



# 中国交建 环境、社会及管治报告

Environmental, Social and Governance Report  
of China Communications Construction  
Company Limited (CCCC)

# 2022



# 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 2022 年 1 月 1 日至 2022 年 12 月 31 日，部分内容适当超出。

#### 汇报准则

本报告编制依据香港联合交易所《环境、社会及管治报告指引》《气候信息披露指引》、上海证券交易所《上市公司自律监管指引第 1 号——规范运作》《股票上市规则（2023 年 2 月修订）》、中国社会科学院《中国企业社会责任报告指南（CASS-ESG5.0）》、全球报告倡议组织《GRI 标准》（2021 版）等。

本报告遵循《环境、社会及管治（ESG）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。

本报告所用工程设备图片均为公司承建工程、自有设备或装备产品。

#### 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/> 社会责任专栏及公告 / 通函（H 股）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：

联系部门：中国交建党委工作部（党委统战部、企业文化部）

通信地址：中国北京市西城区德胜门外大街 85 号

电话：86-10-82016718

E-mail: [ccccshzrbg2019@163.com](mailto:ccccshzrbg2019@163.com)

### 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". China Communications Construction Company Limited in this report is abbreviated as "China Communications Construction", "the Company" and "We".

As an important holding subsidiary of China Communications Construction Group Ltd., China Communications Construction 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, 2022 to December 31, 2022, within which some parts aren't appropriately.

#### Reporting criteria

This report is compiled based on the Hong Kong Stock Exchange's Guidelines on Environmental, Social and Governance Report, Guidelines on Climate Information Disclosure, Shanghai Stock Exchange's Guidelines on Self-discipline Regulation of Listed Companies No. 1 -- Standard Operation, Rules for Stock Listing (Revised on February 2023), and the Chinese Academy of Social Sciences' Guidelines on Corporate Social Responsibility Reporting in China (CASS-ESG5.0), the Global Reporting Initiative's GRI Standards (2021 edition), etc.

This report follows the principles of "significance", "quantification", "balance" and "consistency" in the Guidelines on Environmental, Social and Governance Report. 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. China Communications Construction 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.

The pictures of engineering equipment used in this report are about the projects undertaken by the company, its self-owned equipment or equipment products.

#### Report acquisition

The report is released in electronic form and can be downloaded and viewed at Social Responsibility Column and Announcement/Circular Letter (H Shares) of <https://www.ccccltd.cn/> of China Communications Construction.

If you have any suggestions or comments on this report, contact us as follows:

Contact department: Work Department of the Party Committee of China Communications Construction (United Front Work Department of the Party Committee, Enterprise Culture Department)

Mailing address: No. 85, Deshengmenwai Avenue, Xicheng District, Beijing

Tel: 86-10-82016718

E-mail: [ccccshzrbg2019@163.com](mailto:ccccshzrbg2019@163.com)

# 目录 CONTENTS

03 领导致辞  
Speech by Leaders

07 关于我们  
About us

14 ESG 管治  
ESG governance

117 未来展望  
Future prospect

119 附录  
Appendix

## 23 专题一 Topic I

### “交” 五洲四海

聚链成势共助行业高质量发展

"Expand business" all over the world and gather chains to help the high-quality development of the industry

## 33 专题二 Topic II

### “建” 复兴大道

鱼渔双授共促乡村可持续富饶

"Build" a Road to Revival; Both Teaching Fishing and Giving Fishes Promote Sustainable Rural Development and Prosperity

## 管治篇

### 强国固基·造就永续发展之路

#### GOVERNANCE

Make the Country Strong and Solidify Foundation  
Build a Road to Develop Sustainably

45 新益求新，科技一流  
Keep Updating and First-class Technology

55 精益求精，管理一流  
Keep improving and implement first-class management

63 美益求美，质量一流  
Make refinement and ensure first-class quality

## 环境篇

### 水漾山青·铸就永续生态之路

#### ENVIRONMENT SECTION

Clean water and green mountain  
build a path of sustainable development

71 拓展绿色产业  
Expanding Green Industries

75 坚持绿色运营  
Adhering to Green Operation

83 守护美好生态  
Protecting a Beautiful Ecology

## 社会篇

### 益世利民·成就永续美好之路

#### SOCIETY SECTION

Benefiting the world and benefiting the people  
Achieving a sustainable and beautiful future

91 坚守安全红线  
Adhere to the safety red line

100 成就幸福员工  
Achieving happy employees

106 携手共建共赢  
Work together to build a win-win situation

114 增进民生福祉  
Improving people's well-being

# 领导致辞

## SPEECH BY LEADERS



董事长：王彤宙  
CHAIRMAN: WANG TONGZHOU

星奔川骛，韶华如驶。又是一年星光赶路，奋斗者不负流年。

The time passes quickly and strivers don't live up to themselves.

2022 年是党和国家历史上极为重要的一年。党的二十大胜利召开，描绘了全面建设社会主义现代化国家新蓝图。一年来，全体中交人乘着时代的东风，迎着曙光的照拂，积极应对错综复杂的国际形势、艰巨繁重的国内发展改革稳定任务，高举习近平新时代中国特色社会主义思想伟大旗帜，坚持不懈稳增长、坚韧不拔优结构、坚定不移控风险，公司《财富》世界 500 强排名跃升至第 60 位，ENR 国际承包商排名重返世界前 3，连续 16 年占据中国和亚洲国际承包商排名首位，在大庆之年交出圆满答卷，谱写创建“科技型、管理型、质量型”世界一流企业的璀璨新篇章！

The year 2022 is an extremely important year in the history of the Party and the country. A new blueprint for building a modern socialist country in all aspects is described by successfully holding the 20th National Congress of the Communist Party of China. Over the past year, all CCCC people made the most of the times, grasped the dawn, actively responded to the complex international situation and arduous tasks of domestic reform, development and stability, held high the banner of Xi Jinping socialism with Chinese characteristics for a new era, stabilized growth with persistence, optimized structure tenaciously, and firmly controlled risks. We ranked the 60th in Fortune



总裁：王海怀  
PRESIDENT: WANG HAIHUI

Global 500, returned to the top three in the world in the ENR international contractor ranking and has ranked as the largest international contractor in China and Asia for 16 consecutive years. We delivered a good report in the year of grand celebration, and wrote a bright new chapter in creating a world-class enterprise with "science and technology, management and quality orientation"!

这一年，我们躬耕永续发展之路，观云奔潮涌，日日澄朗。我们牢记高质量发展是全面建设社会主义现代化国家的首要任务，以迎接党的二十大召开和学习宣传贯彻党的二十大精神为主线，紧紧围绕“两增一控三提高”目标，坚持“123456”总体发展思路，深入开展“高质量发展落实年”活动。全体中交人秉持“央企姓党，国企为国”的政治担当，在党和国家事业需要的时候第一时间出征在前。2022 年，公司冬奥工程出色完成各项建设及保障任务，给出“四个办奥”的中交答案；平陆运河、深中通道、乌尉公路等重大工程接连创下“世界之最”，生动彰显国之重器的魅力与实力；海上风电等一批战略性新兴产业加快布局，中交建筑、中交管道等公司陆续组建，“三新”业务规模快速扩大，公司服务保障国家战略的能力不断提高，以一域之力尽全局之责、以一域之光为全局添彩的国家队作用更加彰显。

**Over the past year, we were engaged in sustainable development and achieved some excellent results.** We kept in mind that high-quality development is the primary task of building a modern socialist country in all aspects. With the main line of welcoming the opening of the 20th National Congress of the Communist Party of China and studying, publicizing and implementing the spirit of the 20th National Congress of the Communist Party as the main line and closely around the goal of "two increases, one control and three improvements", we adhered to the overall development idea of "123456", and launched the "High-quality Development and Implementation Year" activity in a deep-going way. All CCCC people upheld the political responsibility of "Chinese Central State-owned Enterprises for the Party and State-owned Enterprises for the Country", and came forward first time when needed by the Party and the country. In 2022, we finished the construction and security tasks of the Olympic Winter Games project excellently, and implemented CCCC concept of "hosting Olympic Winter Games from four aspects". Major projects such as the Pinglu Canal, Shenzhen-Zhongshan Bridge and the Urumchi-Yuli Highway have become the "Top of the World", vividly demonstrating the charm and strength of CCCC; The layout of a batch of strategic emerging industries such as offshore wind power has been accelerated. CCCC Construction, CPPE and other companies have been established. The scale of the "three new business" has been expanded, and the company's ability to serve national strategies has been improved a lot, fully demonstrating its leading role.

**这一年，我们厚植永续生态之路，护碧波清澜，山山骀荡。**我们积极应对绿色低碳发展的机遇和挑战，坚定不移走生态优先、绿色低碳的可持续发展之路，加快实现“绿色发展体系的飞跃”。公司积极推广形成资源节约型、环境友好型的产业结构和生产方式，努力促进核心产业绿色低碳转型，稳步推动规划、设计、施工、运维全过程绿色化，在海绵城市、园林绿化等领域已形成广泛布局。同时，我们积极拓展绿色低碳新兴业务、创新发展模式，在流域综合治理、江湖生态系统修复、海上风电基础设施建设与运维等新领域不断取得重要突破，公司低碳新兴产业已初具规模，以越来越多的绿色工程、绿色建筑点缀大自然极致之美。

**Over the past year, we strengthened the construction of sustainable ecology.** We actively responded to the opportunities and challenges of green and low-carbon development, unswervingly followed the path of ecology first, green and low-carbon sustainable development, and accelerated the realization of "a leap of the green development system". We actively promoted the resource-saving and environment-friendly industrial structure and production mode, strived to promote the green and low-carbon transformation of core industries, steadily promoted the greenization of planning, design, construction, operation and maintenance, and have formed a broad layout in sponge city, landscaping, etc. Meanwhile, we actively expanded the green and low-carbon emerging business, innovative development mode, and have made important breakthroughs in new fields such as comprehensive reclamation of river basin, river and lake ecosystem restoration, construction and operation and maintenance of offshore wind power infrastructure. Our low-carbon emerging industry has begun to take shape and the ultimate beauty of nature is embellished by more and more green projects and green buildings.

**这一年，我们筑建永续美好之路，看盛景在望，岁岁今朝。**推动构建人类命运共同体是中国式现代化的本质要求和不懈追求。我们胸怀家国天下，“公司国际化”升维迎来新的里程碑，2022年，我们在亚得里亚海架起“梦想之桥”，在“七彩金港”讲述通达美好的中国故事，向世界展示着关于“责任中交”的信念与追求；我们勇担央企责任，知重负重，第一时间吹响援吉、援沪、援港“集结号”，一次次上演“中交蓝·党旗红”的感人故事；我们全面推进乡村振兴战略落地落实，连续4年获得中央单位定点帮扶工作成效考核评价最高等次“好”的评价，《新型产业园发展模式助力怒江州产业兴乡村美村民富》荣获“第三届全球减贫案例征集活动”最佳减贫案例。一代代中交人“让世界更畅通、让城市更宜居、让生活更美好”的奋斗愿景正不断变为现实。

**Over the past year, we built a path of external beauty and saw the beautiful view.** Promoting the building of a community with a shared future for mankind is the essential requirement and unremitting pursuit of Chinese modernization. We have the entire motherland in mind and "company internationalization" upgrade has ushered in a new milestone. In 2022, we built the "Dream Bridge" in the Adriatic Sea, and told a wonderful story of China in the "Colorful Phnom Penh-Sihanoukville Autonomous Port", showing the belief and pursuit of "CCCC with responsibilities" to the world; We assumed the responsibility of the Chinese central state-owned enterprise, were brave to take on heavy responsibilities, blew the "assembly" of aid to Jilin, Shanghai and Sihanoukville Autonomous Port and put touching stories of "CCCC Blue • Party Flag Red" on the stage; We comprehensively implemented the rural revitalization strategy, and have received the evaluation of the highest grade "good" in the examination and evaluation of the effectiveness of the central government's fixed point assistance work for four consecutive years. The New Industrial Park Development Mode Helps Realize the prosperity of industries, beauty of countryside and prosperity of Villagers in Nujiang Prefecture won the best poverty reduction case in the "Global Solicitation on Best Poverty Reduction Practices (Third Call)". The vision of struggle of generations of CCCC people of "building a better connected world, making cities more livable, creating better life for people" is becoming a reality.

**且持梦笔书奇景，日破云海万里红。**2023年是全面贯彻党的二十大精神的关键之年，是实施“十四五”规划承上启下的关键之年。中国交建将保持战略定力、强化使命担当，以更加奋发有为的精神状态和卓有成效的实际行动，加快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，全力以赴为全面建设社会主义现代化国家作出新的更大贡献！

**You can get to a certain level by holding on to your dream.** The year 2023 represents the first year to carry out the spirit of the 20th National Congress of the Communist Party of China and also a key year of transition to execute the "14th Five-Year Plan". China Communications Construction will maintain its strategic focus, strengthen its mission, speed up the building of an internationally competitive world-class enterprise with science and technology, management and quality orientation with a more energetic spirit and effective practical actions, and make new and greater contributions to building a modern socialist country in all aspects at full speed!



# 关于我们 ABOUT US

## 公司简介

### COMPANY PROFILE

中国交建是全球领先的特大型基础设施综合服务商，主要从事交通基础设施的投资建设运营、城市综合开发等，为客户提供投资融资、咨询规划、设计建造、管理运营一揽子解决方案和一体化服务。

As the world's leading oversize infrastructure integrated service provider, China Communications Construction 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 32 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。2022 年，中国交建居《财富》世界 500 强第 60 位，在国务院国资委经营业绩考核中获“17 连 A”。

China Communications Construction 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 32 main wholly-owned and holding subsidiaries. China Communications Construction was listed in Hong Kong and Shanghai and takes the leading position in profitability and value creation ability among global peers. In 2022, China Communications Construction ranked the 60th in Fortune Global 500, and has been awarded "Grade A for 17 consecutive years" in the business performance assessment of the State-owned Assets Supervision and Administration Commission of the State Council.



#### 中国交建之“最”

"TOP" OF CHINA COMMUNICATIONS CONSTRUCTION

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

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

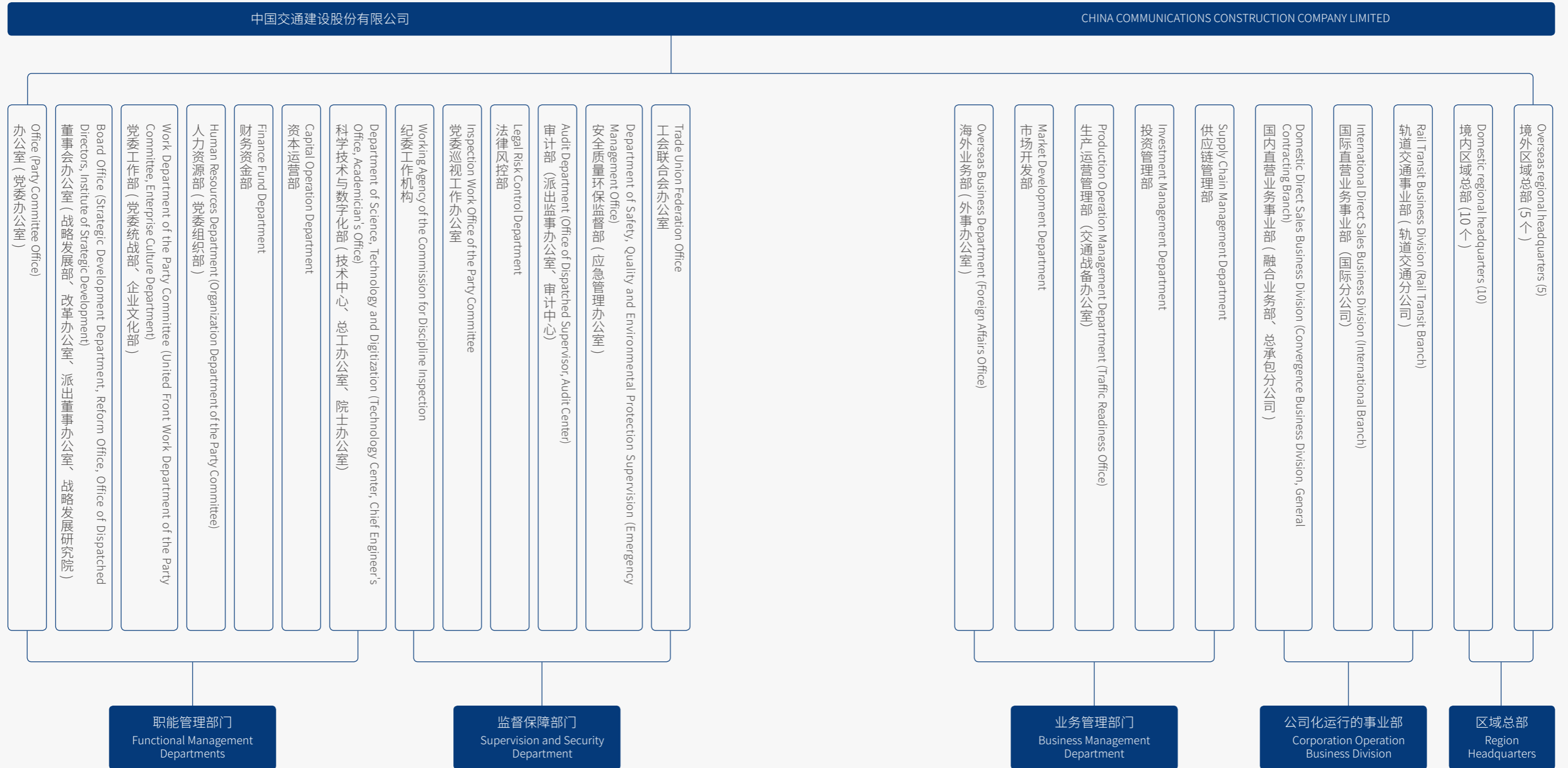
The largest international project contracting company in Asia

中国最大的高速公路投资商

The largest highway investor in China

# 组织架构

## ORGANIZATIONAL STRUCTURE



## 主要子公司名录

### LIST OF MAIN SUBSIDIARIES

|                   |  |
|-------------------|--|
| 中国港湾工程有限责任公司      | China Harbour Engineering Company Ltd.             |
| 中国路桥工程有限责任公司      | China Road & Bridge Corporation                    |
| 中交第一航务工程局有限公司     | CCCC First Harbor Engineering Company Ltd.         |
| 中交第二航务工程局有限公司     | CCCC Second Harbor Engineering Company Ltd.        |
| 中交第三航务工程局有限公司     | CCCC Third Harbor Engineering Co., Ltd.            |
| 中交第四航务工程局有限公司     | CCCC Fourth Harbor Engineering Co., Ltd.           |
| 中交疏浚（集团）股份有限公司    | CCCC Dredging (Group) Co., Ltd.                    |
| 中交一公局集团有限公司       | CCCC First Highway Engineering Group Co., Ltd.     |
| 中交第二公路工程局有限公司     | CCCC Second Highway Engineering Co., Ltd.          |
| 中交路桥建设有限公司        | CCCC Road & Bridge International Co., Ltd.         |
| 中交第三公路工程局有限公司     | CCCC Third Highway Engineering Co., Ltd.           |
| 中交建筑集团有限公司        | CCCC Construction Group Co., Ltd.                  |
| 中交机电工程局有限公司       | CCCC Mechanical & Electrical Engineering Co., Ltd. |
| 中交水运规划设计院有限公司     | CCCC Water Transportation Consultants Co., Ltd.    |
| 中交公路规划设计院有限公司     | CCCC Highway Consultants Co., Ltd.                 |
| 中交第一航务工程勘察设计院有限公司 | CCCC First Harbor Consultants Co., Ltd.            |

|                   |  |
|-------------------|--|
| 中交第二航务工程勘察设计院有限公司 | CCCC Second Harbor Consultants Co., Ltd.           |
| 中交第三航务工程勘察设计院有限公司 | CCCC Third Harbor Consultants Co., Ltd.            |
| 中交第四航务工程勘察设计院有限公司 | CCCC-FHDI engineering Co., Ltd                     |
| 中交第一公路勘察设计院有限公司   | CCCC First Highway Consultants Co., Ltd.           |
| 中交第二公路勘察设计院有限公司   | CCCC Second Highway Consultants Co., Ltd.          |
| 中国公路工程咨询集团有限公司    | China Highway Engineering Consultants Corporation  |
| 中交基础设施养护集团有限公司    | CCCC Infrastructure Maintenance Group Co., Ltd.    |
| 中交天和机械设备制造有限公司    | Tianhe Mechanical Equipment Manufacturing Co., Ltd |
| 中国交通物资有限公司        | China Communications Trading & Supply Co., Ltd.    |
| 中交国际（香港）控股有限公司    | CCCC International Holding Limited                 |
| 中交财务有限公司          | CCCC Finance Company Ltd.                          |
| 中交资本控股有限公司        | CCCC Capital Holdings Limited                      |
| 中交资产管理有限公司        | CCCC Asset Management Company Limited              |
| 中交投资有限公司          | CCCC Investment Company Limited                    |
| 中交城市投资控股有限公司      | CCCC Urban Investment Holding Company Limited      |
| 中交西部投资有限公司        | CCCC Western Investment Co., Ltd.                  |



## 企业文化

### CORPORATE CULTURE

#### 企业使命 Enterprise Mission

固基修道、履方致远  
Only Solid Foundation, Good Morality and Proper Behavior Create A Better Future

#### 企业愿景 Enterprise Vision

让世界更畅通、让城市更宜居、让生活更美好  
We Build a Better Connected World, We Make Cities More Livable, We Create Better Life for People

#### 企业精神 Enterprise Spirit

交融天下、建者无疆  
Transportation Integrates the World The Builder's Field is Boundless

#### 发展目标 Development Goals

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  
Build A World-Class Enterprise With Global Competitiveness In Science and Technology, Management and Quality

#### 价值导向 Value Orientation

以业绩论英雄、英雄不论出处  
Evaluate Heroes by Their Performance Instead of Background

## ESG 管治 ESG GOVERNANCE

### 董事会声明

#### STATEMENT OF THE BOARD

中国交建董事会是公司 ESG 工作的最高统筹及决策机构，对 ESG 相关工作负总体责任，包括制订环境、社会及管治方针、策略及目标，评估及厘定环境、社会及管治相关风险及机遇，推动设立适当和有效的风险管理及内部监控系统，并确保 ESG 报告中数据及信息的真实性、有效性。

The Board of Directors of China Communications Construction is the highest coordinating and decision-making body for ESG work and takes overall responsibility for ESG related work, including development of environmental, social and governance policies, strategies and goals, assessment and determination of environmental, social and governance related risks and opportunities, and promotion of the setup of appropriate and effective risk management and internal monitoring systems and ensuring the authenticity and validity of the data and information in the ESG report.

### ESG 目标 ESG GOAL

中国交建围绕高质量“两保一争”战略目标和建设具有全球竞争力的“科技型、管理型、质量型”世界一流企业的总体目标，积极落实“123456”总体发展思路，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。

Centered around the strategic goal of high-quality "two guarantees and one competition" and the overall goal of building an internationally competitive world-class enterprise with "science and technology, management and quality orientation", China Communications Construction actively implements the overall development idea of "123456" and strives to be a respected enterprise that "makes investors rest assured, customers satisfied, stakeholders trusted, operators relieved, employees happy, and win social recognition".

## ESG 治理体系

### ESG GOVERNANCE SYSTEM

中国交建持续建立健全 ESG 治理体系，通过实施完善的 ESG 治理，妥善识别、管理并利用 ESG 风险和机遇，实现公司的长期繁荣。

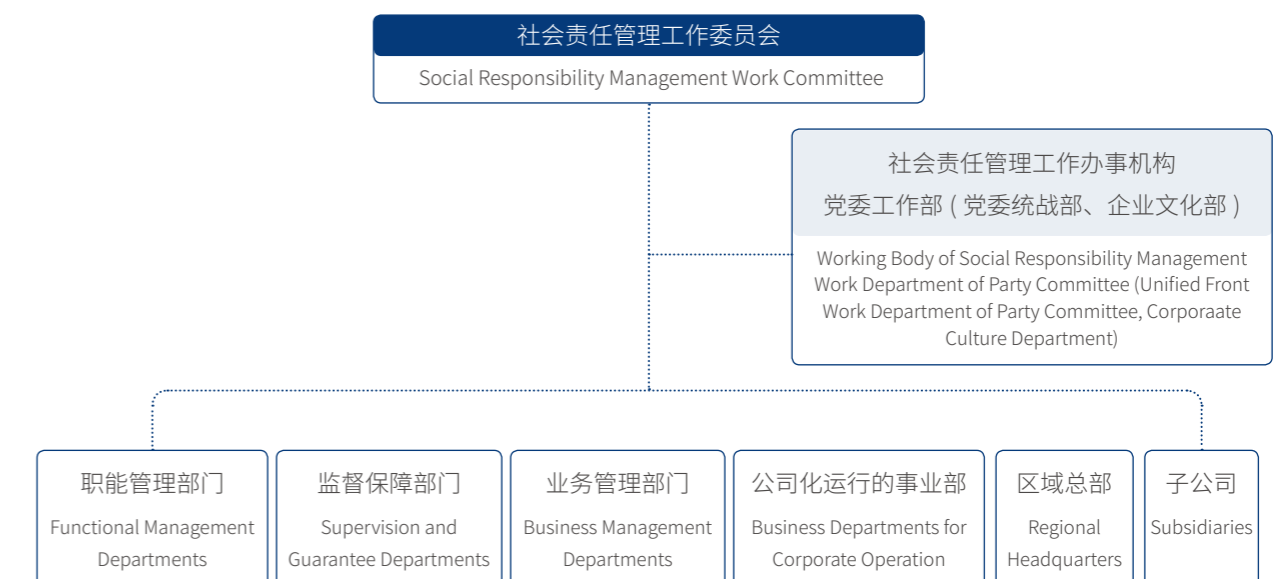
中国交建将 ESG 理念融入公司发展战略和日常经营发展中，董事会作为公司最高治理机构，聚焦公司治理、环境保护、社会责任等方面开展工作。公司积极加强董事反贪污培训，严格执行中央企业负责人和专职外部董事廉洁自律有关规定；结合监管机构要求和利益相关方诉求，制定包括社会责任管理办法、“中交助梦”行动方案，以及生态环保、安全质量等在内的社会责任/ESG 管理制度，明确工作职责及流程，推动社会责任/ESG 与业务有效融合；构建与公司战略规划、公司改革发展相关联的“1+N”绩效考核管理体系，并建立绩效考核管理工作评价制度，落实绩效考核结果的运用，将考核结果与薪酬兑现有效挂钩；积极对标 ESG 发展趋势、工作要求和同行业企业 ESG 建设情况，梳理公司 ESG 管理、ESG 实践、ESG 信息披露与评级评价现状，提出改进措施和工作建议，进一步完善 ESG 治理体系；积极组织参加国务院国资委“中央企业上市公司 ESG 培训会”、中国社会责任百人论坛“第十四期分享责任公开课”、开展全公司范围内的社会责任/ESG 培训，参加国务院国资委 2022 年社会责任/ESG 课题，全面提升社会责任/ESG 工作能力和水平，增强创造经济、环境和社会综合价值的的能力。2021 年，中国交建加入中国社会责任百人论坛，成为理事长单位。

此外，公司成立社会责任/ESG 管理工作委员会，由公司党委书记、董事长任主任，分管领导任副主任，总部各部门负责人任委员。党委工作部是社会责任/ESG 管理工作委员会的日常办事机构，内设社会责任处，负责社会责任/ESG 管理工作。社会责任/ESG 管理工作委员会负责引领决策，所属各单位、各事业部负责具体实施，形成齐抓共管的工作局面。

China Communications Construction continues to establish a perfect ESG governance system, and properly identifies, manages and utilizes ESG risks and opportunities to achieve its long-term prosperity by implementing the perfect ESG governance.

China Communications Construction has incorporated ESG concept into its development strategy and daily operation and development. As the highest governance agency of the company, the board of directors carries out the work around corporate governance, environmental protection, social responsibility, etc. The company actively strengthens the anti-corruption training for directors, and strictly enforces the relevant regulations on the integrity and self-discipline of the persons in charge of Chinese central state-owned enterprises and full-time outside directors; Combined with the requirements of regulatory authorities and demands of stakeholders, it formulates the social responsibility/ESG management system including social responsibility management measures, "Build Your Future Dream" action plan, as well as ecological environmental protection, safety quality, defines job responsibilities and processes and promotes the effective integration of social responsibility/ESG with business; It builds a "1+N" performance appraisal management system related to the company's strategic planning and reform and development, establishes a performance appraisal management work evaluation system, implements the application of performance appraisal results, and effectively links the appraisal results to the salary; It conducts the active benchmarking of ESG development trend, work requirements and ESG construction of enterprises in the same industry, sorts out its ESG management, ESG practice, ESG information disclosure and rating evaluation status, proposes improvement measures and work suggestions, and further perfects the ESG governance system; It actively organizes and participates in the "ESG Training for Listed Companies under the Chinese Central State-owned Enterprises" of the State-owned Assets Supervision and Administration Commission of the State Council, the 14th Session of Sharing Responsibility Open Class of China Social Responsibility 100 Forum, carries out the company-wide social responsibility/ESG training and the 2022 social responsibility/ESG topic of the State-owned Assets Supervision and Administration Commission of the State Council, and comprehensively improves the ability and level of social responsibility/ESG work and enhances the capacity to create integrated economic, environmental and social comprehensive value. In 2021, China Communications Construction joined China Social Responsibility 100 Forum and became its chairman unit.

In addition, it has established a social responsibility/ESG management committee, with the Secretary of the Party Committee of the company and the Chairman as the director, the heads of each division as the deputy director, and the head of each department of the headquarters as the members. The Work Department of the Party Committee is the daily working body of the Social Responsibility/ESG Management Committee and has a Social Responsibility Department to be responsible for the social responsibility/ESG management. The Social responsibility/ESG Management Committee is responsible for leading the decision-making, and the subordinate units and business divisions are responsible for the specific implementation, thus forming a working situation of joint management.



# 利益相关方沟通

## COMMUNICATION WITH STAKEHOLDERS

中国交建通过征集投资者意见建议、邀请利益相关方参加社会责任 /ESG 沟通会议、召开新闻发布会等方式，积极与利益相关方加强沟通，并在官方网站设置“社会责任”“投资者关系”专栏，提升利益相关方获取 ESG 信息的便捷性，有效强化 ESG 信息披露。

2022 年，公司修订《信息披露及重大信息内部报告管理办法》《内幕信息管理制度》《股东及董事、监事和高级管理人员持股变动管理制度》《投资者关系管理办法》4 项制度，有效提升投资者关系管理水平，规范信息披露行为；参与中国企业改革与发展研究会《企业 ESG 评价体系》《企业 ESG 披露指南》，中国质量协会《企业 ESG 评价指南》等团体标准的制定，其中《企业 ESG 披露指南》团体标准于 2022 年 6 月 1 日正式发布，填补了中国企业 ESG 披露标准领域的空白。

China Communications Construction actively strengthens communication with stakeholders by soliciting investors' opinions and suggestions, inviting stakeholders to participate in social responsibility/ESG communication meetings and holding press conferences, and also sets up "social responsibility" and "investor relations" columns on its official website to improve the convenience of stakeholders' access to ESG information and effectively strengthen ESG information disclosure.

In 2022, the company revised 4 systems, namely Measures for the Administration of Information Disclosure and Internal Reporting of Important Information, Insider Information Management System, Management System of Change in Shares by Shareholders, Directors, Supervisors and Senior Managers, and Measures for the Administration of Investor Relations, effectively improving the level of investor relations management and standardizing information disclosure behaviors; It participated in the formulation of group standards such as Corporate ESG Evaluation System, Guidelines to Corporate ESG Disclosure and Guidelines to Corporate ESG Evaluation for the China Association for Quality, among which the group standard Guidelines to Corporate ESG Disclosure was officially released on June 1, 2022, filling the gap in the field of corporate ESG disclosure standards in China.

| 利益相关方<br>Stakeholders                  | 监管机构<br>(国务院国资委)<br>Regulatory authority<br>(State-owned Assets<br>Supervision and<br>Administration Commission<br>of the State Council)  | 各级政府<br>(所在地政府)<br>Government at all levels<br>(Local Government)  | 股东<br>Shareholders  | 业主和客户<br>Owners and customers   | 供应商<br>Supplier  | 员工<br>Employee   | 社区与公众<br>Community and the public   | NGO 等第三方机构<br>NGO and other third-party<br>organizations   |
|--|---|--|---|---|--|--|---|--|
| 沟通机制<br>和形式                            | 落实各类文件和会议精神<br>对口部门业务沟通<br>工作汇报、报告和报表   | 专题会议汇报<br>和信息报送<br>战略合作<br>高端商务会谈  | 定期或临时报告<br>股东大会、书面通知<br>投资者见面会  | 合同执行<br>拜访、会议沟通<br>文件函电来往<br>业主评价与管理  | 招投标、商业谈判<br>合同执行<br>和业务函电沟通  | 职工监事、职代会<br>征求合理化建议<br>培训会议<br>日常工作沟通  | 各种形式交流、慰问<br>参与社会公益活动   | 保持密切联系<br>与信息共享<br>开展合作  |
| Communication<br>mechanism and<br>form | Implementing the spirit of<br>various documents and<br>meetings<br>Communication with the<br>counterpart department in<br>business<br>Work reporting, reports<br>and statements   | Special meeting reporting<br>and information reporting<br>Strategic cooperation<br>High-end business<br>negotiation  | Periodic or interim<br>reporting<br>Shareholders' meeting,<br>written notice<br>Investor meet-and-greet       | Contract execution<br>Visit and conference<br>communication<br>Document correspondence<br>Owner evaluation and<br>management                                      | Bidding, tendering and<br>commercial negotiation<br>Contract execution<br>and business<br>correspondence<br>communication          | Employee supervisor and<br>workers' congress<br>Asking for reasonable<br>suggestions<br>Training meeting<br>Daily work communication         | Various forms of<br>communication and<br>sympathy<br>Participating in public<br>service activities  | Maintaining close contact and<br>information sharing<br>Developing cooperation                           |
| 公司回应                                   | 综合考核 A 类<br>提升企业管控能力<br>承担企业社会责任<br>参与各类责任活动  | 遵守法律法规<br>执行国家政策<br>依法诚信经营<br>践行廉洁从业<br>签署战略合作协议   | 保持稳定盈利<br>维护股东权益<br>保持良好的信用等级   | 确保 100% 的履约率<br>和交工合格率<br>持续的技术工艺<br>和产品创新<br>提供满意服务  | 坚持诚信、互利<br>和平等协商原则<br>保持良好合作关系   | 稳定薪酬激励<br>保障员工权益<br>关注员工发展<br>开展各类活动   | 环境保护、文明共建<br>支持所在地社会和谐发展<br>公益捐赠  | 参与和组织<br>社会贡献活动<br>保持沟通渠道畅通  |
| Company<br>response                    | Grade A comprehensive<br>assessment<br>Improving the management<br>and control ability of<br>enterprises<br>Undertaking the corporate<br>social responsibility<br>Participating in various<br>responsibility activities | Compliance with laws and<br>regulations<br>Executing the national<br>policy<br>Law-based integrity<br>management<br>Clean practice<br>Signing a strategic<br>cooperation agreement | Maintaining stable<br>profit<br>Safeguarding<br>shareholders' equities<br>Maintaining a good<br>credit rating | Ensuring 100% performance<br>rate and qualified delivery rate<br>Continuous technological<br>process and product<br>innovation<br>Providing satisfactory services | Adhering to the principles of<br>good faith, mutual benefit<br>and equal consultation<br>Maintaining good cooperative<br>relations | Stable salary incentive<br>Protecting employees'<br>rights and interests<br>Focus on staff development<br>Implementing various<br>activities | Environmental protection<br>and civilization co-<br>construction<br>Supporting the social<br>harmonious development<br>of the area<br>Public welfare donation | Participate in and organize<br>social contribution activities<br>Keep the communication<br>channels open |

# 实质性议题识别

## SUBSTANTIVE TOPIC IDENTIFICATION

### 议题识别

#### TOPIC IDENTIFICATION

中国交建根据国家宏观政策、行业发展形势、监管机构指引、国内外 ESG 评价标准、相关方意见等，并结合公司战略方针不断更新完善 ESG 议题库。按照内容性质，将议题分为管治、社会和环境三大类，共计 37 项。

China Communications Construction updates and improves the ESG topic database unceasingly according to national macro policies, industry development situation, guidance of regulatory agencies, domestic and foreign ESG evaluation standards, opinions of relevant parties, etc. and in combination with the corporate strategic concept. The topics are divided into three categories: governance, society and environment according to the nature of content, involving 37 items.

|             |   |
|-------------|---|
| <b>管治议题</b> | <ol style="list-style-type: none"> <li>1. 责任战略</li> <li>2. ESG 管理</li> <li>3. ESG 培训</li> <li>4. 利益相关方沟通</li> <li>5. 服务国家战略</li> <li>6. 加强党的建设</li> <li>7. 风险管理与内部控制</li> <li>8. 禁止商业贿赂及腐败</li> <li>9. 投资者关系管理</li> </ol> |
|-------------|---|

|             |  |
|-------------|--|
| <b>社会议题</b> | <ol style="list-style-type: none"> <li>10. 质量管理</li> <li>11. 客户权益保障</li> <li>12. 科技创新</li> <li>13. 知识产权保护</li> <li>14. 供应商管理</li> <li>15. 推动承包商 / 分包商履行社会责任</li> <li>16. 进城务工人员权益保障</li> <li>17. 产业链协同</li> <li>18. 保障员工合法权益</li> <li>19. 职业健康安全</li> <li>20. 工作生活平衡</li> <li>21. 困难员工帮扶</li> <li>22. 公益慈善</li> <li>23. 员工志愿者活动</li> <li>24. 海外履责</li> <li>25. 乡村振兴</li> <li>26. 支援抗疫</li> <li>27. 抢险救灾</li> </ol> |
|-------------|--|

|             |   |
|-------------|---|
| <b>环境议题</b> | <ol style="list-style-type: none"> <li>28. 建立环境管理体系</li> <li>29. 节约资源</li> <li>30. 发展循环经济</li> <li>31. 绿色施工及生态保护</li> <li>32. 排放物管理</li> <li>33. 应对气候变化</li> <li>34. 环保教育宣传</li> <li>35. 生物多样性保护</li> <li>36. 绿色办公</li> <li>37. 海外环境保护</li> </ol> |
|-------------|---|

|                         |   |
|-------------------------|---|
| <b>Governance topic</b> | <ol style="list-style-type: none"> <li>1. Responsibility strategy</li> <li>2. ESG management</li> <li>3. ESG training</li> <li>4. Communication with stakeholders</li> <li>5. Serving the national strategy</li> <li>6. Strengthening the construction of the Party</li> <li>7. Risk management and internal control</li> <li>8. Prohibiting commercial bribery and corruption</li> <li>9. Investor relations management</li> </ol> |
|-------------------------|---|

|                            |   |
|----------------------------|---|
| <b>Environmental topic</b> | <ol style="list-style-type: none"> <li>28. Establishing an environmental management system</li> <li>29. Saving resources</li> <li>30. Developing the circular economy</li> <li>31. Green construction and ecological protection</li> <li>32. Emissions management</li> <li>33. Tackling climate change</li> <li>34. Environmental education propaganda</li> <li>35. Biodiversity protection</li> <li>36. Green office</li> <li>37. Overseas environmental protection</li> </ol> |
|----------------------------|---|

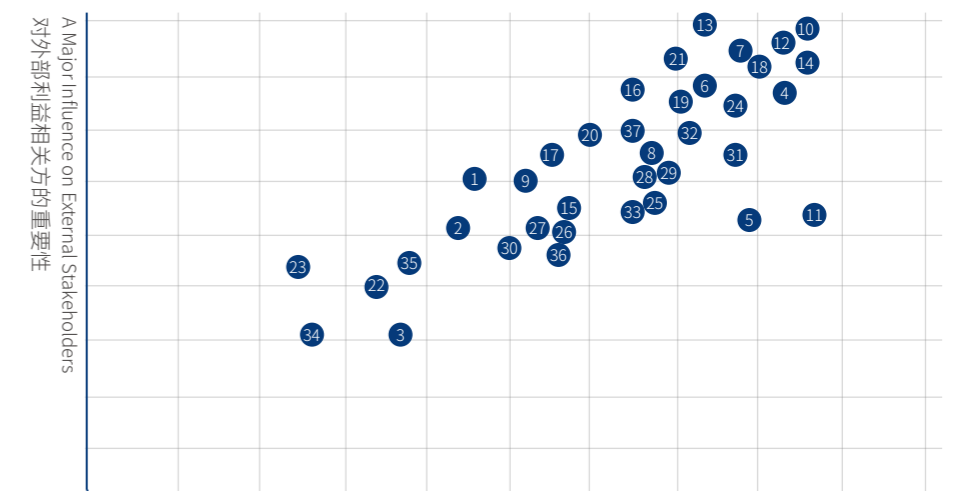
|                     |  |
|---------------------|--|
| <b>Social topic</b> | <ol style="list-style-type: none"> <li>10. Quality management</li> <li>11. Guarantee of customer rights and interests</li> <li>12. Scientific and technological innovation</li> <li>13. Intellectual property protection</li> <li>14. Supplier management</li> <li>15. Promoting the fulfillment of social responsibility among contractors subcontractors</li> <li>16. Guarantee of rights and interests of migrant workers</li> <li>17. Industry chain collaboration</li> <li>18. Protecting the legitimate rights and interests of employees</li> <li>19. Occupational health and safety</li> <li>20. Work and life balance</li> <li>21. Helping employees in difficulties</li> <li>22. Public charity</li> <li>23. Employee volunteer activity</li> <li>24. Overseas execution of duties</li> <li>25. Rural revitalization</li> <li>26. Supporting the fight against COVID-19</li> <li>27. Rescue and relief work</li> </ol> |
|---------------------|--|

### 议题分析

#### TOPIC ANALYSIS

中国交建邀请各利益相关方评价 37 项议题的重要程度，共回收问卷 910 份，结合外部专业机构的分析研判，构建“对外部利益相关方的重要性”和“对中国交建可持续发展的重要性”二维矩阵模型，识别出公司的实质性 ESG 议题，用以指导公司准确、全面地披露环境、社会与管治相关信息。

实质性议题分析二维矩阵  
Two-dimensional matrix for substantive topic analysis



对中国交建可持续发展的重要性  
A Major Influence on the Sustainable Development of China Communications Construction

China Communications Construction invited stakeholders to evaluate the importance of 37 topics and collected 910 questionnaires. Based on the analysis and assessment of external professional institutions, it built a two-dimensional matrix model of "importance to external stakeholders" and "importance to the sustainable development of China Communications Construction" to identify the company's substantive ESG topics to guide the company to accurately and comprehensively disclose environmental, social and governance information.

# ESG 荣誉

## ESG HONORS

2022 年，公司积极申报权威机构评级，获评 Wind ESG 评级“A 级”、福布斯“2022 中国 ESG50 强”“中国 ESG 优秀企业 500 强”。

In 2022, the company actively applied for the rating of authorities, and was honored as the Wind ESG Rating "A", Forbes "2022 China ESG Top 50" and "China ESG Top 500 Excellent Enterprises".

### 2022 年 4 月 In April 2022

荣获“第五届中国新财富最佳 IR 港股公司 (A+H 股)”称号  
金圆桌奖·公司治理特别贡献奖  
最具战略眼光董事长奖、董秘好助手奖

it won the title of "the Fifth New Fortune Best IR Hong Kong Listed Company (A+H Shares)", the Gold Prize of Round Table • Special Contribution Award to Corporate Governance, the Most Strategic Vision Chairman Award, and the Good Board Secretary Assistant Award

### 2022 年 6 月 In June 2022

获评《机构投资者》杂志  
“2022 年度亚洲区公司最佳管理团队”

it was honored as the "2022 All-Asia Executive Team" by the Institutional Investor magazine

### 2022 年 9 月 In September 2022

连续第 9 年获评  
上交所上市公司信息披露 A 级评价

it was awarded Grade A evaluation of information disclosure of listed companies on Shanghai Stock Exchange for the ninth consecutive year

### 2022 年 11 月 In November 2022

成功入选 2022 年“央企 ESG·先锋 50 指数”  
“央企 ESG·风险管理先锋 50 指数”  
“央企 ESG·社会价值先锋 50 指数”

it was successfully selected into 2022 "Central Enterprises ESG•Pioneer 50 Index", "Central Enterprises ESG•Risk Management Pioneer 50 Index", "Central Enterprises ESG•Social Value Pioneer 50 Index"

荣获中国在非企业社会责任联盟  
“‘百企千村’十大综合经典案例”和  
“保护生态环境专项案例”

it won the "Top 10 Comprehensive Classic Cases of 100 Enterprises for 1000 Villages" and "Special Case of Ecological Environment Protection" of the Alliance of Chinese Business in Africa for Social Responsibilities.

荣获中国社会责任百人论坛  
“2022 责任金牛奖”之“责任企业奖”

it won the "Responsible Enterprise Award" of the "2022 Responsibility Golden Bull Award" of China Social Responsibility 100 Forum

中国交建案例  
《中国交建：提升 ESG 治理水平推动企业可持续高质量发展》  
入选《中央企业上市公司环境、  
社会及治理 (ESG) 蓝皮书 (2022)》

the China Communications Construction case China Communications Construction: Improve the ESG Governance Level and Promote Sustainable and High-quality Development of the Enterprise was included into the Blue Book on Environmental, Social and Governance (ESG) of Listed Companies under the Chinese Central State-owned Enterprises (2022)

### 2022 年 12 月 In December 2022

荣获“中国上市公司百强奖”  
之“企业奖”和“卓越董秘奖”

it won the "Enterprise Award" and "Excellent Board Secretary Award" of "China Business Top 100 Award"

荣获中国证券报金牛奖之  
“最佳投资者关系奖”

it won the "Best Investor Relations Award" of the Golden Bull Award of China Securities Journal

荣获中国上市公司协会  
“2022 年度上市公司董办最佳实践”案例、  
“ESG 优秀实践案例”

it won the "2022 Best Practice of Office of the Board of Directors of Listed Companies" Case and "ESG Excellent Practice Case" of China Association for Public Companies

荣获北上协“北京上市公司投资者  
关系管理优秀实践”案例

it won the "Excellent Practice of Investor Relations Management of Listed Companies in Beijing" Case of the List Companies Association of Beijing

荣获“2022 上市公司董事会秘书  
履责评价”5A 评级

it won the 5A rating of "2022 Board Secretary Performance Evaluation of Listed Companies"

荣获 2022 年中国品牌创新优秀案例  
和 2022 年企业社会责任优秀案例

it won the 2022 Excellent Case of China Brand Innovation and 2022 Excellent Case of Corporate Social Responsibility

入选“央企责任管理·先锋 30 指数”

it was selected into the "Central Enterprises Responsibility Management • Pioneer 30 Index"

获评“第 12 届中国证券金紫荆奖”  
之“最佳投资者关系管理上市公司”

it won the "Best Investor Relations Management Listed Company" of the "12th Golden Bauhinia Awards of China Securities"

### 2023 年 1 月 In January 2023

中国交建 7 个案例获评  
“新华信用金兰杯”ESG 优秀案例

7 cases of China Communications Construction were honored as "Xinhua Credit Golden Orchid Cup" ESG Excellent Case



中国上市公司协会 2022 年度上市公司董办最佳实践案例  
2022 Best Practice of Office of the Board of Directors of Listed Companies" Case of China Association for Public Companies



荣获“第三届全球减贫案例征集活动”最佳减贫案例  
It won the Best Poverty Reduction Case in the "Global Solicitation on Best Poverty Reduction Practices (Third Call)"



“第 12 届中国证券金紫荆奖”之“最佳投资者关系管理上市公司”  
"Best Investor Relations Management Listed Company" of the "12th Golden Bauhinia Awards of China Securities"



入选“央企责任管理·先锋 30 指数”  
The company was selected into the "Central Enterprises Responsibility Management • Pioneer 30 Index"

# 专题一 TOPIC I



“ 巩固优势产业领先地位，在关系安全发展的领域加快补齐短板，提升战略性资源供应保障能力。

——摘自党的二十大报告

We will consolidate our leading position in industries where we excel, work faster to shore up weaknesses in sectors vital to China's development security, and improve our capacity for securing the supply of strategic resources

——Extracted from the report of the 20th National Congress of the Communist Party of China

”

## “交”五洲四海 聚链成势共助行业高质量发展

"EXPAND BUSINESS" ALL OVER THE WORLD  
AND GATHER CHAINS TO HELP THE HIGH-  
QUALITY DEVELOPMENT OF THE INDUSTRY

维护产业链供应链安全稳定，增强产业链供应链韧性和自主可控能力，是国家安全的重要组成部分、统筹发展和安全的应有之义，也是构建新发展格局的必然要求。中国交建以“搭建平台、聚合资源、优势互补、共同发展”为宗旨，深化产业链、供应链与分包链“三链”协同管理，优化资源配置，在服务国家战略中彰显“中交担当”。

Maintaining the security and stability of industrial chain and supply chain and enhancing their resilience and autonomous and controllable ability are an important part of national security, an integral component of overall development and security, and also an inevitable requirement for building a new development pattern. China Communications Construction aims to "build a platform, aggregate resources, complement each other's advantages and achieve common development", deepens the coordinated management of the industrial chain, supply chain and subcontracting chain, optimizes resource allocation, and demonstrates its "responsibility" in serving the national strategy.

## 肩扛链长重担，支撑产业链条

### SHOULDER THE HEAVY BURDEN OF THE CHAIN LENGTH AND SUPPORT THE INDUSTRIAL CHAIN

中国交建以“补短板锻长板”稳定强化产业链，融通全产业链资源要素，不断提高全产业链稳定性与可持续性，加快打造引领现代综合交通和城市高质量发展的现代产业链链长，提升国家战略实施能力。

China Communications Construction stabilizes and strengthens the industrial chain through "shoring up weaknesses and improving strengths", integrates the resource elements of the full industrial chain, constantly improves the stability and sustainability of the full industrial chain, accelerates the building of the chain length of modern industrial chain leading modern comprehensive transportation and high-quality urban development, and enhances the ability to support national strategies.

#### 方向明确：紧扣产业链发展要务

##### CLEAR DIRECTION FOCUS ON THE DEVELOPMENT AFFAIRS OF THE INDUSTRIAL CHAIN

中国交建坚持从国家战略大局、产业链整体发展的角度思考问题、推进工作，为打造现代产业链链长提供坚强的政治保证，确保方向正确“不偏航”；梳理绘制各产业链图谱，明确产业链边界范围和关键环节，强化使命担当意识；以链长企业为核心、以市场化经营机制为基础、以国家政策为支撑，强化产业链各环节参与者的大局意识和整体意识；以产业链整体利益最大化为出发点，牵头做好产业链资源协同和共享，带动链条上中下游、大中小企业融通创新、协同发展。

China Communications Construction keeps thinking about problems and promoting work from the perspective of the overall national strategy and the overall development of the industrial chain and provides a strong political guarantee for building the "chain length" of modern industrial chain, thus ensuring the right and "non-yawing" direction; It sorts out and draws the atlas of all industrial chains, clarifies the boundary range and key links of the industrial chain, and strengthens its mission; Cored by chain length enterprises, based on the market-based management mechanism and supported by national policies, it strengthens the overall and integral awareness of participants in all links of the industrial chain; With maximizing the overall interests of the industrial chain as the starting point, it takes the lead in coordinating and sharing industrial chain resources, and drives integrated innovation and coordinated development of the upstream, midstream and downstream large, small and medium-sized enterprises.

#### 机制保障：有序推进产业链工作

##### MECHANISM GUARANTEE: PROMOTE THE INDUSTRIAL CHAIN WORK ORDERLY

公司组建由党委书记、董事长担任组长的现代产业链建设领导小组，由公司总部有关部门组成的专项工作小组，实行产业链常态化管理。定期对相关任务的责任主体开展产业链融合发展工作情况调研、分析与总结工作，强化全过程跟踪管理。通过定期召开领导小组会，完善长效化工作推进机制，持续引导各单位、各部门做好产业链融合发展工作。

The company has a leading group of modern industrial chain construction with the Secretary of the Party Committee and the chairman as the leader, and a special working group consists of the relevant departments of the company headquarters and implements the normal management of the industrial chain. It regularly conducts investigation, analysis and summary of the integrative development of industrial chain for the responsibility subjects of relevant tasks, and strengthens the whole process track management. It improves the long-term work promotion mechanism by regularly holding the leading group meeting and continues to guide all units and departments to do the integrative development of industrial chain well.

#### 分级分类建设产业链链长

##### BUILD THE CHAIN LENGTH OF INDUSTRIAL CHAIN BY CATEGORY AND AT DIFFERENT LEVELS

聚焦核心优势产业，集全公司之力打造国家级产业链链长。

Focus on core advantage industries and build the chain length of the national industrial chain with the power of the whole company.

瞄准产业未来发展方向，以所属二级企业为平台打造行业级产业链链长。

Aim at the future development direction of the industry and build the chain length of industrial chain with the platform of its secondary enterprises.

围绕“链核”和关键“链环”，以所属三级企业为平台培育产业链链长后备军，并根据各级产业链建设推进情况进行动态调整。

Around the "chain core" and key "chain link", it cultivates reserves of chain length of industrial chain with the platform of its tertiary enterprises, and makes dynamic adjustments according to the progress of construction of industrial chains at all levels.

#### 担当善为：构建安全韧性产业链

##### RESPONSIBILITY FULFILMENT: BUILD A SAFE AND FLEXIBLE INDUSTRIAL CHAIN

中国交建充分发挥优势，突出主业、做精专业，推动产业向价值链中高端延伸，大力拓展前瞻性战略性新兴产业；在产业链主要短板和“卡脖子”环节，加大自主研发力度和国产产品服务使用比例，加强供应链管理和战略性储备；充分利用国家级科技创新平台，牵头建立全产业链、跨领域协同创新机制和技术发展联盟，打造产业链创新联合体，推动产业链与创新链深度融合；在内部选择、重点培育一批专精特新企业和单项冠军企业，对外加大对关键“链环”“链辅”企业的支持，构建产业链发展生态圈。

China Communications Construction gives full play to its advantages, highlights its main business, specializes in professional fields, promotes the extension of industries to the middle and high end of the value chain, and vigorously expands forward-looking strategic

emerging industries; It strengthens independent research and development and the use ratio of domestic products and services, and strengthens supply chain management and strategic reserves in the main weakness and "bottleneck" links of the industrial chain; It makes full use of the national science and technology innovation platform, takes the lead in the establishment of the full industrial chain, cross-field collaborative innovation mechanism and technology development alliance, builds an industrial chain innovation consortium to promote the deep integration of industrial chain and innovation chain; It selects and focuses on cultivating a batch of specialized, sophisticated, distinctive and new enterprises and individual champion enterprises internally, increases support for key "chain link" and "chain auxiliary" enterprises externally and builds an ecosystem for industrial chain development.



由公规院主持设计、二航局参与投资建设的鱼梁洲隧道实现沉管隧道建设全产业链国产化

Yuliangzhou tunnel invested by CCCC Highway Consultants Co., Ltd., CCCC Second Harbor Engineering Company Ltd. realizes the domestication of the full industrial chain of immersed tube tunnel construction

## 创新采购管理，塑强供应链条

### INNOVATE PROCUREMENT MANAGEMENT AND SHAPE THE SUPPLY CHAIN

中国交建坚持“供应链总成本最优”原则，围绕“创新、协同、安全、绿色、智慧”五位一体供应链战略思路，抓实“上线率、集中度、支付保障、海外供应链、供应、合规、制度及评价体系、信息化支撑、绿色供应链”九大任务，全面建设新时代供应链管理与发展体系。

China Communications Construction adheres to the principle of "optimal total supply chain cost" and takes real actions in nine tasks of "launch rate, concentration degree, payment guarantee, overseas supply chain, supply, compliance, system and evaluation system, information support and green supply chain" around the five-sphere integrated supply chain strategy idea of "innovation, collaboration, safety, green and wisdom" to build a supply chain management and development system for the new era in all respects.

#### 深推数字集采

#### DEEPLY PROMOTE THE DIGITAL CENTRALIZED PROCUREMENT

公司持续提升供应链系统所属单位覆盖率和全球项目上线率，通过业财协同推进，全面掌控采购数据，有效解决“不上线、不集采、不签合同、不履约”等问题，新增水上燃油集采竞拍、集采数据动态监控等集采功能，提升产业链协同能力；完成供应链控制子平台开发建设，上线驾驶舱大屏、风险控制看板、报表等功能，实现管控自动化。

The company continues to increase the coverage rate of the supply chain system in units and the launch rate of global projects. Upon the collaborative promotion of business and finance, the company controls the procurement data to effectively solve the problems of "no launch, no centralized procurement, no contract signing, no performance"; It adds centralized procurement functions such as water fuel centralized procurement auction, centralized procurement data dynamic monitoring to improve the collaborative capacity of industrial chain; It has completed the development and construction of the supply chain control sub-platform and launched the cockpit screen, risk control Kanban, reports and other functions, thus realizing the automated management and control.

供应链系统覆盖

47 家二级单位

611 家三级单位

7,506 个项目部

The supply chain system covers

47 secondary units,

611 tertiary units and

7,506 project departments worldwide

电子采购金额 3,626 亿元

同比增长 30.3%

The e-procurement amount is RMB

362.6 billion

with a year-on-year increase of

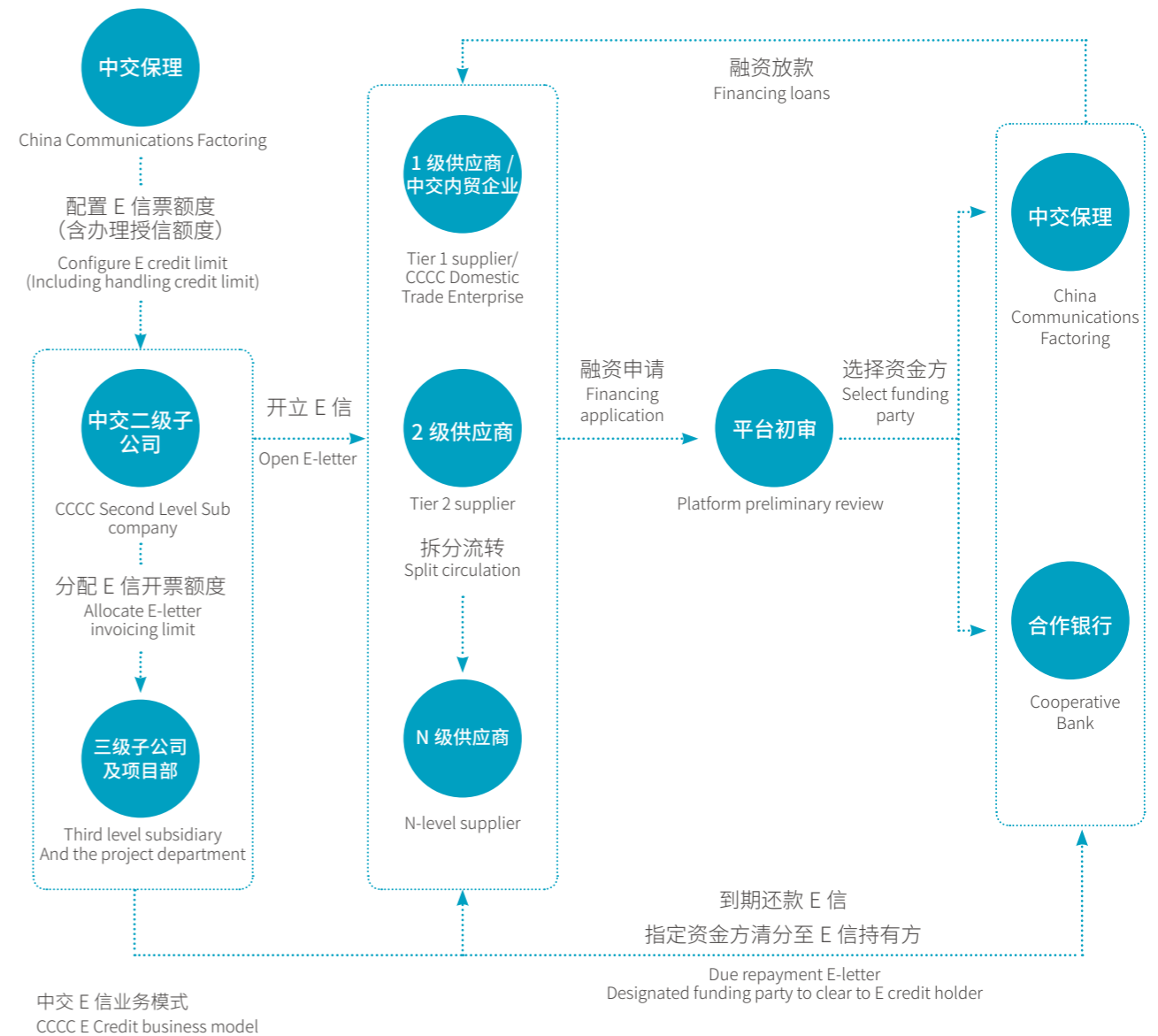
30.3%

## 探索供应链金融

### EXPLORE THE SUPPLY CHAIN FINANCE

公司依托信用、资金和产业链资源优势，组建建筑央企最大的供应链金融平台公司——中交商业保理有限公司，围绕“以融促产、服务主业”的发展定位，开展供应链金融（“中交 E 信”）业务，发挥公司成员单位作为供应链核心企业的带动辐射作用，通过开立“中交 E 信”电子债权债务凭证，为上下游中小微企业提供供应链融资支持，降低供应链融资成本，有效提升供应商的稳定性和服务质量。

Relying on the advantages of credit, capital and industrial chain resources, the largest supply chain finance platform company established by central construction enterprises - CCCC Commercial Factoring Co., Ltd. Around the development orientation of "promoting production through finance and serving the main business", the company conducts the supply chain finance ("CCCC E Credit") business, and realizes the leading and radiating role of its member units as the core enterprises in the supply chain, provides e-commerce draft financing support for upstream and downstream enterprises, strengthens payment guarantee for private and small and medium-sized enterprises, and effectively improves the stability and service quality of suppliers.





## 拓展战略采购合作

### EXPAND STRATEGIC PROCUREMENT COOPERATION

公司积极整合行业龙头资源，与中国建材集团、建龙集团等行业知名品牌签订战略合作协议，提升采购降本增效能力；牵头联合建筑业央企共同发起中国建筑业供应链合作发展联盟，全面支撑成员企业供应链建设，带动供应链上下游企业强化供需对接与交流，打造平等互信、互利互惠的利益共同体，共同维护建筑业供应链稳定。

The company actively integrates leading resources in the industry, and has signed strategic cooperation agreements with well-known brands in the industry such as China National Building Material Group and Jianlong Group to reduce the procurement cost and increase efficiency; It leads Chinese central state-owned enterprises in the construction industry to jointly launch China Construction Supply Chain Cooperation and Development Alliance, comprehensively supports the construction of supply chain of member enterprises, drives upstream and downstream enterprises in the supply chain to strengthen supply and demand connection and exchange, builds a community of shared interests of equality and mutual benefit and reciprocity, and jointly maintains the stability of the supply chain in the construction industry.



中国建筑业供应链合作发展联盟成立大会  
China Construction Supply Chain Cooperation and Development Alliance Establishment Conference

## 打造负责的供应链

### BUILD RESPONSIBLE SUPPLY CHAINS

公司建立全品类、海内外一体化供应商网络，依据不同采购主体，对供应商实行分级、分类管理。坚持责任采购、绿色采购，打造公开透明的采购平台，加强采购人员商业道德和能力建设，构建合规、风险可控的供应链管理体系；培育优选供方，与供应商共同签署反腐倡廉倡议，在供应商审查管理上实行分级审批、推荐考核评价制度，并实现“全生命周期”管理。

The company establishes a full-category, domestic and overseas integrated supplier network, and practices classified administration of suppliers at different levels according to different procurement subjects. It adheres to responsible procurement and green procurement, builds an open and transparent procurement platform, strengthens the business ethics and capacity building of procurement personnel, and builds a compliant supply chain management system with controllable risks; It cultivates preferred suppliers, signs the anti-corruption initiative with suppliers, implements graded examination and approval, recommendation, assessment and evaluation system in the supplier review and management, and realizes the "full life cycle" management.



三航局队和中国港湾队包揽 TFC 全球供应链大赛冠军亚军  
The teams of CCCC Third Harbor Engineering Co., Ltd. and China Harbour won the champion and runner-up of TFC global supply chain competition

## 优化生态，整合分包链条

### OPTIMIZE THE ECOLOGY AND INTEGRATE THE SUBCONTRACTING CHAIN

中国交建建立健全“严格准入、资源共享、公开透明、过程受控、智能运维、合作共赢”的分包管理体系，优化调配分包商资源，提升管控精细化、标准化和信息化，推动形成“运作规范、服务优质、竞争充分、优胜劣汰”的分包链，为项目建设增值，为企业发展提质。

China Communications Construction establishes a perfect subcontracting management system of "strict access, resource sharing, openness and transparency, process control, intelligent operation and maintenance, and win-win cooperation", optimizes the allocation of subcontractor resources, improves the refined, standardized and information management and control, promotes the formation of a subcontracting chain of "standardized operation, quality service, full competition, survival of the fittest", so as to add value to project construction and improve the quality of enterprise development.

#### 严格准入管理，把好“选择关”

##### STRICTLY IMPLEMENT ACCESS MANAGEMENT AND MAKE FINAL CHECK ON SELECTION

公司规定各企业现有合格分包商均须进入分包商资源库，按照《中交集团暨中国交建分包商管理指导意见》的准入标准，采用“双准入”机制，对分包商及分包现场管理人员实行准入管理，同时从资质管理、过程管控、考核评价等方面探索长效机制，强化分包商主体责任，增强分包商履约意识，培育优质分包商，并在全公司范围内共享。

The company stipulates that all existing qualified subcontractors must enter the subcontractor resource database. According to the access standards of Guidance for China Communications Construction Group & China Communications Construction Subcontractor Management, the company adopts the "double access" mechanism to implement access management for subcontractors and on-site subcontracting management personnel and meanwhile it explores a long-term mechanism in terms of qualification management, process control, assessment and evaluation, strengthens the entity responsibility of subcontractors, enhances the sense of performance of subcontractors, cultivates quality subcontractors, and shares them throughout the company.

#### 加强线上采购，把好“质量关”

##### STRENGTHEN ONLINE PROCUREMENT AND STRICTLY CONTROL QUALITY

公司建立分包电子化采购系统，从严执行分包在线采购，提高数据的完整性和全面性；按照“统一标准、统一编码、统一平台”的原则，推进分包管理要求嵌入信息化管理系统，确保制度和流程的刚性执行；结合分包商资源库，筛选优质服务商，杜绝与“黑名单”队伍的合作，确保对分包资源“红线”的管控。2022年，施工企业的分包线上采购占比超过80%。

The company establishes an electronic subcontracting procurement system, strictly implements online subcontracting procurement and improves the integrity and comprehensiveness of the data; In line with the principle of "unified standard, unified coding and unified platform", the company promotes the embedding of subcontracting management requirements in the information management system to ensure the rigid implementation of the system and process; Based on the subcontractor resource database, the company screens the quality service providers, eliminates cooperation with the "blacklist" team to ensure the control of the "red line" of subcontractor resources. In 2022, the online procurement of subcontracting by construction enterprises accounted for over 80%.



菲律宾迪格宁燃煤电厂配套码头一期工程  
Phase I Project of Ancillary Terminal, Digenin Coal-fired Power Plant, the Philippines

#### 强化过程管理，把好“细节关”

##### STRENGTHEN THE PROGRESS MANAGEMENT AND STRICTLY CONTROL DETAILS

公司严格执行开工前必须签订分包合同，强化合同管理，保证分包商的合法权益，防范工程分包风险；遵循“无合同不结算、无结算不支付”原则，强化过程监管，规避超计量、超支付等问题；研究建立分包实行限价管理机制，杜绝随意变更；严格分包采购申请审批，强化分包商清退管理，助力项目优质履约。

The company strictly implements the rule that subcontracts must be signed before commencement of works, strengthens contract management, guarantees the legitimate rights and interests of subcontractors, and prevents the project subcontracting risks; It follows the principles of "no settlement without contract, no payment without settlement" and strengthens process supervision to avoid problems of overmeasurement, overpayment, etc.; It studies and establishes the price limit management mechanism for subcontracting to prevent random changes; It strictly examines and approves subcontracting procurement applications, strengthen the management of subcontractors' withdrawal, and helps the quality performance of projects.

#### 完善评价机制，把好“责任关”

##### PERFECT THE EVALUATION MECHANISM AND UNDERTAKE THE DUE OBLIGATIONS

公司定期开展涵盖进度、安全、质量、环保等内容的分包商信用评价，严格执行正反激励标准，充分调动分包商竞争机制，实现优胜劣汰。此外，开展分包管理体系运转情况评估，动态调整体系指标，促进分包管理提升。2022年3月，公司分包管理系统正式上线运行，实现对分包企业全过程动态、量化管理和有效控制，显著提升管理效率。

The company regularly conducts subcontractor credit evaluation covering progress, safety, quality, environmental protection, etc., strictly implements positive and negative incentive standards and fully mobilizes the subcontractor competition mechanism to realize survival of the fittest. Moreover, it should carry out a subcontracting management system operation elevation, and make a dynamic adjustment of the system indicators, to promote the improvement of the subcontracting management. In March 2022, the company officially put the subcontracting management system into the operation, to realize dynamic and quantitative management and effective control of the subcontracted companies in the whole process and also to significantly improve the management efficiency.

## 专题二 TOPIC II



中交泸水希望学校封顶  
The CCCCLushui Hope School is Capped

“ 全面推进乡村振兴，坚持农业农村优先发展，巩固拓展脱贫攻坚成果，加快建设农业强国，扎实推动乡村产业、人才、文化、生态、组织振兴。

——摘自党的二十大报告

Push forward all-round rural vitalization; adhere to put the agriculture and rural areas to the priority status; consolidate and develop the poverty elimination achievements; move faster to build up China's strength in agriculture and steadily promote the revitalization of businesses, talent, culture, ecosystems and organizations.

——Extracted from the Report to the 20th National Congress of the Communist Party of China

”

## “建”复兴大道 鱼渔双授共促乡村可持续富饶

"BUILD" A ROAD TO REVIVAL  
BOTH TEACHING FISHING AND GIVING FISHES  
PROMOTE SUSTAINABLE RURAL DEVELOPMENT  
AND PROSPERITY

中国交建始终牢记习近平总书记“让脱贫群众生活更上一层楼”的嘱托，积极扛鼎央企责任，接续落实好“四个不摘”“四大衔接”“三个确保”，切实扎牢“351”定点帮扶工作体系，投入真金白银、倾注真情实意，为实现全体人民共同富裕的中国式现代化贡献了中交智慧和力量。

2022 年，公司以助力全面乡村振兴为目标，以擦亮“中交助梦”责任品牌为主线，以“短期帮扶就业、中期帮扶产业、长期帮扶教育”为总体安排，聚焦产业、人才、文化、生态、组织“五个振兴”，全面打造“有产业、有思想、有乡愁、有颜值、有活力”的“五有乡村”，有力促进了帮扶地区产业兴、乡村美、村民富。公司定点帮扶工作连续 4 年获得最高等次“好”的评价，位居中央企业前 10%。

China Communications Construction has always remembered General Secretary Xi Jinping's instruction of "Take the Life of Poverty Alleviated People to a Higher Level", has actively taken its responsibilities as a central enterprise, has continued to implement the "Poverty Relief Responsibilities, Policies, Assistance, and Monitoring", "Four Links" and "Three Guarantees", practically solidify "351" designated-point assistance work system, and invest money and emotion, to make a contribution to Chinese-type modernization in the wisdom and strength to realize prosperity for all people.

In 2022, the company focused on the "Revitalization" of industries, talents, culture, ecologies and organization to fully build a "Good Village" with industries, ideals, nostalgia, good looking and vitality, taking the goal of overall rural revitalization, taking the "Build Your Future Dream" as a main line and taking the "Help Employment in Short Term, Help Industries in Middle Term, and Help Education in Long Term" as an overall arrangement. Hence, it has effectively promoted the industrial prosperity, beautiful villages and wealthy life of the assisted area. The company's designated point assistance work has won the highest grade "Good" elevation and ranks the top 10% of the central enterprises.

## 见证真情·用心用情用力

WITNESS THE TRUTH • WORK WITH HEART, FEELINGS AND EFFORTS

全年向定点帮扶地区投入无偿帮扶资金

2.66 亿元

Invest help fund of RMB **266** million  
free of charge in the designated points annually培训县乡村基层干部 **7,914** 名Train **7,914** grass-roots cadres of countries and villages实施帮扶项目 **209** 个Implement **209** assistance projects培训乡村振兴带头人 **321** 名Train **321** leaders of rural revitalization派出挂职干部 **10** 名Assign **10** temporary workers我们的荣誉  
OUR HONORS《新型产业园发展模式助力怒江州产业兴乡村美村民富  
中国交通建设集团有限公司打造怒江建筑产业园案例》  
荣获“第三届全球减贫案例征集活动”  
最佳减贫案例The New Industrial Park Development Mode Helps Realize the Prosperity of Industries  
Beauty of Countryside and Prosperity of Villagers in the Nujiang Prefecture - A Case Study of China Communications  
Construction Group Ltd. Builds the Nujiang Industrial Park of Construction won the best poverty reduction case  
in the "Global Solicitation on Best Poverty Reduction Practices (Third Call)

## 中交怒江建筑产业园案例

入选国家乡村振兴局社会帮扶助巩固拓展脱贫攻坚成果同乡村振兴有效衔接  
第一批典型案例CCCC Nujiang Industrial Park of Construction was Selected in the First Batch of Typical Cases of the Society Help,  
Consolidate and Expand Effective Links Between Achievements in Poverty Alleviation  
and Rural Revitalization Organized by National Rural Revitalization Administration《打造新型建筑产业园 为怒江州乡村振兴赋能添彩》  
案例入选《中央企业社会责任蓝皮书（2022）》  
“乡村振兴”优秀案例The Case of Build a New Industrial Park of Construction to Enable the Rural Revitalization in the Nujiang Prefecture  
was selected in the Excellent Case of "Rural Revitalization"  
in the Social Responsibilities Blue Book of Central Enterprises (2022)

## 产业振兴添活力

## ADD VITALITY TO INDUSTRIAL REVITALIZATION

中国交建坚持立足当地资源禀赋，积极开展“中交助梦·产业振兴”行动，着力推动优质资源转化为优质产业，多维产业助力打造“有产业”的乡村。

China Communications Construction adheres to relying on local resources, actively carries out the "Build Your Future Dream • Release Industrial Revitalization" Campaign, and make efforts to transform high-quality resources into high-quality industries. The multi-dimensional industries help build an "Industrialized" countryside.

## 建筑产业

## CONSTRUCTION INDUSTRY

公司联合怒江州政府举办面向怒江建筑产业园产业帮扶签约仪式，完成项目招标签约 56 个，涉及合同金额 3 亿元。截至目前，怒江建筑产业园累计入驻企业 371 家、培训产业工人 1,000 余人、吸纳就业 1,100 余人、贡献建筑业产值 27.04 亿元、上缴税金 3,506.59 万元，有效推动怒江州产业兴旺、农民增收。

The company worked with the government of the Nujiang Prefecture to hold a partner signing ceremony of the Nujiang Industrial Park of Construction. Approximately 56 projects completed bidding contracts, equal to the contract amount of RMB 300 million. So far, the Nujiang Industrial Park of Construction has held 371 enterprises, cultivated more than 1,000 industrial workers, absorbed more than 1,100 jobs, output the construction value of RMB 2,704 million, and paid the tax of RMB 35,065,900, which effectively promotes the industrial prosperity and the farmers' income increase in the Nujiang Prefecture.

## 农特产业

## CHARACTERISTIC AGRICULTURAL INDUSTRY

2022 年，公司拨付 8,279 万元助力怒江香料产业园发展峡谷特色香料产业，持续帮扶泸水市自扁王基村发展火龙果产业，拨付 1,000 万元援建独龙江草果烘干厂，拨付 1,250 万元援建英吉沙工业园区帮扶车间、英吉沙乡镇农贸市场等项目，推动当地群众就近就业。

In 2022, the company allocated RMB 82.79 million to the Nujiang Industrial Park of Spices for the purpose of developing characteristic spice industry in the gorge and also to continue to assist the Zibianwangji Village in developing the dragon fruit industry, with RMB 10 million allocated to help build a grass and fruit drying plant in Dulongjiang, and RMB 12.5 million allocated to help build a partner workshop in Yingjisha Industrial Park and the farmer's market in Yingjisha Township, which promotes the local people to go to work nearby.

特色产业园，助力打造集体经济“百万村”

A Characteristic Industrial Park Helps Build a "Village of Millions" of the Collective Economy

针对怒江州产业基础薄弱、可持续发展受限等问题，结合建筑业吸纳就业能力强的特点，中国交建创新实施“中交助梦·产业振兴”行动，帮助怒江州打造了一个易推动、可复制、能富民的建筑产业园。通过采取“总部引领、分园辐射、村集体合作”的新型发展模式，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“乡村集体+致富带头人+村民”的入股方式帮助成立发展乡村集体建筑公司，有效激发脱贫群众内生发展动力，打造了秋那桶村、米俄洛村、自扁王基村 3 个村集体经济“百万村”。

In view of weak industrial foundation and limited sustainable development and other questions in the Nujiang Prefecture, China Communications Construction, based on the characteristics of strong employability in the construction industry, implements the "Build Your Future Dream • Release Industrial Revitalization" Campaign through innovation to help build an Industrial Park of Construction that is easy to promote, is replicable and enriches the people in the Nujiang Prefecture. With a new development model of "headquarters guidance, sub-park radiation, collective cooperation of villages", the focus is the Dulongjiang Township that is most concerned by Xi Jinping, and the first village-resident secretary adopts the contribution model of "rural collectives + leaders to achieve prosperity + villagers" to help establish and develop a rural collective construction company, which effectively stimulates the internal momentum of the people out of poverty and also builds 3 "Villages of Millions" of the collective economy, including Qiunatong Village, Mi'eluo Village and Zibianwangji Village.



举办 2022 面向怒江建筑产业园产业帮扶签约仪式  
Hold a 2022 Industry Partner Signing Ceremony Oriented to the Nujiang Industrial Park of Construction

文旅产业

CULTURE AND TOURISM INDUSTRY

连续 6 年支持举办“中国交建杯”怒江皮划艇野水公开赛。

It has supported the holding of "China Communications Construction Cup" Open Tournament for Kayak of Nujiang River in Wild Water for 6 years.



中国交建怒江皮划艇野水公开赛  
The Open Tournament for Kayak of Nujiang River in Wild Water organized by China Communications Construction

人才振兴聚希望

SKILLED PERSONNEL DEVELOPMENT TO GATHER EXPECTATION

公司开展“中交助梦·教育提升”行动，多措并举助力打造“有思想”的乡村，全年教育帮扶投入达 1 亿元，为“富脑袋”带动“富口袋”提供有力支撑。

The company carries out the "Build Your Future Dream • Promote Education" Campaign, and takes multiple measures to help build a "Village" with thoughts. Moreover, it has invested RMB 100 million to assist the education annually, which provides strong support for the "rich head" to drive the "rich pocket".



建设教育设施

Build Education Facilities

拨付 8,042 万元，援建中交泸水新时代希望学校、中交兰坪新时代希望幼儿园、中交福贡米俄洛新时代希望幼儿园。

It has allocated RMB 80.42 million to provide assistance in the construction of the CCCC Lushui Xinshidai Hope School, the CCCC Lanping Xinshidai Hope Kindergarten, and the CCCC Fugong Mie'luo Xinshidai Hope Kindergarten.



培养干部人才

Training of Cadres and Talents

实施“中交助梦工坊”建筑产业工人培训、开展基层干部及乡村振兴带头人素质能力提升 29 期，培训县乡村基层干部 7,914 人、乡村振兴带头人 321 人、专业技术人员 858 人。

Carry out the "CCCC Dream Workshop" construction worker training, conduct 29 training sessions of the quality and capacity improvement of the grassroots cadres and leaders of rural revitalization, and train 7,914 grass-roots cadres of counties and villages, 321 leaders of rural revitalization and 858 professional technicians.



“中交助梦”乡村振兴干部素质能力提升培训班在杭州举办  
"Build Your Future Dream" training course for rural revitalization cadres to improve their quality and ability was held in Hangzhou



提升师生素养

Improve the Quality of Teachers and Students

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，继续在怒江州民族中学设立奖学金教金；联合稻奋基金会在定点帮扶县设立“中交图书室”。

It has participated in the "Grouped" assistance work for the educational talents organized by the Organization Department of the CPC Central Committee and Ministry of Education, carried out 10 educational assistance works in the designated counties, implemented the teacher quality improvement projects, and continued to set up a scholarship in Nujiang national middle schools; It has worked with the TAOFEN Foundation to build a "CCCC Library" in the designated counties to be assisted.



三航局教育帮扶奖学金发放仪式  
The CCCC Third Harbor Engineering Co., Ltd. Education Assistance Scholarship Issuance Ceremony

## 文化振兴树新风 REVITALIZE CULTURE AND ESTABLISH NEW TRENDS

我们积极开展“中交助梦·文化振兴”行动，全力推进乡村精神文明建设，助力打造“有乡愁”的乡村。

We have actively carried out the "Build Your Future Dream • Culture Revitalization" Campaign to strongly promote the construction of rural spiritual civilization and help build a "Homesick" village.

以文塑形 Create Styles with Culture

充分发掘少数民族的乡村文化底蕴和精神价值，助力打造乡村振兴示范点 8 个，支持怒江桥梁博物馆、北甸村史馆等民族文化站点，增强乡村文化软实力。

Explore the rural cultural deposits and spiritual values of ethnic minorities fully, help build 8 rural revitalization pilots, and support national cultural sites like the Nujiang Bridge Museum and the History Museum of Beidian Village, etc., to strengthen the soft power of the rural culture.

以文铸魂 Cast Souls with Culture

举办各类文化节、舞台剧等文明实践活动，助力少数民族特色文化活动蓬勃发展。

Hold various practical civilization activities like the Cultural Festival and the stage plays, etc., which drives the special cultural activities of ethnic minorities to flourish.

以文易俗 Transform Customs with Culture

注重培育文明乡风、良好家风、淳朴民风，拨付 900 万元支持驻村第一书记开展传承传统文化、推进移风易俗。

Focus on cultivation of the civilized village trends, good family style and simple folk style, and allocate RMB 9 million to support the first village-resident secretary to inherit traditional culture and promote to transform social traditions.



支持兰坪县中排乡举办首届民族民间文化交流会  
Support the Zhongpai Township of Lanping County to hold the first national folk culture exchange meeting

## 生态振兴筑良居

### ECOLOGICAL REVITALIZATION BUILDS A GOOD LIVING ENVIRONMENT

我们积极开展“中交助梦·美丽乡村”行动，治山治水助力打造“有颜值”的乡村。

We actively carry out the "CCCC Helps Dreams · Beautiful Countryside" initiative to help build a "beautiful" countryside by regulating mountains and rivers.

#### 改善人居环境

##### Improve the Living Environment

持续支持第一书记所在村开展乡村绿化、污水管线改造等工作，支持独龙江乡、普拉底乡等改善人居环境，秋那桶村被授予“云南省绿美村庄”“云南省卫生村”称号。

Continue to support the village where the first secretary is located to carry out countryside greening and sewage pipeline renovation, etc., support to improve the living environment of Dulongjiang Township, Puladi Township and others. The Qiunatong Village was awarded the title of "Green Beautiful Village of Yunnan Province" and "Sanitary Village of Yunnan Province".

#### 打造美丽乡村

##### Build a Beautiful Village

投入 800 万元支持的泸水市三河村美丽乡村正式建成，投入 1,500 万元帮助沙瓦村打造特色怒族文化旅游村。

The "Beautiful Village" Sanhe Village in Lushui City that is equal to RMB 8 million has been officially completed. RMB 15 million has also been invested to build the Shawa Village to be a characteristic tourist village with the culture of Nu Nationality.

#### 支持地质灾害防治

##### Support Prevention and Controls of Geological Disasters

拨付 95 万元，帮助怒江州加强地质灾害遥感监测，为怒江州地质灾害防治工作提供技术支撑。

RMB 950,000 has been allocated to help the Nujiang Prefecture strengthen the remote sensing and monitoring of geological disasters, which provides the technical support for the prevention and controls of geological disasters in the Nujiang Prefecture.



焕然一新的兰坪县中排乡北甸村  
The Whole New Beidian Village, Zhongpai Township, Lanping County

## 组织振兴强筋骨

### ORGANIZE REVITALIZATION AND BOOST STRENGTH

中国交建坚持把党建引领作为乡村振兴的“第一抓手”，开展“中交助梦·强基固本”行动，凝心聚力助力打造“有活力”的乡村。

China Communications Construction adheres to taking Party's building as the "First Step" in the rural revitalization, carries out a "Build Your Future Dream · Strengthen the Foundation" Campaign, and works together to build a "Vibrant" countryside.

#### 组织共建 Organize Joint Development

加强对 36 个结对共建基层党组织的指导和支持，帮助完善党建阵地建设，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。

Strengthen guidance and support for the primary-level Party organization co-built by 36 pairs; help improve the Party building; conduct standardized Party building activities; effectively improve the organization, working effectiveness and execution capacity of the villages out of poverty.

#### 队伍共抓 Team's Common Efforts

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，帮助培养打造一支高素质农村党组织和支部书记队伍。

Set up a reward fund of RMB 3 million, support the Organization Department of Nujiang Party Committee in conducting the three-year Campaign of "Leading Eagles Cultivation"; help cultivate and build a team of high-quality rural Party organization and branch secretaries.

#### 资源共享 Resource Sharing

组织内外优秀师资力量对当地党员干部进行集中轮训，在政策理论、产业发展、技能提升、综合治理等方面提供一批精品课程，出资帮助怒江基层干部和乡村振兴带头人走出去开眼界、长见识、强本领。

Organize internal and external excellent teachers to train local Party cadres on the periodic basis; provide a batch of excellent courses in terms of policies & theories, industry development, skill updating and comprehensive management; provide funds to help grass-roots cadres and leaders of rural revitalization in the Nujiang Prefecture to go out to broaden their horizons, increase their knowledge and strengthen their skills.

#### 发展共商 Development Consultation

结对双方党组织共同商定结对帮扶思路、举措和具体项目，围绕产业发展、助力就业等共建目标进行研讨策划。

The Party organizations of the two parties should jointly decide the thoughts, measures and specific projects of the partner assistance, and make discussion and planning around the industry development, employment boosting and other goals.

#### 作风共促 Working Practices Co-monitoring

与结对党组织共同走访调研困难群众，解决急难忧盼问题，增强基层组织的凝聚力和号召力，提升基层治理水平。

Visit and investigate people in straitened circumstances together with the partner Party organization, solve urgent, difficult, expected fraught problems, strengthen the cohesion and appeal of grassroots organizations, and the grassroots governance level.

# GOVERNANCE

## 管治篇

### 强国固基 造就永续发展之路

#### MAKE THE COUNTRY STRONG AND SOLIDIFY FOUNDATION BUILD A ROAD TO DEVELOP SUSTAINABLY

中国交建紧扣“高质量发展”主题主线，聚焦“科技型、管理型、质量型世界一流企业”建设，坚持创新驱动，全力建设科技强企；持续深化国有企业改革，推进管理体系和管理能力现代化；树立质量第一价值导向，着力推动质量品牌建设，企业综合实力不断壮大，全球领跑地位持续巩固，国民经济稳定器、压舱石作用不断彰显。

China Communications Construction adheres to the topic of "high-quality development", focuses on the construction of "world-class technology, management and quality-oriented enterprise", upholds innovation-driven technology, and makes every effort to build a strong enterprise in science and technology; Continue to deepen the reform of the state-owned enterprises, and promote the modernization of the management system and capabilities; It sets up a value orientation of Quality First, and makes efforts to promote the quality brand construction. Its comprehensive strengthen of the enterprise continues to grow, and the global leading position continues to be consolidated, so it plays an increasingly prominent role in the national economy, as a stabilizer and a ballast stone.





## 新益求新，科技一流 KEEP UPDATING AND FIRST-CLASS TECHNOLOGY

中国交建把科技创新作为“头号任务”，持续健全科研体系、突破领先技术，在实现高水平科技自立自强上先行示范，全力以赴打造科技型世界一流企业。

China Communications Construction takes the scientific and technological innovation as the "No.1 Task", continues to improve the scientific research system and break through the leading technology, so it plays a demonstrative role in realizing self-reliance and self-improvement in the high-level technology and spares no pains to create the world-class technology-based enterprise.

### 加强创新管理 STRENGTHEN INNOVATIVE MANAGEMENT

中国交建持续完善科技管理制度体系架构，形成了科技体制改革、科技研发、成果转化、科技奖励、知识产权、创新平台、科技人才、科技交流和科技考核等科技创新全链条的管理制度体系，为科技发展创造了良好的环境。

China Communications Construction continues to improve the science & technology management system framework to form a whole-chain management system with scientific and technological innovation integrating the science & technology system reform, science & technology research and development, achievement transformation, science and technology rewards, intellectual property rights, innovation platform, science & technology talents, science & technology exchange and science & technology assessment and the like, which has created a good environment for the scientific and technological development.

### 强化顶层设计 ENHANCE TOP-LEVEL DESIGN

发布“十四五”科技、数字化发展规划和产业数字化顶层设计，出台深化科技体制机制改革和完善创新体系建设、原创技术策源地建设和自主可控工作指导意见，为实现高水平科技自立自强夯实基石。

China Communications Construction has issued the digital development plan for science & technology in the 14th Five-Year Plan and the industrial and digital top-level design, and the guidelines on deepening the reform of the science & technology system, improving the construction of the innovation system and the source of the original technology and autonomous and controllable works, which lays a foundation for the self-reliance and self-improvement of the high-level technology.

### 完善创新体系 IMPROVE THE INNOVATION SYSTEM

中国交建持续推动创新体系的健全完善和落实落地，加快提升自主创新能力，增强核心竞争力。2022年，公司认定7个原创技术策源地、组建8个“链长”单位牵头的创新联合体、遴选2家二级单位作为科技型世界一流企业试点，修订科技管理制度，科技体系更趋完善。此外，制订技术服务平台管理制度，贯通公司、事业部和项目三级技术管理链条，并编制技术安全指南，对直属项目的技术方案进行认定和分类管理，确保技术体系有效运行。

China Communications Construction continues to promote the improvement and implementation of the innovation system, accelerates efforts to increase the independent innovation capacity, and enhances the core competitiveness. In 2022, the company recognized 7 sources of the original technology, formed 8 innovation unions led by the "Chain" companies, selected 2 secondary organizations as the world-class technology-based enterprise pilots, and modified the science & technology management system, so the science & technology system becomes more perfect. Further, it also formulated the management system of the technical service platform to connect the three-level technical management chain of the company, the business division and the project, prepared the technical safety guidelines, and identified and classified the technical solutions of the directly affiliated projects to ensure the effective operation of the technical system.

### 优化创新生态 OPTIMIZE THE INNOVATION ECOLOGY

我们积极整合集聚创新资源，不断培育以科技为先导的创新生态，完善研发投入机制、科研攻关机制和考核激励机制，以良好的创新生态涵养逐鹿全球市场的企业竞争力。

We actively integrate and gather innovative resources, constantly cultivate the technology-oriented innovation ecology, and improve the mechanism for investment in science and technology, the mechanism for tackling key problems in research, and the incentive mechanism for evaluation, therefore achieving stronger competitiveness of the enterprises in the global market with a good innovation ecology.

### 培育创新人才 CULTIVATE INNOVATIVE TALENTS

公司不断完善有利于激发创新活力的激励保障机制，确保各类人才成长有机会、干事有舞台、发展空间；强化科技领军人才培养，增强院士、大师等顶尖人才战略储备，加快建设高水平人才高地；举办“科技月”活动，积极培育“敢为人先、勇于探索”的创新精神，营造“鼓励创新、宽容失败”的创新氛围。2022年，林鸣院士荣获何梁何利基金的最高奖项“科学与技术成就奖”，张喜刚院士荣获茅以升科学技术奖桥梁大奖。截至2022年底，16人获评全国工程勘察设计大师等国家级称号。

The company constantly improves an incentive mechanism that helps stimulate the innovation vitality, to ensure that the talents of all kinds have an opportunity to grow up, have a platform to do actions, and have space for development; It intensifies the training of the leading talents in science and technology, strengthen the strategic reserve of academicians, masters and other top talents, and accelerates the development of high-level talents; Meanwhile, it also holds the "Science & Technology Month" Event, actively fosters the innovative spirits of "Make Pioneering Efforts and Bold Exploration", and creates an innovative atmosphere of "Encourage Innovation, Tolerate Failure". In 2022, The academician Lin Ming won the top award of the "Science & Technology Achievement Award" of Ho Leung Ho Lee Foundation; the academician Zhang Xigang won the Bridge Award of the Mao Yisheng Science and Technology Award. 16 persons won the national titles like the national engineering survey and design master by the end of 2022.

## 2022·我们的行动

## 2022·OUR ACTIONS

## 获批中国科协青托工程首批试点企业

It was approved as the first batch of pilot enterprises of the Young Elite Scientists Sponsorship Program by CAST

## 成立中交科协资深专家委员会

It established the Committee of Senior Experts of the CCCC Association for Science and Technology

## 启动首批院士后备梯队培养并制定“一人一策”培养方案

It launched the first batch of academician backup team to cultivate and prepare the "One Person, One Policy" training program

## 推动“揭榜挂帅”“赛马制”在二级单位、重点项目落地生根

It pushed the "Science and Technology Inducement Prize System" and "Horse Race System" to be implemented in the secondary organizations and major projects



中国交建高端科技智库专家委员会第二次会议  
The Second Meeting of the Experts Committee of China Communications Construction High-end Technology Think Tank

## 搭建创新平台

## BUILD AN INNOVATION PLATFORM

国家级科技创新平台是国家战略科技力量，也是中交推动高水平科技自立自强的重要载体。公司成立中国交建科学技术协会，组建由 41 位院士等专家组成的高端科技智库，建成了涵盖企业科技创新链条的“三级四类”创新平台体系，2022 年，新增 3 个省部级科技创新平台，创新支撑引领作用更加突出。

2022 年，公司获批综合交通运输理论交通运输行业重点实验室，冻土工程全国重点实验室进入最后评审阶段，创新研究院实现实质性运作，10 家国家企业技术中心通过发改委评价、2 家获评“优秀”。

The national science and technology innovation platform is not only the national strategic science and technology force, but also an important carrier for China Communications Construction to promote self-reliance and self-improvement in high-level science and technology. The company has established a China Communications Construction's Association for Science and Technology, set up a high-end technology Think Tank composed of 41 academicians and other experts, and built a "Three-Level and Four-Category" innovation platform system covering the scientific and technological innovation chains of the enterprises. In 2022, it added 3 new provincial-level platforms for scientific and technological innovation, so the innovation played a more prominent role in supporting and leading.

In 2022, the company was approved as the key laboratory of integrated transportation theories in the transportation industry. The National Key Laboratory of Frozen Soil Engineering entered the final evaluation stage. The research institute for innovation was put into operation. 10 national science and technology centers of the enterprises were evaluated by the National Development and Reform Commission, 2 of which were rated as "Excellent".



中交科协成立大会  
The CCCC Association for Science and Technology Establishment Conference

## 开展创新合作

## DEVELOP INNOVATION COOPERATION

中国交建积极开展与行业先进企业、科研院所、协会、高校的创新交流与合作，充分发挥产、学、研互动优势，提高研发效率效能。2022 年，公司与中国科协签署全面战略合作协议；将交通强国建设与交通强企建设紧密融合，与西藏、广西交通运输厅签署试点合作协议，共建案例入选交通运输部交通强国简报。

China Communications Construction has actively developed innovative exchanges and cooperation with the advanced enterprises, research institutes, associations and universities, which gives full play to the complementary advantages of production, learning and research and also increases the research and development efficiency. In 2022, the company signed a comprehensive strategic cooperation agreement with the China Association for Science and Technology; So the country with strong transport networks was closely integrated with the enterprise with that network. It also signed a pilot cooperation agreement with the Department of Transportation of Tibet Autonomous Region and the Department of Transport of Guangxi. Their co-construction cases were selected in the Powerful Transport Brief of the Ministry of Transport.



董事长王彤宙参加 2022 年全国交通运输科技创新工作会议并作经验交流  
Chairman Wang Tongzhou Participated in 2022 National Conference on Science and Technology Innovation in Transportation and Made Experience Exchange

## 培育创新成果

### FOSTER INNOVATIVE ACHIEVEMENTS

#### 攻关核心技术

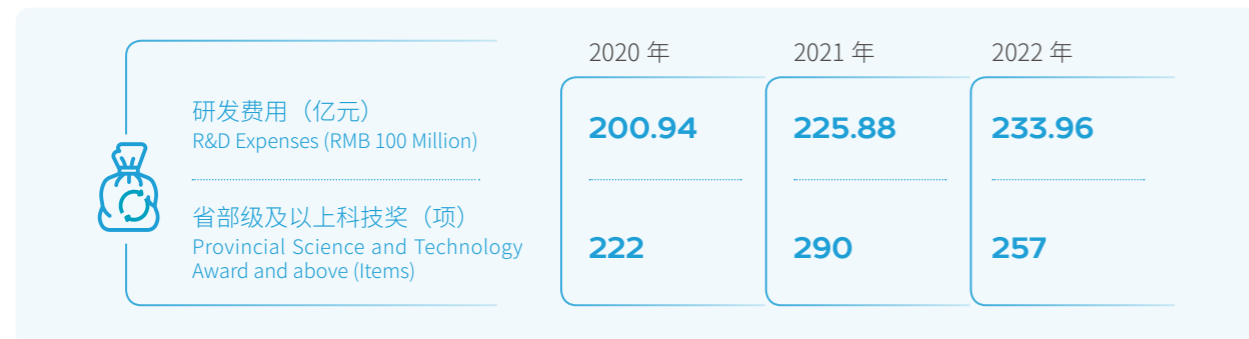
##### TACKLE KEY TECHNOLOGIES

中国交建聚焦“两大两优”领域，不断突破关键核心技术，以一系列重大科技成果支撑国内外重大工程建设和新兴产业培育，“中国路”“中国桥”“中国港”“中国岛”和“中国装备”等国家名片享誉全球。

2022 年，公司发布“十大核心技术成果”“十大核心装备成果”“十大核心系统成果”等 30 项重大科技成果；圆满完成国资委第一批 2 项专项攻关任务并通过成效评估；6 个国家科技项目顺利通过验收，牵头承担的 3 项国家重点研发计划项目正式启动；首个揭榜挂帅项目提前通过中期评估，6 项成果达到国际领先水平。

China Communications Construction has focused on the "Two Major Fields (strong transport network and large city), Two Priorities (Overseas and Rivers, Lakes and Seas)" and also made continuous breakthroughs in key core technologies. A series of major scientific and technological achievements have been used to support the construction of major projects and the cultivation of emerging industries at home and abroad. The "Chinese Road", "Chinese Bridge", "Chinese Port", "Chinese Island" and "Chinese Equipment" and others are famous in the world.

In 2022, the company released 30 major scientific and technological achievements like "Top Ten Core Technological Achievements", "Top Ten Core Equipment Achievements" and "Top Ten Core System Achievements", etc.; It completed 2 special tasks to tackle problems of the first batch of the State-owned Assets Supervision and Administration Commission successfully and also passed the effectiveness evaluation; 6 national science and technology projects passed the acceptance successfully, and 3 national key R&D projects led by the company were launched; The first "Science and Technology Inducement Prize System" project has passed the mid-term evaluation in advance, and 6 achievements have reached the international leading level.



## 支撑重大工程

### SUPPORT MAJOR PROJECTS

中国交建坚持科技自立自强，公司离岸深水港、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关键技术已处于世界领先水平，高水平科技创新有效支撑铸就“大国重器”，浇筑“民族工程”。2022 年，公司在国资委任期考核中获评“科技创新突出贡献企业”。

China Communications Construction adheres to the self-reliance and self-improvement in the science and technology. Its offshore deep water ports, offshore island building, deep-water waterways, super-span bridges, ultra-long tunnels and expressway constructed in frozen earth area on a plateau and other key technologies have taken the leading level in the world. The high-level science and technology innovation has effectively supported the "Pillars of a Great Power" and "National Projects". In 2022, the company won the "Enterprise with Outstanding Contribution to the Science and Technology Innovation" in evaluation by the State-owned Assets Supervision and Administration Commission.

## 凿石开路，天山南北变通途

### Carve out a Road through Chiseling Stones, Tianshan Turned into a Thoroughfare

位于海拔 3,200 米的天山胜利隧道全长 22.13 公里，是目前世界在建最长的高速公路隧道，它穿越天山山脉，是乌尉高速的“咽喉”工程，具有高地应力、高地震烈度、高寒、多断裂带、施工难度大等特点。

为加快掘进速度，提高施工效率，天山胜利隧道引用 TBM 掘进机在隧道两端对向掘进。该掘进机全长 282 米、重约 2,900 吨，月均掘进 1,000 米，是全球首创、全国产化压注式工法新型硬岩掘进机，可应对复杂多变的地质环境，实现在大变形、强岩爆、多断裂带等多种复杂地层下的安全、环保、快速、高效掘进。有了天山胜利隧道这 22 公里的历史一纵，南北疆联络将更加畅通。

Tianshan Shengli Tunnel, located at 3,200m above sea level, is 22.13km in the whole length and is also the longest expressway tunnel under construction in the world. It goes through Tianshan Mountains, a "Throat" project of the Urumchi-Yuli Highway, which is characterized by high ground stress, high seismic intensity, high cold, multiple fault zones and difficult construction, etc.

For the purpose of speeding up the tunneling and improving the construction efficiency, Tianshan Shengli Tunnel has applied a TBM tunneling machine to do tunneling in the opposite direction at both ends of the tunnel. The tunneling machine is 282m long, weights approximately 2,900 tons, and tunnels 1,000m in one month, which is a new hard rock tunneling machine that is a global pioneer and adopts the localized TBM. Such machine can cope with complex and changeable geological environment to realize safe, friendly, fast and efficient tunneling under various complex strata like large deformation, strong rock burst and multiple fault zones. With the history of 22 kilometers, the communication between North and South Xinjiang has become smoother.



中交天和研发生产的“雪山号”盾构机用于天山胜利隧道施工  
The "Xueshan" shield tunneling machine researched and developed by Tianhe is applied in the Construction of Tianshan Shengli Tunnel



中国交建支撑建成世界首条高海拔高寒多年冻土区高等级公路——共玉高速公路  
The First High-grade Expressway at High Altitude and the High Code Area and Permafrost Region Supported by China Communications Construction in the World —Gonghe - Yushu Expressway

为了“海底通途”

For "Underwater Thoroughfare"

深中通道是继港珠澳大桥之后又一集“桥、岛、隧、水下互通”为一体的世界级跨海集群工程，全长 24 公里，其中海底隧道长约 6.8 公里，沉管段长约 5 公里，采用国内首次应用、国际首次大规模应用的钢壳混凝土组合结构形式，由 32 节管节和 1 个最终接头组成，是目前世界上最宽的海底沉管隧道。如何让 8 万吨重的沉管在海底平稳“安家”？一航局的工程师们专门打造了一艘集运、装于一体的双体船——“一航津安 1”。这艘“神来之船”抱着 8 万吨的巨型沉管在惊涛骇浪的茫茫大海，实现毫米级对接，在海底上演一出精彩的“穿针引线”。

The Shenzhen-Zhongshan Bridge is also a world-class sea-crossing cluster project integrating the "bridges, islands, tunnels and underwater communications", following the Hong Kong-Zhuhai-Macao Bridge. It is 24km long, of which the underwater tunnel is about 6.8km long, and the immersed tube is about 5km long. It is made in steel shell-concrete composite structure that is firstly applied in China and is also firstly applied in large scale in the world. Such tunnel consists of 32 pipe joints and 1 final connector, which is now the widest immersed tube tunnel under the sea in the world. How to make the immersed tubes weighting 80,000 tons "settle down" on the bottom of the sea? The engineers from the CCCC First Harbor Engineering build a special catamaran integrating transportation and installation — "Yihang Jinan 1". This "Ship of God" carries giant immersed tubes weighting 80,000 tons in a vast sea of waves, which realizes millimeter-level docking and shows a wonderful "Threading a Needle" under the sea.



世界首艘自航式沉管运输安装一体船——“一航津安 1”  
The First Self-propelled Integrated Ship of Transportation and Installation of the Immersed Tubes in the World — "Yihang Jinan 1"

保护知识产权

PROTECT INTELLECTUAL PROPERTY RIGHTS

中国交建严格遵守《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，并积极开展专利质量管理提升行动，引导各单位不断加大有效科研投入，提升专利质量。

China Communications Construction strictly abides 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 the intellectual property protection, strengthens the top-level design of the patent development, and pays attention to the digging and cultivation of high-value patents. It also carries out the patent quality evaluation and ranking, intensifies the patent examination incentives and guidance, actively conducts the patent quality management and promotion action, and leads organizations at all levels to constantly increase effective research investment to improve the patent quality.



第二十三届中国专利奖

THE 23RD CHINA PATENT AWARD



一航局：深水基床夯实系统  
CCCC First Harbor Engineering Company Ltd.: Deep-water Foundation Bed Tamping System



二航局：钢混叠合的混合梁桥施工方法（援马尔代夫中马友谊大桥）  
CCCC Second Harbor Engineering Company Ltd.: Mixed Beam-bridge Construction Method with Steel and Concrete Superimposed China-Maldives Friendship Bridge for the Support Project of Maldives



三航局：一种导管架基础精定位及临时锁定系统  
CCCC Third Harbor Engineering Company Ltd.: A System of Precise Positioning and Temporary Locking of Jacket Foundation



一公局集团：一种变截面节段梁短线预制拼装方法（乐清湾大桥）  
CCCC First Highway Engineering Group: A Short-line Prefabricated Assembly Method of Variable Cross-section Segment Beams (Yueqing Bay Bridge)

## 推动智能转型

### PROMOTE INTELLIGENT TRANSFORMATION

中国交建围绕打造“数智中交”目标，推进《“十四五”数字化发展规划》有序实施落地，以数字化促进管理变革、推动产业升级，聚焦优化智慧运营体系，打造管理数字化新能力；聚焦新旧动能转换，实现产业数字化新突破；聚焦创新自主研发，推动数字产业化新发展，为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指引新方向。

China Communications Construction pushes the Digital Development Plan in the 14th Five-year Plan to be implemented in order around the goal of building Digital and Intelligent China Communications Construction. It promotes the management reform and industrial updating by means of digitalization technology, focuses on optimizing the intelligent operation system, and creates new capacities of digitalized management; It focuses on the conversion between new and old kinetic energy, which realizes new breakthroughs in industrial digitalization; It also focuses on the innovation of the research and development of independent products, and promotes new development of the digital industrialization, which guides a new trend of the construction of the world-class technology-management-quality-oriented enterprise with global competitiveness.



中国交建参加第五届数字中国建设峰会  
China Communications Construction Participated in the 5th Digital China Summit

## 管理数字化

### DIGITAL MANAGEMENT

中国交建充分发挥数智优势，以数字有力支撑管理水平提升，数字化建设全面铺展、全面花开。2022年，公司业财协同全面上线，成为首家实现全集团业财一体化的建筑央企；一体化公文实现全覆盖，全级次无纸化办公水平跻身央企前列；率先开展公司标准流程上线工作，实现90条“三重一大”流程和19条“对下管控”流程线上化，股权、合同和用工等12个统建系统实现全公司应用，信息化平台覆盖率达71%。

China Communications Construction gives full play to the digital and intelligent advantages and also strongly improves the management level by means of digitalization technology. So the digitalization construction is in full swing. In 2022, the company's business-finance integration was fully launched, which made it become the first central enterprise of construction integrating the business and finance in the whole group; The integrated management of official documents is in full swing, and its level of paperless office ranks among the top of the central enterprises; It takes the lead in launching the online standard process. That is, 90 "the Decision on Major Matters, the Decision on the Appointment and Removal of Important Executives, the Decision on Major Projects, and Use of Large Amounts of Funds" processes and 19 "Management and Control of Affiliates" processes work online; 12 unified systems like equities, contracts, labors and others are applied in the whole company; the information platform covers 71% of the company.

## 财务云业财协同系统

### Financial Cloud Business-Finance Integration System



在国内建筑行业率先建成集业、财、资、税、融一体的企业管理平台。

It takes the lead in building an enterprise management platform integrating the business, finance, funds, taxes and financing in the construction industry in China.

## 产业数字化

### DIGITAL INDUSTRY

中国交建积极培育数字化产业，不断加速信息技术与业务领域的深度融合。制定BIM工作管理办法和产业数字化试点指南，实现BIM中心与分中心协同工作局面，推动以“产业链数据贯通”和“数字化生产”为核心的产业数字化发展。

China Communications Construction actively cultivates the digital industry and accelerates the deep integration of the information technology and business. It also formulates the BIM work management measures and guidelines on the industrial digitalization pilot, to realize the coordination between the BIM center and the branch center, and to promote the digital development of the industry with the "Industrial Chain Data Linking" and "Digital Production" as the cores.

## 深化数据治理

### DEEPEN DATA GOVERNANCE

中国交建积极打造统一、系统、高效的大数据管理平台。公司实现14类主数据的全生命周期管理，开发63个标准服务接口，推广37家二级单位，主数据系统完成了与公司25个统建系统和28家单位自建系统的对接集成；发布数据治理专项规划，制订13项数据标准，数据全生命周期管理平台上线运行，积极推进数据入湖和数据应用，数据治理体系初步建成。

China Communications Construction actively builds a unified, systematic and efficient management platform of big data. The company has realized the whole life cycle management of 14 types of master data, developed 63 standard service interfaces, and promoted 37 secondary organizations. The master data system has been integrated with 25 unified systems and 28 self-built systems of the company; It has released a special plan for data governance and also formulated 13 data standards. The whole life cycle management platform of data has been put into operation. It also actively promotes the data lake access and data application, so a data governance system has been basically formed.

## 高分交通一张图

### A HD Communication Map



入选国资委评选的国有企业“十大数字技术成果”。

It was selected as "Top Ten Digital Technology Achievements" of the state-owned enterprises evaluated by the State-owned Assets Supervision and Administration Commission.



佩列沙茨大桥  
Peljesac Bridge

## 精益求精，管理一流

### KEEP IMPROVING AND IMPLEMENT FIRST-CLASS MANAGEMENT

中国交建严格遵守《中华人民共和国公司法》、上交所《股票上市规则》和《香港联合交易所有限公司证券上市规则》等法律法规和相关规定，完善公司治理架构和制度体系，防范化解重大风险，积极践行廉洁从业，全面焕发中国特色现代企业制度优势。

China Communications Construction strictly complies with the Company Law of the People's Republic of China, the Rules Governing the Listing of Stocks on Shanghai Stock Exchange, the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited and other laws, regulations and relevant provisions, improves the corporate governance structure and institutional system, prevents and solves the major risks, actively implements the integrity principle, and fully shows the advantages of modern enterprise system with Chinese characteristics.

### 完善治理结构

#### IMPROVE THE GOVERNANCE STRUCTURE

中国交建坚持“两个一以贯之”，持续优化公司治理架构，完善各类治理主体议事规则，修订“三重一大”决策制度实施办法和议事清单，初步形成“领”“导”“管”“办”“督”“促”的“六维”中交治理模式。

China Communications Construction adheres to the "two consistency rules", continues to optimize the corporate governance structure, improves the rules of procedure for various governance subjects, revises the implementation measures and list of procedures of the decision-making system regarding "decisions on major matters, appointment and removal of important executives, decisions on investment in major projects, and use of large amounts of funds", and initially forms a "six-dimension" CCCC governance mode, i.e., "leading", "guiding", "managing", "handling", "supervising" and "urging".

### 规范董事会运作

#### STANDARDIZE THE OPERATION OF THE BOARD OF DIRECTORS

中国交建围绕专业尽责、规范高效的董事会建设，不断加强董事会议案管理，按照《董事会议事规则》《董事会议事清单》《董事会授权管理办法》等系列制度，高标准组织召开董事会会议，不断提升董事会运作质量和效率；制定印发《派出外部董事履职细则》，修订完善《派出外部董事日常考核标准及内容》，强化外部董事运行管理；优化独立董事配置，现有 4 名独立董事在金融证券、工程建设、企业管理等方面形成知识互补，并积极参与审计与内控委员会、薪酬与考核委员会工作，通过对上市公司监督和调查、对内部控制发表独立意见，切实加强对重大关联交易的监督，有效发挥制衡作用。2022 年，共召开董事会会议 13 次，审议议案 106 项。

China Communications Construction focuses on the professional, responsible, standardized and efficient construction of board of directors, continuously strengthens the management of board proposals, organizes the high-standard board meetings according to a series of rules such as the Rules of Procedure of the Board of Directors, List of Procedures of the Board of Directors and Authorized Management Measures of the Board of Directors, and improves the operation quality and efficiency of the board of directors; It formulates and issues the Detailed Rules for Performance of Duties of Dispatched Directors, revises and improves the Daily Assessment Standards and Contents of Dispatched Directors, and strengthens the operation and management of dispatched directors; Also, it optimizes the configuration of independent directors. Now, there are 4 independent directors who can complement each other in terms of financial securities, engineering construction, enterprise management, etc., and actively participate in the audit and tasks of the internal control committee and remuneration & assessment committee, carry out supervision and investigation of listed companies and give independent opinions on internal control, so as to further supervise major related party transactions, and effectively play a role of check and balance. In 2022, a total of 13 board meetings were held and a total of 106 proposals were reviewed.

## 数读·2022 Data • 2022

董事会共有董事 **9** 名其中独立董事 **4** 名独立董事占比 **44.4%**The board of directors has **9** directors including**4** independent directors thataccount for **44.4%**

## 加强法人治理

## STRENGTHEN THE CORPORATE GOVERNANCE

中国交建持续优化所属企业董事会结构，制定《关于高质量建强做实子企业董事会的工作方案》，印发《中交集团暨中国交建所出资企业董事会评价办法（试行）》《中交集团暨中国交建所出资企业董事会会议资料示范文本》，保障所属企业董事会规范有效运行；探索建立所出资企业董事会工作机构负责人交流机制，增强对所出资企业董事会服务能力；全面推广专职外部董事制度，为所属企业配齐建强专兼职外部董事队伍，促进所属企业法人治理的规范化、流程化和科学化。目前，应建尽建范围内的 136 家各级子企业均已建立董事会，重要子企业全面落实董事会职权。

China Communications Construction continues to optimize the structure of board of directors of its affiliated enterprises, formulates the Work Plan on Building a Powerful and Strong Board of Directors of Subsidiaries with High Quality, and issues the Evaluation Measures for the Board of Directors of Enterprises Funded by China Communications Construction Group and China Communications Construction (for Trial Implementation) and Document Model of Board Meeting of Enterprises Funded by China Communications Construction Group and China Communications Construction and ensures the standardized and effective operation of the board of directors of affiliated enterprises; It explores the way to establish the exchange mechanism among the heads of the work bodies of the board of directors of funded enterprises, and improves the ability of service to the board of directors of funded enterprises; Also, it promote the system of full-time external directors in an all-around way, fully equips and builds the team of full-time and part-time external directors for affiliated enterprises, and promotes the standardized, process-based and scientific corporate governance of affiliated enterprises. Now, 136 subsidiaries of all levels within the scope in which establishment of board of directors is required have established their boards of directors, and major subsidiaries have fully exercised the functions and powers of the board of directors.

## 激发经理层活力

## ENERGIZE THE MANAGEMENT

中国交建推动经理层任期制和契约化管理精准考核、刚性兑现，制定贯穿全级次的经理层“两书一协议”范本，将所属各级单位 500 多户企业纳入经理层任期制契约化管理；加快推行职业经理人制度，完善市场化薪酬分配机制，推进经营业绩与工资总额核定、领导人员评价挂钩，灵活开展多种方式的中长期激励，全面激发经理层干事创业动力。

China Communications Construction promotes the establishment of the tenure system for the management and accurate assessment & rigid fulfillment of contractual management of managers, formulates the models of "two letters and one agreement" for the management at all levels, and incorporates more than 500 affiliated enterprises at all levels into the contractual management based on the tenure system of the management; It speeds up the implementation of the professional manager system, improves the market-oriented compensation structure assignment mechanism, promotes the linkage between business performance and the verification of total salary and the evaluation of leaders, flexibly adopts various forms of medium/long-term incentives, and fully energizes the management to start up business.

## 维护股东权益

## SAFEGUARD THE RIGHTS AND INTERESTS OF THE SHAREHOLDERS

中国交建持续优化股东事务管理，编制形成《出资企业章程及股东会决议审批流程清单》《公司章程审批台账》《股东会决议审批台账》，规范审核程序，严格把控风险；修订《信息披露及重大信息内部报告管理办法》《投资者关系管理办法》等 4 项制度，提升公司投资者关系管理水平，规范信息披露行为，通过召开业绩说明会、资本市场运作专项说明会、投资者专题交流会等方式加强与投资者的沟通交流，及时回应投资者关切，提升公司资本市场形象。2022 年，成功召开股东周年大会，审议通过 11 项议案；A 股共发布公告及挂网文件 113 份，H 股共发布公告及通函等文件 141 份。

China Communications Construction continues to optimize the management of affairs related to the shareholders, compiles and forms the Articles of Association of Investment Enterprises and List of Approval Procedures for Resolutions of Shareholders' Meetings, Approval Record for Articles of Association of Companies, Approval Record for Resolutions of Shareholders' Meetings, standardizes the audit procedures, and implements the strict control over the risks; It revises 4 systems including Measures for the Administration of Information Disclosure and Internal Reporting of Important Information and Measures for the Administration of Investor Relations, to improve the level of investor relations management and standardize information disclosure behaviors; and strengthens the communication with investors by holding performance briefings, special briefings on operations in capital market, and special exchange meetings of investors, and responds to investors' concerns in a timely manner and enhances the company's image in the capital market. In 2022, the annual session of the shareholders' meeting was successfully held and 11 proposals were reviewed and adopted; There is a total of 113 A-share issued announcements and online documents, and 141 H-share issued announcements and notices.

## 加强风险管控

## STRENGTHEN RISK MANAGEMENT AND CONTROL

中国交建建立健全风险防控与合规经营长效机制，牢固树立防范风险隐患意识，将风险管理融入企业运营各个环节，着力提升风险防控水平，坚决守住不发生重大风险的底线。

China Communications Construction establishes and improves a long-term mechanism for risk prevention & control and compliance management, firmly establishes the awareness of potential risks prevention, integrates the risk management into all links of enterprise operation, focuses on improving the level of risk prevention and control, and resolutely holds the bottom line of zero occurrence of major risks.

## 健全管控体系

## IMPROVE THE MANAGEMENT AND CONTROL SYSTEM

中国交建构建以全面风险管理为导向的内部控制制度，抓好各种存量风险化解和增量风险防范，坚决避免发生系统性、颠覆性风险。按照《全面风险管理办法》，持续开展风险评估和季度风险监测工作，评估安全质量环保风险、财务金融风险、海外风险等重大风险，开展各类风险指标季度监测，发布季度监测报告；建设境外风险排查长效机制，对境外决策、大额资金、合同等 12 类风险开展排查，实行日常排查和专项监督检查，发布风险排查报告；完善重大经营风险事件报告制度，出台《重大经营风险事件报告办法》，强化各级领导班子对本单位重大经营风险事件的整改责任，进一步提升公司风险管理水平。

China Communications Construction Co., Ltd. establishes the internal control system driven by comprehensive risk management, makes great efforts to solve various existing risks and prevent incremental risks, and resolutely avoids systematic and disruptive risks. According to the Comprehensive Risk Management Measures, it continues to carry out risk assessment and quarterly risk monitoring, assesses the risks concerning the safety, quality and environmental protection, financial risks, overseas risks and other major risks, carries out quarterly monitoring of various risk indicators, and releases the quarterly monitoring reports; It establishes the long-term mechanism for investigation of 12 categories of overseas risks on overseas decision-making, large-amount funds and contracts etc., implements the daily risk investigations and special supervision & inspection, and releases the risk investigation reports; Also, it improves the reporting system of major business risk events, promulgates the Measures for Reporting the Major Business Risk Events, strengthens the responsibility of leaders at all levels to rectify major business risk events of responsible departments, and further improves the risk management level of the company.

## 践行守法合规

### COMPLY WITH LAWS AND REGULATIONS

中国交建始终牢记证监会“四个敬畏”要求，严守上市公司“四条底线”，形成“大监督”体系，健全合规内控体系，将合规要求融入治理系统。全面推行“首席合规官+地区合规官+国别合规官”的组织体系，组织境外商法合规培训，提升境外人员的合规素质；推进境内外业务合规一体化建设，以专项工作为契机，选择三家兼有境内外业务的二级单位进行试点，推进建立公司一体化合规标准。同时，扎实推进“合规管理强化年”和“经营业务合规专项治理”活动，开展全级次、全领域、全方位的合规排查与治理，并通过合规微课堂比赛及征文、“12·4”宪法宣传月等活动，提升全员守法合规意识。2022年，共任命39名首席合规官，举办11场境外商法合规培训。

此外，公司严格遵守《中华人民共和国反不正当竞争法》等反垄断及不正当竞争相关法律法规相关规定，恪守公平竞争的原则，助力营造公正、非歧视的营商环境。

China Communications Construction always adheres to the "four compliance" requirements of CSRC, strictly holds the "four bottom lines" of listed companies, forms the "overall supervision" system, improves the compliance and internal control system, and integrates compliance requirements into the governance system. It implements the organizational system of "chief compliance officer + regional compliance officer + national compliance officer" in an all-around way, organizes training on overseas business laws compliance, and improves the compliance level of overseas staff; It also promotes the compliance and integrated construction of domestic and overseas business, selects three secondary units that are able to carry out both domestic and overseas business as the pilot units by taking the opportunity of the special work, and promotes the establishment of integrated compliance standards of the company. Meanwhile, it firmly promotes the activities of "Year of Strengthened Compliance Management" and "Special Governance of Business Compliance", carries out the compliance investigation and governance at all levels, in all fields and in an all-around way, and organizes the activities of compliance micro-classroom competitions and essay competitions, "12.4" Constitution Publicity Month etc. to improve the awareness of all employees in compliance with laws and regulations. In 2022, a total of 39 chief compliance officers were appointed and 11 trainings on overseas business law compliance were held.

In addition, the company strictly complies with the Anti-Unfair Competition Law of the People's Republic of China and other laws and regulations on anti-monopoly and anti-unfair competition, firmly follows the principle of fair competition, and helps create a fair and non-discriminatory business environment.



## 强化审计监督

### STRENGTHEN AUDIT AND SUPERVISION

中国交建建立以《内部审计管理办法》为中心，涵盖审计管理和审计业务的“1+N”内部审计制度体系框架，推进“管审分离”，强化项目审计中心对重大项目的全过程监督，从源头防范风险；抓好审计署审计整改工作，压紧压实主体责任，加强督促检查和追责问责，确保所有问题全部改到位、改彻底；推动审计业务与信息化的深度融合，全面贯通并挖掘数据价值，实现“数字审计”转型。2022年，指导各级机构完成各类审计3,319项，完成年度计划的112.58%，审计资产总额1.8万亿元，发现问题12,940项，提出整改意见9,360条。

China Communications Construction establishes the "1+N" internal audit system framework which is centered on the Internal Audit Management Measures and covers audit management and audit business, promotes the "separation of management and audit", strengthens the responsibility of project audit center for full-process supervision of major projects, and prevents the risks from the source; It pays attention to the audit and rectification work of the audit office, consolidates the main responsibilities, strengthens supervision and inspection and accountability, and makes sure that all problems are rectified properly and thoroughly; Also, it promotes the deep integration of audit business and informatization, fully links to and taps the value of data, and realizes the transformation into the "digital audit". In 2022, it instructed institutions at all levels to complete 3,319 audits of various types, fulfill the 112.58% of the annual plan, audited total audit assets of RMB 1.8 trillion, identified 12,940 problems, and proposed 9,360 rectification opinions.

## 坚持反腐倡廉

### MAKE CONTINUOUS EFFORTS TO COMBAT CORRUPTION AND UPHOLD INTEGRITY

中国交建严格落实《中华人民共和国刑法》《中华人民共和国反不正当竞争法》《中华人民共和国反洗钱法》等法律法规要求，完善防治腐败滋生蔓延的体制机制，一体推进“三不腐”，聚焦作风建设，建立“四位一体”的年轻干部腐败问题治理体系，强化正风肃纪，弘扬廉洁文化，共同营造风清气正的企业发展氛围。2022年，公司纪委获评全国纪检监察系统先进集体。

China Communications Construction strictly implements the laws and regulations such as the Criminal Law of the People's Republic of China, the Anti-Unfair Competition Law of the People's Republic of China, and the Law of the People's Republic of China on Anti-money Laundering, improves the institutional mechanism on preventing breeding and spreading of corruption, promotes the "non-corruptions in three aspects" in an integrated manner, focuses on the construction of work practices, establishes a "four-in-one" governance system to prevent corruption of young cadres, strengthens the integrity and discipline, carries forward the incorruptible culture, and jointly creates a clean and upright enterprise development atmosphere. In 2022, the discipline inspection commission of the company was rated as the advanced unit in the national discipline inspection and supervision system.



中国交建纪委获评全国纪检监察系统先进集体

The discipline inspection commission of China Communications Construction was rated the advanced unit in national discipline inspection and supervision system





广连高速三凤里互通至连州段  
Sanfengli Interchange to Lianzhou Section of Guangzhou-Lianzhou Expressway

## 建章立制

### ESTABLISH RULES AND REGULATIONS

全面深化廉洁风险防控体系建设，加强对关键环节和重要岗位的监督，编制印发《廉洁风险防控工作手册》，建立领导干部任前廉洁制度法规考试机制，推进廉洁风险防控联系点建设，打造合作单位黑名单和重点关注名单制度，确保反腐倡廉工作扎实推进、落实落细。

It deepens the construction of integrity risk prevention and control system in an all-around way, further supervises the key links and important positions, compiles and issues the Manual on Integrity Risk Prevention and Control, establish the integrity system laws and regulations assessment mechanism for leading cadres before taking office, promotes the construction of integrity risk prevention and control contact places, creates a blacklist system of partners and a list of highly concerned units, and ensures the steady advancement and detailed implementation of efforts to combat corruption and uphold integrity.

## 正风肃纪

### IMPROVE WORK PRACTICES AND ENFORCE PARTY DISCIPLINE

印发执行《关于进一步贯彻落实中央八项规定精神 健全作风建设长效机制的通知》，加强年轻干部教育管理监督，划清红线、底线，以高压态势纠“四风”树新风。2022年，共处置违反中央八项规定精神问题线索25件，立案处分处理20人。

It issues and executes the Notice on Further Implementing the CPC Central Committee's Eight Rules and Improving Long-term Mechanism of Style Construction, strengthens the education, management and supervision of young cadres, clearly defines the boundary line and bottom line, and maintains a tough position in eliminating the "four bad conducts" and establishing new work style. In 2022, a total of 25 reports indicating the violation of the CPC Central Committee's Eight Rules were handled, and 20 persons were punished.

## 执纪问责

### ENFORCE DISCIPLINE AND IMPLEMENT ACCOUNTABILITY

编印《执纪审查工作手册》，坚持办案、整改、治理相结合，做实以案示警、以案促改、以案促治，推行重大案件以案促改、“一报告两同步三会议”制度，同时开展执纪审查专项检查，提升监督执纪质效。

It compiles and prints the Discipline Review Manual, adheres to the combination of case handling, rectification and governance, solidly implements the work of giving warning, promoting reform and governance depending on cases, implements the system of promoting reform depending on cases and "one report, two synchronizations and three meetings" to handle the major cases, and also carries out special discipline review to enhance the quality and efficiency of supervision and discipline enforcement.

## 廉政教育

### IMPLEMENT INTEGRITY EDUCATION

加强党规党纪教育，倡导“心至廉 路致远”廉洁文化理念，编印《廉洁文化视觉识别系统规范手册》以及年度廉洁宣教计划，通过党规党纪在线测试、党风廉政宣教月、廉洁道德讲堂等活动学廉促廉倡廉警廉，提升全员纪律规范意识，涵养清廉生态。

It strengthens the education of Party rules and discipline, advocates the incorruptible culture concept of "honest mind and lofty ideal", compiles and prints the Specifications of Visual Identification System of Incorruptible Culture and the annual incorruptible education plan, organizes the activities of online test of Party rules and discipline, publicity and education month of Party style and clean government, and integrity and morality lecture hall etc. to learn, promote, advocate and raise awareness for integrity, enhances the awareness of normalization with discipline and rules of all staff and conserves the incorruptible ecology.

## 美益求美，质量一流

### MAKE REFINEMENT AND ENSURE FIRST-CLASS QUALITY

中国交建坚持质量第一、效益优先，强化价值创造，不断推进技术质量管理标准化与精细化，密切关注客户满意度，提供符合要求的工程、产品和服务，提升公司的核心竞争力和品牌影响力，争当打造“质量型”世界一流企业的领头羊。

China Communications Construction always insists on quality first, benefits first, strengthens value creation, makes constant progress in standardization and refinement of technical quality management, pays close attention to customer satisfaction, provides projects, products and services in line with the requirements, enhances the core competitiveness and brand influence of the company, and strives to be the leader of the "quality-oriented" world-class enterprise.

#### 加强质量管控

##### STRENGTHEN QUALITY CONTROL

中国交建严格遵守《中华人民共和国产品质量法》《中华人民共和国建筑法》《建设工程质量管理条例》等法律法规，建立健全质量管理体系，创新质量发展机制，优化质量发展环境，数字化赋能管理提升，培育中交特色质量文化，全面打造产品质量优、经营能级强、运营质效好的质量强企。公司通过了中国船级社质量认证公司的质量管理体系认证。

China Communications Construction strictly complies with the Product Quality Law of the People's Republic of China, the Construction Law of the People's Republic of China, the Regulations on Quality Management of Construction Projects etc., establishes and improves the quality management system, implements innovation of the quality development mechanism, optimizes the quality development environment, improves the management through digital empowerment, cultivates the special quality culture of CCCC, and comprehensively builds a strong enterprise with excellent product quality, high operating energy level and excellent operating quality and efficiency. The company has passed the quality management system certification of China Classification Society Certification.

#### 完善质量管理体系

##### IMPROVE THE QUALITY MANAGEMENT SYSTEM

修订印发《质量事故报告调查处理办法》《质量事故责任追究办法》，完善质量事故报告和调查处理机制，规范质量事故责任追究工作流程。印发《中国交建安全生产、质量监督、节能环保监督标准框架及导则》，明确质量标准，规范企业和项目质量管理工作。

It revises and issues the Measures for Investigation and Treatment of Quality Accident Reports and the Measures for Investigating Responsibility of Quality Accidents, improves the quality accident reporting, investigation and treatment mechanism, and standardizes the responsibility investigation workflow of quality accidents. It issues the Standard Framework and Guidelines for Work Safety, Quality Supervision, Energy Saving and Environmental Protection Supervision of China Communications Construction, clearly defines the quality standards, and standardizes the quality management work of enterprises and projects.

#### 健全质量监督检查体系

##### ESTABLISH AND IMPROVE THE QUALITY SUPERVISION AND INSPECTION SYSTEM

坚持问题导向，按照分级管理原则，公司及所属单位分别开展质量检查工作，及时查处质量隐患。加强对重大项目、重点领域、新业态领域的监督检查，组织开展铁路项目质量安全红线管理专项督查、实体质量抽检、投资项目质量监督抽查等专项检查，确保质量形势稳定可控。

With the problem-oriented and hierarchical management principle, the company and its subordinate units respectively carry out quality check, and investigates and handles the potential quality risks in a timely manner. It further supervises and checks the major projects, key fields and new business forms, and organizes special inspections such as special quality and safety supervision and inspection of railway projects within the red line management scope, random quality inspection of entities, and quality supervision and inspection of investment projects to ensure controlled stability of quality situation.

#### 推进质量信息化、数字化建设

##### PROMOTE THE QUALITY INFORMATION-BASED AND DIGITALIZED CONSTRUCTION

组建“1+N”质量监控中心，利用物联网技术实现对现场生产过程的实时监控和数据自动采集，实现质量穿透式管理和全过程溯源；开发质量检验控制信息系统 2.0 版，实现“三检”全过程数据采集、表单个性化定制、检测标准智能提醒等功能，工序一次验收平均通过率 98.87%，工序质量控制保持较高水平。

It establishes the "1+N" quality supervision center, and uses the Internet of Things technology to realize real-time monitoring and automatic data collection during field production and realize penetration management of quality and full-process traceability; It develops the quality inspection and control information system of version 2.0 to realize the functions of data collection, personalized customization of forms and intelligent alarm of test standards in the full process of "three inspections". The one-time pass rate of process acceptance is 98.87%, and it maintains a higher level in process quality control.

#### 培育中交特色质量文化

##### CULTIVATE THE SPECIAL QUALITY CULTURE OF CCCC

积极推进质量文化建设，培育诚实守信、持续改进、创新发展、追求卓越的中交特色质量文化。依托全国“质量月”活动，广泛宣传质量文化内涵，将质量文化精神转化为员工行为自觉，树匠心、育匠人、出精品，打造享誉世界的中交品质、中交品牌。2022 年 9 月，“质量月”期间，公司组织开展质量讲堂、质量知识答题 1,219 场、质量培训 851 场、各类质量活动 590 次，参与人员 10 万多人次。

It actively promotes the construction of quality culture, and cultivates the special quality culture of CCCC characterized by integrity and trustworthiness, continuous improvement, innovative development and commitment to excellence. Depending on the national "Quality Month" activities, it extensively publicizes the connotation of quality culture, transforms the spirit of quality culture into employees' conscious behavior, develops ingenuity, cultivates talents of skills, creates high-quality products, and builds a world-famous CCCC quality and CCCC brand. During the period of "Quality Month" activities in September 2022, the company organized 1,219 quality lecture halls and quality quizzes, 851 quality trainings and 590 quality activities, participated by more than 100,000 people.

## 打造品质工程 CREATE THE HIGH-QUALITY PROJECT

中国交建践行质量品牌战略，实施精细管理、精品建造，打造“质量强国”“交通强国”的中交样板。2022 年公司质量工程验收合格率 100%，项目一次交验合格率 100%；14 个项目获得中国建设工程鲁班奖，其中境外工程获奖 3 项，29 个项目获国家优质工程奖，其中金奖 3 项。

China Communications Construction implements the quality brand strategy, insists on fine management and high-quality construction, and builds the CCCC model of "country with excellent quality" and "country with strong transportation network". In 2022, the pass rate of the quality acceptance of the company's projects was 100%, and the on-time pass rate of the project inspection was 100%; A total of 14 projects won the China Construction Engineering Luban Prize, including 3 overseas projects, and 29 projects won the National Prime-quality Project, including 3 projects with gold medals.



扫码观看《新疆乌尉公路，书写“沙海变通途”的奇迹》  
Scan the QR code to watch Xinjiang Urumchi-Yuli Highway, The Miracle of "Changing desert into Thoroughfare"

## 中国建设工程鲁班奖(国家优质工程)(部分)

### CHINA CONSTRUCTION ENGINEERING LUBAN PRIZE (NATIONAL PRIME-QUALITY PROJECT) (PARTIAL)



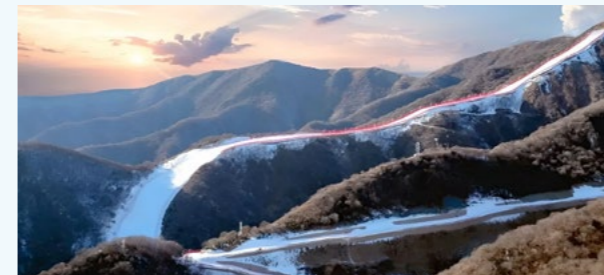
中国交建承建的港珠澳大桥主体工程岛隧工程  
Island tunnel engineering, the main works of Hong Kong-Zhuhai-Macao Bridge, undertaken by China Communications Construction



中国路桥承建的都昌至九江高速公路鄱阳湖二桥  
The Second Poyang Lake Bridge of Duchang-Jiujiang Expressway undertaken by China Road & Bridge Corporation



二航局承建的襄阳庞公(凤雏)大桥  
Xiangyang Pangong (Fengchu) Bridge undertaken by CCCC Second Harbor Engineering Company Ltd.



一局集团承建的国家高山滑雪中心项目  
National Alpine Skiing Center Project undertaken by CCCC First Highway Engineering Group Co., Ltd.



二航局、一局集团承建的延庆至崇礼高速公路河北段  
Hebei Section of Yanqing-Chongli Expressway undertaken by CCCC Second Harbor Engineering Company Ltd. and CCCC First Highway Engineering Group Co., Ltd.



二公局承建的平塘特大桥  
Pingtang Bridge undertaken by CCCC Second Highway Engineering Co., Ltd.



四航局承建的广东陆丰甲湖湾电厂新建工程配套码头工程  
Auxiliary Wharf Works of New Guangdong Lufeng Jiahuan Power Plant undertaken by CCCC Fourth Harbor Engineering Co., Ltd.

## 国家高山滑雪中心项目被特别授予鲁班奖

The National Alpine Skiing Center Project was specially awarded the Luban Award

国家高山滑雪中心又名“雪飞燕”，是目前国内难度最大、标准最高、唯一满足冬奥会赛事要求的高山滑雪比赛场地。一局集团承建国家高山滑雪中心第二标段，在建设过程中攻克了国际标准高山滑雪赛道塑形、高陡赛道运输、赛道生态复绿、亚高山草甸重建等诸多难题，最终成功交付面积约 24.36 万平方米的 6 条雪道，为国内外高标准滑雪赛道的建造积累了经验。2022 年 5 月 23 日，一局集团承建的国家高山滑雪中心项目被中国建筑行业协会特别授予 2022 ~ 2023 年度中国建设工程鲁班奖（国家优质工程）。

The National Alpine Skiing Center, also known as "Swallow Flying in Snow", is the only one alpine skiing event venue in China that is built with maximum difficulty and maximum standard and according to the requirements of the Winter Olympics. The construction of the second bid section of the National Alpine Skiing Center is undertaken by CCCC First Highway Engineering Group Co., Ltd. In the construction, it overcame many problems about shaping the international-standard alpine skiing track, transport of the high steep track, ecological rehabilitation of the track, reconstruction the subalpine meadow, etc., and finally successfully delivered six ski tracks with an area of about 243,600 m<sup>2</sup>, thus accumulating experience in building high-standard ski tracks at home and abroad. On May 23, 2022, the National Alpine Skiing Center Project built by CCCC First Highway Engineering Group Co., Ltd. was specially awarded the China Construction Engineering Luban Prize (National Prime-quality Project) from 2022 to 2023 by China Construction Industry Association.



一局集团承建国家高山滑雪中心第二标段  
The construction of the second bid section of the National Alpine Skiing Center is undertaken by CCCC First Highway Engineering Group Co., Ltd.

## 优化客户服务

## OPTIMIZE CUSTOMER SERVICE

中国交建致力于为客户提供优质服务，建立完备的客户服务体系，畅通客户沟通渠道，深入挖掘客户需求，提升客户满意度。中交建筑与中交管道相继成立，开启“中交服务”专业化发展新格局，更好赋能城市发展和人居美好生活。

China Communications Construction is committed to providing high-quality services for customers, establishing a complete customer service system, keeping customer communication channels smooth, deeply exploring the customer demands and enhancing the customer satisfaction. CCCC Construction and CCCC Pipe have been established successively, which has created a new pattern of professional development of "CCCC Service", and better empowered urban development and a better residence life.



2022 年 9 月 30 日，中交建筑成立  
On September 30, 2022, CCCC Construction was founded.

## 提供优质服务

## PROVIDE HIGH-QUALITY SERVICES

公司坚持以客户为中心，为客户提供一揽子“中交方案”解决其痛点难点问题，并提升客户体验，赢得客户信任。广航局采用定期高端对接、工作检查沟通、日常对接交流、客户回访等方式，从客户实际需求出发，为客户提供有价值的服务；三航局搭建了一套完整客户服务体系，每年定期进行回访，倾听客户反馈，及时调整服务，并开展客户满意度调查，全局顾客满意率为 98.563%、质量满意率为 98.750%、工期满意率为 98%、服务满意率为 98.652%。

The company insists on customer-focused principle, provides the package "CCCC solutions" to solve the pain points and difficult problems for the customers, enhances customer experience and establishes trust in customers. CCCC Guangzhou Dredging Co., Ltd. provides the valuable services for the customers from the actual demands of customers by adopting the means of regular high-end connection, work inspection and communication, daily exchange and communication, customer return visits, etc. CCCC Third Harbor Engineering Co., Ltd. sets up a complete customer service system, pays regular return visits every year, listens to customer feedbacks, adjusts services in time, and conducts the customer satisfaction surveys, with the overall customer satisfaction rate of 98.563%, quality satisfaction rate of 98.750%, construction period satisfaction rate of 98%, and service satisfaction rate of 98.652%.

## 保护客户隐私

## PROTECT CUSTOMER PRIVACY

公司尊重客户隐私，要求员工按照《市场监督管理办法》《政府事务与大客户商务对接管理办法》相关规定，严格保管客户资料，并开展相关培训加强员工法制观念、增强员工保密意识，全面保障客户信息数据的安全性、机密性与完整性。二航局建立顾客、合作伙伴数据库，专人收集、建立管理档案，及时更新、妥善保管相关信息，严防泄露客户隐私；二航院形成相互监督、相互制约的信息保护制度，持续完善信息安全防范措施，确保客户信息不被泄露。

The company respects customers' privacy, requires employees to keep the customer data strictly confidential according to relevant provisions of the Administrative Measures for Market Operation and the Administrative Measures for the Business Connection between Government Affairs and Major Customers, carries out relevant training to strengthen employees' concept of legality and enhance employees' awareness of confidentiality, and guarantees the security, confidentiality and completeness of customer information and data in an all-around way. CCCC Second Harbor Engineering Company Ltd. establishes a database for customers and partners, arranges special personnel to collect data and establish management files, timely updates and properly keeps relevant information, and strictly prevents leakage of customers' private information; CCCC Second Harbor Consultants Co., Ltd. forms an information protection system featured by mutual supervision and restriction, and continues to improve information security and prevention measures to prevent leakage of customer information.

## 应对客户投诉

## RESPOND TO CUSTOMER COMPLAINTS

公司构建完善的客户沟通机制，认真对待客户意见反馈，及时处理相关投诉，不断提高客户的满意度和忠诚度。水规院制定并颁布《顾客服务质量投诉管理办法》，规范客户投诉处理管理，强化对投诉问题的跟踪、解决、分析和评价，持续改进、提升服务水平。2022 年，公司未发生因产品质量及服务引发的重大法律诉讼及投诉。

The company establishes a perfect customer communication mechanism, carefully listens to the customer feedbacks, handles relevant complaints in time, and constantly enhances customer satisfaction and loyalty. CCCC Water Transportation Consultants Co., Ltd. formulates and issues the Administrative Measures for the Customer Service Quality Complaints, handles and manages customer complaints in a standardized way, strengthens the tracking, solution, analysis and evaluation of complaint problems, and continuously improves and enhances the service level. In 2022, no major legal actions and complaints caused by product quality and service occurred.

# ENVIRONMENT SECTION

## 环境篇

### 水漾山青 铸就永续生态之路

#### CLEAN WATER AND GREEN MOUNTAIN • BUILD A PATH OF SUSTAINABLE DEVELOPMENT

中国交建坚定绿色发展理念，聚焦绿色低碳新技术、新模式创新与运用，重点发展绿色产业、绿色装备、碳资产管理等领域，推动传统产业绿色转型，大力发展新兴产业，追求生产运营管理全流程的节能、治污、降耗、减碳，以高效能的生态文明建设赋能品牌价值，努力成为世界一流交通基建领域全生命周期绿色低碳发展的引领者。

China Communications Construction firmly adheres to the concept of green development, focuses on the innovation and application of new technologies and new modes of green and low-carbon projects, put emphasis on the development of fields of green industry, green equipment, carbon asset management etc., promotes the green transformation of traditional industry, strives to develop emerging industries, pursues energy saving, pollution control, consumption reduction and carbon emissions reduction in the whole process of production, operation and management, empowers brand value based on high-efficiency ecological civilization construction, and makes great efforts to become a leader who guides the green and low-carbon development in the full life cycle in the world-class traffic infrastructure field.



## 拓展绿色产业

### EXPANDING GREEN INDUSTRIES

中国交建积极应对气候变化，紧扣“十四五”节能环保产业发展的重大历史机遇期，在节能环保产业、清洁能源产业领域综合发力，不断拓宽迈向未来的“高成长赛道”，开启了助力城市环境治理、绿色高质量发展的生动实践。

China Communications Construction actively responded to climate change, closely followed the important historical opportunity period of the development of energy conservation and environment protection industries in the "14th Five-Year Plan", made comprehensive efforts in the fields of energy conservation and environment protection industries and clean energy industries, and constantly broadened the "high-growth track" for the future, which opened a vivid practice of helping urban environmental governance and green and high-quality development.

### 清洁能源开发

#### CLEAN ENERGY DEVELOPMENT

中国交建全面践行国家能源安全新战略，主动拥抱“绿色革命”，布局清洁能源产业，全力攻关、掌握常用海上风电基础的施工技术和全类型的风机安装技术，积极推进以海上风电、光伏发电为代表的清洁能源项目建设，持续促进能源结构优化。截至 2022 年底，公司参建全国一半以上的海上风电场，超过 60 个海上风电场项目。2022 年 10 月，三航局承建的福建漳州新能源光伏组件车间项目一期工程正式投产。

China Communications Construction comprehensively implements the new national energy security strategy, actively embraces the "green revolution", lays out the clean energy industry, tries all its best to study and master the construction technology of common offshore wind power foundation and all types of fan installation technology, actively promotes the construction of clean energy projects represented by offshore wind power and photovoltaic power generation, and continuously promotes the optimization of energy structure. As of the end of 2022, the company has participated in the construction of more than half of the offshore wind farms in China with more than 60 offshore wind farm projects. In October 2022, the Phase I project of Zhangzhou New Energy Photovoltaic Module Workshop Project in Fujian, which was undertaken by the CCCC Third Harbor Engineering Co., Ltd., was officially put into production.



冬奥会延庆赛区首个建筑光伏一体化应用项目——山地新闻中心  
The first building photovoltaic integrated application project in Yanqing Division of Olympic Winter Games - Mountain Press Center

### 中国交建参建的代表性海上风电项目

#### REPRESENTATIVE OFFSHORE WIND POWER PROJECTS THAT CHINA COMMUNICATIONS CONSTRUCTION HAS PARTICIPATED IN



亚洲首个海上风电场——东海大桥海上风电场  
First offshore wind farm in Asia - East Sea Bridge Offshore Wind Farm



国内首个“双十”的海上风电场——中广核如东海上风电场  
First "Double Ten" offshore wind farm in China - CGN Rudong Offshore Wind Farm



国内首个成规模单机容量 5 兆瓦直驱型风机的海上风电场——中闽福建平海湾海上风电场  
First large-scale offshore wind farm in China with a single unit capacity of 5 MW with direct-drive fan - Zhongmin Fujian Pinghai Bay Offshore Wind Farm



首次在中长周期波、大水深、强淤积条件下的风电场——国电舟山普陀海上风电场  
First wind farm under the conditions of medium-long periodic wave, large water depth and strong siltation - Guodian Zhoushan Putuo Offshore Wind Farm



国内首个 300 千瓦规模的海上风电场——华能如东海上风电场  
First 300 KW offshore wind farm in China - Huaneng Rudong Offshore Wind Farm



国内首个规模化深水导管架基础结构的海上风电场——阳江南鹏岛海上风电场  
First offshore wind farm with large-scale deepwater jacket infrastructure in China - Yangjiang Nanpeng Island Offshore Wind Farm



国内首个单机容量 10 千瓦风机的风电场——福建兴化湾海上风电场  
First wind farm with a single capacity of 10 KW fan in China - Fujian Xinghua Bay Offshore Wind Farm



国内首个批量建设超 100 千瓦的海上风电场——阳江沙扒海上风电场  
First batch construction of offshore wind farm exceeding 100 KW in China - Yangjiang Shaba Offshore Wind Farm

## 参与环保产业

### PARTICIPATING IN ENVIRONMENTAL PROTECTION INDUSTRY

中国交建充分发挥专业优势，积极发展污水处理、垃圾处理等环保产业，塑造中国交建环保业务品牌，累计自主研发绿色低碳循环技术、工艺 70 余项，为污染防治提供技术服务保障，为美丽中国建设添加了靓丽的“中交底色”。

By giving full play to its professional advantages, China Communications Construction has actively developed environmental protection industries such as sewage treatment and garbage disposal, shapes the environmental protection business brand of China Communications Construction, and has independently researched and developed more than 70 green and low-carbon recycling technologies and processes, providing technical service guarantee for pollution prevention and control, and adding a beautiful "CCCC background" to the construction of beautiful China.

## 环保技术

### ENVIRONMENTAL PROTECTION TECHNOLOGY

#### 渣土土质智能化快速检测设备

##### Intelligent and rapid testing equipment for muck soil quality

中交疏浚、上航局成立渣土消纳项目，组织研发了渣土土质智能化快速检测设备，为重大工程建设提供便利、高效、清洁的渣土消纳服务。

CCCC Dredging and CCCC Shanghai Dredging have established a muck disposal project, organized and developed an intelligent and rapid detection equipment for muck soil quality, and provided convenient, efficient and clean muck disposal services for major projects.



渣土土质智能化快速检测设备  
Intelligent and rapid testing equipment for muck soil quality

#### 盾构渣土分离系统

##### Shield muck separation system

二公局深圳地铁 6 号线支线项目研发应用盾构渣土分离系统，经过多级筛分实现渣土和尾水的处理与循环利用，实现了盾构渣土零排放、零污染。

In the branch line project of Shenzhen Metro Line 6 undertaken by the CCCC Second Highway Engineering Co., Ltd., the shield muck separation system is developed and applied, and the treatment and recycling of muck and tail water are achieved through multi-stage screening, thus achieving zero emission and pollution of shield muck.



盾构渣土分离系统  
Shield muck separation system



#### 分子混凝土节水保湿养护膜新型材料

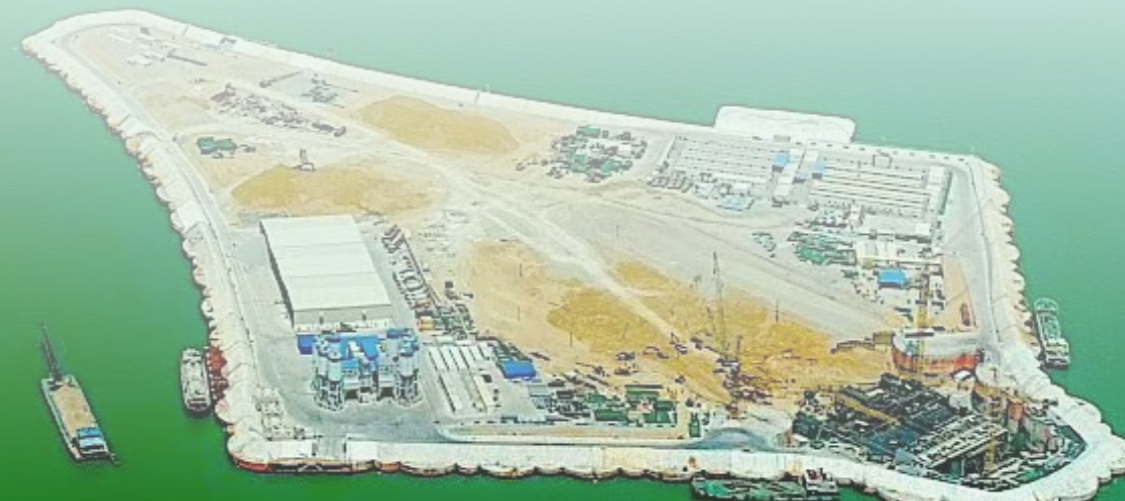
##### New material of water-saving and moisturizing curing film of molecular concrete

一公局集团采用分子混凝土节水保湿养护膜新型材料进行路面养护，新材料养护试验段用水量比传统方法养护段大大减少，在全线树立了节能环保典范。

The CCCC First Highway Engineering Group adopts the new material of water-saving and moisturizing curing film of molecular concrete for pavement maintenance, and the water consumption of curing test section with the new material is greatly reduced compared with that of the curing section with traditional methods, setting an example of energy conservation and environmental protection in the whole line.



分子混凝土节水保湿养护膜  
Water-saving and moisturizing curing film of molecular concrete



## 坚持绿色运营

### ADHERING TO GREEN OPERATION

中国交建全面落实《关于完整准确全面贯彻新发展理念做好碳达峰碳中和工作的意见》《2030 年前碳达峰行动方案》等政策制度，积极探索“双碳”目标下建筑行业绿色发展新路径，争当“世界一流交通基建领域全生命周期绿色低碳发展引领者”。

China Communications Construction has fully implemented policies and systems such as Opinions on Completely, Accurately and Comprehensively Implementing the New Development Concept and Doing a Good Job in Carbon Peak and Carbon Neutrality, and Action Plan for Carbon Peak before 2030, actively explored the new path of green development of the construction industry under the goal of "Carbon Peak and Carbon Neutrality", so as to strive to be a "world-class leader in green and low-carbon development in the whole life cycle of transportation infrastructure".

### 加强环境管控

#### STRENGTHENING ENVIRONMENTAL MANAGEMENT AND CONTROL

中国交建严格落实生态环境保护主体责任，强化节能环保体系顶层设计，持续补充完善节能环保管理制度，全面提高节能环保监督管理水平。公司通过了中国船级社质量认证公司的环境管理体系认证。2022 年，公司印发《生态环境保护监管奖罚办法》，落实资质主体、签约主体、履约主体、责任主体“四位一体”责任；部署环保管理“五个到位”专项工作，印发实施方案，分别从“组织机构和人员配备、管理制度体系、责任追究和考核、环保措施、设施和技术装备、环保经费投入”六个方面发力，逐步建立起符合中交特色的环保管理体系，并按照业务类型选取部分二级单位和实践项目进行试点推进，力争打造出“环保管理五个到位”特色样板，公司本年度未发生一般及以上突发环境事件。

2022 年，公司开展了“环保监督管理人员岗前培训”工作，培训课程由必修课和选修课组成，每位学员须完成 8 门必修课学习，做到熟悉环保法规和政策，掌握公司环保制度和监管要求，并结合实际工作需要，选择最少 2 门选修课学习，掌握与本单位生产活动相关的污染防治要点，实现环保监督管理人员持证上岗。

By strictly implementing the main responsibility of ecological environmental protection, strengthening the top-level design of energy conservation and environmental protection system, China Communications Construction continuously supplements and improves the energy conservation and environmental protection management system, and comprehensively improves the supervision and management level of energy conservation and environmental protection. The company has passed the environmental management system certification of China Classification Society Certification Company. In 2022, the company issued the Measures for Reward and Punishment of Ecological Environmental Protection Supervision to implement the "four-in-one" responsibility of qualification subject, contracting subject, performance subject and responsibility subject; It deployed the "five in place" special work of environmental protection management, issued the implementation plan, and made efforts from six aspects: "organization structure and staff assignment, management system, responsibility investigation and assessment, environmental protection measures, facilities and technical equipment, and environmental protection fund investment", and gradually established an environmental protection management system in line with the characteristics of CCCC. Moreover, according to the business types, the company selected some secondary units and practical projects to promote the pilot, and strived to create a characteristic model of "five in place for environmental management". The company did not have general or above environmental emergencies this year.

The company carried out "pre-job training for environmental supervision and management personnel" in 2022, and the training course consisted of compulsory courses and optional courses. Each trainee must complete eight compulsory courses, know environmental laws and policies well, master the company's environmental protection system and regulatory requirements, and choose at least two optional courses in accordance with the actual work needs, master the pollution prevention points related to the production activities of the unit, and achieve employment with certificates of environmental protection supervision and management personnel.

## 节约能源资源

### SAVING ENERGY AND RESOURCES

中国交建严格遵循《中华人民共和国节约能源法》等节约资源相关法律法规，积极推动产业结构调整和转型升级，建设资源节约型和环境友好型企业，实现可持续发展。

China Communications Construction strictly abides by the Energy Conservation Law of the People's Republic of China and other laws and regulations related to resource conservation, actively promotes industrial structure adjustment, transformation and upgrading, so as to build the resource-saving and environment-friendly enterprise, and achieve sustainable development.

### 加强节能管理

#### STRENGTHENING ENERGY CONSERVATION MANAGEMENT

中国交建遵循合理用能、节约优先的基本原则，印发《节约能源监督管理办法》，把节能工作贯穿生产经营的全过程中，积极推动各单位采取技术上可行、经济上合理的各项节能措施，优化能源结构，提升能源利用效率，建设节能型企业。深挖节能减排工作亮点，提炼、总结节能减排经验成果，不断促进节能减排技术的创新与转化。

2022 年，公司获得中国节能协会“节能减排科技进步奖”一等奖 1 项、二等奖 5 项、三等奖 4 项，“节能减排科技发明奖”二等奖 1 项。

China Communications Construction follows the basic principles of "rational use of energy and giving priority to saving energy", issues the Measures for Supervision and Management of Energy Conservation, and puts energy conservation work through the whole process of production and operation. It actively promotes all units to adopt various energy conservation measures that are technically feasible and economically reasonable, optimize the energy structure, and improve energy utilization efficiency, so as to build energy-saving enterprise. The company digs deep into the highlights of energy conservation and emission reduction, refines and summarizes the experience and achievements of energy conservation and emission reduction, and constantly promotes the innovation and transformation of energy conservation and emission reduction technologies.

In 2022, the company won one first prize, five second prizes, four third prizes of the "Scientific and Technological Progress Award for Energy Conservation and Emission Reduction" and one second prize of the "Scientific and Technological Invention Award for Energy Conservation and Emission Reduction" from the China Energy Conservation Association.





## 推广低碳技术

### PROMOTING LOW-CARBON TECHNOLOGY

中国交建鼓励所属各级单位进行低碳技术和管理创新与攻关，加大对节能科技研发和技术装备自主创新的投入，推广节能“四新技术”（新材料、新技术、新工艺、新设备）应用，不断提升节能能源工艺、技术、装备水平。

2022 年，公司成立绿色低碳发展研究中心和碳资产管理中心，制定中心管理等 4 项制度，发布公路、水运、机场建设期碳排放测算等 7 项标准，填补了行业空白，发布 12 项绿色低碳关键技术成果，公司 17 个绿色低碳项目被国资委、交通部等部委及协会评为典型案例。

China Communications Construction encourages its units at all levels to carry out low-carbon technology and management innovation and research, increase investment in energy conservation technology R&D and independent innovation of technological equipment, promote the application of energy conservation "four new technologies" (new materials, new technologies, new processes and new equipment), and continuously improve the level of energy conservation technology, techniques and equipment.

In 2022, the company established a green and low-carbon development research center and a carbon asset management center, formulated four systems such as center management, and issued seven standards including carbon emission calculation during highway, water transport and airport construction, which filled the gaps in the industry. It also released 12 green and low-carbon key technological achievements. The company's 17 green and low-carbon projects were rated as typical cases by the State-owned Assets Supervision and Administration Commission, Ministry of Transport and other ministries and commissions.

一航局“交工 72 号”施工船成立专项小组，精确测算主机在不同转速下的油耗，并结合航行天气和海况影响进行深度计算确定最低油耗的主机转速，节省大量燃油。

A specialized team was established for the construction ship "Jiaogong 72" of the CCCC First Harbor Engineering. They accurately measured the fuel consumption of the main engine at different speeds, and made in-depth calculation to determine the main engine speed with the lowest fuel consumption in combination with the impact of the weather and sea conditions during navigation, saving a lot of fuel.

三航局“海狮 2 号”施工船团队在保证船机性能的前提下，提出船舶节能增效优化方案，通过调小未使用的主发电机冷却水系统进出口阀门、关闭空调冷媒系统等手段，节省船舶冬季待工状态下的燃油使用量，为项目提升船舶管理、降本增效、减少二氧化碳排放打下坚实基础。

On the premise of ensuring the performance of the ship and the main engine, the construction ship team of "Sea Lion No.2" of CCCC Third Harbor Engineering Co., Ltd. put forward the optimization plan for ship energy conservation and efficiency enhancement. By turning down the unused inlet and outlet valves of the cooling water system of the main generator and turning off the air conditioning refrigerant system and other methods, the fuel consumption of the ship in the winter standby state is saved, laying a solid foundation for the project to improve ship management, achieve cost reduction and efficiency increase, and reduce CO2 emissions.

中交海投“三亚湾号”采用“油电混合”动力推进，实现高低航速下柴油推进和电力推进的切换，节能减排、绿色环保。

The "Sanya Bay" of CCCC Ocean Investment Holding Company Limited adopts a "gas-electric hybrid" power propulsion, achieving the switching between diesel propulsion and electric propulsion at high and low speeds, which is both energy-saving and environmentally friendly.

## 优化用能结构

### OPTIMIZING ENERGY CONSUMPTION STRUCTURE

中国交建大力推广太阳能、天然气等清洁能源应用，调整能源消费结构，加大清洁能源在能源消费结构中的比重，并积极推广采用太阳能路灯及警示灯、太阳能热水器、LED 灯具、照明智能控制系统，鼓励使用新能源作为项目的燃料热源。广连高速公路采用太阳能等清洁能源减少发电机油耗；北京大兴国际机场使用太阳能蓄电池路灯，利用 BIM 合理分析光照布局，提高自然能源利用率，有效实现节能减排。

China Communications Construction vigorously promotes the application of clean energy such as solar energy and natural gas, adjusts the energy consumption structure, and increases the proportion of clean energy in the energy consumption structure. Moreover, it actively promotes the use of solar street lamps and warning lights, solar water heaters, LED lamps and intelligent lighting control systems, and encourages the use of new energy as the fuel heat source of the project. The Guangzhou-Lianzhou Expressway project uses clean energy such as solar energy to reduce the fuel consumption of generators; Beijing Daxing International Airport uses solar battery street lamps and uses BIM to rationally analyze the lighting layout, improving the utilization rate of natural energy, and effectively achieving energy conservation and emission reduction.



北京大兴国际机场荣获国家优质工程金奖，是公司首个获此殊荣的飞行区工程

Beijing Daxing International Airport won the National Gold Award for Prime-quality Projects, which is the first flight area project of the company to win this honor.

## 高效使用建材

### EFFICIENT USE OF CONSTRUCTION MATERIALS

中国交建围绕绿色可持续发展战略，坚持科技引领、创新驱动，持续健全绿色低碳管理体制机制，以“绿色建造、数字建造、工业建造”为攻关方向，建立了房屋建筑绿色低碳技术中心，加强绿色低碳技术的研发、应用转化，促进绿色低碳技术创新，开展超高层复杂建造、装配式智慧建造、大跨度公共场馆建造、城市更新与老旧小区改造等多个领域重难点工程技术研究。在建项目广泛应用智慧物料验收管控系统，推进“人控”向“机控”升级，提升建材使用效率。

Focusing on the green and sustainable development strategy, CCCC insists on technology-led and innovation-driven growth, continues to improve the green and low-carbon management system and mechanism, takes "green, digital and industrial construction" as the direction of research, establishes a green and low-carbon technology center for housing construction, strengthens the research and development and application transformation of green and low-carbon technologies, promotes innovation in green and low-carbon technology, carries out research on key and difficult engineering technologies for complex super high-rise construction, assembly-type intelligent construction, construction of large-span public venues, urban renewal and renovation of old communities, and other fields. The intelligent material acceptance and control system is widely used in projects under construction to promote the upgrade from "human control" to "machine control" and improve the efficiency of building materials.

## 科学节约用水

### SCIENTIFICALLY SAVING WATER

中国交建坚决贯彻节水思想，推进取用水量统计，提高全员节水意识；要求各施工项目依法申请取水许可证，缴纳水资源费取得取水权；在取水点的选择上，避开生态保护区、水源保护地等敏感地带；推广节水新技术、新工艺和新产品，提高节水器具使用率，加强对施工现场雨水进行回收和再利用，用于结构混凝土养护、道路地表降尘等。

China Communications Construction resolutely implements the idea of water conservation, promotes the measurement and statistics of water intake and use, and improves the consciousness of saving water of all staff; The company requires all construction projects to apply for water intake permits in accordance with the law and pay water resources fees to obtain water intake rights; As for the selection of water intake points, the company requires to avoid sensitive areas such as ecological preservation areas and water source protection areas; The company promotes new water conservation technologies, new processes and new products, improves the utilization rate of water conservation appliances, and strengthens the recovery and reuse of rainwater on the construction site for structural concrete maintenance and road surface dust reduction, etc.



巴基斯坦瓜达尔港东湾快速路  
East Bay Expressway, Gwadar Port, Pakistan

## 推进减污降碳

### PROMOTING POLLUTION REDUCTION AND CARBON REDUCTION

中国交建严格遵循《中华人民共和国环境保护法》等环保法律法规，通过制定《投资建设项目环保管理指南》《建设工程绿色施工指导手册》等管理制度，严控大气污染、水体污染、噪音污染，积极做好废弃物排放管理，对生产中产生的污染物进行严格管理监督，全力守护天更蓝、山更绿、水更清的美丽中国。

China Communications Construction strictly abides by the Environmental Protection Law of the People's Republic of China and other environmental protection laws and regulations. By formulating management systems such as Guide to Environmental Protection Management of Investment Construction Projects and Guide Manual for Green Construction of Construction Projects, the company strictly controls air pollution, water pollution and noise pollution, actively manages waste discharge well, strictly manages and supervises pollutants generated in production, and makes every effort to protect beautiful China with bluer sky, greener mountains and clearer water.

## 废气排放管理

### MANAGEMENT OF EXHAUST EMISSION

中国交建严格执行《中华人民共和国大气污染防治法》等与空气污染相关的国际规约、国内法律，加强减排技术的推广应用，最大限度减少污染废气的排放。2022 年，公司严格落实环保主体责任，全面提高环保监督管理水平，强化环保体系顶层设计，持续补充完善环保管理制度和工作标准框架，在已经印发 7 项监管制度的基础上，印发《生态环境保护监管奖罚办法》，落实资质主体、签约主体、履约主体、责任主体“四位一体”责任。京津冀装配式产业基地采用封闭空间的固定式焊接作业方式，通过集烟管道净化设备处理后再排放废气的方式，空气净化率达 100%。

China Communications Construction strictly abides by and implements the Air Pollution Prevention and Control Law of the People's Republic of China and other international agreed-upon stipulations / regulations and domestic laws related to air pollution, and strengthens the popularization and application of emission reduction technologies, so as to minimize the emission of polluted waste gas. In 2022, the company strictly implemented the entity responsibility of environmental protection, comprehensively improved the level of environmental supervision and management, strengthened the top-level design of environmental protection system, and continuously supplemented and improved the environmental management system and work standard framework. On the basis of seven regulatory systems issued last year, the company issued the Measures for Reward and Punishment of Ecological Environmental Protection Supervision to implement the "four-in-one" responsibility of qualification subject, contracting subject, performance subject and responsibility subject. In the assembled industrial base of Beijing-Tianjin-Hebei Region, the fixed welding operation mode of enclosed space is adopted. The air purification rate is 100% by the way of discharging waste gas after being treated by the flue gas collection pipeline purification equipment.

## 废水排放管理

### MANAGEMENT OF WASTEWATER DISCHARGE

中国交建严格遵守《中华人民共和国水污染防治法》《城镇排水与污水处理条例》等水污染防治相关法律法规，大力开展绿色建造活动，严格规范建设项目的环境影响评价和环境保护设施建设工作，执行污染物排放许可制，现场污水按国家标准《污水综合排放标准》的要求排放。

同时，要求各单位通过科学管理和技术进步，最大限度节约资源与减少对环境负面影响，不断加强施工现场废水的回收和再利用。二航局丹江口水库特大桥项目团队对清孔工艺进行配套升级，采用气举反循环清孔方式代替传统的正循环清渣工艺，不仅压缩了清孔时间，而且清渣效果提升 30%，实现了生产用水零渗漏。

China Communications Construction strictly abides by laws and regulations related to water pollution prevention and control, such as the Law on the Prevention and Control of Water Pollution of the People's Republic of China, Regulations on Urban Drainage and Sewage Treatment, vigorously carries out green construction activities and strictly regulates the environmental impact assessment of construction projects and the construction of environmental protection facilities. The company implements the pollutant discharge permit system, and the on-site sewage is discharged in accordance with the requirements of the national standard Integrated Wastewater Discharge Standards.

Meanwhile, it requires all units to save resources to the maximum extent and reduce the negative impact on the environment through scientific management and technological progress, and constantly strengthen the recovery and reuse of waste water on the construction site. The project team of Danjiangkou Reservoir Bridge undertaken by CCCC Second Harbor Engineering Company Ltd. upgraded the hole cleaning process and replaced the traditional positive circulation slag cleaning process with gas lift reverse circulation, which not only shortened the hole cleaning time, but also improved the slag cleaning effect by 30%, achieving zero leakage of production water.



新疆天山胜利隧道生产废水处理厂  
Xinjiang Tianshan Shengli Tunnel Production Wastewater Treatment Plant

## 废弃物排放管理

### MANAGEMENT OF WASTE DISCHARGE

中国交建遵循“源头减量、分类管理、就地处置、排放控制”的原则对无害废弃物进行处理。全面推广“垃圾分类”工作，生活垃圾按照地方要求分类存放；施工船舶的生活垃圾委托有资质的单位进行接收，避免污染海域；建筑垃圾集中分类存放，进行无害化处置或资源化利用，从源头强化管控，实现废弃物的“减量化、无害化、资源化”处理，减少废弃物造成的环境负担。

China Communications Construction follows the principle of "reduction from the source, classified management, on-site disposal and emission control" to treat nonhazardous wastes. The company comprehensively promotes the work of "garbage sorting", and the domestic garbage is classified and stored in accordance with local requirements; the company entrusts a qualified unit to receive the domestic garbage from the construction ship, so as to avoid polluting the sea area; as for construction wastes, the company centrally classifies and stores them for harmless disposal or resource utilization, strengthening control from the source, realizing the "reduction, harmless and resourceful" treatment of wastes, so as to reduce the environmental burden caused by wastes.

## 噪声治理

### NOISE TREATMENT

中国交建严格遵循《中华人民共和国环境噪声污染防治法》等噪声防治相关法律法规，通过合理安排施工时间、优化施工布局等措施从源头控制噪声，并通过选用低噪设备、设置禁鸣标识、建设降噪带等方式，全面防治噪音污染。

China Communications Construction strictly abides by laws and regulations related to noise prevention and control, such as the Law on Prevention and Control of Environmental Noise Pollution of the People's Republic of China. The company controls the noise from the source by reasonably arranging the construction time and optimizing the construction layout, and comprehensively prevents noise pollution by selecting low-noise equipment, setting no honking signs and building noise reduction zones.



中国路桥柬埔寨金港高速公路项目绿色降噪林带

The Green Noise Reduction Forest Belt of Phnom Penh-Sihanoukville Expressway Project in Cambodia, built by China Road & Bridge Corporation

## 扬尘治理

### DUST CONTROL

中国交建通过采取全封闭式工厂化作业、对工地扬尘进行监控、使用自动喷淋系统和雾炮机，并使用自动化洗车设备等降低施工现场扬尘。一航局项目部投入 8 台大型洒水车在施工便道上不间断洒水抑尘，在沿线 9 个村寨布设抽水管线和洒水机，就近组织人员根据车流情况，动态洒水、时时降尘，将中老铁路打造成连心的绿色之路。

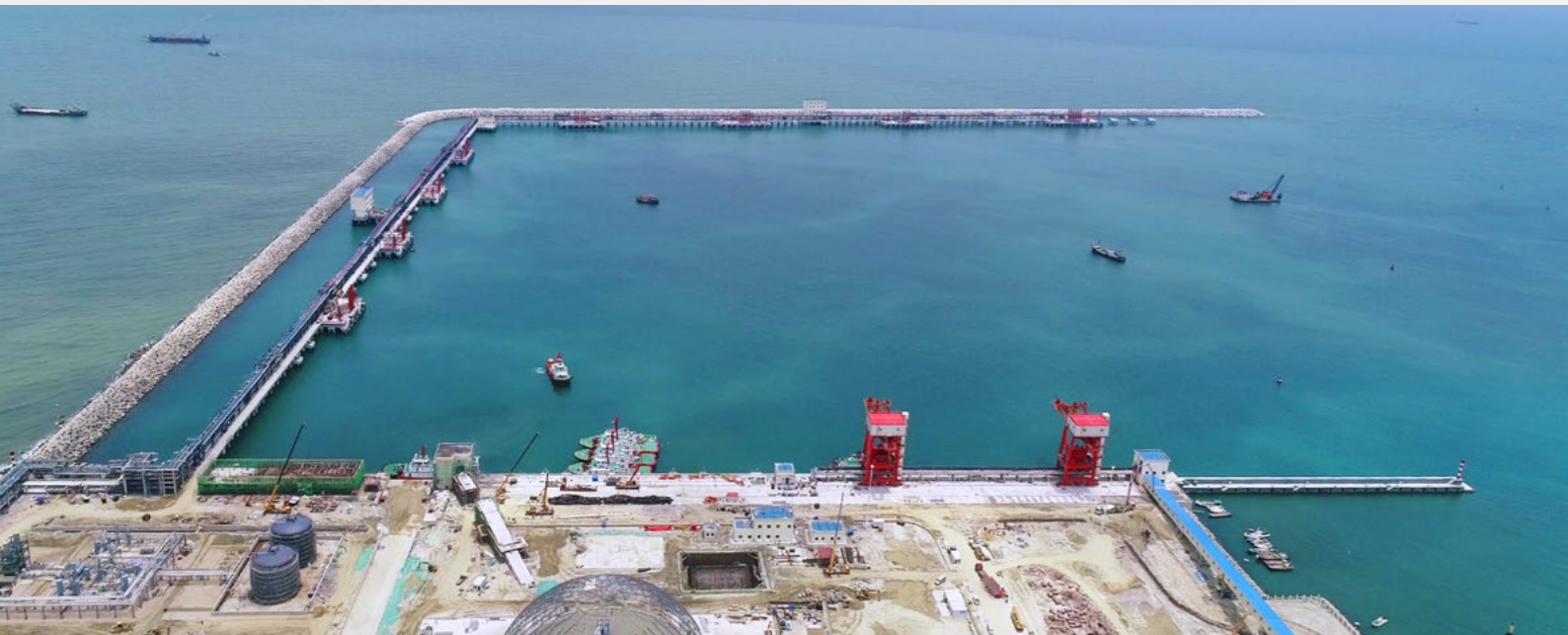
China Communications Construction reduces the dust on the construction site by adopting totally enclosed factory operation, monitoring the dust on the construction site, using automatic spraying systems and fog cannon machines, and using automatic vehicle cleaning equipment. The project department of the CCCC First Harbor Engineering invested 8 large sprinkling trucks to continuously sprinkle water on the construction sidewalk to suppress dust, and laid pumping pipelines and sprinklers in nine stockaded villages along the line, and organized personnel nearby to sprinkle water dynamically and reduce dust from time to time in accordance with the traffic flow, so as to build the China-Laos Railway into a green road connecting the heart.



雾炮机降尘  
Dust reduction with fog cannon machine



工地扬尘监控系统  
Dust monitoring system on construction site



中委合资广东石化 2000 万吨重油加工码头工程  
Sino-Venezuela Joint Venture Guangdong Petrochemicals 20 Million Tonnes Heavy Oil Processing Terminal Project

## 守护美好生态

### PROTECTING A BEAUTIFUL ECOLOGY

中国交建深入实施碳达峰碳中和“3060”行动，开展生态环境保护违法违规问题专项整治工作，积极投身蓝天、碧水、净土保卫战，争当绿色发展重要参与者和贡献者。

China Communications Construction has deeply carried out the "3060" Action of carbon peak and carbon neutrality, carried out special rectification work on illegal issues of ecological environment protection, actively participated in the defense of blue skies, clear waters, and pure land, and strived to be an important participant and contributor to green development.

## 开展环境治理

### CARRYING OUT ENVIRONMENTAL GOVERNANCE

中国交建树牢生态优先、绿色发展理念，全力打造科技支撑、机制灵活、行业领先的一流生态治理商。公司围绕“江河湖海优先”经营策略，深入践行长江大保护、黄河流域生态保护和高质量发展等国家重大战略，深度对接京津冀、长三角、粤港澳、成渝等区域发展规划，在白洋淀、永定河、嘉兴南湖、云南洱海等“一淀三河三江四湖”策划实施了一批流域综合治理项目，探索出“以投资主体一体化带动流域治理一体化”的中交特色流域治理方案。

China Communications Construction firmly adheres to the concept of ecology first and green development, and makes every effort to build a first-class ecological management provider with scientific and technological support, flexible mechanism and leading industry. Focusing on the business strategy of "giving priority to rivers, lakes and seas", the company has deeply practiced the major national strategies such as the great protection of the Yangtze River, the ecological conservation and high-quality development of the Yellow River Basin, deeply connected with the development plans of Beijing-Tianjin-Hebei Region, Yangtze River Delta, Guangdong - Hong Kong - Macao, Chengdu and Chongqing. It has planned and implemented a number of comprehensive river basin management projects in "one shallow lake, three rivers, three long rivers, and four lakes" such as Baiyang Lake, Yongding River, South Lake in Jiaxing, Erhai Lake in Yunnan, and explored a river basin management plan with characteristics of CCCC that "integrates investment entities to drive the integration of river basin management".

## 流域及水环境治理

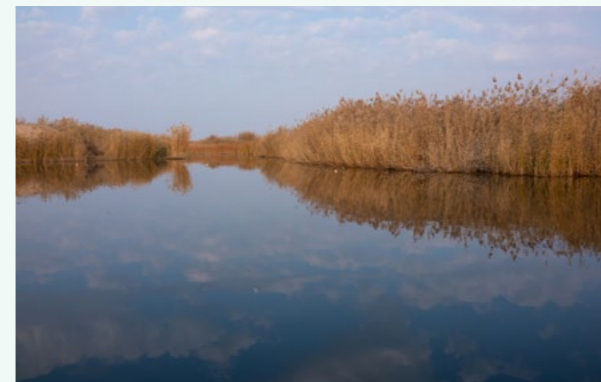
### RIVER BASIN AND WATER ENVIRONMENT MANAGEMENT



白洋淀生态治理与综合修复工程  
Baiyangdian Ecological Management and Comprehensive Restoration Project



永定河流域综合治理与生态修复项目  
Yongding River Basin Comprehensive Management and Ecological Restoration Project



乌梁素海流域山水林田湖草生态保护修复试点工程  
Pilot project for ecological protection and restoration of mountains, rivers, forests, fields, lakes, and grasslands in the Wuliangsu Hai Basin



汾河流域综合治理  
Comprehensive Management of the Fenhe River Basin



蓟运河流域治理 EOD 项目  
Jiyunhe River Basin Management EOD Project



成都锦江流域综合治理  
Comprehensive Management of the Jinjiang River Basin in Chengdu

## “塞外明珠”！乌梁素海等你来打卡

"Pearl beyond the Great Wall"! Wuliangsu Lake is Waiting for you to Visit

由三公局、公规院负责设计建设的内蒙古乌梁素海项目共有“山”“水”“湖”“田”“林草”五大类，共计 15 子项。项目围绕流域内矿山、林草、农田、湿地、湖水等生态要素开展整体保护、系统修复、综合治理。如今，乌梁素海流域山水林田湖草生态保护修复试点工程成效显著，乌梁素海的整体水质明显改善，生态好转，乌梁素海整体水质稳定在 V 类，部分地区达到 IV 标准，在这里还能看到湖里水草丰美、鱼游虾戏，种类繁多的北迁候鸟，包括疣鼻天鹅、凤头鸕鶿、红嘴海鸥等在此聚集，疣鼻天鹅从 2000 年的 200 余只增加到现在的近千只。建设者们将这里真正打造成为物产富饶、风景秀美的“塞外明珠”。

The Wuliangsu Lake project in Inner Mongolia, which is designed and constructed by the CCCC Third Highway Engineering Co., Ltd. and CCCC Highway Consultants Co., Ltd., has five categories, including mountains, waters, lakes, farms, forests and grasses, with a total of 15 sub-items. Focusing on the ecological elements such as mines, forests and grasses, farmland, wetlands and lakes in the basin, the project carries out overall protection, system restoration and comprehensive management. Now, the pilot project of ecological protection and restoration of mountains, rivers, forests, farmlands, lakes and grasslands in Wuliangsu Lake Basin has achieved remarkable success. In Wuliangsu Lake, the overall water quality has improved obviously and the ecology has improved. The overall water quality is stable at Grade V, and some areas reach the IV standard. Here, we can also see the rich aquatic plants in the lake, swimming fish and shrimp, and a wide variety of migratory birds flying to the North, including mute swans, great crested grebes, and black-headed gulls gathering here. The number of mute swans has increased from over 200 in 2000 to nearly a thousand now. The builders have truly built this place into a "Pearl beyond the Great Wall" with abundant resource and rich products and beautiful scenery.



生机盎然的乌梁素海景区  
The Vibrant Wuliangsu Lake Scenic Area

## 保护生物多样性

## PROTECTING BIOLOGICAL DIVERSITY

中国交建深入贯彻习近平主席在《生物多样性公约》第十五次缔约方大会上的主旨讲话精神，始终坚持绿色发展理念，全面推行绿色施工标准化管理，将环保理念贯穿到交通基础设施规划、设计、建设、运营和养护全过程，采取各种生态治理措施，保护项目所在地自然环境和生物多样性。2022 年，中国港湾《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。

China Communications Construction thoroughly implements the spirit of the keynote speech delivered by the President Xi Jinping at the Fifteenth meeting of the Conference of the Parties to the Convention on Biological Diversity, always adheres to the concept of green development, fully implements the standardized management of green construction, runs the concept of environmental protection through the whole process of transportation infrastructure planning, design, construction, operation and maintenance, and adopts various ecological management measures, so as to protect the natural environment and biological diversity of the project site. In 2022, "African Little Turtle Born in the Chinese Delivery Room" of China Harbour Engineering Company was awarded one of the Top Ten Excellent Cases of International Image of Chinese Enterprises.



四航局广东汕头南澳县填海工程项目呵护白海豚生态家园  
Reclamation Project in Nan'ao County, Shantou, Guangdong Province undertaken by CCCC Fourth Harbor Engineering Co., Ltd. protects the ecological home of white dolphins.



中国路桥在蒙内铁路沿线设置野生动物通道  
China Road & Bridge Corporation set up wildlife passageways along Mombasa-Nairobi Railway.

## 红海旅游项目——打造沙特版“马尔代夫”

Red Sea Tourism Project - Creating a Saudi version of "Maldives"

在沙特西部红海沿岸，由中国港湾承建、四航局负责施工的沙特谢巴拉疏浚回填工程项目属于沙特重大再生旅游项目。

该项目施工所在区域遍布红树林、各类珊瑚礁，是海豚、海龟、候鸟等海洋及珍稀物种的栖息地和迁徙地。为此，项目团队“探海斗浪”，成功布置下第二道防污围帘，为作业区域的海洋生态构筑了有效的安全屏障。

Along the Red Sea coast in western Saudi Arabia, the dredging and backfilling project in Chebara, Saudi Arabia, which was undertaken by China Harbour Engineering Company and constructed by CCCC Fourth Harbor Engineering Co., Ltd., belongs to a major renewable tourism project in Saudi Arabia.

The construction area of the project is covered with mangrove forest and various coral reefs, and it is the habitat and migration place of marine and rare species such as dolphins, turtles and migratory birds. Therefore, the project team "explored the sea and fought the waves" and successfully laid the second anti-pollution curtain, which built an effective safety barrier for the marine ecology in the operation area.



(扫码了解更多)  
(Scan the code to learn more)

“

项目建成后，对于观光客和大自然爱好者来说，这里将是世外桃源。游客将与海鸥共进午餐，潜水员将与海豚一起潜水。坐在沙滩上，他们会和海龟一起享受日光浴。

——中交建设者  
沙特谢巴拉疏浚回填工程项目环保经理 Ahmed Nizzami

Upon the completion of the project, it will be a paradise for tourists and nature enthusiasts. Tourists will have lunch with seagulls and divers will dive with dolphins. Sitting on the beach, they will enjoy sunbathing with turtles.

——The Builder of CCCC, Ahmed Nizzami, Environmental Protection Manager of Dredging and Backfilling Project in Chebara, Saudi Arabia

”



## 践行绿色办公

PRACTICING GREEN OFFICE

中国交建积极践行绿色办公理念，全面推广一体化协同办公系统，搭建覆盖全系统的线上办公平台，并加强日常用水、用电管理，积极开展供暖、空调、配电等设备的节能提升工作，利用信息系统和现代设备加强无纸化办公，积极引导广大员工自觉节约用水用电、办公用纸双面打印、低楼层改走楼梯，从身边小事做起，自觉养成绿色低碳的工作习惯，实现行政办公领域的能源资源节约。

China Communications Construction actively practices the concept of green office, comprehensively promotes the integrated collaborative office system, builds an online office platform covering the whole system, strengthens the management of daily water and electricity consumption, and actively promotes the energy saving of heating, air conditioning, power distribution and other equipment. By using information systems and modern equipment, the company strengthens paperless office, actively guides employees to consciously save water and electricity, print on both sides of office paper, and take the stairs on the lower floors, starting with the little things around, and consciously develop green and low-carbon work habits, so as to achieve energy and resource conservation in the administrative office field.

## 开展环保公益

CARRYING OUT ENVIRONMENTAL PUBLIC WELFARE

中国交建结合“世界环境日”“全国节能宣传周”“全国低碳日”等积极开展各类环保宣传教育活动，传递低碳环保理念，并将每年5月定为“节能环保月”，全面宣传绿色理念。2022年，公司组织各单位参加第五届“讲好节能故事”微视频及摄影作品征集活动和第五届“讲好节能故事”征文活动，助力营造全社会节能低碳的浓厚氛围。

In combination with "World Environment Day", "National Energy Conservation Publicity Week" and "National Low Carbon Day", China Communications Construction has actively carried out various environmental publicity and education activities to convey the concept of low-carbon environmental protection. Moreover, it designated May of each year as "Energy Conservation and Environmental Protection Month" to fully publicize the green concept. In 2022, the company organized all units to participate in the 5th "Telling the Story of Energy Conservation Well" micro-video and photography collection activity and the 5th "Telling the Story of Energy Conservation Well" solicit article activity, helping to create a strong atmosphere of energy conservation and low carbon in the whole society.



三航局马来西亚甲醇厂项目净滩活动  
Beach cleaning activity of methanol plant project in Malaysia undertaken by the CCCC Third Harbor Engineering Co., Ltd.



扫码观看  
《精彩亮相！肯尼亚项目环保故事在联合国 COP15 上展示》

Watch the Wonderful Appearance! The Environmental Protection Story of Kenya Project is Displayed at the United Nations COP15 by scanning the QR code!



四航局“植树节·‘益’起长跑·共建绿色梦工厂”活动  
Activity of "Arbor Day • Long-distance Running • Building a Green DreamWorks" held by CCCC Fourth Harbor Engineering Co., Ltd.

# SOCIETY SECTION

## 社会篇

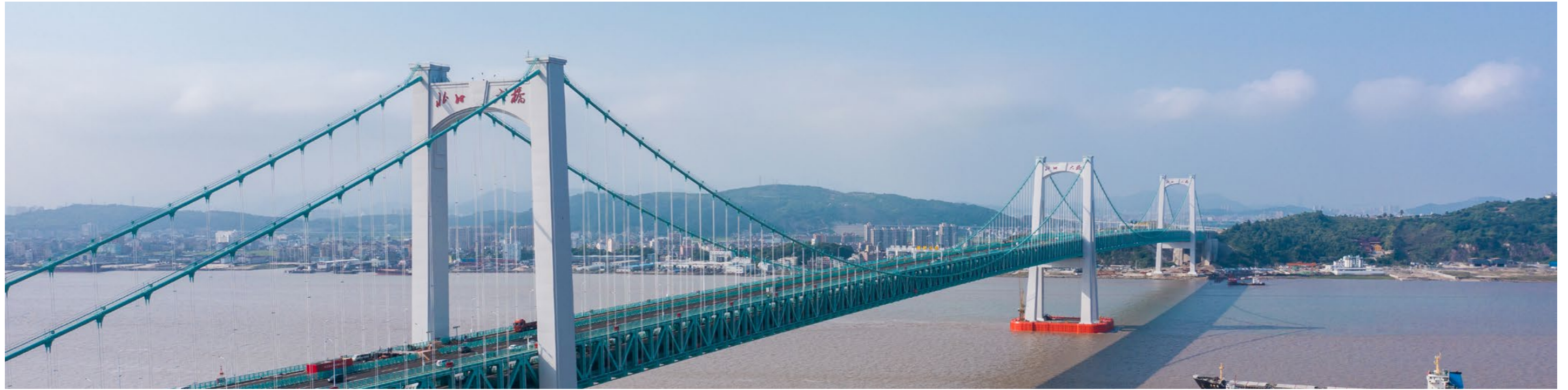
### 益世利民 成就永续美好之路

**BENEFITING THE WORLD AND  
BENEFITING THE PEOPLE  
ACHIEVING A SUSTAINABLE AND  
BEAUTIFUL FUTURE**

中国交建秉承“让世界更畅通、让城市更宜居、让生活更美好”的企业愿景，始终坚持“红线意识、底线思维”，坚决扛起防范化解重大安全风险的政治责任，确保安全生产可控在控；坚持“海外优先”，全力推动“业务国际化”向“公司国际化”转型升维；多解民生之忧、多谋民生之利，努力在高质量发展中增进民生福祉、促进社会和谐。

China Communications Construction adheres to the enterprise vision of "building a better connected world, making cities more livable, creating better life for people", always adheres to the "red line consciousness and bottom line thinking", and resolutely shoulders the political responsibility to prevent and resolve major security risks, so as to ensure that safety production is controllable and under control; The company insists on "overseas priority" and makes every effort to promote the transformation thinking from "business internationalization" to "company internationalization"; The company solves more concerns about people's livelihoods and seeks more benefits for people's livelihoods, and strives to promote people's well-being and social harmony in high-quality development.





温州瓯江北口大桥  
Beikou Bridge, Oujiang, Wenzhou

## 坚守安全红线

### ADHERING TO THE SAFETY RED LINE

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，全力做好发展与安全统筹工作，着力构建“大安全”管理体系，助力公司高质量发展。

China Communications Construction 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 coordinate development and safety, and strives to build a "big safety" management system, so as to help the company develop with high quality.

## 夯实安全基础

### CONSOLIDATING THE SAFETY FOUNDATION

中国交建坚持“标本兼治”，聚焦“五型总部”建设，扎实推进系列监管手段、安全防控措施有效落地实施。同时，不断完善制度体系建设，加强日常防范和源头治理，力求从根本上消除隐患，实现本质安全。2022年，公司安全生产总投入达 139.61 亿元，未发生重大及以上生产安全责任事故。

China Communications Construction adheres to the principle of "seeking both temporary and permanent solutions", focuses on the construction of "five-type headquarters", and solidly promotes the effective implementation of a series of regulatory measures and safety prevention and control measures. Meanwhile, the company constantly improves the system construction, strengthens daily prevention and source management, and strives to fundamentally eliminate hidden dangers and achieve essential safety. In 2022, the company's total investment in safety production reached RMB 13.961 billion, and no major or above production safety responsibility accidents occurred.

## 强化管理

### STRENGTHENING MANAGEMENT

2022年，中国交建出台《区域安全监管办法》，完成所有区域总部专（兼）职安全总监和专职安全监管人员配备，进一步织密区域安全监管网络；系统梳理、全面整治各级单位、项目安全总监和专职安全监管人员配备条件、职级待遇不规范情况；出台专职安全监管人员标准着装专项制度，专职队伍标准化、规范化管理全面提升；深入推进境外安全应急体系建设，进一步推进境内外一体化管理，公司安全监管体系更加健全，“双控”机制建设更加深入，安全生产标准化建设更加完善，牢牢守住安全生产底线红线，确保公司安全形势持续稳定。

In 2022, China Communications Construction issued the Measures for Regional Safety Supervision, completing the allocation of full-time (part-time) safety directors and full-time safety supervisors in all regional headquarters, further weaving the regional safety supervision network; The company systematically has sorted out and comprehensively rectified the staffing conditions of safety directors and full-time safety supervisors of units and projects at all levels, as well as the irregular treatment of ranks; It has introduced a special system of standard dress for full-time safety supervisors, and the standardization and standardized management of full-time teams have been comprehensively improved; It has further promoted the construction of overseas safety emergency system and further promoted the integrated management at home and abroad. The company's safety supervision system is more perfect, the construction of "double control" mechanism is deeper, the standardization of safety production is more perfect, and the bottom line and red line of safety production is firmly held to ensure the continuous and stable safety situation of the company.



2022 年安全生产工作部署会  
2022 Safety Production Work Deployment Meeting



## 专项整治

### SPECIAL RECTIFICATION

中国交建扎实推进安全生产专项整治三年行动收官战，结合安全生产规律，系统部署开展有限空间作业、环保合规性整治等系列安全质量环保专项整治行动，选取有代表性的二级单位和项目全面部署推进环保管理“五个到位”试点工作，形成指南、标准等指导性手册，加强对项目的帮扶指导，有效防范系统性风险。

China Communications Construction has solidly promoted the three-year operation closing battle of special rectification of safety production, systematically deployed a series of special rectification actions for safety, quality and environmental protection, such as limited space operation and environmental compliance rectification. The company selected representative secondary units and projects to fully deploy and promote the "five in place" pilot work of environmental protection management, formed guidance manuals such as guidelines and standards, and strengthened assistance and guidance for projects, so as to effectively prevented systemic risks.

## 分级管控

### CLASSIFICATION CONTROL

中国交建出台《安全风险分级管控和隐患排查治理管理办法》，遴选 48 个重点项目，建立健全监控体系。全年完成一类企业全覆盖安全评价，各专项整治工作组将安全监管的重心放在事故易发多发的地区、领域和单位，公司总部全年累计线下督查项目 291 个。

China Communications Construction has issued the Management Measures for Safety Risk Classification Control and Hidden Danger Investigation and Management, selected 48 key projects, and established and improved the monitoring system. The company completed the full coverage safety evaluation of Class I enterprises throughout the year. The special rectification working groups put the focus of safety supervision on accident-prone areas, fields and units. The company headquarters has conducted a total of 291 offline inspection projects throughout the year.

## 区域监管

### REGIONAL SUPERVISION

中国交建不断压紧压实区域安全监管。首次完成 10 个区域的安全管理全覆盖，结合区域特点有针对性地开展，以长三角区域为样板在全公司推进有限空间作业专项整治，在海西区域深化沿海地区防灾减灾，在西北区域重点部署冬季施工安全。长三角、西南、粤港澳 3 家配置专职安全总监的区域总部，协调调动区域内资源，组织高端对接、地企共建、交叉互检等系列工作，示范效果显著，对“以现场保市场”起到了积极的推动作用。

China Communications Construction constantly compacts the safety supervision of the area. The company has completed the full coverage of safety management in 10 regions for the first time, and carried out targeted work in combination with regional characteristics. Taking the Yangtze River Delta region as a model, the company promotes the special rectification of limited space operations throughout the company, deepens disaster prevention and mitigation in coastal areas in Haixi region, and focuses on winter construction safety in northwest region. Three regional headquarters with full-time safety directors in Yangtze River Delta, Southwest China, Guangdong, Hong Kong and Macao coordinate and mobilize resources in the regions, and organize a series of work such as high-end docking, joint construction between local and enterprises, and cross-inspection. The demonstration effect is significant, which has played a positive role in promoting "protecting the market with the site".

## 科技兴安

### REVITALIZING SECURITY THROUGH SCIENCE AND TECHNOLOGY

中国交建全力打造集全过程安全综合监管和隧道、盾构、桥梁、特种设备、船舶监控一体化的安全监控系统，建设具有信息报送、应急处置、应急指挥、一键报警等功能的应急管理平台，不断提升安全风险研判与监测预警机制。

同时，中国交建通过引入大数据、影像识别等技术科技手段，对安全生产领域潜在风险进行排查整治，从源头增强重大隐患的辨识能力与应急响应能力，“科技兴安、科技保安、科技促安”的作用进一步显现。

China Communications Construction has made every effort to build a safety monitoring system that integrates the whole process of comprehensive safety supervision and the monitoring of tunnels, shields, bridges, special equipment and ships, and build an emergency management platform with functions such as information reporting, emergency response, emergency command, and one click alarm, so as to continuously improve the security risk assessment, monitoring and warning mechanism.

Meanwhile, China Communications Construction conducts investigation and rectification of the potential risks in the field of safety production by introducing big data, image recognition and other technical means, and enhances the identification ability and emergency response ability of major hidden dangers from the source, further demonstrating the role of "revitalizing security through science and technology, ensuring security through science and technology, and promoting security through science and technology".



中交投资视频监控与安全生产指挥中心  
Command Center for Video Monitoring and Safety Production of CCCC Investment Company Limited

## 职业安全与健康

### OCCUPATIONAL SAFETY AND HEALTH

中国交建坚决遵循《中华人民共和国职业病防治法》《用人单位职业健康监护监督管理办法》等相关法律法规，制定《职业病防治指南》，打造闭环式员工健康管理体系，全方位保护从业人员身体健康和职业安全。公司通过了中国船级社质量认证公司的质量健康安全管理体系认证。

China Communications Construction resolutely abides by the Law on Prevention and Control of Occupational Disease of the People's Republic of China, the Measures for the Supervision and Management of Occupational Health Surveillance of Employers and other relevant laws and regulations, and formulates the Guidelines for Prevention and Treatment of Occupational Diseases to create a closed-loop employee health management system, so as to comprehensively protect the health and occupational safety of employees. The company has passed the quality, health and safety management system certification of China Classification Society Certification Company.

数读·2022  
Data · 2022

员工体检覆盖率

100%

The physical examination coverage rate of employees is

100%

### 常态化督导

#### NORMALIZED SUPERVISION

结合安全生产专项整治三年行动的检查督导工作，把职业健康工作作为其中一项督查内容，公司总部工作组累计督查约 291 个项目。

In combination with the inspection and supervision work of the three-year special rectification of production safety, the company regards occupational health as one of the supervision contents, and the working group of the company headquarters has supervised about 291 projects.

### 标准化建设

#### STANDARDIZED CONSTRUCTION

中国交建出台施工作业指导书，现场推行标准化建设，为从业人员配备齐全的劳动防护用品，确保人员作业活动过程中的安全与健康，最大程度防止职业病和工伤事故。

China Communications Construction has issued construction operation instructions, carried out standardized construction on site, and provided employees with complete personal protective equipment, so as to ensure the safety and health of personnel in the process of operation activities and prevent occupational diseases and accidents at work to the greatest extent.



### 无人化作业

#### CULTIVATING SAFETY CULTURE

中国交建积极推进“机械化换人、自动化减人、智能化无人”，聚焦高危作业场所加快工业机器人和智能装备应用，提升设备智能操控水平，使员工免受安全风险和噪音、烟尘、高温等危害侵害，全力打造本质安全型企业。

China Communications Construction actively promotes "mechanized substitution, automatic reduction of personnel, and intelligent self-service", focusing on high-risk workplaces to accelerate the application of industrial robots and intelligent equipment, and improve the intelligent control level of equipment, so as to protect employees from safety risks, noise, smoke and dust, high temperature and other hazards, and make every effort to build an intrinsically safe enterprise.



胜利隧道出口端“胜利号”TBM 操作手驾驶“巨龙”穿越平均海拔 3,200 米的天山

The TBM operator at the exit of Shengli Tunnel drives "Julong" across Tianshan Mountains with an average elevation of 3,200m.



广连十标高峰隧道采用三臂凿岩台车等设备，实现从地质预报到开挖、支护，再到电缆沟槽施工的全工序无间隙机械化施工

In Guanglian Bid 10 Gaofeng Tunnel project, three-arm drilling jumbo and other equipment are used to achieve seamless mechanized construction in the whole process from geological forecast to excavation, support and cable trench construction.



## 培育安全文化 CULTIVATING SAFETY CULTURE

中国交建积极打造具有中交特色的安全文化，通过开展安全生产月活动、安全知识竞赛活动、安全知识科普等形式多样的活动使安全理念深入人心。

2022 年，公司设立职业健康安全专项资金，用于支持职业健康课题的研究；协同中国职工发展基金会开展在京单位女职工“两癌”筛查；开展“健康中交·你我同行——全员健身促进活动”，推动“惠运动”健康课堂上线；开展健康体检，建立健康监护档案，根据职业危害因素针对性地组织员工体检，用心守护员工健康。

China Communications Construction actively builds a safety culture with the characteristics of China Communications Construction. Through various activities such as safety production month, safety knowledge contest and safety knowledge popularization, the safety concept is deeply rooted in the hearts of the staff.

In 2022, the company set up a special fund for occupational health and safety, so as to support the research on occupational health topics; It cooperated with China Worker Development Foundation to carry out "cervical cancer and breast cancer" screening for female employees working in Beijing; It launched "Healthy CCCC·You and I Walk Together - All-staff Fitness Promotion Activity" to promote the launch of the "Hui Sports" health class; It conducts health checkups, establishes health monitoring files, and conducts targeted health checkups for employees in accordance with occupational hazardous factors to protect employees' health with care.

### 数读·2022

#### Data · 2022

**15** 个单位、班组、个人荣登中华全国总工会、应急管理部、卫健委发布的

《2020-2021 年度全国“安康杯”竞赛活动先进集体和优秀个人》榜单

**15** units, teams and groups and individuals were listed in the list of Advanced Collections and Outstanding Individuals in the National "Ankang Cup" Competition in 2020-2021 issued by the All-China Federation of Trade Unions, the Ministry of Emergency Management and the National Health Commission.

公司建设健康驿站，为员工打造温暖可依的“心灵驿站”；配置心理健康咨询师，为员工针对性地进行心理健康指导；从日常科普、自我心理调整、心理预防、社会心理服务知识培训，到个案疏导等多方位为职工提供普及性、普遍性、普惠性的心理健康服务，全面疏解员工压力，守护员工心理健康。

The company has built a health station to create a warm and reliable "Heart Station" for employees; The company has mental health consultants to provide targeted mental health guidance for employees; From daily science popularization, self-psychological adjustment, psychological prevention, social psychological service knowledge training, to case guidance, etc., the company provides employees with universal, general and inclusive mental health services in many aspects, comprehensively relieves employees' pressure and protects their mental health.

2022 年 2 月，公司某公路工程项目在架桥机作业过程中，发生一起高处坠落事故。3 月，公司某市政工程提质增效项目设备调试过程中，又发生了一起机械伤害事故。项目所属单位均及时启动应急预案，成立应急事故小组，第一时间组织现场救援及善后处置工作，并按规定向有关部门和上级公司进行报告。

In February 2022, a fall from height accident occurred during the operation of a bridge erector in a highway project of the Company, and in March, a mechanical injury accident occurred during the commissioning of equipment in a municipal engineering project for quality and efficiency improvement contracted by the Company. All the departments belonging to the project activated the emergency plan in time, set up an emergency team, organized on-site rescue and aftercare work as soon as it allowed, and reported to the relevant authorities and higher-level companies in accordance with the regulations.

为深刻吸取教训，避免类似事故再次发生，公司着力强化安全管理质量，进一步细化相关制度和管理办法。通过开展“大起底、大排查、大整顿”活动、加强员工岗前培训和定期安全培训、编制标准化作业指南指导丛书、对重点难点项目派驻专项工作组全面帮扶等措施，全面提高公司安全生产管理水平，真正查摆问题、解决问题，严守安全底线、红线，切实提升安全管控水平。

In order to learn from the lessons and avoid the recurrence of similar incidents, the Company focused on strengthening the quality of safety management and further refining the relevant systems and management methods. By carrying out "holistic inspection, investigation and rectification" activities, strengthening staff pre-service training and regular safety training, compiling a series of guidance books on standardized operations, and assigning special working groups to key difficult projects to provide all-sided assistance, the Company has comprehensively improved its level of production safety management, truly analyzed the problems and solved them, strictly adhered to the safety bottom line and red line, and effectively improved its level of safety control.

## 提升应急能力 IMPROVING EMERGENCY RESPONSE CAPABILITY

中国交建遵守《中华人民共和国突发事件应对法》等相关法律法规，深入开展突发事件报告专项整治行动；定期开展安全培训和应急演练，提高应急处变能力，不断夯实“大安全”“大应急”基础。

China Communications Construction abides by the "Emergency Response Law of the People's Republic of China" and other relevant laws and regulations, and conducts in-depth special rectification actions for emergency reporting; The company regularly conducts safety training and emergency drills to improve the ability of emergency response and constantly consolidate the foundation of "big safety" and "big emergency".



312 国道 XW13 标开展应急救援安全演练  
XW13 Tendering Section of 312 National Highway conducts an emergency rescue safety drill

数读·2022  
Data Reading · 2022

|           |  |             |  |
|-----------|--|-------------|--|
| 重特大安全事故次数 | Number of major and extraordinarily serious safety accidents | 重特大安全事故死亡人数 | Fatalities in major and extraordinarily serious safety accidents |
| 0 次       | 0  | 0 人         | 0  |

## 实战应急演练，为生命保驾护航

## Practical emergency drill to protect life

6月30日，公司在二航局承建的湖北省十淅高速丹江口水库特大桥现场举办大型桥梁防坍塌实战应急演练。演练共设置倾斜梁体纠偏、伤员救治、油污处理、火灾险情处置等四大类综合科目，体现了信息预警、险情发现、信息报告、先期处置、紧急撤离、抢险救援、指挥权转移、医疗救护等全过程管理。地方海事、环保、公安、消防、医院等多支救援力量百余人参演，磨合了地企联动处置机制、锻炼了应急抢险队伍，有效提升区域应急抢险救援能力。演练成效得到相关部委和地方主管部门等各方一致认可，获得“时间好、地点好、科目好、演练好”的积极评价。

On June 30, the company held a large-scale bridge collapse prevention emergency drill on the site of Danjiangkou Reservoir Bridge of Shixi Expressway in Hubei Province, which was undertaken by CCCC Second Harbor Engineering Company Ltd. Four major comprehensive subjects were set up in the drill, such as rectification of inclined beam, treatment of wounded, oil pollution treatment and fire hazard disposal, reflecting the whole process management such as information warning, danger discovery, information reporting, advance disposal, emergency evacuation, emergency rescue, command transfer and medical aid. More than 100 people from local maritime affairs, environmental protection, public security, firefighting, hospitals and other rescue forces participated in the drill, running in the joint disposal mechanism between local and enterprises, exercising the emergency rescue team, and effectively improving the regional emergency rescue capability. The effectiveness of the drill was unanimously recognized by relevant ministries and commissions and local competent authorities, and it was positively evaluated as "good time, good place, good subjects and good drill".



桥梁防坍塌实战应急演练  
Sino-Venezuela Joint Venture Guangdong Petrochemicals 20 Million Tonnes Heavy Oil Processing Terminal Project

成就幸福员工  
ACHIEVING HAPPY EMPLOYEES

中国交建始终坚持以人为本，以开放、平等、包容的态度引才聚智，尊重并保障员工的合法权益，为员工搭建施展才华的圆梦舞台，与员工携手共享发展成果，共谋幸福未来。

China Communications Construction has always put people first, attracting talents and gathering wisdom with an open, equal and inclusive attitude, respecting and protecting the legitimate rights and interests of employees, building a stage for employees to show their talents and fulfill their dreams, joining hands with employees to share development achievements and strive for a happy future.

维护员工权益  
SAFEGUARDING EMPLOYEES' RIGHTS AND INTERESTS

中国交建坚持以人为本，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》等相关法律要求，建立各项劳动保护制度，充分保障员工平等就业、合理薪酬、休息休假、民主沟通等权益。

China Communications Construction puts people first and strictly abides by relevant legal requirements such as the Labor Law of the People's Republic of China and Labor Contract Law of the People's Republic of China. The company has established various labor protection systems to fully protect employees' rights and interests such as equal employment, reasonable salary, rest and vacation, and democratic communication.

合法平等雇佣  
LEGAL AND EQUAL EMPLOYMENT

中国交建坚持平等雇佣的原则，以公开、公正、竞争、择优的原则开展人才招聘工作，坚决杜绝针对年龄、性别、地域、民族、习俗、宗教等方面的歧视；严格遵守《中华人民共和国未成年人保护法》《禁止使用童工规定》，禁止强制劳动和雇佣童工，并加强检查分包商非法使用童工情况；积极推进本地化用工，加强海外员工招聘。2022年，公司员工劳动合同签订率100%，未发生雇佣童工、强制劳工等情况。

China Communications Construction adheres to the principle of equal employment and conducts talent recruitment based on the principles of openness, fairness, competition, and merit selection, resolutely prohibiting discrimination based on age, gender, region, ethnicity, customs, religion, and other aspects. It strictly abides by The law of the People's Republic of China on the protection of minors and The Provisions on the Prohibition of Using Child Labor, prohibits forced labor and the employment of child labor, and strengthens inspection of subcontractors' illegal use of child labor. It actively promotes localized employment and strengthens overseas staff recruitment. In 2022, the company's labor contract signing rate was 100%, and there were no cases of employing child labor or forced labor.

完善薪酬福利  
IMPROVING COMPENSATION AND BENEFITS

中国交建坚持为员工提供具有竞争力的薪酬福利体系，制定《中长期激励管理办法》，构建“1+7”中长期激励体系，开展股权激励、岗位分红、项目分红等多种激励；持续完善劳务派遣人员薪酬待遇管理制度，坚持岗位序列同工同酬；修订《海外高层次人才待遇及激励保障措施》，完善海外员工福利保障；建立企业年金制度，并按照《中华人民共和国社会保险法》及时、足额为员工缴纳社会保险，为特殊岗位员工购买商业保险，不断巩固人才吸引和保留能力。

China Communications Construction insists on providing employees with a competitive compensation and benefits system, formulating the Medium-and-Long-Term Incentive Management Measures and constructing a "1+7" medium-and-long-term incentive system, which includes various incentives such as equity incentives, position dividends, and project dividends; continuously improving the compensation and treatment management system for dispatched personnel and adhering to equal pay for equal work; revising the Measures for the Treatment and Incentive Protection of Overseas High-level Talents and improving the welfare and protection for overseas employees; establishing an enterprise annuity system and timely and fully paying social insurance for employees in accordance with the Social Insurance Law of the People's Republic of China, purchasing commercial insurance for employees in special positions, continuously consolidating our talent attraction and retention capabilities.



四航局广西西津水利枢纽二线船闸工程劳务工人查看到账工资  
Labor workers working on the Xijin Water Control Project Second Line Ship Lock Project in Guangxi, undertaken by the CCCC Fourth Harbor Engineering, check their wages received.

## 保护进城务工人员权益

### PROTECTION OF MIGRANT WORKERS' RIGHTS AND BENEFITS

中国交建高度重视进城务工人员工资报酬权益工作，切实落实党中央国务院、国资委决策部署，践行以人民为中心的发展思想，多次召开专题会议进行部署，要求各单位切实加强组织领导，完善工作机制，加强督导检查，主动回应社会关切，切实保障广大进城务工人员的合法权益，维护社会和谐稳定。

CCCC attaches great importance to the work on the wages, remuneration, rights and interests of migrant worker, faithfully implements the decisions and deployment of the CPC Central Committee, the State Council and the State-owned Assets Supervision and Administration Commission (SASAC), practices the people-centered development ideology, and has held several special meetings for deployment, requiring entities at all levels to effectively strengthen organizational leadership, improve working mechanisms, strengthen supervision and inspections, actively respond to social concerns, effectively protect the legitimate rights and interests of migrant workers, and maintain social harmony and stability.

## 坚持民主管理

### UPHOLDING DEMOCRATIC MANAGEMENT

中国交建持续建立健全以职代会为基本形式的民主管理制度，畅通职工民主管理、民主监督、民主参与渠道，鼓励员工参与公司民主管理；定期督办反馈提案落实情况，通过《中交集团暨中国交建职代会提案管理办法》《第一届一次职代会提案落实情况报告》《2022 年企业民主管理工作推进情况报告》，推进职代会工作制度化、规范化、流程化，确保员工参与民主管理的权益得到有效保障。

China Communications Construction has continuously established and improved a democratic management system based on the form of the staff and workers' congress, provided channels for democratic management, supervision, and participation for employees, encouraged their participation in company democratic management; regularly supervised and provided feedback on the implementation of proposals, promoted the institutionalization, standardization, and process of the workers' congress through the Management Measures for Proposals of the China Communications Construction Group and China Communications Construction Workers' Congress and the Report on the Implementation of Proposals of the First Session of the Workers' Congress and the Report on the Promotion of Enterprise Democratic Management Work in 2022, to ensure that employees' rights to participate in democratic management are effectively protected.

## 助力员工发展

### FACILITATE STAFF DEVELOPMENT

中国交建全面贯彻习近平总书记关于做好新时代人才工作的重要思想，聚力交通强国、江河湖海、国际化经营人才的“三大高地”，实现人尽其才、才尽其用。

China Communications Construction fully implements the important ideas of General Secretary Xi Jinping on talent work in the new era, focusing on the "Three Highlands" of transportation, river and sea, and international talent management, to achieve the full utilization and development of talents.

## 健全人才管理

### STRENGTHENING TALENT MANAGEMENT

中国交建修订完善《职业技能认定实施办法》《高技能领军人才评选及管理办法》等 11 项制度，强化技能人才工作制度保障；把人才队伍建设与企业改革发展同谋划、同部署、同推进，实施“头雁”“鲲鹏”等六大人才培养工程，完善“六大体系”、建强“六支队伍”、推进“六化建设”制度举措；印发《中交集团暨中国交建海外人才队伍建设实施意见》，在海外人力资源政策库上线 34 个国家（地区）政策法规，保障海外员工管理的标准化、规范化。

China Communications Construction has revised and improved 11 systems such as the Implementation Measures for Vocational Skills Recognition and the Selection and Management Measures for High-Skilled Leading Talents, enhancing the system guarantee for skilled talents; It plans, deploys, and promotes the construction of the talent team in conjunction with enterprise reform and development and implements six major talent training projects, including "Leading Eagles" and "Kunpeng", and improves the "Six Systems", strengthens the "Six Teams", and promotes the "Six Constructions" system measures. It has issued the Implementation Opinions on the Construction of China Communications Construction Group and China Communications Construction Overseas Talent Team, and uploaded 34 national (regional) policies and regulations to the overseas human resources policy library, ensuring standardized and standardized management of overseas employees.

## 畅通发展渠道

### SMOOTH DEVELOPMENT CHANNELS

中国交建落实公司《职务职级体系方案》，建立统一的管理、技术、项目序列职务职级体系，并在三大序列的基础上设置工程技术序列和项目经理序列，打造上下贯通的一体化职务职级体系；职称评审以能力、业绩为导向，努力为不同岗位的员工提供多种职业发展机会；深化“海外优先”导向，对于多年从事境外项目的员工，在职称评审、职级认定上设置特殊支持政策；加大科技人员及年轻干部培养选拔力度，持续评选表彰“十大杰出青年”、特级技师、十佳外籍青年员工等，为员工创造发展空间，助力员工实现自我价值。

China Communications Construction implements the Job Title and Rank System Plan, establishes a unified management, technology, and project sequence job title and rank system, and sets up an engineering technology sequence and a project manager sequence on the basis of the three major sequences, creating a vertically integrated job title and rank system; advocates that the evaluation of professional titles is oriented by ability and performance, and strives to provide various career development opportunities for employees in different positions; deepens the "overseas priority" orientation, and sets special support policies in job title evaluations and rank recognition for employees who have been engaged in overseas projects for many years; increases the training and selection efforts for scientific and technological personnel and young cadres, continuously selects and commends "Ten Outstanding Young People", "Special Grade Technicians", "Top Ten Foreign Young Employees", etc., creating development space for employees and helping them realize their self-worth.

## 开展员工培训

## CONDUCT EMPLOYEE TRAINING

中国交建大力推进公司“十四五”技能人才培养“雨燕”工程，建立健全覆盖全体员工、涵盖不同层级的教育培训体系，通过培训班、在线课程、海外交流、技能竞赛等多种渠道为员工提供科学化、系统化、差异化的培训，为加快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汇聚人才动能。

截至 2023 年 1 月，公司已连续 9 届有优秀高技能人才获评“全国技术能手”称号，在建筑央企中名列前茅。

China Communications Construction vigorously promotes the "Yuyan" project for skills and talent development during the "14th Five-Year Plan" period, establishing a comprehensive education and training system that covers all employees at different levels, and provides scientific, systematic and differentiated training for employees through training courses, online courses, overseas exchanges, skills competitions and other channels, and gathers talents to speed up the construction of world-class enterprises with global competitiveness, such as science and technology, management and quality.

As of January 2023, the company has had outstanding high-skilled talents awarded the "National Technical Expert" title for nine consecutive sessions, ranking among the top in the construction CSOs.

## 数读·2022 Data · 2022

员工培训投入

28,607.46 万元

Invest RMB

286,074,600

to train employees

员工培训人数

1,460,721 人次

With

1,460,721

trainees

人均培训时长

112 学时

An average training duration of

112

credit hours per pers



中交天和焊接设备操作工职业技能竞赛  
Tianhe Welding Equipment Operator Vocational Skills Competition

## 守护员工幸福

## SAFEGUARDING EMPLOYEES' HAPPINESS

中国交建积极构建和谐企业，打造温馨“职工之家”，为员工营造舒心的工作环境；关心关注困难员工、退休员工等特殊群体，在危难时刻第一时间伸出援手；开展形式多样的员工活动平衡员工工作与生活，努力提升员工满意度和归属感。

China Communications Construction actively builds a harmonious enterprise and creates a warm "home for employees" to create a comfortable working environment for employees. It cares for special groups of employees such as those who face difficulties, retired employees, etc., and offers assistance immediately in times of crisis; conducts various employee activities to balance work and life, striving to improve employee satisfaction and a sense of belonging.

## 帮扶慰问员工

## HELPING AND CONSOLING EMPLOYEES

中国交建积极关心关注退休员工、困难员工、病患员工等各类特殊群体，定期开展慰问帮扶活动。一航局、二航局、上航局分别通过“双百慰问”“专项慰问”“一日捐”等形式，不断提升员工的幸福感。

China Communications Construction actively cares for retired employees, employees facing difficulties, and employees who are ill and regularly conducts assistance and consolation activities for them. The CCCC First Harbor Engineering, CCCC Second Harbor Engineering, and CCCC Shanghai Dredging continuously improve the happiness of employees through "double hundred consolation," "special consolation," "one-day donation," and other forms.



董事长王彤宙慰问海外员工  
Chairman Wang Tongzhou comforts overseas employees.

## 丰富员工生活

## ENRICH EMPLOYEES' LIFE

中国交建高度重视员工工作与生活平衡，组织各类各项文体活动，不断增强员工的凝聚力。2022 年，公司通过组织年度劳模休养、开展“幸福中交 快乐暑假”员工子女暑期托管班服务等，并联合北京市科协常态化推进“会聚良缘”服务，举办单身青年联谊活动，获得各界一致好评。

China Communications Construction highly values work-life balance for its employees and organizes various cultural and sports activities to continuously enhance employee cohesion. In 2022, the company organized an annual model worker recuperation program, "Happy CCCC Summer" employee children's summer camp services, and cooperated with the Beijing Association for Science and Technology to promote "Meeting Fortune" services, hosting single youth matchmaking events, which received unanimous praise from all sectors.

## 数读·2022 Data·2022



一公局集团中马足球友谊赛  
China-Malaysia Football Friendly Match of CCCC First Highway Engineering Group Co., Ltd.



粤港澳大湾区区域总部“忠厚传家久”廉洁家风建设活动  
Guangdong-Hong Kong-Macau Greater Bay Area Regional Headquarters "Inheriting Loyalty and Integrity for Generations" Incorrupt Family Tradition Construction Activities



中国交建“奋进新时代·一起向未来”——2022 年喜迎新春网络联欢慰问活动  
China Communications Construction "Advancing into a New Era, Moving Towards the Future Together" - 2022 Celebrating the New Year Network Gala Consolation Activities

## 携手共建共赢

## WORK TOGETHER TO BUILD A WIN-WIN SITUATION

## 深化开放合作

## DEEPEN OPENING COOPERATION

中国交建带着中国标准、中国技术扬帆出海，在不断拓展国际业务、提升国际化水平的同时，积极践行全球企业公民责任，以中交实践为构建人类命运共同体注入强劲而持久的动力。

China Communications Construction sets sail with Chinese standards and technologies, continuously expands its international business and enhances its internationalization level, actively practices global corporate citizenship responsibility, and injects strong and lasting power into the construction of a community with a shared future for mankind through its practical actions.

## 拓展海外市场

## EXPANDING OVERSEAS MARKETS

海外工作是中国交建的特色优势和“金字招牌”，连续多年稳健发展，领跑央企同行，保持全球领先。公司深入贯彻落实习近平总书记关于“一带一路”倡议的最新讲话和指示精神，准确把握“走出去”面临的新形势、新任务，制定《“十四五”国际化经营规划》，绘制“公司国际化”发展蓝图，并指导平台公司、重点工程局院编制海外“十四五”规划，因势利导，上下一盘棋，推动公司“国际化”转型升维。

2022 年，公司在海外发展中坚持“市场为大、市场为先”原则，全面贯彻落实“三重两大两优”经营策略，注重高端营销引领开发，大力推动重大项目落地，全年境外新签合同额稳步增长，ENR 国际承包商排名重返世界前三，连续 16 年位列 ENR 全球最大国际承包商亚洲企业第一名。

Overseas work is the distinctive advantage and "golden business card" of China Communications Construction, which has steadily developed for many years, leading the central state-owned enterprises and maintaining global leadership. The company deeply implements the latest speech and instructions of General Secretary Xi Jinping on "the Belt and Road" Initiative, accurately grasps the new situation and tasks faced by "going global," formulates the 14th Five-Year Plan for International Operation, draws up the development blueprint of "company internationalization," and guides the overseas "14th Five-Year Plan" of platform companies and key engineering bureaus to promote the transformation and upgrading of the company's "internationalization" in a coordinated manner.

In 2022, the company adhered to the principle of "market-oriented, market-first," fully implemented the business strategy of "key projects, key regions, key markets, major transportation, major cities priority overseas, priority rivers, lakes and seas", focused on high-end marketing to lead development, vigorously promoted the landing of major projects, and steadily increased the new contract amount overseas, with ENR's international contractor ranking back to the top three in the world, ranking first in Asia for 16 consecutive years among ENR's largest global international contractors.

## 数读·2022 Digital·2022

境外板块新签合同额 **2,167.82** 亿元，同比增长 **0.37%**

The new contract amount of the overseas segment was RMB **216.782** billion, an increase of **0.37%** YoY.

完成营业收入 **986.56** 亿元，同比增长 **4.02%**

The completed operating income was RMB **98.656** billion, an increase of **4.02%** YoY

## 我们的荣誉

## OUR HONORS

斯里兰卡南部高速延长线等 3 个境外项目荣获 2022 年中国建设工程鲁班奖

Three overseas projects, including the southern extension of the Sri Lanka Highway, won the 2022 China Construction Engineering Luban Prize.

以色列阿什杜德港等 5 个境外项目荣获美国《工程新闻纪录》(ENR) 杂志 2022 年度全球最佳项目奖

Five overseas projects, including the Ashdod Port in Israel, won the 2022 Global Best Projects Award from the US Engineering News-Record (ENR) magazine.

塞内加尔捷斯图巴高速公路等 3 个项目荣获国家优质工程奖

Three projects, including the Senegalese Tuba Highway, won the National Quality Engineering Award.

## 做强“大交通”

## Strengthening the transport infrastructures.

中标孟加拉达卡 RAD 公路、厄瓜多尔基多进城通道，签署塞尔维亚波杜段公路等重大项目，稳住大交通业务基本盘。

CCCC have won major projects such as the Dacca RAD Highway in Bangladesh, the Quito Urban Entry Channel in Ecuador, and the Budva section of the highway in Serbia, stabilizing the foundation of transportation business.

## 深耕“大城市”

## Deeply cultivating the urban infrastructures.

牢固树立“进军城市、建设城市、扎根城市”营销理念，中标香港将军澳市政公园、沙特利雅得塞德拉二期、新加坡伦多中路住宅等重点项目，锻造海外发展新的重要支撑。

Established the marketing concept of "entering cities, building cities, and rooting in cities," won key projects such as the Tseung Kwan O Town Park in Hong Kong, the second phase of Sedlar in Riyadh, Saudi Arabia, and the Lentor Middle Road Residential Project in Singapore, forging a new important support for overseas development.

## 做优“江河湖海”

## Optimizing the "Rivers, Lakes and Seas".

签署菲律宾帕赛吹填补充协议、阿尔及利亚阿尔泽港集装箱港口扩建项目，联合国际码头运营商共同参与吉赞经济城商业港运营。

Signed the supplemental agreement of the Philippine Paseo landfill, the container terminal expansion project of Algeria Arzew Port, and jointly participated in the commercial port operation of Jizan Economic City with international terminal operators.

## 拓展“新业态”

## Expanding "New Business Formats".

围绕核心主业多元发展，签署香港岛与西九龙废物转运站、巴基斯坦大卡拉奇地区供水、沙特阿拉伯吉赞工业城冷却水、越南海上风电等系列工程，为公司海外业务多元化发展打开了新局面。

Diversified development around core main businesses, signed a series of projects such as the Hong Kong Island and West Kowloon Waste Transfer Station, the water supply in the Karachi area of Pakistan, the cooling water in the Jizan Industrial City of Saudi Arabia, and the offshore wind power in Vietnam, opening up a new situation for the diversified development of the company's overseas business.



马来西亚总理伊斯梅尔·萨布里出席马来西亚东海岸铁路云顶隧道敞开式硬岩掘进机 (TBM) 正式掘进启动仪式  
Malaysian Prime Minister Ismail Sabri attended the opening ceremony of the Yun Ding Tunnel boring machine (TBM) for the East Coast Rail Link in Malaysia.



中国港湾承建、一航局施工的科特迪瓦阿比让港第二集装箱码头堆场投入运营  
The yard of the second container terminal in Abidjan Port, Côte d'Ivoire, which was built by China Harbour Engineering Company Ltd. and constructed by CCCC First Harbor Engineering, was put into operation



中国交建承建的巴基斯坦瓜达尔港东湾快速路项目通车  
The Dongwan Expressway Project in Gwadar Port, Pakistan, undertaken by China Communications Construction, was opened to traffic



## 克罗地亚佩列沙茨大桥通车

The Peljesac Bridge in Croatia was now open to traffic.

2022 年 7 月 26 日，由中国路桥牵头，二公局、公规院组成的联营体承建的克罗地亚佩列沙茨大桥及连接线项目举行通车仪式。时任国务院总理李克强以视频方式出席通车仪式并发表致辞，克罗地亚总统米拉诺维奇、总理普连科维奇出席通车仪式。这座连接克罗地亚南北领土的跨海大桥是中企承建的首个由欧盟基金出资建设的大桥，也是克罗地亚国家战略工程、当地人民心中的梦想工程和中克建交以来中企实施的最大项目，被誉为中、克、欧三方合作的典范。

On July 26, 2022, the opening ceremony of the Peljesac Bridge and connecting road project in Croatia, led by China Road & Bridge Corporation and undertaken by a joint venture consisting of CCCC Second Highway Engineering Co., Ltd. and CCCC Highway Consultants Co., Ltd., was held. The ceremony was attended by the then Premier of the State Council, Li Keqiang, who gave a speech via video, as well as Croatian President Milanovic and Prime Minister Andrej PLENKOVI. This sea-crossing bridge, which connects the north and south territories of Croatia, is the first bridge constructed by a Chinese enterprise and funded by the EU, and is also a national strategic project and a dream project for the local people of Croatia. It is considered a model of cooperation between China, Croatia, and the EU, and is the largest project implemented by a Chinese enterprise since the establishment of diplomatic relations between China and Croatia.

克罗地亚佩列沙茨大桥  
the Peljesac Bridge

## 助力属地发展

## SUPPORTING LOCAL DEVELOPMENT

中国交建积极对接所在国发展需求，通过修“致富路”、搭“连心桥”、建“发展港”、筑“幸福城”助力当地经济社会可持续发展。公司坚持把“心联通”作为最深入、最长久的互联互通，以关注所在国最基本的民生需求为导向，积极承担社会责任，力所能及帮助改善当地的基础教育、医疗卫生等条件，与当地民众共同创造美好生活。此外，当所在国家发生自然灾害和突发事件时，公司在道路、桥梁抢修方面迅速反应、行动有力，以最快速度打通灾区的“生命线”，真情诠释人类命运共同体的题中之义。

2022 年，马来西亚突发百年不遇洪灾后，中交团队迅速开展一系列抢险救灾行动，获当地政府表彰；坦桑尼亚空难施救入选“2022 年度央企十大暖镜头”；中国路桥案例《共建互赢 耀亮东非大草原》获评中国在非企业社会责任联盟“百企千村”十大综合经典案例。

China Communications Construction actively connects with the development needs of the countries where it operates. It assists in the sustainable economic and social development of local areas by "constructing roads to wealth", "building bridges of connection", "establishing development ports", and "creating happy cities". The company regards "heart-to-heart connection" as the most profound and long-lasting form of interconnection. It is committed to addressing the basic livelihood needs of the countries where it operates, taking an active role in fulfilling its social responsibilities, and doing what it can to improve local conditions, such as basic education and medical services, in collaboration with local communities to create a better life. Furthermore, when natural disasters or emergencies occur in the countries where it operates, it responds quickly and effectively in repairing roads and bridges to quickly restore the "lifeline" of the disaster-affected areas, fully embodying the concept of a community of shared destiny.

In 2022, the CCCC team in Malaysia responded promptly to the once-in-a-century flood disaster and carried out a series of emergency relief actions, receiving recognition from the local government. The rescue operation for the Tanzania plane crash was selected as one of the "Top 10 Heartwarming Stories of Central Enterprises in 2022". China Road & Bridge Corporation case, Building Together for Win-Win Cooperation to Illuminate the East African Savannah, was named one of the Top 10 Comprehensive Classic Cases of the "100 Enterprises for 1000 Villages" of the Alliance of Chinese Business in Africa for Social Responsibilities.



上航局哥伦比亚巴兰基亚项目部开展向当地社区“授之以渔”捐赠活动

The project team of the CCCC Shanghai Dredging in the Colombia Barranquilla project donated to the local community with a "teach a man to fish" program.



三航局马东铁项目积极参加暴雨灾害抢救

The East Coast Rail Link Project in Malaysia of the CCCC Third Harbor Engineering Co., Ltd. actively participated in the rescue of floods.

## 肯尼亚女司机康西莉亚的故事

The story of Kenyan female driver Consilia

2022年3月8日，在联合国安理会妇女、和平与安全公开辩论会上，中国常驻联合国代表、特命全权大使张军在发言中分享了蒙内铁路首位女性机车乘务员——康西莉亚的经历。

肯尼亚姑娘康西莉亚是蒙内铁路第一批女性机车乘务员中的一员，已独立安全驾驶机车超过14万公里，是肯尼亚家喻户晓的明星人物。2016年1月，康西莉亚进入非洲之星工作，并于2017年在中国路桥资助下赴中国培训学习。在2017年5月、2019年10月，康西莉亚先后两次在肯尼亚总统乌胡鲁·肯雅塔陪同见证下驾驶列车。在非洲之星工作的5年多里，她多次获得“非洲之星年度优秀员工”“平安标兵”“平安卫士”等荣誉称号，见证了蒙内铁路为像她一样的年轻人提供学习技能的机会和就业岗位，更为自己能投身国家交通运输现代化进程感到骄傲。

On March 8, 2022, Zhang Jun, Chinese Permanent Representative to the United Nations and Ambassador Extraordinary and Plenipotentiary, shared the experience of Consilia, the first female locomotive attendant in Mombasa-Nairobi Railway, at the open debate on women, peace and security of the UN Security Council.

Consilia, a Kenyan female, is one of the first female locomotive attendants in Mombasa-Nairobi Railway. She has independently and safely driven locomotives for more than 140,000 kilometers and is a well-known star figure in Kenya. In January 2016, Consilia joined Africa Star, and in 2017, she went to China for training and study with the support of China Road & Bridge Corporation. In May 2017 and October 2019, Consilia drove the train with the accompaniment of Kenyan President Uhuru Kenyatta. During her more than five years of work at Africa Star, Consilia won many honorary titles, including "Africa Star Annual Outstanding Employee," "Peace Pioneer," and "Peace Guardian." She witnessed the opportunity and job positions provided by the Mombasa-Nairobi railway for young people like her to learn skills, and she is proud to be able to contribute to the modernization of national transportation in China.



肯尼亚女司机康西莉亚  
Kenyan female driver Consilia

“

感谢非洲之星带给我的一切，我很自豪在这样一家中国企业从事工作，是中国帮助我们，是中国企业教会我成长……

——康西莉亚

Thanks to Africa Star for everything it has brought me, I am proud to work for such a Chinese company. China helped us, and Chinese companies taught me how to grow...

—said Consilia.

”

## 深化通力合作

## DEEPENING COOPERATION

中国交建积极汇聚各方优势资源，不断拓展与各方全方位、多领域、深层次的战略合作，携手开创互利共赢、协调发展的行业生态圈。

China Communications Construction actively gathers advantageous resources from all parties, continuously expands strategic cooperation with all parties in a comprehensive, multi-field, and deep-level manner, and works together to create an industry ecosystem of mutual benefit and coordinated development.

## 政企合作

## GOVERNMENT-ENTERPRISE COOPERATION

中国交建依托自身全产业链一体化服务优势，积极融入京津冀协同发展、长江经济带发展、粤港澳大湾区建设、长三角一体化发展、黄河流域生态保护和高质量发展等区域重大战略，以政企合作助力区域高质量发展。2022年，公司与贵州省、山东省等省政府，大同市、福州市等市政府签署战略合作协议。

Relying on its own advantages in full-chain integrated services, China Communications Construction actively integrates into major regional strategies such as the coordinated development of Beijing-Tianjin-Hebei, the development of the Yangtze River Economic Belt, the construction of the Guangdong-Hong Kong-Macao Greater Bay Area, the integrated development of the Yangtze River Delta, and the ecological protection and high-quality development of the Yellow River basin, and uses government-enterprise cooperation to support the high-quality development of the region. In 2022, the company signed strategic cooperation agreements with provincial governments such as Guizhou and Shandong, and municipal governments such as Datong and Fuzhou.

## 校企合作

## COLLEGE-ENTERPRISE COOPERATION

中国交建积极推动与知名高校在人才培养、科学研究、成果转化等领域的交流合作，为公司高质量发展筑牢坚实的智力支撑和人才基础。2022年，公司与上海交通大学、北京交通大学等高校签署战略合作协议。

China Communications Construction actively promotes exchange and cooperation with well-known universities in the fields of talent cultivation, scientific research, and achievement transformation, and builds a solid intellectual and talent foundation for the company's high-quality development. In 2022, the company signed strategic cooperation agreements with universities such as Shanghai Jiaotong University and Beijing Jiaotong University.



中国交建与北京交通大学签署战略合作协议  
China Communications Construction and Beijing Jiaotong University signed a strategic cooperation agreement

## 企企合作 ENTERPRISE-ENTERPRISE COOPERATION

中国交建高度重视与优秀企业的沟通交流，努力构建互利共赢、可持续发展的合作关系。2022 年，公司与中国农业发展银行、中储粮集团公司、中国南水北调集团等企业签署战略合作协议，发挥各自优势，以更大合力共助行业高质量发展。

China Communications Construction attaches great importance to communication and exchange with excellent enterprises, and strives to build a mutually beneficial and sustainable cooperative relationship. In 2022, the company signed strategic cooperation agreements with enterprises such as the Agricultural Development Bank of China, China Grain Reserves Group Co., Ltd., and China South-to-North Water Diversion Corporation Limited, and used their respective advantages to work together to assist the high-quality development of the industry.



中国交建与中国南水北调集团签署战略合作协议  
China Communications Construction and China South-to-North Water Diversion Corporation Limited Signing a strategic cooperation agreement

## 深化沟通交流 ENHANCING COMMUNICATION AND EXCHANGE

中国交建积极主办、参与各类论坛展会，与各方伙伴分享经验、交流资讯。2022 年，公司主办中国建筑业供应链合作发展联盟成立大会，参与中国品牌论坛、第五届中国企业论坛、中国海洋经济博览会等高端论坛展会，有效提升了行业影响力。

China Communications Construction actively hosts and participates in various forums and exhibitions, sharing experience and exchanging information with partners from all sides. In 2022, the company hosted the founding conference of the China Construction Supply Chain Cooperation and Development Alliance Establishment Conference and participated in high-end forums and exhibitions such as the China Brand Forum, the 5th China Enterprise Forum, and the China Marine Economy Expo, effectively enhancing the industry's influence.

## 增进民生福祉 IMPROVING PEOPLE'S WELL-BEING

中国交建把支持社区发展、支持公益慈善、开展志愿服务作为重要履责领域，全力以赴惠民生、纾民困、解民忧，在支援抗疫、抢险救灾等大战大考中冲锋在前，使人民群众的获得感、幸福感、安全感更加充实、更有保障、更可持续。

China Communications Construction regards supporting community development, public welfare and charity, and carrying out volunteer services as important areas of responsibility. The Company spares no effort in benefiting the people's livelihood, alleviating poverty, and solving people's problems, taking the lead in supporting major battles and exams such as epidemic prevention and control and disaster relief, making the sense of gain, happiness, and security of the vast masses of people more substantial, secure, and sustainable.

## 热心公益慈善 ENTHUSIASTICALLY ENGAGED IN PUBLIC WELFARE AND CHARITY

中国交建积极投身慈善事业，以“中交助梦”责任品牌为依托，广泛开展爱心助学、关爱儿童、济弱帮困等社会公益活动，传承中华民族的传统美德，弘扬社会正能量。

China Communications Construction actively participates in charity, relying on the Build Your Future Dream" responsibility brand, extensively carries out social public welfare activities such as caring for children, helping the weak, and assisting the impoverished, inheriting the traditional virtues of the Chinese nation and promoting positive social energy.



广航局开展新春“关爱老人送温暖 传承美德献孝心”公益活动  
CCCC Guangzhou Dredging Co., Ltd. launched the Spring Festival public welfare activity "Caring for the Elderly and Sending Warmth, Inheriting Virtues and Showing Filial Piety."

## 同心抗疫救灾 UNITED IN THE FIGHT AGAINST EPIDEMICS AND DISASTER RELIEF

### 助力精准抗疫 SUPPORTING PRECISE EPIDEMIC PREVENTION

中国交建坚持科学防控、精准防控，为完成全年生产经营任务目标提供坚实保障，并积极开展健康培训和心理疏导，做好后勤保障，确保员工身心健康。同时，广大员工主动请缨、尽锐出战，发挥专业优势全面支援方舱医院等工程建设，中交“蓝马甲”志愿者挺身而出，为所在地政府、社区街道提供支持，在社区一线以实际行动赋能“党旗红”，深刻诠释中交人的使命与担当。

China Communications Construction adheres to scientific and precise epidemic prevention and control, providing a solid guarantee to complete the annual production and operation tasks, and actively carries out health training and psychological counseling, providing logistics support to ensure the physical and mental health of employees. At the same time, the majority of employees actively volunteered and made full use of their professional advantages to support the construction of engineering projects such as the makeshift hospitals. The "Blue Vest" volunteers of CCCC also stepped forward to support local governments and community streets, empowering the "red flag" on the front line of the community with practical actions, and profoundly interpreted the mission and responsibility of CCCC.

## 驰援抢险救灾

### EMERGENCY RESPONSE TO DISASTER RELIEF

2022 年，面对全国多地受高温、强降雨等天气影响所暴发的山火、干旱、山洪、泥石流等自然灾害，公司第一时间响应，积极配合当地政府，迅速投入抢险救灾，全力守护人民群众生命财产安全。

In 2022, facing natural disasters such as wildfires, droughts, flash floods, and landslides that broke out due to extreme weather conditions in many parts of the country, CCCC responded promptly, cooperated actively with local governments, and quickly invested in emergency relief efforts, making every effort to protect the safety of people's lives and property.



在四川  
In Sichuan

四川泸定 6.8 级地震发生后，公司通过四川省慈善总会向灾区捐款。中交建设者主动参与应急抢险、清理坍塌路段、开展应急评估，并积极筹备抗震救灾专项优惠贷款，助力当地经济恢复发展，收到交通运输部感谢信。

After the 6.8-magnitude earthquake in Luding, Sichuan, CCCC donated funds to the disaster-stricken area through the Sichuan Provincial Charity Federation. CCCC employees actively participated in emergency response and rescue, clearing collapsed roads, and conducting emergency assessments, and actively prepared for special preferential loans for earthquake relief, helping local economic recovery and development, and receiving a thank-you letter from the Ministry of Transport.



在重庆  
In Chongqing

多地由于极端天气引发山火，中交建设者们通过开辟隔离带、参与火情扑救、采购应急物资等形式紧急驰援。同时，投入各类设备设施 30 余台套，防暑、消防、医疗物资数百件，践行央企责任担当。

Due to extreme weather conditions in many areas, wildfires broke out. CCCC employees urgently rushed to open up firebreaks, participate in firefighting, and purchase emergency materials. At the same time, more than 30 sets of various equipment and facilities were invested, and hundreds of items of heatstroke prevention, firefighting, and medical materials were provided, fulfilling the responsibility of a central enterprise.



在安徽  
In Anhui

淮南瓦埠湖湖区受连续高温天气影响，持续干旱对湖区周边农业用水产生较大影响。中交建设者主动与当地乡镇联系，调集扩宽泵站所需作业设备，有效提升泵站工作效能，保证稻田用水。

Due to continuous high temperatures, the Wabu Lake area in Huainan has been affected by a prolonged drought which has had a significant impact on the surrounding agricultural water use. The builders from CCCC actively contacted the local townships, mobilized and widened the necessary equipment for the pumping station, effectively improving the efficiency of the pumping station's operation and ensuring the water supply for rice paddies.



在青海  
In Qinghai

西宁大通县强降雨引发山洪、泥石流，致使 2 个乡镇 1,517 户村民受灾。中交建设者们全力参与搜救失联人员、抢修道路、排查风险隐患等工作，坚决扛起防汛应急救援责任。

Heavy rainfall in Datong County, Xining caused mountain torrents and mudslides, affecting 1,517 households in 2 townships. The builders from CCCC have made every effort to search for missing persons, repair roads, and identify hidden risks, firmly fulfilling their responsibility for flood control and emergency rescue.

## 开展志愿服务

### PROMOTING VOLUNTEER SERVICE

中国交建积极鼓励引导广大干部职工积极参加便民服务、高考服务、爱心献血等志愿服务，为建设团结互助、平等友爱、共同前进的美好社会作出贡献，“蓝马甲”志愿服务品牌已成为公司履行社会责任的靓丽名片。

China Communications Construction actively encourages and guides its employees to participate in volunteer services such as convenient services, college entrance exam services, and blood donation, contributing to the construction of a harmonious, equal, friendly, and progressive society. The "Blue Vest" volunteer service brand has become a beautiful business card for the company to fulfill its social responsibilities.



中交“蓝马甲”帮助受灾群众抢收农作物  
The "Blue Vest" from China Communications Construction helps disaster-stricken people harvest crops.



中交“蓝马甲”为大雪受困群众送物资  
The "Blue Vest" from China Communications Construction delivers supplies to children.



二航院开展社区志愿服务  
CCCC Second Harbor Consultants Co., Ltd. carries out

砥砺奋进开新局，凝心聚力再出发！2023 年是全面贯彻落实党的二十大精神的开局之年，是“十四五”承上启下之年，我们将以习近平新时代中国特色社会主义思想为指导，深入贯彻落实党的二十大精神，坚持稳中求进工作总基调，紧扣“高质量发展深化年”总体要求，深化“六化”建设，扎实推进“强党建、抓协同、优体系、稳增长”，在新征程上推动高质量发展取得新成效。

The company will forge ahead and start a new journey with unity and concentration! The year 2023 represents the first year to carry out the spirit of the 20th National Congress of the Communist Party of China, and the year of continuity and a new beginning for the "14th Five-Year Plan". The company will adhere to the guidance of Xi Jinping's new era of socialism with Chinese characteristics, thoroughly implement the spirit of the 20th National Congress of the Communist Party of China, adhere to the general work guideline of seeking progress while maintaining stability, closely focus on the overall requirements of deepening the "year of high-quality development," deepen the construction of the "six modernizations," and solidly promote "strengthening party building, focusing on synergy, optimizing the system, and stabilizing growth." On the new journey, we will promote high-quality development and achieve new results.

我们将聚焦打造世界一流企业的目标，全力落实新一轮国企改革深化提升行动，完善中国特色国有企业现代公司治理，提升市场化机制运行水平。同时，不断强化 ESG 治理，争当央企 ESG 创新实践、价值创造、体系建设的示范标杆。

The company will focus on building a world-class enterprise and fully implement the new round of state-owned enterprise reform and deepening and upgrading action, improve the modern corporate governance of Chinese characteristic state-owned enterprises, and enhance the operation level of the market-oriented mechanism. At the same time, The company will continuously strengthen ESG governance and strive to become a demonstrative benchmark for central enterprises in ESG innovation practice, value creation, and system construction.

我们将继续坚持“123456”总体发展思路，强化创新驱动，坚持高水平科技自立自强，全力打造原创技术“策源地”，加快产业链链长建设；充分发挥“大交通、大城市和江河湖海”全产业链优势，勇做交通强国建设先锋，实现企业发展与践行国家战略的同频共振、有机统一，持续推进公司做强做优做大。

The company will continue to adhere to the "123456" overall development strategy, strengthen innovation-driven, adhere to high-level self-reliance and self-strengthening of science and technology, make full efforts to create an "original technology source," and accelerate the construction of the industrial chain; give full play to the advantages of the "major transportation, major cities, and rivers, lakes and seas" whole industrial chain, bravely become a pioneer in building a transportation power, achieve resonance and organic unity between enterprise development and national strategic implementation, and continuously promote the company to become stronger, better, and bigger.

我们将积极优化绿色低碳转型发展的战略布局，重点发展绿色产业、技术装备、碳资产管理等领域，推动传统产业绿色转型，大力发展新兴产业，积极投身蓝天、碧水、净土保卫战，坚定推进生态文明建设，促进人与自然和谐共生。

The company will actively optimize the strategic layout of green and low-carbon transformation development, focus on developing green industries, technological equipment, carbon asset management, and other fields, promote the green transformation of traditional industries, vigorously develop emerging industries, actively participate in the defense of blue skies, clear waters, and pure land, firmly promote ecological civilization construction, and promote harmonious coexistence between man and nature.

我们将始终牢记职责使命，以“让世界更畅通、让城市更宜居、让生活更美好”为愿景，以打造受人尊敬的企业为己任，以实施畅通未来、教育提升、产业振兴等“中交助梦”系列行动为重点，积极开展系统性、长期性的社会责任实践，满足人民群众对美好生活的需要。

The company will always remember the mission and responsibility, take "making the world more accessible, building a better connected world, making cities more livable, creating better life for people" as the vision, take creating a respected enterprise as the responsibility, and focus on implementing the "Build Your Future Dream" series of actions, such as facilitating the future, promoting education, and revitalizing industries. The company will actively carry out systematic and long-term social responsibility practices to meet the needs of the people for a better life.

新的一年，我们将更加积极践行央企使命和担当，发挥专业特长，以更加奋发有为的精神状态和卓有成效的实际行动，书写建设“三型”世界一流企业建设的新篇章，为实现中国式现代化开好局、起好步贡献中交力量！

In the new year, the company will be more proactive in practicing the mission and responsibility of central enterprises, give full play to the professional strengths, and with a more enthusiastic and effective spirit, write a new chapter in the construction of a world-class enterprise with the "three types," and contribute to the development of China-style modernization with China Communications Construction!

# 未来展望 FUTURE PROSPECT

# 附录 APPENDIX

## 关键绩效表

### THE KEY PERFORMANCE TABLE

| 类别 Category      | 指标 Indicators   | 单位 Unit                | 2020      | 2021      | 2022      |
|------------------|---|------------------------|-----------|-----------|-----------|
|                  | 经营绩效 <sup>1</sup> Operational performance <sup>1</sup>  |                        |           |           |           |
| 经济<br>Economy    | 资产总额<br>Total Assets  | 亿元<br>RMB 100 Million  | 13,041.69 | 13,908.37 | 15,113.50 |
|                  | 净资产<br>Net assets   | 亿元<br>RMB 100 Million  | 3,578.03  | 3,913.54  | 4,261.76  |
|                  | 新签合同额<br>New contract amount  | 亿元<br>RMB 100 Million  | 10,667.99 | 12,679.12 | 15,422.56 |
|                  | 营业收入<br>Operating incomes   | 亿元<br>RMB 100 Million  | 6,275.86  | 6,856.39  | 7,202.75  |
|                  | 利润总额<br>Total profits   | 亿元<br>RMB 100 Million  | 254.50    | 287.44    | 309.68    |
|                  | 公司治理 Corporate governance   |                        |           |           |           |
| 管治<br>Governance | 董事会中兼任其他公司 CEO 的成员数量<br>Number of members of the board who also serve as CEOs of other companies        | 人<br>Person            | 0         | 0         | 0         |
|                  | 审计委员会中财务专家人数<br>Number of financial experts on the audit committee                                      | 人<br>Person            | 1         | 1         | 1         |
|                  | 社会责任相关工作向董事会汇报频率<br>Frequency of reporting social responsibility related work to the board of directors | 次/年<br>Time/year       | 1         | 2         | 2         |
|                  | 外部审计费用<br>External audit expense  | 万元<br>RMB ten thousand | 2,390     | 2,570     | 2,570     |
|                  | 发表信息披露文件 <sup>2</sup><br>Publish information disclosure documents <sup>2</sup>                          | 份<br>Copy              | 181       | 201       | 254       |
|                  | 期末控股股东持股比例<br>Shareholding ratio of controlling shareholders at the end of the period                   | %                      | 57.99     | 58.51     | 59.63     |

<sup>1</sup> 经营绩效：中国交建中国会计准则下数据。

<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>1</sup>Operational performance: Data under China Communications Construction Chinese Accounting Standards.

<sup>2</sup>Publish information disclosure documents: Including announcements and online documents issued by A shares, announcements and circulars issued by H shares, etc.

| 类别 Category   | 指标 Indicators  | 单位 Unit   | 2020    | 2021    | 2022    |  |
|---|--|---|---------|---------|---------|--|
|   | 反贪污 Anti-corruption  |   |         |         |         |  |
| 管治<br>Governance  | 反贪污培训覆盖的员工比例<br>Proportion of employees covered by anti-corruption training        | %   | 100     | 100     | 100     |  |
|   | 员工人均接受反贪污培训小时数<br>Hours of anti-corruption training per employee                   | 小时<br>HH  | 3.1     | 3.3     | 3.3     |  |
|   | 反贪污培训覆盖的董事会成员比例<br>Proportion of board members covered by anti-corruption training | %   | 100     | 100     | 100     |  |
|   | 董事人均接受反贪污培训小时数<br>Hours of anti-corruption training per director                   | 小时<br>HH  | 6.3     | 7.1     | 7.4     |  |
|   | 针对公司或员工的贪污诉讼案件数<br>Number of corruption lawsuits against companies or employees    | 件<br>Pcs  | 0       | 0       | 0       |  |
|   | 资源使用 <sup>3</sup> Resource Utilization <sup>3</sup>                                |   |         |         |         |  |
| 环境<br>Environment   | 全年能源消耗总量<br>Total annual energy consumption  | 万吨标煤<br>10,000 tons of standard coal                                | 181     | 195     | 172     |  |
|   | 年度耗电量<br>Annual power consumption  | 万千瓦时<br>10,000 kWh  | 284,261 | 315,138 | 259,727 |  |
|   | 年度耗气量<br>Annual gas consumption  | 万标准立方米<br>Ten thousand standard cubic meters                        | 2,944   | 2,266   | 4,417   |  |
|   | 年度燃油量<br>Annual fuel quantity  | 万吨<br>10,000 tons   | 97      | 104     | 91      |  |
|   | 万元营业收入综合能耗<br>Comprehensive energy consumption of RMB 10,000 operating income      | 吨标煤 / 万元 (现价)<br>Tons of standard coal / RMB 10,000 (current price) | 0.0288  | 0.0284  | 0.0239  |  |
|   |  | 排放物 <sup>4</sup> Emissions <sup>4</sup>                             |         |         |         |  |
|   | 二氧化碳排放总量<br>Total carbon dioxide emissions   | 万吨<br>10,000 tons   | 476     | 522     | 468     |  |
| 单位营业收入二氧化碳排放量 (现价值)<br>Carbon dioxide emissions per unit operating income (current value) | 吨 / 万元<br>ton/RMB 10,000   | 0.0758  | 0.0761  | 0.0650  |         |  |

<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 2020 年和 2021 年的能源消费量和二氧化碳排放量相关数据。

<sup>3、4</sup> Resource use, emissions: In 2022, the company carried out activities to report and investigate energy-saving statistics. Each department checked for omissions, verified data accurately, strengthened energy data source control, and corrected the relevant data for energy consumption and CO2 emissions in 2020 and 2021.

| 类别 Category   | 指标 Indicators                      | 单位 Unit   | 2020        | 2021    | 2022    |         |
|---------------|------------------------------------|---|-------------|---------|---------|---------|
| 社会<br>Society | 员工总数<br>Total number of employees  | 人<br>Person                                     | 133,294     | 136,772 | 136,506 |         |
|               | 按性别划分<br>By gender                 | 男性<br>Male                                      | 人<br>Person | 107,569 | 110,731 | 113,039 |
|               |                                    | 女性<br>Female                                    | 人<br>Person | 25,725  | 26,041  | 23,467  |
|               |                                    | 男性比例<br>Male proportion                         | %           | 80.70   | 80.96   | 82.81   |
|               |                                    | 女性比例<br>Female proportion                       | %           | 19.30   | 19.04   | 17.19   |
|               | 按民族划分<br>By ethnic groups          | 其他民族员工<br>Employees of other nationalities      | 人<br>Person | 7,651   | 7,268   | 8,715   |
|               |                                    | 汉族员工<br>Han employees                           | 人<br>Person | 125,643 | 129,504 | 127,791 |
|               | 按年龄划分<br>By age                    | 30 岁以下<br>Less than 30 years old                | 人<br>Person | 51,584  | 42,008  | 48,382  |
|               |                                    | 30-40 岁<br>30-40 years old                      | 人<br>Person | 48,652  | 55,420  | 52,490  |
|               |                                    | 40-50 岁<br>40-50 years old                      | 人<br>Person | 22,260  | 25,214  | 23,271  |
|               |                                    | 50 岁以上<br>Above 50 years old                    | 人<br>Person | 10,798  | 14,130  | 12,363  |
|               | 按年资划分<br>By seniority              | 5 年以上<br>More than 5 years                      | 人<br>Person | 97,851  | 102,758 | 101,743 |
|               |                                    | 3-5 年<br>3-5 years                              | 人<br>Person | 11,581  | 12,987  | 13,652  |
|               |                                    | 3 年以下<br>Within 3 years                         | 人<br>Person | 23,862  | 21,027  | 21,111  |
|               | 按学历分<br>By academic qualifications | 研究生及以上学历<br>Graduate degree and above           | 人<br>Person | 13,335  | 14,838  | 15,501  |
|               |                                    | 本科学历<br>Bachelor degree                         | 人<br>Person | 85,654  | 91,187  | 94,285  |
|               |                                    | 大专学历<br>College degree                          | 人<br>Person | 20,631  | 19,337  | 16,142  |
|               |                                    | 中专及以下学历<br>Technical secondary school and below | 人<br>Person | 13,674  | 11,410  | 10,578  |

| 类别 Category   | 指标 Indicators                                   | 单位 Unit                          | 2020        | 2021    | 2022    |         |
|---|---|----------------------------------|-------------|---------|---------|---------|
| 社会<br>Society   | 按雇佣类型划分<br>By type of employment                | 全职<br>Full-time                  | 人<br>Person | 133,294 | 136,772 | 136,506 |
|   |   | 兼职<br>Part-time                  | 人<br>Person | 0       | 0       | 0       |
|   | 按地区划分<br>By region                              | 中国<br>China                      | 人<br>Person | 127,189 | 130,889 | 131,756 |
|   |   | 海外<br>Overseas                   | 人<br>Person | 6,105   | 5,883   | 4,750   |
|   | 员工流失率<br>Loss rate of employees                 | %                                | 3.16        | 3.17    | 3.11    |         |
|   | 按性别划分<br>By gender                              | 男性<br>Male                       | %           | 81.77   | 80.71   | 80.26   |
|   |   | 女性<br>Female                     | %           | 18.23   | 19.29   | 19.74   |
|   | 按年龄划分<br>By age                                 | 30 岁以下<br>Less than 30 years old | %           | 50.53   | 52.23   | 58.60   |
|   |   | 30-40 岁<br>30-40 years old       | %           | 27.91   | 28.27   | 30.64   |
|   |   | 40-50 岁<br>40-50 years old       | %           | 8.07    | 7.42    | 7.95    |
|   |   | 50 岁以上<br>Above 50 years old     | %           | 13.49   | 12.08   | 2.81    |
|   | 健康与安全<br>Health and safety                      |                                  |             |         |         |         |
|   | 因工死亡人数<br>Work-related fatalities               | 人<br>Person                      | 6           | 7       | 6       |         |
|   | 因工死亡比重<br>Proportion of work-related fatalities | %                                | 0.0045      | 0.0051  | 0.0044  |         |
|   | 重伤事故率<br>Serious injury rate                    | %                                | 0           | 0       | 0       |         |
|   | 轻伤事故率<br>Minor injury rate                      | %                                | 0           | 0       | 0       |         |
| 因工伤损失工作日数 <sup>5</sup><br>Number of working days lost due to work-related injuries <sup>5</sup> | 天<br>Day(s)                                     | 36,000                           | 42,000      | 36,000  |         |         |
| 客户隐私泄露事件次数<br>Number of customer privacy leaks  | 次<br>Times                                      | 0                                | 0           | 0       |         |         |

<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>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.

| 类别 Category      | 指标 Indicators                   | 单位 Unit                  | 2020  | 2021  | 2022  |     |
|------------------|---------------------------------|--------------------------|-------|-------|-------|-----|
| 社会<br>Society    | 发展与培训 Development and training  |                          |       |       |       |     |
|                  | 培训覆盖率 Training coverage rate    | %                        | 100   | 100   | 100   |     |
|                  | 按性别划分<br>By gender              | 男性 Male                  | %     | 100   | 100   | 100 |
|                  |                                 | 女性 Female                | %     | 100   | 100   | 100 |
|                  | 按雇员类别划分<br>By type of employee  | 高级管理者 Senior manager     | %     | 100   | 100   | 100 |
|                  |                                 | 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                    | 105   | 110   | 112   |     |
|                  | 按性别划分<br>By gender              | 男性 Male                  | 小时 HH | 103   | 109   | 111 |
|                  |                                 | 女性 Female                | 小时 HH | 110   | 118   | 119 |
|                  | 按雇员类别划分<br>By type of employee  | 高级管理者 Senior manager     | 小时 HH | 137   | 141   | 143 |
|                  |                                 | 中级管理者 Middle manager     | 小时 HH | 143   | 145   | 146 |
|                  |                                 | 普通员工 General employee    | 小时 HH | 138   | 108   | 109 |
|                  | 供应链管理 Supply chain management   |                          |       |       |       |     |
|                  | 供应商数量 Number of suppliers       | 个 Pcs                    | 1,496 | 2,595 | 2,736 |     |
|                  | 按地区划分<br>By region              | 东北地区 Northeast China     | 个 Pcs | 55    | 111   | 112 |
|                  |                                 | 华东地区 East China          | 个 Pcs | 585   | 831   | 891 |
|                  |                                 | 中南地区 Central South China | 个 Pcs | 286   | 414   | 438 |
|                  |                                 | 西南地区 Southwest China     | 个 Pcs | 123   | 270   | 289 |
|                  |                                 | 西北地区 Northwest region    | 个 Pcs | 66    | 149   | 153 |
| 华北地区 North China |                                 | 个 Pcs                    | 381   | 511   | 536   |     |

| 类别 Category                                | 指标 Indicators  | 单位 Unit | 2020    | 2021    | 2022  |  |
|--|--|---------|---------|---------|-------|--|
| 社会<br>Society                              | 报告期审查的供应商数量<br>Number of suppliers reviewed during the reporting period  | 个 Pcs   | 1,496   | 2,595   | 2,736 |  |
|  | 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<br>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<br>Number of on-site inspections of suppliers  | 次 Times | 10      | 29      | 30    |  |
|  | 供应商现场核查覆盖率<br>Supplier on-site verification coverage rate  | %       | 0.7     | 1.3     | 1.1   |  |
|  | 供应商社会责任培训次数<br>Number of supplier social responsibility training   | 次 Times | —       | 2       | 0     |  |
|  | 因社会责任不合规被否决的潜在供应商数量<br>Number of potential suppliers rejected due to social responsibility non-compliance  | 个 Pcs   | —       | 0       | 0     |  |
|  | 因社会责任不合规被中止合作的供应商数量<br>Number of suppliers whose cooperation has been suspended due to non-compliance of social responsibility   | 个 Pcs   | —       | 0       | 8     |  |
|  | 产品责任 Product liability   |         |         |         |       |  |
|  | 安全问题产品回收次数<br>Recovery times of products with safety problems  | 次 Times | 0       | 0       | 0     |  |
|  | 安全相关缺陷投诉数量<br>Number of complaints about safety-related defects  | 件 Pcs   | 0       | 0       | 0     |  |
|  | 客户隐私泄漏事件<br>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<br>Percentage of products needing to be taken back due to safety and health in the sold and transported amount   | %       | 0       | 0       | 0     |  |
|  | 客户投诉数量<br>Amount of customer complaints  | 件 Pcs   | 0       | 0       | 0     |  |
|  | 社区投资 Community investment  |         |         |         |       |  |
| 捐赠总额<br>Total donations                    | 万元 RMB ten thousand  | 12,308  | 8,875   | 28,736  |       |  |
| 员工志愿者人数<br>Number of employee volunteers   | 人 Person   | 19,124  | 20,080  | 21,985  |       |  |
| 志愿活动时长<br>Duration of voluntary activities | 小时 HH  | 95,620  | 100,401 | 110,300 |       |  |



# 指标索引

## INDEX OF INDICATORS

| 联交所《环境、社会及管治报告指引》<br>SEHK Guidelines on Environmental, Social and Governance Report |  |   |                               |
|---|--|---|-------------------------------|
| 层面<br>Level   | 指标<br>Indicators                               | 指标内容<br>Indicator contents  | 回应情况<br>Response<br>Situation |
| 层面 A1<br>排放物<br>Level A1<br>Emissions   | 一般披露<br>General disclosure                     | 有关废气及温室气体排放、向水及土地的排污、有害及无害废弃物的产生等的：<br>Regarding exhaust gas and greenhouse gas emissions, sewage discharge to water and land, generation of harmful and harmless wastes, etc:<br>(a) 政策<br>(a) Policies<br>(b) 遵守对发行人有重大影响的相关法律及规例的资料<br>(b) Compliance with relevant laws and regulations that have a significant impact on the issuer. | √                             |
|   | 关键绩效指标 A1.1<br>Key performance indicators A1.1 | 排放物种类及相关排放数据<br>Emission category and related emission data   | √                             |
|   | 关键绩效指标 A1.2<br>Key performance indicators A1.2 | 直接（范围 1）及能源间接（范围 2）温室气体排放量（以吨计算）及（如适用）密度（如以每产量单位、每项设施计算）<br>Direct (scope 1) and energy indirect (scope 2) GHG emissions (in tonnes) and (if applicable) density (if calculated per unit of production, per facility)   | —                             |
|   | 关键绩效指标 A1.3<br>Key performance indicators A1.3 | 所产生有害废弃物总量（以吨计算）及（如适用）密度（如以每产量单位、每项设施计算）<br>Total amount of hazardous waste generated (in tons) and (if applicable) density (if calculated per unit of production, per facility)  | —                             |
|   | 关键绩效指标 A1.4<br>Key performance indicators A1.4 | 所产生无害废弃物总量（以吨计算）及（如适用）密度（如以每产量单位、每项设施计算）<br>Total amount of harmless waste generated (in tons) and (if applicable) density (e.g. per unit of production, per facility)  | —                             |
|   | 关键绩效指标 A1.5<br>Key performance indicators A1.5 | 描述所订立的排放量目标及为达到这些目标所采取的步骤<br>Describe the emission targets set and the steps taken to achieve them  | √                             |
|   | 关键绩效指标 A1.6<br>Key performance indicators A1.6 | 描述处理有害及无害废弃物的方法，及描述所订立的减废目标及为达到这些目标所采取的步骤<br>Describe the methods of disposal of hazardous and harmless wastes, and describe the waste reduction objectives set and the steps taken to achieve these objectives   | √                             |
| 层面 A2<br>资源使用<br>Level A2<br>Resource<br>Utilization                                | 一般披露<br>General disclosure                     | 有效使用资源（包括能源、水及其他原材料）的政策<br>Policies for efficient use of resources (including energy, water and other raw materials)  | √                             |
|   | 关键绩效指标 A2.1<br>Key performance indicators A2.1 | 按类型划分的直接及 / 或间接能源（如电、气或油）总耗量（以千个千瓦时计算）及密度（如以每产量单位、每项设施计算）<br>Total consumption of direct and/or indirect energy (e.g. electricity, gas or oil) by type (in thousands of kWh) and density (e.g. per unit of production, per facility)  | √                             |
|   | 关键绩效指标 A2.2<br>Key performance indicators A2.2 | 总耗水量及密度（如以每产量单位、每项设施计算）<br>Total water consumption and density (e.g. per production unit, per facility)   | —                             |
|   | 关键绩效指标 A2.3<br>Key performance indicators A2.3 | 描述所订立的能源使用效益目标及为达到这些目标所采取的步骤<br>Describe the energy efficiency goals set and the steps taken to achieve them  | √                             |

| 层面<br>Level   | 指标<br>Indicators                               | 指标内容<br>Indicator contents   | 回应情况<br>Response<br>Situation |
|---|--|--|-------------------------------|
| 层面 A2<br>资源使用<br>Level A2<br>Resource<br>Utilization                          | 关键绩效指标 A2.4<br>Key performance indicators A2.4 | 描述求取适用水源上可有任何问题，以及所订立的用水效益目标及为达到这些目标所采取的步骤<br>Describe any problems in obtaining suitable water sources, and the water efficiency targets set and the steps taken to achieve these targets   | √                             |
| 层面 A2<br>资源使用<br>Level A2<br>Resource<br>Utilization                          | 关键绩效指标 A2.5<br>Key performance indicators A2.5 | 制成品所用包装材料的总量（以吨计算）及（如适用）每生产单位占量<br>Total amount of packaging materials used for finished products (in tons) and (if applicable) proportion per production unit   | —                             |
| 层面 A3<br>环境及<br>天然资源<br>Level A3<br>Environment<br>and<br>natural<br>resource | 一般披露<br>General disclosure                     | 减低发行人对环境及天然资源造成重大影响的政策<br>Policies to reduce the issuer's significant impact on the environment and natural resources  | √                             |
| 层面 A3<br>环境及<br>天然资源<br>Level A3<br>Environment<br>and<br>natural<br>resource | 关键绩效指标 A3.1<br>Key performance indicators A3.1 | 描述业务活动对环境及天然资源的重大影响及已采取管理有关影响的行动<br>Describe significant impact of operational action on environment and natural resources and actions taken for managing relevant impacts.  | √                             |
| 层面 A4<br>气候变化<br>Level A4<br>Climate<br>changes                               | 一般披露<br>General disclosure                     | 识别及应对已经及可能会对发行人产生影响的重大气候相关事宜的政策<br>Policies for identifying and responding to significant climate-related issues that have and may have an impact on issuers   | √                             |
| 层面 A4<br>气候变化<br>Level A4<br>Climate<br>changes                               | 关键绩效指标 A4.1<br>Key performance indicators A4.1 | 描述已经及可能会对发行人产生影响的重大气候相关事宜，及应对行动<br>Describe major climate-related issues that have and may have an impact on the issuer, and the response actions  | √                             |
| 层面 B1<br>雇佣<br>Level B1<br>Employment   | 一般披露<br>General disclosure                     | 有关薪酬及解雇、招聘及晋升、工作时数、假期、平等机会、多元化、反歧视以及其他待遇及福利的：<br>Relating to pay and dismissal, recruitment and promotion, working hours, leave, equal opportunities, diversity, anti-discrimination and other benefits and benefits:<br>(a) 政策<br>(a) Policies<br>(b) 遵守对发行人有重大影响的相关法律及规例的资料<br>(b) Compliance with relevant laws and regulations that have a significant impact on the issuer. | √                             |
| 层面 B1<br>雇佣<br>Level B1<br>Employment   | 关键绩效指标 B1.1<br>Key performance indicators B1.1 | 按性别、雇佣类型（如全职或兼职）、年龄组别及地区划分的雇员总数<br>Total number of employees by sex, type of employment (such as full-time or part-time), age group and region   | √                             |
| 层面 B1<br>雇佣<br>Level B1<br>Employment   | 关键绩效指标 B1.2<br>Key performance indicators B1.2 | 按性别、年龄组别及地区划分的雇员流失比率<br>Loss ratio of employees divided based on gender, age group and region.   | √                             |
| 层面 B2<br>健康与安全<br>Level B2<br>Health and<br>safety                            | 一般披露<br>General disclosure                     | 有关提供安全工作环境及保障雇员避免职业性危害的：<br>Information relating to providing a safe working environment and protecting employees from occupational hazards:<br>(a) 政策<br>(a) Policies<br>(b) 遵守对发行人有重大影响的相关法律及规例的资料<br>(b) Compliance with relevant laws and regulations that have a significant impact on the issuer.  | √                             |

| 层面 Level  | 指标 Indicators                                  | 指标内容 Indicator contents  | 回应情况 Response Situation |
|---|--|--|-------------------------|
| 层面 B2: 健康与安全  | 关键绩效指标 B2.1<br>Key performance indicators B2.1 | 过去三年（包括汇报年度）每年因工亡故的人数及比率<br>Number and rate of work-related deaths in each of the past three years (including the reporting year)  | √                       |
|   | 关键绩效指标 B2.2<br>Key performance indicators B2.2 | 因工伤损失工作日数<br>Number of working days lost due to work-related injuries  | √                       |
|   | 关键绩效指标 B2.3<br>Key performance indicators B2.3 | 描述所采纳的职业健康与安全措施，以及相关执行及监察方法<br>Describe adopted occupational health and safety measures and relevant implementation and monitoring methods.  | √                       |
| 层面 B3 发展与培训<br>Level B3<br>Development and training | 一般披露<br>General disclosure                     | 有关提升雇员履行工作职责的知识及技能的政策。描述培训活动<br>Policies about improving employees' knowledge and skill for fulfilling working responsibilities. Describe training activities  | √                       |
|   | 关键绩效指标 B3.1<br>Key performance indicators B3.1 | 按性别及雇员类别（如高级管理层、中级管理层）划分的受训雇员百分比<br>Percentage of trained employees by sex and employee category (such as senior management and middle management)   | √                       |
|   | 关键绩效指标 B3.2<br>Key performance indicators B3.2 | 按性别及雇员类别划分，每名雇员完成受训的平均时数<br>Average number of hours per employee completed training by sex and type of employee  | √                       |
| 层面 B4 劳工准则<br>Level B4<br>Labor standard            | 一般披露<br>General disclosure                     | 有关防止童工或强制劳工的：<br>Information relating to preventing child and forced labor:<br>(a) 政策<br>(a) Policies<br>(b) 遵守对发行人有重大影响的相关法律及规例的资料<br>(b) Compliance with relevant laws and regulations that have a significant impact on the issuer. | √                       |
|   | 关键绩效指标 B4.1<br>Key performance indicators B4.1 | 描述检讨招聘惯例的措施以避免童工及强制劳工<br>Describe measures for reviewing recruitment practice to avoid child laborer and forced labor  | √                       |
|   | 关键绩效指标 B4.2<br>Key performance indicators B4.2 | 描述在发现违规情况时消除有关情况所采取的步骤<br>Describe steps taken for eliminating related situations when violations are discovered   | √                       |
| 层面 B5 供应链管理<br>Level B5<br>Supply chain management  | 一般披露<br>General disclosure                     | 管理供应链的环境及社会风险政策<br>Environmental and social risk policies for supply chain management  | √                       |
|   | 关键绩效指标 B5.1<br>Key performance indicators B5.1 | 按地区划分的供应商数目<br>Number of suppliers by region   | √                       |
|   | 关键绩效指标 B5.2<br>Key performance indicators B5.2 | 描述有关聘用供应商的惯例，向其执行有关惯例的供应商数目，以及相关执行及监察方法<br>Describe the practice of employing suppliers, the number of suppliers that enforce the practice against them, and the relevant enforcement and monitoring methods                           | √                       |
|   | 关键绩效指标 B5.3<br>Key performance indicators B5.3 | 描述有关识别供应链每个环节的环境及社会风险的惯例，以及相关执行及监察方法<br>Describe the practices for identifying environmental and social risks at each stage of the supply chain, and the related implementation and monitoring methods                                 | √                       |
|   | 关键绩效指标 B5.4<br>Key performance indicators B5.4 | 描述在挑选供应商时促使多用环保产品及服务的惯例，以及相关执行及监察方法<br>Describe the practice of promoting the use of environmentally friendly products and services in the selection of suppliers, and the relevant implementation and monitoring methods              | √                       |

注：

我们遵循联交所《环境、社会及管治报告指引》“不遵守就解释”条文，对未披露指标 A1.2、A1.3、A1.4、A2.2、A2.5 做出如下解释

① 受业务性质及业务范围影响，A1.2、A1.3、A1.4 条款暂未统计；未来，公司将持续推进排放物管理提升工作

② 公司业务性质不适用 A2.2、A2.5 条款

| 层面 Level  | 指标 Indicators                                  | 指标内容 Indicator contents   | 回应情况 Response Situation |
|---|--|---|-------------------------|
| 层面 B6 产品责任<br>Level B6:<br>Product liability    | 一般披露<br>General disclosure                     | 有关所提供产品和服务的健康与安全、广告、标签及私隐事宜以及补救方法的：<br>Regarding health and safety, advertising, labeling and privacy matters and remedies for products and services provided:<br>(a) 政策<br>(a) Policies<br>(b) 遵守对发行人有重大影响的相关法律及规例的资料<br>(b) Compliance with relevant laws and regulations that have a significant impact on the issuer. | √                       |
|   | 关键绩效指标 B6.1<br>Key performance indicators B6.1 | 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<br>Percentage of products needing to be taken back due to safety and health in the sold and transported amount Percentage of products needing to be taken back due to safety and health in the sold and transported amount  | √                       |
|   | 关键绩效指标 B6.2<br>Key performance indicators B6.2 | 接获关于产品及服务的投诉数目以及应对方法<br>Number of complaints about products and services and coping approach  | √                       |
|   | 关键绩效指标 B6.3<br>Key performance indicators B6.3 | 描述与维护及保障知识产权有关的惯例<br>Describe conventions in respect of maintaining and guaranteeing intellectual property right  | √                       |
|   | 关键绩效指标 B6.4<br>Key performance indicators B6.4 | 描述质量检定过程及产品回收程序<br>Describe the quality verification process and product recovery procedures  | √                       |
|   | 关键绩效指标 B6.5<br>Key performance indicators B6.5 | 描述消费者资料保障及私隐政策，以及相关执行及监察方法<br>Describe policies regarding customer data guarantee and privacy and related execution and monitoring methods  | √                       |
| 层面 B7 反贪污<br>Level B7<br>Anti-corruption        | 一般披露<br>General disclosure                     | 有关防止贿赂、勒索、欺诈及洗黑钱的<br>Information relating to bribery, extortion, fraud and money laundering:<br>(a) 政策<br>(a) Policies<br>(b) 遵守对发行人有重大影响的相关法律及规例的资料<br>(b) Compliance with relevant laws and regulations that have a significant impact on the issuer.   | √                       |
|   | 关键绩效指标 B7.1<br>Key performance indicators B7.1 | 于汇报期内对发行人或其雇员提出并已审结的贪污诉讼案件的数目及诉讼结果<br>Number and litigation outcome of corruption lawsuits filed against the issuer or its employees which have been concluded within the report period   | √                       |
|   | 关键绩效指标 B7.2<br>Key performance indicators B7.2 | 描述防范措施及举报程序，以及相关执行及监察方法<br>Describe preventive measures and reporting procedures, as well as related enforcement and monitoring methods   | √                       |
|   | 关键绩效指标 B7.3<br>Key performance indicators B7.3 | 描述向董事及员工提供的反贪污培训<br>Describe anti-corruption training provided to directors and staff   | √                       |
| 层面 B8 社区投资<br>Level B8:<br>Community investment | 一般披露<br>General disclosure                     | 有关以社区参与来了解营运所在社区需要和确保其业务活动会考虑社区利益的政策<br>Policies on community participation in understanding the needs of the community in which they operate and ensuring that their business activities take into account the interests of the community  | √                       |
|   | 关键绩效指标 B8.1<br>Key performance indicators B8.1 | 专注贡献范畴（如教育、环境事宜、劳工需求、健康、文化、体育）<br>Focus on contribution areas (such as education, environmental issues, labor needs, health, culture, sports)   | √                       |
|   | 关键绩效指标 B8.2<br>Key performance indicators B8.2 | 在专注范畴所动用资源（如金钱或时间）<br>Resources (such as money or time) used in the area of focus   | √                       |

Note:

Following the "No Compliance or Explanation" provision of the SEHK Guidelines on Environmental, Social and Governance Report, we interpret the undisclosed indicators A1.2, A1.3, A1.4, A2.2 and A2.5 as follows

① Affected by the nature and scope of business, clauses A1.2, A1.3 and A1.4 have not been counted yet; In the future, the company will continue to promote the improvement of emission management

② Clauses A2.2 and A2.5 are not applicable to the nature of the company's business

# 评级报告

## 《中国交建 2022 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 2022 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-ESG5.0）》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《企业社会责任报告过程性资料确认书》及相关证明材料；
2. 评级小组对《报告》编写过程及内容进行评价，拟定评级报告；
3. 评级专家委员会副主席、评级小组组长、评级小组专家共同签审评级报告。

### 三、评级结论

#### 过程性 (★★★★★)

公司成立 ESG 管理工作委员会，公司党委书记、董事长任主任，分管领导任副主任、总部各部门负责人任委员；党委工作部牵头编制年度报告并提交董事会最终审定；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；构建 ESG 指标体系，优化管理流程；推动下属单位发布报告，形成 1+M（下属单位报告）+N（一带一路报告）的报告体系，并计划召开专项发布会；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、污染物管理、工程质量管理、施工安全、绿色建筑、高效使用建筑材料、保护进城务工人员权益等所在行业关键性议题，叙述详尽充分，实质性表现领先。

#### 完整性 (★★★★★)

《报告》主体内容从“管治篇 强国固基·造就永续发展之路”“环境篇 水漾山青·铸就永续生态之路”“社会篇 益世利民·成就永续美好之路”等角度披露了所在行业核心指标的 73.35%，完整性表现优秀。

#### 平衡性 (★★★★★)

《报告》披露了“因工死亡人数”“一般及以上突发环境事件”“员工流失率”“客户隐私泄漏事件次数”等负面数据信息，并对工程项目高空坠落及机械伤害事件的经过及整改措施进行案例描述，平衡性表现卓越。



中国企业社会责任报告  
评级专家委员会  
Chinese Expert Committee on CSR Report Rating

#### 可比性 (★★★★★)

《报告》披露了“新签合同额”“研发投入”“全年能源消耗总量”“客户满意度”“志愿活动时长”“慈善捐赠总额”等 94 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》采用议题型框架结构，从“管治篇”“环境篇”“社会篇”三大篇章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；设置专题，聚焦企业年度履责重点实践，彰显了企业履责的引领性；采用中英文排版设计，国际化风格突出，彰显企业特色；内页多处使用“第三方证言”“数说 2022”“我们的荣誉”等小栏目，增强报告易读性和沟通力，可读性表现领先。

#### 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，通过召开专项发布会、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 (★★★★★)

综合以上七项评价指标，《中国交建 2022 年度环境、社会及管治报告》在过程性、实质性、平衡性、可比性、可及性上表现卓越，在可读性方面表现领先，在完整性方面表现优秀。综合来看，该报告是一份卓越的企业社会责任报告。

### 四、改进建议

1. 增加行业核心指标的披露，提升报告的完整性；
2. 优化关键绩效数据呈现方式，进一步提高报告可读性。



中国企业社会责任报告  
评级专家委员会  
Chinese Expert Committee on CSR Report Rating

中国交建环境、社会及管治报告首次获得五星级评价

黄群慧

评级专家委员会副主席

钟宏武

评级小组组长

张洲

评级小组专家



扫码查看企业评级档案

出具时间：2023 年 4 月 28 日

## 意见反馈

### 尊敬的读者

您好！十分感谢您阅读《中国交建 2022 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：86-10-82016894

联系地址：中国北京市西城区德胜门外大街 85 号

### 您的信息

姓 名：\_\_\_\_\_ 联系电话：\_\_\_\_\_

工作单位：\_\_\_\_\_ 传 真：\_\_\_\_\_

职 务：\_\_\_\_\_ E-mail：\_\_\_\_\_

### 意见反馈

1. 您对本报告的总体评价是

好       较好       一般

2. 您认为本报告是否能反映中国交建对经济、社会和环境的重大影响？

高       较高       一般       较低       低

3. 您认为本报告所披露信息、数据、指标的清晰、准确、完整度如何？

好       较好       一般       差       不了解

4. 您最满意本报告哪一方面？

5. 您希望进一步了解哪些信息？

6. 您对我们今后发布报告还有哪些建议？

## FEEDBACK

### DEAR READERS

Greetings! Thank you for reading the 2022 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.: 86-10-82016894

Address: No. 85, Deshengmenwai Street, Xicheng District, Beijing

### YOUR INFORMATION

NAME: \_\_\_\_\_ TEL: \_\_\_\_\_

EMPLOYER: \_\_\_\_\_ FAX: \_\_\_\_\_

TITLE: \_\_\_\_\_ E-MAIL: \_\_\_\_\_

### SUGGESTION FEEDBACK

1. Your overall assessment of the report is

Good       Better       Average

2. Do you think this report can reflect the great impact of China Communications Construction on economy, society and environment?

High       Relatively high       Fair       Relatively low       Low

3. What do you think of the clarity, accuracy and completeness of the information, data and indicators disclosed in this report?

Good       Better       Average       Poor       Don't know

4. Which aspect of this report are you most satisfied with?

5. What information do you want to know more?

6. What other suggestions do you have for us to publish reports in the future?

交融天下  
建者无疆



中国交通建设股份有限公司  
CHINA COMMUNICATIONS CONSTRUCTION COMPANY LIMITED

地址：北京市西城区德胜门外大街85号 邮编 Post Code：100088  
Add：No.85,Deshengmenwai Avenue,Xicheng District, Beijing,P.R.China  
电话 Tel：86-10-8201 6894  
传真 Fax：86-10-8201 6594  
<http://www.cccltd.cn>

报告出版的环境考虑

纸张：采用环保纸张印刷

油墨：采用环保油墨以减少空气污染

设计制作： 创云