



中国交建 环境、社会及管治报告

Environmental, Social and Governance Report
of China Communications Construction

2021





让世界**更**畅通

让城市**更**宜居

让生活**更**美好

报告编制说明

DESCRIPTION OF THE REPORT PREPARATION

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 2021 年 1 月 1 日至 2021 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有限公司证券上市规则之《环境、社会及管治（ESG）报告指引》《上海证券交易所股票上市规则》、中国社会科学院《中国企业社会责任报告指南（CASS-CSR4.0）》、全球报告倡议组织《可持续发展报告标准》（GRI Standards）。

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，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

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

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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：86-10-82016894

E-mail：ccccshzrbg2019@163.com

Scope of the Report

Organizational scope of the report: This report covers China Communications Construction Company Limited (CCCC) and its affiliated branches & subsidiaries, and the brand name of China Communications Construction Company Limited is "China Communications Construction". In this report, China Communications Construction Company Limited is also referred to as "China Communications Construction" "the Company" and "We".

China Communications Construction, as an important holding subsidiary of China Communications Construction Group Limited (CCCG), plays a decisive role in its business performance. Therefore, in the related comprehensive honors and rankings, they are not distinguished in this report.

Period of the report: This is an annual report, covering the period from January 1, 2021 to December 31, 2021. Some contents may appropriately go beyond the above period.

Reporting Criteria

This report is prepared based on the rules for listing of securities of the Stock Exchange of Hong Kong Ltd. – *Guidelines on Environmental, Social and Governance (ESG) Reports*, the *Rules Governing the Listing of Stocks on Shanghai Stock Exchange, Guide for Corporate Social Responsibility Reports in China (CASS-CSR4.0)* of Chinese Academy of Social Sciences (CASS) and *Standards for Sustainable Development Reports* of Global Reporting Initiative (GRI Standards).

This report follows the requirements of the relevant principles of "significance", "quantification", "balance" and "consistency" of *Guidelines on Environmental, Social and Governance (ESG) Reports*, and it responds to the "significance" principle by analyzing the significance of social responsibility, responds to the principles of "quantification" and "consistency" by quantifying the data list and responds to the "balance" principle by reviewing the negative topics and bad performance.

Content Description

There is no false information or misleading statements in this report. China Communications Construction guarantees its authenticity, accuracy and completeness.

The financial data involved in this report shall be only used for reference, and the financial data shall be subject to that in the annual report of the Company. Unless otherwise stated, the amount disclosed in this report shall be in RMB.

All the engineering and equipment pictures in this report are the engineering undertaken, equipment owned or products equipped by the Company.

Access to the Report

This report is released in form of an electronic version and is available for downloading from and browsing on the columns of Social Responsibility and Announcements/Circulars (H Share) at the website of China Communications Construction: www.ccccltd.cn.

If you have any suggestion and opinion on this report, you may contact us according to the following information:

Contact department: Work Department of Party Committee (Unified Front Work Department of Party Committee, Corporate Culture Department) of China Communications Construction

Mailing address: No. 85, Deshengmenwai Street, Xicheng District, Beijing, China

Tel.: 86-10-82016984

E-mail: ccccshzrbg2019@163.com

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领导致辞

LEADER'S SPEECH



董事长：王彤宙

Chairman: Wang Tongzhou




总裁：王海怀

CEO: Wang Haihui



时间是万物的尺度，丈量着平凡到伟大的距离。2021年是浓墨重彩的一年，这一年新冠疫情仍然笼罩全球，世界风云波谲云诡，人类命运休戚与共，面对百年未有之大变局，ESG投资更加成为全球共识、通行的理念。在此背景下，中国ESG投资迎来了蓬勃发展的新阶段。2021年，国务院国资委首次将ESG纳入推动企业履行社会责任重点工作，中国交建作为ESG理念的持续践行者，交出了一份精彩厚重的答卷。

Time is a yardstick for all, measuring the distance from the commonplace to the consummate. The year 2021 was a different year marked by the COVID-19 pandemic raging worldwide and sudden changes in the global landscape. Mankind who shares a common future is confronted with profound changes unseen in a century. ESG investment has even become the global consensus and a prevailing concept. In this context, China's ESG investment reaches a new stage of flourishing development. In 2021, the State-owned Assets Supervision and Administration Commission of the State Council included ESG as a key task for the fulfillment of corporate social responsibility for the first time. China Communications Construction Company Limited (CCCC) has been a star performer in its continual practice of the ESG concept.

2021年，我们以国擎巨匠的情怀与实力，用心浇筑利益相关方的满意。公司新签合同额、营业收入、利润总额、净利润均创历史新高，荣居《财富》世界500强第61位，在国务院国资委经营业绩考核中获“16连A”，入选首批中国ESG示范企业，实现了“十四五”高质量发展的良好开局，在建设具有全球竞争力的科技型、管理型、质量型世界一流企业道路上砥砺前行、奋楫笃行。

In 2021, we built on our responsibility and strength as a key enterprise and achieved results to the satisfaction of stakeholders. We scaled new heights in terms of the value of newly signed contracts, operating income, total profit, and net profit. We ranked 61st in the Fortune Global 500, achieved "16 straight As" in the business performance assessment conducted by the State-owned Assets Supervision and Administration Commission of the State Council, and was selected as one of the first ESG demonstration enterprises in China. Getting off to a good start for high-quality development during the 14th Five-Year Plan period, we strive to build a world-class enterprise with global competitiveness regarding "technology, management and quality".

这一年，我们积极汇聚改革创新合力，知重负重，不负市场所望。心怀“国之大者”，全力推进“让世界更畅通，让城市更宜居，让生活更美好”的愿景变为实景。科学谋划战略蓝图，编制出台“十四五”总体规划，“三核五商”新中交为未来发展指明了方向；推进改革提质走深走实，完成国企改革三年目标任务85%以上，实现资本结构不断优化，运维质量有效提升；深入实施“三重两大两优”经营策略，公路业务规模重返国内第一，机场建设业务稳居行业首位，江河湖海业务达历史新高，发展态势稳中向好；立足服务国家战略全局，继续在京津冀、雄安新区、长三角、粤港澳等区域深耕发力；厚植全球竞争优势，马来西亚东海岸铁路、柬埔寨金港高速、科伦坡港口城等项目取得丰硕成果；坚持科技自立自强，主导制（修）订并发布ISO国际标准3项，获得国家科技进步二等奖1项、技术发明二等奖1项，2个国家工程研究中心纳入国家科技创新基地新序列管理，首个跨法人组织的财务大共享中心成功运行，“数智中交”迈上新台阶。

This year, we conducted reforms and improved operational efficiency in the face of overwhelming difficulties, and lived up to the expectations of the market. Taking the responsibility as a key enterprise, we went all out to make a reality the vision of "making the world more connected, making the city more livable, and making the life better". We scientifically mapped out the strategic blueprint, and formulated the overall plan for the 14th Five-Year Plan period, with the strategy of "three core areas and five fields" pointing out the way forward. We made substantial progress in reform, completed more than 85% of the three-year goals and tasks of state-owned enterprise reform, optimized the capital structure, and improved the quality of operation and maintenance. The business strategy of "three majors, two big and two priorities" was thoroughly implemented. We again ranked first in China in terms of highway business, led the industry in terms of the airport construction business, hit a record high in terms of the river, lake and marine business, and achieved a development trend of ensuring progress while maintaining stability. While keeping a foothold in serving the national strategic interests, we continued our development in the Beijing-Tianjin-Hebei region, Xiong'an New Area, Yangtze River Delta, Guangdong-Hong Kong-Macao Greater Bay Area, etc. Building on its global competitive edge, we achieved fruitful results in projects such as East Coast Rail Link (ECRL) in Malaysia, the Phnom Penh-Sihanoukville expressway in Cambodia, and Colombo Port City. We also adhered to self-reliance in science and technology, led the formulation, revision and publication of three pieces of ISO international standards, and won one second prize for National Science and Technology Progress, and one second prize for technological invention, with our two national engineering research centers having been placed under the new sequence management of the national science and technology innovation bases. The first financial sharing center across legal persons has been put into operation, and new progress was made in "digital and smart CCCC".

这一年，我们持续深挖永续发展潜力，各美其美，不负山水所寄。深入开展安全生产专项整治三年行动、节能环保三年行动和“平安百年品质工程”建设，扎实打通安全生产“最后一公里”专项工作，安全环保质量形势总体平稳。围绕“双碳”目标，积极融入海洋强国、美丽中国建设，绿色低碳行动持续实施，海上风电产业链持续完善，水利环保业务迈上新台阶；全面投身蓝天、碧水、净土保卫战，参与长江流域综合开发治理、黄河流域生态保护和高质量发展、永定河流域治理，以生态之笔绘就经济社会发展的美好画卷。公司承建的援埃塞俄比亚河岸绿色发展项目荣获美国《工程新闻纪录》全球环境类最佳项目奖，冬奥可持续集装箱产品被列入科技部2021年国家重点研发计划“科技冬奥”重点专项，科技支撑、机制灵活、行业领先的全国一流生态治理商“名片”擦得更亮。

This year, we continued to tap the potential of sustainable development, and contributed to environmental protection. We took further steps for the three-year action for special rectification of safe production, the three-year action for energy conservation and environmental protection, and the "Safe Quality Engineering in One Hundred Years". Decisive progress was made in the "last mile" of work safety, and overall safety and environmental

protection quality was ensured. Centering on the "dual carbon" goal, we were actively involved in building China into a maritime power and a beautiful China. Green and low-carbon campaigns were constantly implemented, the offshore wind power industrial chain continuously improved, and new progress made in water conservancy and environmental protection. In order to keep the skies blue, waters clear, and land pollution-free, we participated in the comprehensive development and governance of the Yangtze River Basin, the ecological protection and quality development of the Yellow River Basin, and the governance of the Yongding River Basin as its contribution to economic and social development. The green riverbank development project in Ethiopia undertaken by China Communications Construction was awarded the Best Global Project Award in the Environment Category by the U.S. *Engineering News-Record*. The Winter Olympics sustainable container products were included in the "technologically advanced Winter Olympics" key special project in the Ministry of Science and Technology's national key R&D program in 2021. We enhanced our reputation as a national industry-leading ecological management company with high technology and flexible mechanism.

这一年，我们不断厚培履责践诺能力，念兹在兹，不负社会所托。胸怀“国之大者”，行之所至，为世界缔造工程奇迹，加纳特码新集装箱码头、巴基斯坦喀喇昆仑二期项目等荣获ENR2021年度全球最佳项目奖。坚持严管厚爱，广开贤路，精准滴灌，为员工搭建奋斗圆梦的舞台。秉持许党报国的真挚情怀，在疫情防控、防汛抗洪救灾等大战大考中积极作为，中交“蓝马甲”成为街头巷尾的一抹靓丽风景；推动乡村振兴战略落地生根，通过“打造将军山最美红色之路”等特色实践，全面建设美丽宜人、业兴人和的社会主义新农村；聚焦医疗救助、公共卫生、文化教育等重点民生领域，开展“中交助梦”系列行动，荣获第十一届“中华慈善奖”，向全社会展示“责任公民”的中交形象。

This year, we improved the ability to fulfill our responsibilities and commitments. Taking the responsibility as a key enterprise, we performed engineering miracles in the world. The Tema New Container Terminal in Ghana and the Karakoram Phase II Project in Pakistan won the ENR's Global Best Project Award 2021. We exercised strict management and showed great kindness as a stage where every capable employee can realize their dreams. To serve the Party and the country, we swung into action in emergencies such as epidemic response, and flood and disaster relief. China Communications Construction's "Blue Vest" is beautiful street scenery. We implemented the rural vitalization strategy, and comprehensively built new socialist villages that are beautiful, livable, and harmonious with thriving businesses through featured practices such as "building the most beautiful red road in Jiangjun Mountain". We focused on key areas related to people's well-being such as medical assistance, public health, culture and education, and launched the "CCCC Makes Dream Come True" campaign. It won the eleventh award "China Charity Award", demonstrating its image as a "responsible citizen".

春华秋实，岁物丰成，欣逢盛世，也当不负盛世。站在第二个百年征程的历史新起点上，中国交建将始终牢记“央企姓党、国企为国”，坚持“123456”总体发展思路，全力当好贯彻新发展理念、融入新发展格局的排头兵、先行者，向着早日建成具有全球竞争力的科技型、管理型、质量型世界一流企业阔步前进，在新的赶考征程中交出更加优异的答卷！

At a time of harvest in the great era, we must live up to the expectations. Standing at the new starting point of the journey towards the second centenary goal, We will keep in mind that "central state-owned enterprises belong to the Party, and state-owned enterprises serve the country". In keeping with the "123456" development strategy, we will be a pioneer to implement the new development philosophy and integrate into the new pattern of development, establish a world-class enterprise with global competitiveness regarding "technology, management and quality" early, and achieve greater results in the testing journey!

关于我们 ABOUT US

中国交建之“最”

NO. 1 OF CHINA COMMUNICATIONS CONSTRUCTION

-  世界最大的港口设计建设公司
World's largest port design and construction company
-  世界最大的公路与桥梁设计建设公司
World's largest highway and bridge design and construction company
-  世界最大的疏浚公司
World's largest dredging company
-  世界最大的高速公路设计、建设运营商
World's largest expressway design, construction and operation company
-  亚洲最大的国际工程承包公司
Asia's largest international contractor

公司简介

CORPORATE PROFILE

中国交通建设股份有限公司（以下简称“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。

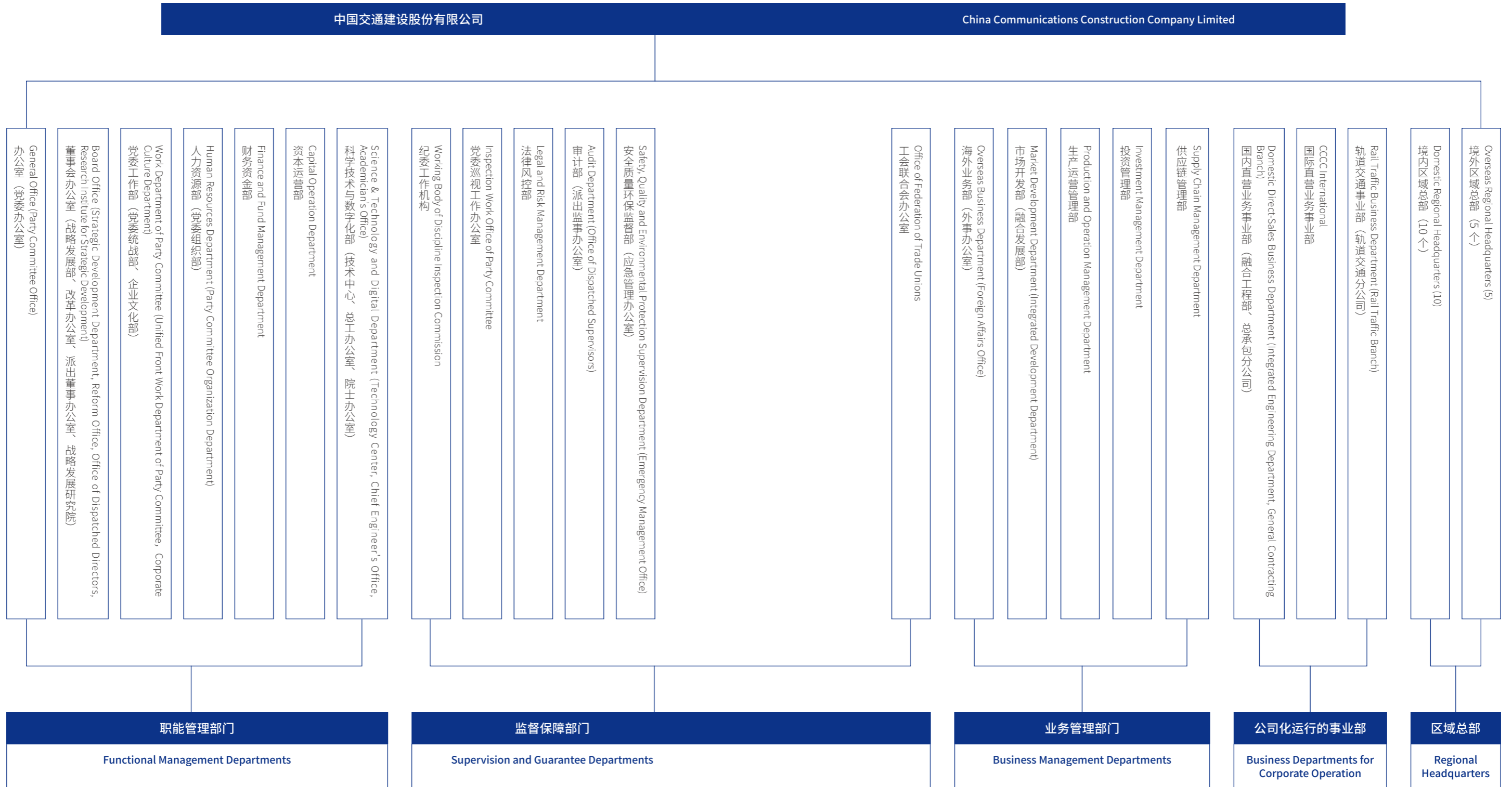
China Communications Construction Company Limited (hereinafter referred to as "China Communications Construction") is a world-leading mega comprehensive infrastructure service provider. It is mainly engaged in businesses such as investment, construction & operation and integrated urban development of the transport infrastructures and provides the customers with the package solution and integrated services of investment & financing, consulting & planning, design & construction and management & 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 33 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。2021 年，中国交建居《财富》世界 500 强第 61 位，在国务院国资委经营业绩考核中获“16 连 A”。

China Communications Construction has been engaged in infrastructure and other related industries for more than 100 years, with products and services covering more than 150 countries, and it has completed a large number of transport infrastructure projects representing the highest level of the world and the era, provided the customers with mature and complete services and formed the world's leading technology system. It has 33 major wholly-owned and holding subsidiaries. Listed in Hong Kong and Shanghai, China Communications Construction takes a leading position in the world in profitability and value-creation capability. In 2021, China Communications Construction ranked 61st in Fortune Global 500, and it won the A rating for 16 consecutive years in the assessment of the operation performance made by the State-owned Assets Supervision and Administration Commission of the State Council.

组织架构

ORGANIZATIONAL STRUCTURE



主要子公司名录

LIST OF MAJOR SUBSIDIARIES

01	中国港湾工程有限责任公司	China Harbour Engineering Company Ltd.	18	中交水运规划设计院有限公司	CCCC Water Transportation Consultants Co., Ltd.
02	中国路桥工程有限责任公司	China Road and Bridge Corporation	19	中交公路规划设计院有限公司	CCCC Highway Consultants Co., Ltd.
03	中交第一航务工程局有限公司	CCCC First Harbour Engineering Company Ltd.	20	中交第一航务工程勘察设计院有限公司	CCCC First Harbor Consultants Co., Ltd.
04	中交第二航务工程局有限公司	CCCC Second Harbour Engineering Company Ltd.	21	中交第二航务工程勘察设计院有限公司	CCCC Second Harbor Consultants Co., Ltd.
05	中交第三航务工程局有限公司	CCCC Third Harbour Engineering Company Ltd.	22	中交第三航务工程勘察设计院有限公司	CCCC Third Harbor Consultants Co., Ltd.
06	中交第四航务工程局有限公司	CCCC Fourth Harbour Engineering Company Ltd.	23	中交第四航务工程勘察设计院有限公司	CCCC - FHDI Engineering Co., Ltd.
07	中交一公局集团有限公司	CCCC First Highway Engineering Group Co., Ltd.	24	中交第一公路勘察设计研究院有限公司	CCCC First Highway Consultants Co., Ltd.
08	中交第二公路工程局有限公司	CCCC Second Highway Engineering Co., Ltd.	25	中交第二公路勘察设计研究院有限公司	CCCC Second Highway Consultants Co., Ltd.
09	中交第三公路工程局有限公司	CCCC Third Highway Engineering Co., Ltd.	26	中国公路工程咨询集团有限公司	China Highway Engineering Consulting Corporation
10	中交第四公路工程局有限公司	CCCC Fourth Highway Engineering Co., Ltd.	27	中交基础设施养护集团有限公司	CCCC Infrastructure Maintenance Group Co., Ltd.
11	中交路桥建设有限公司	Road and Bridge International Co., Ltd.	28	中交疏浚（集团）股份有限公司	CCCC Dredging (Group) Company Limited
12	中交投资有限公司	CCCC Investment Company Limited	29	中交机电工程局有限公司	CCCC Mechanical and Electrical Engineering Co., Ltd.
13	中交城市投资控股有限公司	CCCC Urban Investment Holding Company Limited	30	中国交通物资有限公司	China Communications Materials and Equipment Company Limited
14	中交西南投资发展有限公司	CCCC Southwest Investment and Development Co., Ltd.	31	中交资本控股有限公司	CCCC Capital Holding Co., Ltd.
15	中交国际（香港）控股有限公司	CCCC International (Hong Kong) Holding Limited	32	中交财务有限公司	CCCC Finance Company Ltd.
16	中交海洋投资控股有限公司	CCCC Ocean Investment Holding Company Limited	33	中交天和机械设备制造有限公司	CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd.
17	中交资产管理有限公司	CCCC Asset Management Company Limited			

企业文化

CORPORATE CULTURE

■ 企业使命 固基修道、履方致远

Corporate Mission: build high-quality infrastructure and lay a solid foundation for future prosperity

■ 企业愿景 让世界更畅通、让城市更宜居、让生活更美好

Corporate Vision: make the world more connected, make the city more livable, make the life better

■ 企业精神 交融天下、建者无疆

Corporate Spirit: build a connected world with an international vision

■ 企业目标 打造具有全球竞争力的科技型、管理型、质量型世界一流企业

Corporate Goal: establish a world-class enterprise with global competitiveness regarding "technology, management and quality"

■ 价值导向 以业绩论英雄、英雄不问出处

Value Orientation: heroes are judged by their achievements instead of their provenance

ESG 管治

ESG GOVERNANCE

董事会声明

BOARD STATEMENT

董事会对本公司环境、社会及管治负总体责任，负责制定本公司环境、社会及管治策略，领导及监察本公司可持续发展的政策、措施和绩效，评估及厘定本公司环境、社会及管治相关风险及机遇，审批有关环境、社会及管治报告披露资料，对风险管理及内部监控系统负责，并确保其有效性、可靠性。

The Board of Directors shall bear the overall responsibility for the Company's environment, society & governance as follows: prepare the ESG strategy, lead and supervise the policies/measures/performance of sustainable development, assess and determine the ESG-related risks and opportunities, examine and approve the information disclosed in ESG reports, be responsible for the risk management and internal control system, and ensure its effectiveness and reliability.

ESG 治理体系

ESG GOVERNANCE SYSTEM

中国交建围绕国家“十四五”规划发展理念，准确把握新时期 ESG 工作面临的新形势、新任务和新要求，持续健全完善公司 ESG 管理，保障环境、社会及管治相关工作扎实推进。以公司发展战略为导向，不断拓展环境、社会及管治的内涵与外延，将 ESG 理念深度融入日常经营发展；由董事会负责 ESG 管治事项审议、决策与监督，并定期对 ESG 工作开展情况进行审查；持续完善公司社会责任管理办法，夯实 ESG 管理的制度基础；设立以公司主要领导任主任、分管领导任副主任、各部门负责人任委员的社会责任管理工作委员会，以各级深度参与、横向协调、纵向联动的社会责任管理组织体系保证 ESG 工作的可持续开展。2021 年，公司社会责任相关工作向董事会汇报 2 次；开展多层次社会责任培训，支持国务院国资委 2021 年社会责任 /ESG 课题，全面提升 ESG 工作能力和水平，公司荣获 Wind ESG 评级 A 级，ESG 综合得分位列行业第 7。

Focusing on the development philosophy of China's 14th Five-Year Plan, we accurately hold the new situation, new tasks and new requirements of ESG in the new era to constantly improve our ESG management and ensure the solid progress of ESG related work. Guided by our development strategy, we constantly expand the connotation and extension of ESG, and deeply integrate ESG philosophy into our daily operation and development. Moreover, the Board of Directors is responsible for the review, decision-making and supervision of ESG matters, and regularly reviews the work of ESG. We constantly improve our social responsibility management methods to consolidate the institutional foundation of ESG management. Furthermore, we establish the Social Responsibility Management Work Committee (in which, our key leaders serve as directors, competent leaders serve as deputy directors, and department heads serve as members), and the social responsibility management organizational system characterized by deep participation at all levels, horizontal coordination and vertical linkage is used to ensure the sustainable development of ESG. In 2021, we reported the social responsibility work twice to the Board of Directors. In addition, we have carried out multi-level social responsibility training activities and supported the 2021 social responsibility/ESG issue of the State-owned Assets Supervision and Administration Commission of the State Council, which comprehensively improves the work capacity and level of ESG. We won Grade A in Wind ESG rating, and our ESG comprehensive score ranked the 7th in the industry.



中国交建入选首批十家“中国 ESG 示范企业”

China Communications Construction was awarded one of the first batch of Ten "China ESG Demonstration Enterprises"



利益相关方沟通

COMMUNICATION WITH INTERESTED PARTIES

中国交建不断完善沟通机制，丰富沟通形式，全面了解利益相关方诉求，深度回应利益相关方的期盼。2021年，公司连续发布第15本社会责任报告，并首次发布ESG报告，社会责任和ESG工作开启新篇章。此外，公司积极与利益相关方开展广泛而真诚的互动，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，不断强化ESG信息披露，及时回应利益相关方关切，确保精准浇筑利益相关方的满意。

Constantly improving the communication mechanisms and enriching communication forms, we fully understand the demands of stakeholders to deeply respond to their expectations. In 2021, we released the social responsibility report for 15 consecutive years and the first ESG report, opening a new chapter in social responsibility and ESG work. In addition, we actively carried out extensive and sincere interactions with stakeholders, for example, we established "Social Responsibility" and "Investor Relations" columns on our official website to improve the convenience of obtaining ESG information for stakeholders, and we constantly strengthened ESG information disclosure to respond to the concerns of stakeholders in a timely manner, ensuring accurate delivery of the satisfaction to stakeholders.



2021年7月18日，由中国交建联合主办的ESG中国论坛2021夏季峰会在京召开，国务院国资委党委委员、秘书长彭华岗与中国交建党委书记、董事长王彤宙在会上共同发布《中国交建2020年环境、社会及管治报告》

On July 18, 2021, the ESG China Forum 2021 Summer Summit co-hosted by China Communications Construction was held in Beijing. Peng Huagang (member of the CPC Committee and Secretary General of the State-owned Assets Supervision and Administration Commission of the State Council, and Wang Tongzhou (Secretary of the Party Committee and Chairman of China Communications Construction) jointly released the CCCC Environment, Social and Governance Report 2020 at the Summit.

利益相关方 Stakeholders	监管机构 (国务院国资委) Regulator (State-owned Assets Supervision and Administration Commission of the State Council)	各级政府 (所在地政府) Governments at all levels (local government)	股东 Shareholders	业主和客户 Owners and customers	供应商 Suppliers	员工 Employees	社区与公众 Community and the public	NGO等第三方机构 Third-party institutions such as NGOs
沟通机制和形式 Communication mechanisms and forms	落实各类文件制度和会议精神 对口部门业务沟通 工作汇报、报告和报表 Implement all kinds of document systems and meeting spirits Business communications with counterpart departments Work reporting, reports and statements	专题会议汇报和信息报送 战略合作 高端商务会谈 Special meeting reporting and information submission Strategic cooperation High-end business negotiation	定期或临时报告 股东大会、书面通知 投资者见面会 Regular or interim reports Shareholders' Meetings, written notices Investors' meetings	合同执行 拜访、会议沟通 文件函电往来 业主评价与管理 Contract implementation Visit, meeting communication Documents and correspondences Owners' evaluation and management	招投标、商业谈判 合同执行 和业务函电沟通 Tendering and bidding, business negotiation Contract implementation and business correspondence communication	职工监事、职代会 征求合理化建议 培训会议 日常工作沟通 Employee Supervisors, Workers' Congress Seek the reasonable suggestions Training meetings Daily work communication	各种形式交流、慰问 参与社会公益活动 Exchanges and sympathies in various forms Participate in the social public welfare activities	保持密切联系与信息 共享 开展合作 Maintain close contact and information sharing Carry out cooperation
公司回应 Company's responses	综合考核A类 提升企业管控能力 承担企业社会责任 参与各类责任活动 Class A of comprehensive assessment Promote the corporate control ability Bear the corporate social responsibility Participate in various social responsibility-related activities	遵守法律法规 执行国家政策 依法诚信经营 践行廉洁从业 签署战略合作协议 Observe the laws and regulations Implement the national policies Operate honestly according to law Practice the operation honestly Sign the strategic cooperation agreements	保持稳定盈利 维护股东权益 良好的信用等级 Maintain the stable profit Safeguard the shareholders' rights and interests Good credit rating	确保履约率 和交工合格率100% 持续的技术工艺 和产品创新 提供满意服务 Ensure the agreement performance rate and qualified rate of delivery of 100% Continuous technology, process and product innovation Provide the satisfactory services	坚持诚信、互利 和平等协商原则 良好合作关系 Insist on the principles of integrity, mutual benefit and equal negotiation Good cooperation relationship	稳定薪酬激励 保障员工权益 关注员工发展 开展各类活动 Stabilize the salary incentive Safeguard the employees' rights and interests Pay attention to the employees' development Carry out all kinds of activities	环境保护、文明共建 支持所在地社会 和谐发展 公益捐赠 Environmental protection, civilization co-building Support the harmonious development of local society Public donation	参与和组织 社会贡献活动 保持沟通渠道畅通 Participate in and organize the social contribution activities Maintain the communication channels unblocked

实质性议题识别

IDENTIFICATION OF SUBSTANTIAL TOPICS

议题识别

TOPIC IDENTIFICATION

中国交建及时向利益相关方了解其对公司环境、社会和管治议题的看法，通过纵向分析弥补不足，横向对标行业先进，结合国家宏观政策、行业发展形势、香港联交所 ESG 指引、国内外 ESG 评价标准、相关方参与意见、公司战略方针等，不断更新 ESG 议题池，按照内容性质，将议题分为环境、社会和管治三大类，共计 46 项。

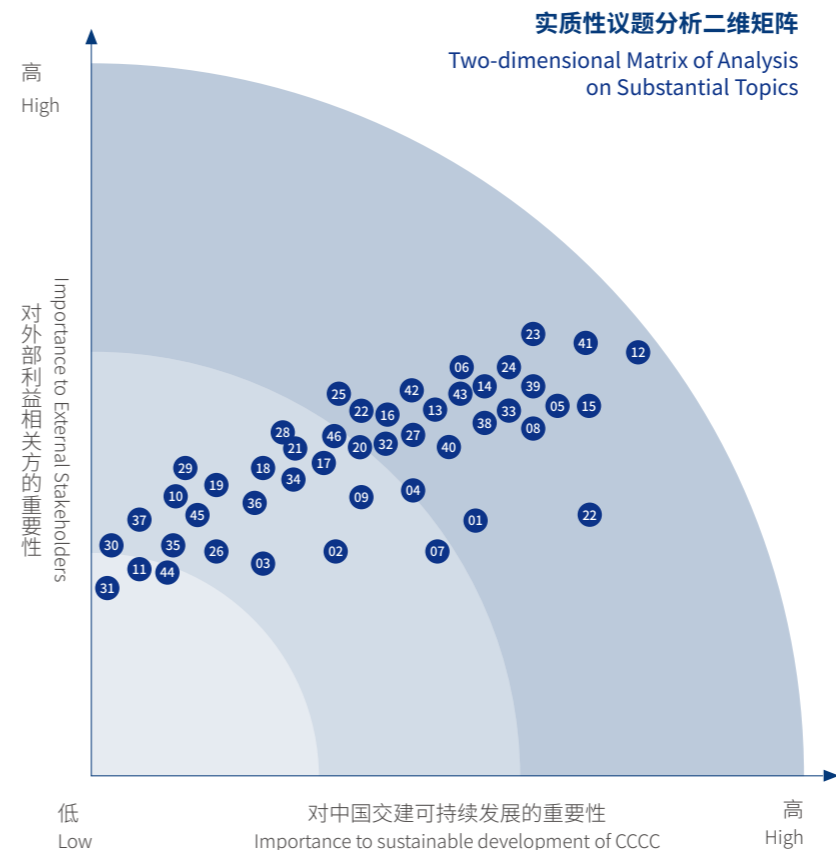
China Communications Construction timely understands the interested parties' views on our environmental, social and governance topics, then longitudinally remedies the weakness via analysis and laterally learns from the industry's advanced practices. Based on national macro policy, industrial development situation, HKSE ESG Guidelines, ESG elevation standards at home and abroad, suggestions of interested parties, and corporate strategy, we constantly update the ESG topic pool. According to the nature of the content, we classify the topics into environmental, social and governance categories, which are 46 items in total.

Governance topics	Social topics	Environmental issues
1. Responsibility strategy	12. Engineering quality	38. Establish the environmental management system
2. Responsible governance	13. Customers' rights and interests guarantee	39. Save resources
3. Social responsibility training	14. Promote customer satisfaction	40. Develop the circular economy
4. Communication with interested parties	15. Scientific and technological innovation	41. Green construction and ecological protection
5. Improved governance structure	16. Intellectual property protection	42. Emission management
6. Serve the national strategies	17. Contractor/subcontractor screening mechanism	43. Cope with climate changes
7. Strengthen Party building	18. Standardize tendering and bidding	44. Environmental protection education and publicity
8. Risk management and internal control	19. Promote the contractors/subcontractors to perform the social responsibility	45. Biodiversity protection
9. Prohibit commercial bribery and corruption	20. Migrant workers' rights and interests guarantee	46. Overseas environmental protection
10. Regular information disclosure	21. Responsible procurement	
11. Investment relationship management	22. Compliant employment	
	23. Employees' salaries and welfare	
	24. Employees' health and safety	
	25. Employees' training and career development	
	26. Democratic management	
	27. Employees' work-life balance	
	28. Support of needy workers	
	29. Public welfare brand projects	
	30. Public welfare donations	
	31. Employees' volunteer activities	
	32. Overseas public welfare and charity	
	33. Rural revitalization	
	34. Fight against the outbreak	
	35. Emergency rescue and disaster relief	
	36. Drive employment in project locations	
	37. Localized purchase	

管治议题	社会议题	环境议题
1. 责任战略	12. 工程质量	38. 建立环境管理体系
2. 责任治理	13. 客户权益保障	39. 节约资源
3. 社会责任培训	14. 提升客户满意度	40. 发展循环经济
4. 利益相关方沟通	15. 科技创新	41. 绿色施工及生态保护
5. 完善的治理结构	16. 知识产权保护	42. 排放物管理
6. 服务国家战略	17. 承包商 / 分包商筛选机制	43. 应对气候变化
7. 加强党的建设	18. 规范招投标	44. 环保教育宣传
8. 风险管理与内部控制	19. 推动承包商 / 分包商履行社会责任	45. 生物多样性保护
9. 禁止商业贿赂及腐败	20. 进城务工人员权益保障	46. 海外环境保护
10. 定期信息披露	21. 责任采购	
11. 投资者关系管理	22. 合规雇佣	
	23. 员工薪酬与福利	
	24. 员工健康与安全	
	25. 员工培训与职业发展	
	26. 民主管理	
	27. 员工工作生活平衡	
	28. 困难员工帮扶	
	29. 公益品牌项目	
	30. 公益捐赠	
	31. 员工志愿者活动	
	32. 海外公益慈善	
	33. 乡村振兴	
	34. 抗击疫情	
	35. 抢险救灾	
	36. 带动项目所在地就业	
	37. 本地化采购	

议题分析

TOPIC ANALYSIS



中国交建邀请各利益相关方评价 46 项议题的重要程度，共回收问卷 439 份，结合外部机构专业分析研判，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。

China Communications Construction invited stakeholder to evaluate the importance of 46 topics to them, and a total of 439 questionnaires were collected. According to the professional analysis and judgment of external agencies, a two-dimensional matrix model of "Importance to External Stakeholders" and "Importance to Sustainable Development of CCCC" was established to identify the substantial ESG topics of the Company, which is used to guide the accurate and comprehensive disclosure of environmental, social and governance information.

专题一 TOPIC 1

交融天下 共奏“一带一路”时代强音

BUILD A CONNECTED WORLD IN THE BELT AND ROAD ERA

中国交建秉持“共商共建共享”理念，勇当“一带一路”建设排头兵，全力推动中国品牌“走出去”，将公司发展融入国家战略，推动实现友好合作、互利共赢，与所在国、所在地区及海外合作伙伴共同打造利益共同体、命运共同体和责任共同体，推动共建“一带一路”高质量发展不断取得新成效。2021年，公司海外业务实现新签合同额312.99亿美元，连续15年荣膺ENR全球最大国际承包商中国企业第一名，持续保持亚洲企业第一名。

Upholding the concept of "extensive consultation, joint contribution, and shared benefits", China Communications Construction becomes the vanguard to implement the Belt and Road Initiative, promote Chinese brands to "go global", integrate corporate development into the national strategy, promote friendly cooperation, mutual benefit and win-win, build a community of interests, a community of destiny and a community of responsibility together with partners in the host countries, regions and overseas, and make new progress in the high-quality development of the Belt and Road Initiative. In 2021, China Communications Construction ranked first in China among ENR's world's largest international contractors for 15 years in a row, and ranked top among Asian companies, with a new contract value of USD 31.299 billion for overseas business.

携手共商

JOIN HANDS FOR CONSULTATION

中国交建依托全球化布局和全产业链优势，持续深化与全球伙伴的沟通交流，积极践行属地化经营，加强境外本土化、专业化布局，实现真正扎根当地，与当地经济社会的共生共赢、共同发展。

Relying on our global layout and advantages in the whole industrial chain, we constantly deepen communication and exchanges with global partners. We actively practice localized operation, and enhance localization and professional overseas layout so as to truly take root in the local economy & society for a win-win coexistence and joint development.

深化国际交流

DEEPEN INTERNATIONAL EXCHANGES

2021年，公司持续加强国际合作交流，深化与各国政府、企业等的沟通合作，与相关各方凝聚共识，形成合力，携手共同发展。

In 2021, we constantly strengthened international cooperation and exchanges to deepen communication and cooperation with governments and enterprises of all countries, and we built consensus with relevant parties to form synergy and work together for common development.

高端对接

High-end connection

参加中国服贸会、金砖国家工商论坛、中国东盟博览会、可持续发展论坛、联合国全球可持续交通大会等高端经济与行业国际交流活动。

We participated in high-end economic and industrial international exchange events, including the China International Fair for Trade in Services, BRICS Business Forum, China-ASEAN Expo, Sustainable Development Forum and UN Global Sustainable Transport Conference.

政府交流

Government exchanges

与巴基斯坦、委内瑞拉等多个国家的驻华大使开展沟通交流。

We conducted communication and exchanges with ambassadors from Pakistan, Venezuela and other countries in China.

伙伴合作

Partnership cooperation

与沙特阿吉兰控股等多家海外企业开展合作交流，成功参股葡萄牙第一大建筑工程承包商莫塔—恩吉尔公司，成为其第二大股东。

We cooperated and exchanged with Saudi Ajlan & Bros Holding and other overseas companies, and successfully bought shares of Mota Engil, the largest construction contractor in Portugal, becoming its second largest shareholder.



肯尼亚总统乌胡鲁·肯雅塔参加内罗毕快速路主线架梁贯通仪式
Kenyan President Uhuru Kenyatta presided over the laying of the last girders of the Nairobi Expressway



尼日尔总统伊素福出席援尼第三大桥项目通车仪式
Niger President Issoufou attended the opening ceremony of the Niger Third Bridge Project

属地化经营

LOCALIZED OPERATION

公司建立属地化经营体系，制定海外属地化发展指导意见（试行），创设“Think Global Act Local”特色属地文化，首次推进5家单位开展属地化试点，打造专业化集约化的属地化经营实体公司。此外，公司积极开展境外机构管理优化工作，结合属地情况，完成127个国家“一国一表”境外机构信息库建设，选取15个试点国别和地区编制《项目管理国别手册》，充分运用属地资源和国际资源，加强属地用工和人才培养，致力带动属地经济社会发展，实现共建共赢。新加坡分公司统筹在建项目分包、采购的本土化比例超过90%；马东铁项目联合马来西亚建筑发展局积极实施“中马铁路人才培养计划”，将培训人数提升至5,000人次。

We have established a localized operation system: we formulated the *Guidance on Overseas Localized Development (Trial)*, created the "Think Global Act Local" characteristic localized culture, initially promoted the five pilots to carry out the localized operation, and built a professional and intensive localized operation entity. Moreover, we actively carried out foreign agency management optimization, and according to the local conditions, we completed the overseas agency information database construction "One Country, One Table" in 127 countries. Furthermore, we selected 15 pilot countries and regions in preparing *the Project Management Country Manual* to make full use of local resources and international resources, and strengthened the local labor and talent training to drive the local economic and social development for joint contribution and win-win results. For example, over 90% as a whole of the sub-contracting and procurement of ongoing projects in our Singapore Branch were localized, and the East Coast Rail Link project in Malaysia, together with the Malaysian Construction Development Authority, has actively implemented the "China-Malaysia Railway Talent Training Program" to increase the number of trainees to 5,000.

互通共建

CONNECTIVITY AND JOINT CONTRIBUTION

中国交建积极在“一带一路”沿线国家和地区援建基础设施、打造绿色建筑，致力改善当地基础设施水平，带动相关产业进步，推动当地经济社会发展，让中国交建品牌在“一带一路”沿线熠熠生辉。

We have actively assisted in the construction of infrastructure and green buildings in the countries and regions along the Belt and Road, and we are committed to improving the local infrastructure level, driving the progress of relevant industries, promoting local economic and social development, and making CCCC brand shine along the Belt and Road.

援建基础设施

AID INFRASTRUCTURE

中国交建充分发挥基础设施综合服务商优势，为“一带一路”沿线国家建设铁路、港口、隧道、公路、桥梁等基础设施。截至2021年12月，公司实质性业务覆盖全球139个国家和地区，在139个国家和地区设立268个境外机构。境外新签合同额312.99亿美元，增幅5.4%，再创历史新高。加纳特码新集装箱码头、巴基斯坦喀喇昆仑二期项目等共4个项目荣获ENR 2021年度全球最佳项目奖。

We have made full use of our advantages as a comprehensive infrastructure service provider to build railways, ports, tunnels, roads, bridges and other infrastructures for countries along the Belt and Road Initiative. As of December 2021, our substantial business covered 139 countries and regions, and 268 overseas offices have been established in the above countries and regions. The amount of newly signed overseas contracts reached USD 31.299 billion with a 5.4% growth rate, which laid a new record. Four projects, including The Tema New Container Terminal in Ghana and the Phase II Karakoram Project in Pakistan, won the ENR's Global Best Project Award 2021.

我们的成绩

数据截至 2021 年 12 月

Our Achievements

Data as of December 2021

▶ **投资、建设基础设施项目 3,000 多个**

Invest in over 3,000 projects for infrastructure construction

▶ **修建公路超 13,000 公里、桥梁 200 余座、重点港口 150 个**

Build over 13,000 km of roads, more than 200 bridges and 150 key ports

▶ **签约及在施铁路超过 3,000 公里**

Over 3,000 km of railway contract signed and under construction

“海外之最”·2021

Overseas Records in 2021

▶ **秘鲁互联互通的第一个大型交通类基础设施项目——秘鲁钱凯港项目**

First major transportation infrastructure project in connectivity of Peru - Chancay Port Project in Peru

▶ **斯里兰卡史上外商投资单体规模最大的项目——科伦坡港口城项目**

The largest single foreign investment project in Sri Lanka - Colombo Port City project

▶ **肯尼亚首座具有国际领先水平的现代化油气装卸码头——蒙巴萨港 Kipevu 油码头项目**

The first world's leading modern oil and gas terminal in Kenya - Kipevu Oil Terminal at the Mombasa Port project

▶ **中克建交以来规模最大的交通基础设施建设项目——克罗地亚佩列沙茨跨海大桥项目**

The largest transportation infrastructure construction project since the establishment of diplomatic relations between China and Croatia - the Peljesac Bridge in Croatia

▶ **西非区域近年规模最大的单体市政道桥项目——科特迪瓦阿比让四桥项目**

The largest single municipal road bridge project in West Africa in recent years - the four Bridges Project in Abidjan, Cote d'Ivoire

▶ **坦桑尼亚近 50 年来的首个大型水工项目——达累斯萨拉姆港项目**

The first large scale hydraulic project in Tanzania in nearly 50 years - Dar es Salaam Port project

▶ **“一带一路”旗舰项目——马来西亚东海岸铁路项目**

The Belt and Road flagship Project - East Coast Rail Link Project in Malaysia

案例 **跨越山河！中老两国元首共同见证中老铁路通车运营**
CASE Across mountains and rivers! The two heads of state witnessed the opening of the China-Laos Railway

2021年12月3日，中共中央总书记、国家主席习近平同老挝人民革命党中央总书记、国家主席通伦举行视频会晤并以视频连线形式共同见证中老铁路通车。中国交建参建的中老铁路是习近平总书记批示的“一带一路”建设重点项目，是泛亚铁路中线的重要组成部分，也是首个以中方为主投资建设运营全线采用中国技术标准、中国设备与中国铁路网直接连通的国际铁路项目。

On December 3, 2021, Xi Jinping, General Secretary of the CPC Central Committee and Chinese President, met with Thongloun Sisoulith, General Secretary of the Lao People's Revolutionary Party Central Committee and the Lao President, and jointly witnessed the opening of the China-Laos Railway via video link. The China-Laos Railway, co-built by China Communications Construction, is a key project of the Belt and Road Initiative approved by General Secretary Xi Jinping. It is an important part of the Middle Route of the Pan-Asia Railway, and it is also the first international railway project in which the whole line is constructed and operated with Chinese technical standards and Chinese equipment and is directly connected with the Chinese railway network.



中老两国元首共同见证中老铁路通车
 The two heads of state witnessed the opening of the China-Laos Railway

中老铁路北起云南省昆明市南至老挝首都万象，全长约 1035 公里，由国内昆玉段、玉磨段和老挝境内磨万段组成，项目建成通车将成为昆明通往老挝万象，辐射东南亚的重要国际大通道，对于解锁老挝陆路交通困局，提高当地运输效率和水平，推进我国与周边国家互联互通，促进中国 - 东盟自由贸易区建设，实施我国西部大开发，带动沿线地区经济社会发展具有重要意义。

China-Laos Railway is about 1,035km from Kunming (Yunnan Province) in the north to Vientiane (Laos Capital) in the south, and it is composed of Kun-Yu Section and Yu-Mo Section in China and Mo-Wan Section in Laos. This Project will become an important international thoroughfare for Kunming to radiate Vientiane, Laos of Southeast Asia, and it also is of the following great significance: unlock the difficulties of Lao road transportation, improve local transportation efficiency and level, promote connectivity between China and neighboring countries, accelerate the construction of the China-ASEAN Free Trade Area, implement the large-scale development of China's western region, and drive the economic and social development of regions along the Railway.



通车中的中老铁路（玉磨段）
 China-Laos Railway in operation (Yu-Mo Section)

“中老铁路是两国互利合作的旗舰项目。铁路一通，昆明到万象从此山不再高、路不再长。”

"The China-Laos Railway is a flagship project of mutually beneficial cooperation between the two countries. After the railway is opened, the mountain from Kunming to Vientiane is no longer high and the road is no longer long."

——中国中共中央总书记、国家主席 习近平

Xi Jinping, General Secretary of the CPC Central Committee and the Chinese President



“感谢中国大力支持，老挝终于告别了没有火车的时代，拥有了现代化铁路。老中铁路是老挝‘陆锁国’变‘陆联国’战略深入对接‘一带一路’倡议的纽带，是老挝现代化基础设施建设的一个重要里程碑，将极大促进老挝国家经济社会发展。”

"Thanks to China's strong support, Laos has finally bid farewell to the days without trains and now has a modern railway. The Laos-China Railway is a bond docking the Laos' development strategy to convert itself from a land-locked country to a land-linked country and the Belt and Road Initiative, and an important milestone in Laos' modern infrastructure construction. The railway will greatly promote Laos' national economic and social development."

——老挝人民革命党中央总书记、国家主席 通伦

Thongloun, General Secretary of the Lao People's Revolutionary Party Central Committee and the Lao President



贡献绿色建筑

CONTRIBUTE TO GREEN BUILDINGS

中国交建充分发挥在世界建筑业产业链和供应链中的地位和价值，聚焦主业优势，在污水处理、泛水务、绿色新能源、绿色城市建设、智慧高速公路收费系统、BIM 技术等方面建设一批亮眼项目；将“绿色”“高质量”元素融入海外项目建设中，打造了马来西亚东海岸铁路、几内亚马拉博国家公园等卓越绿色工程。

Giving full play to our position and value in the world construction industry chain and supply chain and focusing on our main advantages, we have constructed a number of eye-catching projects in wastewater treatment, pan water-related affairs, green new energy, green city construction, intelligent expressway toll system and BIM technology, and we integrated the "green" and "high quality" elements into the overseas projects to create the East Coast Rail Link in Malaysia, Guinea Malabo National Park and other outstanding green projects.

我们的成绩

Our Achievements

▶ 援埃塞俄比亚河岸绿色发展项目荣获 ENR 2021 年度全球环境类最佳项目奖

The Green Riverbank Development Project in Ethiopia won the 2021 ENR Best Global Project Award (Environment Category).

▶ 吉隆坡 TRX 中央公馆项目获得绿色建筑指数 (GBI) 和 LEED v4 的金级认证

Kuala Lumpur TRX Central Mansion Project won the gold certification of the Green Building Index (GBI) and LEED V4.

▶ 樟宜机场 PK3 项目和陆交局 J106 地铁项目获得新加坡环境协会颁布的 2021 年度“生态冠军办公室”奖项

The Changi Airport PK3 Project and LTA's J106 Metro Project were awarded the 2021 Eco Champion's Office by the Singapore Environment Council.



援埃塞俄比亚河岸绿色发展项目被埃塞总理称为“美化亚的斯”的核心示范工程

Green Riverbank Development Assistance Project in Ethiopia hailed by the Ethiopian Prime Minister as the "Beautification of Addis" core demonstration project

美好共享

SHARE THE BEAUTY

中国交建秉持构建人类命运共同体理念，高度重视履行海外社会责任，深度融入当地经济社会发展，积极开展形式多样的文化交流和公益活动，致力促进与属地人民情谊相通。

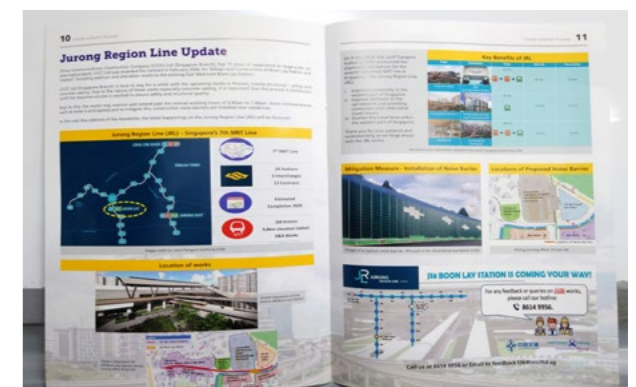
Guided by the vision of building a community of a shared future for mankind, we attach great importance to fulfilling our overseas social responsibilities. We deeply integrate ourselves into the local economic and social development, and actively implement cultural exchanges and public welfare activities in various forms to promote friendship with the host countries.

文化融合交流

CULTURAL INTEGRATION AND EXCHANGES

中国交建充分尊重文化差异，在境外项目组织庆祝各地特色节日活动，为海外员工设立祈祷活动区，举办中外员工文化交流活动，在当地官方杂志设置专栏介绍项目进展，加强与社区居民的沟通交流。

We fully respect the cultural differences, and organize activities celebrating local special festivals in overseas projects. For example, we established prayer areas for overseas employees, held cultural exchange activities for Chinese and foreign employees, set up columns in local official magazines to introduce project progress, and strengthened communication with community residents.



杂志专栏

Magazine column



海外员工祈祷活动区

Prayer area for overseas employees

投身社会公益

GET INVOLVED IN PUBLIC WELFARE

中国交建积极践行企业海外社会责任，广泛开展社区公益活动，携手当地居民共同抗击疫情，主动参加抢险救灾，支持教育发展，持续完善“蓝马甲”志愿服务体系，加强志愿服务阵地建设。

We actively practice our overseas social responsibilities. For example, we extensively implemented community public welfare activities, and joined hands with local residents to fight COVID-19. Moreover, we actively participated in emergency rescue and disaster relief, and supported local education. In addition, we constantly improved the "Blue Vest" voluntary service system, and strengthened the construction of the voluntary service front.

马来西亚公司开展水灾慈善募捐活动，共为灾区捐赠 3,3800 马币。

Our Malaysia Branch participated in a flood charity fundraising event to donate MYR 3,3800 to the disaster area.

中交新加坡公司为所在兀兰社区内困难家庭提供免费食品。

Our Singapore Branch offered free food to needy families in Woodlands Community where it is located.

中国路桥全额资助“一带一路”沿线国家 365 名留学生在中交学习基础设施建设相关专业知识。

China Road and Bridge Corporation fully funded 365 overseas students from countries along the Belt and Road to study infrastructure construction and other related knowledge in China.

孩子们在四航院建设的巴基斯坦瓜达尔法曲尔学校里开心的读书

The kids are studying happily at the Faqeer School in Gwadar, Pakistan built by CCCC Fourth Harbor Consultants



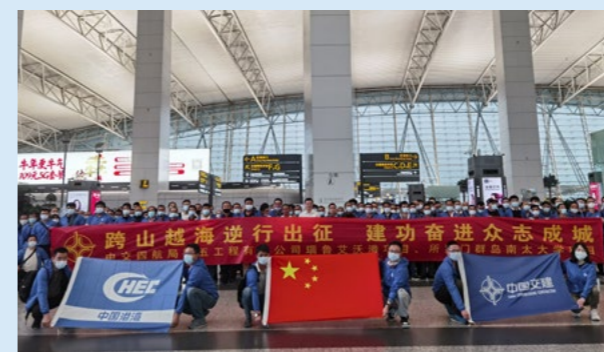
我们的成绩

Our Achievements



马来西亚公司荣获当地社区贡献奖

Malaysia Branch won the Local Community Contribution Award



四航局支援海外项目返岗复工

CCCC Fourth Harbor Engineering Company Ltd. supported the work resumption of overseas projects



斯里兰卡科伦坡港口城项目联合当地开展疫苗接种活动

Colombo Port City project of Sri Lanka conducted a vaccination campaign together with local government

专题二 TOPIC 2

建者无疆 共绘乡村振兴壮美画卷

PAINT A WONDERFUL PICTURE OF RURAL VITALIZATION

脱贫攻坚三年行动期间，中国交建圆满完成云南省怒江州泸水市、兰坪县、福贡县、贡山县和新疆英吉沙县等5县（市）定点扶贫工作，助力当地实现脱贫摘帽。2021年，中国交建严格落实“摘帽不摘责任、摘帽不摘政策、摘帽不摘帮扶、摘帽不摘监管”要求，继续采取有效措施，巩固拓展脱贫攻坚成果，推动帮扶地区早日实现乡村振兴。

During the three-year poverty alleviation campaign, China Communications Construction completed poverty alleviation work in targeted poor areas in five counties (cities) including Lushui City, Lanping County, Fugong County, Gongshan County in Nujiang Prefecture, Yunnan Province and Yingjiasha County in Xinjiang. In 2021, China Communications Construction continued to take effective measures to consolidate the gains in poverty alleviation and help targeted regions realize rural vitalization according to the requirements of "continued responsibility, policy, assistance, and supervision following the successful poverty alleviation campaign".

高层挂帅，强化组织领导

SENIOR MANAGEMENT ASSUME LEADERSHIP TO STRENGTHEN ORGANIZATION AND LEADING

公司成立定点帮扶工作领导小组和办公室，新设社会责任处专职负责定点帮扶和社会责任工作。领导小组发挥总揽全局、协调各方作用；领导小组办公室统筹协调、落实落细帮扶工作；所属单位加强组织安排，指定部门和专人负责执行各项帮扶任务；总部各部门做好资金保障、项目监管、宣传引导、考核激励等工作，形成齐抓共管的工作局面。公司领导亲赴帮扶一线调研指导督导，全年公司负责同志13人次、所属单位负责同志66人次赴5县市及驻村第一书记所在村开展调研指导，并每季度召开一次视频会，确保实现全方位、多维度、全过程指导，把乡村振兴工作落到实处。

We establish a leading group and office for paired assistance, and a new social responsibility department has been set up to be responsible for paired assistance and social responsibility work. The leading group plays the role of commanding the overall situation and coordinating all parties, while the office of the leading group coordinates as a whole and implements the work of providing detailed assistance. Meanwhile, the subsidiaries strengthen the organizational arrangements, and designate specific departments and persons to be responsible for the implementation of paired assistance tasks, and all departments of the headquarters ensure funding, supervision, guidance, publicity, assessment and incentive to form a working situation of joint management. Our leaders personally present at the paired assistance frontline for survey, guidance and supervision. For example, in 2021, thirteen comrades from the headquarter and 66 comrades from subsidiaries conducted surveys and guidance in five counties and villages where the first secretary resides, and held a video meeting once a quarter to ensure the all-round, multi-dimensional and whole-process guidance and implement the rural revitalization.



党委书记、董事长王彤宙出席怒江定点帮扶现场调研座谈会
Wang Tongzhou, Secretary of the Party Committee and Chairman, attended the on-site survey seminar on the Nujiang paired assistance

高位推动，完善顶层设计

HIGH-LEVEL PROMOTION TO IMPROVE THE TOP-LEVEL DESIGN

公司全面落实“四个不摘”，做好“四大衔接”与“三个不减”，构建定点帮扶“351”工作格局，制定落实公司定点帮扶项目管理办法、定点帮扶工作考核评价办法等，与35家二级单位签订责任书，下达公司《2021年各单位定点帮扶责任书定量指标》，成立帮扶工作组，做到分工明确、责任清晰、任务到人、考核到位。

We fully implement the "Four Remains", "Four Connections" and "Three Unchanged" to build the "351" work pattern for paired assistance. For instance, we formulated measures to implement paired assistance project management and assessment methods, and we signed the letter of responsibility with 35 subsidiaries. In addition, we issued the 2021 Quantitative Indicators of Paired Assistance Letter of Responsibility for Each Unit, and established the paired assistance working group, achieving definite division of work, clear responsibilities, tasks to specific person, and adequate assessment.

乡村振兴“351”工作格局 "351" Work Pattern of Rural Revitalization

- “3” 坚持以“以人为本、可持续、可示范”三大原则
refers to the three principles of "being people-centered, sustainable and demonstrable"
- “5” 健全“责任、目标、制度、宣传、考核”五大体系
refers to the improvement of five systems of "responsibility, goal, system, publicity and assessment"
- “1” 培育打造“中交助梦”责任品牌
refers to the cultivation and creation of "CCCC Makes Dream Come True" responsibility brand

同时，公司将党建与乡村振兴深度融合，采取组织共建、队伍共抓、资源共享、发展共商、作风共促的方式，帮助村党支部建强班子、健全制度、完善阵地建设，夯实组织保障。此外，选取 40 个优秀党支部与怒江州、英吉沙县等 40 个村级党支部结对共建，通过高质量党建助力引领乡村振兴。

At the same time, we deeply integrate the party building into rural revitalization, and adopt the way of joint contribution in the organization, joint management in the team, sharing in resources, joint consultation in the development and joint promotion in style to help the village party branches build strong teams, improve systems, optimize front construction, and consolidate the organizational guarantee. In addition, 40 outstanding party branches were selected to pair up with 40 village-level party branches in Nujiang Prefecture and Yingjisha County, leading rural revitalization through high-quality party building.



中交四航局援建的巴坡村党总支新时代党群服务中心

CCCC Fourth Harbor Engineering Company Ltd. assists in the construction of the New Era Party-Mass Service Center of the General Party Branch of Bapo Village

高效落实，做好振兴答卷

EFFICIENT IMPLEMENTATION TO PROVIDE REVITALIZATION ACHIEVEMENTS

2021 年，公司全面发力巩固脱贫攻坚成果，有效衔接乡村振兴。全年向定点帮扶地区投入帮扶资金 41,045 万元，其中无偿帮扶资金 27,769 万元，有偿帮扶资金 13,128 万元、引进帮扶资金 148 万元；实施帮扶项目 142 个、派出挂职干部 10 名、培训基层干部、乡村振兴带头人和技术人员 2,267 名，书写了乡村振兴靓丽答卷。

In 2021, we made full power to consolidate the achievements of poverty alleviation and effectively coordinated rural revitalization. During this year, we put RMB 410.45 million into paired assistance areas, including a free paired assistance fund of RMB 277.69 million, a compensatory paired assistance fund of RMB 131.28 million and introduced paired assistance fund of RMB 1.48 million. In addition, we implemented 142 paired assistance projects, in which, we dispatched 10 cadres to temporary posts, and trained 2,267 community-level cadres, foregoers and technicians for rural revitalization, achieving great results in rural revitalization.

乡村振兴答卷 RURAL REVITALIZATION ACHIEVEMENTS



帮扶云南省怒江州 Paired assistance in Nujiang Prefecture, Yunnan Province

2021 年面向全州投入无偿帮扶资金 9,507 万元，实施香料产业园项目缺口补贴、建筑产业发展扶持、建筑行业培训考核基地建设、皮划艇野水公开赛、“中交助梦 关爱幼儿”计划、援建怒江州 87 所中小学幼儿园学校卫生室（保健室）、“青春促就业 温暖留守心”剩余劳动力转移就业服务行动等帮扶项目 12 个。

In 2021, the free paired assistance fund of RMB 95.07 million was put into Nujiang Prefecture, and we implemented 12 paired assistance projects, including spices industrial park project fund gap subsidies, support in the construction industry development, construction industry training assessment base construction, canoeing wild water open, "CCCC Makes Dream Come True Care for Children" program, assistance construction of school medical rooms (health rooms) for 87 primary schools/middle schools/kindergartens, and "Promote Youth Employment, Warm Left-behind Children" surplus labor transfer and employment events.



“中国交建杯” 2021 中国怒江皮划艇野水公开赛
"CCCC Cup" 2021 Canoeing Wild Water Open in Nujiang, China



帮扶云南泸水市 Paired assistance in Lushui City, Yunnan province

2021 年向泸水市投入无偿帮扶资金 7,797 万元，实施中交泸水新时代希望学校、三河村乡村振兴示范项目、自扁王基村示范乡村打造、阿客哆咪咖啡、火龙果连片种植、老窝镇崇仁村蔬菜种植、成立集体经济建筑公司、设立“中交园丁奖”等帮扶项目 20 个。

In 2021, the free paired assistance fund of RMB 77.97 million was put into Lushui County, and we implemented 20 paired assistance projects, including CCCC Lushui New Era Hope School, a rural revitalization demonstration project in Sanhe Village, demonstration village creation in Zibianwangji Village, Akeduomi coffee, pitaya contiguous planting, vegetable cultivation in Chongren Village, Laowo Town, the establishment of the collective economic construction company, and establishment of "CCCC Gardener Award".



党委书记、董事长王彤宙出席援建学校奠基仪式
Wang Tongzhou, Secretary of the Party Committee and Chairman, attended the foundation stone laying ceremony of the assistance school



帮扶云南兰坪县
Paired assistance in Lanping County, Yunnan Province

2021 年向兰坪县投入无偿帮扶资金 1,214 万元，实施北甸村示范乡村打造、北甸村小学食堂、兰坪希望学校风雨球场、中排乡路面硬化、太阳能路灯安装、党员活动室建设、秋季助学助教金、河西九年一贯制学校小学部语音考试教室建设等帮扶项目 29 个。



兰坪县北甸小学食堂
Beidian Primary School Canteen, Lanping County

In 2021, the free paired assistance fund of RMB 12.14 million was put into Lanping County, and we implemented 29 paired assistance projects, including demonstration village creation in Beidian Village, primary school canteen in Beidian Village, Stormproof court in Lanping Hope School, road hardening in Zhongpai Township, solar street lamp installation, party member activity room construction, autumn student & teacher assistantships, voice examination classroom construction for Hexi nine-year primary school.



帮扶云南贡山县
Paired assistance in Gongshan County, Yunnan province

2021 年面向贡山县投入无偿帮扶资金 5,493 万元，实施独龙江乡村振兴实训基地建设、茨开新时代幼儿园建设、秋纳桶村示范乡村打造、秋那桶怒族文化街提升改造、丙中洛镇甲生村集体经济建设、负压救护车捐赠、幼儿疫苗接种室建设、巴坡村党群活动中心建设、巴坡村孟顶小组人居环境改善等帮扶项目 23 个。

In 2021, the free paired assistance fund of RMB 54.93 million was put into Gongshan County, and we implemented 23 paired assistance projects, including the construction of rural revitalization practice base in Dulongjiang Township, construction of the New Era Kindergarten in Cikai Town, and creation of demonstration village in Qianatong Village, improvement and renovation of Nu Culture Street in Qianatong Village, collective economic construction in Jiasheng Village, Bingzhongluo Town, donation of negative pressure ambulance, construction of child vaccination room, construction of Party-Mass Activity Center in Bapo Village, and living environment improvement in Mengding Team, Bapo Village.



秋那桶村民宿文化展馆
Homestay Culture Exhibition Hall in Qianatong Village



帮扶云南福贡县
Paired assistance in Fugong County, Yunnan province

2021 年面向福贡县投入无偿帮扶资金 1,877 万元，实施 2 个小康示范村建设、成立米俄洛村建筑工程公司、子里甲完小学生夏令营、奖学金及助教金、基层干部及乡村振兴带头人学习培训、子里甲乡幼儿园基础设施提升、沙瓦村特色怒族文化旅游村寨打造等帮扶项目 39 个。

In 2021, the free paired assistance fund of RMB 18.77 million was put into Fugong County, and we implemented 39 paired assistance projects, including two well-off demonstration villages construction, the establishment of Mi'e'luo Village Construction Engineering Company, Zilijia complete primary school summer camp/student and teacher assistantships, training for community-level cadres and foregoers of rural revitalization, improvement of infrastructure for kindergartens in Zilijia Township, and creation of a featured Nu culture tourism village in Shawa Village.



福贡县“美丽乡村”——棉谷村
Miangu Village, the "Beautiful Village" in Fugong County



帮扶新疆英吉沙县
Paired assistance in Yingjisha County, Xinjiang

2021 年向英吉沙县投入无偿帮扶资金 1,882 万元，实施试点集镇村庄住房防雨保暖提升改造、特殊教育学校教学设备捐赠及康复训练场建设、英也尔庭院经济示范点建设、苏盖提乡第二小学体育设施建设、“中交助梦·妇儿关爱基金”、护路员养护工作服捐赠、基层干部及技术人员培训等帮扶项目 19 个。

In 2021, the free paired assistance fund of RMB 18.82 million was put into Yingjisha County, and we implemented 19 paired assistance projects, including improvement and renovation of pilot town/village housing rain-proof and insulation, teaching equipment donations and rehabilitation training venue construction for special education school, construction of courtyard economy demonstration site in Yingye'er Township, construction of sports facilities of No. 2 Primary School in Sugaiti Township, "CCCC Makes Dream Come True Women & Children Care Fund", donation of work clothes for trackmen, and training for community-level cadres and technical personnel.



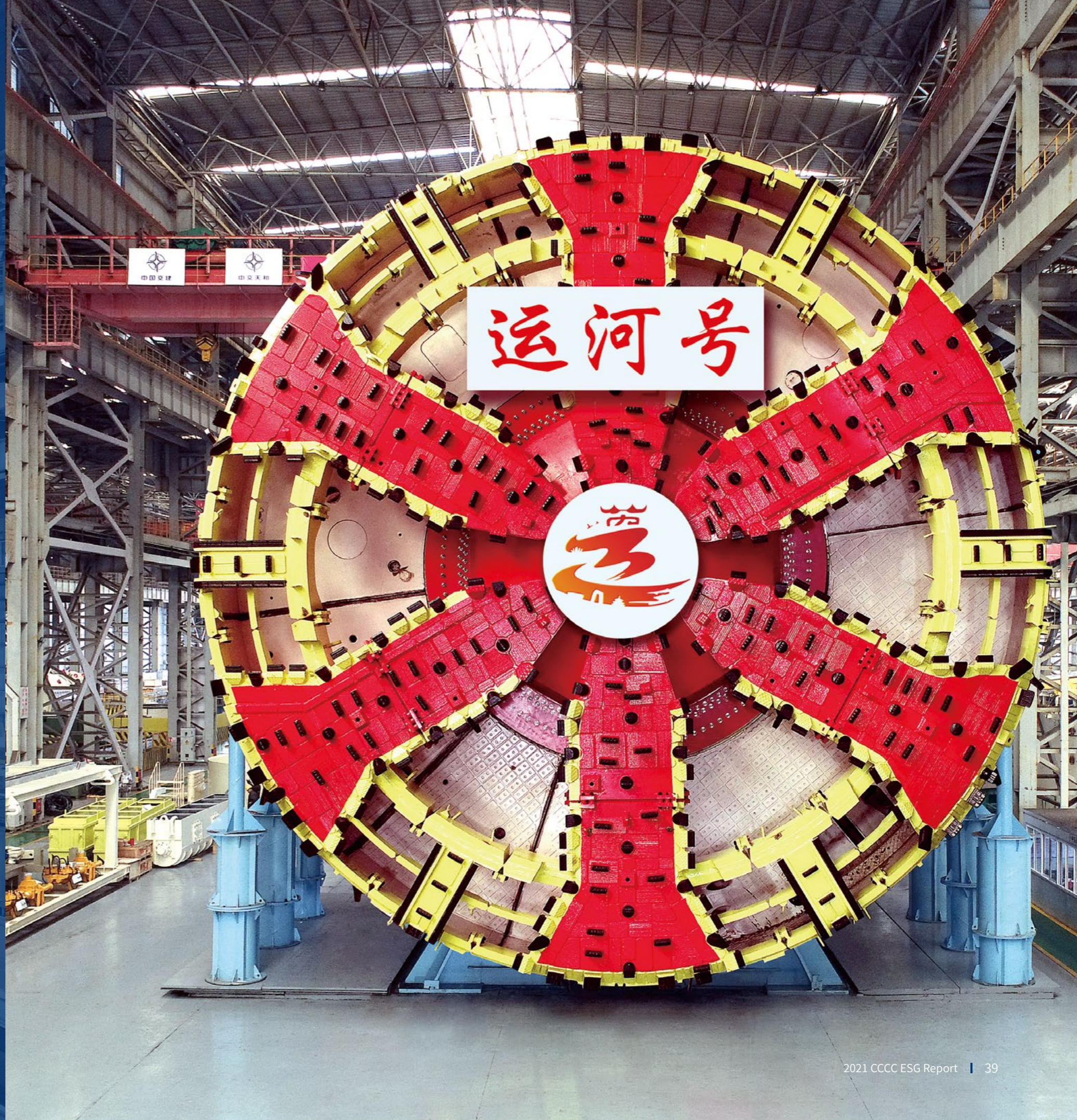
为英吉沙县萨罕镇中心小学捐赠电脑
Donation of computers for Sahan Town Central Primary School in Yingjisha County

积厚成势 一流的科技

ACCUMULATION OF STRENGTH · FIRST-RATE TECHNOLOGY

中国交建致力打造科技型世界一流企业，不断完善科技创新管理和创新体系建设；围绕“中交智造”“中交创造”，加大核心技术攻关，全力培育创新发展引擎；大力推进数字化、信息化发展，提升公司数智化水平；加强知识产权保护，力争在国家基础性、前瞻性、重大关键技术领域多出成果，稳步推进创新成果转化及推广应用，为科技强国贡献中交力量。

China Communications Construction is committed to becoming a world-class technology enterprise as it works to promote scientific and technological innovation and build an innovation system. Based on "CCCC's smart manufacturing" and "CCCC's creative manufacturing", we devote greater effort in core technology breakthrough in order to strive to achieve innovation-oriented development through increased technology research and development. We vigorously promote the development of digitization and information technology to improve our level of digitalization and intelligence. It steps up efforts to protect intellectual property rights, strives to make more achievements in the country's basic, forward-looking, and major key technical fields, and steadily promotes the commercialization and popularization of innovative achievements while contributing to China's scientific and technological strengths.



优化科技管理

OPTIMIZE TECHNOLOGICAL MANAGEMENT

公司不断提升科技管理能力，完善科技创新体系，加强科技人才队伍建设，搭建创新平台，最大化激发管理对科技创新的支撑、驱动和引领作用。

We have constantly improved our technological management ability to optimize the technological innovation system, and strengthened the cultivation of technological talents to create an innovative platform, which could maximize the stimulation of management to support, drive and lead technological innovation.

完善创新机制

IMPROVE INNOVATION MECHANISMS

公司全面梳理完善科技管理制度体系架构，制修订相关制度，形成覆盖科技创新全链条的科技管理制度体系。公司制定了以“一个目标、两高要求、三链融合、四项重点、五种能力、六大任务”为核心内容的“十四五”科技创新发展规划，以及数字化发展总体蓝图；完成16项科技创新制度、12项技术管理制度、8项数字化管理制度制修订；启动重大项目库、科技人才库、平台资源库、重大科技成果库“四库”搭建。统筹加强顶层设计，实施“揭榜挂帅”机制，推动公司上下“因企制宜”统筹科技布局，坚定推动公司迈向创新高质量发展。

We comprehensively sort out and improve the structure of the technological management system, and formulate/revise relevant systems to form the technological management system covering the whole chain of technological innovation. For example, we formulated the 14th Five-Year Plan for technological innovation development and the overall blueprint for digital development with the core content of "one goal, two high requirements, three chains integration, four key points, five capabilities, and six tasks". Another example, we completed the formulation/revision of 16 technological innovation systems, 12 technical management systems and eight digital management systems, and we initiated the construction of four pools (significant project pool, technological talent pool, platform resources pool and significant technological achievements pool). In addition, we strengthened the top-level design as a whole to implement the open competition mechanism, so that we could promote the coordination of technological layout in accordance with "specific corporate conditions" to firmly drive the innovative and high-quality development of the Company.

培养创新人才

CULTIVATE INNOVATIVE TALENT

公司通过成立科学技术学会、组织人才培养专题培训、加大科技创新人才激励等方式培养创新人才，通过举办青年创新创效周、创新创效技能大赛等活动，充分释放人才创新活力，不断增强科技人才队伍建设。2021年，林鸣当选中国工程院院士，汪双杰当选全国杰出专业技术人才，3人当选国家工程勘察设计大师，高端人才培养迈上新台阶。

We establish societies for science and technology, organize special training for talent cultivation, and increase the incentives for technological innovation talents to cultivate innovative talents, and we also hold youth innovation and efficiency week, and innovative and efficient skills competition to fully release the innovative vitality and constantly enhance the construction of technological talents. In 2021, Lin Ming was elected the academican of the Chinese Academy of Engineering, and Wang Shuangjie was elected National Outstanding Professional and Technical Personnel, in addition, three people were elected as the National Engineering Survey and Design Masters, so our cultivation of high-end talents has reached a new level.



四航院举办无人机测绘技能大赛

The CCCC Fourth Harbor Consultants holds a UAV mapping skills competition

搭建创新平台

BUILD AN INNOVATION PLATFORM

公司积极搭建创新平台，推进国家创新平台基地优化整合工作。2021年，公司2个国家工程研究中心被纳入国家科技创新基地新序列管理，申报6项国资委原创技术策源地，认定了7个国内和2个海外集团研发中心；围绕国家重大战略、重大工程建设，拓展与多方的创新交流合作平台，加入国资委高端金属材料创新联合体和CPU芯片和操作系统创新联合体，加强与高校、科研院所、企业等之间的科研创新合作，全力激发联合创新正能量。

We actively build an innovation platform to promote the optimization and integration of the national innovation platform base. In 2021, our two national engineering research centers were included into the new sequence management of the national technological innovation base, and original technology sources of SASAC were declared, furthermore, seven domestic and two overseas group R&D centers were identified. Moreover, centering on major national strategies and major engineering construction, we expanded platforms for innovation exchange and cooperation with various parties, and joined the SASAC's high-end metal materials innovation consortium as well as the CPU chip and operating system innovation consortium. In addition, we strengthened the scientific research and innovation cooperation with universities, research institutes and enterprises to fully stimulate the positive energy of joint innovation.



中国交建与中国航天科工签署战略合作框架协议

China Communications Construction signs framework agreement on strategic cooperation with China Aerospace Science and Industry Corporation Limited



中国交建与清华大学签署战略合作协议

China Communications Construction signs strategic cooperation agreement with Tsinghua University

培育创新成果

CULTIVATE INNOVATIVE OUTCOMES

公司深耕重大核心技术领域，成立科技创新暨关键核心技术攻关领导小组，组建高端科技智库，着力攻关掌握一批关键核心技术；积极参与行业标准制定，加强知识产权保护，让科技创造力实实在在地转化为生产力，为公司高质量发展提供强大支撑。

Working hard in significant core technological fields, we have established the "Leading Group for Scientific and Technological Innovation & Key and Core Technology Tackling" and built the high-end technological think tank to focus on tackling and mastering a number of key core technologies. In addition, we have actively participated in the formulation of industry standards, and strengthened the protection of intellectual property rights to turn technological creativity into productivity, providing strong support for our high-quality development.

核心技术攻关

CORE TECHNOLOGY TACKLING

2021年，公司超大直径竖向硬岩掘进机“首创号”顺利下线并成功始发掘进，专项攻关任务顺利完成；自主研发设计制造的当时国产最大直径（16.07米）泥水平衡盾构机“运河号”成功始发；自主开发的桥隧OSIS计算分析软件取得重大突破，解决了核心工程设计软件“卡脖子”难题。

In 2021, the company's super large diameter vertical TBM "Shouchuang" was successfully launched and started excavation, with the specific tackling task satisfactorily accomplished. Moreover, the slurry balance TBM "Yunhe", which was independently researched, developed, designed and manufactured with the largest diameter (16.07m) in China at that time, started operation successfully. Furthermore, the independently developed bridge & tunnel calculation and analysis software OSIS made a significant breakthrough and solved the "bottleneck" challenge of core engineering design software.



青藏高原公路基础设施建设研讨会

Seminar on Infrastructure Construction of the Qinghai-Tibet Plateau Highway

行业标准制定

INDUSTRIAL STANDARD FORMULATION

公司主导编制的水运基础设施 IFC 国际标准通过 bSI 技术委员会审查，牵头的 ISO 国际标准《船舶与海上技术—耙吸挖泥船—耙臂位置显示系统》获批立项，主导制修订并发布《起重机工作和非工作状态下的锚定装置》等 3 项 ISO 国际标准，3 项公路工程行业 BIM 标准正式发布实施，填补了行业空白。

The water transportation infrastructure IFC international standard dominantly prepared by the Company has passed the review by BSI Technical Committee, and the ISO international standards *Ships and Marine Technology - Trailing Suction Hopper Dredger - Trailing Arm Position Display System* project led by the Company was approved. In addition, we led, formulated/revised and released three ISO international standards (including the *Cranes - Anchoring Devices for In-service and Out-of-service Conditions*), and three BIM standards for the highway engineering industry have been officially released and implemented, filling the industrial gap.

知识产权保护

INTELLECTUAL PROPERTY PROTECTION

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》等知识产权保护相关法律法规，首次在全公司范围内开展公司专利质量管理提升行动，并发布行动计划方案，持续加强研发、生产、经营活动的知识产权法律保护。

Strictly complying with the *Patent Law of the People's Republic of China*, the *Anti-unfair Competition Law of the People's Republic of China* and other relevant intellectual property rights protection laws and regulations, we initially conducted the corporate patent quality management improvement actions throughout the Company, and issued action plan to constantly strengthen the legal protection of intellectual property rights in R&D, production and operation activities.



超大直径竖向掘进机“首创号”顺利下线

The super large diameter vertical TBM "Shouchuang" is successfully launched

我们的成绩

Our Achievements

- ▶ 2021 年新增专利 6,838 项
Add 6,838 patents in 2021
- ▶ 累计拥有专利 20,566 项
Owning 20,566 patents in total
- ▶ 2021 年新增发明专利 733 项
Add 733 invention patents in 2021
- ▶ 累计获得发明专利 3,432 项
Owning 3,432 invention patents in total



发明专利证书

Certificates of invention patents

推动数智转型

PROMOTE THE DIGITAL AND INTELLIGENT TRANSFORMATION

中国交建积极贯彻“数字强国”发展战略，探索数字化与各项业务的深度融合，钻研数字技术在各项产业及工程建设中的运用，加快推进数字化智慧化转型，着力打造“数智中交”，全面释放企业高质量发展新动能。

We have actively implemented the development strategy of "Becoming a Digital Power" to explore the deep integration between digitization and various businesses, and studied the application of digital technology in various industries and engineering construction to accelerate the digital and intelligent transformation. In addition, we strive to create a "Digital and Intelligent CCCC", so as to fully release the new driving force of our high-quality development.

管理数字化

DIGITAL MANAGEMENT

公司财务云业财协同系统上线运行，成为建筑央企首次在全公司层面实现业财一体化；首个跨法人组织财务大共享中心——华中财务共享中心成功运行；运营监控和一体化办公等 40 多个数字系统全面应用，切实提升管理智能化水平和运营效率。

Our financial cloud industry and finance coordination system was put into operation, becoming the first construction central SOEs to realize the integration of industry and finance at the whole company level. Moreover, the Central China Financial Sharing Center, which is the first cross-legal organization financial sharing center, operated successfully. In addition, more than 40 digital systems (including operation monitoring and integrated office) have been fully applied to effectively improve the level of intelligent management and operation efficiency.



公司参加第四届“数字中国”峰会
The company participates in the fourth "Digital China" Summit



中交财务云系统首批试点上线启动
The first batch of pilot financial cloud system of China Communications Construction is launched

产业数字化

DIGITAL INDUSTRY

公司自主研发的自动化码头 TOS 系统上线，实现了码头全生命周期自主规划、自动运转和智能管理的一站式服务；BIM 技术和智慧交通等产业化成果丰富，“数智中交”迈上新台阶。

The independently researched and developed TOS system of the automated terminal was launched, realizing the one-stop service of independent planning, automatic operation and intelligent management for the whole life cycle of terminals. Moreover, BIM technology and intelligent transportation have made abundant achievements in industrialization, so "Digital and Intelligent CCCC" has reached a new level.

夯基固本 一流的管理

SOLID FOUNDATION · FIRST-CLASS MANAGEMENT

中国交建严格遵守《中华人民共和国公司法》、上海证券交易所《股票上市规则》和《香港联合交易所有限公司证券上市规则》等相关规定，持续完善与市场要求相契合、与公司发展相匹配的治理结构与管理体系，恪守合规营运，倡导诚信廉洁，强化风险管理，以一流的管理促进经营提质增效，给予投资者以实在的回馈。

We strictly comply with the *Corporate Law of the People's Republic of China*, the *Rules Governing the Listing of Stocks on the Shanghai Stock Exchange*, the *Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited* and applicable regulations to constantly improve the governance structure and management systems matching the market demand and company development. By abiding by the compliance operations, advocating integrity, and strengthening the risk management, we give investors a real return via first-class management promoting the quality and efficiency of the operation.



完善公司治理

IMPROVE CORPORATE GOVERNANCE

中国交建立足党委“把方向、管大局、促落实”，董事会“定战略、作决策、防风险”，经理层“谋经营、抓落实、强管理”定位，厘清各治理主体权责界面，健全议事规则，实现董事会应建尽建、配齐建强，董事会中外部董事占多数。落实董事会职权，保障经营层依法行权履职，扎实构建现代企业制度和法人治理结构。

We hold the philosophy that the Party Committee shall "control the direction, manage the overall situation, promote the implementation", the Board of Directors "determines the strategy, makes decisions, prevents risks", and managers "plan the operation, grasp the implementation, strengthen the management" to clarify the rights and responsibilities of each governance body. We improve the rules of procedure to realize a sound and complete board of directors, and the Board of Directors is dominated by external directors. We implement the functions and powers of the Board of Directors to ensure that managers exercise their powers and duties in accordance with the law, and make solid progress in building a modern corporate system and corporate governance structure.

完善法人治理结构

OPTIMIZE CORPORATE GOVERNANCE STRUCTURE

中国交建持续优化所属企业董事会结构，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。2021年，完成以公司章程为核心的法人治理制度体系建设，形成法人治理“1+N”制度体系，建立“1+6+X”董事会设置配置标准模式，建立外部董事履职机构，开发外部董事管理系统，实现子企业法人治理制度体系不断完善、董事会建设持续增强、外部董事管理更加规范。

Constantly optimizing the structure of the board of directors of our enterprises, we have comprehensively promoted the system of full-time external directors, and completed a sound team of full-time and part-time external directors for our enterprises. In 2021, we completed the construction of the corporate governance system with the articles of association as the core, so that we formed the "1+N" institutional system of corporate governance, and established the "1+6+X" standard mode of setting and configuring the board of directors. In addition, we established agencies for performing the duties of external directors, and developed the management system for external directors. As a result, we achieved a continuous improvement of the legal person governance institutional system, strengthening of the building of boards of directors, and standardizing of the management of external directors of subsidiaries.

落实董事会职权

IMPLEMENT THE FUNCTIONS AND POWERS OF BOARD OF DIRECTORS

中国交建围绕充分发挥董事会功能作用，规范公司董事会的决策机制，提升董事会决策质量和效率，加强董事会议案管理，为董事会履职尽责提供坚强有力支撑，以高质量董事会建设促进公司高质量发展。2021年，共召开董事会会议17次、董事会各专门委员会会议17次、审议议案114项。

Focusing on giving full play to the functions and roles of the Board of Directors, standardizing the decision-making mechanism of the Board of Directors, improving the quality and efficiency of decision-making of the Board of Directors, strengthening the management of motions of the Board of Directors, we have provided strong support for the Board of Directors to perform their duties and fulfill their responsibilities, and promoted high-quality corporate development with the construction of high-quality Board of Directors. In 2021, the Board of Directors held 17 board meetings and 17 special committee meetings, with 114 motions reviewed.

激发经理层活力

STIMULATE MANAGERS' VITALITY

中国交建所属各级企业持续实行经理层成员任期制和契约化管理，保障经理层依法履行职责。同时，进一步加强经理层任期意识、岗位意识、权责意识，进而激发活力，提升效率；持续健全完善沟通汇报工作机制，经理层以定期报告、信息报送等方式主动向董事会报告决议执行情况，由董事会负责监督检查、评估现状、调整战略，实现持续改进、循环提升。

Our enterprises at all levels constantly have implemented the tenure system and contractual management for managers to ensure that managers perform their duties in accordance with the law. Moreover, the tenure consciousness, position consciousness and rights & responsibility consciousness of managers have been further strengthened to stimulate their vitality and improve efficiency. Furthermore, we have constantly improved and optimized the communication and reporting mechanisms, and managers actively reported the implementation of resolutions to the Board of Directors via regular reports and information reporting. In addition, the Board of Directors is responsible for the supervision, inspection, assessment of the current situation, adjustment of strategy to achieve continuous improvement and cyclic promotion.

坚持反腐倡廉

COMBAT CORRUPTION AND UPHOLD INTEGRITY

中国交建秉持合规经营理念，严格遵守《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，坚持守底线，聚焦问题导向、目标导向，一体推进“三不腐”，严肃查处混合所有制改革、境外投资建设等领域的腐败问题，严惩靠企吃企、违规挂靠等违纪违法行为，同时在企业内部大力倡导廉政新风，弘扬廉洁文化，引导全体员工正心修身，常存戒惧。2021年，公司没有员工涉及贪污、贿赂、勒索、欺诈及洗钱等法律诉讼案件。

Holding the philosophy of compliance operation, we strictly comply with the *Criminal Law of the People's Republic of China*, the *Anti-unfair Competition Law of the People's Republic of China*, the *Anti-money Laundering Law of the People's Republic of China* and other laws and regulations to adhere to the bottom line and focus on the issue & target orientation, and we have integrated "Three Anti-corruption Requirements" (not daring to corrupt, not being able to corrupt, not wanting to corrupt) to solemnly investigate the corruption issues in the mixed ownership reform and the overseas investment construction. Moreover, we severely punished the violation of laws and regulations, such as duty-related crimes and illegally associating with enterprise, and we have also vigorously advocated a new style of clean governance within enterprises and promoted an integrity culture to guide all employees to cultivate their moral integrity and always be wary. In 2021, we had no employees involved in corruption, bribery, blackmail, fraud, money laundering and other legal cases.

建章立制

Establish rules and regulations

持续加强反贪污管理与反腐倡廉制度建设，印发公司《廉洁风险防控工作指导意见》《廉洁风险防控工作联系点建设工作规定》，明确工作要求。

We have constantly strengthened the construction of anti-corruption management and anti-corruption systems, and issued the *Guidance on Prevention and Control of Integrity Risk* and the *Regulations on Construction of Contact Points of Prevention and Control of Integrity Risk* to clarify the work requirements.

正风肃纪

Rectify work styles and disciplines

常态长效落实中央八项规定精神，持续纠治“四风”，全年共处置违反中央八项规定精神问题线索 10 件次，处分处理 11 人次。

We have constantly implemented the spirit of the eight-point guidelines issued by CPC leadership in a long-term manner to constantly correct "four forms of decadence" problems. In 2021, we dealt with 10 issue clues violating the spirit of the eight-point guidelines issued by CPC leadership, and 11 persons were punished.

执纪问责

Enforce discipline and accountability

加大与所属企业负责人谈话力度，印发纪委委员履职工作规则、执纪审查工作指引等制度 16 项，加强执纪工作指导检查，坚决防止执纪问责宽松软现象。

We have increased the conversation with the person in charge of our subsidiaries, and issued 16 regulations (such as duty performance rules for members of the Discipline Inspection Commission, guidelines on discipline enforcement & review) to strengthen the guidance and inspection of discipline enforcement, and resolutely prevent the loose and soft discipline enforcement and accountability.

廉政教育

Conduct integrity education

利用媒介持续开展立体化、全方位宣教，通过组织演讲比赛，编制公司《廉洁风险防控工作手册》，开展反贪污培训等形式，提升全员廉洁风险防控意识。

We have used the media to constantly carry out three-dimensional and all-round publicity and education. For example, we organized speech contest, prepared *Integrity Risk Prevention and Control Manual*, and conducted anti-corruption training to enhance our employees' awareness of integrity risk prevention and control.

加强风险管理

STRENGTHEN RISK MANAGEMENT

中国交建从全面风险识别、评估入手，基于管理制度、管理职责、业务管控需要，持续强化顶层设计、优化流程管理、加强过程监管，充分识别风险并加强管控，真正将风险管理和内控工作嵌入到具体工作和业务流控。

Starting from comprehensive risk identification and assessment, and based on the management system, management responsibilities and business control requirements, we have constantly strengthened top-level design, optimized process management, and enhanced process supervision to fully identify risks and strengthen control, so that we have truly embedded risk management and internal control into specific work and business flow control.

健全管控体系

IMPROVE THE MANAGEMENT AND CONTROL SYSTEM

中国交建持续强化风险防控顶层设计，高质量开展法律风险防控规划、制度“立改废”、管理考核评价与规章制度的法律审核，提升依法治企能力；深化合同管理，高质量完成合同、项目的法律审核；加强对投资项目、深化改革、依法治理的法律支撑，强化商标管理；加强纠纷管理，强化维权，开展纠纷案件“压存控增，提质创效”专项行动。

We have constantly strengthened the top-level design of risk prevention and control, and carried out high-quality legal risk prevention and control planning, institutional "establishment, modification and abolition", management assessment and legal review of rules and regulations to improve our ability of corporate governance according to law. Moreover, we have deepened contract management, and completed the legal reviews of contracts and projects with high quality. Furthermore, we have strengthened the legal support for investment projects, further reform, and governance in accordance with the law, and we have also enhanced trademark management. In addition, we have strengthened dispute management and rights protection, and launched a special campaign "compress the existence and control the increment, improve the quality and create the efficiency" to improve the quality and efficiency of dispute cases.

公司积极加强全面风险防范与合规管理，搭建“1+N”内控建设与监督制度体系；围绕外经、投资、金融等 8 个业务板块梳理 200 余项风险事项，形成 2021 版公司风险管理清单；加强重大专项风险应对，开展海外反腐败、长臂管辖、出口管制等法律研究，全面分析《区域全面经济伙伴关系协定》（RCEP）与《中欧全面投资协定》，编制专项分析报告，并形成应对预案，进一步提升风险管理水平。

We have actively strengthened the overall risk prevention and compliance management, and built a "1+N" internal control construction and supervision institutional system. Moreover, we sort out more than 200 risk items in eight business sectors such as foreign economy, investment and finance to form our 2021 risk management list. Furthermore, we have strengthened the response to major specific risks, and conducted legal studies on overseas anti-corruption, long-arm jurisdiction and export control. In addition, we have also comprehensively analyzed the *Regional Comprehensive Economic Partnership* (RCEP) and the *China-EU Comprehensive Investment Agreement* to prepare specific analysis reports, and then we have formulated response plans to further improve risk management.

此外，公司着眼于日常法治、风控与合规管理工作的需要，加强“八五”普法工作，深化公司总法律顾问制度和法律合规人才队伍建设，建立健全企业法律顾问和公司律师专业培训机制，多措并举开展各类法治、合规与风险管理培训，全年通过线上方式对全系统项目专兼职法律顾问、公司律师共 1,324 人开展为期 4 天的脱产培训，对 2,000 余名内控人员开展培训，组织 23 次海外合规培训，覆盖 32,227 人次。

In addition, focusing on the daily legal governance, risk control and compliance management, we have strengthened the 8th Five-Year Plan on law dissemination, and deepened our general legal counsel system and legal compliance talent team construction. Moreover, we have established and improved the enterprise legal adviser and corporate lawyers' professional training mechanism, and many measures have been taken to hold various legal governance, compliance and risk management training. For example, in 2021, we held four-day off-job online training for 1,324 full-time and part-time legal counsels and corporate lawyers in China Communications Construction, more than 2,000 internal control personnel were trained, and 23 overseas compliance training were organized, covering 32,227 person-times.

发挥审计效能

GIVE FULL PLAY TO AUDIT EFFECTIVENESS

中国交建不断强化审计职能，把内部审计作为推动实现高质量发展的有力监督保障。公司不断完善“党管审计”的体制机制，形成公司统管、分级负责的组织体系。同时，由公司党委书记、董事长直接分管审计工作，重大事项经党委会集体讨论决策，有力保障审计工作的独立性和权威性。

We have constantly strengthened the audit function, and regarded internal audit as strong supervision and guarantee to promote high-quality development. We have constantly improved the system and mechanism of "audit under party supervision" to form an organizational system of corporate unified management and level-to-level responsibility. Meanwhile, the Secretary of the Party Committee and the Chairman are directly in charge of the audit work, and the major matters have been discussed and decided collectively by the Party Committee, which effectively guarantees the independence and authority of the audit work.

三大聚焦 Three Focuses

聚焦推进落实国家重大战略。围绕打赢“三大攻坚战”、落实中央八项规定精神、民企清欠等重点工作开展审计监督，坚持应审尽审、凡审必严，全力以赴保障公司在服务国家重大战略、践行央企使命中当先锋做表率。

Focus on promotion and implementation of major national strategies. We carry out audits and supervision on key tasks (such as winning the "Three Critical Battles", implementing the spirit of eight-point austerity rules of the Party Central Committee, and clearing up debts of private enterprises), and we insist that all audits should be carried out strictly. In addition, we make every effort to ensure that we take the lead in serving major national strategies and fulfilling the mission as a central state-owned enterprise.

聚焦改革发展关键领域。针对转型升级、提质增效、改革攻坚、科技创新等重点工作，尤其是针对重点环节、问题多发环节，集中开展专项审计，确保审出成果、审出效益、审出价值。

Focus on key fields of reform and development. We carry out specific audits on key tasks such as transformation and upgrading, quality and efficiency improvement, reform and scientific & technological innovation, especially on key links where problems occur frequently, to ensure that results, benefits and values are audited.

聚焦防范化解重大风险。及时揭示公司在生产经营、合规管理、安全生产等方面存在的重大风险隐患，形成风险识别、分析、处置的管理闭环，以高质量监督为企业高质量发展保驾护航。

Focus on prevention and solution of major risks. We timely reveal the major risks and hidden dangers existing in our production and operation, compliance management, production safety and other aspects to form a closed loop of risk identification, analysis and disposal, escorting our high-quality development with high-quality supervision.

2021年，公司设立总审计师岗位，成立审计中心，构建由非财务审计专业的公司内专家组成的审计咨询专家库，选拔100名优秀审计骨干组建人才库。

In 2021, we set up the post of chief auditor and established an audit center to build an audit consulting expert pool composed of non-financial audit experts in China Communications Construction and we selected 100 excellent audit backbones to form a talent pool.

精工细作 一流的质量

FINE WORKMANSHIP · FIRST-CLASS QUALITY

中国交建坚持质量第一，紧扣建设“质量型”世界一流企业目标，严抓产品和服务质量，全力塑造质量品牌；坚持“安全管理是第一管理”理念，压紧压实安全生产责任，严格管控安全风险，切实维护人民群众生命财产安全；积极对标世界一流供应链管理体系，加强供应商管理与培训，践行责任采购，努力实现高质量可持续发展。

China Communications Construction consistently puts quality first and focuses on the goal of building a "quality-oriented" world-class enterprise. It ensures the quality of products and services, and fully engages in building a quality brand. Moreover, adhering to the principle of "safety management is the first management", we carefully implement our responsibility for work safety, and we strictly control safety risks to earnestly protect the safety of people's lives and property. In addition, we actively benchmark ourselves against the world-class supply chain management system to strengthen supplier management and training, practice responsible procurement, and strive to achieve high-quality sustainable development.



提供优质服务

PROVIDE QUALITY SERVICES

加强质量管控

STRENGTHEN QUALITY CONTROL

公司严格遵守《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。2021年，公司修订完成产品质量监督管理办法、质量责任制规定等制度；推进“平安百年品质工程”课题研究，将“平安百年品质工程”建设纳入公司“交通强国”试点任务，深中通道等69个参与实施项目入选交通运输部第一批平安百年品质工程创建示范项目清单，质量管控取得重要实效。

We strictly comply with the *Product Quality Law of the People's Republic of China*, the *Construction Law of the People's Republic of China*, *Regulations on Quality Management of Construction Projects*, and applicable laws and regulations. In 2021, we revised and completed product quality supervision and management measures, and quality responsibility regulations and other regulations. In addition, we promoted the subject study "Safe Quality Engineering in One Hundred Years", which was included in our pilot task of "Building National Strength in Transportation", and 69 participating projects (for example, Shenzhong Bridge) were selected as the first batch of demonstration projects of Safe Quality Engineering in One Hundred Years created by the Ministry of Transport, so that substantial results were achieved in quality management and control.

完善工程质量管理体系

Improve project quality management system

建立健全质量监督管理体系、分级领导体系、分级监管体系和分级责任体系。

We have established and improved quality supervision and management system, level-to-level leadership system, level-to-level supervision system and level-to-level responsibility system.

健全工程质量管理措施

Improve project quality management measures

建立健全质量管理制度、管理标准、监督检查体系，积极推进质量信息化、数字化建设。

We have established and improved quality management systems, management standards, supervision and inspection systems, and actively promoted the construction of quality informatization and digitalization.

积极推进质量文化建设

Actively promote quality culture construction

广泛开展质量改进、质量攻关、质量管理小组等群众性质量活动，形成“企业追求质量、人人关心质量”的良好氛围。全年组织开展质量知识答题、开展质量讲堂113场，质量培训540场，各类质量活动1,000多次，参与人员6万多人次。

We have widely carried out mass quality activities such as quality improvement, quality tackling and quality management team to form a good atmosphere of "enterprise pursues quality and everyone cares about quality". In 2021, 113 quality knowledge quizzes/quality lectures and 540 quality training sessions were organized, and more than 1,000 quality activities were held, involving more than 60,000 person-times.



中国交建总工程师林鸣（右六）荣获第四届中国质量奖，并受邀分享港珠澳大桥岛隧工程科技与质量创新管理与实践

Lin Ming (the sixth from right), Chief Engineer of China Communications Construction, won the 4th China Quality Award, and was invited to share the science & technology and quality innovation management and practice of the Island Tunnel Project of the Hong Kong-Zhuhai-Macao Bridge

打造品质工程

CREATE QUALITY PROJECTS

中国交建积极实施质量品牌战略，打造精品工程。2021年，公司8个境内项目获得中国建设工程鲁班奖，38个项目入选国家优质工程奖（含金奖9项），其中孝感文化中心项目实现公司房建项目鲁班奖“零”的突破，并评选出中国交建优质工程奖136项，优秀设计奖110项，优质混凝土奖36项。

We actively implement the quality brand strategy to create high-quality projects. In 2021, eight projects within China were granted the China Construction Engineering Luban Prize, and 38 projects were selected as the National Quality Engineering Award (including nine gold awards), in which, the Xiaogan Cultural Center Project realized our breakthrough with Luban Prize in housing construction field. In addition, we selected 136 quality engineering awards, 110 outstanding design awards and 36 quality concrete awards in China Communications Construction.

案例 CASE

公司首个全专业实施的轨道交通项目——佛山地铁2号线

Foshan Metro Line 2, the first fully professional rail transit project implemented by China Communications Construction

12月28日，中国交建首个全专业实施的轨道交通项目——佛山市地铁2号线一期工程正式开通初期运营。该工程是广东省首批列入国家发改委PPP库的重点项目，首次提出“BOT+EPC+TOD”建设模式，线路全长32.4公里。公司各参建单位积极探索新技术，形成了一批优秀科研成果，并取得发明专利、实用新型专利、QC、工法、课题等共计100余项，将该工程打造成为安全、低碳、环保的一流品质工程。此外，佛山地铁2号线还积极探索TOD城市综合开发模式，通过一二级联动开发，打造佛山市首个TOD项目（湖涌TOD项目）以及最大TOD项目（林岳TOD综合开发项目），并建成了未来佛山7条地铁线的轨道中枢大脑——湾华地铁控制中心。一期工程的开通运营将极大改善佛山交通出行环境，拓展城市发展空间，促进广佛全域同城化，助力佛山全方位融入粤港澳大湾区建设，并为共建共享“轨道上的大湾区”注入新活力。

On December 28, Foshan Metro Line 2 Phase I Project, the first fully professional rail transit project implemented by China Communications Construction, officially opened its initial operation. This Project is one of the first batch of key projects listed in the PPP database of the National Development and Reform Commission in Guangdong Province, in which, the construction mode of "BOT+EPC+TOD" is proposed for the first time, and the total length of the Line is 32.4km. Our participating units actively explored new technologies to form a number of outstanding scientific research achievements, and more than 100 invention patents/utility patents/QC/construction methods/research subjects were obtained to create this Project into a first-class quality project of safety, low carbon and environmental protection. In addition, in Foshan Metro Line 2, we also actively explored TOD urban comprehensive development mode, and the primary and secondary linkage development was used to create the first TOD project (Huyong TOD project) and the largest TOD project (Linyue TOD comprehensive development project) in Foshan, and we built Wanhua Metro Control Center, which will be the rail central brain for seven future metro lines in Foshan. The opening and operation of this Phase I Project will greatly improve the transportation environment of Foshan, including expansion of the space for urban development, promotion of the urban integration of Foshan and Guangzhou, and full integration of Foshan into the construction of the Guangdong-Hong Kong-Macao Greater Bay Area, and it will inject new vitality into the joint construction and sharing of the "Greater Bay Area on the Rail".



中国建设工程鲁班奖项目风采

Projects winning China Construction Engineering Luban Prize



深圳港盐田港区西作业区集装箱码头工程

Container Terminal Engineering at West Operation Zone of Yantian Port Area in Shenzhen Port



温州市瓯飞一期围垦工程（北片）

Wenzhou Oufei Phase I Reclamation Project (North section)



孝感文化中心项目

Xiaogan Cultural Center Project



湖南省临湘至岳阳高速公路洞庭湖大桥

Dongting Lake Bridge at Linxiang-Yueyang Expressway in Hunan Province



佛山地铁2号线一期工程

Foshan Metro Line 2 Phase I Project

优化客户服务

OPTIMIZE CUSTOMER SERVICES

中国交建坚持以客户为中心，不断优化服务体系，提升服务质量，完善客户服务内容，致力提升客户体验感和满意度，携手客户共赢共享。

We persist in putting customers first, including constant optimization of the service system, improvement of service quality, optimization of customer service content, so that we strive to enhance customer experience and satisfaction in order to achieve win-win results and share with customers.

提供优质服务 Provide quality services

公司坚持从客户出发，从客户关系管理、客户要求确定和客户满意管理三方面着手完善客户服务体系，定期开展客户满意度调查，了解客户的意见和建议，提升客户体验感。中交疏浚建立覆盖总部、区域中心、各子公司多维客户服务立体网络；四航院通过制定顾客满意状况监控及评价管理规定，将满意度调查的份数和满意率纳入质量目标，并进行严格考核，在全年发出的 785 份满意度调查表中，收回率为 84.3%，满意率 98.6%，服务受到客户的高度肯定。

We insist on improving the customer service system from the three aspects: customer relationship management, customer requirements determination and customer satisfaction management, and regularly conduct customer satisfaction surveys to understand customers' opinions & suggestions and improve customer experience. For example, the CCCC Dredging (Group) Company Limited established a multi-dimensional customer service network covering headquarters, regional centers and subsidiaries. Another example, the CCCC Fourth Harbor Consultants Co., Ltd. prepared the customer satisfaction monitoring and evaluation management regulations, and the scores and satisfaction rate of satisfaction surveys were included in the quality objectives to assess strictly. Among the 785 satisfaction surveys sent out in 2021, the recovery rate was 84.3%, and the satisfaction rate was 98.6%, so their services were highly recognized by customers.



中国交建“交通强国”第一示范服务区——云南大板桥非洲风情主题服务区

African Style Dabanqiao Service Area in Yunnan Province, the first demonstration service area of China Communications Construction's Transportation Powerful Nation

保护客户隐私 Protect customer privacy

中国交建通过构建严密的信息保护体系充分保护客户隐私信息。在公司《市场经营管理办法》《政府事务与大客户商务对接管理办法》中明确提出在处理客户关系时，应增强法治观念和保密意识，严格保管客户有关资料及隐私信息，严守客户商业秘密，不得在违反法律法规、公司制度的情况下向第三方泄露。2021年，公司网络安全保障能力进一步提升，涉密和网络信息安全管理在央企中名列前茅。四航局制定《保密管理规定》，逐级与员工签订保密责任书，把保密责任落实到人；二公局建立客户信息数据库，坚持分级保管、分级查阅的原则，按照保管价值确定保管期限；中交路建制定《网络安全管理办法》，应用防火墙、入侵检测防御、VPN访问等技术措施，强化数据资源和访问保护。

We fully protect customer privacy information by establishing a strict information protection system. In the *Market Operation and Management Measures* and the *Government Affairs and Big Customer Commercial Docking Management Measures*, we explicitly proposed that, during the management of customer relationships, we should enhance our consciousness of rule of law and confidential consciousness, including strict custody of customer information & privacy information and strict maintenance of customer business secret, and we should not disclose such information to a third party in violation of laws & regulations and corporate provisions. In 2021, our network security capability has been further improved, and our management of confidentiality and network information security ranks top among central SOEs. For example, the CCCC Fourth Harbor Engineering Company Ltd. formulated the *Confidentiality Management Regulations*, and signed the confidentiality responsibility letter with the employees according to levels to implement the confidentiality responsibility to the specific employee. Another example, the CCCC Second Highway Engineering Co., Ltd. established a customer information database, and they adhered to the principle of level-to-level storage and level-to-level access to determine the storage period according to the storage value. The Road and Bridge International Co., Ltd. formulated the *Network Security Management Measures*, and they applied firewall, intrusion detection defense, VPN access and other technical measures to strengthen data resources and access protection.

应对客户投诉 Deal with customer complaints

中国交建不断强化客户投诉管理，完善客户投诉解决机制，明确处置流程，设立处置台账，并做好跟踪督查。一航院设定客户投诉控制程序，由生产经营部接收投诉，联合相关部门进行处理，由安全质量监管部门检查执行结果，最后由人力资源部门对投诉对象提出处理意见，形成完整的闭环投诉解决机制。2021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。

We constantly strengthen customer complaint management, including improvement of customer complaint resolution mechanism, clarification of the disposal process, the establishment of the disposal ledger, and conduct of follow-up supervision. For example, the CCCC First Harbor Consultants Co., Ltd. established the customer complaint control procedure, in which, when the complaint is received by the Production and Operation Department, they will dispose of such complaint jointly with relevant departments, next, the safety and quality supervision department will check the execution results, and finally the human resources department will give disposal suggestions for the complainant, forming a complete closed-loop complaint resolution mechanism. In 2021, there were no major lawsuits and complaints caused by product quality and service in China Communications Construction.

落实安全生产

ENSURE WORK SAFETY

中国交建严守安全红线，压紧压实安全生产责任，严格管控安全风险，出台公司《推进打通安全生产“最后一公里”（第一阶段）实施方案》，深入排查治理安全隐患，扎实推进问题整改，确保实现安全生产。2021年，公司总部投入安全生产专项资金5,949万元，未发生重大及以上生产安全责任事故，百亿元产值死亡率保持在0.2的历史低点。

We strictly observe the safety red line to fulfill our responsibility of work safety, and we also strictly manage and control the safety risks. For example, we issued the *Implementation Plan for Advancing the "Last Mile" of Work Safety (Phase I)* to deeply check and govern the potential safety hazards, and soundly promote the rectification of problems to ensure work safety. In 2021, the Company's headquarters invested RMB 59.49 million of special fund for work safety, and no major or above production safety accidents occurred, while the mortality rate for an output value of RMB 10 billion remained at the historical low of 0.2.

我们的成绩

Our Achievements

▶ **57个项目获评交通运输部、应急管理部及全国总工会3部委联合冠名的“2018-2020年度平安工程”**

57 projects were awarded the "2018-2020 Safe Engineering" jointly sponsored by three ministries, including the Ministry of Transport, the Ministry of Emergency Management and the All-China Federation of Trade Unions

▶ **311个项目获评省级“平安工地”“安全生产标准化工地”**

311 projects were awarded the provincial "Safe Construction Site" and "Work Safety Standard Construction Site"

▶ **30个境外项目荣获安全类荣誉**

30 overseas projects won awards in work safety

夯实安全管理

CONSOLIDATE SAFETY MANAGEMENT

中国交建深入践行“安全管理是企业第一管理”理念，坚持“零事故、零死亡”管理目标，按照安全生产“五个到位”和“1247”工作要求，确保责任抓细抓实抓准、制度保证严密周全、思想认识坚定到位、技术支撑科学先进、监督检查严格细致。

We deeply practice the philosophy of "Safety Management is the First Management Concept of an Enterprise", and we adhere to the management objectives of "Zero Accident and Zero Death Toll". According to the "Five in Place" and "1247" work requirements for work safety, we ensure meticulous, practical and accurate responsibility allocation, strict and comprehensive system guarantee, firm and ready thinking and understanding, scientific and advanced technical support, strict and meticulous supervision and inspection.

体系搭建

System construction

开展制度“废改立”，新编公司《区域安全监督管理办法》等3项制度，修订公司《职业健康安全监督管理办法》等8项制度，废除公司《安全护照使用管理办法》等4项制度，指导安全防范措施高质量落实推进。

We carried out the institutional "abolition, modification and establishment", and three systems (including *Regional Safety Supervision and Management Measures*) were newly drafted. Moreover, eight systems (including *Occupational Health and Safety Supervision and Management Measures*) were revised, and four systems (including *Safety Passport Use and Management Measures*) were abolished, which guides the high-quality implementation and promotion of safety prevention measures.

管理筑基

Management foundation

成立调度室，对公司所属在建项目进行实时监控；强化“关键少数”安全决策，公司董事长、总裁46次就安全环保工作作出专门批示，总裁亲自起草打通安全生产“最后一公里”工作方案核心内容，亲自部署推进，确保工作推进力度。强化“关键少数”安全意识，全年共2,000余名项目经理完成脱产学习。

A dispatching room was established to monitor our projects under construction in real time, and we strengthened the "key minority" safety decision, for instance, our President and CEO made special instructions on safety and environmental protection work 46 times, and our President personally drafted the core content for the work plan of "Last Mile" of work safety to deploy and promote it in person in order to ensure the progress of work. In addition, we strengthened the "key minority" safety consciousness, and more than 2,000 project managers completed off-job learning in 2021.

隐患排查

Potential hazards check

统筹推进安全生产专项整治三年行动，涉稳风险排查整治、防灾减灾大排查等规定动作督查191个重点项目，各级总部排查整治隐患21万余项；在粤港澳大湾区、长三角和西南3个重点区域，试点组织开展交叉互检，从内夯实安全生产基础。

We coordinated and promoted a three-year action for special rectification of safe production to improve work safety, including supervision of 191 key projects involving risk check & rectification and disaster prevention and reduction check, and headquarters at all levels checked and rectified over 210,000 potential hazards. In the three key regions (Guangdong-Hong Kong-Macao Greater Bay Area, Yangtze River Delta and Southwest China), we piloted organization and conducted cross-checking to consolidate the foundation for work safety from the inside.

科技兴安

Safety promotion via technology

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，全年隧道监控中心发布1,839份风险管控提示，盾构监控中心发布53起预警，提升运营效率的同时，有效保障作业人员和设备安全。

We created a safety monitoring system integrating whole-process and comprehensive safety regulation, tunnel, TBM, bridge, special equipment, and ship monitoring. In 2021, the Tunnel Monitoring Center issued 1,839 risk control tips, the Shield Monitoring Center issued 53 early warnings, which not only improves operational efficiency, but also effectively ensures the safety of operating personnel and equipment.

强化安全教育

STRENGTHEN SAFETY EDUCATION

中国交建持续推进安全文化体系建设，加强安全宣传引导，开展安全生产月、线上安全培训、职工安全微课评选等活动，并利用官方微信公众号、视频号等传媒平台宣传安全知识，营造安全氛围，提升全员安全素养和安全意识。2021年，利用骄子大学·中交网院培训系统，分类组织开展18期网络视频安全环保培训，公司二、三级单位总部累计培训达23万人次。



一航院组织员工参观消防体验馆

The CCCC First Harbor Consultants organizes employees to visit the firefighting experience museum

We constantly promote the construction of safety culture system to strengthen safety publicity and guidance by holding various events, such as safety production month, online safety training, and employee safety micro course selection, and we also utilize the WeChat official public account, WeChat video channel and other media platforms to publicize safety knowledge, create a safety atmosphere, and improve the safety literacy and consciousness of all employees. In 2021, in the training system of Jiaozi University CCCC Online School, we classified and organized 18 sessions of online video safety and environmental protection training, training 230,000 person-times in total for secondary and tertiary headquarters.



中交路建开展安全生产法宣贯活动

The CCCC Road and Bridge International conducts safety production law publicity and implementation activities

提升应急能力

IMPROVE EMERGENCY RESPONSE CAPACITY

中国交建持续完善应急管理体系建设、优化应急管理 workflow、提高突发事件应急处置能力，全力防控重大安全风险。公司着力构建“安全生产+应急管理”的“大安全、大应急”体系，成立应急指挥调度中心，推进建设应急管理平台建设，实现突发事件信息直报，提升应急处置能力。全年开展4次公司级应急演练，组织100余个项目纳入应急管理部工程抢险预置力量。2021年，公司某项目在进行车站负二层土方开挖时发生1起物体打击事故，事故发生后，项目部立即启动应急预案，第一时间组织现场救援及善后处置工作，全面加强安全警示教育，坚决筑牢安全生产底线，避免类似事故再次发生。

We constantly improve the emergency management system construction, optimize the emergency management workflow, and increase the emergency response capacity to make every effort to prevent and control major safety risks. For example, a "Big Safety and Big Emergency" system of "Work Safety + Emergency Management" has been established with great efforts, and an Emergency Command and Dispatch Center has been set up to promote the emergency management platform construction, so that emergency information could be reported directly, and emergency response capability has been improved. In 2021, four company-level emergency drills were carried out, and more than 100 items were incorporated into the engineering rescue preset force of the Ministry of Emergency Management. In 2021, one object strike accident occurred during earthwork excavation at second floor basement of a station in our project. After the occurrence, the Project Office promptly launched the emergency response plan to organize the on-site rescue and subsequent disposal. We further strengthened the safety warning education, and determined to build a safe production line to avoid similar accidents from happening again.



四航院小漠项目部开展应急救援演练

The Xiaomo Project Office of CCCC Fourth Harbor Consultants conducts emergency rescue drills



一航局开展防台应急演练

The CCCC First Harbor Engineering Company Ltd. conducts emergency drills against typhoons

构筑责任供应链

BUILD A RESPONSIBLE SUPPLY CHAIN

中国交建树立“供应链总成本最优”的意识，围绕“创新、协同、高效、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，高质量开展供应链管理体系建设。2021年，公司全面规划编制供应链“十四五”发展规划与《供应链管理部与物资公司整合方案》《供应链管理提升方案》等4项专项方案，研究确定公司《供应链管理办法》等“1+15”项制度框架，按照“归口统一管理、分级分类实施、统筹集约、高效协同、全面上线”的原则开展供应链建设和管理工作，并着力加强供应链信息系统建设。

Establishing the consciousness of "Optimal Total Cost of Supply Chain", and focusing on the five-integrated supply chain strategy idea of "Innovation, Collaboration, Efficiency, Green and Intelligence", we emphasize nine tasks of "non-qualified rate, concentration ratio, payment security, overseas supply chain, supply, compliance, regulation & evaluation system, informatization support, green supply chain" to conduct high-quality supply chain management system construction. In 2021, we comprehensively planned and prepared four specific programs (including The 14th Five-Year Plan for Supply Chain Development, *Supply Chain Management Department and Material Company Integration Program*, and *Supply Chain Management Improvement Program*), and discussed and determined the "1+15" institutional framework (including Supply Chain Management Measures). According to the principle of "centralized and unified management, level-to-level and classified implementation, overall and intensive planning, efficient coordination, and fully launched", we conducted the supply chain construction and management, and focused on strengthening the construction of the supply chain information system.

我们的成绩

Our Achievements

▶ 获得年度国资委采购管理对标评估 A 级，连续 3 年位居建筑类央企第二名

We won Grade A in the Procurement Management Evaluation of SASAC in 2021, ranking second in the sector of construction central SOEs for three consecutive years

▶ 《以实现集团整体利益最大化为核心的供应链管理体系》获批成为国资委国有重点企业管理标杆创建行动标杆项目

The *Supply Chain Management System Centering on Maximizing the Overall Interests of the Group* was approved by SASAC as a benchmark item in creating management benchmark for key state-owned enterprises

▶ 《中交集团智慧供应链创新与实践成果》荣获中国施工企业管理协会“工程建设行业供应链创新与应用成果”一等奖

The *Innovation and Practice Achievements of CCCC Intelligent Supply Chain* won the first prize of "Supply Chain Innovation and Application Achievements in Engineering Construction Industry" by the China Association of Construction Enterprise Management

供应商管理

SUPPLIER MANAGEMENT

中国交建建立全品类、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。2021年，公司修订供应商管理办法、供应商管理细则等管理制度，进一步完善、细化供应商管理的管控机制、评价机制和激励机制，公司层级境内供应商 100% 通过 ISO9001 质量管理体系、环境管理体系、职业健康安全管理体系认证。

We establish an integrated supplier network of all categories at home and abroad, and implement level-to-level and classified management of suppliers according to different procurement subjects. In 2021, we revised the supplier management measures and the supplier management rules and other management systems to further improve and refine the control mechanism, evaluation mechanism and incentive mechanism of supplier management. Our domestic company-level suppliers have all passed ISO9001 quality management system, environmental management system and occupational health & safety management system certification.

中国交建按地区划分的供应商数目

Number of Suppliers of China Communications Construction by Region

地区 Region	单位 Unit	2019	2020	2021
东北地区 Northeast China	个 PCS	48	55	111
华东地区 Eastern China	个 PCS	549	585	831
中南地区 Central South China	个 PCS	266	286	414
西南地区 Southwest China	个 PCS	112	123	270
西北地区 Northwest China	个 PCS	66	66	149
华北地区 North China	个 PCS	356	381	511

供应商准入 Access of suppliers

中国交建实行资料系统上传审核制，由供应商的初始管理单位严格执行供应商的初始准入标准：

We carry out the data system uploading and approval system access, and our initial management departments for the suppliers strictly implement the initial access standards of the suppliers:

- ◎ 具有法律主体资格，并具有增值税一般纳税人资格；
- ◎ The supplier should have the qualification of legal subject and the qualification of general VAT taxpayer;

◎ 具有 ISO9001 质量管理体系、环境管理体系、职业健康安全管理体系认证证书，贸易商需同时具有产品生产企业的代理协议或产品销售授权资质；

◎ The supplier should have ISO9001 quality management system, environmental management system, occupational health & safety management system certification, and the trader should also have the agency agreement of product production enterprise or product sales authorization qualification;

◎ 提供的产品符合法律规定的产品认证证书；

◎ The supplier should provide the product certification certificates as required by law;

◎ 具有良好的售后服务跟踪体系；

◎ The supplier should have a good after-sales service tracking system;

◎ 具有良好的资金财务状况及商业信誉。

◎ The supplier should have good financial status and business reputation.

供应商审查 Supplier review

中国交建对供应商实行分级审批、推荐考核评价制度，从供应商进入到接受评价评审与分级管理，参与投标与合同签订，跟踪评价，直至退出供应商网络。

We implement the level-to-level review & approval, recommendation, assessment and evaluation system for suppliers, including supplier entry, acceptance of evaluation and assessment, level-to-level management, participation in bidding and contract signing, tracking evaluation, and withdrawal from the supplier network.

◎ 从不同层级的供应商准入开始，均实行岗位审批制，并将评价评审优秀的供应商逐级推荐并通过上层管理审批岗审批到相应层级，接受管理；

◎ From the access of suppliers at different levels, the post review and approval system is implemented, and the suppliers with excellent evaluation and assessment results are recommended level-to-level, and will be reviewed and approved by the upper management review & approval post to the corresponding level for management;

◎ 由供应商初始推荐单位审核供应商信息是否全面、准确，并根据供应商的基本条件、产品质量、供货效率和业绩情况择优向上级单位推荐；

◎ The initial recommender of the supplier will check whether the information of the supplier is comprehensive and accurate, and preferentially recommend to the superior management based on the basic conditions, product quality, supply efficiency and performance of the supplier;

◎ 重点对生产过程、原材料入场检验、不合格品的管控流程等实施考核检查，同时实现正负两方面的升降级分级管理激励机制，根据线上和现场评价评审结果，调整供应商层级。

◎ We focus on the check and inspection of the production process, raw material entry inspection, and the management & control process of nonconforming products, and we also realize the promotion and demotion level-to-level management incentive mechanism of both positive and negative aspects, namely, we will adjust the level of suppliers according to the online and on-site evaluation and assessment results.

供应商沟通 Supplier communication

中国交建持续健全完善与供应商的长效沟通机制，定期组织电话会议、供应商交流大会或年度优秀供应商表彰交流会，及时将信息反馈给供应商，并且不定期与部分供应商进行交流访谈，形成长效沟通机制，促进双方共赢。此外，公司坚持双向接收内部采购单位及供应商的意见反馈，搜集问题，并及时解决。

We have constantly improved and optimized a long-term communication mechanism with suppliers to regularly organize teleconferences, supplier exchange meetings or annual outstanding supplier commendation and exchange meetings, so that we could timely feedback information to suppliers. Moreover, we also conducted exchanges and interviews with some suppliers from time to time, which forms a long-term communication mechanism promoting a win-win situation. In addition, we insist on receiving feedback from both internal purchasing units and suppliers, collecting problems and solving them in time.



中国交建举办海外供应商交流会暨进口采购签约仪式

China Communications Construction is holding the CCCC overseas supplier exchange meeting and signing ceremony of procurement contracts

供应商培训

SUPPLIER TRAINING

中国交建通过每年度的供应商大会、供应商公开培训课、供应商现场评价等方式向供应商传递公司供应链管理理念、发展方向，加强供应商准入及绩效评价标准等培训，并积极开展管理及技术经验交流。2021年，由中国交建牵头联合七家建筑央企共同组建课题组编制完成的《中国建筑业供应链管理知识体系》正式发布。此外，2016年至2021年，共2,000余家供应商接受相关社会责任培训，其中2021年举办免费供应商管理网络视频公开课2次，共500余人次参加了培训学习。

China Communications Construction has held annual supplier meeting, supplier open training courses and supplier on-site evaluation to deliver supply chain management philosophy and development direction to suppliers, and strengthened the training on supplier access and performance evaluation standards. Meanwhile, we have also actively conducted management and technical experience exchanges. In 2021, the *Chinese Construction Industry Supply Chain Management Knowledge System*, which was prepared by the research group led by CCCC and jointly composed of seven construction central state-owned enterprises, was officially released. In addition, from 2016 to 2021, more than 2,000 suppliers got relevant social responsibility training, in which, we held two free online video open courses on supplier management in 2021, and more than 500 people participated in the training and learning.

责任采购

RESPONSIBLE PROCUREMENT

中国交建在实践中坚持将ESG理念融入采购管理全过程，严格遵守招投标法有关规定，制定一系列管理原则、方法及规范，推进建设高质量供应链，规避因供应商管理不当而引发环境、社会与管治风险。

In practice, we insist on integrating ESG philosophy into the whole process of procurement management, for example, we strictly comply with the relevant provisions of the tendering & bidding law, and formulate a series of management principles, methods and norms, so that we could promote the construction of high-quality supply chain to avoid environmental, social and governance risks caused by improper supplier management.

◎ 制定物资采购供应管理办法、装备采购供应管理办法、招标采购管理办法等制度，建立完善的招评标机制，打造公开透明的采购平台。

◎ We have formulated the management measures for material procurement and supply, the management measures for equipment procurement and supply, the management measures for tendering and procurement and other systems to establish a sound tendering and evaluation mechanism, and create an open and transparent procurement platform.

◎ 制定物资集中采购支付管理办法，强化支付保障。

◎ We have formulated the payment management measures for centralized procurement of materials to strengthen payment security.

◎ 制定供应链风险与合规管理办法，对供应链中的风险与合规问题进行有效的管理与控制，建设合规、风险有序可控的供应链管理体系。

◎ We have formulated the management measures for supply chain risk and compliance to effectively manage and control supply chain risk and compliance issues, so as to build a supply chain management system with compliance and orderly & controllable risks.

◎ 制定供应商管理办法、供应商管理细则、海外合规工作管理办法等制度，督促供应商履行社会责任。

◎ We have formulated the supplier management measures, supplier management rules, overseas compliance management measures and other systems to urge suppliers to fulfill their social responsibilities.

同时，公司积极践行绿色采购，将环境指标作为重点纳入供应商选择指标体系，优先选择绿色供应商，采购达标绿色材料，与供应商携手共建绿色、低碳、可持续的产业链。

Meanwhile, we have also actively practiced green procurement to take environmental indicators as a key component of the supplier selection index system, so we give priority to green suppliers and procure qualified green materials, and work with suppliers to build a green, low-carbon and sustainable industrial chain.

碧水清波 持续的生态

GOOD ENVIRONMENT · SUSTAINABLE ECOLOGY

中国交建坚决贯彻执行《中华人民共和国环境保护法》及地方环境保护相关法律法规，持续强化环保管理，提升能源、资源利用效率，降低污染排放；积极应对气候变化，促进低碳发展，倡导绿色办公，加强生物多样性保护，坚定成为绿色发展的重要参与者、贡献者、引领者。

In accordance with the *Environmental Protection Law of the People's Republic of China* and relevant local environmental protection laws and regulations, China Communications Construction continuously tightens the management of environmental protection, ensures more efficient energy and resource utilization, reduces pollution emissions; pursues low-carbon development, advocates green office and strengthens biodiversity conservation to become a key participant, contributor and leader of green development in active response to climate change.

我们的成绩

Our Achievements

▶ 香港将军澳跨湾大桥项目荣获英国土木工程师学会 2021 年度“减碳”基建项目最高等级布鲁奈尔奖

The Tseung Kwan O Cross-Bay Bridge project in Hong Kong won the Brunel Award for 2021 granted by the Institution of Civil Engineers, which is the highest-level award for the "carbon reduction" infrastructure project.

▶ 荣获中国节能协会“节能减排科技进步奖”二等奖 2 项、三等奖 3 项

We won two second prizes and three third prizes in the "Science and Technology Progress Award for Energy Conservation and Emission Reduction" granted by China Energy Conservation Association.

▶ 香港机场 3302 和 3405 项目荣获香港机场管理局“杰出环保奖”

Hong Kong Airport 3302 and 3405 projects won the "Environmental Excellence Award" granted by Airport Authority Hong Kong.

环境风险管理

ENVIRONMENTAL RISK MANAGEMENT

中国交建持续优化生态环保工作机制，统筹完善顶层设计，推进生态环境保护工作“党政同责、一岗双责”，压紧压实生态环境保护主体责任，将问题整改与建章立制、形成长效机制相结合，严守环保合规底线，夯实生态环境保护管理基础。2021 年，公司节能环保形势总体稳定，未发生一般以上突发环境事件。

We constantly optimize the ecological environment protection work mechanism, and improve the top-level design as a whole to promote the ecological environment protection work on the principle of "party and government bearing the same responsibility, one post assuming two responsibilities". Moreover, we fulfill the principal responsibility of ecological environment protection, and combine the problem rectification with rules and regulations establishment as well as long-term mechanisms. Furthermore, we strictly maintain the bottom line of environmental compliance to consolidate the foundation of ecological environment protection management. In 2021, our energy conservation and environmental protection situation was generally stable, and there was no above general emergency environmental event.

完善环保管理制度体系

IMPROVE ENVIRONMENTAL PROTECTION MANAGEMENT INSTITUTIONAL SYSTEM

公司深度聚焦国家“双碳”目标，制定公司《绿色低碳行动方案》，明确绿色低碳发展目标，制定“11568”绿色发展路径；结合“制度建设年”计划安排，印发公司《生态环境保护管理工作评价办法》《生态环境保护领导小组办法》《生态环境保护考核办法》《总部生态环境保护责任制规定》《生态环境保护责任追究管理规定》等 5 项制度，进一步压实监管职责，公司定期或不定期对各单位的生态环境保护工作进行抽查，每年抽查不少于 2 次。

We deeply focus on the national "dual carbon" goal to formulate our *Green and Low-carbon Action Plan*, and define the green and low-carbon development goal to formulate the "11568" green development path. Moreover, according to the "Institutional Construction Year" plan, we issued five regulations (including the *Evaluation Measures for Ecological Environment Protection Management*, the *Measures for Ecological Environment Protection Leading Group*, the *Assessment Measures for Ecological Environment Protection*, the *Regulations on Headquarters Ecological Environment Protection Responsibility System*, and the *Regulations on Ecological Environmental Protection Responsibility Investigation*) to further clarify the regulatory responsibilities. In addition, we conducted spot checks on the ecological environment protection work of all units regularly or irregularly, at least twice a year.

落实节能环保帮扶指导

IMPLEMENT GUIDANCE ON ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION

公司成立 8 个节能环保帮扶指导工作组，印发公司《关于开展节能环保帮扶指导工作的通知》《中交各级总部及项目场站环保管理要点》《生态环境保护应知应会手册》等指导手册，并根据投资建设的业务领域特点及节能环保方面突出问题，进行调研分析、专家会诊和现场帮扶指导，提高标准化管理水平。

We established eight assistance and guidance work teams for energy conservation and environmental protection, and issued the *Notice on Conducting Assistance and Guidance on Energy Conservation and Environmental Protection*, the *Key Points on Environmental Management of Headquarters at All Levels and Project Terminal in CCCC*, the *Manual on Required Knowledge and Skills of Ecological Environment Protection* and other guidance manuals. In addition, according to the features of invested and constructed business fields as well as the prominent problems of energy conservation and environmental protection, we conducted surveys and analysis, expert consultations and on-site assistance & guidance to improve standardized management level.

开展节能环保合规性专项整治

CONDUCT SPECIAL RECTIFICATION OF COMPLIANCE WITH ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION

公司积极开展固定资产投资、施工项目污染防控、工业企业污染防控、运营业务环境风险防控等专项整治活动，全面提升环保治理能力，消除环境风险隐患。

We have actively conducted special rectification activities such as fixed asset investment, pollution prevention and control of construction projects, pollution prevention and control of industrial enterprises, and environmental risk prevention and control of the operating business, and comprehensively improved the ability of environmental protection governance to eliminate potential environmental risks.

降低污染排放

REDUCE POLLUTION EMISSIONS

公司围绕生产运营所产生废气、废水、固体废弃物及其他污染物，有针对性地制定管控措施，确保排放物达到排放标准，减少对环境的负面影响。

Focusing on the waste gas, wastewater, solid waste and other pollutants generated from production and operation, we have formulated targeted control measures to ensure that the emissions meet the emission standards, so as to reduce the negative impact on the environment.

温室气体管理

GREENHOUSE GAS MANAGEMENT

公司聚焦“双碳”目标，研究建立碳排放核算体系，对二氧化碳排放量进行统计分析，加强设备技术提升改造，降低综合排放，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引领者。

Focusing on the "dual carbon" goal, we study and establish a carbon emission accounting system, and conduct statistical analysis on carbon dioxide emissions. In addition, we strengthen technical transformation and upgrading of equipment to reduce the comprehensive emissions, striving to become a leader in the whole life cycle of green and low-carbon development in the field of world-class transportation infrastructure.

废气排放管理

EXHAUST EMISSION MANAGEMENT

公司严格执行《中华人民共和国环境保护法》《中央企业节能减排监督管理暂行办法》等与空气污染相关的法律法规，通过优化调整工艺、技术改造升级，推广节能环保产品、应用太阳能、天然气等清洁能源，减少废气的产生与排放。中国路桥香港屯门收费广场项目中应用超低硫柴油技术，所有机械和发电机均使用超低硫柴油，有效减少了二氧化硫等废气的排放。

We strictly enforce the *Environmental Protection Law of the People's Republic of China*, the *Interim Measures for the Supervision and Administration of Energy Conservation and Emissions Reduction of Central SOEs* and other laws and regulations related to air pollution, and optimization & adjustment of technology, technical transformation & upgrading, promotion of energy conservation & environmental protection products, application of solar energy/natural gas and other clean energy are utilized by the Company to reduce waste generation and emissions. For example, in the Toll Plaza in Tuen Mun, Hong Kong, which is constructed by the China Road and Bridge Corporation, ultra-low sulphur diesel technology was applied in all machinery and generators to reduce emissions of sulphur dioxide and other gases.

废水排放管理

WASTE WATER DISCHARGE MANAGEMENT

公司严格规范建设项目的环评评价和环境保护设施建设工作，严格执行污染物排放许可标准，现场污水按国家标准《污水综合排放标准》（GB8978-1996）的要求排放。黑山南北高速项目在项目施工期间严格执行污水排放标准，污水经过沉淀池系统、PH 值调节系统、油水分离器系统等一系列控制处理，达到标准后排放。

We strictly regulate the environmental impact assessment of the construction projects and the construction of environmental protection facilities, and strictly implement the pollutant discharge permit standard, so our on-site sewage is discharged according to the requirements of the national standard *Integrated Wastewater Discharge Standard* (GB8978-1996). For example, during the construction of the North-South Expressway project in Montenegro, the wastewater discharge standards were strictly implemented. Subject to a series of control and treatments, such as sedimentation tank system, pH value regulation system and oil-water separator system, the wastewater was then discharged after meeting the standards.

废弃物管理

WASTE MANAGEMENT

公司严格遵守《中华人民共和国固体废物污染防治法》以及有关法律法规要求，高度重视发展循环经济，探索创新可持续再利用方案，鼓励固体废弃物资源化利用，实现资源节约型、环境友好型、技术创新型企业的转型。公司按照“源头减量、分类管理、就地处置、排放控制”的原则对生产、生活过程中产生的各类无害废弃物进行规范化处理，降低对环境的影响；积极响应国家、地方“垃圾分类”号召，全面推广“垃圾分类”工作，对生活垃圾实施分类存放，委托有资质的单位接收施工船舶生活垃圾，避免污染海域；对建筑垃圾集中分类存放，实施无害化处置或资源化利用；鼓励金属类垃圾作为施工材料或工具就地处置，完善危险废物类别清单及标识牌，委托有资质单位进行危废处置。此外，对钢材、水泥等废旧建筑材料废弃物进行再生综合利用，加强对粉煤灰、煤矸石、矿渣、废旧轮胎等工业废料和疏浚土、建筑垃圾、污水雨水的无害化处理和综合利用力度，实现废弃物的资源化、减量化和无害化。

We strictly follow the *Law of the People's Republic of China on the Prevention and Control of Solid Waste Pollution* and the applicable laws & regulations, and attach great importance to the development of a circular economy to explore innovative, sustainable and recycling plans. For example, we encouraged solid waste resource utilization to realize the transformation of resource-saving, environment-friendly and technology-innovative enterprise. Moreover, based on the principle of "source reduction, classified management, on-site disposal and emission control", we conducted the standardized treatment for various harmless wastes generated from production and life to reduce the impact on the environment. Furthermore, we actively responded to the national and local call on "Garbage Classification" and comprehensively promoted the work as follows: (i) we conducted classified storage for the household waste; (ii) we entrusted the qualified entities to receive the garbage of construction vessels so as to avoid the marine pollution; (iii) we stored the construction waste in a centralized and classified manner to implement the harmless disposal or resource utilization; (iv) we encouraged the on-site disposal of

metal waste as a construction material or tool; (v) we improved the hazardous waste category list and identification plate, and entrusted the qualified entities to dispose of the hazardous waste. In addition, we recycled and comprehensively utilized the construction material waste (such as steel and cement, etc), and strengthened the harmless disposal and comprehensive utilization efforts on the industrial waste (such as coal ash, coal gangue, slag, waste tires), dredged soil, construction waste, sewage and rainwater to achieve the recycling, reduction and harmless utilization of waste.



一航局海口市江东新区起步区水系（道孟河、芙蓉河）综合治理工程创新采用生物技术进行坑塘底泥处理处置，用于底泥堆肥、底泥填方、底泥制陶、底泥制砖，在美化环境防止二次污染的同时，带来了可观的经济效益

In the comprehensive treatment project by CCCC First Harbor Engineering Company Ltd. for the water system (Daomeng River, Furong River) of Starting Area, Jiangdong New District, Haikou, the biological technology was innovatively applied for the treatment and disposal of pit and pond bottom mud (including bottom mud composting, bottom mud filling, bottom mud pottery and bottom mud brick making), which not only beautifies the environment and prevents secondary pollution, but also brings considerable economic benefits

高效利用资源

EFFICIENT UTILIZATION OF RESOURCES

中国交建积极响应国家“建设资源节约型社会”号召，将环保理念融入项目规划、设计、建设、运营、维护全生命周期，持续优化能源消费结构，钻研生态环境保护技术，推广清洁能源使用，努力形成资源节约型、环境友好型产业结构和生产方式。

We actively respond to the national call on "building a resource-saving society", and integrate the environmental protection philosophy into the full life cycle of project planning, design, construction, operation, and maintenance. Moreover, we constantly optimize energy consumption structure, and study the ecological environment protection technology. In addition, we promote the use of clean energy, and make efforts to form a resource-saving and environment-friendly industrial structure and production mode.

完善监测体系，提升管理水平

OPTIMIZE THE MONITORING SYSTEM AND IMPROVE THE MANAGEMENT LEVEL

公司进一步完善中国交建能源节约与生态环境保护统计监测体系，升级“节能环保信息统计报送管理系统”，提升能源消耗统计监测的精准化管理水平。同时，公司管理部门通过监督人力和技术投入情况、对工作人员进行培训等方式监测可持续或绿色产品开发工作的现状和进展。

We have further improved the statistics and monitoring system of energy conservation and ecological environmental protection, and upgraded the "Energy Conservation and Environmental Protection Information Statistics and Reporting Management System" to improve the accurate management level of energy consumption statistics and monitoring. Meanwhile, our corporate management monitors the status and progress of sustainable or green product development by supervising the manpower & technical input and training the staff.

优化能源结构，提升能效水平

OPTIMIZE THE ENERGY STRUCTURE AND IMPROVE ENERGY EFFICIENCY

公司大力推广太阳能、天然气等清洁能源应用，加大清洁能源在能源消费结构中的比重，优化能源消费结构。推广使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，鼓励使用天然气作为沥青搅拌站的主要燃料。2021年，中国交建综合能源消耗量为149.82万吨标准煤，较上年略有增加。

We vigorously promote the application of solar energy, natural gas and other clean energy, and increase the proportion of clean energy in the energy consumption structure to optimize the energy consumption structure. Moreover, we promote the use of solar street lamps and warning lights, solar water heaters, LED lamps, and intelligent lighting control systems, and encourage the use of natural gas as the main fuel of asphalt mixing plants. In 2021, our comprehensive energy consumption was 1.4982 million tons of standard coal, a slight increase from the previous year.

强化创新攻关，推广节能技术

STRENGTHEN INNOVATIVE TACKLING AND PROMOTE ENERGY-SAVING TECHNOLOGY

公司依托项目开展节能环保领域的科技研发和技术装备自主创新，鼓励所属各级单位开展生态环境保护技术和管理创新与攻关，推广节能低碳环保“四新技术”（新材料、新技术、新工艺、新设备）应用，推进绿色施工科技进步。

We rely on our projects to conduct the technological R&D and the independent innovation of technical equipment in the fields of energy conservation and environmental protection, and we encourage our affiliated units at all levels to carry out the innovation and tackling of ecological environmental protection technology and management. For example, we promoted the application of "Four New Techniques" (new materials, new technology, new process, new equipment) in respect of energy conservation, low carbon and environmental protection to drive the technological progress of green construction.



四航局中国交建南方总部基地项目，广泛使用节能新型建筑材料，有效减少材料和能源的损耗且维护成本较低，荣获“国际标准智慧园区示范区”称号

The China Communications Construction Southern Headquarters Base Project by the CCCC Fourth Harbor Engineering Company Ltd. has been awarded the title of "Demonstration Zone of International Standard Intelligent Park", in which, the energy-saving new construction materials were widely used to effectively reduce material & energy loss and achieve low maintenance cost

科学节约用水，提高用水效益

SAVE WATER SCIENTIFICALLY AND IMPROVE WATER EFFICIENCY

公司严格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。在选择取水点时避开生态保护区、水源保护地等敏感地带；大力推广箱梁节水养生等节水工艺技术，改进施工及养护工艺，采用井点降水收集水资源循环利用技术、自动喷淋养生系统等减少用水量；严格实施清污分流、雨污分流，生产废水、生活污水分别回收再利用等水资源管理措施，提高水资源利用率。

We strictly require each construction project to apply for a water-drawing permit according to law and pay water resource fees to obtain the water-drawing right. In the selection of water-drawing points, we avoid ecological protection areas, water protection areas and other sensitive areas; moreover, we vigorously promote water-saving technologies such as box girder water-saving health preservation to improve construction and maintenance technology, and we utilize the well point precipitation collection water resources recycling technology and the automatic spraying health preservation system to reduce water consumption; in addition, we strictly implement water resource management measures, such as separating sewage from clear water/rainwater, and recycling production of wastewater and living sewage respectively, so as to increase the utilization rate of water resources.



全球首个“智慧零碳”码头——天津港北疆港区 C 段智能化集装箱码头

The world's first "Intelligent Zero Carbon" terminal -- Intelligent Container Terminal at Section C, Beijiang Port, Tianjin Port



中交养护集团桥梁快速拆建成套技术达到国际领先水平，在柱 3 小时内拆除 2 座跨线天桥，全过程未中断交通，无粉尘、噪音污染

CCCC Infrastructure Maintenance Group's packaged technology of rapid bridge removal and construction reaches the international leading level, and they removed two overpass bridges within three hours in Guangxi, without traffic interruption, dust or noise pollution during the whole process

应对气候变化

RESPOND TO CLIMATE CHANGE

中国交建积极应对气候变化，以公司《绿色低碳行动方案》为指导，谋划布局绿色产业，积极推动绿色基础设施建设，做好节能减排工作和清洁能源开发利用，探索低碳城市建设，有效控制温室气体排放，加快发展方式实现全面绿色转型。

We actively respond to climate change. For example, we take our "Green Low Carbon Action Plan" as the guidance to plan the layout of the green industry, and positively promote green infrastructure construction to properly conduct the energy saving and emission reduction as well as the development and utilization of clean energy. In addition, we explore the low-carbon city construction to effectively control greenhouse gas emissions, and accelerate the development modes to realize the comprehensive green transformation.

推动传统产业绿色转型

PROMOTE GREEN TRANSFORMATION OF TRADITIONAL INDUSTRIES

公司大力加强低碳、零碳、负碳重大科技攻关，在交通基础设施、市政环保基础设施、海绵城市、园林绿化、装备制造等领域开展绿色低碳相关业务，推动传统产业转型升级。公司连续 10 年推出“煤改气”“油改气”、分布式风光互补发电、靠港船舶使用岸电、装配式建筑等 143 项绿色示范项目，淘汰老旧设备约 1 万台套，完成节能环保技改项目 1,000 余项。

We have made great efforts to tackle significant technological challenges of low carbon, zero carbon and negative carbon, and conducted green and low-carbon businesses in transportation infrastructure, municipal environmental protection infrastructure, sponge city, landscaping, equipment manufacturing and other fields to promote the transformation and upgrading of traditional industries. During the past 10 years, we have consecutively launched 143 green demonstration projects, such as "replacing coal with gas", "replacing oil with gas", distributed wind-light complementary power generation, shore power for berthing vessels, and prefabricated buildings, in which, we have eliminated about 10,000 sets of old equipment, and more than 1,000 energy conservation and environmental protection technological transformation projects have been completed.

拓展绿色低碳新兴产业

EXPAND GREEN AND LOW-CARBON EMERGING INDUSTRIES

中国交建紧跟国家战略部署，围绕“江河湖海优先”经营战略，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、河湖生态系统修复、土壤环境修复、城镇污水处理、固废处理、海上风电、光伏发电等新领域取得突破。

Closely following the national strategic deployment, we focus on the business strategy of "Priority in Rivers, Lakes and Seas" to actively expand green and low carbon emerging business and innovate the development mode, and we have made breakthroughs in river basin comprehensive treatment, the river/lake ecosystem restoration, soil environmental restoration, urban wastewater treatment, solid waste treatment, offshore wind power, and photovoltaic power generation.

公司持续探索低碳城市建设，系统实施一淀三河三江四湖等流域治理综合开发项目，先后策划实施永定河、白洋淀、汾河等十大流域治理项目，建成全国首个 5G 地下水水质净化厂——深圳市洪湖水水质净化厂工程、全国首座现代化专门污泥卫生填埋场——天津青凝侯淤泥填埋场应急处置项目等一批重点项目，绿色低碳新兴产业初具规模。

We constantly explore low-carbon city construction, and systematically implement the comprehensive development projects of governance in eleven river basins to successively plan and conduct ten river basin governance projects in Yongding River, Baiyangdian Lake, Fenhe River, etc. We have built the first 5G underground water purification plant in China (Shenzhen Honghu Water Purification Plant project) and a number of key projects, such as the first modernized specialized sludge sanitary landfill in China (Tianjin Qingninghou Sludge Landfill Emergency Treatment project), so our green and low-carbon emerging industries have begun to take shape.



雄安新区森林城市“千年秀林”项目

Forest City "Millennium Beautiful Forest" project in Xiong'an New Area

践行绿色运营 PRACTICE GREEN OPERATION

中国交建倡导绿色办公，鼓励引导员工形成绿色生活方式，以自身实际行动践行绿色低碳理念；开展绿色环保宣传教育，科普生态保护知识，营造生态文明风尚；积极践行环保公益，落实生态环境修复治理与生物多样性保护。

We advocate green office, encourage and guide our employees to form a green lifestyle, and practice green and low-carbon philosophy with their practical actions. Moreover, we conduct publicity and education on green environmental protection, and popularize ecological protection knowledge to create ecological civilization. In addition, we actively practice public welfare of environmental protection, and implement ecological environment restoration governance and biodiversity protection.

倡导绿色办公

ADVOCATE GREEN OFFICE

公司倡导简约适度、绿色低碳的生活方式，厉行节约用水、用电，积极开展节能提升，倡导推动“无纸化”办公，公司内部通过建设“无纸化”会议系统、采用喷墨打印机等措施减少氮氧化物和二氧化硫的排放；有针对性开展“绿色出行”“健步走”等节能减排体验活动，引导员工在日常工作、生活中养成良好的节能低碳生活习惯，不断提升节能环保和绿色办公、生活的思想自觉和行动自觉。

We advocate simple and moderate, green and low-carbon lifestyle, and strictly save water and electricity to actively promote energy conservation and advocate a "paperless" office. For example, we constructed the "paperless" conference system and used inkjet printers to reduce the emission of nitrogen oxide and sulfur dioxide. Moreover, we conducted the targeted energy conservation and emission reduction experiential activities such as "Green Travel" and "Brisk Walking" to guide our employees to form good energy-saving and low-carbon living habits in their daily work and life, and constantly improve their awareness and conscious actions on energy conservation, environmental protection and green office and life.

加强环保教育

STRENGTHEN ENVIRONMENTAL PROTECTION EDUCATION

公司积极开展低碳日活动，采用线上线下相结合的方式，开展环保相关内容宣传。通过“中交网院”网络培训平台开展“绿色讲堂”环保教育培训和专题培训活动，开展 10 期“绿色讲堂”培训，近万人次参与培训。

We actively conduct low-carbon day events, and carry out environmental protection related publicity online and offline. For example, the "Green Lecture" environmental education and special training events have been held via the online training platform of "CCCC Online School", and ten "Green Lecture" training sessions have been carried out with nearly 10,000 trainees.

生物多样性保护

BIODIVERSITY PROTECTION

公司积极响应保护生物多样性、共建生命共同体的倡议，主动参与项目当地的生物多样性保护。在南亚，斯里兰卡科伦坡港口城项目发起美丽海滩计划；在欧洲，黑山南北高速项目同步启动塔拉河治理工程，并定期对塔拉河生物多样性进行专门监测；在非洲，蒙内铁路项目与肯尼亚专业动物组织合作，专门设置 14 处大型动物通道、600 处涵洞和 61 处桥梁供动物穿行。加纳特马港项目在海滩开辟专门区域打造海龟孕育中心。公司将企业生产活动和自然生态环境相结合，勾勒出人与自然和谐相处的美好画卷。

We actively respond to the initiative of protecting biodiversity and building a community of life, and positively participate in biodiversity protection in the place where our project is located. In South Asia, we launched the Beautiful Beaches Initiative in the Sri Lanka Colombo Port City project. In Europe, we simultaneously launched the Tara River treatment engineering together with the North-South Expressway project in Montenegro, and regularly monitored the biodiversity of Tara River. In Africa, in the Mombasa-Nairobi Railway project, we collaborated with Kenyan professional animal organizations to arrange 14 large animal passages, 600 culverts and 61 bridges for animals to cross. In the Tema Port project in Ghana, we created a sea turtle breeding center in a dedicated area on the beach. In a word, we combine our production activities with the natural ecological environment to sketch out a beautiful picture of harmonious coexistence between man and nature.



公司党委副书记刘翔在推进全球生态文明建设（洱海）论坛作案例分享

Liu Xiang, the Company's Deputy Secretary of the Party Committee, shared the case at the Erhai Forum on Global Ecological Civilization Construction

案例 CASE

守护红树林“幼儿园” Guard mangrove "Kindergarten"

四航院海南炼化项目的临时施工通道，毗邻 200 多亩有着“海岸卫士”“海洋绿肺”美誉的红树林。红树林旁边的滩涂上，星星点点生长着红树林的幼苗，这片滩涂原本是项目临时施工通道的首选方案，直线贯穿这里距离短、成本低，但会影响红树林幼苗的生长。为了最大程度保护这片原本不在保护范围内的红树林幼苗，四航院通过优化设计，绕行 120 米，虽然增加成本和工期，但却为红树林守住了这片“幼儿园”。

The temporary construction channel of the Hainan Refining and Chemical project by the CCCC Fourth Harbor Consultants Co., Ltd. is adjacent to more than 200 mu of mangrove, which has the reputation of "coastal guard" and "green lung of the ocean", and the mudflat next to the mangrove is dotted with mangrove seedlings. This mudflat was originally the first choice for the temporary construction channel of the project, as it has a short distance and it is at a low cost to run straight through it, but this will affect the growth of mangrove seedlings. In order to maximize the protection of the mangrove seedlings, which were not originally within the protection scope, the CCCC Fourth Harbor Consultants Co., Ltd. made a 120m detour through optimized design, which increased the cost and construction period, but protected the "kindergarten" for mangroves.



红树林幼苗
Mangrove seedlings

人本至上 持续的呵护

PEOPLE FIRST · CONTINUOUS SUPPORT

中国交建坚持以人为本，积极保障员工薪酬与福利、健康与发展、民主管理等合法权益；优化人才培养机制，畅通员工发展通道，助力员工成长成才；努力为广大员工营造良好工作环境和氛围，促进实现工作生活平衡，全力提升员工获得感、幸福感和满足感。

China Communications Construction puts people first, protects the legitimate rights and interests of employees, including salary and welfare, health and development, and democratic management; establishes a sound talent training mechanism to aid the staff's career development and to help employees grow; and strives to create a good working environment and atmosphere for employees, promoting the realization of a work-life balance, and devoting great efforts to enhance employees' sense of gain, happiness and satisfaction.



维护员工权益

SAFEGUARD THE RIGHTS AND INTERESTS OF EMPLOYEES

中国交建严格恪守《中华人民共和国劳动法》《中华人民共和国劳动合同法》《中华人民共和国工会法》等法律要求，建立各项劳动保护制度，充分保障员工的平等就业、成长发展、休息休假、合理薪酬、民主权利等各方面权益。

Strictly complying with the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, the *Trade Union Law of the People's Republic of China* and other applicable laws, we establish various labor protection systems to fully ensure the rights and interests of our employees, such as equal employment, growth & development, holiday and vacation, reasonable remuneration, and democratic rights.

合法平等雇佣

LEGAL AND EQUAL EMPLOYMENT

公司坚决抵制强制劳动、雇佣童工，强化检查分包商非法使用童工情况；公平对待应聘者，坚决查处针对国籍、性别、年龄、种族、宗教、孕残等任何歧视行为；坚持合法合理用工、坚持同工同酬；制定公司《关于进一步推进市场化用工的指导意见》，规范市场化用工管理。2021年，公司劳动合同签订率达100%，未发生雇佣童工、强制劳工及雇佣纠纷情况；未发生与就业歧视有关的法律诉讼造成的金钱损失。

We resolutely oppose forced labor and child labor, and strengthen the inspection of illegal child labor by subcontractors. Moreover, we fairly treat the applicants, and resolutely investigate and punish any discrimination against nationality, gender, age, race, religion, pregnancy and disability. Furthermore, we insist on legal and reasonable employment and equal pay for equal work, and we have formulated the *Guidance on Further Promoting Market-oriented Employment to standardize market-oriented employment management*. In 2021, the signing rate of labor contracts reached 100%, and no child labor, forced labor or employment disputes occurred, so we suffered no monetary losses arising from legal proceedings relating to employment discrimination.

员工性别分布

Gender Distribution of Employees



完善薪酬福利

IMPROVE REMUNERATION AND WELFARE

公司为员工提供具有竞争力的薪酬福利体系，2021年员工薪酬水平在建筑类央企中位居前列；制定印发公司《中长期激励管理办法》，实行正向合理的薪酬激励体制；及时足额缴纳社会保险，为特殊岗位员工购买商业保险，2021年员工社会保险覆盖率100%；建立企业年金制度，2021年累计企业年金规模近162亿元，2.6万余人享受此待遇。

We provide a competitive remuneration and welfare system for our employees, and the remuneration level of our employees ranked at the forefront among construction central SOEs in 2021. Moreover, we have formulated and issued the *Medium and Long-term Incentive Management Measures* to implement a positive and reasonable remuneration incentive system. Furthermore, in addition to contributing social insurance in full and in time, we have further purchased commercial insurance for employees at special posts, and the coverage rate of social insurance for our employees was 100% in 2021. In addition, we have established the corporate pension system, and its accumulative scale was nearly RMB 16.2 billion in 2021, benefiting more than 26,000 employees.

民主管理沟通

DEMOCRATIC MANAGEMENT AND COMMUNICATION

公司按照国家法律法规规定，设置年假、病假、婚假、产假、丧假、事假等假期，保证员工休息休假权益；调整生育政策，保障生育三胎的员工福利不减；健全民主管理制度，制定通过《中国交建职工代表大会表决办法》《中国交建职工代表大会实施办法》《2021年企业民主管理工作推进情况报告》，定期召开职代会，发挥工会作用，保障员工民主权利。

We provide annual vacation, sick leave, marriage leave, maternity leave, funeral leave, personal leave and other holidays in accordance with national laws and regulations to ensure the rights and interests of employees in respect of holidays and vacation. Moreover, we adjust the childbearing policy to ensure that the welfare of employees who give birth to a third child is not reduced. Furthermore, we improve the democratic management system. For example, we formulated and adopted the *Measures for Voting by the CCCC Workers' Congress*, the *Implementation Measures for CCCC Workers' Congress*, and the *Report on the Progress of Corporate Democratic Management in 2021*, and we regularly held the Workers' Congress to give play to the role of labor union and protect the democratic rights of employees.



召开第一届一次职工代表大会暨2022年工作会议

We hold the first session of the 1st Workers' Congress and the 2022 Working Conference

搭建成长舞台 SET UP A STAGE FOR GROWTH

中国交建坚持人才强企，强化人才队伍管理，健全发展通道，完善人才培训培养体系，为员工提供充分发展和实现价值的舞台，致力培养德才兼备的人才队伍，充分释放企业发展活力。

We insist on the principle of strengthening the enterprise through talents, so we enhance the management of the talent team. Moreover, we optimize the development channel and talent training system to provide a stage for employees to fully develop and realize their value. In addition, we are committed to cultivating a talent team with both integrity and the ability to fully release our development vitality.

人才发展管理 TALENT DEVELOPMENT MANAGEMENT

公司组织编制“十四五”人力资源规划，系统优化总部人才管理制度，制修订总部员工、招聘及交流管理办法，确定实施“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；加快专项子规划建设，制定印发公司《2021-2025年所属单位领导班子建设规划》《海外人才队伍建设实施意见》《技能人才队伍建设实施意见》等制度，同时围绕“两大两优”经营策略，研究制定《公司“大交通大城市”业务领域经营管理人才队伍建设指导意见》，全方位加强人才发展顶层设计。

We organize the formulation of the 14th Five-year Plan human resources plan, in which, we systematically optimize the headquarters talent management system, and formulate/revise the measures for the management of headquarters employees, recruitment and exchange. For example, we determined the implementation of six talent cultivation programs (including "Leading Wild Goose", "Kunpeng"), improved the "Six Systems", strengthened the "Six Teams", and promoted the "Six Constructions". Moreover, we accelerated the construction of specific sub-plans, and formulated and issued the *Leadership Construction Plan of Affiliated Units for 2021-2025*, the *Implementation Opinions on Overseas Talent Team Construction*, the *Implementation Opinions on Skilled Talent Team Construction* and other systems. In addition, focusing on the "Two-large and Two-excellent" business strategy, we have discussed and formulated the *Guiding Opinions on the Construction of Operation and Management Talent Team in the Business Field of "Big Transportation and Big City"* to strengthen the top-level design of talent development in an all-round manner.

畅通晋升通道 SMOOTH PROMOTION CHANNELS

中国交建认真落实公司《职务职级体系方案》，研究确立了管理、技术、项目三个职务职级序列，细化不同序列和职级成长通道，为员工打造多元化职业发展通道，建立 241 名优秀年轻干部库，致力培养高端人才。

We earnestly implement our *Position and Rank System Plan* to discuss and establish three position and rank sequences of management, technology and project, and we detail the growth channels of different sequences and ranks to create diversified career development channels for our employees. For example, we established a pool for 241 outstanding young cadres, aiming to cultivate high-end talents.

完善培训体系 IMPROVE TRAINING SYSTEM

公司针对不同职级、岗位制定特色培训体系，围绕员工就业技能、晋升、职业学习等方面培育打造了“企业领导人员班”“优秀年轻干部班”“中青班”“国际商务班”“国际项目经理班”“优秀总工班”等一批具有广泛影响力的培训品牌。2021年，共顺利实施各类培训学习 31,600 余期。

We formulate characteristic training systems for different ranks and posts, and focusing on the employment skills, promotion and professional learning of our employees, we create a number of widely influential training brands, such as "class for corporate management personnel", "class for excellent young cadres", "class for young and middle-aged talents", "class on international business", "class for international project managers", "class for excellent chief engineers". In 2021, more than 31,600 various training sessions were successfully held.

员工培训时长 Hours of Training for Employees



房建业务示范培训班
Housing construction business demonstration training course



新员工培训
Newly-recruited employee training

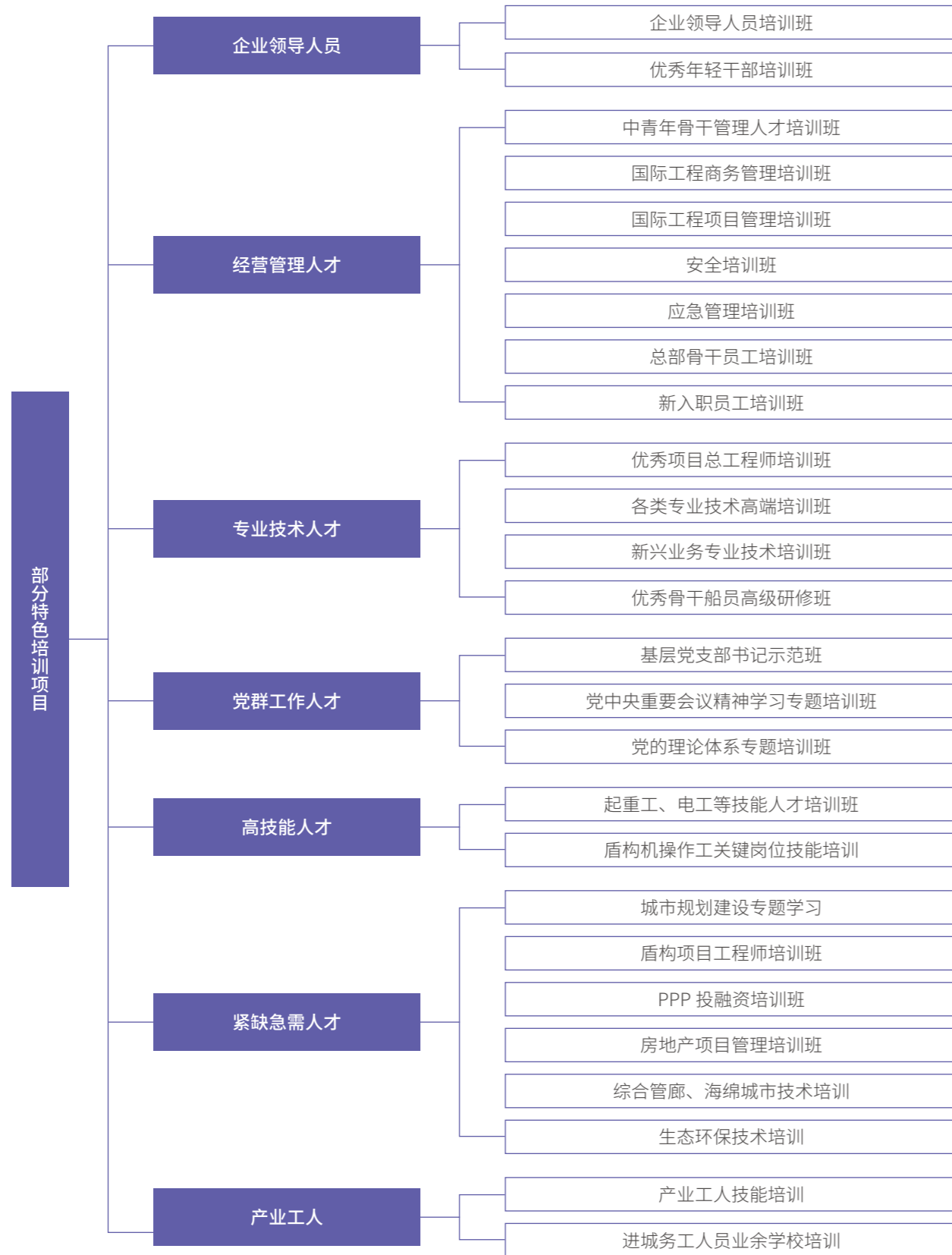


第五届职业技能竞赛
The 5th Vocational Skills Competition

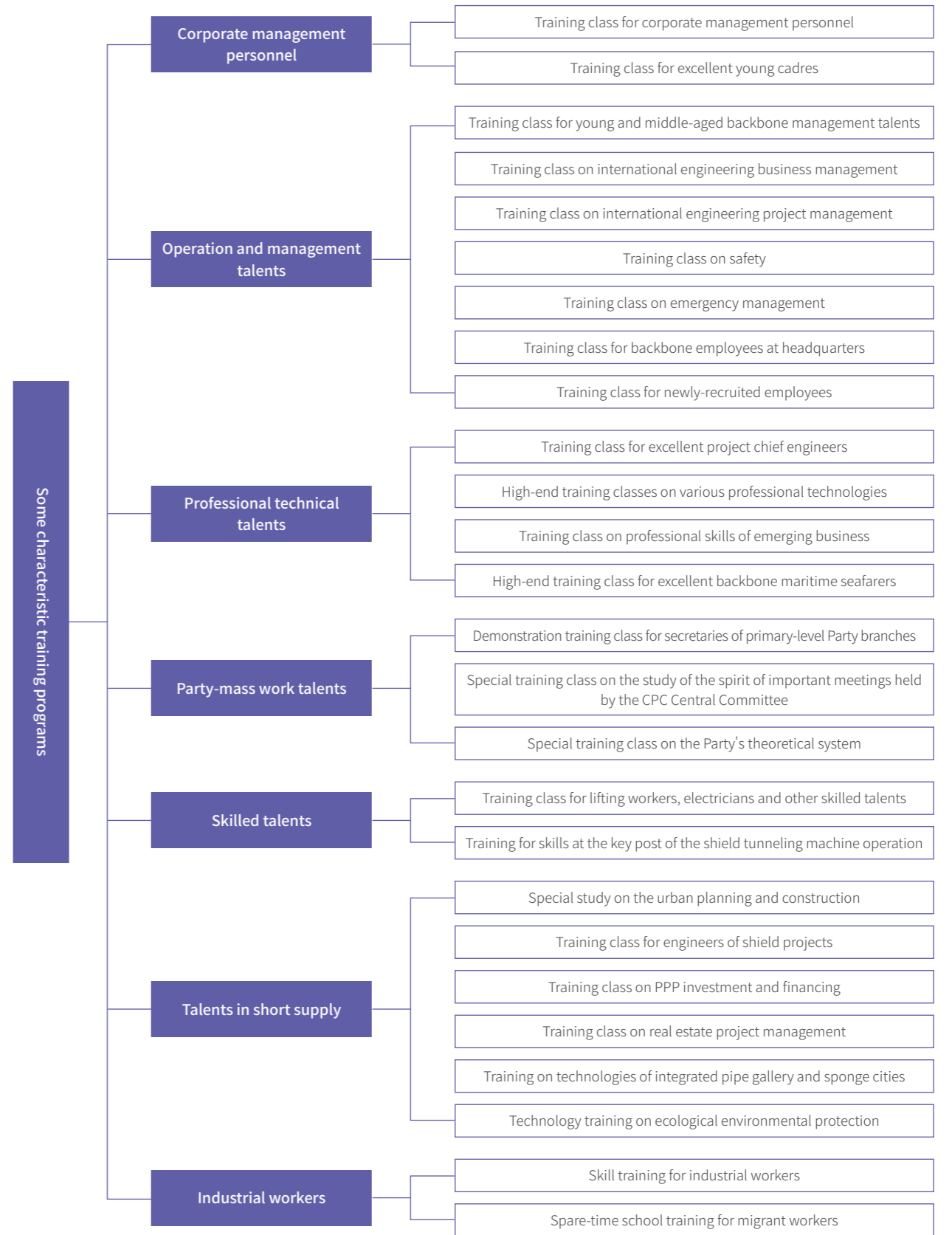


产业工人培训
Industrial worker training

中国交建特色培训体系



CCCC Characteristic Training System



构建和谐企业

BUILDING A HARMONIOUS ENTERPRISE

中国交建非常注重呵护员工健康，重视困难员工帮扶，加大慰问力度，提供家庭支持，开展文化活动，平衡员工工作和生活。

In addition to caring for the health of our employees, we also attach great importance to the assistance of employees in difficulties. We not only enhance the visits, but also provide family support and conduct cultural activities, balancing the work and life of employees.

职业健康

OCCUPATIONAL HEALTH

中国交建严格遵守《中华人民共和国职业病防治法》等法律规章，修订公司《职业健康安全监督管理办法》；开展职业健康宣传和心理疏导，累计 10,468 人次参加职业健康培训学习；组织 11,385 人参加职业病防治法专项答题活动；各子分公司因企制宜，通过建设健康驿站，为员工安排岗前、岗中、离岗及专岗体检，全面呵护员工健康。

We have strictly complied with the *Law of the People's Republic of China on Prevention and Control of Occupational Diseases* and other laws & regulations, and revised the Company's *Supervision and Administration Measures for Occupational Health and Safety*. Moreover, we conducted occupational health publicity and psychological counseling, with 10,468 employees having participated in occupational health training and learning accumulatively. Furthermore, we organized 11,385 employees to participate in the competition event of the Law on Prevention and Control of Occupational Diseases. In addition, according to their conditions, our branches established health stations to arrange pre-job, in-job, post-job and specific-post physical examinations for employees, comprehensively protecting the health of employees.



“健康中国·幸福职工”健康科普巡讲活动

"Healthy China · Happy Employees" medical science popularization lecture tour

帮扶慰问

ASSISTANCE AND VISIT

公司定期开展节日慰问、离退休职工慰问、困难职工子女助学帮扶等活动，从政策、物资等多方面为困难职工提供帮扶救助。2021 年，慰问一线员工 74,830 人，困难职工 2,810 人，发放帮扶金 881 万元。

We regularly conduct activities such as holiday visits, care for retired employees, and assistance to the children of employees in difficulties, which provides assistance to employees in difficulties from policies and supplies. In 2021, we visited 74,830 frontline employees and 2,810 employees in difficulties, and provided assistance funds of RMB 8.81 million.



心系职工情，共圆学子梦——中交投资开展职工子女助学帮扶

Care for employees to achieve their children's university dreams - CCCC Investment Company Limited conducts educational assistance for employees' children



一航局荣获城市困难职工解困脱困表彰会“重要贡献集体”荣誉

The CCCC First Harbor Engineering Company Ltd. is granted the "Important Contribution Collective" honor in the Commendation Meeting for Relief of Urban Workers in Poverty

员工活动

EMPLOYEE ACTIVITIES

公司通过开展各类文艺文化活动增强文化阵地建设，丰富员工生活；开展暑期职工子女爱心托管等服务，为员工提供家庭支持，让爱照进员工心房，做员工的贴心人。

We hold various cultural activities to enhance the construction of the cultural front and enrich the lives of employees. For example, we held caring custody services for the children of employees during summer vacation to provide family support for employees, making the love shine into the hearts of employees and becoming a close friend of employees.



中交路建举办建党百年文艺晚会

CCCC Road and Bridge International holds the gala evening for the 100th Anniversary of the Founding of the Communist Party of China



一公局举办儿童节烘焙活动

CCCC First Highway Engineering holds baking activities on Children's Day



一航院开展职工趣味运动会

CCCC First Harbor Consultants holds employee fun sports meeting



二公局六公司举行员工集体婚礼

The No. 6 Company of CCCC Second Highway Engineering holds a collective wedding for employees

物阜民安 持续的美好

PROSPERITY AND PEACE ·
LASTING BEAUTIFUL LIFE

中国交建坚持用心服务大众、回报社会，积极投身社区发展、志愿服务、公益慈善、抢险救灾等行动中，全力奉献社会，以实际行动彰显敢于担当、无私奉献的央企精神。

China Communications Construction consistently serves the public and society by actively engaging in community development, volunteering, charity, disaster relief, etc. to demonstrate the spirit of being responsible and selfless contribution with practical actions as a central state-owned enterprise.



中国交建
CHINA COMMUNICATIONS CONSTRUCTION

中交怒江建筑
产业园

开展社区关怀

CONDUCT COMMUNITY CARE

公司通过打造“蓝马甲”志愿服务品牌，积极开展志愿活动，解决群众所需所盼，助力建设和谐社区。2021年，中交“蓝马甲”走进社区为居民开展便民服务，协助各地政府开展疫情防控工作，主动参加助力高考志愿服务、爱心献血等活动，让“蓝马甲”成为社区靓丽的风景线。

Creating the "Blue Vest" volunteer service brand, we actively conduct volunteer activities to meet the needs and expectations of the masses and help build a harmonious community. In 2021, our "Blue Vest" went into communities to provide convenient services for residents, and assisted the local governments in COVID-19 prevention and control. In addition, we also positively participated in volunteer services for college entrance examination and blood donation activities, making "Blue Vest" a beautiful scene in the community.



公规院助力社区开展疫情防控工作

CCCC Highway Consultants assists communities to carry out COVID-19 prevention and control



四航院博士吕邦来为学生开展讲座

Lv Banglai, a doctor from CCCC Fourth Harbor Consultants, is giving a lecture to students



水规院组织员工开展义务献血

CCCC Water Transportation Consultants organizes employees for voluntary blood donation



中交路建开展环保进社区活动

CCCC Road and Bridge International conducts environmental protection activities in the community

实施济弱帮困

AID THE DISTRESSED AND HELP THE NEEDY

中国交建遵守《中华人民共和国慈善法》《中华人民共和国公益事业捐赠法》等法律法规，通过组织开展“中交助梦”系列活动，深度参与公益慈善活动。开展关爱留守儿童、青少年综合服务、爱心助学等公益项目；积极与宝贝回家志愿者协会合作，参与到打拐行动中；积极进行慈善捐助，通过基金会、红十字会、地方政府等渠道为需要帮助的群体捐款。

We comply with the *Charity Law of the People's Republic of China*, the *Public Welfare Donation Law of the People's Republic of China* and other laws & regulations, and organize and conduct the campaign "CCCC Makes Dream Come True" to deeply participate in public welfare and charity events. For example, we held the public welfare programs such as care for left-behind children, comprehensive services for teenagers, and educational assistance, and we also actively cooperated with the Baby Back Home Volunteers Association to participate in the anti-abduction campaign. In addition, we also actively made charitable donations to groups in need via foundations, Red Cross, local governments and other channels.

我们的成绩

Our Achievements



公司荣获第十一届“中华慈善奖”

We won the 11th "China Charity Awards"



“中交助梦”责任品牌启动仪式

The launching ceremony of our social responsibility brand "CCCC Makes Dream Come True" is held

驰援应急救灾

RUSH TO EMERGENCY ASSISTANCE AND DISASTER RELIEF

中国交建依托主责主业优势，在抗洪救灾、海上救援、抗击台风、协助处理高速公路事故等灾害险情中逆行而上，全力保障人民群众的生命安全，受到了各级政府和相关单位的高度肯定和点赞。

Relying on our advantages of primary social responsibility and major business, we have gone against the tide in flood fighting and disaster relief, maritime rescue, typhoon fighting and expressway accident handling, and made every effort to protect people's lives and safety, which has been highly recognized and praised by governments and relevant units at all levels.



河南省委对公司驰援“7·20”特大暴雨洪灾表示高度肯定和感谢

The CPC Henan Provincial Party Committee expresses high appreciation and gratitude for our rescue in the "July 20" torrential rain and flood.

案例 CASE 全力抗洪，“豫”你同在

Fight against the flood together with "Henan" people

7月中下旬，河南省遭遇特大暴雨和洪涝灾害。中国交建积极贯彻落实习近平总书记对防汛救灾工作作出的重要指示，落实党中央、国务院决策部署，迅速组织在豫企业和施工项目部积极投入抢险救灾工作，累计派出抗洪抢险人员1,200余名、设备180余台、车辆100余辆，积极配合当地政府开展防汛救援行动，全力保障人民群众生命财产安全；并通过河南省慈善总会向河南灾区捐款1,200万元，支持河南水灾紧急救援和灾后恢复重建工作。

In mid-to-late July 2021, Henan Province encountered torrential rain and flood. In order to actively implemented General Secretary Xi Jinping's important instructions on flood prevention and disaster relief, and the decision and deployment of the CPC Central Committee and the State Council, we rapidly organized our enterprises and project offices in Henan to actively engage in emergency rescue and disaster relief, and accumulatively dispatched over 1,200 flood fighting & emergency personnel, more than 180 sets of equipment and 100-plus vehicles. Moreover, we actively cooperated with the local governments to carry out the flood fighting and rescue actions and make every effort to ensure the safety of people's lives and property. In addition, we donated RMB 12 million to the disaster-hit areas via the Charity Federation of Henan Province to support flood emergency rescue and post-disaster recovery & reconstruction in Henan Province.



公司防汛突击队参与紧急救援

Our flood prevention commandos participate in emergency rescue

案例 CASE 被困10人全部获救!

All 10 trapped people were rescued!

8月30日，陕西省凤县在建316国道酒奠梁段改建工程酒奠梁隧道发生坍塌事故，导致10名施工人员被困，情况十分紧急。接到国家安全生产应急救援中心出警指令后，中交重庆救援队科学安排，快速行动。30分钟内先导队人员出发，3个小时重装出动，携带120余台套设备跨越700余公里，7小时到达事故现场，20个小时钻通逃生通道，成功营救被困人员。每一个时间节点和救援数据都体现一支国家专业队的实力与素养，展示了中国交建大国央企的责任与担当，获得了陕西省应急厅的高度评价。

On August 30, 2021, the Jiudianliang Tunnel in the Jiudianliang Section reconstruction project of No. 316 National Highway under construction in Feng County, Shaanxi Province collapsed, and 10 workers were trapped, which is an emergency. After receiving the instructions from the National Work Safety Emergency Rescue Center, CCCC Chongqing Rescue Team made scientific arrangements and acted quickly. Their pilot team set out within 30 minutes, and the principal team departed in three hours. They carried more than 120 sets of equipment and traveled more than 700 km for seven hours, later they arrived at the accident scene. They spent 20 hours drilling through an escape channel and successfully rescued the trapped workers. Every time node and rescue data reflect the strength and quality of a national professional team, demonstrating the responsibility and assumption of China Communications Construction as a central state-owned enterprise in China, and they were highly appraised by the Department of Emergency Management of Shaanxi Province.



中交重庆救援队

CCCC Chongqing Rescue Team

未来展望

FUTURE PROSPECT

逐梦再出发！2022 年将迎来我们党的二十大胜利召开，中国交建将继续在党的坚强领导下奋力前行，再接再厉，努力在困境中突围，在改革中蝶变，在发展中创新，于变局中开新局，在“新”的赶考路上接续奋斗，在建设具有全球竞争力的科技型、管理型、质量型世界一流企业的征程中再创辉煌！

We set off again in pursuit of our dream! The 20th National Congress of the Communist Party of China will be held in 2022. Under the leadership of the CPC, China Communications Construction will work tirelessly to overcome difficulties, make breakthroughs in the reform, and pursue innovative development and progress in the midst of changes. It will make brilliant achievements again as it works to build a world-class tech enterprise with global competitiveness in management and quality!

我们将勇担深化改革责任，全力推进治理开新局。牢记习近平总书记关于国企改革的重要指示批示精神，坚决扛起“三个试点”先行示范的政治责任，积极对标世界一流管理经验，提升国际化、精细化和专业化管理水平。同时，把可持续发展理念持续融入公司治理，完善公司 ESG 管治机制，全面实现治理体系和治理能力现代化。

We will fulfill the responsibility of deepening reform and strive to make new progress in governance. Bearing in mind the guidelines of General Secretary Xi Jinping's important instructions on the reform of state-owned assets and state-owned enterprises, we will fulfill the political responsibility of the "three pilot programs", and exercise world-class, refined and professional management. At the same time, we will pursue sustainable development in corporate governance, improve the ESG governance mechanism, and modernize the governance system and capabilities across the board.

我们将勇担国之栋梁责任，全力推进发展谱新篇。锚定“两保一争”战略目标，坚定“123456”总体发展思路，坚持科技创新驱动，勇当原创技术“策源地”和现代产业链“链长”，聚焦“大交通”“大城市”核心主业，高质量践行“交通强国”战略，以更强实力、更足底气做强做优做大优势主业，当好国民经济“稳定器”和“压舱石”。

We will fulfill our responsibility as a pillar of the state and strive to make new development achievements. We set our sights on "two guarantees and one endeavor", implement the overall development idea of "123456", realize technological innovation-driven development,

and serve as the "source" of original technology and the "leader" of the modern industrial chain. Centering on the core business of "big transportation" and "big city", we seek quality progress when implementing the strategy of "building national strength in transportation", make the main business stronger, bigger and better, and become a "stabilizer" and "ballast stone" for the national economy.

我们将勇担生态文明责任，全力推进低碳出新绩。坚定绿色发展理念，聚焦“双碳”目标，深度融入“美丽中国”建设，围绕公司绿色低碳行动方案，以“江河湖海”业务为重点，谋划布局绿色产业，深耕水系治理、流域治理、污水处理等重点领域，积极推动绿色基础设施建设，强化节能减排和清洁能源开发利用，加快推进公司实现绿色低碳转型。

We will fulfill the responsibility of making ecological progress and make new results in low-carbon development. We adhere to the vision of green development, focus on the "dual carbon", and fully participate in building a "beautiful China". Centering on the company's action plan of green and low-carbon development, we prioritize the "river, lake and marine" business, make plans for environmental-friendly industries, make further progress in key areas such as water system governance, water basin governance, and sewage treatment, promote green infrastructure construction, enhance energy conservation and emission reduction as well as clean energy development and utilization, and move faster to become a green and low-carbon enterprise.

我们将勇担美好社会责任，全力推进服务建新功。坚持以人为本，关心关爱员工成长；加强安全管理标准化建设，保障安全生产；热心公益慈善，努力打造“中交助梦”责任品牌，投身和谐社区建设，促进带动就业，助力乡村振兴，倾情回馈社会，助力实现共同富裕。

We will fulfill the responsibility of serving society and strive to provide new services. We show concern for the progress of employees in a people-oriented manner; standardize safety management to ensure work safety; engage in charity to strive to build a responsible brand of "CCCC Makes Dream Come True", devote ourselves to the construction of harmonious communities, create jobs, aid rural vitalization, and help achieve common prosperity for all.

一起向未来！面对全新的 2022 年，我们将牢记国家和人民的嘱托，奋力做到开局即冲刺，起步即决战，以“闯”的精神、“创”的劲头、“干”的作风戮力拼搏，携手各利益相关方跑出高质量发展“加速度”，谱写可持续发展新篇章，为实现中华民族伟大复兴的中国梦作出新的更大贡献！

Together for a shared future! In 2022, we will keep in mind the expectations of the country and the people, make persistent practical efforts from the outset with a pioneering spirit, work with all stakeholders to achieve quality development at a faster rate, compose a new chapter of long-term development, and make new and greater contributions to realizing the Chinese Dream of great national rejuvenation!

附录 APPENDIX

关键绩效表

TABLE OF KEY PERFORMANCE

类别 Category	指标 Indicators	单位 Unit	2019	2020	2021
	公司治理 Corporate Governance				
	董事会中兼任其他公司 CEO 的成员数量 Number of board members who are also the CEO of another company	人 Person	0	0	0
	审计委员会中财务专家人数 Number of financial experts in the Audit Committee	人 Person	1	1	1
	社会责任相关工作向董事会汇报频率 Reporting frequency of social responsibility related work to the Board of Directors	次/年 Time/year	1	1	2
	外部审计费用 ¹ External audit fees ¹	万元 RMB 10,000	4,080	4,270	4,800
	发表信息披露文件 ² Information release and document disclosure ²	份 Copy	195	181	201
管治 Governance	期末控股股东持股比例 The shareholding ratio of controlling shareholders at the end of the period	%	57.96	57.99	58.51
	反贪污 Anti-corruption				
	反贪污培训覆盖的员工比例 Percentage of employees covered by anti-corruption training	%	100	100	100
	员工人均接受反贪污培训小时数 Hours of anti-corruption training per employee	小时 Hour	3	3.1	3.3
	反贪污培训覆盖的董事会成员比例 Percentage 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 Hours of anti-corruption training per director	小时 Hour	6	6.3	7.1
	针对公司或员工的贪污诉讼案件数 Number of corruption litigation cases for the Company or employees	件 PCS	0	0	0

¹ 外部审计费用：中国交建机关支付的年度和中期报告的审计费用。

¹ External audit fees: audit fees paid by CCCC administrative departments for annual and interim reports.

² 发表信息披露文件：为 A+H 公告。

² Information release and disclosure documents: A+H announcement.

类别 Category	指标 Indicators	单位 Unit	2019	2020	2021
	资源使用 Resource Utilization				
	全年能源消耗总量 ³ Total annual energy consumption ³	万吨标煤 10,000 tons of standard coal	167.83	146.4184	149.82
	年度耗电量 Annual electricity consumption	万千瓦时 10,000 KWH	292,140.2	212,485	237,447
	年度耗气量 Annual gas consumption	万标准立方米 10,000 normal cubic meters	3,126.80	2,869	2,147
环境 Environmental	年度燃油量 Annual fuel oil consumption	万吨 10,000 tons	83.35	78.4709	79.37
	万元营业收入综合能耗 ⁴ Comprehensive energy consumption per RMB 10,000 operating revenue ⁴	吨标煤/万元(现价) Ton standard coal/RMB 10,000 (current price)	0.0277	0.0239	0.0219
	排放物 Emissions				
	二氧化碳排放总量 Total carbon dioxide emission	万吨 10,000 tons	465.6	391.0	412.7
	单位营业收入二氧化碳排放量(现价) Carbon dioxide emission per unit of operating revenue (current value)	吨/万元 Ton/RMB 10,000	0.0839	0.0639	0.0602
	员工总数 Total number of employees				
	员工总数	人 Person	124,457	133,294	136,772
	按性别划分 By gender	男性 Male	107,033	107,569	110,731
		女性 Female	17,424	25,725	26,041
		男性比例 Male ratio	86.00	80.70	80.96
		女性比例 Female ratio	14.00	19.30	19.04
社会 Social	按民族划分 By nationality	少数民族员工 Ethnic minority employees	6,504	7,651	7,268
		汉族员工 Han employees	117,953	125,643	129,504
	按年龄划分 By age	30岁以下 Under the age of 30	43,041	51,584	42,008
		30-40岁 30 to 40	46,950	48,652	55,420
		40-50岁 40 to 50	22,571	22,260	25,214
		50岁以上 Above the age of 50	11,895	10,798	14,130

³ 全年能源消耗总量：2020年、2021年全年能源消耗总量及相关耗电、耗气、燃油量和二氧化碳排放量因疫情影响低于公司计划消耗量和排放量。

³ Total annual energy consumption: The total energy consumption and related electricity, gas, fuel oil consumption and carbon dioxide emissions in 2020 and 2021 were lower than our planned consumption and emissions due to the impact of COVID-19.

⁴ 万元营业收入综合能耗：中国交建中国会计准则下2021年营业收入为6,856.39亿元。

⁴ Comprehensive energy consumption per RMB 10,000 operating revenue: Under China accounting principles, the operating revenue of CCCC in 2021 was RMB 685.639 billion.

类别 Category	指标 Indicators	单位 Unit	2019	2020	2021	
社会 Social	按年资划分 By service year	5年以上 Above 5 years	人 Person	89,554	97,851	102,758
		3-5年 3-5 years	人 Person	11,301	11,581	12,987
		3年以下 Under 3 years	人 Person	23,602	23,862	21,027
	按雇佣类型划分 By employment type	全职 Full-time	人 Person	124,457	133,294	136,772
		兼职 Part-time	人 Person	0	0	0
	按地区划分 By region	中国 China	人 Person	117,966	127,189	130,889
		海外 Overseas	人 Person	6,491	6,105	5,883
	员工流失率 Employee turnover rate		%	3.15	3.16	3.17
	按性别划分 By gender	男性 Male	%	83.62	81.77	80.71
		女性 Female	%	16.38	18.23	19.29
	按年龄划分 By age	30岁以下 Under the age of 30	%	46.96	50.53	52.23
		30-40岁 30 to 40	%	28.28	27.91	28.27
		40-50岁 40 to 50	%	10.6	8.07	7.42
		50岁以上 Above the age of 50	%	14.16	13.49	12.08
	健康与安全 Health and Safety					
	工伤总数 ⁵ Total number of work-related injuries ⁵		人 Person	0	0	0
	因工死亡人数 ⁶ Number of work-related deaths ⁶		人 Person	8	6	7
	因工死亡比重 The ratio of work-related deaths		%	0.00511	0.00450	0.00355
	总工伤率 ⁷ The total work-related injury rate ⁷		%	0	0	0
重伤事故率 ⁷ The serious injury accident rate ⁷		%	0	0	0	
轻伤事故率 ⁷ The minor injury accident rate ⁷		%	0	0	0	
因工伤损失工作日数 ⁸ Working days lost due to work-related industries ⁸		天 Day	48,000	36,000	42,000	
客户隐私泄露事件次数 Number of customer privacy leakage events		次 Time	0	0	0	

⁵ 工伤总数：为中国交建总部数据。

⁵ Total number of work-related injuries: data from CCCC headquarters.

⁶ 因工死亡人数：统计依据为生产安全责任事故死亡人数。

⁶ The number of work-related deaths: the statistical basis is the number of deaths due to work safety accidents.

类别 Category	指标 Indicators	单位 Unit	2019	2020	2021
发展与培训 Development and Training					
培训覆盖率 Training coverage		%	100	100	100
按性别划分 By gender	男性 Male	%	100	100	100
	女性 Female	%	100	100	100
按雇员类别划分 By employee category	高级管理者 Senior management	%	100	100	100
	中级管理者 Middle management	%	100	100	100
	普通员工 Regular employees	%	100	100	100
人均培训时长 Per capital training duration		小时 Hours	82	105	110
按性别划分 By gender	男性 Male	小时 Hours	80	103	109
	女性 Female	小时 Hours	86	110	118
按雇员类别划分 By employee category	高级管理者 Senior management	小时 Hours	131	137	141
	中级管理者 Middle management	小时 Hours	138	143	145
	普通员工 Regular employees	小时 Hours	79	138	108
供应链管理 Supply Chain Management					
供应商数量⁹ Quantity of suppliers⁹		个 PCS	1,397	1,496	2,595
按地区划分 By region	东北地区 Northeast China	个 PCS	48	55	111
	华东地区 East China	个 PCS	549	585	831
	中南地区 Central South China	个 PCS	266	286	414
	西南地区 Southwest China	个 PCS	112	123	270
	西北地区 Northwest China	个 PCS	66	66	149
	华北地区 North China	个 PCS	356	381	511

⁷ 总工伤率、重伤事故率、轻伤事故率：均为中国交建总部数据。

⁷ Total work-related injury rate, serious injury accident rate, minor injury accident rate: data from CCCC headquarters.

⁸ 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。

⁸ Lost working days due to work-related injury: the statistical basis is that each death is converted into 6,000 lost working days.

⁹ 供应商数量：2019年、2020年为境内数量，2021年为境内外数量。

⁹ Number of suppliers: domestic suppliers in 2019 and 2020, domestic and overseas suppliers in 2021.

指标索引

INDICATOR INDEX

联交所 ESG 指引 SEHK ESG Guidelines

类别 Category	指标 Indicators	单位 Unit	2019	2020	2021	
社会 Social	报告期审查的供应商数量 Number of suppliers reviewed during the reporting period	个 PCS	1,397	1,496	2,595	
	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 The ratio of suppliers/subcontractors who pass the certification of quality, environment and occupational health & safety management system	%	100	100	100	
	供应商现场核查次数 ¹⁰ Number of supplier on-site review ¹⁰	次 Time	20	10	29	
	供应商现场核查覆盖率 The coverage rate of supplier on-site review	%	1.4	0.7	1.3	
	产品责任 Product Responsibility					
	安全问题产品回收次数 Number of recoveries for products with safety-related problems	次 Time	0	0	0	
	安全相关缺陷投诉数量 Number of complaints related to safety defects	件 PCS	0	0	0	
	客户隐私泄漏事件 Customer privacy leakage events	件 PCS	0	0	0	
	已售或已运送产品总数中因安全与健康理由而须回收的百分比 Percentage of recovery in total sold or shipped products due to safety and health reasons	%	0	0	0	
	客户投诉数量 Quantity of customers' complaints	件 PCS	0	0	0	
	社区投资 Community Investment					
	捐赠总额 Total donation	万元 RMB 10,000	4,596.12	12,308	8,875	
	员工志愿者人数 Number of employee volunteers	人 Person	17,211	19,124	20,080	
志愿活动时长 Volunteer activity duration	小时 Hour	89,861	95,620	100,401		

¹⁰ 供应商现场核查次数：对供应商实行现场抽查，重点抽查专项物资生产商。

¹⁰ Number of supplier on-site review: on-site spot check for suppliers, especially on manufacturers of specific supplies.

层面 Aspects	指标 Indicators	指标内容 Indicator description	回应情况 Response
层面 A1: 排放物 Aspect A1: emission	一般披露 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： Emissions of exhausts and greenhouse gases, emission to water and land, generation of hazardous and non-hazardous wastes, etc.:	✓
	关键绩效指 A1.1 Key performance indicator A1.1	排放物种类及相关排放数据 Types of emission and related emission data	✓
	关键绩效指 A1.2 Key performance indicator 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） Direct (Scope 1) and energy indirect (Scope 2) GHG emissions (in ton) and (if applicable) density (if measured per output unit/per facility)	—
	关键绩效指 A1.3 Key performance indicator 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） Total generated hazardous wastes (in ton) and (if applicable) density (if measured per output unit or per facility)	—
	关键绩效指 A1.4 Key performance indicator 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） Total generated non-hazardous wastes (in ton) and (if applicable) density (if measured per output unit or per facility)	—
	关键绩效指 A1.5 Key performance indicator 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 Describe the emission targets and the steps taken to achieve these targets	✓
层面 A2: 资源使用 Aspect A2: resource utilization	关键绩效指 A1.6 Key performance indicator 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 Describe the treatment methods of hazardous and non-hazardous wastes, describe the waste reduction targets and the steps taken to achieve these targets	✓
	一般披露 General disclosure	有效使用资源（包括能源、水及其他原材料）的政策 Policies for efficient utilization of resources (including energy, water and other raw materials)	✓
	关键绩效指 A2.1 Key performance indicator 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） Total direct and/or indirect energy consumption (e.g. electricity, gas or oil) by type (measured in KWH) and density (if measured per output unit or per facility)	✓
	关键绩效指 A2.2 Key performance indicator A2.2	总耗水量及密度（如以每产量单位、每项设施计算） Total water consumption and density (if measured per output unit or per facility)	—
	关键绩效指 A2.3 Key performance indicator 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 Describe the energy efficiency targets and the steps taken to achieve these targets	✓

层面 Aspects	指标 Indicators	指标内容 Indicator description	回应情况 Response
层面 A2: 资源使用 Aspect A2: resource utilization	关键绩效指 A2.4 Key performance indicator 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 Describe any possible problems in obtaining suitable water sources, the water efficiency targets and the steps taken to achieve these targets	✓
	关键绩效指 A2.5 Key performance indicator 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 Total packaging materials (in ton) of finished products and (if applicable) usage amount of per production unit	—
层面 A3: 环境及天然资源 Aspect A3: environment and natural resources	一般披露 General disclosure	减低发行人对环境及天然资源造成重大影响的政策 Policies to reduce issuer's significant impacts on the environment and natural resources	✓
	关键绩效指 A3.1 Key performance indicator 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 Describe the significant impacts of business activities on the environment and natural resources, and actions taken to manage those impacts	✓
层面 A4: 气候变化 Aspect A4: climate change	一般披露 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 Identify and respond to the policies of significant climate-related issues that have affected and may affect issuer	✓
	关键绩效指 A4.1 Key performance indicator 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 Describe the significant climate-related issues that have affected and may affect issuer, and the actions taken in response	✓
层面 B1: 雇佣 Aspect B1: employment	一般披露 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: Salary and dismissal, recruitment and promotion, hours of work, holidays, equal opportunity, diversity, anti-discrimination and other benefits and welfares: (a) 政策 (a) Policies (b) 遵守对发行人有重大影响的相关法律及规例的资料 (b) Information about compliance with relevant laws and regulations which materially affect the issuer	✓
	关键绩效指 B1.1 Key performance indicator 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 Total number of employees by gender, employment type (e.g. full-time or part-time), age group and region	✓
	关键绩效指 B1.2 Key performance indicator B1.2	按性别、年龄组别及地区划分的雇员流失比率 Employee turnover rate by gender, age group and region	✓
	一般披露 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: The provision of a safe working environment and the protection of employees from occupational hazards: (a) 政策 (a) Policies (b) 遵守对发行人有重大影响的相关法律及规例的资料 (b) Information about compliance with relevant laws and regulations which materially affect the issuer	✓
层面 B2: 健康与安全 Aspect B2: health and safety	关键绩效指 B2.1 Key performance indicator B2.1	过去三年 (包括汇报年度) 每年因工亡故的人数及比率 The number and rate of work-related deaths in each of the past three years (including the reporting year)	✓
	关键绩效指 B2.2 Key performance indicator B2.2	因工伤损失工作日数 Lost working days due to work-related injury	✓
	关键绩效指 B2.3 Key performance indicator 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 Describe the occupational health and safety measures adopted, and the methods of their implementation and supervision	✓

层面 Aspects	指标 Indicators	指标内容 Indicator description	回应情况 Response
层面 B3: 发展与培训 Aspect B3: development and training	一般披露 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 Policies to improve employees' knowledge and skills in performing their job and duties. Describe training activities	✓
	关键绩效指 B3.1 Key performance indicator 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 Percentage of trained employees by gender and employee category (e.g. senior management, middle management)	✓
	关键绩效指 B3.2 Key performance indicator 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 Average training hours completed per employee by gender and employee category	✓
层面 B4: 劳工准则 Aspect B4: labor codes	一般披露 General disclosure	有关防止童工或强制劳工的: Prevention of child Labor or forced Labor: (a) 政策 (a) Policies (b) 遵守对发行人有重大影响的相关法律及规例的资料 (b) Information about compliance with relevant laws and regulations which materially affect the issuer	✓
	关键绩效指 B4.1 Key performance indicator B4.1	描述检讨招聘惯例的措施以避免童工及强制劳工 Describe the measures to review recruitment practices in order to avoid child Labor and forced Labor	✓
	关键绩效指 B4.2 Key performance indicator B4.2	描述在发现违规情况时消除有关情况所采取的步骤 Describe the steps taken to eliminate a violation when it is found	✓
	一般披露 General disclosure	管理供应链的环境及社会风险政策 Policies to manage the environmental and social risks of supply chain	✓
层面 B5: 供应链管理 Aspect B5: supply chain management	关键绩效指 B5.1 Key performance indicator B5.1	按地区划分的供应商数目 Number of suppliers by region	✓
	关键绩效指 B5.2 Key performance indicator 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 Describe the practice in choosing suppliers, the number of suppliers to which such practice is applied, and the related implementation and supervision methods	✓
	关键绩效指 B5.3 Key performance indicator 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 Describe the practice for identifying environmental and social risks at each link of the supply chain, and related implementation and supervision methods	✓
	关键绩效指 B5.4 Key performance indicator 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 Describe the practice of promoting the use of green products and services in supplier selection, and the related implementation and supervision methods	✓

层面 Aspects	指标 Indicators	指标内容 Indicator description	回应情况 Response
层面 B6: 产品责任 Aspect B6: product responsibility	一般披露 General disclosure	有关所提供产品和服务的健康与安全、广告、标签及隐私事宜以及补救方法的： Health and safety, advertising, labelling and privacy matters and remedies relating to products and services provided: (a) 政策 (a) Policies (b) 遵守对发行人有重大影响的相关法律及规例的资料 (b) Information about compliance with relevant laws and regulations which materially affect the issuer	✓
	关键绩效指 B6.1 Key performance indicator 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 Among the total sold or delivered products, percentage of products to be recalled for safety and health reasons	✓
	关键绩效指 B6.2 Key performance indicator B6.2	接获关于产品及服务的投诉数目以及应对方法 Number of complaints received about products and services, and the coping approach	✓
	关键绩效指 B6.3 Key performance indicator B6.3	描述与维护及保障知识产权有关的惯例 Describe practices relating to the maintenance and protection of intellectual property rights	✓
	关键绩效指 B6.4 Key performance indicator B6.4	描述质量检定过程及产品回收程序 Describe the quality verification process and product recall procedures	✓
	关键绩效指 B6.5 Key performance indicator B6.5	描述消费者资料保障及隐私政策，以及相关执行及监察方法 Describe consumer data protection and privacy policies, and the related implementation and supervision methods	✓
层面 B7: 反贪污 Aspect B7: anti-corruption	一般披露 General disclosure	有关防止贿赂、勒索、欺诈及洗黑钱的： The prevention of bribery, extortion, fraud and money laundering: (a) 政策 (a) Policies (b) 遵守对发行人有重大影响的相关法律及规例的资料 (b) Information about compliance with relevant laws and regulations which materially affect the issuer	✓
	关键绩效指 B7.1 Key performance indicator 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 Number of corruption cases brought and concluded against the issuer or its employees during the reporting period, and the outcome	✓
	关键绩效指 B7.2 Key performance indicator B7.2	描述防范措施及举报程序，以及相关执行及监察方法 Describe the preventive measures and reporting procedures, and related implementation and supervision methods	✓
	关键绩效指 B7.3 Key performance indicator B7.3	描述向董事及员工提供的反贪污培训 Describe the anti-corruption training provided to directors and employees	✓

层面 Aspects	指标 Indicators	指标内容 Indicator description	回应情况 Response
层面 B8: 社区投资 Aspect B8: community investment	一般披露 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 Policies to understand the needs of the community in which it operates through community participation and to ensure that its business activities take into account community interests	✓
	关键绩效指 B8.1 Key performance indicator 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） Focus on contribution category (e.g. education, environmental issues, labor demand, health, culture, sports)	✓
	关键绩效指 B8.2 Key performance indicator B8.2	在专注范畴所动用资源（如金钱或时间） The resources (such as money or time) utilized in the contribution category as focused on	✓

注：

Notes:

我们遵循港交所《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

According to the "comply or explain" provisions of *HKSE Environmental, Social and Governance Reporting Guidelines*, we provide the explanations for the non-disclosed indicators A1.2, A1.3, A1.4, A2.2 and A2.5 as follows:

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

① Affected by the nature and scope of business, A1.2, A1.3 and A1.4 are not yet statistics; in the future, we will constantly promote the improvement of emissions management

②公司业务性质不适用 A2.2、A2.5 条款

② Due to the nature of our business, A2.2 and A2.5 are not applicable.

意见反馈

尊敬的读者：

您好！感谢您阅读《中国交建 2021 年环境、社会及管治报告》。我们非常重视并期望聆听您对中国交建在环境、社会及管治方面的管理、实践和报告的反馈意见。为进一步提升我们的工作水平并使下一份报告更符合您的期望，恳请您协助完成反馈意见表中提出的相关问题，并选择以下方式反馈给我们。

联系电话：86-10-82016718

联系地址：中国北京市西城区德胜门外大街 85 号

姓名：	联系电话：
工作单位：	传真：
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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？

OPINIONS AND FEEDBACK

Dear readers,

Thank you very much for reading the *2021 Environmental, Social and Governance Report of China Communications Construction*. We attach great importance to and look forward to listening to your feedback on the management, practice and reporting of China Communications Construction in environment, society and governance. In order to further promote our work level and enable the next report to comply with your expectations more, please assist in completing the relevant questions in the Feedback Form and choose the following options to contact us.

Tel.: 86-10-82016718

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

Name:	Tel.:
Work unit:	Fax:
Title:	E-mail:

1. What is your overall assessment of this report?

Excellent Good Fair

2. Does this report reflect the major impacts of China Communications Construction on economy, society and environment?

Excellent Good Fair Poor Very Poor

3. Are the information, data and indicators disclosed in this report clear, accurate and complete?

Excellent Good Fair Poor No Idea

4. What do you think is the most satisfying aspect in this report?

5. What kinds of information would you like to learn more about?

6. What are your recommendations for our future reports?

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 Street, Xicheng District, Beijing, P.R.China
电话 Tel：86-10-8201 6894
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