	58.60	52.23	39.84
	按年龄划分	30-40 岁 30-40 years old	%	30.64	28.27	36.69
	By age	40-50 岁 40-50 years old	%	7.95	7.42	11.25
		50 岁以上 Above 50 years old	%	2.81	12.08	12.22
	健康与安全 Health and safety					
	因工死亡人数 Work-related fatalities		人 Person	7	6	6
	因工死亡比重 Proportion of work-relate	%	0.0051	0.0044	0.004	

类别 Category	指标 Indicators		单位 Unit	2021	2022	2023
	重伤事故率 Serious injury rate		%	0	0	0
	轻伤事故率 Minor injury rate		%	0	0	0
	因工伤损失工作日数 <sup>5</sup> Number of working days l injuries <sup>5</sup>	天 Day(s)	42,000	36,000	36,000	
	发展与培训 Development and traini					
	· 培训覆盖率 Training coverage rate		%	100	100	100
	按性别划分	男性 Male	%	100	100	100
	By gender	女性 Female	%	100	100	100
		高级管理者 Senior manager	%	100	100	100
	按雇员类别划分 By type of employee	中级管理者 Middle manager	%	100	100	100
		普通员工 General employee	%	100	100	100
	人均培训时长 Per capita training time		小时 HH	110	112	112
会 ociety	按性别划分	男性 Male	小时 HH	111	109	110
ciety	By gender	女性 Female	小时 HH	119	118	121
	按雇员类别划分 By type of employee	高级管理者 Senior manager	小时 HH	143	141	143
		中级管理者 Middle manager	小时 HH	146	145	145
		普通员工 General employee	小时 HH	109	108	109
	供应链管理 Supply chain manageme	ent				
	供应商数量 Number of suppliers		个 Pcs	2,595	2,736	2,965
		东北地区 Northeast China	个 Pcs	111	112	121
	_	华东地区 East China	个 Pcs	831	891	979
	按地区划分	中南地区 Central South China	个 Pcs	414	438	481
	By region	西南地区 Southwest China	个 Pcs	270	289	308
	-	西北地区 Northwest region	个 Pcs	149	153	172
	-	华北地区 North China	个 Pcs	511	536	576

<sup>5</sup>因工伤损失工作日数:统计依据为每死亡1人,折合成损失工作日数6,000工作日。

<sup>&</sup>lt;sup>5</sup> Number of working days lost due to work-related injuries: The statistical basis is that every one person dies, which is converted into 6,000 lost working days.

# 指标索引

# INDEX OF INDICATORS

类别		单位	2021	2022	2022
Category	Indicators	Unit	2021	2022	2023
	报告期审查的供应商数量	个			
	Number of suppliers reviewed during the reporting period	Pcs	2,595	2,736	2,965
	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 who have passed the certification of quality, environment and occupational health and safety management system	%	100	100	100
	供应商现场核查次数 Number of on-site inspections of suppliers	次 Times	29	30	14
	供应商现场核查覆盖率 Supplier on-site verification coverage rate	%	1.3	1.1	0.5
	供应商社会责任培训次数 Number of supplier social responsibility training	次	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 social responsibility non-compliance	↑ Pcs	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 has been suspended due to non-compliance of social responsibility	↑ Pcs	0	8	14
社会 Society	产品责任 Product liability				
	安全问题产品回收次数 Recovery times of products with safety problems	次 Times	0	0	0
	安全相关缺陷投诉数量 Number of complaints about safety-related defects	件 Pcs	0	0	0
	客户隐私泄漏事件 Customer privacy leakage incident	件 Pcs	0	0	0
	已售或已运送产品总数中因安全与健康理由而须回收的百分比 Percentage of products needing to be taken back due to safety and health in the sold and transported	%	0	0	0
	amount 客户投诉数量 Quantity of customers' complaints	件 Pcs	0	0	0
	社区投资 Community investment	FCS			
	指赠总额 Total donations	万元 RMB 10,000	8,875	28,736	27,359
	员工志愿者人数 Number of employee volunteers	人 Person	20,080	21,985	33,719
	志愿活动时长 Duration of voluntary activities	小时 Hour	100,401	110,300	125,283

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Opening up the unlimited roads	管理向精新跨越 The leap of management towards refinement and novelty	B7.1/B7.2/B7.3	G1.3/G1.4/G1.7/G1.8/ G1.10	102-17/102-30/205-1/205- 2/419-1
	质量向优新突破 New breakthrough in the transformation of quality towards excellence	B6.1/B6.2/B6.3/ B6.4/B6.5	S4.1/S4.5/S4.6	416-1/416-2/417-1/417- 2/418-1
山水卷之中· 浸染宜居生态 In the Picture of	产业升级新篇章 New chapter of industrial upgrading	B5.1/B5.2/B5.3/ B5.4	S5.1/S5.2/S5.6	102-9/308-1/414-1/
Mountains and Rivers · Infiltrate the	安全为基新作为 New actions based on safety	-	\$3.4/\$3.5/\$3.6/\$3.7/\$3.8/ \$3.9	403
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Journey · Build A Better Future	合作共赢新蓝图 New blueprint for win-win cooperation	-	V2.8	-
	员工和谐新家园 New harmonious home for employees	B1.1/B1.2/B2.1/ B2.2/B2.3/B3.1/ B3.2/B4.1/B4.2	\$1.1/\$1.2/\$1.3/\$1.6/ \$1.10/\$2.1/\$2.2/\$2.3/ \$2.4/\$3.1	
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# 评级报告

# 《中国交建 2023 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《中国交建 2023 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

中国社会科学院《中国企业社会责任报告指南(CASS-ESG 5.0)》暨"中国企业社会责任报告评级专家委员会"《中国企业 ESG 报告评级标准(2023)》。

### 二、评级过程

- 1. 评级小组审核确认《报告》编写组提交的《企业 ESG 报告过程性和可及性评估资料确认书》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(★★★★★)

公司党委工作部牵头编制 ESG 报告,各部室、各单位提交 ESG 报告素材,董事会战略与投资及 ESG 委员会对年度报告进行审议;将报告定位为合规披露履责信息、强化利益相关方沟通的重要工具,功能价值定位明确;根据国家宏观政策、国内外指标体系、公司发展规划、利益相关方需求等识别实质性议题;推动下属单位发布报告,打造独具特色的 ESG 报告矩阵体系;报告将以中英文电子版、印刷品、微信版等多种形式呈现,过程性表现卓越。

# 实质性 (★★★★★)

《报告》披露了完善 ESG 治理、服务国家战略、应对气候变化、污染物管理、工程质量管理、施工安全、高效使用建筑材料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"复兴梦之下,开拓畅通道路""山水卷之中,浸染宜居生态""新征程之上,浇筑美好未来"等角度披露了所在行业核心指标的 78.33%,完整性表现优秀。

### 平衡性 (★★★★★)

《报告》披露了"因工死亡人数""重伤事故率""员工流失率""客户隐私泄漏事件次数""安全问题产品回收次数"等负面数据信息,并简述安全事故处置方式,平衡性表现卓越。

### 可比性(★★★★★)

《报告》披露了"资产总额""营业收入""全年能源消耗总量""志愿活动时长""捐赠总额"等 91 个关键指标连续 3 年的对比数据,并对世界 500 强排名、国资委经营业绩考核等指标进行横向比较,可比性表现卓越。

# 可读性(★★★★★)

《报告》结构清晰,以企业愿景中"畅通""宜居""美好"为关键词搭建框架,系统展示企业履责行动及成效,全面

回应利益相关方期望与诉求;设置两大责任专题,高度总结企业在践行"一带一路"及落实"双碳"目标方面的履责行动及成效,具有时代引领性,彰显央企责任风范;报告设计高端大气,中英文排版凸显国际化气质;篇章页及内页多用精美高清大图,图文展示相得益彰;多处嵌入二维码链接,拓展报告内容,丰富阅读体验,可读性表现卓越。

# 可及性(★★★★★)

《报告》与公司年报发布时间间隔预计1个月以内;有明确的发布渠道,通过公司官网、交易所网站等渠道发布报告,并将通过行业交流会向大众媒体等进行传播,增强报告的沟通性和影响力;支持报告网络搜索、邮寄等获取方式,渠道多样,简单便捷,具有卓越的可及性表现。

# 综合评级(★★★★★)

经评级小组评价, 《中国交建 2023 年度环境、社会及管治报告》为五星级, 是一份卓越的企业 ESG 报告。

# 《中国交建 2023 年度环境、社会及管治报告》评级报告

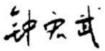


# 四、改进建议

增加行业核心指标的披露,提高报告的完整性;

基為是

评级专家委员会副主席



评级小组组长



剂的

评级小组专家

出具时间: 2024年4月13日



扫码查看企业评级档案

# 意见反馈

# 尊敬的读者:

您好!十分感谢您阅读《中国交建 2023 年环境、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: 86-10-82016718

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	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	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?	

# SUGGESTION FEEDBACK

Dear readers,

Greetings! Thank you for reading the 2023 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.: 86-10-82016718

Address: No. 85, Deshengmenwai Street, Xicheng District, Beijing

Name:			Tel.:		
Employe	r:		Fax:		
Title:			E-mail:		
1. Your overal	l assessment of the repo	rtis			
0.6	O.D. III	O A			
○ Good	○ Better	O Average			
2. Do you thi	nk this report can refle	ect the great im	pact of China Commu	nications Construction on econo	omy, society and
environment?	?				
○High	O Relatively high	○ Fair	O Relatively low	OLow	
3. What do yo	u think of the clarity, acc	uracy and comp	leteness of the informat	ion, data and indicators disclosed	d in this report?
○ Good	O Better	○ Average	O Poor	○ Don't know	
4. Which aspe	ect of this report are you	most satisfied w	ith?		
5. What inforr	nation do you want to kr	now more?			
6. What other	suggestions do you have	for us to publis	h reports in the future?		

# 交融天下

# 建者无疆



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