



北京的湖路之行

A PERPETUAL TRAILBLAZER

环境、社会与管治报告暨社会责任报告 Environmental, Social and Governance Report and Social Responsibility Report of CREC

# 牢记殷殷嘱托 永当开路先锋

Remember the ardent expectations, be a perpetual trailblazer



# 2014

2014年5月10日,习近平总书记考察中铁 工程装备,作出"三个转变"重要指示, 中国品牌日由此而来。

During his visit to China Railway Engineering Equipment Group on May 10, 2014, General Secretary Xi Jinping lays out the important directive of the "three transformations", which led to the initiation of China Brand Day.



2019

2019年1月16日,习近平总书记在雄安新区 规划展示中心,通过大屏幕连线中国中铁参 建的京雄城际铁路雄安站建设工地现场,同 日察看了中国中铁承建的雄安新区"千年秀 林"大清河片林一区造林区域。

On January 16, 2019, General Secretary Xi Jinping inspects the construction site of Xiong'an Station of the Beijing-Xiong'an Intercity Railway, which is constructed with the participation of CREC, via video link from the Planning Exhibition Center of Xiong'an New Area. On the same day, he inspects another project built by CREC, namely the afforestation area of the "Millennium Beautiful Forest" Daqinghe Forest Zone I in Xiong'an New Area.

# 2020

2020年4月20日,习近平总书记来到陕西 柞水县金米村调研脱贫攻坚情况,走进中 国中铁一局投资建设的金米村智能连栋木 耳大棚、智慧农业示范园等项目,点赞柞 水木耳是"小木耳,大产业"。



On April 20, 2020, General Secretary Xi Jinping visits Jinmi Village in Zhashui County, Shaanxi Province, to survey the progress of poverty alleviation efforts. He inspects various projects including the intelligent multi-span black fungus greenhouses and the smart agriculture demonstration parks invested by China Railway First Group in Jinmi Village, praising Zhashui's black fungus as a significant industry.

# 2021

2021年1月19日,习近平总书记乘坐京张 高铁赴张家口赛区考察北京冬奥会、冬残 奥会筹办工作。期间,考察调研了中国中 铁承建的太子城站和国家跳台滑雪中心。



On January 19, 2021, General Secretary Xi Jinping travels to the Zhangjiakou venue by the Beijing-Zhangjiakou High-speed Rail to inspect the preparations for the Beijing Winter Olympics and Paralympics. During the visit, he conducts an inspection and research on the Taizicheng Station and the National Ski Jumping Center, which were constructed by China Railway Group Limited.





On July 14, 2022, General Secretary Xi Jinping visits the preservation and restoration project of the Ancient Ruins of Jiaohe in Turpan, Xinjiang, where CREC is involved, to gain insights into the preservation and utilization of cultural heritage.

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	2014	2016		2017			2018
	<ul> <li>2014年5月10日,习近平 总书记考察中铁工程装 备,提出了"三个转变" 重要指示。中国品牌日由 此而来。</li> <li>During his visit to China Railway Engineering Equipment Group on May 10, 2014, General Secretary Xi Jinping laid out the important directive of the "three transformations," which led to the initiation of China Brand Day.</li> </ul>	○ 2016年6月22日, 习近平与乌兹别克 共同见证了中国中 承建的安帕铁路卡 道通车。 On June 22, 2016, Gen Secretary Xi Jinping ar President of Uzbekista witnessed the opening the Qamchiq Tunnel o Angren-Pap Railway, w constructed by China F Tunnel Group.	斯坦总统 铁隧道局 姆奇克隧 eral nd the n jointly gof n the hich was Railway	路"国际合的雅万高铁四个重大海。 与建设。 On May 14, 20 delivered a ka Forum for Int major overse High-Speed F Addis Ababa- Railway, all o CREC.	作高峰论坛上发 、中老铁路、 如 约铁路项目,中 2017, General Secret eynote speech at th ernational Coopera s railway, projects ailway, the China-	ne Belt and Road ation, mentioning four : the Jakarta-Bandung Laos Railway, the nd the Hungary-Serbia	<ul> <li>总书记在打好精准脱贫攻</li> <li>坚战座谈会上的讲话,点</li> <li>赞中国中铁隧道局成昆铁</li> <li>路青年党员。</li> <li>On February 12, 2018, General</li> <li>Secretary Xi Jinping praised</li> <li>the young Party members of</li> <li>China Railway Tunnel Group's</li> <li>Chengdu-Kunming Railway at</li> </ul>
	2022		2022		2021		2021
	2022年4月8日, 习近平总书记在北京冬奥会、 冬残奥会总结表彰大会上发表重要讲话指出, 广大冬奥会、冬残奥会的参与者们共同创造 了北京冬奥精神。中国中铁优质高效建成了一 批配套重点项目, 积极投身运行保障及志愿服 务,全力保障冬奥盛会成功举办。 On April 8, 2022, General Secretary Xi Jinping delivered an important speech at the Beijing Winter Olympics and Paralympics Summary and Commendation Conference, pointing out that the participants of the Winter Olympics and Paralympics have jointly created the spirit of the Beijing Winter Olympics. CREC has successfully completed a number of key supporting projects with high quality and efficiency, actively engaged in operational support and volunteer services, and made every effort to ensure the successful hosting of the Winter Olympics.		2022年1月4日,习近平 总书记到中国中铁华铁 设计的北京冬奥会重点 工程二七厂冰雪项目训 练基地考察调研。 On January 4, 2022, General Secretary Xi Jinping visited the ice and snow training base of the key project of the Beijing Winter Olympics, Factory 27, designed by China Railway Huatie Engin- eering Design Group.		总书记、国家主席习近平在 北京同老挝人民革命党中央 总书记、国家主席通伦过视 频连线共同出席中老铁路通 车仪式。 On December 3, 2021, General Secretary Xi Jinping attended the opening ceremony of the China-Laos Railway with General Secretary of the Central Committee of the Lao People's Revolutionary Party and President Thongloun via video link in Beijing.		2021年7月22日, 习近平总书记到 中国中铁设计承建的川藏铁路林 艺站视察,参观了由中国中铁牵 头组织实施的展陈,提出要建设 好川藏铁路这一实现第二个百年 奋斗目标进程中的标志性工程的 要求。 On July 22, 2021, General Secretary Xi Jinping inspected the Nyingchi Station of the Sichuan-Tibet Railway, which was designed and constructed by CREC. He <i>v</i> isited the exhibition organized and mplemented by CREC and put forward the requirement to build the Sichuan Tibet Railway as a landmark project n the process of achieving the second tentenary goal.
	2022	2022				2022	All Star
总书记在新疆吐鲁番考察 总统佐科举行会 了中国中铁参与的交河故 一带一路"合作			:谈时强调,双方要推动高质量共建 "   西亚 :不断走向深入。由中国中铁参建的雅   运行 :快速发展的象征,成为两国友谊的又  运行		西亚总统佐科在[ 运行并观看两国行 运行线路全部由「	2022年11月16日,国家主席习近平和时任印度尼 西亚总统佐科在巴厘岛共同视频观摩雅万高铁试验 运行并观看两国合作成果展示视频。雅万高铁试验 运行线路全部由中国中铁承建,是中国高铁首次全 系统、全要素、全产业链在海外建设项目。	

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# 万高铁作为印尼快速发展的象征,成为两国友谊的又 一丰碑。

On July 26, 2022, General Secretary Xi Jinping emphasized during his talks with Indonesian President Joko Widodo that both sides should promote the continuous deepening of high-quality cooperation in jointly building the Belt and Road Initiative. The Jakarta-Bandung High-Speed Railway, jointly built by China Railway Group, serves as a symbol of Indonesia's rapid development and become another monument to the friendship between the two countries.

On November 16, 2022, General Secretary Xi Jinping and then-Indonesian President Joko Widodo jointly watched a video showcasing the test operations of the Jakarta-Bandung High-Speed Railway and the results of bilateral cooperation during a virtual event held in Bali. The test operation line of the Jakarta-Bandung High-Speed Railway was entirely constructed by CREC, marking the first time that China's high-speed rail system, encompassing all components and the entire industrial chain, has been implemented in an overseas project.

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### 2019

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### 2019

2019年12月30日,中国中铁设 计建设的京张高铁开通运营, 习近平总书记作出重要指示。

On December 30, 2019, the Beijing-Zhangjiakou High-Speed Railway designed and constructed by CREC opened for operation, and General Secretary Xi Jinping made important instructions.

### 2020

2020年4月20日,习近平总书记来到陕西柞 水县金米村调研脱贫攻坚情况,走进中国中 铁一局投资建设的金米村智能连栋木耳大 棚、智慧农业示范园等项目,点赞柞水木耳 是"小木耳,大产业"。

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### 2020

2020年11月12日下午,习近平 总书记在南通市五山地区滨江片 区考察调研。在同市民群众亲切 交流时,提到中国中铁设计建设 的沪苏通长江公铁大桥。

On the afternoon of November 12, 2020, General Secretary Xi Jinping conducted an inspection and research in the Binjiang area of Five Mountains area, Nantong City. During friendly communication with citizens, the Shanghai-Suzhou-Nantong Yangtze River Bridge designed and constructed by CREC was mentioned. 2020年11月8日,中国中铁参与设 计建设的川藏铁路雅林段以视频方 式举行开工动员大会。时任中共中 央政治局委员、国务院副总理刘鹤 在大会上传达了习近平总书记重要 指示。

2020

On November 8, 2020, the Ya'an-Nyingchi section of the Sichuan-Tibet Railway, designed and built with the CREC's participation, held a groundbreaking mobilizaiton meeting via video link. Liu He, member of the Political Bureau of the Communist Party of China Central Committee and Vice Premier of the State Council, conveyed important instructions from General Secretary Xi Jinping at the conference.

### 2020

2020年 9月16日,习近平总书记 在中国中铁帮扶的汝城县调研脱 贫攻坚情况,参观了"半条被子 的温暖"专题陈列馆。

On September 16, 2020, General Secretary Xi Jinping conducted research on poverty alleviation in Rucheng County, which was assisted by CREC, and visited the "Warmth of Half a Ouilt" exhibition ball

## 2024

2024年2月7日,中国南极秦岭站建成并投入 使用。习近平总书记致信表示热烈祝贺。由 中国中铁承建的秦岭站是我国在南极的第五 个科考站,也是新时代我国建立的第一个常 年科考站。

On February 7, 2024, China's Qinling Station in Antarctica was completed and put into use. General Secretary Xi Jinping sent a letter expressing warm congratulations. The Qinling Station, constructed by China Railway Group, is China's fifth scientific research station in Antarctica and the first perennial scientific research station established in the new era.

### 2024

2024年6月30日,深圳至中山跨江通道建成开 通,习近平总书记发来贺信,表示热烈祝贺。 由中国中铁参与设计、监理、施工的深中通道 是全球首个集"桥、岛、隧、水下互通"于一 体的跨海集群工程,创下十项世界之最。

On June 30, 2024, the Shenzhen-Zhongshan Link was completed and opened. General Secretary Xi Jinping sent a congratulatory letter expressing warm congratulations. The Shenzhen-Zhongshan Link, designed, supervised, and constructed by CREC, is the world's first cross-sea cluster project that combines bridges, islands, tunnels, and underwater interchanges, setting ten world records.

## 2024

当地时间2024年11月14日,国家主席习近平 同秘鲁总统博鲁阿尔特在利马总统府以视频 方式共同出席钱凯港开港仪式。由中国中铁 承建的钱凯隧道是钱凯港的重要组成部分和 关键控制性工程。

On November 14, 2024, local time, General Secretary XI Jinping and Peruvian President Dina Boluarte attended the inauguration ceremony of Chancay Port by video link at the Presidential Palace in Lima. The Chancay Tunnel, constructed by CREC, is a crucial component and key control project of the Chancay Port.

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Chairman's Statement



#### 中国中铁股份有限公司党委书记、董事长

陈文健

Secretary of the Party Committee and Chairman of China Railway Group Limited

Chen Wenjian

时间的长河奔流不息, 奋斗的足迹永不停歇。2024年是全面 学习贯彻党的二十届三中全会精神的重要之年, 是实现"十四 五"规划目标任务的关键之年, 也是全体中国中铁人知难克 难、披荆斩棘的奋斗之年。面临内外部严峻的考验挑战, 我们 以习近平新时代中国特色社会主义思想为指导, 深入落实党 中央、国务院各项重大决策部署, 贯彻国资委的一系列工作要 求, 坚持稳中求进、以进促稳、先立后破, 抓基层、抓改革、抓 创新、抓形象、抓作风、控风险, 实现了各项经济指标的总体 平稳, 企业改革发展开创了新的局面。

In the long river of time, we forge ahead, never pausing in our journey. The year 2024 is pivotal for thoroughly studying and implementing the spirit of the third plenary session of the 20th Central Committee of the Communist Party of China (CPC). It marks a critical period for achieving the objectives and targets of the "14th Five-Year Plan" and has witnessed the efforts of all members of China Railway Group Limited (hereinafter referred to as

"CREC" or "the Company") to confront and overcome adversities. Facing severe internal and external challenges. we have guided our efforts with Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era. We have thoroughly executed the significant decisions and plans of the CPC Central Committee and the State Council, along with the directives of the State-owned Assets Supervision and Administration Commission of the State Council (SASAC). We have acted on the principle of seeking progress while maintaining stability, promoting stability through progress, and establishing the new before abolishing the old. With a focus on primary-level governance, reform, innovation, corporate image, work style, and risk management, we have achieved overall stability in various economic indicators and broken new ground in corporate reform and development.

这一年,我们坚守"央企姓党"政治本色,紧跟党走、步伐

**豪迈**。认真学习贯彻习近平总书记关于发展国有经济的重要 论述精神,牢记新时代新征程的新使命新定位,拥护"两个 确立"、做到"两个维护"的思想自觉、政治自觉和行动自觉 更加坚定。将学习贯彻党的二十届三中全会精神作为重大政 治任务,集中轮训领导干部9638人,培训党员和员工21.5万 人,中国中铁上下迅速掀起学宣贯热潮,《科技日报》刊发中 国中铁党委相关署名文章。深入落实习近平总书记关于全面 加强党的纪律建设的重要论述精神,全覆盖抓好党纪学习教育,有关经验多次登上国务院国资委简报。大力实施基层党 建提质增效"七抓七强七提升"工程,团结引领广大党员干部 始终沿着习近平总书记指引的方向前进,《人民日报》头版、 新华社、总台央视等中央媒体刊发多篇中国中铁高质量发展 的深度报道。

Over the past year, we have remained steadfast in upholding CPC leadership, preserving our political character as a central state-owned enterprise (SOE).

We have made concerted efforts with the Party and advanced with full confidence. We have conscientiously studied and implemented the spirit of General Secretary Xi Jinping's important discourse on developing the state-owned economy, kept in mind our new mission and new positioning on the new journey in the new era, and developed stronger awareness in political orientation, thinking, and action of the need to understand the "Two Affirmations" and practice the "Two Upholds." Viewing the learning and implementation of the spirit of the third plenary session of the 20th CPC Central Committee as a significant political undertaking, we have organized largescale training for 9,638 leaders and 215,000 Party-member and non-Party-member employees, setting off a strong wave of studying, publicizing and implementing the spirit. Besides, a signed article written by the Party Committee of CREC has been published on Science and Technology Daily. We have thoroughly implemented the principles outlined by General Secretary Xi Jinping concerning the comprehensive enhancement of Party discipline, and executed an extensive Party discipline education and study program, with the pertinent experience being repeatedly highlighted in SASAC's briefings. We have vigorously

"focused on, strengthened and upgraded efforts in seven aspects" to enhance primary-level Party building quality and efficiency, uniting and guiding the majority of Party members and cadres to consistently advance in the direction led by General Secretary Xi Jinping. Several noteworthy reports on CREC's high-quality development have been featured on the front page of People's Daily (《人民日报》), as well as by Xinhua News Agency, CCTV, and other central media outlets.

#### 这一年,我们胸怀"国之大者"使命担当,书写山河、绘就未

来。习近平总书记先后致信祝贺南极秦岭站建成并投入使 用、深中通道建成开通,作为主要建设者,我们备受鼓舞、 倍感光荣。投身西部大开发、东北振兴、中部崛起、东部率先 发展战略和"一带一路"建设,先后建成沪苏湖高铁、川青铁 路、常泰大桥、黄茅海跨海通道、帕德玛大桥铁路连接线、钱 凯隧道等大批国内外重点民生工程。牢记习近平总书记"三个 转变"殷殷嘱托,聚焦加快发展新质生产力,举办"砥砺十年 向新而行"座谈交流会。承办2024年世界隧道大会,主办特长 公路隧道建设与运营国际学术交流会;全球首台大直径会"爬 陡坡"的隧道掘进机、世界首台硬岩泥水平衡顶盾机、2000吨 自升式海上风电安装平台等一批"国之重器"交付使用,为实 现交通强国战略贡献了中国中铁力量。

# In the past year, bearing in mind the country's most fundamental interests, we have made great endeavors

to create a brighter future. General Secretary Xi Jinping successively sent congratulatory letters on the completion and operation of China's Qinling Station in Antarctica and the opening of the Shenzhen-Zhongshan Link. As a primary builder of these projects, we were deeply encouraged and immensely honored. We have been committed to the largescale development in the western region, the revitalization of the northeast, the rise of the central region, and the trailblazing development of the eastern region, as well as the development of the Belt and Road Initiative (BRI). We have completed numerous key domestic and international livelihood projects, including the Shanghai-Suzhou-Huzhou High-speed Railway, Sichuan-Qinghai Railway, Changtai Yangtze River Bridge, Huangmaohai Cross-sea Passage, Padma Bridge Rail Link, and Chancay Tunnel. Keeping in mind the expectations of General Secretary Xi Jinping on the "three transformations," we have focused on accelerating the development of new quality productive forces, and organized a symposium titled "Forging Ahead for Ten Years in Pursuit of Innovation." We have organized the 2024 World Tunnel Congress (WTC2024) and hosted the International Symposium on Long Highway Tunnel Construction & Operation. We have also delivered some advanced equipment to customers, including the world's first large-diameter tunnel boring machine (TBM) capable of "climbing steep slopes," the world's first hard rockmud-water balance shield machine, and a 2,000-metric-ton offshore wind-power installation platform, contributing significantly to building China into a country with great transport strength.

#### 这一年,我们锚定"高质量中国中铁"奋斗目标,深化改革、

提质增效。聚焦效益提升、价值创造,坚持"一切管理工作到项目""一切党建工作到支部"导向,纵深推进大商务管理暨项目管理效益提升三年行动,压茬推进改革深化提升行动,以及"科改行动""双百行动",中国中铁名列"整体成效突出的34家中央企业"之一,所属6家企业分获"3标杆3优秀"。坚持科技强企战略,培育壮大"2+4"战略性新兴产业发展体系,全面实施科技创新效能提升行动、"Al+"专项行动,企业核心竞争力持续增强。中国中铁163项成果达到国际领先或国际先进水平,4项关键核心技术攻关取得突破;5项成果获国家科学技术奖,数量排名建筑央企第一;33项工程入选第二十届詹天佑奖,占获奖总数的三分之一以上,其中京张高铁获詹天佑奖首设的特等奖;两个团队被评为首届国家卓越工程师团队,所属1家企业入选央企品牌引领行动首批优秀成果,5家企业入选"中国建造"品牌企业,"开路先锋"形象更加立体丰满。

#### The past year has witnessed our deepened reforms and enhanced quality and efficiency achieved based on the goal of advancing high-quality CREC development.

Focusing on efficiency improvement and value creation, we have adhered to the principle of implementing "project-oriented management" and "Party building across branches." We have advanced a three-year action to enhance efficiency in whole life-cycle business management and project management, while sequentially promoting the reform deepening and upgrading actions, as well as the "science & technology reform action" and the "double-hundred action." CREC was recognized as one of the "34 central SOEs with outstanding overall performance," with "3 benchmarks & 3 excellent grades" achieved by six of its subsidiaries. Committed to the strategy of strengthening the Company through science and technology, we have fostered and expanded the "2 + 4" strategic emerging industry development system, and fully executed the sci-tech innovation efficiency improvement plan and the "AI +" special action, continuously enhancing our core competitiveness. CREC has achieved 163 results that are at the international leading or advanced level, with breakthroughs in four key core technologies. Five achievements have received the national science and technology awards, placing it first among central construction SOEs in terms of the number. Thirty-three projects won the 20th China Civil Engineering Zhan Tianyou Award, accounting for more than one-third of the total number of awards. Among these projects, the Beijing-Zhangjiakou High-speed Rail won the newly launched special award. Two teams were awarded

the title of "National Excellent Engineer Team," one of its subsidiaries was included in the first outstanding achievements for leading central SOE brands, and five subsidiaries were recognized as brand enterprises in Chinese construction, further enhancing CREC's image as a trailblazer.

#### 这一年,我们展现"责任担当"央企形象,绿色发展、共享美

好。积极推进美丽中国建设,深度参与各地清洁能源利用、湿地修复、废弃矿山修复、垃圾处理、污水处理等工程,承担国资委基础设施绿色低碳原创技术策源地建设,10项工程获中国建筑业协会绿色建造施工技术竞赛一等奖,3家企业获评国家级绿色工厂。积极投身文化遗产保护事业,为守护传承中华文明持续贡献专业力量,中铁文保团队事迹相继在新华社、国资小新等中央媒体亮相。组织广大干部员工主动投身洞庭湖决堤、超强台风"摩羯"登陆以及各地洪涝的抢险救援,2名同志获应急管理部个人三等功奖章。坚决扛起定点帮扶、对口支援和乡村振兴责任,全年投入资金8000余万元,通过人才帮扶、产业帮扶、智力帮扶、消费帮扶等,助力当地群众增收致富,相关案例入选《中央企业助力乡村振兴蓝皮书》,有力促进人民美好生活水平提升。

# Over the past year, we have demonstrated the image of a responsible central SOE committed to green

development and a shared promising future. We have proactively advanced the construction of beautiful China by deeply engaging in projects that involve clean energy utilization, wetland restoration, abandoned mine reclamation, waste management, and sewage treatment across various regions. We are responsible for the establishment of a source of original technologies for green and low-carbon infrastructure under the supervision of the SASAC. Additionally, 10 projects have won first prizes at the Green Construction Technology Competition organized by the China Construction Industry Association, and three of our subsidiaries have been designated as "National Green Factories." We have actively engaged in the protection of cultural heritage, consistently contributing our professional expertise to the preservation and inheritance of Chinese civilization. The exemplary work of China Railway Wenbao Technological Innovation has been featured in prominent central media outlets, including Xinhua News Agency and SASAC News Center. We have mobilized a large number of cadres and employees to take part in emergency rescue and disaster relief in response to the dike breaching in Dongting Lake, the landfall of Typhoon Yagi and various flood situations. One of our team members has received

a third-class personal merit award from the Ministry of Emergency Management. We have firmly assumed the responsibility for paired assistance and rural revitalization, investing over RMB80 million throughout the year to support local residents in increasing their income and prosperity through initiatives such as talent support, industrial development, intellectual aid, and consumption assistance. Relevant cases were included in the Blue Book on Rural Revitalization Supported by Central State-owned Enterprises, significantly contributing to the enhancement of people' s quality of life.

路虽远,行则将至;事虽难,做则必成。2025年,中国中铁将 以习近平新时代中国特色社会主义思想为指导,全面贯彻落 实党的二十大和二十届二中、三中全会精神,完整准确全面贯 彻新发展理念,锚定"效益提升、价值创造"主线,坚持稳中求 进,不断增强核心功能、提升核心竞争力,高质量完成"十四 五"规划目标任务,为实现"十五五"良好开局打牢基础,筑牢 中国式现代化的物质基础,以高质量发展的实际成效为强国 建设、民族复兴伟业作出新的更大贡献!

The journey may be long, but we will arrive; the task may be difficult, but we will succeed. In 2025, CREC will follow the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era while fully implementing the guiding principles of the 20th CPC National Congress and the second and third plenary sessions of the 20th CPC Central Committee. It will fully, accurately and comprehensively apply the new development philosophy, focus on the core theme of

"profit enhancement and value creation," uphold the general principle of seeking progress while maintaining stability, strengthen its core functions, and enhance its core competitiveness. It aims to successfully achieve the goals and tasks of the "14th Five-Year Plan" based on the principle of high-quality development, thereby establishing a robust foundation for a good start to the

"15th Five-Year Plan," and solidifying the material base necessary for Chinese modernization. It will strive to make new and greater contributions to the construction of a strong country and the great cause of national rejuvenation with the actual results of high-quality development!

# 关于中国中铁 About CREC

# 公司概况 Company profile

中国中铁股份有限公司(以下简称中国中铁)是集设计 咨询、工程建造、装备制造、特色地产、资产经营、资 源利用、金融物贸、新兴业务于一体的综合型建筑产业 集团,拥有130多年发展历史和百年红色基因,现有40 多家二级企业、近30万名员工,为全球90多个国家和地区 提供服务。作为我国基础设施建设领域的主力军以及全球 最大的建筑工程承包商之一,公司连续19年进入世界企业 500强,2024年在《财富》世界500强排名第35位,在《财 富》中国500强排名第9位,居ENR全球最大承包商第2位。

1950年6月,在新中国第一条铁路成渝铁路开工典礼上, 邓小平、贺龙等领导人将"开路先锋"大旗授予中国中铁 建设者。此后,中国中铁大力传承弘扬"开路先锋"精 神,逢山开路、遇水架桥,累计参建的工程占中国铁路总 里程的2/3,占中国电气化铁路的90%,占中国高铁总里 程的55%,占中国高速公路总里程的1/8,占中国城市轨 道工程总里程的3/5,建造跨江跨海大桥1万多座,建造长 大隧道2万多公里,20次赴南极承担建设维护任务。中国 中铁是我国铁路建设的主力军、高铁建设的领航者、城市 轨道工程建设的排头兵、桥梁建造的国家队、长大隧道建 设的领军企业、国内最大的铁路专用施工设备制造商及世 界上能够独立生产TBM并具有知识产权的三大企业之一。

党的十八大以来,习近平总书记先后20余次作出与中国 中铁有关的重要指示批示。其中,2014年5月10日,习近 平总书记考察中铁工程装备集团有限公司,作出"三个转 变"的重要指示,中国品牌日由此而来。2019年1月,习 近平总书记在视察雄安新区时,称赞中国中铁京雄城际建 设者是"千年大计"建设的"开路先锋"。



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China Railway Group Limited (hereinafter referred to as "CREC" or "the Company") is a comprehensive construction industry group that integrates design and consulting, engineering construction, equipment manufacturing, featured property, asset management, resource utilization, financial and materials trade, and emerging businesses. With an extensive history spanning more than 130 years and a legacy of revolutionary spirit, it currently operates over 40 secondary subsidiaries and has nearly 300,000 employees, providing services to more than 90 countries and regions globally. As a leading power in China's infrastructure construction sector and one of the world's largest construction engineering contractors, the Company has been listed among Fortune Global 500 enterprises for 19 consecutive years. In 2024, it ranked 35th in Fortune Global 500 enterprises, 9th in Fortune China 500 enterprises, and 2nd among ENR 2024 Top 250 Global Contractors.

In-June 1950, Deng Xiaoping and He Long conferred the construction workers of CREC the flag of "Trailblazer" at the groundbreaking ceremony of Chengdu-Chongqing Railway, the first railway in the People's Republic of China. Since then, to live up to that title, CREC has been committed to cutting a way through when confronted by mountains and building a bridge when blocked by a river. The projects constructed with its participation cumulatively account for two-thirds of the total mileage of Chinese railways, 90% of the total mileage of Chinese electrified railways, 55% of the total mileage of Chinese high-speed railways, one-eighth of the total mileage of Chinese expressways, and three-fifths of the total mileage of Chinese urban rail projects. We also built more than 10,000 river- and sea-crossing bridges and over 20,000 kilometers of tunnels, and made 20 trips to Antarctica for construction and maintenance tasks. CREC stands as the backbone of China's railway construction, a pioneer in high-speed rail development, the frontrunner in urban rail engineering, the national leader in bridge construction. It is also China's largest manufacturer of specialized railway construction equipment and one of the three leading global firms capable of independently producing TBMs with proprietary intellectual property rights.

Since the 18th National Congress of the Communist Party of China (CPC), General Secretary Xi Jinping has issued over 20 significant directives concerning CREC. During his visit to China Railway Engineering Equipment Group on May 10, 2014, General Secretary Xi Jinping laid out the important directive of the "three transformations," which led to the initiation of China Brand Day. During his visit to the Xiong'an New Area in January 2019, General Secretary Xi commended CREC's builders of Beijing-Xiong'an Intercity Railway as the "trailblazers" in the implementation of the national project of millennial significance.

# 连续**19**年 进入世界企业500强

Serving as one of the Fortune Global 500 enterprises for 19 consecutive years 在世界500强 排名第**35**位

Ranking 35th in the Fortune Global 500 enterprises

# 在《财富》中国500强 排名第**9**位

Ranked 9th in the Fortune China 500

# 资产总额 **22564.14**亿元

Total assets: RMB 2,256.414 billion

#### -0

# <sup>营业收入</sup> 11603.11<sub>亿元</sub>

Operating revenue: RMB 1,160.311 billion

#### -0----

# 新签合同额 **27151.8**亿元

Amount of newly signed contracts: RMB 2,715.18 billion

## <sup>净资产</sup> 5101.4<sub>亿元</sub>

Net assets: RMB 510.14 billion

# 利润总额

Total profit: RMB 38.871 billion

#### -С

归属母公司净利润

# **278.87**亿元

Net profit attributable to the parent company: RMB 27.887 billion

# 纳税总额 **359.47**亿元

Total tax payment: RMB 35.947 billion

# 中国中铁"开路先锋"文化理念体系

—四梁八柱一面旗

**企业使命** Corporate mission

**企业愿景** Corporate vision

**企业核心价值观** Corporate core value

#### **企业精神** Corporate spirit

经营理念 Business philosophy	管理理念 Management philosophy	<b>安全理念</b> Safety philosophy
Good Faith-based Win-win Cooperation	b同高效 效益优先 Efficiency	生命至上 安全第一 Supremacy of Life and Safety First



# CREC "trailblazer" cultural concept system

Four beams, eight columns, and one flag

中国建造 铁肩担当 Delivering Superior Products and Improving People's Wellbeing

### 具有全球竞争力的世界一流综合型建筑产业集团

A world-class comprehensive construction industry group with global competitiveness

#### 守正创新 行稳致远 向上向善 勇争一流

Innovation with Integrity Sustainable Growth Commitment to Excellence and Pursuit of Leadership

#### 勇于跨越 追求卓越

Conquering the Summit and Building towards Excellence

<b>质量理念</b> Quality philosophy	<b>环保理念</b> Environmental philosophy	人才理念 Talent philosophy	<b>廉洁理念</b> Integrity philosophy	品牌理念 y Brand philosophy
匠心品质 精心建造	勤俭节约 绿色发展	以人为本 奋斗圆梦	风清气正 业兴人和	创造价值 基业长青
High-quality Engineering, Meticulous Construction	Diligence and Thrift, Green Development	People Orientation, Pursuit of Dreams	Clean and Upright, Prosperous and Harmonious	Value Creation, Sustainable Development

# 年度荣誉 Annual honors

连续16年获评上交所上市公司考核A级;连续11年获上交所信息披露A级

连续 年蝉联《新财富》最佳IR港股公司 (A+H股)

获评《董事会杂志》第十九届中国上市公司董事 会"金圆桌奖"公司治理特别贡献奖

获评《IR MAGAZINE》大中华区 最佳投资者关系奖 获第三十八届国际ARC年报传 统工程类荣誉奖、建筑工程类 财报数据荣誉奖 获中国基金报《中国上市公司 英华示范案例》<mark>港股ESG价值评</mark> 选奖

连续3年入选中国上市公司协会 可持续发展最佳实践案例 入选中国上市公司协会2024年 上市公司董事会最佳实践案例 获得中国上市公司协会"ESG最 住实践奖"

• 2024年主要ESG评级



WIND ESG评级A级



An A rating in listed company evaluation from Shanghai Stock Exchange (SSE) (

an A rating in information disclosure evaluation from SSE ( consecutive years)

New Fortune Best IR Hong Kong Listed Company (A+H)

Award ( consecutive years)

Review of the 19th "Golden Roundtable Award" for Special Contribution to Corporate Governance by Board of Directors Magazine in China's Listed Companies

The Best Investor Relations Award in Greater China from IR MAGAZINE Traditional Engineering Honorary Award and Construction Engineering Financial Statement Data Award at the 38th ARC Annual Report Awarded the Hong Kong Stock ESG Value Selection Award in the China Listed Companies Yinghua Exemplary Cases by China Fund News.

Best Practice Case in Sustainable Development of Listed Companies from China Association for Public Companies (CAPCO) (3 consecutive years)

CSI ESG rating:

Best Practice Case of the Board of Directors of Listed Companies in 2024 from CAPCO

Key ESG ratings in 2024

Wind ESG rating:



**ESG Best Practice Award** 

from CAPCO

# 责任聚焦 Focus on Responsibility

向新而行 以质致远 加速培育新质生产力 Pursue innovation-driven, qualityoriented sustainable development, accelerate cultivation of new quality productive forces



# 向新而行 以质致远 加速培育新质生产力

Pursue innovation-driven, quality-oriented sustainable development, accelerate cultivation of new quality productive forces

公司统筹推进科技创新和产业创新,一手抓传统产业转型升级,一手抓战略性新兴产业和未来产业发展壮大, 大力推进现代化产业体系建设,加快培育和发展新质生 产力。2024年,公司国家科学技术奖获奖数量排名建筑 央企第一。 The Company promoted sci-tech innovation and industrial innovation as a cohesive whole. It focused on the transformation and upgrading of traditional industries, while emphasizing the development and growth of strategic emerging industries and future industries. Additionally, it vigorously advanced the construction of modern industrial systems, and accelerated the cultivation and development of new quality productive forces. In 2024, it ranked first among central construction SOEs in the number of national science and technology awards.

### 向高攀登 传统产业转型升级

Strive for elevation: Transform and upgrade traditional industries

公司积极参与"两重"、"两新",持续通过设备更新、工艺升级、数字赋能、管理创新,推动传统工程建设、装备制造产业全方位改造提升,加快高端化智能化绿色化转型。

The Company actively participated in the "two major" and "two new" initiatives, continuing to promote the comprehensive transformation and upgrading of the traditional engineering construction and equipment manufacturing industries through equipment renewal, process enhancement, digital empowerment, and management innovation, thereby accelerating the shift towards high-end, intelligent, and green practices.

#### 高端化——提升产业"含金量" Advance higher-end industry development

公司"港珠澳大桥跨海集群工程"等5项科研成果获国家科学技术进步奖。33项工程获中国土木工程詹天佑奖,其中京 张高铁荣获首届特等奖。完成"1025"二期7项任务,突破复杂海域环境下桥梁施工平台及超大直径钻孔关键技术,开 展海底超深隧道、深地人居环境等首批次5项未来产业课题研究。一批先进隧道施工成果集中亮相世界隧道大会,7项工 程入选全球隧道与地下工程领域50项标志性工程。

Five scientific research achievements, including the Hong Kong-Zhuhai-Macao Bridge Cross-sea Cluster Project, have won the National Scientific and Technological Progress Award. A total of 33 projects have been awarded the China Civil Engineering Zhan Tianyou Award, with the Beijing-Zhangjiakou High-speed Rail winning the first special award. The Company completed the seven tasks of the second phase of Project 1025, made breakthroughs in key technologies for bridge construction platforms and large-diameter drilling in complex marine environments, and initiated research on five future industrial subjects including ultra-deep undersea tunnels and deep-earth habitats. A series of advanced tunnel construction achievements were showcased at the WTC, with seven projects selected among the world's top 50 landmark projects in the field of tunnels and underground engineering.

**责任聚焦一** Focus on Responsibility I



2024年6月30日,中国中铁参与设计、监理、施工的深中通道建成开通。中共中央总书记、国家主席、中央军委主席习近平发 来贺信,表示热烈祝贺,并向参与规划建设的全体同志致以诚挚问候。深中通道是全球首个集"桥、岛、隧、水下互通"为 一体的跨海集群工程,创下十项世界之最,是当前世界上综合建设难度最高的跨海集群工程之一。

On June 30, 2024, the Shenzhen-Zhongshan Link, designed, supervised, and constructed by CREC, opens to traffic. Xi Jinping, General Secretary of the Communist Party of China Central Committee, Chinese President and Chairman of the Central Military Commission, sends a congratulatory letter, expressing warm congratulations and conveying sincere greetings to all those involved in the planning and construction. The Shenzhen-Zhongshan Link is the world's first cross-sea cluster project that integrates bridges, islands, tunnels, and underwater interchanges. It sets ten world records and ranks among the most complex cross-sea cluster projects in the world.

智能化——提升产业"含新量" Facilitate more intelligent industry development



公司全面统筹北斗规模应用,场景化部署近万套北斗装备,在30多个项目试点开发推广国产BIM。启动AI+专项行动,推 进信息贯通2.0建设,开展数据底座等8个项目"揭榜挂帅",打造智能建造新引擎。

It thoroughly organized the large-scale application of the BeiDou Navigation Satellite System (BDS), deploying nearly 10,000 sets of BDS equipment across a variety of scenarios, and advancing the development and promotion of domestic BIM technology in over 30 pilot projects. It launched a special "AI +" initiative to advance the development of the Informatization 2.0 project, adopted the open competition mechanism to select the best candidates for eight projects including data foundation, and created a new engine for intelligent construction.

# 案例 中铁隧道局推动盾构隧道智能建造进入 V2.0 时代 CASE China Railway Tunnel Group propels intelligent shield tunnel construction into Era V2.0

中铁隧道局依托崇太长江隧道项目,组建科研团队深入钻研、不懈攻坚,打造了"智能感知、智能设计、智能预制、 智能掘进、智能安装、智能构筑、智能环控、智能运输、智能管控"九大智能建造体系,推动盾构隧道智能建造最新 成果在崇太长江隧道成功应用,大幅提升工程施工效率和质量,为我国基础设施建设注入新的动能,引领隧道智能建 造进入新阶段。

Relying on the Chongtai Yangtze River Tunnel, China Railway Tunnel Group formed a dedicated research team to conduct indepth investigations and overcome challenges. The team established nine intelligent construction systems encompassing

"intelligent perception, intelligent design, intelligent prefabrication, intelligent tunneling, intelligent installation, intelligent construction, intelligent environmental control, intelligent transport, and intelligent management and control." This facilitated the successful application of the latest advancements in intelligent shield tunnel construction to the Chongtai Yangtze River Tunnel, significantly enhancing engineering efficiency and quality. It also injected new momentum into China's infrastructure development and pioneered a new era in intelligent tunnel construction.



智能管控平台 Intelligent management and control platform

#### 发布智能建造蓝皮书,中国中铁引领隧道工程智能化变革

CREC leads the intelligent transformation of tunnel engineering by publishing a blue book on intelligent construction

2024年11月18日至19日,中国中铁在上海召开智能建造学术研讨现场会暨加快推进新质生产力、提升价值创造能力推进 会,推动我国乃至全球隧道工程领域智能化发展。会上,发布了《中国盾构/TBM隧道智能建造蓝皮书》,并由隧道掘进 机及智能运维全国重点实验室主任洪开荣进行了说明。

From November 18 to 19, 2024, CREC held an academic seminar on intelligent construction and a promotion meeting on accelerating the promotion of new quality productive forces and enhancing value creation ability in Shanghai, promoting the intelligent development of tunnel engineering in China and even the world. At the meeting, the Blue Book on Intelligent Construction of Shield/TBM Tunnels in China was released and explained by Hong Kairong, Director of State Key Laboratory of Tunnel Boring Machine and Intelligent Operation and Maintenance.



绿色化——提升产业"含绿量" Pursue more eco-friendly industry development

公司成功获批国资委"基础设施绿色低碳原创技术策源地","盾构渣土高效化处理技术"纳入国家发改委《绿色技术 推广目录(2024年版)》。世界首台千吨级多模态新能源架桥机"应龙号"入选年度央企十大国之重器。新一代海上风 电安装船"大桥海风号""中铁1237号"盾构机等一批绿色装备投入应用。

The Company has been successfully approved by the SASAC as "a source of original green, low-carbon technology for rail transit infrastructure", and its "Shield Soil Dregs Efficient Processing Technology" has been included in the Green Technology Promotion Catalogue (2024 Edition) issued by the National Development and Reform Commission (NDRC). "Yinglong," the world's first 1,000-ton multi-mode new energy bridge girder erection machine, was named one of the top ten significant pieces of central SOEs' equipment for the year. A range of green equipment, including the new-generation offshore wind power installation vessel "Daqiao Haifeng" and the "CREC 1237" TBM, have been put into use.



2024年11月28日, "应龙号"架桥机在中铁二局珠肇高铁江机段JJZQ-8标完成首架,标志着全球首台千吨级新能源架桥机研制成功。"应龙号"首次将新能源技术应用在架桥机上,应用后设备燃油消耗可节省40%。

On November 28, 2024, "Yinglong" bridge girder erection machine completed its first task at Section JJZQ-8 of the Zhuhai-Zhaoqing High-speed Railway undertaken by China Railway No. 2 Engineering Group, marking the successful development of the world's first thousand-ton new energy bridge launching machine. "Yinglong" is the first bridge girder erection machine that applied new energy technology, resulting in a 40% reduction in equipment fuel consumption.

## 向新迈进 新兴产业培育壮大

Progress forward: Foster and strengthen emerging industries

公司大力布局战略性新兴产业,全力构建"2+4"战新产业发展体系,积极引领智能建造、智慧运维发展,做强高端装备、节能环保、新材料、新能源四大产业,担当好产业发展国家队。

To play a leading role in the national industrial development, the Company vigorously expanded into emerging industries of strategic importance, and aggressively pursued the development of a framework of "2 + 4" strategic emerging industries. This entailed spearheading intelligent construction and intelligent operation and maintenance while reinforcing the four major sectors of high-end equipment, energy conservation and environmental protection, new materials, and new energy.

#### 高端装备畅销全球 Sell high-end equipment around the world

公司聚焦建筑行业所需,积极攻关高端装备制造,一系列具有标志性意义的新产品接连下线,以盾构机为代表的高端装 备制造畅销海内外。

The Company focused on the needs of the construction industry and actively tackled challenges in high-end equipment manufacturing. A series of new products with iconic significance were launched in succession. High-end equipment, exemplified by TBMs, sold well both domestically and internationally.



由中铁隧道局和中铁工业旗下中铁装备联合研制的"领航号"是世界最大直径高铁盾构机。2024年10月20日,"领航号"在 — 崇太长江隧道顺利掘进至第1000环,助力实现高铁穿越长江不减速壮举。

"Linghang," jointly developed by the China Railway Tunnel Group and the China Railway Engineering Equipment Group under China Railway Hi-Tech Industry, is the world's largest-diameter high-speed railway shield machine. On October 20, 2024, "Linghang" excavated its 1000th ring segment in the construction of the Chongtai Yangtze River Tunnel, contributing to the remarkable achievement of a high-speed railway crossing the Yangtze River without decelerating.

#### 节能环保产业蓬勃发展

Advance robust development of energy conservation and environmental protection

公司积极贯彻"双碳"战略,加快布局绿色建筑、绿色交通和绿色城市产业,加快构建绿色低碳生产方式,推动企业绿 色低碳高质量发展。

The Company actively implemented the "dual carbon" strategy by accelerating the development of green building, green transportation, and green urban industries, thus advancing the construction of green and low-carbon production methods and promoting green, low-carbon, high-quality corporate development.

#### 探索可推广的生态治理商业模式 案例

中国铁工投资开发的沙湖港及周边环境整治 PPP 项目,采取 BOT+TOT 方式运作,通过生态治理与景观建设一体化 模式,改善流域生态环境,提升城市景观。项目付费采用"可用性付费+运维服务费-使用者付费"的政府可行性缺 口补助模式,实现绿色金融支持生态环保、节能减排等领域发展。

The PPP environment improvement project of Shahugang and its surrounding areas, invested and developed by China Tiegong Investment & Construction Group, employed a BOT + TOT operational model. This approach improved the ecological environment of the basin and the urban landscape through an integrated ecological management and landscape construction model. The project utilized a government feasibility gap subsidy model characterized by "availability payments + operation and maintenance service fees - user payments," thereby facilitating the advancement of green finance to support development in eco-environmental protection, energy conservation, and emission reduction.



沙湖港治理后实景图 Scene of Shahugang after environmental governance

#### 新材料产业增储上产

Expand reserves and production in the new materials industry

公司不断探索前沿技术,积极推动超高性能混凝土、绿色低碳水泥、无机非金属材料等新材料增储上产,并广泛应用于 旗下各类工程项目。同时,积极开拓外部市场,参与国内外新材料产业竞争,以优质产品和服务树立品牌形象。

The Company explored cutting-edge technologies and actively promoted the increase of reserves and production of new materials such as ultra-high performance concrete, green and low-carbon cement, and inorganic nonmetallic materials, which were widely used in various engineering projects of the Company. Besides, it actively explored external markets, participated in the domestic and international new materials industry competition, and established a good brand image through high-quality products and services.

# 案例 CASE

中铁大桥局承建的双柳长江大桥、跨粑铺大堤桥、航天城互通北引桥 LUHPC(轻质超高性能混凝土)预制桥面板安 装工程圆满完成,实现了 LUHPC 新材料在国内桥梁工程的首次大规模应用,为探索超大跨径钢混组合结构开辟了一 条新的广阔应用前景。

The installation of LUHPC (lightweight ultra-high performance concrete) prefabricated deck slabs on projects such as the Shuangliu Yangtze River Bridge, the Cross-Bapu Levee Bridge, and the North Approach Bridge of Aerospace City Interchange, constructed by China Railway Major Bridge Engineering Group, has been successfully completed. This represented the first large-scale application of LUHPC in domestic bridge engineering and offered expansive application prospects for the ultra-wide span steel-concrete composite structures.



#### 新能源产业持续发力

Make continuous efforts in the new energy sector

#### 公司积极投身新能源产业发展浪潮,快速发展风电、光伏发电等产业,在新能源市场竞争中成功崭露头角。

The Company actively participated in the development of the new energy industry, rapidly developing wind power, PV power generation and other sectors, and it successfully stood out in the competition of new energy market.

#### 

2024 年 11 月 13 日,由中铁大桥局参建的山东垦利 100 万千瓦海上光伏项目首批发电单元正式并网,该项目是全球 最大的开放式海上光伏项目。项目全部并网后,预计年发电量 17.8 亿千瓦时,可满足 267 万普通中国城镇居民一年 的用电量,同时节约标准煤 50.38 万吨,减少二氧化碳排放 134.47 万吨。此外,项目采用"渔光一体"开发方式, 在保障渔业养殖功能的同时实现清洁能源发电,预计渔业养殖年收益将超过 2700 万元。

On November 13, 2024, the first batch of power generation units from the 1-gigawatt offshore PV project in Kenli District, Shandong Province, constructed with the participation of China Railway Major Bridge Engineering Group, was officially connected to the grid. It is the largest open-sea offshore PV project worldwide. Once the project is fully connected, the expected annual power generation will reach 17,800 GWh, sufficient to meet the annual electricity needs of 2.67 million ordinary Chinese urban residents. Additionally, it will save 503,800 tons of coal equivalent (tce) and reduce carbon dioxide emissions by 1.3447 million tons. Moreover, the project utilizes an "aquaculture-PV power generation integration" approach, facilitating clean energy production while supporting fishery activities. The annual revenue from aquaculture is expected to exceed RMB27 million.



## 向远着眼 未来产业加紧布局

Step up the layout of future industries

公司高瞻远瞩,积极布局数字基建、智能建造、地下空间开发领域等产业,全力构建面向未来的产业体系,引领建筑行 业迈向新征程。

With a far-sighted vision, the Company actively deployed industries such as digital infrastructure construction, intelligent construction, and underground space development. It was fully committed to building a future-oriented industrial system and leading the construction industry onto a new journey.

#### ▲ 案例 新质生产力的"未来工厂" CASE The "future factory" of new quality produce

中铁一局在西成高铁建设现场建成智能化轨枕厂和小型预制构件厂,探索新质生产力。预制构件厂实现预制生产、温 控蒸养、自动脱模、机器人码垛、成品养护等全过程智能化生产功能,仅需4名作业人员辅助,平均日产量达95方, 较人工生产提高10-15倍。轨枕厂10名作业人员每天可生产1600根高铁双块式轨枕,满足甘肃段183.2公里轨枕需求。 通过技术创新,如 MES 制造执行系统、3D 视觉系统、智能养护系统等,大幅提高生产效率和产品质量,减少人工操 作误差,轨枕合格率提升至99%。

China Railway First Group established an intelligent sleeper production facility and a small-scale precast component factory at the construction site of the Xi'an-Chengdu High-speed Railway to explore new quality productive forces. The precast component factory features comprehensive intelligent production capabilities, including prefabrication, temperature-controlled steam curing, automated demolding, robotic palletizing, and finished product maintenance. With just four operators needed for assistance, the factory achieved an average daily output of 95 cubic meters, which is 10 to 15 times higher than traditional manual production. The sleeper factory, staffed by 10 operators, can produce 1,600 high-speed rail bi-block sleepers daily, meeting the demand for sleepers along the 183.2-kilometer Gansu section. Through technological innovations such as MES manufacturing execution systems, 3D vision systems, and intelligent maintenance systems, production efficiency and product quality have been significantly enhanced. This reduces manual operation errors, increasing the qualification rate of sleepers to 99%.



钢筋自动焊接 Automatic rebar welding

# 责任聚焦 Focus on Responsibility

完善制度 提升治理 全面深化改革天地宽 Improve systems and enhance governance to embrace comprehensive and in-depth reform





# 完善制度 提升治理 全面深化改革天地宽

Improve systems and enhance governance to embrace comprehensive and in-depth reform

公司全面贯彻落实党的二十届三中全会精神,深入实施 国企改革深化提升行动,以改革破解发展难题、增强发 展活力、厚植发展优势,着力打造创新领先、功能突 出、治理高效、充满活力的现代新国企。 CREC fully implemented the spirit of the third plenary session of the 20th CPC Central Committee, thoroughly implemented the actions to deepen and upgrade the reforms of SOEs, solved development problems through reform, enhanced development vitality, strengthened development advantages, and strove to build a new modern SOE characterized by leading innovation capabilities, outstanding functions, efficient governance and vitality.

### 加强顶层设计 Strengthen top-level design

公司成立深改领导小组和专项工作组高位统筹改革任务,建立常态化推进机制,多次召开会议加速改革进程;深入基层 遴选联系点企业,开展调研并出台配套政策,推广改革经验;将改革深化提升行动要求纳入考核体系,强化激励约束, 确保改革工作系统推进、有序落实。

The Company established a leading group for in-depth reform and a dedicated task force to drive the reform agenda at the highest level; set up a reform implementation mechanism and convened numerous meetings to expedite the reform process; selected contact point enterprises, conducted investigations and issued supporting policies to promote reform experience; integrated the requirements of the reform deepening and upgrading action into the evaluation system, strengthening incentives and constraints, thus ensuring the smooth progression of the reform.

#### 截至2024年末

By the end of 2024

# 公司**292**项改革举措完成**189**项

the Company has completed 189 out of 292 reform initiatives

# 各单位综合完成进度基本达到80%以上

The comprehensive completion rate of each unit of the Company generally exceeded 80%.

# 综合完成进度达到81.5%,超过央企平均进度水平

with an overall completion rate of 81.5%, which surpassed the average progress of central SOEs.



中国中铁举办中央企业改革深化提升行动联建互助交流活动

China Railway Group successfully held the Central Enterprise Reform Deepening and Upgrading Action Joint Construction Mutual Assistance Exchange Activity



打刈性出台以卑能复以束Ⅰ♥┦坝,形成以单经短材料备♥扁

Issued 109 targeted supporting reform policies and compiled 20 documents summarizing reform experience



## 完善中国特色现代企业制度

Improve the modern enterprise system with Chinese characteristics

公司深入贯彻新《公司法》要求,坚持"两个一以贯之",将党的领导深度融入公司治理各环节,持续完善中国特色现代 企业制度。以深化治理体系改革为主线,优化党委、董事会、经理层权责边界,推动所属二级企业全面实现外部董事占多 数,健全外部董事履职评价机制,显著提升董事会科学决策效能。通过强化制度建设与规范运作,构建权责法定、权责透 明、协调运转、有效制衡的公司治理机制。

The company thoroughly implements the requirements of the new company law, adheres to the "two consistency", deeply integrates the leadership of the Party into all aspects of corporate governance, and continues to improve the modern enterprise system with Chinese characteristics. With deepening the reform of the governance system as the main line, we will optimize the rights and responsibilities of the Party committee, the board of directors and the management, promote the secondary enterprises to fully realize the majority of external directors, improve the performance evaluation mechanism of external directors, and significantly improve the scientific decision-making efficiency of the board of directors. By strengthening the system construction and standardized operation, we will build a transparent and efficient decision-making system with statutory rights and responsibilities, and promote the coordinated operation of governance entities.



中国中铁为全体董监高提供《公司法》学习资料,为总部和子公司员工开展《公司法》宣贯培训。

China Railway provided all directors, supervisors and senior executives with learning materials for the new company law, and conducted publicity and implementation training on the law for headquarters and subsidiary employees.

### 推动企业降本提质增效

#### Cut costs, enhance quality, and boost efficiency

公司深入推进机构精简,持续压降管理成本。截至2024年底,累计压减境内法人企业26户、境外机构15户,撤并经营机构 105个、直属项目管理机构8个,撤销议事协调机构42个。

The Company further streamlined internal organizations and continuously slashed management costs. By the end of 2024, it has reduced 26 domestic corporate entities and 15 overseas institutions, conducted revocation and amalgamation of 105 operational institutions and 8 directly affiliated project management organizations, and completed revocation of 42 deliberation and coordination bodies.

# **二 案例** 中铁二局多措并举推改革 瘦身健体增活力 CASE China Railway No. 2 Engineering Group is implementing mu

中铁二局大力加强市场化用工管理,深化多元板块业务改革,推进三级公司本部机构、区域营销机构和社管中心改革, 多系统、多维度、多举措打好瘦身健体组合拳,深入推进市场化经营机制改革,不断释放组织活力、提升管理效能。

China Railway No. 2 Engineering Group vigorously strengthens marketoriented employment management, deepens the reform of diversified business sectors, promotes the reform of the headquarters, regional marketing institutions, and social management centers of the third-level companies, and takes multiple systems, dimensions, and measures to achieve a combination of slimming and fitness. It deeply promotes the reform of marketoriented operation mechanisms, continuously unleashes organizational vitality, and improves management efficiency.



#### ■ 案例 中铁交通建立高速公路运营成本双控管理机制 CASE China Railway Communications Investment Group has establishe oppressures

中铁交通深化高速公路运营管理改革,创新实施运营成本与人工成本"双控"管理模式,在委托运营和自运营项目中 推行成本目标精准测算与责任包干制,推动所属单位市场化运作,实现自主管理、调控与分配,有效促进效益联动与

价值创造,激发管理内生动力。

In deepening the reform of expressway operation and management, China **Railway Communications Investment** Group has implemented "dual control" management of operating costs and labor costs in both commissioned and self-operated projects of expressways, achieving accurate cost target calculation and responsibility contracting, realizing market-oriented operation of independent management, regulation and allocation of affiliated units, promoting benefit linkage and value creation, and stimulating endogenous management power.



### **深化"三项制度"改革** Deepen the reform of "three systems"

公司系统制定修订涵盖深化三项制度改革评估、经理层成员任期制和契约化管理、人才引进等80余项规章制度,构建以评 促改、持续优化的长效机制。2024年评估显示,上年度全公司范围实行任期制和契约化管理的经理层成员人数占比、管理 人员退出比例等6项指标达到历史最高分值,充分彰显制度建设成效。

The Company formulated and revised 80 rules and regulations encompassing three system reform evaluations, the tenure system and contractual management mechanism of the Management members, as well as talent introduction. Additionally, it established a long-term mechanism to drive reform and ensure continuous improvement through evaluations. In 2023, it achieved the highest scores in six indicators, such as the proportion of Management members under the tenure system and contractual management mechanism, and the withdrawal ratio of management personnel.

#### ▲ 案例 中铁一局五公司扎实推进"三项制度"改革 CASE The Fifth Engineering Co., Ltd. of China Railway First Group steadily promotes th

中铁一局五公司坚持以经理层成员任期制和契约化管理为"三项制度"改革核心,在中铁一局范围内率先完成三级公司经理层成员"两书"签约,覆盖率达100%,实现"干部能上能下,员工能进能出、薪酬能增能减"的改革目标。

The Fifth Engineering Co., Ltd. of China Railway First Group adheres to the "three systems" reform core of the tenure system and contractual management of management members, and takes the lead in completing the "two-letter" signing of management members of third-level companies within the scope of China Railway First Group, with a coverage rate of 100%, achieving the reform goal of "cadres can be promoted or demoted, employees can enter or leave, and salaries can be increased or decreased".



# 打造核心竞争主体

#### Create a core competitive entity

公司深入实施"扶优扶强"战略,全力推进"王牌企业""专精特新企业""主力三级公司"建设,通过强化资源配置、 创新体制机制,全面激发发展动能;与此同时,坚决淘汰落后产能,加大扭亏治亏工作力度,实施分类施策、精准发力, 切实提升发展质量。

The company deeply implements the strategy of "supporting the excellent and the strong", fully promotes the construction of "ace enterprises", "specialized and special new enterprises" and "main third-level companies". and comprehensively stimulates the development momentum by strengthening resource allocation and innovating system and mechanism. At the same time, we will resolutely eliminate backward production capacity, intensify efforts to rectify losses, implement classified measures and make precise efforts to effectively improve the quality of development.

中国中铁三级工程公司20强 Top 20 China Railway Third-Level Engineering Companies				
中铁建工集团第二建设有限公司	Ũ	China Railway Construction Engineering Group Second Construction Co., Ltd.		
中铁建工集团第五建设有限公司	2	China Railway Construction Engineering Group Fifth Construction Co., Ltd.		
中铁建工集团有限公司华北分公司	3	China Railway Construction Engineering Group Co., Ltd. North China Branch		
中铁四局集团第四工程有限公司	4	China Railway No. 4 Engineering Group Fourth Engineering Co., Ltd.		
中铁四局集团有限公司第八工程分公司	5	China Railway No. 4 Engineering Group Eighth Engineering Branch		
中铁四局集团有限公司第七工程分公司	6	China Railway No. 4 Engineering Group Seventh Engineering Branch		
中铁七局集团郑州工程有限公司	Ī	Zhengzhou Engineering Co., Ltd. of China Railway Seventh Group		
中铁一局集团有限公司第三工程分公司	8	China Railway First Group Co., Ltd. Third Engineering Branch		
中铁四局集团第一工程有限公司	9	China Railway No. 4 Engineering Group First Engineering Co., Ltd.		
中铁电气化局集团有限公司城铁公司	10	China Railway Electrification Engineering Group Urban Railway Company		
中铁电气化局集团北京电气化工程有限公司	1	China Railway Electrification Engineering Group Beijing Electrification Engineering Co., Ltd.		
中铁一局集团新运工程有限公司	12	China Railway First Group Xinyun Engineering Co., Ltd.		
中铁四局集团第三建设有限公司	13	China Railway No. 4 Engineering Group Third Construction Co., Ltd.		
中铁一局集团第一建设有限公司	14	China Railway First Group First Construction Co., Ltd.		
中铁三局集团建筑安装工程有限公司	15	China Railway No. 3 Engineering Group Construction and Installation Engineering Co., Ltd.		
中铁四局集团建筑工程有限公司	16	China Railway No. 4 Engineering Group Construction Engineering Co., Ltd.		
中铁七局集团第三工程有限公司	1	China Railway Seventh Group Third Engineering Co., Ltd.		
中铁四局集团有限公司市政工程分公司	18	China Railway No. 4 Engineering Group Municipal Engineering Branch		
中铁建工集团有限公司深圳分公司	19	China Railway Construction Engineering Group Co., Ltd. Shenzhen Branch		
中铁电气化局集团第一工程有限公司	20	China Railway Electrification Engineering Group First Engineering Co., Ltd.		

## 推进"科改行动""双百行动"改革专项工程

Advance the special reform initiatives under the "science & technology reform action" and "double-hundred action"

在国务院国资委"科改企业""双百企业"2023年度考核中,公司获评整体成效突出的中央企业,所属6户子企业成绩优异,其中3家企业获评"标杆",3家企业获评"优秀"。

In SASAC's annual evaluation of enterprises under the "science & technology reform action" and "double-hundred action" in 2023, CREC was recognized as a central SOE with outstanding overall performance, with "3 benchmarks and 3 excellent grades" achieved by six of its subsidiaries.



#### 案例 中铁装备深入践行"三个转变" 持续强化科技创新 CASE China Railway Engineering Equipment Group deeply practices the "three transformations" and continues to strengthen sci-tech innovation

中铁装备深入践行习近平总书记关于"三个转变"重要指示精神,通过持续深化科技创新、优化产业结构、建强人才 队伍,有力推动企业高质量发展实现新跨越,成为盾构行业唯一同时斩获国家科技进步一等奖、二等奖,以及首个荣 获中国专利金奖、制造业单项冠军、中国工业大奖的企业。

China Railway Engineering Equipment Group has thoroughly implemented the important instructions of General Secretary Xi Jinping on the "three transformations". By continuously deepening scientific and technological innovation, optimizing the industrial structure, and building a strong talent team, it has effectively promoted the high-quality development of enterprises to achieve new leaps. It has become the only enterprise in the shield industry that has won the first and second prizes of the national science and technology progress award at the same time, and the first enterprise to win the China Patent Gold Award, the single champion of the manufacturing industry, and the China industry award.


## 抓实大商务管理

Ensure effective measures in whole life-cycle business management

公司深化"一切工作到项目"管理思路,聚焦"效益提升、价值创 造",全面开展大商务管理体系建设及项目管理效益提升三年行动, 推动项目管理水平和管理效率加快提升。

The company deepened its management approach of "all work focused on projects," concentrating on "efficiency improvement and value creation." It fully implemented a three-year action plan for building a comprehensive business management system and enhancing project management effectiveness, which accelerated the improvement of project management standards and management efficiency.

公司积极推动财务集约化、商务精细化、法务风控化、采购体系化深 度融合,构建全链条协同机制。整合职能并深化信息化平台建设,实 现业务数据贯通与资源高效配置,同时强化供应链成本管控,推动管 理效能显著提升,将四融合优势转化为高质量发展新动能,持续增强 企业核心竞争力。

The company actively promotes the deep integration of financial intensification, business refinement, legal risk control and procurement systematization, and constructs the whole chain coordination mechanism. It endeavored to integrate functions and deepen the construction of information platform, realize the connection of business data and efficient allocation of resources; at the same time, it tried to strengthen the cost control of the supply chain, promote the significant improvement of management efficiency, transform the four integration advantages into new drivers of high-quality development, and continue to enhance the core competitiveness of enterprises.



中国中铁举办大商务管理暨项目管理效益提升三年 行动培训

CREC holds a training session for the three-year action to enhance efficiency in whole life-cycle business management and project management



中国中铁财商法采"四融合"工作推进会 CREC's work promotion meeting for the integration

frameworks'

of "financial, commercial, legal, and procurement

异例 中铁四局深化供应链体系建设 赋能企业高质量发展
CASE China Railway No. 4 Engineering Group deepens the construction of its supply chain system to empower its high-quality development
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中铁四局建立了战略采购、四局商城、区域联采、网络物流为抓手,集供应链、资金链、价值链为一体的四局供应链

管理体系,供应链更加安全稳健,助力企业提质增效。

China Railway No. 4 Engineering Group has established a four bureau supply chain management system with strategic procurement, four bureau shopping mall, regional joint procurement, and network logistics as the focus, integrating supply chain, capital chain, and value chain. It has formed a distinctive four bureau supply chain ecosystem, making the supply chain safer and more stable, and helping enterprises improve quality and efficiency.



公司建立"两拖欠"治理长效机制,强化激励约束,尤其对虚假清欠、新增无分歧欠款、不履行生效的仲裁(判决)等行为,及时处理,加大责任追究力度。

It endeavored to establish a long-term mechanism for the governance of "two arrears", strengthen incentives and constraints, especially for behaviors such as false debt clearance, new undisputed debts, and failure to fulfill effective arbitration (judgments), timely handle them, and increase accountability efforts.

# 责任聚焦 Focus on Responsibility

用情用心 深化帮扶 书写乡村振兴新答卷 Put heart and soul into further assistance to submit a new answer sheet for rural revitalization



# 用情用心 深化帮扶 书写乡村振兴新答卷

Put heart and soul into further assistance to submit a new answer sheet for rural revitalization

公司深入贯彻落实习近平总书记关于"三农"工作的重 要论述,认真履行帮扶责任,有序推进各项工作落实落 地,扎实推动巩固拓展脱贫攻坚成果同乡村振兴有效衔 接,为促进农业农村现代化、加快建设农业强国持续贡 献中铁力量。 The Company deeply implemented General Secretary Xi Jinping's important discussions on issues relating to agriculture, rural areas and farmers, earnestly fulfilled its responsibility to provide assistance, and orderly advanced the implementation of various tasks. It effectively promoted the connection between consolidating and expanding the achievements of poverty alleviation and rural revitalization, continuously contributing to the modernization of agriculture and rural areas and the acceleration of building a strong agricultural nation.

## 组织保障 系统集成聚合力

Offer organizational assurance: Create synergy for system integration

公司高度重视定点帮扶和对口支援工作,成立定点帮扶暨援疆援藏援青工作领导小组,召开年度帮扶工作会议,实现对 帮扶县调研全覆盖。公司主要领导带队深入乡村一线考察项目、座谈交流,确保帮扶工作精准务实。同时,强化咨询 督导,组织专家深入现场调研11次,形成调研报告11份,下达督办函4封,加强资金监管,确保帮扶方向不偏、力度不 减、成色不变,构建了上下联动、协同发力的帮扶工作格局。

The Company placed significant emphasis on paired assistance efforts, established a leadership group dedicated to paired assistance as well as aid to Xinjiang, Tibet, and Qinghai. It conducted annual assistance work meetings and achieved comprehensive coverage in conducting research on all assisted counties. The Company's primary leaders personally led teams into rural frontlines to assess projects and engage in discussions and exchanges, ensuring the assistance efforts were precise and pragmatic. Besides, the Company strengthened its consultation and supervision efforts. It organized experts to conduct 11 indepth on-site investigations, which resulted in 11 investigation reports, and issued four supervisory letters to strengthen fund supervision. It strove to ensure that the direction of assistance remained unbiased, the intensity was undiminished, and the quality was consistent, and finally established a framework for assistance work characterized by both vertical linkage and coordinated efforts.



中国中铁在山西省保德县召开定点帮扶工作座谈会 CREC holds a symposium on paired assistance in Baode County, Shanxi Province

#### 2024年 In 2024

#### 赴定点帮扶县调研指导

66人次

Offered guidance to 66 persons in counties receiving paired assistance after conducting investigations

# 帮扶、支援挂职干部和驻村第一书记

Assisted and supported 11 cadres in temporary positions and first secretaries stationed in villages 全年投入无偿帮扶资金 **6590**万元

Invested RMB65.9 million as assistance funds

## 无偿援藏资金 **2070**万元

Invested RMB20.7 million as assistance funds for Xizang

# 培训基层干部人才

Trained 43,933 primary-level cadres and personnel

# 购买和帮助销售农产品

Purchased and assisted in the sale of agricultural products worth RMB60.2386 million

# 引进帮扶项目或企业

3↑ Introduced 3 a

Introduced 3 assistance projects or enterprises

## 帮助培育新型农业经营主体 **18**个

Assisted in cultivating 18 new agricultural business entities



## 精准施策 多措并举促发展

Implement targeted policies: Adopt multiple measures to promote development

公司通过产业帮扶、教育支持、文化下乡、基础设施建设等多维度举措,助力实现乡村全面振兴。

The company has taken multidimensional measures such as industrial assistance, educational support, cultural outreach to rural areas, and infrastructure construction to help achieve comprehensive rural revitalization.

#### 产业发展, 夯实经济基础

Promote industrial development to strengthen the economic foundation

公司立足帮扶地区资源禀赋,因地制宜发展特色农业产业,通过技术引进、产业链延伸和产业融合,助力实现产业兴 旺、农民富裕。在湖南汝城县连续第3年投入500万元扶持汝城县白毛茶发展,建设白毛茶野生资源保护区和母本园,扩大 种植面积,建设标准化加工厂房,促进白毛茶产业进一步发展。投入1500万元,建设集物流、仓储、交易等功能于一体的 沙洲农产品冷链物流交易中心,解决该地区7万亩水果分拣、储存、交易问题,促进周边"十村一社区"做大做强特色水果 产业,实现联动发展、均衡发展、健康发展。

The Company develops characteristic agricultural industries according to local conditions of the assisted regions, including the resource endowment. Through technology introduction, industrial chain extension, and industrial integration, it helps to achieve industrial prosperity and farmer prosperity. In Rucheng County, Hunan Province, for the third consecutive year, 5 million yuan has been invested to support the development of Baimao tea in Rucheng County. This includes the construction of a Baimao tea wild resource reserve and mother plant, the expansion of planting areas, the construction of standardized processing plants, and the promotion of further development of the Baimao tea industry. An investment of 15 million yuan will be made to build a Shazhou agricultural product cold chain logistics trading center that integrates logistics, warehousing, and trading functions. This will solve the problem of sorting, storing, and trading 70,000 mu of fruits in the area, promote the development and strengthening of the characteristic fruit industry in the surrounding "ten villages and one community", and achieve coordinated, balanced, and healthy development.





在湖南省桂东县投入 2000 万元,将全溪村等 9个村落分散的 2500 亩稻田打造成集中连片的 "冷水稻米特色产 业" 示范基地。通过实施高标准农田改造,改善耕作与灌溉条件,推进机械化作业,同步整合销售渠道、开展品 牌包装,提升品牌价值,实现冷水稻米高产稳产,助力当地村民增产增收。

An investment of 20 million yuan will be made in Guidong County, Hunan Province to transform the 2,500 mu of scattered rice fields in nine villages, including Quanxi Village, into a centralized and contiguous demonstration base for the "cold water rice characteristic industry". By implementing high-standard farmland transformation, improving farming and irrigation conditions, promoting mechanized operations, simultaneously integrating sales channels, carrying out brand packaging, enhancing brand value, high and stable yields of cold-water rice will be achieved and local villagers' production and income will be increased.



在山西省保德县投入2000万元,参与在桥头镇等4个乡镇建设2万亩高标准农田,进行土地平整、灌溉设施及田间道 路建设。高标准农田建成后,每亩每年增收400余元,惠及800余户村民,有效促进当地主粮增产,村民增收致富。

Invest 20 million yuan in Baode County, Shanxi Province to participate in the construction of 20,000 mu of high standard farmland in four towns including Qiaotou Town, and carry out land leveling, irrigation facilities, and field road construction. After the construction of high standard farmland, the annual income per mu will increase by more than 400 yuan, benefiting more than 800 households of villagers, effectively promoting the increase of local staple food production, and increasing the income and wealth of villagers.



### 人才培育,点亮希望之光

Cultivate talent to illuminate the hope

公司积极响应国务院国资委"央企育才促振兴"倡议,坚持扶志扶智相结合,通过教育赋能与人才培育双轮驱动,为乡 村发展注入可持续动力,点亮乡村希望之光,照亮乡村美好未来。

The Company actively supported SASAC's initiative of "central SOEs cultivating talent for revitalization." It upheld the dual approach of fostering ambition and intellect, and injected sustainable energy into rural development through education and talent cultivation, illuminating the hope of rural areas, and shining a light on a bright future for the countryside.

中国中铁借助职教优势在湖南省汝城县职业中专打造技能教育培训基地,援建工程测量、电气运行与控制、工程 机械驾驶与维修三个专业,累计招生1801人,毕业生进入中国中铁就业人数达337人。同时,公司与汝城县人民 政府共建的"人人有技能"品牌开展各类培训49期,共培训各类技术人才6101人次。

Leveraging its expertise in vocational education, CREC established a skills education and training base at the vocational secondary school in Rucheng County, Hunan Province, and supported the development of three specialized fields: engineering surveying, electrical operation and control, and machinery operation and maintenance. The base has enrolled 1,801 students, with 337 graduates securing employment in the Company. Moreover, the "everyone has skills" initiative, co-developed by the Company and the Rucheng County People's Government, conducted 49 training sessions of various types, successfully training a total of 6,101 technical professionals.



2024 年 12 月,全国劳模、"大国工匠"中铁一局五公司测量专家白芝勇到汝城职校开展讲学活动。

In December 2024, Bai Zhiyong, a national model worker, a national-level master artisan and a surveying expert from the Fifth Engineering Co., Ltd. of China Railway First Group, delivers a lecture at a vocational school in Rucheng County



中国中铁援建的寨前中学位于湖南省桂东县寨前镇,总建筑面积10683平方米,主要包括1栋教学楼、1栋食堂宿舍 楼和1栋教职工宿舍楼。该校可容纳学生800余人,其中寄宿类学生600人,有效缓解了县城教学压力,对促进当地 教育振兴具有重要意义。

Zhaiqian Middle School, constructed with assistance from CREC, was situated in Zhaiqian Town, Guidong County, Hunan Province. Covering a total construction area of 10,683 square meters, it primarily consists of one academic building, one building for dining and accommodation, and one dormitory building for faculty. The school is capable of accommodating over 800 students, including 600 boarders, thereby effectively alleviating the educational pressure in the county and significantly contributing to the revitalization of local education.



中国中铁举办"央企育才促振兴" 第四期基层干部乡村振兴能力提升 培训班。

CREC hosts the 4th training session aimed at enhancing rural revitalization capacities for primarylevel cadres under the initiative of "central SOEs cultivating talent for revitalization"



#### 文化下乡,凝聚精神力量 Bring culture to the countryside to harness spiritual strength

公司充分发挥自身优势,挖掘乡村特色文化,通过建设文化活动室,策划乡村特色活动,组织文艺团队深入乡村开展演出,为乡村文化繁荣注入新的活力,让村民在文化传承与发展中增强文化自信,增强乡村的凝聚力和向心力。

中国中铁积极支持保德县猯窝村文化设施建设,投资修建文化广场、村史馆和多功能活动室,为村民打造集文化 活动、知识普及与乡土记忆展示于一体的综合平台。同时,组织文艺下乡演出、农民读书会等活动,激发村民参 与文化建设的热情,让乡村文化生活焕发新活力。累计赠送各类书籍15000余册,形成爱读书、读好书、善读书 的浓厚氛围。

CREC actively supported the construction of cultural facilities in Wanwo Village, Baode County, investing in the establishment of a cultural square, a village history museum, and a multifunctional activities room. This created a comprehensive platform for villagers, integrating cultural activities, knowledge dissemination, and local heritage display. At the same time, it organized cultural performances in rural areas and farmer reading clubs, igniting villagers' enthusiasm for participating in cultural development and revitalizing rural cultural life. A total of over 15,000 various books were donated, fostering a strong atmosphere of reading, encouraging a love for books, and promoting good reading habits.



The Company fully leveraged its advantages to explore characteristic rural cultures by building cultural activity centers, planning distinctive rural activities, and organizing artistic teams to perform in the countryside. These efforts injected new energy into the cultural prosperity of rural areas, allowing villagers to enhance cultural self-confidence through cultural inheritance and development, thereby enhancing the cohesion and unity of rural residents.

中铁大桥局在湖北省宣恩县两河口村"积极为彭家寨旅游景区、沙道沟镇争取"景区带村"旅游帮扶新路径,拓宽村集体经济增收渠道,为村民就近就地就业和增收致富提供机会。

In Lianghekou Village, Xuan'en County, Hubei Province, China Railway Major Bridge Engineering Group actively strove for a new tourism assistance path of "village growth driven by scenic areas" for Pengjiazhai and Shadaogou Town, broadened the income sources of the village collective economy, and provided opportunities for villagers to find jobs nearby and increase their income.



中铁大桥局支持彭家寨举办"知音湖北,四季村晚"2024年全国夏季"村晚"活动,助力当地特色文化旅游项目的发展。

China Railway Major Bridge Engineering Group assists Pengjiazhai in organizing the "Bosom Friends in Hubei, Four-Season Village Gala" 2024 National Summer Village Gala event, providing vigorous support for the development of local characteristic cultural tourism projects.

环境改善,提升幸福指数 Improve environment to enhance the sense of happiness

公司充分发挥基础设施建设优势,改善交通条件,加强人居环境整治,提升村容村貌,助力乡村蝶变,让村民切实感受 到交通便利、环境优美、生活富裕的新变化,为乡村振兴画卷添上了浓墨重彩的一笔。

The company fully leverages its advantages in infrastructure construction, improves transportation conditions, strengthens the improvement of living environment, enhances the appearance of villages, and assists in the transformation of rural areas. It allows villagers to truly feel the new changes of convenient transportation, beautiful environment, and prosperous life, adding a significant touch to the picture of rural revitalization.



中国中铁在湖南桂东县修建 X004、X006 以及振兴大道三条道路,带动 文旅康养发展。

In Guidong County, Hunan Province, CREC constructed three roads: X004, X006, and Zhenxing Avenue, which fostered the development of cultural tourism and health care.



中国中铁在湖南桂东县完成3家长者食堂建设和90户困难老年人家庭 适老化改造、80户困难残疾家庭无障碍改造,不断增强村民获得感、 幸福感和安全感。

It completed the construction of three canteens for the elderly in Guidong, carried out elderly-friendly renovations for 90 underprivileged senior families, and made accessibility renovations for 80 disabled families. These measures aimed to keep enhancing villagers' sense of fulfillment, happiness and security.



中国中铁持续推进湖南汝城县乡村振兴示范创建工作,按照"办点、连 线、扩面、成景"的工作思路,加大对8个示范村的资金支持,重点抓 好产业发展、人居环境整治、农村规范建房、乡风文明等方面建设,开 创汝城乡村振兴新模式。

China Railway Group Corporation continues to promote the demonstration and creation of rural revitalization in Rucheng County, Hunan Province. Following the work concept of "establishing points, connecting lines, expanding coverage, and creating scenery", it has increased financial support for 8 demonstration villages, focusing on industrial development, improving living environment, building standardized houses in rural areas, and promoting rural culture and civilization, creating a new model for rural revitalization in Rucheng.



#### Achieve the intended goals as planned: Show a sense of responsibility through fruitful results

2024年,公司持续发力、善作善成,在乡村振兴领域形成了许多可复制、可推广的经验模式,取得了令人瞩目的成绩, 受到了社会各界广泛认可,示范效应不断彰显。

In 2024, the Company continued to make strides and achieve success, developing many replicable and promotable models in the field of rural revitalization. It obtained remarkable results and received widespread recognition from various sectors of society, demonstrating its increasingly obvious demonstration effect.



中铁信托《慈善信托助力保德县光伏电站建设》荣获2024中国银行 业ESG实践案例之"社会公益责任案例"

The Charitable Trust Supporting PV Power Station Construction in Baode County of China Railway Trust received the "Social Public Welfare Responsibility Case" award as part of the 2024 China Banking ESG Practice Cases.

中铁信托荣获上证·诚信托"财富管理品牌奖",公司 受托设立"中国中铁乡村振兴2号慈善信托" 荣获上证·诚信托

#### "最佳公益慈善信托产品奖"

China Railway Trust received the "Wealth Management Brand Award" from SSE-Cheng Trust, and its "CREC Rural Revitalization No. 2 Charitable Trust" won the "Best Charitable Trust Product Award" from SSE-Cheng Trust. 中铁信托受托设立"中国中铁乡村振兴3号慈善信 托"获评四川企业社会责任优秀案例之 "ESG公益责任案例"

"CREC Rural Revitalization No. 3 Charitable Trust" of China Railway Trust won the honor of the "ESG Public Welfare Responsibility Case" among Sichuan's outstanding ESG cases.

### 中铁六院合肥院《乡村振兴视角下的建筑设计》

#### 获评中国交通企业管理协会2024年度"交通企业社会责任(ESG)杰出案例"

The Architectural Design from a Rural Revitalization Perspective of China Railway Liuyuan Group Hefei Branch won the honor of the "Outstanding ESG Case of Communication Enterprises in 2024" from China Association of Communication Enterprise Management.

# **开路先锋** 淬炼中国建造

Part I

上篇

A Trailblazer Contributing to Chinese Construction

规范治理 夯实发展之基 Solidify the foundation for development through standardized governance

精心建造 坚守工匠之道 Adhere to the craftsmanship spirit to ensure meticulou construction

互联互通 点亮丝路之光 Light up the beacon of the Silk Road by enhancing connectivity

创新驱动 激扬未来之帆 Drive future development through inno

诚信合规 走好稳健之路 Ensure steady development through integrity an

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作为"三个转变"重要指示的首倡地和"中国品牌日" 的发源地,中国中铁始终胸怀"两个大局",心系"国 之大者",高擎"开路先锋"旗帜,聚焦主责主业,坚 决有力服务国家战略,积极推动构建人类命运共同体, 充分彰显中国建造的实力担当。

As the first entity to initiate the important instructions on "three transformations" and to launch the "China Brand Day," CREC has always embraced the "two overall situations" and the country's most fundamental interests, and proudly raised the banner of "pioneering the way." It concentrated on its primary responsibilities and effectively served the national strategy, actively promoted the construction of a community with a shared future for mankind, fully demonstrating the strength and commitment of Chinese construction.

# 规范治理 夯实发展之基

#### Solidify the foundation for development through standardized governance

中国中铁依据法律法规和国资监管、证券监管要求,持续完善权责法定、权责透明、协调运转、有效制衡的公司治理机 制,促进董事会与其他治理主体良性互动、切实发挥作用,提升公司治理整体效能。

In compliance with the laws and regulations and the requirements of state-owned assets and securities supervision, CREC continuously enhances its corporate governance mechanism that is legally defined in terms of rights and responsibilities, transparent in rights and responsibilities, coordinated in operation, and effective in checks and balances. This facilitated positive interaction between the board of directors and other governance entities, allowing them to play their roles effectively and enhancing the overall effectiveness of corporate governance.

## 完善治理结构 Improve the governance structure

公司坚持 "两个一以贯之",严格遵循《中华人民共和国公司法》《中华人民共和国证券法》等法律法规以及上海证券 交易所、香港联合交易所监管规则,全面落实国务院国资委关于深化国企改革、完善公司治理的部署要求,明确股东大 会、董事会、经理层、监事会权责边界与决策程序,规范各治理主体行权履职,保障重大决策科学高效。

The Company has consistently implemented the two principles. It strictly complies with the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, and other relevant laws and regulations, as well as the supervision rules of the Shanghai Stock Exchange (SSE) and the Stock Exchange of Hong Kong Limited. It fully implemented the requirements set forth by the SASAC regarding the deepening of state-owned enterprise reform and the improvement of corporate governance. It clarified the boundaries of responsibilities and decision-making procedures for the shareholders' meeting, board of directors, management, and supervisory board, standardizing the exercise of authority and duties by each governance entity to ensure that major decisions were made in a scientific and efficient manner.

## 规范董事会运作 Regulate the operation of the Board of Directors

公司持续优化董事会治理,动态调整成员结构以强化专业互补,健全制度体系并细化议事规则,同时优化专门委员会职能,提升专业化运作水平。注重发挥独立董事作用,保障其独立性与监督效能,有效提升决策科学性与监督制衡效能,激发董事会治理活力。公司董事会荣获中国上市公司协会"2023上市公司董事会最佳实践案例"奖。

The Company continuously optimized the governance of its board of directors, dynamically adjusting the composition of its members to enhance professional complementarity. It improved the institutional framework and refined the rules of procedure while also optimizing the functions of its specialized committees to elevate the level of professional operations. Emphasis was placed on the role of independent directors, ensuring their independence and supervisory effectiveness, which effectively enhanced the scientific nature of decision-making and the effectiveness of checks and balances, thereby invigorating the governance of the board. Its Board of Directors won the honor of the 2023 Best Practice Case of the Board of Directors of Listed Companies from CAPCO.



#### 2024年 In 2024

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Held 2 shareholders' meetings, and deliberated and approved 17 proposals.

公司连续11年获得上海证券交易所信息披露A类评价

The company has received Class A evaluation on information disclosure of Shanghai Stock Exchange for 11 consecutive years



Held 14 board meetings, deliberated and approved 139 proposals and reports, and made 108 resolutions.



公司根据沪港两地上市规则和监管规定,制定了《董事会成员多元化政策》并遵照执行。截至报告期末,公司董事会由7名 董事组成,其中女性董事占比为14%;7名董事分别具有与公司业务发展相关的工程、会计、投资、企业管理等专业知识和 丰富的从业经验。多元化的成员构成确保了董事会成员经验与能力的有效互补,为公司董事会提升决策效率和决策质量起 到了重要作用。

In line with the listing rules and regulatory requirements of both Shanghai and Hong Kong, the Company developed and followed the Policy of Board Member Diversity. As of the end of the reporting period, the Board of Directors consisted of 7 directors, with women making up 14% of the board. All of the 7 directors possess professional expertise and extensive experience in fields such as engineering, accounting, investment, and business management, crucial for the Company's business development. The diversified membership ensures the effective complementarity of experience and abilities among board members, which plays an important role in improving decision-making efficiency and quality for the Board of Directors of the Company.

# 董事会独立性

#### Board independence

公司严格按照《公司章程》规定的任职条件选聘独立董事,在任独立董事人数及背景满足上市地上市规则的要求。公司 董事会中,独立非执行董事人数不少于三分之一,非执行董事人数超过半数。公司董事会下设战略与投资、审计与风险 管理、薪酬与考核、提名、安全健康环保五个专门委员会,其中战略与投资委员会、提名委员会、安全健康环保委员会 中非执行董事占多数,审计与风险管理委员会、薪酬与考核委员会全部由非执行董事组成。董事会及各专门委员会独立 性得到有效保证,为维护公司整体利益和全体股东的合法权益,特别是保护中小股东利益发挥着积极作用。

The Company selects and employs independent directors in strict accordance with the conditions stipulated in the Articles of Association, and the number and background of incumbent independent directors meet the requirements of listing rules at the place of listing. The number of independent non-executive directors is not less than one-third of the total in the Board of Directors, and the number of non-executive directors exceeds half. The Board of Directors is supported by five specialized committees: Strategy and Investment Committee, Audit and Risk Management Committee, Remuneration and Evaluation Committee, the Nomination Committee, and Health, Safety and Environment (HSE) Committee are non-executive directors, and all members of the Audit and Risk Management Committee are non-executive directors. The independence of the Board of Directors and specialized committees is effectively guaranteed, which plays a positive role in safeguarding the overall interests of the Company and the legitimate rights and interests of all shareholders, especially in protecting the interests of small and medium-sized shareholders.

董事会 Board of Directors				
召开会议10次,针 对33项议案进行审 议并提出意见建议, 尤其是在投资负面清 单、重大投资项目的 把关方面发挥了积极 作用。	召开会议9次,针对 39项议案进行审议 并提出意见建议,尤 其是在针对资产负债 率管控、"两金"压 降、房地产业务风险 防范、现金流管控、 内部控制等方面提出 较好的意见建议,在 强化公司财务管理和 风险管理方面发挥了 积极作用。	召开会议5次,针对 11项议案进行审议 并提出意见建议,并 重点对高管绩效考核 方案、股权激励、业 绩考核等方面提出了 意见建议,在加强公 司薪酬管理与业绩考 核工作方面发挥了积 极作用。	召开会议2次,针对 2项议案进行审议并 提出意见建议,在强 化公司安全、质量、 职业健康、环境保护 工作方面发挥了积极 作用。	召开会议5次,针对 13项议案进行审议 并提出意见建议, 在公司依法合规履行 董事选任与高管聘任 程序方面发挥了积极 作用。
Held 10 meetings to review 33 proposals and put forward relevant opinions and suggestions, especially playing an active role in the negative list of investment and the control of major investment projects	Held 9 meetings to review 39 proposals and offer relevant opinions and suggestions, and expressed views on regular reports, financial management, related party transactions, internal control audits, and risk management, with a particular focus on asset-liability ratio control, reduction of receivables and inventory, prevention of real estate business risks, cash flow control, and internal control, playing a positive role in strengthening the Company's financial and risk management	Convened 5 meetings to review 11 proposals and offer relevant opinions and suggestions, with a focus on the performance appraisal scheme of senior executives, equity incentives and performance assessment, playing a positive role in strengthening the Company's salary management and performance assessment	Held 2 meetings to review 2 proposals and put forward relevant opinions and suggestions, playing an active role in strengthening the Company's efforts in safety, quality, occupational health and environmental protection	Held 5 meetings to review 13 proposals and provide relevant opinions and suggestions, playing an active role in the Company's adherence to legal procedures for selecting directors and appointing senior executives



### 董事培训 Director training

2024年,公司组织开展新一届董事任前培训和上市公司独董、新任高管培训,组织董监高参加财务造假犯罪案件、诚信 建设和反舞弊等专题国资证券监管培训27人次;举办为期5天的二级子公司外部董事监事、董事会日常工作机构业务培 训,线上线下521人参加;利用多平台开展公司治理、宏观经济、建筑行业、战新产业等多领域专业培训,持续提升董 事会成员的知识水平和履职能力。

In 2024, the Company organized a new session of pre-appointment training for directors and training for independent directors and newly appointed senior executives of listed companies, and provided 27 directors, supervisors and senior executives with training sessions related to financial fraud, integrity building, and anti-fraud, as part of the state-owned asset securities supervision program. It conducted a 5-day business training session for the external directors and supervisors of secondary subsidiaries and the daily operation teams of the Board of Directors, gathering a total of 521 participants both online and offline. It carried out professional training for corporate governance, macro-economy, the construction industry, emerging industries of strategic importance and other fields through multiple platforms to continuously improve the knowledge level and duty performance ability of board members.

# 明确监事会职能 Clarify the functions of the Board of Supervisors

监事会是公司的监督机构,本着对股东负责的态度,认真对公司财务和公司董事、高级管理人员履行职责的合法合规性 进行监督。截至报告期末,公司监事会由4名监事组成,其中股东代表监事1名,职工代表监事1名。监事会根据《中华 人民共和国公司法》《中华人民共和国证券法》《上市公司监事会工作指引》以及《公司章程》赋予的职责勤勉履职, 召开监事会会议5次,审议与定期报告、内部控制、利润分配等相关的47项议案。

The Board of Supervisors acts as the Company's supervisory body, operating with a commitment to shareholder accountability. It thoroughly monitors the legality and compliance of the Company's financial operations and the duty performance of the Company's directors and senior executives. As at the end of the reporting period, the Board of Supervisors consisted of X supervisors, including X shareholder representative supervisors and X employee representative supervisors. The Board of Supervisors performed its duties diligently in accordance with the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, the Guidelines on the Work of the Board of Supervisors of Listed Companies and the Articles of Association. It convened five meetings and deliberated 47 proposals related to periodic reports, internal control and profit distribution.

# **激发经理层活力** Stimulate the vitality of the Management

公司坚持守正创新,积极把制度优势转化为治理效能,激发经理层干事创业动力。着力在制度融合上下功夫,经理层围绕"谋经营、抓落实、强管理"职能,优化经理层向董事会汇报工作机制,构建大经营格局。着力在人员配置上求实效,截至报告期末,公司设总裁1名、副总裁6名、总会计师1名、总工程师1名、总经济师1名,经理层不同职责人员相互配合、相互促进、相得益彰,共同组织生产经营日常工作,执行董事会决议和行使董事会授权事项决策权,定期向董事会报告生产经营情况、反馈决议执行情况。着力在企业经营发展中见真章,提升经理层积极性、创新力、责任感,有力应对挑战,不断抢抓机遇,纵深推进改革创新,持续加强风险防范,不断推动企业高质量发展迈上新台阶。

China Railway adheres to integrity and innovation, actively transforms institutional advantages into governance effectiveness, and stimulates the entrepreneurial motivation of the executive officers. Focusing on the integration of systems, the management level has optimized the reporting mechanism of the management level to the board of directors and built a large-scale business pattern around the function of "seeking operation, grasping implementation and strengthening management". Strive for effectiveness in staffing. As of the end of the reporting period, the company has set up one president, six vice presidents, one chief accountant, one chief engineer and one chief economist. Personnel with different responsibilities at the management level cooperate, promote and complement each other, jointly organize the daily work of production and operation, implement the resolutions of the board of directors and exercise the decision-making power of the matters authorized by the board of directors, regularly report the production and operation situation to the board of directors and feed back the implementation of the resolutions. Focus on seeing the truth in the business development of enterprises, improve the enthusiasm, innovation and sense of responsibility of managers, effectively respond to challenges, constantly seize opportunities, promote reform and innovation in depth, continue to strengthen risk prevention, and constantly promote the high-quality development of enterprises to a new level.

# 维护股东权益 Safeguard shareholder rights and interests

公司持续优化股东事务管理,推动落实《股东大会议事规则》,规范审核程序,严格把控风险,公司股东大会会议的召集、提案、召开、表决和决议均由律师现场见证,并出具合法合规的法律意见。持续提升公司投资者关系管理水平,规范信息披露行为,通过召开业绩说明会、资本市场运作专项说明会、投资者专题交流会等方式加强与投资者的沟通交流,及时回应投资者关切,提升公司资本市场形象。报告期内,公司召开股东大会会议1次,审议通过了与定期报告、利润分配等相关的13项议案。

The company continues to optimize shareholder affairs management, promote the implementation of the "Rules of Procedure for Shareholders' Meetings", standardize audit procedures, strictly control risks. The convening, proposal, holding, voting, and resolutions of the company's shareholders' meetings are witnessed by lawyers on site, and legal opinions that are legal and compliant are issued. Continuously improve the company's investor relations management level, standardize information disclosure behavior, strengthen communication and exchange with investors through holding performance briefing meetings, special briefing meetings on capital market operations, and investor exchange meetings, respond to investor concerns in a timely manner, and enhance the company's capital market image. During the reporting period, the company held one shareholders' meeting and approved 13 proposals related to regular reports and profit distribution.



2024 年 6 月 28 日,中国中铁召开 2023 年年度股东大会。 On June 28, 2024, CREC holds its 2023 Annual Shareholders<sup>1</sup> Meeting

# 精心建造 坚守工匠之道

Adhere to the craftsmanship spirit to ensure meticulous construction

中国中铁大力弘扬工匠精神,坚持以精益求精、臻于至善的信念建造精品工程,努力做到干一项工程树一座丰碑,成就 百年品质典范。

CREC actively promoted the spirit of craftsmanship, adhering to the belief of striving for excellence and achieving perfection in its construction of high-quality projects. It aimed to set a benchmark with each project, creating a lasting legacy and establishing a century-long standard of quality.

## 打造卓越产品 Develop exceptional products

公司通过制度、科技、文化三轮驱动,全力打造卓越产品,树立行业质量标杆,凸显央企在质量强国战略中的主力军 地位。

The Company, driven by the triad of systems, technology, and culture, made every effort to create excellent products, established industry quality benchmarks, and highlighted the position of central SOEs as the main force in the strategy for building a strong nation in quality.

## 质量管理

#### Quality management

公司不断加强质量精准化管理,分层次、分行业实施全面质量管理(TQM),积极推动企业ISO9001质量管理体系换版升级。积极引入卓越绩效管理等先进质量管理方式,开展标准化技术和工艺改造,建立工艺参数及质量在线监控系统。同时开展与国内外优质产品的质量比对,鼓励以用户为中心的微创新,改善用户体验,激发消费潜能,满足绿色环保、可持续发展、消费友好等需求。截至2024年底,公司拥有各类资质及许可4052项。

The company continuously strengthened precision management of quality and implemented TQM at multiple levels and across various industries, actively promoting the upgrade of the ISO 9001 quality management system. It also proactively introduced advanced quality management approaches, such as excellence performance management, and carried out the standardization of technologies and process transformations. A system for online monitoring of process parameters and quality was established. Additionally, the company conducted quality comparisons with high-quality products from both domestic and international sources, encouraged user-centered micro-innovations, improved user experiences, stimulated consumption potential, and addressed demands for environmental friendliness, sustainable development, and consumer-friendly practices. As of the end of 2024, it holds a total of 4,052 qualifications and licenses.



中铁电气化局光谷空轨维保团队创新举措提升运行质量 Optics Valley Sky Rail Maintenance Team of China Railway Electrification Engineering Group employs innovative measures to enhance operational quality

中铁电气化局光谷空轨维保团队不断夯实质量管理,建立维保信息化管理系统,依托自主研发的智能检测机器人、 多功能作业车等设备,开展线路日检、月检、季检和年检,实现了维保工作的数字化、智能化管理,填补了国内空 轨施工运维的多项空白。截至2024年底,武汉光谷空轨已安全运行超过400天,运行质量大幅提升。

The Optics Valley Sky Rail Maintenance Team of China Railway Electrification Engineering Group continually reinforced quality management and established a maintenance information management system. By leveraging self-developed intelligent inspection robots and multifunctional operation vehicles, among other equipment, the team conducted daily, monthly, quarterly, and annual inspections, and achieved digital and intelligent management of maintenance tasks, filling numerous gaps in domestic air rail construction, operation and maintenance. By the end of 2024, the "Optics Valley Photon" sky rail in Wuhan has been operating safely for over 400 days, with significant improvements in operational quality.



### 合肥市轨道交通建设工程质量安全监督站

#### 表扬信

中国中铁股份有限公司: 由贵公司率关承建的合肥市轨道交通 8 号线一期土建工程, 已于 2024 年 12 月 1 日顺利通过竣工验收, 数合同工期提前一年。 白 2020 年 12 月透场以来, 贵公司积极响应合肥市葵, 市政 府及市行业主管部门工作部署要求, 积极融入合肥市轨道交通工 程大建设。8 号线总包都始终坚持安全第一的原则, 扎实做好各 项风险防控工作。2024 年以来, 总包部对剩余附属工程、管线 迁改、道路恢复等进行风险研判, 并制定针对性管控措施, 日常 施工作业过程中, 加强隐患排查频率及力度, 严格落实风险分级 管控与隐患排查治理双重预防机制; 严格把控施工质量关, 施工 过程中产守每道工序红线, 为 8 号线"高质量"开通奠定了坚实 的基础。 经研究决定, 对合肥市轨道交通 8 号线一期土建施工总承包 都子以表扬, 希望贵公司在合肥市轨道交通后续建设中继续承承 2024年12月1日,由中国中铁牵头承建的合肥市轨道交通8号线一期 土建工程顺利通过竣工验收,较合同工期提前一年。合肥市轨道交 通建设工程质量安全监督站专门致信给予表扬。

On December 1, 2024, the first phase civil engineering project of Hefei Metro Line 8, led by China Railway Group, successfully passed the completion acceptance, one year ahead of the contract period. The Quality and Safety Supervision Station of Hefei Rail Transit Construction Project specially wrote a letter to commend the Company.

### 质量标杆 Quality benchmark

优良传统,为合肥轨道交通工程建设再立新功!

2024年,中国中铁11项工程入选中国市政工程协会市政工程最高质量水平评价工程名单。公司严格按照《中国中铁优质 工程评选规定》,在"严格把关、优中选优"的基础上,规范优质工程评审流程,深入开展工程创优活动,推动企业和 施工现场加强工程质量管理,评选出中国中铁优质工程金杯奖36项、中国中铁杯奖60项,推动工程质量水平的持续改进 与提高。公司作为建筑类企业,不存在因安全与健康理由须回收产品的情形。

In 2024, 11 projects of China Railway Group were selected as the highest quality evaluation projects for municipal engineering by the China Municipal Engineering Association. The company strictly follows the "China Railway High Quality Engineering Evaluation Regulations", standardizes the evaluation process of high-quality engineering on the basis of "strict control and selection of the best", deeply carries out engineering excellence activities, promotes enterprises and construction sites to strengthen engineering quality management, and has selected 36 China Railway High Quality Engineering Golden Cup Awards and 60 China Railway Cup Awards to ensure the continuous improvement and enhancement of engineering quality level. As a construction enterprise, the company does not have to recycle products for safety and health reasons.

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中国第五座南极考察站——南极秦岭站建成开站 Qinling Station, China's fifth Antarctic research station, has been completed and opened

中铁建工集团将工程建设与国家极地战略紧密结合,致力于打造"极寒地区房屋快速建造标杆",填补极地施工建造技术空白。在南极极端条件下,建设者们不畏艰险,拼搏奋进,以求实态度确保工程质量和功能需求的精准实现,用汗水和智慧铸就了秦岭站。这不仅是极地精神的生动体现,更是我国极地事业发展的重要里程碑。

2024年2月7日,中铁建工承建的中国南极秦岭站正式建成并投入使用。习近平总书记致信表示热烈祝贺,贺信指出,"中国南极秦岭站的建成,将为我国和全世界科学工作者持续探索自然奥秘、勇攀科学高峰提供有力保障"。

China Railway Construction Engineering Group integrated engineering construction with the national polar strategy. It is committed to establishing a "benchmark for rapid housing construction in extremely cold regions," thereby filling the technological gaps in polar construction. In the harsh conditions of Antarctica, the builders demonstrated remarkable resilience and determination, meticulously ensuring that the project met all quality and functional requirements through a pragmatic approach. They combined hard work and ingenuity to successfully establish the Qinling Station. This not only exemplifies the spirit of polar exploration but also marks a significant milestone in the advancement of China's polar research efforts.

On February 7, 2024, China's Qinling Station in Antarctica, constructed by China Railway Construction Engineering Group, was officially completed and put into use. In his congratulatory letter, General Secretary Xi Jinping stated, "The establishment of the Qinling Station in Antarctica will provide strong support for domestic and global scientists to continue uncover the mysteries of nature and pursue scientific excellence."



南极秦岭站 Qinling Station in Antarctica



### <mark>标杆项目</mark> Benchmark project





2024年7月1日,由中铁六局承建的全球首例墩 顶双转体曲线钢桁梁斜拉桥安家庄东桥正式通车, 为京津冀一体化协同发展注入新动能。

On July 1, 2024, the East Anjiazhuang Grand Bridge, noted as the world's first curved steel truss cable-stayed bridge with dual pivoting decks atop piers, officially opened, injecting new momentum into the coordinated development of the Beijing-Tianjin-Hebei region. It was constructed by China Railway Sixth Group.

#### 2024 年 12 月 11 日,由中铁大桥局参建的世界跨 径最大的三塔斜拉公路桥黄茅海大桥正式通车,为 粤港澳大湾区建设注入强劲动力。

On December 11, 2024, the Huangmaohai Bridge, constructed with the participation of China Railway Major Bridge Engineering Group, was officially opened to traffic. As the world's largest three-tower cable-stayed highway bridge, it provides significant momentum for the development of the Guangdong-Hong Kong-Macao Greater Bay Area.





2024 年 12 月 26 日,中铁二局参建的长三角高铁 网中唯一一条贯通江浙沪的大通道沪苏湖高铁正式 通车,促进长三角一体化高质量发展。

On December 26, 2024, the Shanghai-Suzhou-Huzhou High-speed Railway, the sole major corridor traversing Jiangsu, Zhejiang, and Shanghai in the Yangtze River Delta high-speed railway network and built with the participation of China Railway No. 2 Engineering Group, officially opened to traffic. This promoted the high-quality integrated development of the Yangtze River Delta.

## 强化品牌建设 Strengthen brand building

公司认真践行"三个转变"重要指示,持续加强品牌建设,积极推动中国技术、中国标准、中国方案"走出去",努力 把中国高铁、中国桥梁、中国隧道、中国电气化、中国装备打造成为全球建造的新典范、国家形象的新名片。

公司落实《中国中铁品牌管理办法》,发布《2024年度中国中铁品牌架构图谱》,系统构建全过程品牌管理体系。召 开2024年度品牌建设工作会及专题培训,推动核心子品牌管理的二级单位建立健全品牌传播、品牌识别、品牌资产、品 牌保护等品牌管理制度体系,实现核心子品牌管理全覆盖。持续加强品牌保护,优化协议、合同管理,规范商标字号准 入,明确退出机制。开展品牌权益常态化监测,建立全级次产权登记"白名单",严厉打击品牌侵权行为。



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The company earnestly practiced the "three transformations," continuously strengthened brand building, and actively promoted the "going global" initiative for Chinese technology, Chinese standards, and Chinese solutions. It endeavored to establish Chinese high-speed rail, Chinese bridges, Chinese tunnels, Chinese electrification, and Chinese equipment as new benchmarks for global construction and as a new business card for the national image.

The company implements the "China Railway Brand Management Measures", releases the "2024 China Railway Brand Architecture Map", and systematically constructs a full process brand management system. Convene the 2024 Brand Building Work Conference and special training to promote the establishment and improvement of brand communication, brand identification, brand assets, brand protection and other brand management systems for secondary units of core sub brand management, and achieve full coverage of core sub brand management. Continuously strengthen brand protection, optimize agreement and contract management, standardize trademark name access, and clarify exit mechanisms. Carry out regular monitoring of brand equity, establish a "whitelist" for full level property rights registration, and crack down on brand infringement behavior severely.





2024 年 5 月 10 日,2024 年中国品牌日活动启动仪式在上海举行。在中央企业展区,中国中铁展台突出"三个转变"首倡地、"中国品牌日"发源地和"开路先锋"文化理念,展现了企业在"三个转变"重要指示引领下取得的一系列令人振奋的突破性进展和标志性成果。

On May 10, 2024, the opening ceremony of 2024 China Brand Day events was held in Shanghai. In the central SOE exhibition area, CREC's booth emphasized its role as the first entity to initiate the "three transformations" and to launch the "China Brand Day," and the "trailblazer" cultural concept. It showcased a series of thrilling advancements and remarkable achievements under the important directive of the "three transformations".



2024年5月16日,中国中铁在总部召开"砥砺十年向新而行"——中国中铁践行"三个转变"重要指示座谈交流会。

On May 16, 2024, CREC held an important symposium titled "Forging Ahead for Ten Years in Pursuit of Innovation: CREC Implementing the Three Transformations" at its headquarters.



2024年 In 2024

## 打造"沿着总书记的足迹"媒体宣传品牌,开展"向新而行 智造未来"主题采访活动,全年在各级媒体刊发 **29**万余篇,自有融媒体平台累计阅读量达**3000**多万人次。

The Company established a media publicity brand titled "Following the Footsteps of General Secretary Xi Jinping," conducted interviews under the theme "Embracing Innovation, Shaping the Future Through Intelligent Manufacturing." Over the year, it published more than 290,000 articles across media platforms at all levels, with its own media network accumulating over 30 million views.

制作发布《中国中 铁国际形象宣传 片》,有力提升了 CREC品牌知名度和 含金量。

It released the International Image Promotion Video of China Railway Group Limited, significantly boosting the brand awareness and prestige of CREC. 开展2024年度品牌建设典型案例和品牌 故事评选,评选**中国中铁典型案例** 和优秀品牌故事各20个,1<sub>项作品</sub> 获评国有企业优秀品牌故事。

In 2024, CREC organized relevant activities to select 20 typical cases of brand building and 20 outstanding brand stories. One entry was honored as an exceptional brand story among SOEs. 中铁一局、中铁四局、中铁大桥局、中铁隧道局、中铁电气 化局入选"中国建造"品牌 企业。

Several subsidiaries of CREC have been recognized as brand enterprises in Chinese construction, including China Railway First Group, China Railway No. 4 Engineering Group, China Railway Major Bridge Engineering Group, China Railway Tunnel Group, and China Railway Electrification Engineering Group.

#### 中铁工业获评中国品牌建设促进

### 会 "2024中国品牌价值机械设备 制造榜单"前列。

China Railway Hi-Tech Industry was ranked among the top of the "2024 Most Valuable Chinese Machinery and Equipment Brands" by the China Council for Brand Development.

#### 中铁装备获评国务院国资委中央企业品牌引领行动首批优

秀"企业品牌",掘进机产销量连续七年世界 第一。

China Railway Engineering Equipment Group was recognized as part of the first outstanding "enterprise brands" under the central SOE brand leadership initiative of the SASAC. Its TBMs have led the world in production and sales for seven consecutive years.



近年来,公司涌现出窦铁成、巨晓林、严金秀、白芝勇、王杜娟、王中美等全国重大先进典型和一批全国最美职工、最美家庭、最美退役军人、道德模范、中国好人、见义勇为先进个人等榜样人物,成为企业形象的最佳代言人。

In recent years, the Company has cultivated a group of excellent employees with exemplary characters, including Dou Tiecheng, Ju Xiaolin, Yan Jinxiu, Bai Zhiyong, Wang Dujuan, and Wang Zhongmei. They have won such honors as the most outstanding employees/families/veterans, the ethical role models, the Good Samaritans of China, and the individuals recognized for their courageous actions for justice. These role models have become the best spokespersons for the corporate image.



全国知识型产业工人、共和国"双百人物"——窦铁成 Dou Tiecheng, National Knowledge-Based Industry Worker, Dual-Honored Figure of the PRC









国际隧协首位女主席、隧道女神——严金秀 Yan Jinxiu, the First Female President of the International Tunnelling and Underground Space Association, Outstanding Female in Tunneling



全国最美职工、首届央企楷模——白芝勇 Bai Zhiyong, the Most Beautiful Employee in the Country, the First Model ofCentral SOEs





全国最美科技工作者、央企楷模——王杜娟 Wang Dujuan, the Most Beautiful Sci-Tech Worker in the Country, Modelof Central SOEs





全国劳动模范、全国优秀共产党员——王中美 Wang Zhongmei, NationalModel Worker, Outstanding CPC Member

## 提供优质服务 Provide high-quality services

公司始终坚持"精益求精,持续改进"的总体思路,以对国家、对人民、对客户、对企业高度负责的态度,不断提高服务质量。

The company always adhered to the overarching principle of "pursuing excellence and continuous improvement," with a highly responsible attitude towards the country, the people, the customers, and the enterprise, continuously enhancing the quality of its services.

重视客户沟通与售后服务 Attach importance to customer communication and after-sales service

公司高度重视与客户的沟通,设立电话、传真和邮件等多种沟通渠道,成立了相关监管中心,认真对待客户的投诉与建议,及时反馈处理结果,提高客户满意度,积极营造良好的客户关系。

The company placed great importance on communication with its clients, establishing multiple channels such as phone, fax, and email. It set up relevant supervisory centers to address customer complaints and suggestions seriously, providing timely feedback on the resolution of issues. This approach aimed to enhance customer satisfaction and actively foster positive client relationships.

#### 严格隐私与数据保护 Highlight strict privacy and data protection

公司严格遵守《中华人民共和国网络安全法》《中华人民共和国数据安全法》《中华人民共和国个人信息保护法》等网 络安全相关法律法规,建立数据安全管控系统,全面保护客户隐私和企业数据安全。依托中铁云网信息科技有限公司为 企业数据保护提供专业服务。报告期内,公司未发生泄露客户隐私事件。

The Company strictly complies with network security-related laws and regulations, such as the Cybersecurity Law of the People's Republic of China, the Data Security Law of the People's Republic of China, and the Personal Information Protection Law of the People's Republic of China. It established a data security management system to comprehensively protect customer privacy and ensure enterprise data security. During the reporting period, there were no incidents of customer privacy breaches within the Company, relying on the profesional services for data protection provided by CREC Cloud Net Information Technology Co., Ltd.



# 互联互通 点亮丝路之光

Light up the beacon of the Silk Road by enhancing connectivity

中国中铁始终坚持共商共建共享原则,深度融入高质量共建"一带一路",统筹推进重大标志性工程和"小而美"民生 项目建设,形成一批示范性合作成果,促进沿线国家基础设施互联互通和经贸往来。同时,通过举办文化交流活动、支 持当地教育事业及参与公益慈善,搭建起民心相通的桥梁,夯实了共建"一带一路"的民意基础。

CREC consistently adhered to the principles of consultation, joint construction, and shared benefits. It deeply integrated into the high-quality development of the Belt and Road Initiative, coordinating the advancement of significant landmark projects alongside "small but beautiful" livelihood projects. This approach resulted in a number of exemplary cooperative achievements that promoted infrastructure connectivity and economic trade among countries along the route. At the same time, through hosting cultural exchange activities, supporting local education, and participating in charitable endeavors, it built bridges for mutual understanding among people, solidifying the public support for jointly building the Belt and Road Initiative.

# 助力当地发展 Facilitate local development

公司承建的吉尔吉斯斯坦灌溉系统、格鲁吉亚KK公路隧道、尼泊尔引水隧道、雅万高铁等重大工程稳步推进,让"一带 一路"合作从"大写意"走入"工笔画",规划图不断转化为实景图。

The Company steadily advanced major projects such as the irrigation system in Kyrgyzstan, tunnel of KK Highway in Georgia, diversion tunnel in Nepal, and Jakarta-Bandung High-Speed Railway. As it transitions from making high-level plans to intensive and meticulous implementation in BRI cooperation, it has turned an increasing number of planning drafts into realities.



2024 年 3 月 13 日,吉尔吉斯斯坦灌溉系统项目顺利移交。 On March 13, 2024, the irrigation system in Kyrgyzstan is successfully handed over.



2024 年 5 月 8 日,尼泊尔逊科西马林引水隧道项目主体顺利贯通。 On May 8, 2024, the main section of the tunnel under Nepal's Sunkoshi Marin Diversion Multipurpose Project is successfully completed.



2024年4月23日,格鲁吉亚南北走廊 KK 公路古多里隧道贯通。 On April 23, 2024, the Gudauri Tunnel of Georgia North-South Corridor KK Highway is successfully completed.



2024 年 10 月 17 日,雅万高铁开通运营满一年,逐渐成为一条 黄金旅游通道。

October 17, 2024 marks the first anniversary of the opening of Jakarta-Bandung High-Speed Railway, which gradually becomes a golden tourism channel.

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2024年11月14日,中国国家主席习近平同秘鲁总统博鲁阿尔特在利马总统府以视频方式共同出席钱凯港开港仪式。 钱凯港是中国和秘鲁共建"一带一路"重要合作项目。由中铁十局承建的钱凯隧道作为钱凯港的"咽喉工程",于 2024年8月5日实现贯通,赋能钱凯港口实现散杂货年吞吐能力620万吨、集装箱年吞吐能力150万标准箱,对于助力 秘鲁打造太平洋沿岸最有影响力的物流集散中心,推动秘鲁经济发展,深化中秘友好合作关系具有非常重要的意义。

On November 14, 2024, Chinese President Xi Jinping and Peruvian President Dina Boluarte attended the inauguration ceremony of Chancay Port by video link at the Presidential Palace in Lima. Chancay Port is an important cooperation project under the

Belt and Road Initiative, jointly built by China and Peru. The Chancay Tunnel, constructed by China Railway No. 10 Engineering Group Co., Ltd., served as the "throat project" for Chancay Port and achieved completion on August 5, 2024. This significant development enabled the port's ability to handle 6.2 million tons of bulk cargo and 1.5 million TEUs of containerized cargo annually. It played a crucial role in helping Peru establish itself as the most influential logistics hub along the Pacific coast, promoting the country's economic development and deepening the friendly cooperation between China and Peru.



#### L 案例 CASE

#### 孟加拉国帕德玛大桥铁路连接线正式开通运营 The Padma Bridge Rail Link in Bangladesh officially opens

作为中孟两国"一带一路"框架下的重要合作项目,由中国中铁承建的孟加拉帕德玛大桥及铁路连接线项目受到两 国领导人的高度关注。2024年12月24日,帕德玛大桥铁路连接线项目正式开通运营。该项目全长约170公里,是孟 加拉国迄今为止最大的铁路项目。通车后从达卡到杰索尔的运输时间由原来的10个小时缩短到2小时以内,将直接 惠及8000万人,拉动孟加拉国经济增长1.5个百分点。

As a significant collaboration project under the BRI framework between China and Bangladesh, the Padma Bridge Rail Link Project constructed by CREC in Bangladesh has garnered considerable attention from the leaders of both nations. On December 24, 2024, the Padma Bridge Rail Link Project was officially opened to traffic. Spanning approximately 170 kilometers in length, it is Bangladesh's largest railway project to date. After its opening, the travel time from Dhaka to Jashore was reduced from the original 10 hours to just two hours, directly benefiting 80 million people and enhancing Bangladesh's economic growth by 1.5 percentage points.



帕德玛大桥铁路连接线开通运营 Padma Bridge Rail Link is opened to traffic



## 加强合作交流 Strengthen cooperation and communication

公司在参与"一带一路"建设中,通过多层次国际合作与跨文化融合举措,积极打造互利共赢的合作典范。

The Company actively created a model of mutually beneficial cooperation through multi-level international collaboration and crosscultural integration initiatives while participating in the Belt and Road Initiative.

### 深化国际合作 Deepen international cooperation

公司积极参与中非合作论坛峰会、全球可持续交通大会、2024中国・马达加斯加经济发展圆桌会议及第八届中非企业家 大会等国际会议,深化与非洲及沿线国家在基础设施、可持续交通等领域的技术交流与资源共享,推动中国技术与国际 标准融合,进一步拓展了海外市场。

The Company actively participated in various international conferences such as the Summit of the Forum on China-Africa Cooperation, United Nations Global Sustainable Transport Conference, 2024 China-Madagascar Roundtable on Economic Development, and the 8th Conference of Chinese and African Entrepreneurs. It enhanced technical exchanges and resource sharing with African and BRI countries in areas such as infrastructure and sustainable transport, promoted the integration of Chinese technology with international standards, and further expanded the overseas markets.



中国中铁与刚果(金)开展商务活动 CREC conducts business activities with the Democratic Republic of the Congo



中国中铁亮相第十六届国际交通技术与设备展览会 CREC attends the 16th International Exhibition on Transport Technology and Equipment



中国中铁出席全球可持续交通高峰论坛(2024) CREC attends the Global Sustainable Transport Forum 2024

### 推动文化融合 Promote cultural integration

公司在推进"一带一路"建设中,始终秉持开放包容的理念,充分尊重沿线国家文化传统与习俗,积极开展同庆节日、 同台表演、同话友谊等文化交流活动,促进不同文明的互鉴与融合,使企业在赢得外籍员工和当地社会的认同与信任。

The Company consistently upheld an open and inclusive philosophy while promoting the Belt and Road Initiative. It fully respected the cultural traditions and customs of the countries along the route, actively engaged in cultural exchange activities such as celebrating festivals together, performing on the same stage, and discussing friendships. These efforts facilitated mutual learning and integration among different civilizations, enabling the Company to gain recognition and trust from foreign employees and the local community.



2024 年 2 月 23 日元宵节前夕,中国中铁孟铁项目与央广总台亚 非中心开展"圆梦之旅"元宵节特别节目。

On the eve of the Lantern Festival on February 23, 2024, CREC's railway project in Bangladesh and the Asia-Africa Center of China Media Group launch a special program titled "Journey to Fulfill Dreams" for the Lantern Festival.



2024年1月,中国中铁匈塞铁路项目举办"遇见匈塞、共话未来" 主题开放日暨共迎中国春节活动。

In January 2024, CREC's Hungary-Serbia Railway Project hosts an open day themed "Meeting Hungary and Serbia, Talking About the Future" and an activity celebrating the Chinese New Year.



2024 年 9 月 13 日,中国中铁与匈牙利罗兰大学联合主办以"共 建匈塞铁路同享天涯明月"为主题的"中国中铁——罗兰大学文 化融合之中秋年会"。

On September 13, 2024, CREC and Eötvös Loránd University (ELTE) in Hungary jointly host the "Mid-Autumn Festival Annual Meeting for CREC-ELTE Cultural Integration" with the theme of "Jointly Building Hungary-Serbia Railway, Facilitating Meeting and Reunion."



2024年10月28日,中铁七局乌干达项目开展校企文化交流活动, Kikuube地区政府官员、校方师生代表、属地媒体记者等100余 人参加。

On October 28, 2024, the project department of China Railway Seventh Group in Uganda carries out a school-enterprise cultural exchange activity, gathering over 100 people including Kikuube's government officials, school teachers and students representatives, and local reporters.


## 履行海外社会责任 Fulfill social responsibilities overseas

公司积极履行海外社会责任,通过促进就业、技术赋能、人才培育、抢险救灾、志愿服务、生态共建等举措,为所在国 发展注入可持续动能,树立了负责任的国际企业形象。

The company actively performs its overseas social responsibilities, injects sustainable momentum into the development of the host country and establishes a responsible international corporate image through measures such as promoting employment, technology empowerment, talent cultivation, disaster relief, voluntary service, and ecological co construction.

#### 改善民生福祉

#### Improve people's well-being

公司在海外坚持属地化经营,聘用大量本土员工,开展技能培训并组织赴华学习,提升其职业能力。同时,通过实施交通、电力等设施 建设,参与捐赠物资、抢险救灾等公益行动,直接惠及当地民众。

The company adhered to local operations overseas, hiring a large number of local employees, providing skill training, and organizing learning trips to China to enhance their professional abilities. At the same time, it engaged in infrastructure development such as transportation and electricity, participated in donations of materials, and took part in public welfare actions for disaster response, directly benefiting the local community.



中铁七局员工参与完成坦桑尼亚林地省米太加村(miteja)附近 马塔图(matandu)河抗洪抢险

Employees of China Railway Seventh Group join flood fighting and rescue efforts near the village of Miteja along the Matandu River in Lindi Region, Tanzania



中铁国际尼苏尔项目开展"阿尔巴因"朝觐公益服务

China Railway International Group organizes public services for the Arbaeen pilgrimage at the site of the Nisour Square Development Project



#### 中铁建工助力坦桑尼亚人才培养

China Railway Construction Engineering Group assists Tanzania with talent training

2024年9月13日,中铁建工联合坦桑尼亚国家交通学院、中非职业教育联盟开展毕业生实习计划启动会和项目参观活动,共同推进岗位实习与技能实训,助力学生成长成才,实现行业、企业、高校多方合作共赢。

On September 13, 2024, China Railway Construction Engineering Group, together with the National Institute of Transport of Tanzania and the China-Africa Vocational Education Alliance, holds a launch meeting for the graduate internship program and a project site visit. Together, they promote job internships and skills training, supporting student growth and success while achieving a win-win cooperation among the industry, the enterprise, and universities.



坦桑尼亚国家交通学院师生到中铁建工坦桑分公司库拉西尼基 地、诺德半岛中心项目进行参观学习。

Teachers and students of the Tanzania National Institute of Transport visited the Kurasini Base and the Nord Peninsula Center Project of China Railway Construction Engineering Group's Tanzania Branch.

#### 推进绿色施工

#### Promote green construction

公司在海外始终践行绿色发展理念,严格遵守驻在国相关环保法律法规,办理各类环保资质,积极采取有效措施助力海外项目节能减 排,切实保护当地生物多样性,实现工程建设与生态环境的和谐共生。

The company has always practiced the concept of green development overseas, strictly abided by the relevant environmental protection laws and regulations of the host country, handled various environmental protection qualifications, and actively taken effective measures to help overseas projects save energy and reduce emissions, effectively protect local biodiversity, and realize the harmonious coexistence between engineering construction and ecological environment.



中铁二院负责实施的孟加拉国多哈扎里至 科克斯巴扎尔铁路项目,规划修建了野生 大象专用通道,并建立监测预警系统,这 一创新举措在全世界范围内尚属首次,为 人类与野生动物和谐相处提供了新范本。 中铁二院撰写的案例《跨越铁路的"野生 大象专用通道",让"象往"家园更和谐》 入选第七届中国企业国际形象建设案例征 集活动"ESG 与绿色发展"类优秀案例。

The railway project from Dohazari and Cox's Bazar in Bangladesh, which is implemented by CREEC, has planned to build a special passage for wild elephants and established a monitoring and early warning system. This innovative measure is the first time in the world, providing a new model for harmonious coexistence between humans and wild animals. CREEC's case of "Special Passage for Wild Elephants" across the Railway to Make the Home of Elephants More Harmonious was selected as an outstanding case in the "ESG and Green Development" category at the 7th China Enterprise International Image Building Case Collection Event.



2024 年,在匈塞铁路项目施工过程中,中国中铁建设团队配合当地考古队保护文物,协助植被移植工作。 In 2024, during the construction of the Hungary-Serbia railway project, the China Railway Construction team cooperated with the local archaeological team to protect cultural relics and assisted transplantation work.



中铁资源在刚果(金)布桑加水电站建设过程中将绿色理念深深植入施工的每一个环节,广泛运用中国建筑施工的绿色科技及先进筑坝 技术,力求以"保绿"最大程度保护原生态,以最快速度"复绿"恢复原生态。2024年5月,刚果(金)第七届能源大会的与会代表 集体参观了布桑加水电站,纷纷对其赞叹不已,称其不仅是一项宏伟壮丽的水利工程,更是一个充满绿色环保理念的"生态综合体"。

During the construction of the Busanga Hydropower Station in the Democratic Republic of the Congo, China Railway Resources Group deeply implemented the green concept in every link, and widely used the Chinese green technology and advanced dambuilding technology, striving to protect the ecology to the greatest extent by "preserving green plants" and restore the original ecology at the fastest speed. In May 2024, delegates attending the 7th Energy Conference in the Democratic Republic of the Congo were amazed by the Busanga Hydropower Station during their visit. They said that it is not only a magnificent water conservancy project but also an "ecological complex" fully practicing the environmental protection concept.

#### 加强境外合规管理

#### Strengthen overseas compliance management

公司不断建立健全境外合规管理体系,配齐配强各层级境外法律合规专业人员,不断强化境外法律合规风险管控。持续完善排查机制, 连续7年开展境外法律合规风险年度排查,坚持做好季度风险监测,督促各层级识别、防范各类法律合规风险。高度重视涉外法治人才 培养,开展重点领域涉外法治研究及专题调研,有效提升涉外法治工作能力。持续培育合规文化,开展高风险岗位人员合规培训,组织 境外从业人员签订合规承诺书,多措并举开展涉外法治宣传。稳步推进合规管理信息化,强化重点环节的合规管控。

The Company has continued to improve its overseas compliance management system, strengthened the capacities of overseas legal compliance professionals at all levels, and continuously enhanced overseas legal compliance risk control. It has continued to improve the investigation mechanism, conducting annual investigations of overseas legal compliance risks for seven consecutive years. It has maintained quarterly risk monitoring and urged units all levels to identify and prevent various legal compliance risks. It has attached great importance to the training of foreign-related legal talent, carried out foreign-related legal research and special investigations in key areas, and effectively improved the ability to handle foreign-related legal work. It has continued to cultivate a compliance culture, conducted compliance training for personnel in high-risk positions, organized overseas practitioners to sign compliance commitments, and implemented various measures to promote foreign-related legal awareness. Additionally, it has steadily advanced the informatization of compliance management and strengthened compliance control in key areas.

# 创新驱动 激扬未来之帆

Drive future development through innovation

中国中铁始终将科技创新作为引领高质量发展的第一动力,持续深化体制改革,优化创新体系。聚焦国家战略与行业 前沿,在轨道交通、智能建造等领域突破一批"卡脖子"技术,推动智能化、绿色化转型,加速科技成果转化。通过 产学研深度融合打造原创技术策源地,培育新质生产力,以科技创新引领产业升级,服务国家科技自立自强与中国式 现代化建设。

CREC has always taken scientific and technological innovation as the first driving force to lead high-quality development, continued to deepen system reform and optimize the innovation system. Focus on the national strategy and industry frontier, break through a number of bottleneck of technologies in rail transit, intelligent construction and other fields, promote intelligent and green transformation, and accelerate the transformation of scientific and technological achievements. Through the in-depth integration of production, learning and research, we will create the original technology source, cultivate new quality productivity, lead industrial upgrading with scientific and technological innovation, and serve the national scientific and technological self-reliance and Chinese style modernization.



公司构建并完善"三级四层"科技创新体系和多层级立体化科技创新组织架构,强 化公司总部在科技创新管理中的协调、统筹、监督等职能,明确各层级创新主体定 位与职能,深入落实《推进实用技术成果内部有偿转化的工作意见》《科技创新奖 励管理规定》等制度,支撑科技创新体系高质量建设。

The Company established and refined a "three-tier, four-level" sci-tech innovation system, along with a multi-layered, three-dimensional organizational framework for innovation. It strengthened the functions of the headquarters, such as coordination, comprehensive planning, and supervision in sci-tech innovation management, and clearly defined the roles and functions of innovation entities at different levels. It also thoroughly implemented the Guidelines for the Internal Paid Conversion of Practical Technological Achievements and the Regulations on the Management of Scientific and Technological Innovation Awards, among other systems, to support the high-quality construction of the technological innovation system.



#### 深入调整"三级四层"科技创新的组织体系



Deeply adjust the "three-tier, four-level" organizational system for sci-tech innovation

# **攻克核心技术** Make breakthroughs in core technologies

公司紧扣立项指南,依托研发平台与重大项目深化科研"揭榜挂帅"机制,集中攻关突破一批核心关键建造技术,为践 行"效益提升价值创造" 理念提供了强有力的科技支撑。2024年,研制了国内首台可变径竖井扩孔掘进机、小直径双 护盾硬岩掘进机等工程装备,开发的"铁路标准梁轻量化关键技术与应用"等多项成果达到国际领先或国际先进水平。

The company closely followed the guidelines for project establishment, relying on the R&D platform and major projects to deepen the mechanism of "taking the lead" in scientific research, focused on tackling key problems and breaking through a number of core key construction technologies, providing strong scientific and technological support for the practice of the concept of "efficiency improvement and value creation". In 2024, the first variable diameter shaft reaming TBM, small diameter double shield Hard Rock TBM and other engineering equipment in China were developed, and many achievements such as "key technology and application of lightweight railway standard beam" developed reached the international leading or international advanced level.



2024 年 11 月 28 日,在第十届 ITA TUNNELLING AWARD( ITA 隧道奖)颁奖典礼上,中铁装备自主研制的"极小半径硬岩 TBM"项目 荣获"年度装备与设备创新"金奖,"青岛地铁 6 号线 1 期工程"获得"超越工程"铜奖。

January 28, 2024, at the awards ceremony of the 10th edition of ITA Tunnelling Awards, the "Ultra-small Turning Radius Hard Rock TBM" independently developed by China Railway Engineering Equipment Group won the Gold Award for "Product/Equipment Innovation of the Year" while the "Qingdao Metro Line 6 (Phase I) Project" received the Bronze Award for "Beyond Engineering."



"极小半径硬岩 TBM"项目 Ultra-small Turning Radius Hard Rock TBM



青岛地铁 6 号线 1 期工程 Qingdao Metro Line 6 (Phase I) Project



2024 年 8 月 30 日,由中铁二院勘察设计,中铁二局、八局、电 气化局、科研院参建的新建四川成都至青海西宁铁路镇江关至黄 胜关段开通运营。川青铁路镇江关至黄胜关段处于青藏高原东 缘高山峡谷地带,海拔从镇江关站的 2503 米攀升至黄胜关站的 3156 米,穿越了摩天岭等众多山脉,沿线地质条件复杂,施工难 度极大。中国中铁建设者们克服高寒缺氧、地质灾害频发等困难, 成功解决了隧道软岩大变形、高地应力、岩溶突水突泥等技术难 题,推动项目按期建成投运。



On August 30, 2024, the Zhenjiangguan-Huangshengguan section of the new Sichuan-Qinghai Railway was put into operation. It was surveyed and designed by China Railway Eryuan Engineering Group and constructed by China Railway No. 2 Engineering Group, China Railway No. 8 Engineering Group, China Railway Electrification Engineering Group, and China Railway Academy. The Zhenjiangguan-Huangshengguan section of the Sichuan-Qinghai Railway is located in the alpine and gorge area on the eastern edge of Oinghai-Tibet Plateau. With the altitude rising from 2,503 m at Zhenjiangguan Station to 3,156 m at Huangshengguan Station, this section passes through many mountains such as Motianling. The geological conditions along the route are complex, making construction challenging. The builders from CREC overcame challenges such as high altitude, low oxygen levels, and frequent geological disasters, successfully addressing technical difficulties like significant deformation of soft rock tunnels, high ground stress, and karst water and mud inrushes, which facilitated the project's timely completion and operation.

2024年10月5日,中铁隧道局在640.22米深的大瑞铁路高黎贡 山隧道2号竖井下的隧道里正式建成一座颠覆传统思路和空间布 局的混凝土拌合站,是国内铁路隧道建设史上的一次大胆创举。

On October 5, 2024, China Railway Tunnel Group officially built a concrete mixing station at a depth of 640.22 meters that subverted traditional ideas and spatial layout in the tunnel under No. 2 shaft of Gaoligong Mountain Rail Tunnel along Dali-Ruili Railway, which is a bold innovation in the history of domestic rail tunnel construction.

### L 案例 CASE

#### 中国中铁亮相2024年世界隧道大会 CREC attends the WTC2024

2024年4月22日,由国际隧道和地下空间协会(ITA)和中国土木工程学会主办的2024年世界隧道大会开幕,全球隧 道工程产业链上近200家知名企业参展,中国中铁携带众多高端隧道装备精彩亮相线下展览,吸引了海内外众多参 会人员的围观。

On April 22, 2024, the WTC2024 opened. Hosted by the International Tunnelling and Underground Space Association (ITA) and the China Civil Engineering Society, it gathered nearly 200 well-known companies in the global tunnel engineering industry chain. CREC brought many high-end tunnel equipment to the offline exhibition, attracting many visitors from home and abroad.



EJM 系列掘锚一体机 EJM digging-anchoring machine



DJ3E 智能型三臂凿岩台车 DJ3E intelligent three-boom drill jumbo

# **培育创新人才** Foster innovative talent

公司高度重视创新人才培养,构建以院士、全国工程勘察设计大师为引领,高级专业技术人才为骨干,3万余名一线高 技能人才为基础的创新队伍体系。通过健全管理办法与激励机制,实施科技型企业关键核心人才岗位分红激励,激发员 工创新活力;同时强化科技人才选拔培养,积极推荐大国工匠,定期评选科技标兵、特级技师等,为人才搭建成长展示 平台。

The Company attaches great importance to the cultivation of innovative talent. It has built an innovative talent team system led by academicians and national engineering survey and design masters, with senior professional and technical personnel as the backbone and more than 30,000 front-line high-skilled workers as the basis. By improving the management measures and incentive mechanisms, it has implemented position-based dividend incentives for key core talent in sci-tech enterprises to effectively stimulate employees' innovation vitality. It has also strengthened the selection and training of sci-tech talent, actively recommended national-level master artisans, and regularly selected sci-tech pacesetters, special-grade technicians and craftsman technicians, providing a display platform for sci-tech talent.



殊津贴高技能人才38人。

There were 56 national highly-skilled workers, including 4 people who have won the Skills Awards of China, 35 national technical experts, 5 national-level master artisans and 38 highly-skilled workers enjoying special government allowance of the State Council.





中国工程院院士、中国中铁首席科学家秦顺全、高宗余领衔 的高速铁路大跨度桥梁创新团队荣获"国家卓越工程师团队"

The high-speed railway long-span bridge innovation team led by Qin Shunquan and Gao Zongyu, academicians of the Chinese Academy of Engineering and chief scientists of CREC, wins the title of "National Excellent Engineer Team"

中国中铁高级专家李建斌带领的盾构创新研发团队荣获"国家卓越工程师团队"

The shield machine innovative R&D team led by Li Jianbin, senior expert of CREC, wins the title of "National Excellent Engineer Team"

# 搭建创新平台 Build innovation platforms

公司持续加大高端研发平台的建设力度,通过强化经费保障、集聚院士专家等高端人才、组建跨学科创新团队,聚焦行 业核心技术与重大工程需求展开科研攻关。同时构建产学研协同创新机制,加速科技成果向工程应用转化,形成"研发-验证-产业化"全链条创新体系,为突破关键技术瓶颈、提升企业核心竞争力提供了坚实的平台支撑。截至本报告期末, 公司拥有"高速铁路建造技术国家工程研究中心""隧道掘进机及智能运维全国重点实验室"和"桥梁结构健康与安全 国家重点实验室"三个国家实验室(工程研究中心)及10个博士后工作站,1个国家地方联合研究中心(数字轨道交通技 术研究与应用国家地方联合工程研究中心),52个省部级研发中心(实验室),21个国家认定企业技术中心,140个省级 认定企业技术中心和17个公司专业研发中心。

The company continued to strengthen the construction of high-end R&D platforms, and carried out scientific research by strengthening funding support, gathering high-end talents such as academicians and experts, and establishing an interdisciplinary innovation team, focusing on the industry's core technologies and major engineering needs. At the same time, we should build a collaborative innovation mechanism of industry university research, accelerate the transformation of scientific and technological achievements into engineering applications, and form a full chain innovation system of "R&D verification industrialization", which provides a solid platform support for breaking through the bottleneck of key technologies and improving the core competitiveness of enterprises. As of the end of the reporting period, the company has three national laboratories (engineering research centers), namely, "National Engineering Research Center for high-speed railway construction technology", "National Key Laboratory for tunnel boring machine and intelligent operation and maintenance" and "National Key Laboratory for bridge structure health and safety", 10 post doctoral workstations, 1 national local joint research center (national local joint Engineering Research Center for digital rail transit technology research and application), 52 provincial and ministerial R&D centers (laboratories), 21 national certified enterprise technology centers, and 17 professional R&D centers.

# 保护知识产权 Protect intellectual property rights

公司严格遵守《中华人民共和国专利法》《中华人民共和国知识产权法》和《中华人民共和国商标法》《企业知识产权 管理规定》等相关法律法规,深入实施公司专利管理规定等有关制度文件,加强知识产权运营中心建设,完善专利导航 平台,优化工法、专利业务在科技管理信息系统在线办理工作,全面提高公司知识产权的创造和运营能力。根据工法开 发和专利授权情况,加大省部级工法开发任务指标、专利授权任务指标,推动量质齐升。

The company strictly adhered to the Patent Law of the People's Republic of China, the Intellectual Property Law of the People's Republic of China, as well as relevant regulations such as the Enterprise Intellectual Property Management Provisions. It implemented the company's patent management regulations and related system documents in depth, strengthened the construction of the Intellectual Property Operation Center, improved the patent navigation platform, and optimized the online processing of work methods and patent business within the technology management information system. These efforts comprehensively enhanced the company's capacity for the creation and operation of intellectual property. Based on the development of work methods and the status of patent authorizations, the company increased the task indicators for provincial and ministerial-level work method developments and patent authorizations, promoting an improvement in both quantity and quality.



# 诚信合规 走好稳健之路

Standardizing governance and consolidating the foundation of development

中国中铁以诚信合规为基石,深入推进"法治中铁、合规中铁"建设,通过完善制度体系、健全管理机制、强化法治教育,将合规要求深度融入经营管理全流程,持续提升依法治企能力,切实筑牢风险防控屏障,为企业高质量发展营造了规范有序的环境。

With integrity and compliance as the cornerstone, CREC has further promoted the construction of "rule of law and compliance China Railway". By improving the system, improving the management mechanism, and strengthening the rule of law education, the company has deeply integrated compliance requirements into the whole process of operation and management, continued to improve its ability to govern enterprises according to law, and effectively built a risk prevention and control barrier, creating a standardized and orderly environment for the high-quality development of enterprises.

# 合规组织保障

## Offer organizational assurance for compliance

公司持续完善合规管理组织体系,通过设立合规委员会、重大经营风险管控委员会和法治建设领导小组,统筹推进法律、 合规、内控、风险一体化建设。同时,公司高度重视人才队伍建设,通过开展境内外业务法律合规培训等方式,持续提升 合规管理人员专业素养,增强法律顾问职业能力。

The Company persistently refined the organizational system for compliance management, and established a Compliance Committee, a Major Operation Risk Management and Control Committee, and a Legal Construction Leadership Group to promote the unified advancement of legal, compliance, internal control, and risk management. In addition, the Company attached great importance to the talent team construction. By conducting legal compliance training for domestic and overseas businesses, it continued to improve the professional quality of compliance management personnel and enhance the professional ability of legal advisors.



2024 年 10 月 28 日,公司组织召开第四季度总部部门合规官制度 宣讲会。

On October 28, 2024, the Company organizes a presentation on the Compliance Officer System for headquarters departments for the fourth quarter.

2024年 In 2024

开展企业法律顾问培训4 期

Conducted 4 training sessions for corporate legal advisors

累计培训企业法律顾问人员 637 人次

Trained a total of 637 corporate legal advisors

# 筑牢风险防线 Strengthen the risk defense line

公司严格落实国务院国资委风险防控部署,不断提升自身风险防控能力和水平,确保不发生系统性风险。组织开展年度 重大经营风险识别评估,研究确定公司年度五项重大经营风险并落实具体防控措施,定期对重大经营风险进行监测,及 时识别应对可能面临的风险。结合监管政策变化对各类重大投融资项目进行不定期梳理和检查,对重大、共性风险及时 进行督导和提示,制定重大工程项目投标负面清单,强化境外重大风险管理,构筑商业管理全流程风险防控屏障。针对 重点领域风险,不断强化风险应对能力,持续深化国际多边开发银行合规风险专项治理等行动,切实筑牢企业稳健运营 防线。

The company strictly adheres to the risk prevention and control guidelines set by the State-owned Assets Supervision and Administration Commission of the State Council. It is committed to enhancing its risk prevention and control capabilities to ensure that no systemic risks arise. The company organizes annual identification and assessment of significant operation risks, studies and identifies five major risks for the year, and implements specific prevention and control measures. It regularly monitors major operation risks and quickly identifies and addresses potential threats. In response to changes in regulatory policies, the company will review and inspect various major investment and financing projects from time to time, and provide timely supervision and alerts for significant and common risks. It will develop negative lists for bidding on major engineering projects, strengthen the management of major overseas risks, and establish a full-process commercial risk prevention and control framework. Focusing on risks in key sectors, the company will continuously improve its risk response capabilities and engage in special management initiatives aimed at compliance risk prevention related to international multilateral development banks. By doing so, it can effectively build a strong defense for the stable operation of enterprises.

### → 中国中铁风险防控措施 China Railway Risk Prevention and Control Measures +

<mark>风险识别</mark> isk identificatior

组织开展年度重大经营风险识 别评估,研究确定公司年度五 项重大经营风险并落实具体防 控措施。

The Company conducted annual major operation risk identification and assessment, analyzed and confirmed the five major operation risks for the year, and executed specific prevention and control measures.



风险排查 risk identification

结合监管政策变化对各类重大 投融资项目进行不定期梳理和 检查,对重大、共性风险及时 进行督导和提示。

Based on changes in regulatory policies, it sorted out and inspected various major investment and financing projects from time to time, and provided timely supervision and alerts for major and common risks.



**风险应对** risk identificatio

持续开展国际多边开发银行合 规风险防控应对工作,指导下 属重点单位开展风险处置。

It continued to engage in the compliance risk prevention and control of international multilateral development banks, and guided key subsidiaries to carry out risk disposal.





## 推进反腐倡廉 Promote anti-corruption and integrity

公司坚持"严"的总基调不动摇,深入推进党纪学习教育常态化长效化,积极构建党委巡视、纪委监督、财务监督、审计 监督、合规监督、职工民主监督贯通协同"六位一体"大监督格局,持续加强新时代廉洁文化建设,一体推进不敢腐不能 腐不想腐,营造持久风清气正的政治生态。公司所属各单位均设立纪检组织,负责反腐败信访举报工作,同时,坚决保护 举报人隐私和安全,对于失密泄密的,将追究相关人员责任。2024年,地方司法机关审结所属企业管理干部贪污案件5件, 相关人员被依法追究刑事责任。

The company maintained a steadfast commitment to a strict overall tone, deeply advancing the normalization and long-term effectiveness of party discipline education. It proactively constructed a coordinated "six-in-one" supervision framework that integrated party committee inspections, disciplinary committee oversight, financial supervision, audit supervision, compliance supervision, and employee democratic supervision. The company continuously strengthened the construction of a clean culture in the new era, promoting a comprehensive approach to deter corruption, prevent corruption, and foster a mindset against corruption, thereby creating a lasting political ecology characterized by integrity and clarity. All units under the company established disciplinary inspection organizations responsible for anti-corruption reporting and whistleblowing. At the same time, they resolutely protected the privacy and safety of whistleblowers, holding accountable those responsible for any breaches of confidentiality. In 2024, local judicial authorities concluded five cases of embezzlement involving management personnel at affiliated enterprises, with related individuals facing criminal responsibility in accordance with the law.

公司结合开展党纪学习教育,紧抓《中国共产党纪律处分条例》《国有企业管理人员处分条例》的学习,引导各级党组 织及广大党员干部特别是领导干部坚持原原本本学、逐章逐条学、分层分类学、联系实际学,实现100%覆盖,营造了学 纪、知纪、明纪、守纪的浓厚氛围。2024年,公司开展廉洁从业警示教育5202场次,参加422470人次。

The company integrated the study and education of party discipline with a strong emphasis on learning the "Regulations on Disciplinary Actions of the Communist Party of China" and the "Regulations on Disciplinary Actions for Managers of State-Owned Enterprises." This approach guided party organizations at all levels and Party members and cadres, especially leading cadres, to learn thoroughly from the original texts, study chapter by chapter and article by article, engage in tiered and categorized learning, and relate the teachings to practical situations, achieving 100% coverage and creating a strong atmosphere of learning, understanding, clarifying, and adhering to discipline. A total of 5,202 sessions of integrity and professional conduct warning education were held, with participation from 422,470 individuals.



### 2024年12月,中央纪委国家监委网站刊登《中铁工业:

#### 讲好家规故事拓展廉洁文化建设载体》

In December 2024, the website of the Communist Party of China Central Commission for Discipline Inspection and the National Supervisory Commission published an article titled "China Railway Hi-Tech Industry: Telling the Story of Family Rules and Expanding the Carrier for Integrity Culture Construction."



# 加强审计监督 Enhance audit supervision

公司以强化审计监督为抓手,构建全覆盖、多层次审计体系,聚焦重大项目、关键领域和资金使用,深化全过程跟踪审 计与专项审计,严格问题整改和责任追究,推动审计结果与绩效考核、干部管理深度融合,充分发挥审计在风险防控、 合规管理、效益提升中的监督保障作用。

Focusing on strengthening audit supervision, the company built a full coverage and multi-level audit system, focused on major projects, key areas and the use of funds, deepened the whole process tracking audit and special audit, strictly enforced problem rectification and accountability, promoted the deep integration of audit results with performance appraisal and cadre management, and gave full play to the supervision and guarantee role of audit in risk prevention and control, compliance management and benefit improvement.



完善审计制度体系 Optimize the audit system



强化审计工作机制 Strengthen the audit work mechanism



提升审计信息化水平 Elevate the level of audit informatization 公司现行《审计工作管理办法》《违规经营投资责任追究实施办法》等有效审计制 度36项。2024年,公司按照国务院国资委《中央企业投资后评价监督管理办法(试 行)》等制度规定,制定《中国中铁股份有限公司投资后评价管理规定》,进一步健 全完善审计制度体系。

The company had established 36 effective auditing systems, including the current "Audit Work Management Measures" and the "Implementation Measures for Accountability of Violating Business and Investment Practices." In 2024, the company formulated the "Management Regulations on Post-Investment Evaluation of China Railway Group Limited" in accordance with the regulations of the State-owned Assets Supervision and Administration Commission of the State Council on the "Interim Measures for Supervising and Managing Post-Investment Evaluation of Central Enterprises," further enhancing and perfecting its auditing system.

公司坚持党对审计工作的全面领导,强化董事会审计指导监督职能,加大审计监督 力度,强力推进问题整改,充分发挥内部审计促改革防风险稳发展的作用,确保审 计管理体系始终保持集中统一、全面覆盖、权威高效的运行状态,切实提升审计监 督效能。

The company upheld the Party's comprehensive leadership over audit work, strengthened the audit guidance and supervisory functions of the board of directors, and intensified audit supervision efforts. It vigorously promoted the rectification of issues and fully leveraged the role of internal audits in driving reforms, preventing risks, and stabilizing development. This ensured that the audit management system consistently maintained a centralized, unified, comprehensive, and efficient operational state, effectively enhancing the effectiveness of audit supervision.

公司紧扣 "科技强审" 要求,扎实推进智能化审计系统升级,加速向数智化审计转型 和穿透式审计监督迈进,实现审计模型构建、依据查询、报告生成、整改跟踪等业务 全链条闭环管理,有效提升审计信息化水平和监督效能。

The company closely adhered to the requirements of "Technology-Driven Audit" and diligently advanced the upgrade of its intelligent audit system. It accelerated the transformation towards digitalized auditing and penetrative audit supervision, achieving a complete closed-loop management of the entire audit process, including audit model construction, data inquiry, report generation, and remediation tracking. This effectively enhanced the level of audit informatization and the efficiency of supervision.



## 格守商业道德 Adhere to business ethics

公司严格遵守中国及海外业务所在国家或地区的《反垄断法》《反不正当竞争法》等法律法规,坚持合规运营、公平竞 争,坚决反对贿赂、勒索、欺诈、洗钱等不正当竞争行为,对违反商业道德行为零容忍;建立完备的商业道德管理及监 督机制,制定《商业道德制度(试行)》并明确涵盖供应商的商业道德标准,且制度经合规、审计等部门审查;实施至 少每两年一次的商业道德标准及执行情况审计,2024年针对2023年审计发现的普遍性问题,对所属单位进行通报并提出 整改意见和提升建议,持续加强商业道德管理。

The company strictly adhered to the antitrust laws and unfair competition laws of China and the countries or regions where it operated. It committed to compliance operations and fair competition, firmly opposed bribery, extortion, fraud, money laundering, and other unfair competitive practices, and maintained a zero-tolerance policy towards violations of business ethics. A comprehensive management and supervision mechanism for business ethics was established, and a "Business Ethics System (Trial)" was formulated, clearly outlining the ethical standards for suppliers. This system was reviewed by compliance and auditing departments. Audits of the business ethics standards and their implementation were conducted at least once every two years. In 2024, the company reported on common issues identified during the 2023 audit and provided corrective actions and improvement recommendations to its affiliated units, continuously strengthening the management of business ethics.

# 规范关联方交易 Standardize related party transactions

公司严格执行证券监管机构的关联交易管理规定,遵循《公司章程》《关联交易管理办法》以及有关议事规则要求,持 续规范关联交易行为,对公司关联交易事项进行审议,并定期对公司关联人名单、半年度和全年度的关联交易情况进行 审查,坚持从交易的必要性、定价的公允性、程序的合法性、是否符合股东利益等多角度进行考量。根据上海证券交易 所和香港联交所关于关联交易管理要求,公司下设董事会审计与风险管理委员会,负责关联交易控制和日常管理,定期 审查关联人名单和重大关联交易。同时,公司认真把握好证券监管机构关联交易与会计准则界定下的关联交易、香港联 交所上市规则下的关联交易的差异,严格履行关联交易的决策程序和披露义务,确保公司关联交易事项规范公允,有效 提高上市公司规范运作水平,保护上市公司和全体股东的合法权益。

The company strictly implemented the related party transaction management regulations set by the securities regulatory authorities, adhering to the Articles of Association, the Related Party Transaction Management Measures, and relevant procedural rules. It consistently standardized related party transactions, reviewed related party transaction matters, and conducted regular examinations of the list of related parties and the related party transactions on a semi-annual and annual basis. The company evaluated these transactions from multiple perspectives, including their necessity, fairness in pricing, legality of procedures, and alignment with shareholder interests. In accordance with the requirements for the management of related party transactions from the Shanghai Stock Exchange and the Hong Kong Stock Exchange, the company established an Audit and Risk Management Committee under the Board of Directors, responsible for controlling and managing related party transactions on a daily basis, as well as regularly reviewing the list of related party transactions as defined by the securities regulatory authorities and accounting standards, and those under the listing rules of the Hong Kong Stock Exchange. It strictly fulfilled the decision-making process and disclosure obligations for related party transactions, ensuring that the related party transactions were conducted in a standardized and fair manner, effectively enhancing the operational standards of the listed company and protecting the legitimate rights and interests of both the company and all its shareholders.

# 下篇 Part II

# **百年央企** 砥砺铁肩担当

A Century-old Central SOE, Forging Ahead with Great Determination

# 生命至上 筑牢安全之堤 Life comes first: Strengthen the "dam" of safety

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中国中铁作为一家拥有百年历史的中央企业,始终以人 民对美好生活的向往为奋斗目标,在实现自身高质量发 展的同时,坚持 "取之于民,用之于民",积极履行社 会责任,将经营成果回馈社会,夯实民生福祉根基,促 进和谐社会建设,让人民群众有更多获得感幸福感安全 感,以实际行动彰显 "共和国长子"的责任担当。

As a central SOE with a century-long history, CREC consistently takes the people's aspiration for a better life as its striving goal. While achieving its own high-quality development, the Company has upheld the principle of "taking from the people and giving back to the people". It has actively fulfilled its social responsibilities, returning its operating results to society, solidifying the foundation of public welfare, and promoting the construction of a harmonious society. This enables the public to experience greater satisfaction, happiness, and security, demonstrating the sense of responsibility and commitment of the "eldest son of the PRC" through tangible actions.

# 生命至上 筑牢安全之堤

Life comes first: Strengthen the "dam" of safety

中国中铁始终坚持树牢底线思维,增强忧患意识,提升防控能力,统筹发展与安全,将 "生命至上、安全第一" 理念贯穿 生产经营全流程和高质量发展各环节,构建全方位安全管理体系,筑牢安全防线,为企业行稳致远保驾护航。

CREC has always adhered to a bottom-line mindset, enhanced awareness of potential risks, and improved preventive and control capabilities. It has adopted a comprehensive approach to balance development and safety, ensuring that the principle of "life comes first, safety is paramount" is genuinely implemented throughout all processes of the Company's production and operations. The Company has established a comprehensive safety management system to create a strong defense for stability and long-term development.

# 健全安全管理体系

### Improve the safety management system

公司严格遵循《中华人民共和国安全生产法》,紧密结合国务院安委会、国资委等上级工作部署与企业实际,制定 《2024—2026 年安全生产治本攻坚三年行动方案》,树立"零事故、零伤害"安全生产理念。严格落实《中国中铁铁腕治 安硬十条》,健全完善安全生产长效机制,切实提升本质安全水平。在此基础上,实行安全生产考核与高管薪酬挂钩,建 立安全生产 "吹哨人" 制度和事故内部隐患报告奖励机制,层层压实安全生产责任,构建起全链条、闭环式安全管理体系。

公司设有安全生产(质量)委员会,统筹负责公司安全生产各项工作。委员会设主任2名,由公司党委书记、董事长和公 司总裁担任;设副主任1名,由分管安全质量的副总裁担任;设委员若干名,包含公司领导班子其他成员和高管、安全生 产总监(高管)、高级专家、总部相关部门负责人。从公司总部到项目部,各级组织都设有安全生产总监和安全生产监 督部门。

The Company has strictly abided by the Law of the People's Republic of China on Work Safety. In combination with the working plans made by the Work Safety Commission under the State Council, the SASAC, and actual corporate management, the Company has developed the Three-Year Action Plan for Addressing Fundamental Issues in Work Safety (2024-2026), established a work safety philosophy of "zero accidents and zero injuries", rigorously implemented the Ten Strict Measures for Maintaining Security of China Railway Group Limited, and established a robust, long-term work safety mechanism to fundamentally improve its work safety capabilities. Building on this foundation, the Company has linked work safety assessments to executive compensation and established a "whistleblower" system for work safety along with a reward mechanism for reporting internal hidden dangers. This approach has ensured the effective enforcement of work safety responsibilities and has created a comprehensive, closed-loop safety management system.

The Company has set up a Work Safety (Quality) Committee responsible for overseeing all work safety matters. The Committee is chaired by the Secretary of the CPC Committee (Chairman) of the Company and the President of the Company. It also includes one Vice Chairperson, who is the Vice President in charge of safety and quality, along with several members, including other members of the leadership team, senior executives, the Work Safety Director (senior executive), senior experts, and heads of relevant departments at headquarters. Throughout the organization, from headquarters to project departments, work safety directors and supervising departments are established at all levels.



2024年 In 2024
中国中铁十个集体被认定为2023年度"全国青年安全生产示范岗"。
Ten collectives from CREC were recognized as the "National Youth Work Safety Demonstration Post" for the year 2023.
中铁一局香港轻铁项目部获香港职业安全健康大奖赛" <b>安全表现杰出奖"。</b>
The Hong Kong Light Rail Project Department of China Railway First Group received the "Outstanding Safety Performance Award" at the Hong Kong Occupational Safety and Health Award.
新加坡地铁T250A项目部获新加坡LTA建筑业"安全优异奖""无事故认可奖"。
The Singapore MRT T250A Project Department won the "Construction Safety Merit Award" and "Accident-Free Recognition Award" from the Land Transport Authority.
中铁隧道局智利圣地亚哥地铁7号线项目连续第2次获得 <b>智利建筑商会安全互助</b> 协会金级认证。
The Santiago Metro Line 7 Project in Chile by China Railway Tunnel Group received the

### 《中国中铁铁腕治安硬十条》 Ten Strict Measures for Maintaining Security of China Railway Group Limited

坚持党管安全	Uphold Party control over safety.	坚持钢规铁纪
坚持强化责任	Strengthen accountability.	坚持隐患闭合
坚持畅通系统	Ensure smooth systems.	坚持严惩违规
坚持项目策划	Emphasize project planning.	坚持事故追责
坚持风险预防	Prioritize risk prevention.	坚持"一票否决"
	and the second second	

Gold Certification from the Security Mutual CChC for the second time in a row.

Adhere to stringent regulations and discipline.

Close the loop on hidden danger prevention and control.

Enforce strict penalties for violations.

Hold individuals accountable for accidents.

Implement a "one-vote veto" system.



公司制定《安全风险分级管控和隐患排查治理双重预防工作机制指导意见》《安全质量、生态环境及灾害事故(事件) 应急预案》《隧道施工抢险救援工作指引》等制度文件,强化安全生产风险分级管控,明确落实重大安全风险和重大危 险源的安全管理与监管责任,进一步提升应急救援效率,降低安全隐患发生概率。一体推进系统督查和隐患排查治理, 深化双重预防机制建设。全年组织开展常态化安全隐患排查、安全生产专项检查行动11次。

The Company has formulated the Guiding Opinions on the Dual Prevention Mechanism of Safety Risk Graded Management and Control and Hidden Danger Identification and Remediation, the Emergency Plan for Safety, Quality, Ecological Environment and Disaster Accidents (Events), the Guidelines for Emergency Rescue in Tunnel Construction, and other emergency response plans. These measures emphasize the graded management and control of work safety risks and clarify the responsibilities for the safety management and supervision of major safety risks and significant hazard sources. They have further enhanced the efficiency of emergency rescue operations and reduced the likelihood of safety hazards. A comprehensive promotion of systematic inspections and hazard identification and remediation has been implemented, deepening the construction of a dual prevention mechanism. Throughout the year, regular safety hazard inspections and special work safety checks have been conducted 11 times.



中铁投资开展轨道交通运营突发事件综合应急演练 China Railway Investment Group holds a comprehensive emergency drill for unexpected incidents in rail transit operations



中铁北京局雄安新区容城职教中心项目进行班前安全讲话 Pre-shift speech on work safety of China Railway Beijing Engineering Group's Xiong'an New Area Rongcheng Vocational Education Center Project



中铁三局开展消防风险隐患排查活动 China Railway No. 3 Engineering Group conducts a fire risk and hidden danger investigation



公司制定了企业本质安全的长远目标,认真落实《安全生产管理"十四五"规划》,全面压实安全责任链条,确保项目 安全人员配置到位、风险动态辨识到位、技术方案措施到位、安全风险措施到位、隐患排查治理到位、应急处置考核到 位,做到全系统管安全、全周期管安全。

在承包商安全生产管理方面,公司通过建立负面清单管理制度,在准入环节严格评估投标方安全生产管理能力,将劳工 管理纳入准入条件及日常、年度评价体系。在合同签订阶段,明确约定劳务安全、劳工权益等条款,要求承包商严格落 实安全生产与职业健康保障措施,为劳工提供安全作业环境。公司同步建立保险保障与安全教育机制,为劳工投保工伤 保险及意外伤害保险,并定期开展安全卫生培训,形成 "准入严把关、合同明责任、保障强落实"的闭环管理模式,最大 限度地减少安全事故与职业危害。

The Company has established long-term goals for intrinsic safety. It has diligently implemented the 14th Five-Year Plan for Work Safety Management, fully reinforcing the safety responsibility chain to ensure proper staffing of safety personnel for projects, dynamic risk identification, effective technical solutions, adequate safety risk prevention and control measures, thorough hazard identification and remediation, and rigorous emergency response assessments. This has realized comprehensive safety management across all systems and throughout the entire project lifecycle.

Regarding work safety management against contractors, the Company has established a negative list management system, rigorously assessing the work safety management capabilities of bidding parties during the admission process and incorporating labor management into the admission criteria as well as into daily and annual evaluation systems. During the contract signing phase, specific clauses regarding labor safety and laborers' rights and interests have been clearly stipulated. Contractors have been required to strictly implement work safety and occupational health protection measures to provide a safe working environment for laborers. The Company has simultaneously established insurance and safety education mechanisms, providing laborers with work-related injury insurance and accidental injury insurance, while conducting regular safety and health training. This has created a closed-loop management model characterized by "strict admission controls, clear contractual responsibilities, and strong implementation of safeguards", aimed at minimizing safety incidents and occupational hazards to the greatest extent possible.

# 促进科技兴安

### Promote work safety through technology

公司进一步加大安全生产关键技术装备的研发推广力度,推动信息化、机械化、智能化技术和装备在危险工艺和关键环 节上的应用,加强现代信息技术与安全生产的深度融合和推广应用。

The Company has intensified its efforts in the R&D and promotion of key technologies and equipment for work safety. It has encouraged the application of information-powered, mechanized, and intelligent technologies and equipment in hazardous processes and critical stages while strengthening the thorough integration and application of modern information technology in work safety.



中铁四局信息化系统保障企业安全生产

China Railway No. 4 Engineering Group's information system ensures work safety

中铁四局强化信息化系统应用,积极改进传统管理方式,开发应用重大安全风险分级管控系统、安全质量隐患排查 治理系统等信息化工具,并研发深基坑和栈桥变形数字监测系统、隧道应急喊话系统以及隧道雷达智能分析系统 等,通过数字化和信息化手段,为企业的安全生产保驾护航。

China Railway No. 4 Engineering Group has enhanced the application of information systems, actively improving traditional management approaches. It has developed and applied various information tools, including a system for graded control and management of major safety risks and a system for identifying and addressing safety and quality hazards. Additionally, it has developed a digital monitoring system for deep foundation pits and trestle deformations, a tunnel emergency communication system, and a tunnel radar intelligent analysis system. Through digitalization and informatization, these systems provide robust support for work safety efforts.



桥梁智慧监测系统 Intelligent bridge monitoring system



#### 第六代桥梁拉索检测机器人助力危险岗位安全生产

The 6th-generation bridge cable inspection robot helps work safety in hazardous workplaces

中铁大桥局研发的第六代桥梁拉索检测机器人机身主要由强度高、重量轻的材料制造,"眼睛"是高清分辨率数字 式摄像头,"心脏"则是电磁探伤无损检测系统,可实现缆索表面的高清图像采集和病害识别,还可以对缆索断丝 等情况进行研究及分析,有效帮助危险岗位安全作业。

The body of the 6th-generation bridge cable inspection robot developed by China Railway Major Bridge Engineering Group is mainly made of high-strength, lightweight materials. Its "eyes" consist of high-definition digital cameras, while its "heart" is an electromagnetic flaw detection system for non-destructive testing. This robot can capture high-resolution images of cable surfaces and identify defects, as well as study and analyze issues such as broken strands in cables, effectively aiding safe operations in hazardous workplaces.



第六代桥梁拉索检测机器人 The 6th-generation bridge cable inspection robot



# 培育安全文化 Cultivate a safety culture

公司深耕安全文化建设,构建多层次、全覆盖的安全教育体系。2024年以"安全生产月"为核心载体,统筹开展主题宣 讲、事故警示教育、法规科普、"安康杯"线上竞赛、安全宣传咨询日、线上逃生演练及急救知识宣讲等5000余场活 动,累计吸引38万余人次参与,强化安全知识普及与应急能力培养。与此同时,聚焦 "关键少数"群体,举办两期安全领 导力培训班,实现工程局分管领导及三级公司党政主要领导全覆盖,推动管理层安全责任落实。通过系统化教育实践, 构建起"人人讲安全、层层抓安全"的立体化安全文化生态。

The Company has been deeply committed to building a safety culture and has established a multi-level, comprehensive safety education system. In 2024, centered around "Work Safety Month", the Company organized over 5,000 activities, including thematic presentations, accident warning education, regulatory awareness initiatives, the "Ankang Cup" online competition, Safety Promotion and Consultation Day, online escape drills, and first aid knowledge presentations, attracting more than 380,000 participants. These activities strengthened the dissemination of safety knowledge and the cultivation of emergency response skills. At the same time, the Company held two sessions of Safety Leadership Training for the "Key Minority", covering all leaders responsible for engineering and all primary Party and administrative leaders of the tier-three subsidiaries, to promote the accountability of management for safety. Through systematic educational practices, the Company has built a multi-dimensional safety culture ecosystem where "everyone speaks about safety, and everyone is responsible for safety".



中铁六局广州公司广湛高铁项目部开展防洪应急演练 The China Railway Sixth Group Guangzhou Engineering Company carries out a flood prevention emergency drill for the Guangzhou-Zhanjiang High-speed Railway Project Department 中铁电气化局南昌中铁穗城轨道公司举办安全生产月知识竞赛 Nanchang China Railway Suicheng Rail Transit Construction and Operation Co., Ltd. of China Railway Electrification Engineering Group holds a "Work Safety Month" knowledge competition

# 保障员工职业健康与安全

Ensure the occupational health and safety of employees

公司严格遵循《中华人民共和国安全生产法》《中华人民共和国职业病防治法》等法律法规,建立完善的职业健康安全 管理体系,具备职业健康安全管理体系(ISO 45001:2018)认证资质。

公司加强职业病危害申报、监测、告知和警示工作,按照国家《职业病危害因素分类目录》所列职业病的危害因素进行 识别,及时、如实向项目所在地或公司注册地卫生行政主管部门主动申报并接受监督。坚持每年对职业病危害因素进行 检测,每三年进行一次职业病危害评价。2024年,公司未发生职业病事件。

公司研究、引进、使用绿色低碳循环生产技术和工艺,持续改善劳动安全卫生条件,不断加强特殊工种和女职工的特殊 保护工作。2024年,公司认真开展全员职业健康教育培训、完善健康体检档案、配备合格劳动保护用品、加强过程监督 检查等工作,对全体管理人员、作业人员实施了职业健康体检,为39111个工作场所实施了职业病危害定期检测,开展 职业健康培训20310次,参培人员超200万人次。

健康小屋 — Health Cabin







高压平衡氧舱 High pressure balanced oxygen chamber



The Company has strictly abided by laws and regulations such as the Law of the People's Republic of China on Work Safety and the Law of the People's Republic of China on Prevention and Control of Occupational Diseases, to establish a sound occupational health and safety management system. It is certified with the ISO 45001:2018 qualification.

The Company has intensified efforts related to the declaration, monitoring, notification, and warning of occupational disease hazards. It has identified hazard factors as listed in the Catalogue of Occupational Hazard Factors, proactively reporting to the health administrative authorities where the project is located or the Company is registered in a timely and truthful manner and accepting supervision. The Company has conducted annual monitoring of occupational hazard factors, with a comprehensive hazard evaluation every three years. In 2024, the Company did not experience any occupational disease incidents.

The Company has studied, introduced, and utilized green, low-carbon circular production technologies and processes, continuously improved labor safety and health conditions, and strengthened special protection for employees in specific job categories and female employees. In 2024, the Company diligently carried out occupational health education and training for all employees, improved health examination records, provided qualified labor protection supplies, and enhanced process supervision inspections. Occupational health examinations were conducted for all management and operational personnel, regular monitoring for occupational hazards was performed at 39,111 workplaces, and 20,310 occupational health training sessions were held, with over 2 million participants.



— 氧气罐 Oxygen tank





2024 年 10 月 29 日,中铁五局成都公司西 藏项目部为员工进行义诊,切实关注高原项 目员工的身心健康。

On October 29, 2024, the Xizang Project Department of China Railway No. 5 Engineering Group Chengdu Engineering Company provides a free clinic for employees, demonstrating a genuine concern for the physical and mental health of staff working on projects in the plateau



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中铁七局针对西藏高原"缺氧、严寒、偏僻、艰苦"四重难关,建立高原等艰苦偏远地区津贴制度,探索"员工家 属探亲制度";组建"后勤保障小组",为职工输送氧气瓶、新鲜蔬菜;积极联系当地部门为项目输送干净水,安 装发电机、暖气和空气净化器等各类电器设施;与当地开展医疗共建,建设医疗联系点,定期为员工健康体检、送 医送药,最大限度为职工提供舒适办公生活环境,保障员工的职业健康。

In response to the challenges of "lack of oxygen, extreme cold, remoteness, and harsh conditions" in Xizang, China Railway Seventh Group established a subsidy system for workers in harsh and remote areas, including the plateau, and developed a family visitation policy for employees. A "Logistics Support Team" was formed to provide oxygen tanks and fresh vegetables to employees. The Company actively coordinated with local authorities to supply clean water to the projects and installed various electrical facilities such as generators, heating systems, and air purifiers. Collaborating with local healthcare providers, it established medical contact points, offering regular health check-ups and delivering medical treatment and supplies to employees. All these measures aimed to ensure a comfortable working and living environment for employees and safeguard their occupational health.

### 上 案例 大瑞铁路施工,以健康守护解高温难题 CASE Protect health amidst high temperatures during Dali-Ruili Railway construction

中铁隧道局大瑞铁路项目施工过程中,隧道掌子面处的岩温最高时超过了39℃,涌水则达到了38℃,项目制定出了 堵截热水源的办法,并购置了全进口大功率风机加大通风制冷和空气流动,一次性投入150万元自建了日产60吨冰 块制冰厂,以满足现场每天近60吨冰块需求。

During the construction of the Dali-Ruili Railway by China Railway Tunnel Group, the highest rock temperature at the tunnel face exceeded 39°C and the water inrush temperature reached 38°C. The project team developed methods to intercept hot water sources and purchased imported high-power fans to increase ventilation and cooling, significantly improving air circulation. Additionally, an investment of RMB1.5 million was made in a lump sum to establish an ice factory capable of producing 60 tons of ice per day to meet the on-site demand for nearly 60 tons of ice daily.





# 绿色环保 共享生态之美

Green and environmental protection: Share the beauty of ecology

中国中铁积极践行"绿水青山就是金山银山"的理念,坚定不移走生态优先、绿色低碳的高质量发展道路,协同推进降 碳、减污、扩绿、增长,加快落实"双碳"行动,以"制"促"治",点"绿"成"金",努力让天更蓝、地更绿、水 更清、生态环境更美好。

CREC has actively practiced the concept that "lucid waters and lush mountains are invaluable assets". The Company has been steadfastly committed to high-quality development that prioritizes eco-environmental protection and a green and low-carbon way of life. It has promoted coordinated efforts in carbon reduction, pollution reduction, greenery expansion, and economic growth while accelerating the implementation of "dual carbon" actions. By promoting governance through systems and transforming "green resources" into "invaluable assets", the Company has been dedicated to making the skies clearer, the land greener, the water cleaner, and the ecological environment more beautiful.

# 应对气候变化 Respond to climate change

公司深刻认识气候变化对人类社会及企业可持续发展的深远影响,积极响应全球气候治理号召,围绕国家"双碳"目标, 遵循《联合国气候变化框架公约》《巴黎协定》,对标气候信息披露要求,系统谋划碳达峰路径,完善气候治理体系, 将气候应对融入战略与运营全流程。依托技术创新和管理优化提升气候适应能力,推动工程建设领域绿色转型,展现中 央企业在低碳发展中的示范引领作用,为全球气候治理注入中国企业实践力量。

The Company has profoundly recognized the far-reaching impacts of climate change on human society and the sustainable development of enterprises. It has actively responded to global climate governance calls and aligned its efforts with the national "dual carbon" goals. By adhering to the United Nations Framework Convention on Climate Change, and the Paris Agreement, the Company has benchmarked itself against climate information disclosure requirements, systematically planning pathways to peak carbon emissions, enhancing its climate governance system, and integrating climate response into the entire strategy and operational processes. It has leveraged technological innovation and management optimization to improve climate adaptability and promoted green transformation in the engineering construction sector, showcasing exemplary leadership of itself as a central SOE in low-carbon development and contributing to global climate governance.

## 治理 Governance

2024年,公司制定《中国中铁推进美丽中国建设指导意见》,成立应对气候变化及节能减排工作领导小组,专题部署推进美丽中国建设重点任务,推动所属单位构建组织有力、协同高效的工作体系,细化责任分工与任务目标,强化动态推进机制,确保各项工作有序落实。

In 2024, the Company issued the Guiding Opinions of China Railway Group Limited on Promoting the Construction of Beautiful China and set up a leading group to address climate change and energy conservation and emission reduction, assigning key tasks for promoting the construction of Beautiful China. It has encouraged subsidiaries to build a strong and efficient collaborative work system, clarified responsibilities and objectives, and strengthened dynamic advancement mechanisms to ensure that all tasks are implemented in an orderly manner.



## 战略 Strategy

公司按照国务院国资委有关部署要求,制定《中国中铁股份有限公司碳达峰行动方案》,下达约束性考核目标文件,强化 节能环保统计监测和考核奖惩,督导各单位、项目提升节能环保工作实效。

In line with SASAC's relevant plans and requirements, the Company has formulated the China Railway Group Limited Carbon Peaking Action Plan and issued binding assessment target documents. It has enhanced the monitoring and evaluation of energy-saving and environmental protection statistics, as well as the related rewards and penalties, and supervised units and projects to improve the effectiveness of their energy-saving and environmental protection efforts.



## 风险与机遇管理 Risk and opportunity management

公司在气候变化背景下面临多重风险挑战,极端天气事件直接冲击生产运营,增加施工难度并威胁设备稳定。同时,政策 法规趋严、市场绿色转型需求上升以及供应链低碳化压力,对企业传统运营模式形成挑战。此外,企业推进绿色低碳转 型,需要攻克技术升级和管理优化的难题,在风险管理和战略调整之间找到平衡点,从而提升应对气候变化的能力和可持 续发展的后劲。

The Company faces multiple risks and challenges in the context of climate change. Extreme weather events directly impact production operations, increase construction difficulties, and threaten equipment stability. Additionally, stricter policies and regulations, rising market demands for green transformation, and pressure from realizing low-carbon supply chains present challenges to the Company's traditional operating models. Furthermore, to promote a green and low-carbon transition, it must tackle the challenges of technological upgrades and management optimization and find a balance between risk management and strategic adjustments to enhance its capacity to address climate change and support sustainable development.

级) 风险类型 Risk Types	中国中铁应对措施 CREC's Countermeasures
急性自然风险,如地震、台风、泥石流、 洪水等已经或可能给公司施工造成影响的 自然灾害或重大气候变化 Acute natural risks: Earthquakes, typhoons, mudslides, floods, and other natural disasters or major climate changes that have already impacted or could impact the Company's construction activities	制定《安全质量、生态环境及灾害事故(事件)应急预案》,对危险源识别、危 险性分析、预防与预警、应急响应、善后处置、应急保障、培训演练等有明确且 规范的指引。 The company has formulated the Emergency Plan for Safety and Quality, Ecological Environment, and Disaster Accidents (Incidents), providing clear and standardized guidelines on hazard identification, risk analysis, prevention and early warning, emergency response, post-incident handling, emergency support, training, and drills.
慢性自然风险,如气候变暖,海平面上 升等 Chronic natural risks: Climate warming, sea level rise, etc.	大力拓展以"生态修复、城市修补"为主要内容的城市双修、海绵城市、海域岸线 综合治理等业务领域,积极适应因气候变化可能带来的城市环境变化等问题。 The Company has vigorously expanded into business areas such as sponge city initiatives and comprehensive coastal management with "ecological restoration and urban regeneration" as the main content, to adapt to potential urban environmental changes resulting from climate change



公司抢抓气候变化催生的绿色基建与建筑技术升级机遇,以 "双碳" 目标为引领系统识别发展先机。在绿色规划施工中创新 低碳建造技术,提升工程能效;加速布局风电、光伏等清洁能源开发,拓展绿色能源业务版图;深耕环保产业建设,推动 生态修复与资源循环利用。通过多维度绿色实践,为生态文明建设注入中铁动能,在低碳转型中开辟高质量发展新路径。

The Company has seized the opportunities presented by climate change for green infrastructure and upgrades in construction technology, systematically identifying development opportunities under the guidance of the "dual carbon" goals. It has innovated low-carbon construction technologies within green planning and construction to enhance energy efficiency in projects. Additionally, the Company has accelerated its development in clean energy, focusing on wind and photovoltaic power, thereby expanding its green energy business landscape. It has also deepened its efforts in the environmental protection industry, promoting ecological restoration and resource recycling. Through multi-dimensional green practices, the Company has injected momentum into the building of ecological civilization and opened new pathways for high-quality development during the low-carbon transition.

税遇类型 Risk Types	中国中铁应对措施 CREC's Countermeasures
<b>政策机遇:</b> 中国"双碳"目标推动企业环 保低碳绿色发展	积极服务国家清洁能源基地建设;打造行业领先的海上风电建造综合服务商;加快海工起重吊装等产品迭代升级,开展高压直流海底电缆等核心部件研发,努力打造海工装备特色生产商。
<b>Policy opportunities:</b> China's "dual carbon" goals promote the environmentally friendly, low-carbon, and green development of enterprises.	The Company has actively supported the construction of national clean energy bases, positioned itself as an industry-leading integrated service provider for offshore wind power construction, and strived to grow into a characteristic manufacturer of offshore equipment by accelerating the iteration and upgrading of marine engineering lifting products and conducting R&D on core components such as HVDC submarine cables
<ul> <li>技术机遇: 光伏建筑一体化等绿色建筑 技术,推进技术革新</li> <li>Technological opportunities:</li> <li>Innovations in green building technologies, such as Building Integrated PV, promote technological advancement</li> </ul>	推动新型建筑材料研发应用。深化外加剂、特种水泥、特种钢等新型建材的自主研 发和联合研发能力,加快成果转化。 The Company has advanced the R&D and application of new building materials. It has developed its independent and joint R&D capabilities regarding new building materials, including admixtures, special cement, and special steels, and accelerated the conversion of research outcomes

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公司积极研发并推广使用地源热泵、光伏发电、热电冷三联供及空气能等清洁能源技术,在工程建设与房地产开发中构建 清洁能源技术与资源平台协同体系,推动项目在清洁能源利用、节能降耗及生态保护方面达行业领先水平,实现技术创新 与绿色发展的深度融合。

The Company has actively developed and promoted the use of clean energy technologies such as geothermal heat pumps, PV power generation, combined cooling, heat and power, and air energy. A collaborative system for clean energy technology and resource platforms has been established within engineering construction and real estate development, enabling projects to achieve industry-leading levels in clean energy utilization, energy conservation, consumption reduction, and ecological protection. As a result, it has realized a deep integration of technological innovation and green development.

#### 2024年 In 2024



#### 上 案例 CASE CASE China Railway South Investment Group's Shield Soil Dregs Efficient Processing Technology

中铁南方创新性提出"集成化布置、模块化安装、智能化控制、工业化生产"的理念,研发盾构渣土环保处理系统 及"盾构渣土高效化处理技术",实现渣土洁净分级分离及干化,无机原料与水资源循环利用,达成高效减量化运 输、高值资源化利用及环保化处理目标,为盾构施工绿色转型提供技术范例。

China Railway South Investment Group has innovatively proposed the concept of "integrated layout, modular installation, intelligent control, and industrialized production". It designed an environmentally friendly system for shield soil dreg treatment and developed the Shield Soil Dregs Efficient Processing Technology, achieving clean graded separation and drying of the shield soil dregs, the reuse of inorganic materials and water resources, efficient reduction in transportation volume, highvalue resource utilization, and environmentally friendly processing. This provides a technical model for the green transformation of shield construction.



盾构渣土高效资源化处理系统流程图

Flow Chart of Efficient Resource Treatment System for Shield Soil Dregs

#### **区**案例 CASE

### 中铁大桥局海上风电清洁能源开发实践

Offshore wind power clean energy development practice of China Railway Major Bridge Engineering Group

中铁大桥局凭借丰富的海上桥梁建设经验,积极拓展海上风电清洁能源领域,参与了福清兴化湾、粤电阳江沙扒等 一系列重大海上风电项目,自主研发了YC—180大型液压冲击锤,打破了国外技术垄断,打造了"福船三峡""大 桥福船""招商乘风"等专业风电施工设备,提升了海上风电施工效率,推动海上风电清洁能源的开发,为我国在 该领域的技术创新和设备研发做出重要贡献。

Leveraging its extensive experience in offshore bridge construction, China Railway Major Bridge Engineering Group has actively expanded into the offshore wind power sector. It has participated in a series of significant offshore wind power projects such as Fuqing Xinghua Bay Offshore Wind Farm and Yudean Yangjiang Shapa Offshore Wind Power Project. The Group independently developed the YC-180 large hydraulic impact hammer, breaking the foreign technological monopoly. It also created specialized wind power construction equipment such as "Fuchuan Sanxia", "Daqiao Fuchuan", and "Zhaoshang Chengfeng", which enhance the efficiency of offshore wind power construction and promote the development of offshore wind power. Its efforts have made important contributions to technological innovation and equipment development in this field in China.



2000 吨自升式海上风电安装平台——"大桥海风"号 2000-ton self-elevating offshore wind power installation platform— "Daqiao Haifeng"

## 指标与目标 Indicators and objectives

公司按照《中国中铁关于加快绿色发展推进美丽中国建设的指导意见》《节能减排监督管理办法》和《"十四五"节能减 排规划》的要求,下达年度节能环保各项目标指标,扎实推进节能增效工作。依托"双碳"专业研发中心对中国中铁碳排 放统计监测系统现状进行分析,建设"碳排放因子库",开展碳排放管理架构与流程相关课题,探索能源消耗、碳减排在 线监测措施,研发"中国中铁碳排放MRV信息化管理平台",平台于2024年进行了首次测试。

2024年,公司万元营业收入综合能耗(可比价)0.0401吨标煤/万元,比去年同期下降3.37%;万元营业收入二氧化碳排放 (可比价)0.1405吨/万元,比去年同期下降3.3%。

According to the Guiding Opinions of China Railway Group Limited on Accelerating Green Development and Promoting the Construction of Beautiful China, the Measures for Supervision and Management of Energy Conservation and Emission Reduction, and the 14th Five-Year Plan for Energy Conservation and Emission Reduction, the Company has issued annual targets for energy conservation and environmental protection and made solid progress in energy conservation and efficiency improvement. Supported by the "Dual Carbon" R&D Center's analysis of the current state of the Company's carbon emission statistics and monitoring system, the Company has established a "Carbon Emission Factor Library". It has studied topics related to carbon emission reduction. The Company has also developed the "CREC Carbon Emission MRV Information Management Platform", which underwent its first test in 2024.

In 2024, the Company's comprehensive energy consumption per RMB10,000 operating revenue (comparable price) was 0.0401 tons of standard coal, down 3.37% from the same period last year; carbon dioxide emissions per RMB10,000 operating revenue (comparable price) stood at 0.1405 tons, down 3.3% from the same period last year.

公司锚定"双碳"目标,设定清晰的短期与中期规划,提升绿色低碳发展水平,积极稳妥推进碳达峰碳中和。

Aiming at the "dual carbon" goals, the Company has set clear short-term and medium-term plans to improve the level of green and low-carbon development and actively and steadily advance carbon peaking and carbon neutrality.

### 短期目标 Short-term objectives

到2025年,公司适应生态文明建设要求的绿色中铁体系建设取得显著进展;能源利用效率不断提高,能源 消费结构得到明显改善。

By 2025, the Company will make significant progress in building a Green CREC System that meets the requirements of ecological civilization construction; energy utilization efficiency will continue to improve; and the energy consumption structure will undergo notable positive changes.

### 中期目标 Medium-term objectives

到2027年,公司每年遴选绿色施工科技示范工程100项,持续开展节能低 碳技术研发评比工作,形成明显碳减排成效;碳达峰行动取得阶段性成 果,将碳排放强度约束性指标纳入经营业绩考核,基本全面实施碳排放 双控。

By 2027, the Company will select 100 green construction technology demonstration projects annually and continue to carry out energy-saving and low-carbon technology R&D evaluation, to result in significant carbon emission reduction outcomes. The carbon peaking efforts are expected to achieve phased results, with the binding indicators of carbon emission intensity incorporated into business performance assessment, and the dual control of carbon emissions will be basically implemented.



注: 作为建筑类企业,中国中铁不涉及范围一和范围二的碳排放量,只包含在范围三范畴。

Note: As a construction enterprise, CREC does not engage in Scope 1 and Scope 2 carbon emissions, and only includes emissions within the Scope 3 category.

# 加强绿色管理 Strengthen green management

公司践行绿色发展理念,构建完善的环境管理架构,强化环境风险管控,注重节能减排,推动绿色施工和低碳技术研发 应用。同时推行绿色办公,倡导低碳生活方式。通过全链条绿色管理举措,实现发展与生态双赢。

The Company has practiced the concept of green development, building a sound environmental management structure, strengthening environmental risk control, emphasizing energy conservation and emission reduction, and encouraging the R&D and application of green construction and low-carbon technologies. Additionally, it has implemented green office practices and advocated for low-carbon lifestyles. Through green management measures across the entire value chain, it has achieved a win-win scenario for both development and ecological protection.

## 完善管理架构

### Improve the management structure

公司严格遵守《中华人民共和国环境保护法》《建设项目环境保护管理条例》等法律法规,落实企业生态环保主体责任,确保业务活动对环境和生态系统的影响降到最低。公司具备ISO14001环境管理体系认证,3家企业获评国家级绿色工厂。

The Company has strictly followed the Environmental Protection Law of the People's Republic of China, Regulations on the Environmental Protection Administration of Construction Projects, and other laws and regulations, fulfilling its principal responsibility for ecological environmental protection to minimize the impact of business activities on the environment and ecosystems. The Company is certified with the ISO 14001 Environmental Management System, and three of its subsidiaries have been rated as national green factories.

#### 中国中铁股份有限公司 CHINA RAILWAY GROUP LIMITED



责任落实 Responsibility assignment 公司坚持"属地管理""预防为主,防治结合""谁污染谁治理"的原则,实行统一领导、逐级负责的管理模式,确保环境保护工作有序可控。

The Company has upheld the principles of "local management", "prevention first, prevention and control combined", and "whoever pollutes is responsible for treatment". It has implemented a unified leadership and hierarchical responsibility management model to ensure that environmental protection work is orderly and controllable.



环境评估 Environmental assessment 公司对在建工程项目和作业场所进行环境因素识别和评估,建立生态环保监控监测体系,加强对生产过程中 生态环境污染风险源及污染物排放的控制。

The Company has conducted environmental factor identification and assessment for ongoing engineering projects and work sites. It has also established an ecological environmental protection monitoring and control system to strengthen the control of ecological environmental pollution risks and pollutant emissions during production processes.



风险管控 Risk management

and control

公司强化环境风险战略管控,深入开展建筑垃圾处置及弃、取土场生态环保专项整治活动,针对重点问题 挂牌督办。

The Company has strengthened the strategic management and control of environmental risks, deeply engaged in special rectification activities for construction waste disposal and ecological environmental protection at excavation and dumping sites, and placed key issues under strict supervision.



管理目标 Management objectives 到2027年,中国中铁生态环境问题整改推进机制基本完善,突出问题整改取得显著实效;基本形成完备有 效的环境风险防控体系,实现风险隐患清单制管理。

 $\boxtimes$  By 2027, the mechanism for rectifying ecological and environmental problems at CREC will be fundamentally improved, and significant results will be achieved in addressing prominent issues. A comprehensive and effective environmental risk prevention and control system will be established, and a risk hazard identification management approach will be implemented.


2024 年 10 月 20 日至 21 日,中国中铁生态环境 劳模(工匠人才)创新工作室联盟启动大会在宁 夏银川顺利举行,来自所属 14 家二级单位的 32 家生态环境方向创新工作室,聚焦美丽中国建设, 围绕"生态环境"领域,进行"联盟攻关",激 发企业新质生产力中的"生态"创新力量。

On October 20-21, 2024, the launch conference of the China Railway Ecological Environment Model Worker (Craftsman Talent) Innovation Studio Alliance was successfully held in Yinchuan, Ningxia. 32 ecological environment oriented innovation studios from 14 affiliated secondary units will focus on the construction of a beautiful China, conduct "alliance research and development" around the field of "ecological environment", and stimulate the "ecological" innovation power in the new quality productivity of enterprises.

#### 中铁宝桥南京公司成功入选"国家级绿色工厂" China Railway Baoji Bridge Group Nanjing Company successfully selected as a "National Green Factory"

中铁工业旗下中铁宝桥南京公司以"绿色低碳"理念为指引,成功入选"国家级绿色工厂"。中铁宝桥南京公司采 用全生命周期绿色设计,开发减振降噪技术,研制高原、重载、环保型道岔,降低维护成本。道岔生产线融合智 能控制技术,实现高效率自动化生产,原材利用率95%,以水性漆替代油性漆减少污染。同时,实施分布式光伏发 电,年供清洁电力435万KWh,占总能耗30%以上。

Under the guidance of the "green and low-carbon development" concept, China Railway Baoji Bridge Group Nanjing Company under the China Railway Hi-Tech Industry was successfully selected as a "National Green Factory". It employs a full lifecycle green design, develops vibration and noise reduction technologies, and manufactures heavy-haul environmentally friendly turnouts that adapt to high-altitude environments to lower maintenance costs. The turnout production line integrates intelligent control technology to achieve highly efficient and automated production, with a raw material utilization rate of 95%. Water-based paints are used instead of oil-based paints to reduce pollution. Additionally, China Railway Baoji Bridge Group Nanjing Company implements distributed PV power generation, supplying 4.35 million kWh of clean electricity annually, which accounts for over 30% of total energy consumption.



实施降耗增效 推进清洁生产 Implement consumption reduction and efficiency increase, promote clean production



道岔联合厂房屋面光伏 Joint switch factory roof photovoltaic

# 坚持节能减排

## Be committed to energy conservation and emission reduction

公司聚焦节能减排,深度参与各地湿地修复、废弃矿山修复、垃圾处理、污水处理等工程,10项工程获中国建筑业协会绿 色建造施工技术竞赛一等奖。

The Company has focused on energy conservation and emission reduction, deeply engaged in projects for wetland and abandoned mine restoration and waste and sewage treatment. A total of 10 projects won first prizes at the Green Construction Technology Competition organized by the China Construction Industry Association.

#### 污染防治 Pollution prevention and control

公司严格遵守《中华人民共和国大气污染防治法》《中华人民共和国固体废物污染环境防治法》等国家环保法规与行业标准,全面加强污染防治工作,在废气、废物、废水和噪声管理等方面,通过系统化的管理和科学的规划,持续降低污染物排放,最大限度减少对环境的影响。

The Company has strictly complied with national environmental protection regulations and industry standards, such as the Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution and the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste. It has comprehensively strengthened pollution prevention and control efforts and continuously reduced pollutant emissions through systematic management and scientific planning in areas including waste gas, waste residue, wastewater, and noise management, thereby minimizing the impact on the environment.

### 废气管理

#### Waste gas management

公司废气排放主要来自所属项目的锅炉燃烧以及钢结构加工过程中的冶炼、板材处理、喷砂、打磨及喷涂等工序,主要污染物为二氧 化碳、氮氧化物、烟(粉)尘和挥发性有机物(VOCs),主要为工业类企业排放。公司为国务院国资委关注类建筑企业,废气排放量 较少。

The Company's waste gas emissions primarily come from boiler combustion at its projects, as well as from smelting, plate processing, sandblasting, grinding, and spraying processes involved in steel structure fabrication. The main pollutants include carbon dioxide, nitrogen oxides, smoke (dust), and volatile organic compounds (VOCs), predominantly from industrial enterprises. As a construction company of concern to SASAC, the Company has relatively low waste gas emissions.

#### 降低废气排放举措 Measures to reduce waste gas emissions

- 公司加大了用于污染治理的资金投入力度和工业改造力度,通过调整产能结构,并通过低氮改造燃气锅炉等方式,减少二氧化碳、 氮氧化物的排放。
- 在运输、存储、施工、生产等过程中,通过覆盖、洒水、增加除尘设备、封闭作业等方式有效减少烟(粉)尘。
- 为治理VOCs,公司在生产线加装活性炭和过滤棉漆雾过滤系统,并按照VOCs治理标准对车间整体进行改造。

2024年,公司各主要废气污染物均在许可证排污范围内,实现达标排放。

- The Company has increased financial investment and industrial upgrades in pollution control, reducing carbon dioxide and nitrogen oxide emissions through capacity structure adjustment and modifications such as low-nitrogen retrofits of gas boilers.
- During transportation, storage, construction, production, and other processes, the Company has effectively reduced smoke (dust) by employing measures such as covering, spraying water, increasing dust removal equipment, and conducting operations in confined spaces.
- To control VOCs, the Company has installed activated carbon, cotton filter, and paint mist filtering systems on production lines and made overall improvements to workshops following VOC control standards.

In 2024, all major waste gas pollutants from the Company were within permitted discharge limits, achieving compliant emissions.

#### 废物管理

#### Waste residue management



\*Note: The Company's main businesses do not involve logistics and related material packaging services, as it is a construction company, and thus the waste residue does not include packaging materials.

In 2024, the Company's comprehensive utilization rate of non-hazardous waste reached 92.05%, and the disposal rate of non-hazardous and hazardous waste registered 100% and 100%, respectively.



中铁科工盾构机再制造,推动绿色循环与资源高效利用。

China Railway Science and Industry Group's shield machine remanufacturing promotes green circulation and efficient resource utilization

中铁工业旗下中铁科工江夏基地作为华中地区最大的盾构生产及再制造基地,通过盾构机再制造技术,有效降低采 购成本,延长设备使用寿命,激活闲置资源。该基地年再制造能力达30台次,与购置新盾构机相比,可节约成本 50%以上,节能60%,节省耗材70%。2024年,"盾构机再制造"服务已被列入"工信部绿色制造系统解决方案供 应商""工信部再制造产品名录""湖北省技术创新示范产品目录",成为资源循环利用和绿色发展的典范。

As the largest shield machine production and remanufacturing base in Central China, the Jiangxia Base of China Railway Science and Industry Group under the China Railway Hi-Tech Industry has effectively reduced procurement costs, extended equipment life, and activated idle resources through shield machine remanufacturing technology. The Base's annual remanufacturing capacity is up to 30 sets. Compared to purchasing new shield machines, it can save over 50% cost, 60% energy, and 70% consumables. In 2024, the "shield machine remanufacturing" service was included in the "Ministry of Industry and Information Technology Green Manufacturing System Solution Supplier", "Ministry of Industry and Information Technology Remanufactured Product List", and "Hubei Technological Innovation Demonstration Product Catalogue", becoming a model of resource recycling and green development.



<sup>2024</sup> 年 12 月 11 日,中铁科工再制造的土压、泥水双模盾构 机 "智勇号"在江夏制造基地下线。

On December 11, 2024, the earth pressure and slurry dualmode shield machine, "Zhiyong", remanufactured by China Railway Science and Industry Group rolls off the production line at Jiangxia Base.

#### 上 CASE

#### 中国铁工投资打造国内首个污泥处置项目 China Tiegong Investment and Construction Group builds China's first sludge disposal project

由中国铁工投资建设、运营的重大民生工程——西咸新区沣西新城污泥处置项目正式运营后,污泥处理规模可达 600 吨/日,能满足西安市五分之一的污泥处置需求。项目采用国际领先的"两段式干化+热解气化"工艺,较其他 干化工艺可降低蒸汽耗量约30%以上,与市政污泥处置行业平均碳排放水平相比,项目运营阶段年碳减排量可达 44万吨,减排90%以上。处置产物可作建材利用,实现了污泥处置"无害化、稳定化、减量化、资源化"目标, 大幅降低运营成本和能耗,实现降碳增效双赢。

After the Sludge Disposal Project in Fengxi New City of Xixian New Area, a major livelihood project constructed and operated by China Tiegong Investment and Construction Group, was put into operation, its processing capacity can reach 600 tons per day, meeting one-fifth of Xi'an's sludge disposal needs. The project employs internationally advanced "two-stage drying + pyrolysis gasification" technology, which can reduce steam consumption by over 30% compared to other drying processes. During its operational phase, the project can



achieve an annual carbon emission reduction of up to 440,000 tons (over 90%) in comparison to the average carbon emission level of municipal sludge disposal. The byproducts from sludge disposal can be utilized as building materials, achieving goals of "harmlessness, stabilization, volume reduction, and resource recycling" in this process, substantially reducing operating costs and energy consumption while achieving a win-win situation in carbon emission reduction and efficiency improvement.

种类 Type	指标 Indicator	<b>单位</b> Unit	<b>2024 年</b> <sup>2024</sup>	同比增减 YoY Increase/Decrease
废气 Waste Gas	氮氧化物排放量 Nitrogen Oxide Emissions	吨 ton	9.63	3.3%
	烟(粉)尘排放量 Smoke (Dust) Emissions	吨 ton	50.46	-4.6%
	挥发性有机物排放量 VOC Emissions	吨 ton	23.53	-16%
	二氧化硫 Sulfur Dioxide Emissions	吨 ton	0.33	6.2%
废物 Waste Residue	有害废弃物排放产生量 Amount of Hazardous Waste Emissions	吨 ton	1280	-8.5%
	有害废弃物排放密度 Hazardous Waste Emission Density	吨 / 万元 t/RMB10,000	0.011	0
	无害废弃物排放产生量 Amount of Non-hazardous Waste Emissions	吨 ton	5105000	-0.97%
	无害废弃物排放密度 Non-Hazardous Waste Emission Density	吨 / 万元 t/RMB10,000	0.046	12.2%



具体说明

1.氮氧化物、二氧化硫、烟(粉)尘和挥发性有机物排放量均为工业板块按排污许可证排放量计算。

2.2024年,公司所属中铁工业旗下中铁宝桥和中铁九桥增加采用蓄热燃烧(天然气为燃料)RTO方式的环保治理设备,导致氮氧化物、二氧化硫排放量增加。2023年披露的氮氧化 物排放浓度取值为季度监测的最低值,修正后2023年年度应为9.32吨。

Notes

1. Emissions of nitrogen oxides, sulfur dioxide, smoke (dust), and VOCs are calculated based on the discharge limits specified in the pollutant discharge permit for the industrial sector.

2. In 2024, subsidiaries of China Railway Hi-Tech Industry under the Company, including China Railway Baoji Bridge Group and China Railway Jujijang Bridge Engineering, increased the use of environmental protection equipment employing Regenerative Thermal Oxidation (RTO) technology with natural gas as fuel, resulting in a rise in nitrogen oxides and sulfur dioxide emissions. The nitrogen oxide emission concentration disclosed in 2023 was the lowest quarterly monitoring value; after revision, the annual total emission concentration for 2023 should be 9.32 tons.

废水管理 Wastewater mail	nagement
一度水管理 Wastewater mail	nagement

公司系统评估废水的潜在环境影响,强化施工废水管理,设置三级沉淀池,对施工废水进行处理。攻克了隧道施工污水处理及回用装备技术,开发隧道废水净水剂大幅降低药剂投加成本,并研发隧道废水梯级循环利用技术,通过"废水处理再利用"模式为隧道施工 专用装备提供了清洁且丰富的作业用水,实现水资源高效循环与成本优化,构建起施工废水全链条绿色处理体系。

The Company has systematically analyzed the potential environmental impacts of wastewater, placed significant emphasis on the management of construction wastewater, and set up three-level sedimentation tanks for construction wastewater treatment. It has successfully developed the technology for treating and reusing wastewater from tunnel construction and tunnel wastewater clarifying agents that significantly reduce chemical dosing costs. Additionally, the Company has developed tiered recycling technology for tunnel wastewater, providing abundant clean operating water for specialized tunnel construction equipment through "wastewater treatment and reuse". Moreover, this approach has achieved efficient recycling of water resources and cost optimization and contributed to the establishment of a full-chain green treatment system for construction wastewater.

#### 噪声管理

公司严格要求所属工程项目现场必须配备噪声监控设备,对施工噪声实施实时监控,确保噪声排放符合国家有关标准。

In terms of noise management for engineering projects, the Company has required all project sites to be equipped with noise monitoring devices to conduct real-time monitoring of noise generated by the projects. The noise control shall meet relevant national standards.

#### 资源利用 Resource utilization

#### 能源管理

公司持续落实《生态环境保护与能源节约监督管理规定》,多举措推进节能增效工作。

The Company has continued to implement the Regulations on Supervision and Management of Ecological Environmental Protection and Energy Conservation and taken multiple measures to promote energy-saving and efficiency-improvement efforts.

#### 设备升级

#### **Equipment upgrading**

公司淘汰落后产能,推广节能降碳先进技术,优先采 购达到节能水平的设备。

The Company has phased out obsolete production capacity, promoted advanced technologies for energy conservation and carbon emission reduction, and prioritized the procurement of equipment that meets energy-saving standards.

#### 信息系统优化

#### Information system optimization

公司启用并动态升级新版能源节约与生态环境保护 统计系统,实现节能环保数据常态化线上填报。

The Company has adopted and dynamically upgraded a new version of the energy conservation and ecological environmental protection statistical system, standardizing regular online reporting of energy conservation and environmental protection data.

Noise management

**Energy management** 

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### 水资源管理

#### Water resource management

公司严格落实国务院国资委印发的《中央企业能源节约与生态环境保护统计报表》要求,持续完善水资源统计监测体系,规范用耗水 量核算口径,强化循环利用。在此基础上,积极采取施工节水措施,普遍推广节水型自动喷淋系统、沉淀池等,用于混凝土养护、车 辆冲洗及扬尘抑制,显著提高水资源利用率。施工项目水源主要由属地自来水公司保障,在求取适用水源方面不存在问题。

According to the Statistical Statement on Energy Conservation and Ecological Environment Protection of Central SOEs issued by SASAC, the Company has continuously improved its water resource statistical monitoring system, standardized the statistical accounting caliber of water consumption, and strengthened the recycling of water resources. Based on this, it has actively put into practice construction water-saving measures, widely promoting water-efficient automatic sprinkler systems and sedimentation tanks for concrete curing, vehicle washing, and dust suppression, thereby improving water resource utilization. The Company has no problem in sourcing suitable water supplies, which are primarily provided by the local water supply company.



2024 年 5 月,由中国铁工投资集团投资、建设、运营的江西省鹰潭信江新区厂网河湖园一体化海绵城市建设项目主体完工。该项目共分为三个板块,统筹源头海绵化改造、城镇生活污水提质增效、城市排水防涝能力提升等工作,致力于将鹰潭海绵生态新城打造成全国海绵城市建设示范。

In May 2024, the main part of the factory-network-river-lake-park integrated sponge city construction project in Xinjiang New District, Yingtan City, Jiangxi Province invested, constructed, and operated by China Tiegong Investment and Construction Group was completed. The project is divided into three sections, coordinating the transformation towards a sponge city, urban sewage treatment quality and efficiency improvement, and urban drainage and flood prevention capabilities enhancement. It is committed to making Yingtan a national model for sponge city construction.



能源及资源消耗关键绩效指标

Key Performance Indicators for Energy and Resource Consumption

种类 Туре	指标 Indicator	2024年	<b>同比增减</b> YoY Increase/ Decrease
直接能源消耗 Direct Energy Consumption	汽油(万吨)Gasoline (10,000 tons)	50.2	-6.2%
	汽油(吨 / 万元)Gasoline (t/RMB10,000)	0.0045	0
	柴油(万吨)Diesel (10,000 tons)	158.5	-10.3%
	柴油(吨 / 万元)Diesel (t/RMB10,000)	0.0143	0.7%
	天然气(万标立方米)Natural Gas (10,000 standard cubic meters)	3450	-5.5%
	天然气(立方米 / 万元)Natural Gas (cubic meter/RMB10,000)	0.58	-5.4%
间接能源消耗 Indirect Energy Consumption	电力(万千瓦时)Electricity (10,000 kWh)	1019900	-9.8%
	电力(万千瓦时 / 万元)Electricity (10,000 kWh/RMB10,000)	0.01	0
综合能源消耗 Comprehensive Energy Consumption	综合能源消耗(万吨标准煤)Comprehensive Energy Consumption (10,000 tons of standard coal)	456.3704	-10.09%
	综合能源消耗(吨标准煤 / 万元收入)Comprehensive Energy Consumption (tons of standard coal/RMB10,000 revenue)	0.0401	-3.4%
	综合能源消耗(万千瓦时)Comprehensive Energy Consumption (10,000 kWh)	3610875	-0.06%
	综合能源消耗(千瓦时 / 万元收入)Comprehensive Energy Consumption (kWh/RMB10,000 revenue)	330	-0.06%

# 推进绿色办公 Promote green office practices

公司开展总部办公楼节能降碳行动,通过技术改造提升能效,更换无负压供水系统和自动喷淋系统、替换公共区域节能型 照明灯具,建立分时段制冷供热、错峰用电机制,大幅降低能耗。2024年共节约能耗费用约100万元,为全公司绿色办公 树立示范标杆。

公司总部和所属各单位积极推广应用无纸化会议系统,实现会议全流程数字化管理,显著提升会议效率与管理水平。该系统在助力企业数字化转型的同时,通过节能降碳举措带动整体运营效率提升,为绿色办公与高效管理提供双重支撑。

The Company has initiated energy-saving and carbon emission-reduction actions in its headquarters office building, enhancing energy efficiency through technological upgrades. This includes applying the non-negative pressure water supply system and the automatic sprinkler system, updating public area lighting with energy-efficient fixtures, and establishing a tiered cooling and heating system along with staggered electricity usage mechanisms. These measures have significantly reduced energy consumption. In 2024, it saved approximately RMB1 million in energy consumption costs and set a benchmark for green office practices across the Company.

The Company headquarters and subsidiaries have actively promoted the application of a paperless meeting system, achieving digital management of the entire meeting process, which has significantly enhanced meeting efficiency and management levels. This system has supported the Company's digital transformation while driving improvements in overall operational efficiency through energy-saving and carbon-reduction measures, providing dual support for green office practices and efficient management.

# 落实生态保护 Implement ecological protection

公司秉持"生态优先、绿色发展"理念,将生态保护要求深度融入战略规划与治理全流程,持续完善生态环境保护管理 体系,强化生态环境风险防控能力,切实履行生态环境保护主体责任,以系统化管理举措守护生态红线。

The Company has been committed to the principle of "ecological priority and green development", integrating ecological environmental protection requirements into its strategic planning and governance processes. It has continually improved its ecological environmental protection management system, enhanced risk prevention and control capabilities, and fulfilled its responsibilities in this regard, to protect the ecological environment through systematic management measures.

# 生态系统保护 Ecosystem protection

公司坚持生态保护与工程建设同步规划、同步实施,委托专业机构开展水土保持、植被保护等专项环境影响评估,严守生态保护底线。通过全过程生态管控,确保已竣工项目环评通过率连续保持 100%。

The Company has maintained synchronous planning and implementation of ecological environment protection and engineering construction. It has entrusted professional organizations to conduct special environmental impact assessments for soil and water conservation and vegetation protection, strictly safeguarding the ecological protection bottom line. Through ecological management across the process, the Company has ensured that the environmental impact assessment pass rate for completed projects has continuously remained at 100%.

#### L 案例 CASE

# 无人机航拍 守护承平项目绿色施工路

E Drone aerial photography: Safeguard green construction of the Chengping Project

中铁六局北京公司承平项目部根据属地环保有关规定,组织专人每周对施工全线进行无人机航拍,检查环保措施落 实情况,排查绿色施工管理盲区,最大限度减少施工对沿线环境造成的影响。

According to relevant local environmental protection regulations, the Chengping Project Department of Beijing Railway Construction Company of China Railway Sixth Group organized dedicated personnel to conduct weekly drone aerial photography of the entire construction line, inspect the implementation of environmental protection measures, identify blind spots in green construction management, and minimize the impact of construction on the environment along the line.



#### 在施工前期

#### In the early stage of construction

公司组织专业机构开展环境影响评价,依据评估结果制定切实有效的保护方案,同步规划水土保持、生物多样性保护、植被保护等措施,做好科学选址、规范弃碴、事先防护、积极消纳。

The Company has engaged professional institutions to carry out environmental impact assessments. Based on the assessment results, it has formulated effective protection plans and simultaneously planned for soil and water conservation, biodiversity protection, and vegetation preservation while making careful site selection, proper waste disposal, preemptive protection measures, and proactive waste disposal.

#### 施工过程中

During the construction

公司注重生态保护的持续投入,使用环保设备,改进施工工艺和优化施工方案,减少对水、大气、植被和生物的影响。对于施工过程中 涉及的临时用地,公司严格编制、实施用地及复垦规划,注意对居民稠密区、自然保护区等环境敏感区域的保护。

The Company has emphasized continuous investment in ecological protection. It has employed environmentally friendly equipment, improved construction processes, and optimized construction plans to minimize impacts on water, atmosphere, vegetation, and biodiversity. For temporary land use required during construction, the Company has strictly formulated and implemented land use and reclamation plans, paying particular attention to protecting environmentally sensitive areas, such as densely populated regions and nature reserves.

#### 工程竣工后

After project completion

按照规定对土地进行恢复,最大限度保护生态环境。

The Company has restored land according to regulations to maximize the protection of the ecological environment.

# 生物多样性保护 Biodiversity conservation

公司切实履行生物多样性保护责任,通过优化施工方案避开生物多样性关键区域及生态敏感区,实施施工生态影响动态监测,最大限度减少对生物种群及栖息地的干扰,致力于实现工程建设与生物多样性保护的和谐共生。

The Company has actively fulfilled its responsibilities for biodiversity conservation. By optimizing construction plans, it has avoided critical biodiversity areas and ecologically sensitive zones while continuously monitoring the impact of construction activities on the ecological environment to minimize potential effects on biological populations and habitats. The Company has been committed to balancing engineering construction and biodiversity protection.





**在匈塞铁路项目中**中铁九局与中铁电气化局积极应对沿线自然保护区和珍稀物种栖息地的挑战,通过与匈牙利环境部门合作,合理安排施工时间,避免在鸟类繁殖期施工,同时采取植物迁移、种子收集、动物保护和噪声控制等措施,有效保护 了当地生态环境,获得国际媒体广泛认可。

In the Budapest–Belgrade railway project, China Railway No. 9 Group and China Railway Electrification Engineering Group actively responded to the challenges posed by nature reserves and rare species habitats along the route. By collaborating with Hungarian environmental authorities, they appropriately scheduled construction times to avoid work during bird breeding seasons. They also applied measures such as plant relocation, seed collection, animal protection, and noise control, effectively protecting the local ecological environment and thereby receiving widespread recognition from international media.





**在海南昌江核电二期工程项目中**中铁八局高度重视绿色文明施工,在线路经过路段,提前迁地移植珊瑚群;采用声呐探测 海床沉降等先进技术,有效减小海床沉降和振动,保护了海底生物多样性稳定和持续发展。

In the Hainan Changjiang Nuclear Power Phase II project, China Railway No. 8 Engineering Group placed a high priority on green and well-managed construction practices. It transplanted coral colonies in advance in sections where the line passes. Using advanced technologies such as sonar detection of seabed subsidence, it successfully minimized seabed subsidence and vibration, thereby protecting the stability and sustainable development of marine biodiversity.





# 生态保护宣传和实践活动

#### Ecological protection publicity and practice activities

公司组织员工参加生态保护培训与专题讲座,深化环保意识;开展义务植树、生态修复等实践活动,并通过示范引领带 动公众参与生态保护行动,推动形成社会共建生态文明的良好格局。

The company organizes employees to participate in ecological protection training and special lectures to deepen environmental protection awareness; Carry out voluntary tree planting, ecological restoration and other practical activities, and lead the public to participate in ecological protection actions through demonstration, so as to promote the formation of a good pattern of social co construction of ecology.

#### 2024年3月12日,是我国的第46个植树节,林草兴则生态兴,中国中铁所属各单位深入践行"绿水青山就是金山银山"理念, 掀起造林绿化热潮。

March 12, 2024 marked the 46th Tree Planting Day in China. As forests and grasslands flourish, natural surroundings thrive. All subsidiaries of CREC have deeply practiced the concept that "lucid waters and lush mountains are invaluable assets", igniting a fervor for afforestation and greening activities.



中铁六局路桥公司在湖北利川荷花村、纳水村和海洋村开展"植绿在春, 荫庇千秋"义务植树活动。

China Railway Sixth Group Road and Bridge Construction Company organized voluntary tree planting activities in Hehua, Nashui, and Haiyang Villages in Lichuan, Hubei Province, under the initiative "Planting Trees in Spring, Benefiting Future Generations".



中铁七局西安公司团组织青年员工前往翠华山生态区开展"正'植' 青春,共'树'理想"环保植树活动。

The Youth League Committee of China Railway Seventh Group Xi'an Railway Engineering Company organized young people to carry out a tree planting activity titled "Planting by Youth, Cultivating Ideals Together" in the Cuihua Mountain Ecological Area.

# 2024年5月,中国中铁所属各单位在全国节能宣传周通过展板宣传、张贴标语、发起倡议等方式,向员工普及节能减排知识,引导员工践行低碳生活。

In May 2024, subsidiaries of CREC popularized energy conservation and emission reduction to employees during the National Energy Efficiency Promotion Week through exhibition boards, slogan postings, and advocacy initiatives, guiding employees to adopt low-carbon lifestyles.



中铁武汉电气化局在全国节能宣传周张贴宣传海报

Posters put up by China Railway Wuhan Electrification Engineering Group during the National Energy Efficiency Promotion Week



中铁大桥局开展全国节能宣传周学习教育活动

China Railway Major Bridge Engineering Group conducts a learning and education campaign during the National Energy Efficiency Promotion Week

# 以人为本 凝聚奋进之力

Be people-oriented: Unite efforts for progress

# 中国中铁深入实施人才强企战略,将员工作为发展核心力量,尊重主体地位,完善权益保障,搭建成长平台,提供培训 晋升通道,推动员工与企业同心同向、砥砺奋进、筑梦圆梦,凝聚高质量发展合力。

CREC has actively implemented a talent driven strategy, recognizing employees as the core driving force for development. It has respected their status, ensured the protection of their rights and interests, built platforms for growth, and provided training and promotion pathways. This approach has fostered alignment and cooperation between employees and the Company, enabling them to work together diligently to realize their dreams and achieve high-quality development.

# 人才引进 Talent introduction

公司注重从源头控制人才引进质量,对企业所需的高层次人才、特殊紧缺人才放宽引进条件限制,畅通引进渠道。在引进方式方面,明确通过公开招聘等市场化方式优化引进渠道,公开公平开展人才招聘工作。2024年,公司共签约高校毕业生1.48万人。尊重、优待退役军人,支持退役军人安置工作,接收安置转业军官1人、退役士兵20人。

The Company has controlled the quality of talent introduction from the source, relaxed the restrictions on the introduction of highlevel and particularly scarce talent needed by enterprises, and facilitated smooth introduction channels. In terms of introduction methods, the Company has made it clear that the introduction channels should be optimized through market-oriented ways such as open recruitment, and talent recruitment should be carried out publicly and fairly. In 2024, the Company signed contracts with a total of 14,800 college graduates. It has respected and supported veterans, actively assisting in their resettlement. The Company has received and placed 1 demobilized military officer and 20 retired soldiers.



2024年,中国中铁启动"总对总"集 中招聘模式。由公司牵头所属各单位到 清华大学等名牌院校和行业重点院校" 组团招聘",充分发挥中国中铁品牌效 应,进一步提升了人才引进成效。

In 2024, CREC launched a "Direct-to-Direct" centralized recruitment model. It led its subsidiaries to recruit talent at prestigious universities such as Tsinghua University and other key industry schools, fully leveraging CREC's brand effect to further enhance the effectiveness of talent acquisition.



# 保障员工权益 Protect employees' rights and interests

公司严守劳动法规,依法保障员工薪酬福利、休息休假等权益,规范用工管理,完善职业发展通道,推进民主管理,营 造和谐劳动关系,增强员工归属感与向心力,助力企业高质量发展。

The company strictly abides by labor laws and regulations, protects employees' rights and interests such as salary and welfare, rest and vacation, standardizes employment management, improves career development channels, promotes democratic management, creates harmonious labor relations, enhances employees' sense of belonging and centripetal force, and helps the high-quality development of the enterprise.

# 平等用工 Equal employment

公司秉持平等用工理念,严格遵守法律法规,禁止就业歧视,确保劳动者不因性别、种族、年龄等因素受到差别对待,切 实落实同工同酬原则,保障员工在薪酬分配上的公平性;同时,建立公正透明的晋升机制,为员工提供平等的职业发展机 会,通过系统化培训体系提升员工技能水平,营造公平竞争的职场环境;此外,注重维护劳动者人格尊严,打造安全健康 的工作条件,保障员工合法权益。公司坚决抵制和反对任何形式的雇佣童工和强制劳动行为,本报告期内,未发现使用童 工及强制劳工的事件。

The company adheres to the concept of equal employment, strictly abides by laws and regulations, prohibits employment discrimination, ensures that workers are not treated differently due to gender, race, age and other factors, and earnestly implements the principle of equal pay for equal work, so as to ensure the fairness of employees' salary distribution; At the same time, establish a fair and transparent promotion mechanism, provide equal career development opportunities for employees, improve the skill level of employees through a systematic training system, and create a fair and competitive workplace environment; In addition, pay attention to safeguarding the dignity of workers, creating safe and healthy working conditions, and protecting the legitimate rights and interests of employees. The company firmly resists and opposes any form of child labor and forced labor. During the reporting period, no child labor and forced labor were found.

# 劳动合同管理

#### Labor contract management

公司认真贯彻落实《劳动法》和《劳动合同法》,坚持依法合规、协商一致、防范风险、创新发展的原则加强合同管理, 与所有受聘者均依法签订劳动合同,明确在劳动保护、劳动报酬、保险福利、职业道德等方面的权利和义务,以及合同变 更、解除、终止、续订的标准和程序,并严格执行合同条款,不断加强劳动合同全过程管理。公司境外机构和项目按照当 地劳动法和社保法等制定属地化的劳工管理制度,规范当地员工招聘、合同签订、社保交纳、出勤管理、请假制度、薪酬 标准、解聘流程等各环节要求。

The company conscientiously implements the Labor Law of the People's Republic of China and Labor Contract Law of the People's Republic of China, adheres to the principles of legal compliance, consensus, risk prevention and innovative development, strengthens contract management, signs labor contracts with all employees according to law, defines the rights and obligations in labor protection, labor remuneration, insurance benefits, professional ethics and other aspects, as well as the standards and procedures for contract change, cancellation, termination and renewal, strictly implements the contract terms, and continuously strengthens the whole process management of labor contracts. The company's overseas institutions and projects formulate localized labor management systems in accordance with the local labor law and social security law, and standardize the requirements of local staff recruitment, contract signing, social security payment, attendance management, leave system, salary standards, dismissal process and other links.

# 薪酬福利 Compensation and benefits

公司按照现代企业制度要求,持续健全市场化薪酬分配机制建设。进一步优化工资总额管理,落实"效益升、工资升, 效益降、工资降"及"工资效益联动、效率对标调整、工资水平调控"要求,突出工资总额与经济效益、投入产出效 率、经营业绩考核结果挂钩。积极推进中长期激励工作,统筹运用上市公司股权激励、科技型企业股权和分红激励、超 额利润分享等激励工具,努力实现扩面提质。深化内部收入分配制度改革,扎实推进能增能减工作,加强专项奖励和津 贴补贴福利规范管理,严肃薪酬分配纪律。推进薪酬管理信息系统建设,进一步强化预算管理、总额分配、薪酬发放、 精准激励、穿透监管、查询统计等核心业务信息化管理,丰富薪酬管理手段,提升薪酬管理效能,防范违规分配行为。

In accordance with the requirements of the modern enterprise system, the company continued to improve the market-oriented salary distribution mechanism. Further optimize the payroll management, implement the requirements of "wage benefit linkage, efficiency benchmarking adjustment, wage level regulation", and link the payroll of each unit with business performance, inputoutput efficiency, and labor productivity on the basis of accurate assessment. Continue to strengthen the management of the person in charge's salary, adhere to the principle of "performance increase, salary increase, performance decrease, salary decrease", and determine the person in charge's performance salary according to the assessment results in accordance with the system and measures, the letter of responsibility for business performance signed by the enterprise and the person in charge. We will actively promote medium - and long-term incentives, and make overall use of incentive tools such as equity incentives for listed companies, equity and dividend incentives for technology-based enterprises, excess profit sharing, and follow-up investment, so as to achieve expansion and quality improvement. We will further standardize the order of salary distribution, deepen the reform of increasing and decreasing income, strengthen the standardized management of allowances, subsidies and benefits, and tighten the discipline of salary distribution. Ensure the payment of employees' wages, establish a long-term mechanism, and lay a solid foundation for building a harmonious labor relationship.



公司切实保障职工合法社保权益,及时为职工参加基本养老保险、基本医疗保险、工伤保险、失业保险及生育保险。建立 企业职工终身重疾保障体系,在全公司推行团体长期重大疾病补充医疗保险,最大限度为广大员工提供全生命周期的健康 保障。

公司落实国家及国务院国资委政策规定,建立了企业年金缴费水平与企业运行质量挂钩及动态调整机制,合理确定缴费水平,发挥年金保障与激励作用。规范年金企业缴费分配,强化年金投资运作管理,加强年金基金投管人绩效考核。加大日常管理力度,督导所属企业提高年金覆盖率,增强投资风险防控,保障员工权益。

The company effectively protects the legitimate social security rights and interests of employees, and timely participates in basic endowment insurance, basic medical insurance, industrial injury insurance, unemployment insurance and maternity insurance for employees. Establish a life-long serious illness insurance system for enterprise employees, implement long-term group supplementary medical insurance for major diseases throughout the company, and maximize the provision of life-cycle health insurance for employees.

The company has implemented the policies and regulations of the state and the state owned assets supervision and Administration Commission of the State Council, established the linkage between the payment level of enterprise annuity and the quality of enterprise operation and the dynamic adjustment mechanism, reasonably determined the payment level, and played the role of annuity guarantee and incentive. We will standardize the payment distribution of annuity enterprises, strengthen the operation and management of annuity investment, and strengthen the performance appraisal of annuity fund investors and managers. Strengthen daily management, supervise affiliated enterprises to improve annuity coverage, strengthen investment risk prevention and control, and protect employees' rights and interests.

# 民主管理

# Democratic management

公司健全和落实以职工代表大会为基本形式的企业民主管理制度,发挥好职工代表大会制度、厂务公开制度、职工董事职 工监事制度作用,保障和落实广大职工的知情权、参与权、表达权、监督权。

公司各级企业每年都召开一次职工代表大会,持续推进四级职代会规范化建设。2024年,公司召开了四届二次职代会, 按程序圆满完成了审议行政工作报告、提案征集处理报告、集体合同履行情况报告,以及民主评议领导人员、职工董监 事、签订集体合同等议程。对职代会征集审定立项的88项提案实现"一案一复",提案办结率100%。推进民主管理制度 体系建设,指导12家企业完成了职代会换届和改选工作,履行了民主程序,落实了职代会职权。

The company will improve and implement the enterprise democratic management system in the form of employee congress, give full play to the role of employee congress system, factory affairs disclosure system, employee director and employee supervisor system, and ensure and implement the rights of employees to know, participate, express and supervise.

Enterprises at all levels of the company hold a workers' Congress every year to continue to promote the standardization of the four level workers' Congress. In 2024, the company held the 2nd Meeting of the 4th Workers' Congress and successfully completed the review of the administrative work report, the report on the collection and handling of proposals, the report on the performance of collective contracts, as well as the democratic evaluation of leaders, staff directors and supervisors, and the signing of collective contracts. For the workers' Congress to solicit, approve and approve the project. The proposal has achieved "one case, one reply", and the completion rate of the proposal is 100%. Promote the construction of the democratic management system, and guide the construction of the democratic management system. 12 enterprises have completed the establishment and replacement of the workers' Congress. Enterprises held workers' Congress, performed democratic procedures, and implemented the functions and powers of workers' Congress.



2024年1月19日,中国中铁召开四届二次职工代表大会,会上签订了《2024年集体合同》。 On January 19, 2024, CREC holds the 2nd Meeting of the 4th Workers' Congress, at which the Collective Contract for 2024 is signed

# 助力员工成长 Help employees grow

公司深入实施人才强企战略,统筹推进"六支人才队伍"建设,为企业高质量发展提供了坚实的人才保障和智力支持, 助力企业在激烈的市场竞争中抢占先机、赢得优势。

The Company has thoroughly implemented a talent-driven strategy, proactively advancing the development of "six talent teams". The strategy has provided a solid talent guarantee and intellectual support for the Company's high-quality development, helping it gain a competitive edge in the intense market competition.





2024年8月9日,中国中铁在总部召开干部人才工作会。 On August 9, 2024, CREC holds an officer and talent work meeting at its headquarters





# 田 家例 中国中铁加快推进产业工人队伍建设 Conference on Promoting the Reform of Industrial Worker Team Constr Conference on Promoting the Reform of Industrial Worker Team Constr

2024年3月13日,中国中铁在郑州召开产业工人队伍建设改革推进会议,对开展深化产业工人队伍建设改革专项行 动进行了安排部署,提出思想引领、建功立业、提素赋能、地位提高、维权服务、队伍壮大"六大行动"。

On March 13, 2024, China Railway held a meeting in Zhengzhou to promote the construction and reform of industrial workers' team, which arranged and deployed the special action to deepen the construction and reform of industrial workers' team, and proposed "six actions" including ideological guidance, making contributions, improving quality and ability, improving status, safeguarding rights and services, and strengthening the team.



L 案例 CASE 中铁二院"局院交流"人才培养模式赋能企业高质量发展 The "Bureau-Institute Exchange" talent development model of China Railway Eryuan Engineering Group empowers high-quality development of the enterprise

中铁二院创新探索"局院交流"人才培养模式,采用派员单位按需"下单"、接收单位推优"接单"的"订单式" 培养模式,有效拓展了复合型工程人才培养路径,有力促进了人才培养与企业效益"双提升、共进步"

China Railway Eryuan Engineering Group innovatively explores the "Bureau Institute Exchange" talent training model, adopting an "order based" training model where dispatching units place orders as needed and receiving units promote excellence and accept orders. This effectively expands the path of cultivating composite engineering talents and promotes the "dual improvement and common progress" of talent training and enterprise efficiency.



# 组织员工培训

# Organize employee training

公司积极构建 "线上 + 线下" "实践赋能" "跨域交流"等多元化培训体系,着力强化员工政治素养与业务能力双提升, 同步推动视野开拓与思维革新,搭建起系统化赋能成长平台,全面培育高素质复合型人才。

The Company has established a diversified training system such as "online + offline", "practice empowerment" and "cross-domain exchange", focuses on strengthening the double improvement of staff's political literacy and business ability, synchronously promotes vision expansion and thinking innovation, builds a systematic platform for enabling growth, and comprehensively cultivates high-quality compound talents.





2024年10月,中国中铁举办2024年新入职员工示范培训班 In October 2024, CREC holds a demonstration training course for new employees in 2024



2024年8月19日,中国中铁第三期青年干部培训班暨青年马克思主义者培养工程培训班开班。 On August 19, 2024, the Third CREC Young Officers Training Program and the Youth Marxist Training Program officially commences



"导师带徒"铺就新员工成长路

2024年,中铁六局电务公司组织开展"导师带徒"签约协议、业务培训、现场指导等系列活动,围绕新入职员工开 展定向化、目标化培养,建立良好的帮扶指导与交流机制,发挥"传、帮、带"作用。

In 2024, China Railway Sixth Group Electric Power Company organized a series of activities such as the "mentorapprentice" agreement signing ceremony, business training, and on-site guidance. The focus was on the systematic and targeted development of newly hired employees. The Company has established a robust support, guidance, and communication mechanism, to give play to mentors' role of "teaching, assistance, and leading".



师父正在施工现场指导徒弟 Mentor is instructing apprentices on the construction site

# 推进职称评审 Encourage qualification certification

公司坚决执行职称评审制度体系,畅通专业技术人员发展通道。公司设有工程、会计、经济、政工多个系列的专业技术职 务人员晋升评审委员会,按照公司有关规定对申报上述系列高级专业技术职务人员进行资格评审。2024年,全公司共评审 通过高级职称6872人,其中工程系列5469人、经济系列345人、会计系列483人、政工系列575人。

The Company has resolutely implemented the professional title evaluation system and smoothed the development channel for professional technical personnel. It has established promotion evaluation committees for professional technical positions, including engineering, accounting, economics, and political work, to evaluate the qualifications of applicants for senior professional technical positions in accordance with the Company's relevant regulations. In 2024, a total of 6,872 individuals were approved for senior professional titles across the Company, including 5,469 in engineering, 345 in economics, 483 in accounting, and 575 in political work.

# 开展职业技能等级认定 Conduct vocational skill level assessment

公司所属单位广泛深入开展技能培训、岗位练兵、技术比武等活动,持续提升技术技能人才整体素质;注重发掘创新型、 工匠型优秀人才,通过选拔推荐机制树立标杆典范,激发人才创新活力。2024年,公司评审通过工匠技师4人、特级技师 110人、高级技师500人。

All subsidiaries of the Company have vigorously carried out various skills training, job training, and skills competitions to improve the overall quality level of the technical and skilled talent team. They have emphasized the identification of innovative and skilled craftsmen, establishing role models through a selection and recommendation mechanism, which has stimulated the innovative potential of talent. In 2024, the Company certified 4 craftsmen technicians, 110 special-grade technicians, and 500 senior technicians.



中铁广州局举办首届"港航"杯青年技能竞赛(工程测量) China Railway Guangzhou Engineering Group holds the first "Port and Shipping" Cup Youth Skills Competition (Engineering Survey)



中铁隧道局举办 2024 年质量月技能比武活动 China Railway Tunnel Group holds the 2024 Quality Month Skills Competition



# 关怀员工生活 Care for employees' lives

# 开展常态化帮扶

**Regular** assistance

公司构建起社会基本保障、企业补充保障、职工互助保障相结合的多层次社会保障体系,常态化开展"冬送温暖、夏 送清凉"等品牌慰问活动,并设立精准帮扶基金强化兜底保障,为企业和谐稳定发展筑牢民生保障网。2024年共筹集

发放"四季送"、助学助医助困、精准帮困专 项资金3.4亿元,显著增强职工的获得感幸福感 安全感。

The Company has established a multi-tiered support system, including basic social security, supplemental corporate security, and employee mutual aid. It has remained committed to brand initiatives like providing warmth in winter and offering relief in summer while setting up targeted assistance funds to strengthen the bottom line guarantee, reinforcing the social safety net for its harmonious and stable development. In 2024, a total of RMB340 million was raised and distributed for "four-season aid", assistance for education and medical care, and targeted poverty alleviation, significantly enhancing employees' sense of gain, happiness, and security.



中铁七局郑州公司中秋慰问廉书义 Zhengzhou Engineering Company of China Railway Seventh Group visits Lian Shuyi during the Mid-Autumn Festival

2024 公司"精准帮困专项基金" CREC's "Special Fund for Targeted Poverty Alleviation" in 2024

精准帮困基金全年支出约320.48万元

The Special Fund for Targeted Poverty Alleviation spent about RMB



Involve 1,264 dependents



Help 407 households of severely impoverished workers



Help 23 employees suffering from serious diseases

# **打造职工之家** Build a home for employees

公司制定出台《中国中铁职工职业生涯全过程关爱服务实施意见》,每年投入近8亿元工会经费,重点围绕职工从入职入 会,到恋爱交友、结婚成家、子女入学、生病住院,再到退休离岗期间个人重大事项提供普惠性服务和精准帮扶。

The Company has formulated and issued the Implementation Opinions of China Railway Group Limited on Care Services for Employees Throughout Their Career Life, allocating nearly RMB800 million annually from the Trade Union fund to provide universal services and targeted assistance for employees throughout significant life milestones, including onboarding and joining the organization, dating and forming relationships, marriage and family establishment, children's education, hospitalization, and retirement.



《致梦想·入学季》中国中铁读书公益联谊活动

"To Dreams: Enrollment Season" CREC Reading & Fellowship Event

2024年3月9日,公司工会、团委在总部联合举办了"致梦想·入学季"中国中铁读书公益联谊活动,吸引来自在京 各行政事业单位、部队、央企、国企、高校、医院等160名单身男女青年参加,切实帮助企业员工解决婚恋问题。

On March 9, 2024, the Company's Trade Union and Youth League Committee jointly hosted the "To Dreams: Enrollment Season" Reading & Fellowship Event at the headquarters. The event attracted 160 single young men and women from various administrative and public institutions, military units, central SOEs, SOEs, universities, and hospitals in Beijing, effectively helping employees address their marriage and relationship concerns.



**案例** 中铁大桥局举办医疗义诊活动 CASE China Railway Major Bridge Engineering Group hosts a free clinic e

2024年8月19日,中铁大桥局工会携手华中科技大学同济医学院附属协和医院,共同举办医疗义诊活动,为一线建 设者们送去健康诊疗服务,让员工感受到来自企业、来自社会的温暖和关怀。

On August 19, 2024, the Trade Union of China Railway Major Bridge Engineering Group, in collaboration with the Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, organized a free clinic event. This initiative provided healthcare services to frontline workers, allowing employees to feel the warmth and care of the Company and society.



#### 四 <sup>案例</sup> CASE

# 中铁武汉电化局开展健康讲座

China Railway Wuhan Electrification Engineering Group conducts a health sen

2024年12月25日,中铁武汉电化局举办"呵护健康 从齿开始"健康讲座,邀请口腔专家讲解常见口腔疾病的症状以及预防方法, 增强员工自我保健意识。

On December 25, 2024, China Railway Wuhan Electrification Engineering Group held a health seminar titled "Caring for Health Starts with Teeth". Dental experts were invited to explain the symptoms of common oral diseases and prevention methods, aimed at enhancing employees' self-care awareness.





に CASE

#### 中国中铁所属企业开展丰富多彩的文化活动 CREC Limited's subsidiaries carry out a variety of cultural activities

2024年6月12日,中铁二局举办第六届"开路先锋"企业文化节。活动采用"现场+视频分会场"方式,号召全体员 工深化开路先锋文化建设,聚焦企业改革发展使命,将核心价值观贯穿管理活动和生产实践,推动企业行稳致远。

On June 12, 2024, China Railway No. 2 Engineering Group held the Trailblazer Corporate Culture Festival. The event adopted a format of "on-site venue + video sub-venue", calling on all employees to deepen the construction of the Trailblazer Culture, focus on the mission of corporate reform and development, integrate core values into management activities and production practices, and promote the sustainable and steady progress of the enterprise.

2024年6月27日,中铁大桥院举办第三次党代会职工文艺汇演,充 分展示了广大职工在岗位上砥砺奋进、开拓创新、逐梦前行的精 神风貌。

On June 27, 2024, China Railway Major Bridge Engineering Group Co., Ltd. held its third Party Congress and Workers' Literary and Artistic Performance, showcasing the spirit and dedication of its employees in forging ahead, innovating, and pursuing dreams in their respective positions.





中铁七局武汉公司开展"开卷有益 悦读生活"读书月主题活动 Wuhan Engineering Company of China Railway Seventh Group launches the themed "Beneficial Reading, Joyful Life" Reading Month Event

2024年4月1日,中铁七局武汉公司组织开展"开卷有益 悦读生 活"读书月活动,鼓励职工积极参与读书活动,助力职工实现专 业水平和综合素质的同步提升。

On April 1, 2024, Wuhan Engineering Company of China Railway Seventh Group organized the "Beneficial Reading, Joyful Life" Reading Month Event, encouraging employees to actively participate in reading activities. This effort aimed to assist employees in synchronously enhancing their professional skills and overall quality.



# 案例 CASE CREC Limited's subsidiaries carry out sports con

2024年8月27日,中铁建工集团第二十二届"建工杯"篮球赛 在兰州圆满落下帷幕。15支参赛队伍、近200名队员在赛场上 释放激情、挥洒汗水、传递友谊。

On August 27, 2024, the 22nd 'Construction Cup' Basketball Tournament organized by China Railway Seventh Group successfully concluded in Lanzhou. Fifteen participating teams, with nearly 200 players, showcased their passion, sweat, and camaraderie on the court.

2024年10月26日,中铁设计举办"以人为本 、共建和谐 、企 业发展、职工幸福"为主题的第十届职工运动会。

On October 26, 2024, China Railway Design Corporation held its 10th Employee Sports Games under the theme "People-Oriented, Building Harmony Together, Enterprise Development, and Employee Well-Being."





L 案例 CASE 中国中铁所属企业举办职工子女暑期托管班

CREC Limited's subsidiaries host summer daycare programs for employees' children

2024年8月5日,由中铁六院组织的"未来之 星·缤纷夏日"职工子女暑期托管班在天津 空港经济区顺利开班,为孩子打造安全、快 乐、健康假期的同时,也让职工切实感受到 企业的关心关爱。

On August 5, 2024, the "Future Stars: Colorful Summer" summer care program for employees' children, organized by China Railway Liuyuan Group, officially commenced in the Tianjin Airport Economic Zone. This program created a safe, joyful, and healthy break for the children while allowing employees to truly feel the care and support of the Company.



2024年7月11日,中铁上海局"小候鸟"爱心暑托班开班。

On July 11, 2024, China Railway Shanghai Engineering Bureau launched the "Little Migratory Birds" Summer Care Program.



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公司持续深化"三工"建设(工地生活、工地卫生和工地文化建设),积极打造项目部"幸福之家十个一"工程, 推动职工宿舍、职工餐厅、职工书屋、心灵驿站、母婴室、探亲房、体育场地、幸福菜园、健康体检等落实落地。 其中,为41个偏远、高原、困难的项目部拨付专项帮扶经费337万元。1家单位被列为全国总工会第三批提升职工生 活品质试点单位。

The Company has launched an upgraded version of the "Three Construction Sites" Initiative, called the "Ten Ones of Happy Home" Project, which promotes the establishment of employee dormitories, cafeterias, libraries, mental wellness stations, mother and baby rooms, family visit apartments, sports facilities, vegetable gardens, and health check-up services. Increased investment in the "Three Construction Sites" Initiative has resulted in the allocation of RMB3.37 million in special assistance funds to 41 remote, high-altitude, and challenging project departments. Additionally, one unit was selected for the third group of pilot units to improve the quality of employees' lives by the All-China Federation of Trade Unions.



中铁三局运输分公司员工休闲驿站 Employees<sup>1</sup> Leisure Station of the Transportation Engineering Company of China Railway No. 3 Engineering Group



中铁九局一公司项目驻地 A construction site of a China Railway No. 9 Group's project



中铁北京局襄荆铁路项目驻地职工 活动室

The employee activity room at the Xianjing Railway project site of China Railway Beijing Engineering Group

送文化进工地活动走进中铁大 桥局新港高速双柳长江大桥项 目工地

"Cultural Promotion at the Construction Site" is conducted at the Xingang Expressway Shuangliu Yangtze River Bridge Project of China Railway Major Bridge Engineering Group



# 守护员工身心健康

# Safeguard employees' physical and mental health

公司认真执行《职工带薪年休假条例》及其他各类假期规定,员工依法享受年休假、病假、婚假、丧假等权利。针对生产经营特别是一线项目部实际,采取轮休、调休、反探亲、发放补贴、重大节日延长放假时间等灵活多样的形式和措施,统筹安排员工休息休假,实行休假天数通报和年度清算制度。制定并落实《境外员工薪酬及休假管理指导意见》, 保障境外员工休假权益。贯彻人力资源与社会保障部关于实行特殊工时制度的相关要求,认真执行《工作时间及假期管理办法》,依法合规加强工时管理,大多实行8小时标准工时制度,对符合规定条件的岗位申请实行特殊工时制度,切实维护劳动者权益。

公司积极推进员工健康关爱工程(EAP),切实加强人文关怀和心理疏导,引导员工正确对待困难、挫折和荣誉,理性 表达和维护自身利益,塑造自尊自信、理性平和、亲善友爱的积极心态,为企业改革发展营造了和谐稳定环境。

The company conscientiously implements the Regulations on Paid Annual Leave for Employees and other provisions on various types of leave, and employees are entitled to annual leave, sick leave, marriage leave, funeral leave and other rights according to law. According to the actual situation of the production and operation Department, especially the front-line project department, flexible and diverse forms and measures such as rotation, compensatory leave, anti family visits, subsidies, and extended vacation time for major festivals are adopted to make overall arrangements for employees' rest and vacation, and the system of notification of vacation days and annual liquidation is implemented. Formulate and implement the Guiding Opinions on Compensation and Leave Management for Overseas Employees to protect the rights and interests of overseas employees' leave. Implement the relevant requirements of the Ministry of human resources and social security for the implementation of the special working hour system, conscientiously implement the Management Measures for Working Hours and Leave, strengthen the management of working hour system for the application of posts that meet the specified conditions, so as to effectively safeguard the rights and interests of workers.

The company actively promoted the Employee Assistance Program (EAP), practically strengthened humanistic care and psychological counseling, guided employees to correctly deal with difficulties, setbacks and honors, rationally expressed and safeguarded their own interests, and shaped a positive attitude of self-esteem, self-confidence, rational peace, kindness and fraternity, creating a harmonious and stable environment for enterprise reform and development.

#### 四 案例 CASE

# EAP赋能,共筑职场心灵绿洲

2024年11月14日,中国中铁EAP协会华北片区员工心理沙龙活动启动仪式暨第一期主题活动成功举办,来自中国中 铁在京单位的90余名职工参加本次活动。活动现场,开展了"心理常识及应对策略"专题讲座及"情绪管理"主题 心理沙龙。在彼此真诚开放、深入沟通的氛围中,学员们对提升自我认知与情绪调节能力有了更为深刻的领悟,为 未来的心理成长之路奠定了坚实基础。

On November 14, 2024, the CREC EAP Association held the Launching Ceremony of the Psychological Salon for Employees in the North China Region & the First Theme Activity, with over 90 employees from CREC units in Beijing attending. During the event, a thematic lecture on "Psychological Knowledge and Coping Strategies" and a psychological salon on "Emotional Management" were conducted. In the atmosphere of sincerity, openness, and in-depth communication, participants gained a deeper understanding of self-awareness and emotion regulation, laying a solid foundation for their future psychological growth.



# 合作共赢 托举梦想之翼

# Win-win cooperation: Support the realization of dreams

# 中国中铁深化政企协同推动政策落地,强化企企联动促进资源共享与产业链协同,深化校企合作推进产学研融合与人才 培养,同时优化供应链管理,构建多元协同、互利共赢的生态体系。

CREC has deepened government-enterprise collaboration to facilitate the implementation of policies, strengthened enterpriseenterprise synergy to promote resource sharing and collaboration along the industry chain, and enhanced school-enterprise cooperation to advance the integration of industry, academia, and research, along with talent development. At the same time, it has optimized supply chain management to build a diversified, collaborative, and mutually beneficial ecosystem.

# **深化多元合作** Deepen diverse cooperation

### 公司聚焦主责主业,深化与政府、企业、高校的多维合作,推动优势互补与资源整合。

The Company has focused on its core responsibilities and main businesses, deepening multi-dimensional cooperation with governments, enterprises, and universities to promote complementary advantages and resource integration.

# 政企合作 Government-enterprise cooperation

公司持续深化与各级地方政府的合作,深入推进战略合作协议的落地实施,围绕交通基础设施、城市更新、生态保护、能源 开发等重点领域,不断拓展合作空间,提升合作层次,推动区域经济社会发展。

The Company has continuously deepened its partnerships with local governments at all levels, advancing the thorough implementation of strategic cooperation agreements. Focusing on key sectors such as transportation infrastructure, urban renewal, ecological protection, and energy development, it has kept expanding cooperation spaces, upgrading partnership levels, and contributing to regional economic and social development.



中国中铁与湖南省政府举行工作会谈 The Company holds a working meeting with the People's Government of Hunan Province



中国中铁与哈尔滨市政府签署战略合作框架协议 Signing of a strategic cooperation framework agreement with Harbin Municipal People's Government

# 企企联动 Enterprise-enterprise synergy

公司与多家知名企业、金融机构聚焦重大项目联动、产业链协同及金融服务创新,深化合作关系,构建协同发展新生态, 助力各方在市场竞争中抢占先机、共同成长。

The Company has deepened its cooperative relationships with several well-known enterprises and financial institutions, focusing on collaboration for major projects, industry chain synergy, and financial service innovation. This has created a new ecosystem for collaborative development, assisting all parties in gaining a competitive edge in the market and achieving mutual growth.



中国中铁与南方电网签署业务合作协议 CREC and China Southern Power Grid sign a strategic cooperation agreement



中国中铁与中国农业银行签署战略合作协议 CREC and Agricultural Bank of China sign a strategic cooperation agreement

# 校企共融

# School-enterprise co-integration

公司深化校企合作,与高校共建产学研创新平台,推动技术研发与成果转化,攻克行业关键难题;构建协同育人机制, 通过订单培养、实习实训、联合课题研究等模式,精准输送高素质技术与管理人才,实现教育链、人才链与产业链、创 新链有机衔接,既为企业高质量发展提供智力支撑,又助力高校提升科研与育人实效,打造校企共融、协同创新的发展 典范。

The Company has deepened its cooperation with universities to jointly establish an industry-university-research innovation platform, promoting technology R&D as well as achievement transformation and tackling key industry challenges. It has built a collaborative talent cultivation mechanism, utilizing models such as order-based training, internships, training, and joint research projects to precisely deliver high-quality technical and management talent. This integration has organically connected the education chain, talent chain, industry chain, and innovation chain, providing intellectual support for the Company's high-quality development while helping universities enhance their research and educational effectiveness, creating a development model of university-enterprise synergy and collaborative innovation.



公司主要领导出席山东大学卓越工程师学院成立大会并致辞 The Company's main leaders attend and address the inaugural ceremony of the National Graduate School for Elite Engineers at Shandong University



2024 年 5 月,中南大学校长到访公司总部,参观了中国中铁"开路先锋"文化展览馆。

In May 2024, the President of Central South University visits CREC's "Trailblazer" Cultural Exhibition Hall at the headquarters



# <mark>强化供应链协同</mark> Strengthen supply chain collaboration

公司坚持阳光采购,全面评估并规避 ESG 风险,促进供应商责任意识提升,实现降本增效与可持续发展并重,构建风险 共担、利益共享的合作生态,助力供应链各方共同迈向可持续发展目标。

The Company has adhered to open procurement practices, comprehensively assessing and mitigating ESG risks, and promoting an increased sense of responsibility among suppliers. It has achieved a balance between cost reduction, efficiency enhancement, and sustainable development while building a cooperative ecosystem based on shared risks and benefits. These efforts have assisted all parties in the supply chain in moving towards sustainable development goals.



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工进出口商会(CCC-MC)颁发的矿产供应链尽责管理 AA 评级

The cobalt products of La Sino-Congolaise Des Mines Societe Anonyme of China Railway Resources Group were awarded the "AA" rating in the mineral supply chain due diligence assessment by the China Chamber of Commerce of Metals, Minerals and Chemicals Importers and Exporters (CCC-MC) <section-header><text><text><text><text><text><text><text><text>

Certificate of Mineral Supply Chain Due Diligence Assessment

# 阳光采购 Open procurement

公司实行阳光采购,通过禁止商业贿赂,搭建信息化采购平台,营造公平竞争的采购环境,保障供应链安全稳定。

The Company has practiced open procurement, prohibiting commercial bribery, establishing an information-based procurement platform, and fostering a procurement environment featuring fair competition to ensure safe and stable supply chains.

推进采购集约化改革 Promote centralized procurement reform

与大型生产厂家开展战略采购,资源保障和配置能力不断提升;落实《中国中铁钢材、水泥集中采购供应实施方案(试行)》,实施 区域集采、砂石料自加工、钢筋集中加工配送等举措,降本增效取得明显成效。

The Company has engaged in strategic procurement with large manufacturers, continuously enhancing resource assurance and allocation capabilities. It has put into practice the Implementation Plan of China Railway Group Limited for Centralized Procurement and Supply of Steel and Cement (Trial), adopting measures such as regional centralized procurement, self-processing of aggregate materials, and centralized processing and distribution of steel bars. As a result, it has achieved significant cost reduction and efficiency improvements.

#### 推动采购信息化建设 Promote procurement informatization

搭建中国中铁采购电子商务平台(即中铁鲁班商务网),公开采购信息、固化采购流程,促进采购活动公开化、透明化。

The Company has developed the CREC Procurement E-commerce Platform (www.crecgec.com) to disclose procurement information and formalize procurement processes, enhancing the openness and transparency of procurement activities.

#### 加强采购合规管理

Strengthen procurement compliance management

开展供应链人才培训,强化采购业务监督考核,提升依法合规采购水平。

The Company has conducted supply chain talent training, reinforced procurement business supervision and assessment, and enhanced legal and compliant procurement practices.

# 供应商准入与评价

# Supplier admission and evaluation

公司建立供应商准入及评价管理体系,遵照《中国中铁关于进一步加强供应链管理的意见》相关要求,严格供应商准 入、评价、退出机制,对供应商进行分类管理和动态评价。

The Company has established a supplier admission and evaluation management system. Following the requirements of the Opinions of China Railway Group Limited on Further Strengthening Supply Chain Management, it has created a strict mechanism for supplier admission, evaluation, and exit, with classified management and dynamic evaluation of suppliers.

#### 准入 Admission

落实"先评审、后采购"准入机制,要求各 类供应商在办理注册申请时须签署《供应商 承诺书》,开展合格供应商准入评审,审查 供应商诚信经营、安全生产、环境保护等情 况,对合格供应商实行供应目录管理。

The Company has implemented a "review first, procurement second" admission mechanism, requiring all types of suppliers to sign a Supplier Commitment Letter when applying for registration. Qualified suppliers undergo an admission review on their integrity, work safety, environmental protection, and other aspects and are managed through a supply catalog.

## 评价 Evaluation

开展供应商综合评审,定期对供应 商的履约情况进行日常评价与年度 评价,将评价结果纳入供应商年度 考核,激励供应商提升产品和服务 水平。

The Company has conducted comprehensive evaluations of suppliers, regularly evaluating their daily and annual performance. The evaluation results have been incorporated into the annual assessment of suppliers to incentivize them to enhance the quality of their products and services. 退出 Exit

建立供应商不良行为负面清单,对 存在不良行为的供应商采取限制交 易措施。

A negative list of suppliers exhibiting poor behavior has been established, and trading restrictions are imposed on suppliers that display such behavior.

# 供应链风险防范 Supply chain risk prevention

### 公司注重供应链风险的识别与防范,持续净化资源渠道,减少不良供应商合作带来的风险,增强供应链安全稳定与韧性。

The Company has emphasized the identification and prevention of supply chain risks, continuously purifying resource channels to minimize risks associated with collaborating with unreliable suppliers, thereby enhancing the safety, stability, and resilience of the supply chain.

公司建立了风险评估和识别预警机制,依托技术平台,借助大数据和人工智能等技术,建设了风险预测、监控和预 警系统,及时发现各个环节的潜在风险,对不良行为供应商采取限制交易措施,净化源头渠道,防范供应链风险。

The Company has established a risk assessment, identification, and early warning mechanism, utilizing a technology platform and leveraging big data and artificial intelligence to develop a risk prediction, monitoring, and early warning system. This system has allowed for the timely identification of potential risks in various stages, with measures taken to restrict transactions with non-compliant suppliers, thus purifying source channels and preventing supply chain risks.

持续加强供应链生态建设,加强优质战略供应商培育,大力压减"小散杂乱"供应商,推动供应商结构转型升级; 持续优化资源渠道,加强与国内外主流生产厂家建立长期稳定的合作关系,保障供应安全稳定;对于危险化学品供 应商强化专项评审,明确危化品管理人员持证上岗,落实健康与安全检查机制。

The Company has continuously strengthened the construction of the supply chain ecosystem, fostering high-quality strategic suppliers while significantly reducing the number of "small, scattered, and disorganized" suppliers and promoting the transformation and upgrading of the supplier structure. It has also optimized resource channels and established long-term, stable partnerships with mainstream manufacturers both domestically and internationally to ensure the security and stability of supply. For hazardous chemical suppliers, the Company has reinforced special assessments, stipulating that hazardous materials management personnel must hold the necessary certifications and implementing health and safety inspection mechanisms.

加强产业链和供应链的自主可控,不断推进盾构装备零部件国产化工作,当前大部分盾构机零部件全部实现国产化 替代;在高速铁路四电集成方面实现了关键零配件的自主生产和技术领先,增强产业链供应链自主可控能力。



The Company has enhanced the autonomy and controllability of the industrial and supply chains, continuously advancing the localization of shield equipment components, with most components of shield machines now completely replaced by domestic products. In the integration of the four electrical systems for high-speed railways, significant progress has been made in the independent production and technological leadership of key components, strengthening the capacity for autonomy and controllability throughout the industrial and supply chains.

# 推进供应商履行社会责任

# Encourage suppliers to fulfill their social responsibilities

公司通过与供应商签订合同,监督供应商保障劳务安全、维护农民工权益、保护环境,引导其履行社会责任。

The Company has guided suppliers to fulfill social responsibilities by incorporating relevant provisions into contracts, supervising them to ensure labor safety, safeguard the rights and interests of migrant workers, and protect the environment.

# <mark>劳务安全与职业</mark>保障

Labor safety and occupational security

要求供应商积极落实职业安全卫生保障措施,加大安全管理投入,持续改善安全设备设施;对农民工开展安全卫生教育和培训,防 止劳动过程中的安全事故,减少职业危害;认真落实国家有关工伤保险和意外伤害保险的规定,将农民工纳入保险范围。

Suppliers are required to actively implement occupational safety and health protection measures, increase investment in safety management, and continuously improve safety equipment and facilities. They must provide safety and health education and training for migrant workers to prevent workplace accidents and reduce occupational hazards. Suppliers are also expected to comply with national regulations regarding work-related injury insurance and accidental injury insurance, ensuring coverage for migrant workers.

## 农民工权益维护

Protection of migrant workers' rights and interests

落实农民工劳动报酬支付规定,通过建立农民工工资专用账户制度、保证金制度、代发工资制度等,确保工资按时足额发放;严格 执行实名制管理,规范劳动合同签订,保障农民工合法权益。

The Company requires adherence to regulations regarding the payment of remuneration to migrant workers. By establishing dedicated salary accounts for migrant workers, a deposit system, and a payroll credit system, suppliers need to ensure that wages are paid on time and in full to migrant workers. Strict implementation of real-name management and standardized labor contract signing should also be enforced to protect the legitimate rights and interests of migrant workers.

#### 环境保护

**Environmental protection** 

在合同中明确环境保护条款,要求供应商严格遵守环境保护法规,防治空气、水、土壤、噪声等污染物。

Contracts should explicitly include environmental protection clauses, mandating that suppliers strictly comply with environmental protection laws and regulations and prevent and control pollution of air, water, soil, and noise.

公司注重供应商社会责任和ESG意识的提升培训工作,供应商进场时进行多部门联合培训,确保其在劳工、环保、安全等方面能 够达到要求,并且每年开展多项专项培训及宣传教育以提高其安全、质量、环保及劳动权益意识。同时,公司通过制作发放宣 传手册、张贴警示教育栏及线上教育内容,确保供应商深入学习和理解社会责任和ESG标准,促进供应链的可持续发展。

The Company has emphasized enhancing suppliers' awareness of social responsibility and ESG through training initiatives. When suppliers begin their engagement, multi-departmental joint training is conducted to ensure compliance with labor, environmental, and safety standards. Additionally, the Company carries out numerous special training sessions and educational campaigns each year to increase suppliers' awareness of safety, quality, environmental protection, and labor rights. At the same time, the Company has produced and distributed brochures, posted educational materials, and provided online education content, to ensure that suppliers thoroughly learn and understand their social responsibilities and ESG standards and promote the sustainable development of the supply chain.



# 参与标准制定 Participate in standard formulation

公司深度参与国际铁路标准制定,主导编制多项国际标准,将中国高铁技术与创新成果融入全球行业规则。通过国际展 会展示高端装备与智能技术,深化国际交流合作,推动中国铁路标准走向世界,提升全球轨道交通领域的中国话语权, 为国际铁路发展贡献中国方案。

The Company has thoroughly participated in the development of international railway standards, leading the formulation of multiple international standards and integrating Chinese high-speed railway technology and innovations into global industry regulations. Through international exhibitions, it has showcased advanced equipment and intelligent technologies, deepened international communication and cooperation, and promoted Chinese railway standards on the global stage. This has enhanced China's influence in the field of global rail transit and contributed Chinese solutions to international railway development.



准铁路BIM领域的首项国际标准,解决了ISO标准在铁路信号领域的缺失问题,提升了中国中铁在该领域的国际知 名度。

In March 2024, the Industry Foundation Classes (IFC) for data sharing in the construction and facility management industries (ISO16939-1:2024) prepared under the leadership of CREC was officially released. It is the first international standard in the railway BIM field, addressing the absence of ISO standards in railway signaling and enhancing CREC's international visibility and influence in this domain.



# 福泽社会 唱响和谐之歌

Benefit society: Sing the song of harmony

中国中铁深植社会责任基因,勇担抢险救灾、文物保护、志愿服务、援藏建设等使命,以 "厚德载物" 的担当构建责任 网络,推动企业发展与社会价值共融,为美好社会建设注入中铁力量。

CREC has deeply integrated social responsibility into its corporate DNA, actively undertaking missions such as disaster rescue, cultural heritage protection, volunteer services, and support for construction in Xizang. Embodying the philosophy of "commitment to the world with great virtue", it has built a network of responsibility, promoting the integration of corporate development with social value and injecting the strength of CREC into the construction of a better society.

# **火速驰援守护生命财产** Rush to protect lives and property

公司高度重视应急管理工作,持续推进昆明、贵阳、西藏三支国家专业应急救援队基地建设与装备升级,统筹抓好人员补充、指挥系统优化、协调机制健全、基础设施配套、规章制度完善、培训演练强化及保障体系构建,显著提升基地专业救援、快速机动及综合保障能力。

2024年,公司全力以赴投入抢险救灾,先后参加湖南华容县洞庭湖决堤、迎战台风"摩羯"、陕西柞水高速公路桥梁垮塌、 西藏定日县地震等重要抢险救援行动,受到国务院领导,国务院国资委、应急管理部以及社会各界的广泛赞誉。

The Company has placed great emphasis on emergency management work and has continuously promoted the base construction and equipment upgrades for the three national professional emergency rescue teams located in Kunming, Guiyang, and Xizang. It has effectively coordinated personnel supplementation, command system optimization, coordination mechanisms improvement, supporting infrastructure provision, regulation refinement, training and drill strengthening, and support systems construction, significantly enhancing the professional rescue capabilities, rapid response, and comprehensive support abilities of the bases.

In 2024, the Company devoted itself fully to disaster rescue efforts, participating in significant rescue operations to respond to the breached dike of the Dongting Lake in Hunan's Huarong County, Typhoon Yagi, the collapse of a bridge on an expressway in Zhashui County, Shaanxi Province, and the earthquake in Dingri County, Xizang. Its efforts won it widespread acclaim from leaders of the State Council, the SASAC, the Ministry of Emergency Management, and all sectors of society.
感谢信
<b>国家健业应急救援中铁二局昆明队</b> ;
青海省防灾减灾救灾委员会办公室于2024年10月10日举
b的"昆仑·2024" 姚震综合实战震练活动、在贵单位的大力
1.持和金力配合下, 圆滴完成了各项演练任务, 得到了省委,
省政府和各遂演单位的充分肯定和高度评价。展现了我省在防
R减完载灾工作方面的综合教援实力和应急响后能力,为处置
可能发生的地震灾害积累了空景经验、提供了参考价值。
在此次演练活动中、贵単位高度重视、积极配合、高标准。
新质量完成了隧道教授等演练科目,确保了演练的顺利进行。
着张了应对自然灾害的实践能力。为全省防灾减灾救灾工作树
立了新的标杆。
我们東心播谢青单位对青海省应急管理和防灾减灾救灾事
业的扇力支持、期待在下步工作中携手并进。共同探索防灾减
完教灾工作的新方法, 新途径, 为我省彻实减灾救灾事业作出
所的更大贡献。
· · · · · · · · · · · · · · · · · · ·
2024年10月15日

中铁二局昆明队收到青海省突发公共事件应急管理委员会发来的感谢 信,来信对中铁二局昆明队紧急驰援西宁市大通县中岭水库抽排水抢 险表示衷心感谢,并向参战的全体指战员致以崇高敬意。

The Kunming Emergency Rescue Team of China Railway No. 2 Engineering Group received a letter of thanks from the Qinghai Provincial Emergency Management Committee. The letter expressed heartfelt gratitude for the team's assistance in pumping and draining the Zhongling Reservoir in Datong County, Xining City, and paid high respects to all the officers and soldiers who participated in the operation.

#### 2024年 In 2024

中国中铁及所属各单位累计参与各类抢险共

**450**余次

CREC and its subsidiaries participated in over 450 disaster rescue operations.

中国中铁三支国家专业应急救援队全年出警20次,救援生

还人数3人

The three national professional emergency rescue teams of CREC responded to 20 calls throughout the year, resulting in the rescue of 3 lives.

中国中铁所属25余家单位累计投入2.4万余人、



Over 25 subsidiaries of CREC mobilized more than 24,000 personnel and deployed over 5,900 sets of equipment.

在国家安全生产救援中心2023年工作成效通报中,中铁二局

昆明队在113<sub>支应急救援队伍中排名第一,1人获得应急管</sub>理部二等功、2人获得应急管理部嘉奖;2024年,2人获得应 急管理部三等功、2人获得应急管理部嘉奖

In the 2023 performance report of the National Work Safety Rescue Center, the Kunming team of China Railway No. 2 Engineering Group ranked first among 113 emergency rescue teams. One member received a Second Class Merit Award and two others received commendations from the Ministry of Emergency Management. In 2024, two members were awarded a Third Class Merit and two others received commendations from the Ministry of Emergency Management.



两支国家级应急救援队星夜赴华容排涝抢险 Two national emergency rescue teams rush to Huarong County for flood relief operatic

2024年7月5日,湖南省华容县团洲垸附近的洞庭湖大堤被肆虐的洪水撕开,决口迅速扩大。7月10日,国家隧道应 急救援中铁二局昆明队、中铁五局贵阳队火速集结100余名队员,以及指挥车、排水抢险车、冲锋舟等专业救援设 备200余台套,分别从昆明和贵阳基地出发,星夜奔赴湖南岳阳华容县,执行排涝抢险任务,切实保障了人民群众 的生命财产安全。

On July 5, 2024, the Dongting Lake levee near Tuanzhouyuan in Huarong County, Hunan Province, was breached by devastating floods, with the breach rapidly expanding. On July 10, the National Tunnel Emergency Rescue Kunming Team from China Railway No. 2 Engineering Group and the Guiyang Team from China Railway No. 5 Engineering Group quickly assembled over 100 team members and dispatched more than 200 sets of professional rescue equipment, including command vehicles, drainage vehicles, and assault boats. They departed from their bases in Kunming and Guiyang under the cover of night, heading to Huarong County in Yueyang City, Hunan Province, to carry out flood relief operations, effectively ensuring the safety of the lives and property of the local population.



中国中铁应急救援队奔赴洞庭湖 CREC emergency rescue team en route to Dongting Lake

## <mark>案例 中国中铁迎战超强台风"摩羯" CASE CREC takes action against Super Typhoor CREC takes action against Super Typhoor </mark>

2024年9月6日,超强台风"摩羯"先后在海南文昌市、广东徐闻县登陆,造成人员伤亡和重大财产损失,大量用户 电力、通信中断,部分房屋倒损。中国中铁所属单位迅速组织应急救援力量,冲锋在抗击台风的第一线,全力以赴 参与灾后重建工作,加快恢复当地群众生产生活。

On September 6, 2024, Super Typhoon Yagi made landfall successively in Wenchang City, Hainan Province, and Xuwen County, Guangdong Province, causing casualties and heavy property losses. A large number of users experienced power and communication outages, and several houses were damaged. Subsidiaries of CREC swiftly organized emergency rescue forces to respond to the typhoon's impact, actively participating in post-disaster recovery efforts and accelerating the restoration of the residents' production and daily life.





## 科技赋能传承文明根脉 Technology empowers cultural inheritance

公司积极投身文化遗产保护与传承,近年来,参与敦煌莫高窟、嘉峪关长城、乐山大佛、楼兰古城等重要文物保护工程,攻 克了文化遗产保护与现代科技融合的技术难题,创新应用科学保护方法,为传承中华文明、增强文化自信提供了中铁方案。

The Company has actively engaged in the preservation and inheritance of cultural heritage. In recent years, it has participated in significant conservation projects, including those at Dunhuang Mogao Caves, the Great Wall at Jiayu Pass, the Leshan Giant Buddha, and the Loulan Ruins. These efforts have addressed numerous challenges in applying modern technologies in cultural heritage protection. With innovative scientific conservation methods, CREC has provided solutions for Chinese civilization preservation and cultural confidence enhancement.



I视频监测机器人为乐山大佛"保驾护航"

Al video monitoring robot safeguards the Leshan Giant Buddha

针对乐山大佛佛头沉降及大佛左侧危岩体裂缝病害,中铁文保利用AI视频监测机器人对乐山大佛佛头、乐山大佛本体进行沉降监测,对乐山大佛左侧危岩体进行裂缝监测和位移监测专项工作,实现了对文物本体非接触式、可视化、高精度的连续AI视频监控、监测、测量和预警,同时支持生成数据报表和分析报告,为文物保护提供了强有力的技术支持。

In response to the settlement of the Leshan Giant Buddha's head and the cracks in the dangerous rock mass on the left side of the statue, China Railway Wenbao Technological Innovation used AI video monitoring robots to conduct settlement monitoring on the Giant Buddha's head and body. The robot also performed special monitoring for cracks and displacements in the dangerous rock mass on the left side of the Leshan Giant Buddha. This technology enabled non-contact, visual, and high-precision continuous AI video monitoring and measurement of cultural relics as well as early warning. Additionally, it supported the generation of data and analysis reports, providing robust technical support for the preservation of cultural heritage.



## 开展公益帮扶助力民生 Carry out charitable support to improve people's livelihoods

公司以爱为引领,积极践行志愿服务精神,围绕爱心助考、敬老爱老、关怀残障人士等开展"千人百团"志愿服务行动,用 实际行动传递温暖与关怀,汇聚点滴爱心,为社会注入正能量。2024年,公司共计开展志愿服务超3000场,参与志愿青年2.6 万余人,帮扶人数超过3万人次。

The Company has followed the principle of "love caring" and actively practiced the spirit of volunteer service. It has launched the "Thousands of People, Hundreds of Teams" volunteer service initiative, supporting students during exams, caring for the elderly, and assisting individuals with disabilities. Through tangible actions, the Company has conveyed warmth and compassion, gathering small acts of kindness to inject positive energy into society. In 2024, the Company conducted over 3,000 volunteer service activities, with participation from more than 26,000 young volunteers and assistance provided to over 30,000 individuals.



中铁工业宝桥集团志愿服务突击队清除小区淤泥 Volunteers from China Railway Baoji Bridge Group clear mud in a community



中铁电气化局开展"青春志愿行 爱心助高考"志愿服务 China Railway Electrification Engineering Group carries out the "Youth Volunteer Initiative: Support for Students Taking College Entrance Examination" service



中铁五局为老人理发、送慰问品 China Railway No. 5 Engineering Group provides haircuts and gifts to the elderly



中铁建工为盲校孩子们进行职业体验 China Railway Construction Engineering Group arranges career experience activities for visually impaired students

# 深耕援藏建设带动发展

#### Engage in support for Xizang construction to drive development

公司多措并举对口支援西藏昌都市卡若区:干部支援方面,完成3名计划外援藏干部轮换,考核3名援藏、2名援疆干部,组织 5名当地干部挂职锻炼;人才支援方面,招收12名高校毕业生储备属地化人才,举办"走进中国中铁"夏令营、"中铁西藏 班"专题培训,培训40人次;资金支援方面,投入2000万元实施沙贡乡莫仲村美丽宜居村建设,设立专项帮扶资金开展"格 桑花"计划,精准帮扶困难单亲母亲子女就学就医。通过多维支援助力当地经济发展与民生改善。

The Company has actively carried out pairing assistance to the Karuo District of Qamdo City, Xizang, In terms of officer support, the Company has completed an unplanned rotation of three aid officers to Xizang, assessed three aid officers to Xizang and three to Xinjiang, and organized five local officers to gain experience by serving temporary positions at the Company. For talent support, the Company has recruited 12 college graduates to build a reserve of localized professional talent. It has also organized a summer camp themed "Into CREC" and held the "CREC Xizang Class" training session with 40 participants. In terms of financial support, the Company has invested RMB20 million to renovate the Mozhong Village, Shagong Township into a livable village. A dedicated assistance fund has been established locally to implement the "Gesang Flower" program, which provides targeted support for single mothers, helping their children access education and receive medical care. The Company has provided multi-faceted support to enhance local economic development and improve livelihoods.



中国中铁举办 2024 年 "中铁西藏班——经济高质量发展示范班" CREC hosts the 2024 "CREC Xizang Class — Demonstration Class for High-Quality Economic Development"



## 案例 b b 方西藏单亲母亲自立自强 CASE Help single mothers in Xizang to become self-relia

2024年11月29日,中国中铁与西藏自治区昌都市卡若区妇联签署了《中国中铁格桑花计划捐赠协议》,开展2024 年单亲母亲帮扶活动捐赠活动,引导卡若区困难单亲母亲自立自强,乐观面对生活。公司工会当年捐款199,947.00 元。通过"一对一"或"多对一"模式,提供精准帮扶,改善其生活条件,防止返贫致贫。

On November 29, 2024, we signed the China Railway Galsang Flower Program Donation Agreement with the Women's Federation of Karuo District, Chamdo City, Tibet Autonomous Region, and launched a donation activity to support single mothers. The initiative aims to empower underprivileged single mothers in Karuo District to become self-reliant and face life with optimism. The company's labor union donated a total of 199,947.00 yuan that year. Through "one-on-one" or "many-to-one" models, targeted assistance is provided to improve their living conditions to prevent them from falling back into poverty.









格桑花捐赠启动仪式 Launch ceremony of "Gesang Flower" Program



# ESG管治 ESG Governance

中国中铁积极落实国务院国资委《关于新时代中央企业高标准履行社会责任的指导意见》,切实加强环境、社会和公司 治理(ESG)工作,通过持续完善社会责任和ESG管理体系,开展系列责任实践活动,积极回应利益相关方诉求,不断 提升ESG管治水平。

CREC has actively implemented the Guiding Opinions on High-Standard Performance of Social Responsibilities by Central SOEs in the New Era issued by SASAC, effectively strengthening its Environmental, Social, and Governance (ESG) efforts. By continuously improving its social responsibility and ESG management systems, it has conducted a series of responsibility practice activities, actively responded to stakeholder demands, and continually enhanced its ESG governance level.

## 董事会声明 Statement of the Board of Directors

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

The Board of Directors of the Company is the highest coordinating and decision-making body for ESG affairs, bearing overall responsibility for ESG-related work. It is responsible for formulating the Company's ESG strategies, leading and overseeing the policies, measures, and performance of the Company's sustainable development efforts, assessing and determining the Company's ESG-related risks and opportunities, examining and approving the disclosure of relevant ESG reports, and being accountable for risk management and internal control systems, and ensuring their effectiveness and reliability.

# ESG目标 ESG goals

公司根据自身ESG现状,设定了ESG目标:到2025年,中国中铁社会责任管理和ESG管治的工作机制更加健全完善,基本形成中国中铁特色履责模式和ESG品牌;到2030年,企业经济、社会、环境综合价值创造能力显著增强,服务人民美好生活需要更加全面充分;到2035年,企业在社会责任领域取得显著成就,ESG管治水平处于业界前列。

The Company has set ESG goals based on its current ESG status: By 2025, the working mechanism of CREC's management of social responsibility and ESG governance will be more robust and well-structured, and a characteristic model of fulfilling responsibilities alongside an ESG brand will be established. By 2030, the Company's ability to create comprehensive economic, social, and environmental values will be significantly enhanced, enabling more comprehensive and sufficient services to meet people's needs for a better life. By 2035, the Company will achieve significant results in the area of social responsibility, positioning its ESG governance level among the industry leaders.

# ESG治理 ESG governance

#### 公司制定了《关于新时代中国中铁高标准履行社会责任(ESG)的指导意见》,建立了强而有力的治理架构,覆盖董 事会管理层、本部业务部门和所属各单位,将ESG绩效与高管薪酬挂钩,持续推进社会责任理念和ESG理念全面融入 企业战略、重大决策和企业文化建设之中。

The Company has formulated the Guiding Opinions on High-Standard Performance of Social Responsibilities (ESG) by China Railway Group Limited in the New Era, establishing a robust governance framework that encompasses the Board of Directors, management, business units of the headquarters, and subsidiaries and links the ESG performance to executive compensation. It has continuously promoted the concepts of social responsibility and ESG to be fully integrated into the Company's strategies, major decisions, and corporate culture.

#### 明确董事会ESG治理工作机制

Clarify the ESG governance working mechanism of the Board of Directors

将ESG管理体系建设纳入公司董事会和董事会战略委员会职责范围并列入《公司章程》,董事会全面负责督导、直接管理及监管 公司的ESG议题,战略委员会及安全健康环保委员会定期审查相关制度体系运行成效,及是否涵盖重大环境、社会和管治问题的 主要控制措施。

The development of the ESG management system is incorporated into the scope of responsibilities of the Board of Directors and the Strategy Committee of the Board of Directors and stipulated in the Company's Articles of Association. The Board of Directors is fully responsible for overseeing, directly managing, and supervising the Company's ESG issues. The Strategy Committee and the HSE Committee regularly review the operation effectiveness of relevant institutional systems and whether key control measures for major ESG issues are covered.

#### 建立业务部门责任矩阵

#### Establish a responsibility matrix for business units

建立跨部门合作机制,定期召开业务部门协调会,研究推动ESG披露工作,确保将ESG各项指标融入业务管理和数据统计,确保所 呈列数据及可持续发展措施的准确性、可靠性和及时性。

A cross-departmental cooperation mechanism has been established, with regular coordination meetings held among business units to discuss and promote ESG disclosure work. This ensures that various ESG indicators are integrated into business management and data statistics, guaranteeing the accuracy, reliability, and timeliness of the presented data and sustainable development measures.

# ESG实践

2024年,按照《中国中铁"十四五"发展规划》,公司开展系列ESG实践活动,有效推动公司ESG影响力。



# **ESG** practices

In 2024, in accordance with the 14th Five-Year Development Plan of China Railway Group Limited (《中国中铁"十四五"发展规划》), the Company carried out a series of ESG practice activities to effectively improve its ESG influence.

Key ESG Actions of CREC in 2024					
ESG Training	<ul> <li>Organize and participate in internal and external ESG-related training to keep abreast of cutting-edge ESG trends</li> <li>Attend SASAC "ESG Training for Listed Central SOEs"</li> <li>Participate in the "Senior Management Talent Training Course on ESG" organized by the China Enterprise Reform and Development Society</li> <li>Attend the "Sharing Responsibility Open Class" hosted by the China Social Responsibility 100 Forum</li> <li>Participate in the "China Public Companies Sustainable Development Conference" organized by CAPCO</li> </ul>				
ESG Information Disclosure	<ul> <li>Compile and publish the 16th ESG and Social Responsibility Report of CREC</li> <li>Publish the Hungary Country Social Responsibility Report</li> <li>Release the Tanzania Country Social Responsibility Report of China Railway Construction Engineering Group</li> </ul>				
External Communication	<ul> <li>Establish a regular communication mechanism with ESG rating agencies and provide constructive suggestions for the China Securities Index ESG rating</li> <li>Strengthen communication with investors, learn about ESG issues of concern to investors through the Market Capitalization Management Report and the Capital Market Opinion Summary and Management Recommendations, and feedback these insights to the Board of Directors</li> </ul>				
ESG Promotion	<ul> <li>Promote the spread of brand value and publicize CREC's strength through diverse channels</li> <li>Release the International Image Promotion Video of China Railway Group Limited</li> <li>Conduct annual evaluations of brand-building typical cases and brand stories</li> <li>Release the 2024 Brand Architecture Map of China Railway Group Limited</li> </ul>				

## 重要性议题识别

公司依据政府政策导向、监管机构要求以及国内外主流ESG标准,结合公司发展实际与利益相关方期望,对ESG实质性 议题进行了识别和重要性评估,最终形成议题矩阵,并在本报告中对各项重要议题予以回应。



## Identification of material issues

The Company has identified the material ESG issues and assessed their significance based on government policy guidance, regulatory requirements, and mainstream ESG standards both in China and the world as well as its developmental realities and the expectations of stakeholders. It has ultimately created an issue matrix, which responds to each important topic in this report.



# 利益相关方沟通

公司通过多渠道增进与利益相关方的沟通,确保有效回应利益相关方的核心诉求。

#### 利益相关方诉求与中国中铁的回应

Stakeholder Demands and CREC's Responses



## Stakeholder communication

The Company has enhanced communication with stakeholders through multiple channels, ensuring effective responses to their core demands.



# 展望 2025 Outlook for 2025

A MASSING AND A STREET AND

回望来路,风雨兼程;展望新程,壮志满怀。2025年是"十四五" 规划收官之年,也是"十五五"规划谋篇布局的关键之年。中国 中铁将以习近平新时代中国特色社会主义思想为指导,深入贯彻 党的二十大和二十届二中、三中全会精神,全面贯彻中央经济工 作会议和中央企业负责人会议部署要求,坚持稳中求进总基调, 锚定"效益提升、价值创造"主线,以"千磨万击还坚劲"的 韧性和"越是艰险越向前"的担当,攻坚克难、真抓实干,全力 以赴完成全年目标任务,持续增强核心功能、提升核心竞争力, 更好发挥科技创新、产业控制、安全支撑作用,努力当好中国式 现代化开路先锋! future. The year 2025 marks the conclusion of the "14th Five-Year Plan" and is also a crucial year for planning the "15th Five-Year Plan". CREC will follow the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, thoroughly put into practice the guiding principles of the 20th CPC National Congress and the second and third plenary sessions of the 20th CPC Central Committee, and comprehensively implement the directives from the Central Economic Work Conference and the Central SOEs Leaders' Meeting. It will uphold the general principle of seeking progress while maintaining stability and be steadfast in its focus on "profit enhancement and value creation". With resilience that "stands strong despite numerous challenges" and a commitment to "forging ahead in the face of difficulties", CREC will tackle challenges headon and take concrete actions to achieve annual goals and complete relevant tasks. It is going to continuously enhance core functions and competitiveness, better leverage the roles of technological innovation, industry control, and safety support, and strive to be a trailblazer in advancing Chinese modernization!

# 附录 Appendices

## 报告说明 About the Report

#### 报告范围

本报告为公司连续发布的第17份ESG暨社会责任报告,披露范围涵盖了中国中铁股份有限公司及所属各单位在履行环境、社会和公司治理方面的责任信息。

#### 时间周期

本报告为年度报告,时间跨度为2024年1月1日至2024 年12月31日。为遵循信息一致性原则,对部分内容进行 了回溯和延展。

#### 编制依据

联合国《2030可持续发展议程》

国际标准化组织社会责任指南(ISO 26000: 2010)

国务院国资委《关于新时代中央企业高标准履行社会 责任的指导意见》《央企控股上市公司ESG专项报告编 制研究》

财政部《企业可持续披露准则——基本准则(试行)》

香港联合交易所《环境、社会及管治报告守则》

上海证券交易所《上市公司自律监管指引第14号——可 持续发展报告(试行)》《上市公司自律监管指南第4 号——可持续发展报告编制》

中国社会科学院《中国企业可持续发展报告指南 (CASS-ESG 6.0)》

#### 报告原则

重要性原则:本报告按照公司董事会批准的ESG重要 性议题评估结果,对可能对利益相关方和公司产生重 要影响的事项进行了重点汇报。

量化原则:本报告信息数据来自公司的正式文件、统 计报告与财务报告,以及经由公司统计、汇总与审核的 ESG信息。本报告数据按国家规定或行业标准统计、 计算。如:《综合能耗计算通则》(GB/T2589-2020)、《用 水单位用水统计通则》(GB/T26719-2022)、《国控污染源 排放口污染物排放量计算方法》(环办〔2011〕8号)、《能 源统计报表制度(2021)》(国家统计局)等。如无特殊说 明,货币单位均为人民币元。

平衡原则:本报告内容反映客观事实,对涉及正面、负面信 息的指标均进行披露。

一致性原则:如无特殊说明,本报告相对于公司往年ESG 报告披露范围无重大调整,且使用一致的统计方法,对 ESG关键定量指标披露了3年对比情况,以反映绩效水平 趋势。

#### 称谓说明

本报告中中国中铁股份有限公司简称"中国中铁""公司""我们"。其他所属单位称谓指代详见附录"名词释 义"。

#### 报告获取

本报告以电子版形式发布,可在中国中铁网站http://www.crecg.com/社会责任专栏下载浏览。

#### **Reporting scope**

This is the 17th environmental, social, and governance (ESG) and social responsibility report published by China Railway Group Limited (CREC). It discloses information on the fulfillment of ESG responsibilities by CREC and its subsidiaries.

#### **Reporting frequency**

This report is an annual report, covering the period from January 1, 2024, to December 31, 2024. In order to maintain information consistency, some sections have been retrospectively reviewed and expanded.

#### References

2030 Agenda for Sustainable Development released by the United Nations

ISO 26000:2010: Guidance on Social Responsibility released by the International Organization for Standardization

Guidelines to the State-Owned Enterprises Directly Under the Central Government on Fulfilling Corporate Social Responsibilities to High Standards in the New Era, and Research on the Compilation of ESG Special Reports by Central State-Owned Enterprises released by the State-owned Assets Supervision and Administration Commission of the State Council

Sustainability Disclosure Standards for Business Enterprise—Basic Standard (Trial) issued by the Ministry of Finance of the People's Republic of China

Environmental, Social and Governance Reporting Code issued by the Stock Exchange of Hong Kong Limited

Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial), and Guide No. 4 for Self-Regulatory Supervision on Listed Companies of the SSE—Compilation of Sustainable Development Reports issued by Shanghai Stock Exchange

Guidelines on Sustainable Development Reporting for Chinese Enterprises (CASS-ESG6.0) issued by Chinese Academy of Social Sciences

## **Reporting principles**

Materiality: This report highlights issues that could have a significant impact on stakeholders and CREC, based on the ESG materiality assessment results approved by the Board of Directors.

Quantification: The data presented in this report are sourced from CREC's official documents, statistical reports, and financial statements, as well as ESG information that has been compiled, summarized, and verified by the Company. The data in this report are compiled and calculated in accordance with national regulations or industry standards, including the General Rules for Calculation of the Comprehensive Energy Consumption (GB/T2589-2020), the General Rules for Water Statistics in Water-use Organization (GB/T 26719-2022), the Calculation Methods for Emissions from Outlets of State-Controlled Pollution Sources (HB [2011] No. 8), and the Energy Statistical Statement System (2021) of the National Bureau of Statistics. Unless otherwise specified, all currency units are in Renminbi (RMB).

Balance: This report objectively reflects facts by disclosing all indicators related to both positive and negative information.

Consistency: Unless otherwise noted, there are no significant changes in the scope of disclosure in this report compared to CREC's previous ESG reports. The same statistical method is applied to provide a three-year comparison of key quantitative ESG indicators, illustrating performance trend levels.

#### **Title description**

In this report, China Railway Group Limited is also referred to as "CREC", "the Company", and "we/us". Please refer to the Appendix "Terms and definitions" for the full names and short names of CREC's subsidiaries.

#### Access to the report

This report has been published in electronic form in the "Social Responsibility" section of CREC's website http://www. crecg.com/.



## 关键绩效表

类别	指标	单位	2022	2023	2024			
	资源使用							
	万元营业收入综合能耗(可比价)	吨标煤 / 万元	0.0429	0.0415	0.0401			
	环保投入	万元	358590.3	368605.95	368620			
	环保培训	次	19835	24400	27031			
	电力(间接能源消耗)	万千瓦时	1130796	1185613	1019900			
		万吨	50.0052	53.8165	50.2			
	汽油(直接能源消耗)	吨 / 万元	0.0046	0.0043	0.0045			
		万吨	167.5264	177.035	158.5			
	柴油(直接能源消耗)	吨 / 万元	0.015	0.0142	0.0143			
		万标立方米	7160.4	6875.5	3450			
环境	天然气(直接能源消耗)	立方米 / 万元	0.66	0.55	0.58			
		万吨标准煤	482.323	507.557	456.3704			
	/	吨标准煤 / 万元收入	0.0429	0.0415	0.0401			
	综合能源消耗	万千瓦时	3924515	4129874	3610875			
		千瓦时 / 万元收入	361	332	330			
	까나 꼬기 거 티	万立方米	46105.66	46050.65	42430.75			
	消耗新水总量	立方米 / 万元收入	4.24	3.71	3.65			
	循环用水量	万立方米	4575	4560	4552.23			
	废水排放量	万吨	86285.51	8964.1	8958.66			
	二氧化碳排放量	万吨	1632.9429	1727.7111	1607.8065			
	二氧化碳排放密度	吨 / 万元	0.1502	0.1453	0.13831			

## The key performance table

Category	Indicator	Unit	2022	2023	2024
	Resource Utilization				
	Comprehensive energy consumption per RMB10,000 operating revenue (comparable price)	Tons of standard coal/ RMB10,000	0.0429	0.0415	0.0401
	Investment in environmental protection	RMB10,000	358590.3	368605.95	368620
	Environmental protection training	Nr.	19835	24400	27031
	Electricity (indirect energy consumption)	10,000 kWh	1130796	1185613	1019900
	Gasoline (direct energy consumption)	10,000 tons	50.0052	53.8165	50.2
	Gasoline (direct energy consumption)	Tons of standard coal/ RMB10,000         0.0429         0.0415           RMB10,000         358590.3         368605.95           RMB10,000         358590.3         368605.95           Nr.         19835         24400           Nr.         19835         24400           10,000 kWh         1130796         1185613           10,000 tons         50.0052         53.8165           t/RMB10,000         0.0046         0.0043           t/RMB10,000         0.015         0.0142           10,000 tons         167.5264         177.035           t/RMB10,000         0.015         0.0142           10,000 tons of standard cubic meters         7160.4         6875.5           cubic meter/RMB10,000         0.666         0.55           10,000 tons of standard coal/ RMB10,000 revenue         0.0429         0.0415           10,000 kWh         3924515         4129874           kWh/RMB10,000 revenue         361         332           Cubic meter/RMB10,000         4.24         3.71           revenue         4575         4560           10,000 cubic meters         4575         4560           10,000 cubic meters         4525.1         8964.1           10,0000 c		0.0045	
		10,000 tons	167.5264	177.035	158.5
	Diesel (direct energy consumption)	t/RMB10,000	0.0429         0.0415         0.           358590.3         368605.95         36           19835         24400         2           1130796         1185613         10           50.0052         53.8165         5           0.0046         0.0043         0.           167.5264         177.035         1           0.015         0.0142         0.           7160.4         6875.5         3           0.66         0.55         0           482.323         507.557         456           0.0429         0.0415         0.           3924515         4129874         36           361         332         3           46105.66         46050.65         42           4575         4560         45           86285.51         8964.1         89           1632.9429         1727.7111         160	0.0143	
	Natural gas (direct energy consumption)		7160.4	6875.5	3450
Environment		cubic meter/RMB10,000	0.66	0.55	0.58
			482.323	507.557	456.3704
	Comprehensive energy consumption		0.0429	0.0415	0.0401
		10,000 kWh	3924515	4129874	3610875
		kWh/RMB10,000 revenue	361	332	330
		10,000 cubic meters	46105.66	46050.65	42430.75
	Total fresh water consumption		4.24	3.71	3.65
	Circulating water consumption	10,000 cubic meters	4575	4560	4552.23
	Wastewater discharge	10,000 tons	86285.51	8964.1	8958.66
	CO <sub>2</sub> emissions	10,000 tons	1632.9429	1727.7111	1607.8065
	CO <sub>2</sub> emission density	t/RMB10,000	0.1502	0.1453	0.13831

类别	指标		单位	2022	2023	2024
	员工总数	员工总数		297620	299652	297359
		男性	Д	248821	250540	248668
	按性别划分	女性	Д	48799	49112	48691
	少数民族员工		Д	-	-	15116
		35 岁以下	Д	131983	132893	128203
	按年龄划分	35-50 岁	Д	111195	113588	114085
		50 岁以上	Å	54442	53171	55071
		博士学历	Å	323	372	409
	校堂下八	研究生学历	Å	14154	15539	16274
	按学历分	本科学历	Д	164128	177620	186344
社会		大专以下学历	Å	119015	106121	92355
	按地区划分	中国	Д	293392	294703	292283
		海外	Д	4228	4949	5076
	员工流失率		%	3.3	2	3.12
	百亿元营收死亡人数		Д	-	-	0.24
	科技创新	科技创新				
	研发人员数量	研发人员数量		27366	27970	37085
	研发人员占员工总人	研发人员占员工总人数比例		9.28	9.31	12.48
	省部级工法	省部级工法		794	1184	1416
	授权专利数		页	9256	8324	9745
	发明专利数	发明专利数		1875	2438	3385

Category	Indicator		Unit	2022	2023	2024
	Total number of employees		Nr.	297620	299652	297359
		Male	Nr.	248821	250540	248668
	By gender	Female	Nr.	48799	49112	48691
	Ethnic minority employees		Nr.	-	-	15116
		Under 35 years old	Nr.	131983	132893	128203
	By age	35-50 years old	Nr.	111195	113588	114085
		Above 50 years old	Nr.	54442	53171	55071
	By educational background	Doctoral degree	Nr.	323	372	409
		Master's degree	Nr.	14154	15539	16274
		Bachelor's degree	Nr.	164128	177620	186344
Society		College degree or below	Nr.	119015	106121	92355
	By region	China	Nr.	293392	294703	292283
		Overseas	Nr.	4228	4949	5076
	Employee turnover rate		%	3.3	2	3.12
	Fatalities per RMB10 billion		Nr.	-	-	0.24
	Technological Innovation					
	Number of R&D per	sonnel	Nr.	27366	27970	37085
	Proportion of R&D p of employees	personnel to the total number	%	9.28	9.31	12.48
	Provincial and ministerial construction methods		Nr.	794	1184	1416
	Number of authoriz	ed patents	Nr.	9256	8324	9745
	Number of inventio	n patents	Nr.	1875	2438	3385

# 指标索引

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	Drive future development through innovation	_	Articles 41 and 42	S2.1
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2	中铁一局	中铁一局集团有限公司
3	中铁二局	中铁二局集团有限公司
4	中铁三局	中铁三局集团有限公司
5	中铁四局	中铁四局集团有限公司
6	中铁五局	中铁五局集团有限公司
7	中铁六局	中铁六局集团有限公司
8	中铁七局	中铁七局集团有限公司
9	中铁八局	中铁八局集团有限公司
10	中铁九局	中铁九局集团有限公司
11	中铁十局	中铁十局集团有限公司
12	中铁大桥局	中铁大桥局集团有限公司
13	中铁隧道局	中铁隧道局集团有限公司
14	中铁电气化局	中铁电气化局集团有限公司
15	中铁武汉电化局	中铁武汉电气化局集团有限公司
16	中铁建工	中铁建工集团有限公司
17	中铁广州局	中铁广州工程局集团有限公司
18	中铁北京局	中铁北京工程局集团有限公司
19	中铁上海局	中铁上海工程局集团有限公司
20	中铁投资	中铁投资集团有限公司
21	中铁南方	中铁南方投资集团有限公司
22	中铁交通	中铁交通投资集团有限公司
23	中铁云投	中铁云南建设投资有限公司



## Terms and definitions

	Short Name	Full Name
1	CREC/Company/We	China Railway Group Limited
2	China Railway First Group	China Railway First Group Co., Ltd.
3	China Railway No. 2 Engineering Group	China Railway No. 2 Engineering Group Co., Ltd.
4	China Railway No. 3 Engineering Group	China Railway No. 3 Engineering Group Co., Ltd.
5	China Railway No. 4 Engineering Group	China Railway No. 4 Engineering Group Co., Ltd.
6	China Railway No. 5 Engineering Group	China Railway No. 5 Engineering Group Co., Ltd.
7	China Railway Sixth Group	China Railway Sixth Group Co., Ltd.
8	China Railway Seventh Group	China Railway Seventh Group Co., Ltd.
9	China Railway No. 8 Engineering Group	China Railway No. 8 Engineering Group Co., Ltd.
10	China Railway No. 9 Group	China Railway No. 9 Group Co., Ltd.
11	China Railway No. 10 Engineering Group	China Railway No. 10 Engineering Group Co., Ltd.
12	China Railway Major Bridge Engineering Group	China Railway Major Bridge Engineering Group Co., Ltd.
13	China Railway Tunnel Group	China Railway Tunnel Group Co., Ltd.
14	China Railway Electrification Engineering Group	China Railway Electrification Engineering Group Co., Ltd.
15	China Railway Wuhan Electrification Engineering Group	China Railway Wuhan Electrification Engineering Group Co., Ltd.
16	China Railway Construction Engineering Group	China Railway Construction Engineering Group Co., Ltd.
17	China Railway Guangzhou Engineering Group	China Railway Guangzhou Engineering Group Co., Ltd.
18	China Railway Beijing Engineering Group	China Railway Beijing Engineering Group Co., Ltd.
19	Shanghai Civil Engineering Co., Ltd. of CREC	Shanghai Civil Engineering Co., Ltd. of CREC
20	China Railway Investment Group	China Railway Investment Group Co., Ltd.
21	China Railway South Investment Group	China Railway South Investment Group Co., Ltd.
22	China Railway Communications Investment Group	China Railway Communications Investment Group Co., Ltd.
23	China Railway Yunnan Construction Investment	China Railway Yunnan Construction Investment Co., Ltd.



	简称	全称
24	中铁城投	中铁城市发展投资集团有限公司
25	中铁上投	中铁(上海)投资集团有限公司
26	中国铁工投资	中国铁工投资建设集团有限公司
27	中铁广投	中铁(广州)投资发展有限公司
28	中铁二院	中铁二院工程集团有限责任公司
29	中铁六院	中铁第六勘察设计院集团有限公司
30	中铁设计	中铁工程设计咨询集团有限公司
31	中铁大桥院	中铁大桥勘测设计院集团有限公司
32	中铁科研院	中铁科学研究院有限公司
33	中铁华铁	中铁华铁工程设计集团有限公司
34	中铁长江设计	中铁长江交通设计集团有限公司
35	中铁水利设计	中铁水利水电规划设计集团有限公司
36	中铁国际	中铁国际集团有限公司
37	中海外	中国海外工程有限责任公司
38	国际工程分公司	中国中铁股份有限公司国际工程分公司
39	中铁工业	中铁高新工业股份有限公司
40	中铁置业	中铁置业集团有限公司
41	中铁资源	中铁资源集团有限公司
42	中铁信托	中铁信托有限责任公司
43	中铁财务	中铁财务有限责任公司
44	中铁资本	中铁资本有限公司
45	中铁物贸	中铁物贸集团有限公司
46	中铁信科	中铁云网信息科技有限公司
47	中铁装备	中铁工程装备集团有限公司
48	中铁文保	中铁文保科创有限公司

## The key performance table

	Short Name	Full Name
24	China Railway City Development and Investment Group	China Railway City Development and Investment Group Co., Ltd.
25	China Railway (Shanghai) Investment	China Railway (Shanghai) Investment Co., Ltd.
26	China Tiegong Investment & Construction Group	China Tiegong Investment & Construction Group Co., Ltd.
27	China Railway (Guangzhou) Investment & Development	China Railway (Guangzhou) Investment & Development Co., Ltd.
28	China Railway Eryuan Engineering Group	China Railway Eryuan Engineering Group Co., Ltd.
29	China Railway Liuyuan Group	China Railway Liuyuan Group Co., Ltd.
30	China Railway Engineering Design and Consulting Group	China Railway Engineering Design and Consulting Group Co., Ltd.
31	China Railway Major Bridge Reconnaissance & Design Institute	China Railway Major Bridge Reconnaissance & Design Institute Co., Ltd.
32	China Railway Academy	China Railway Academy Co., Ltd.
33	China Railway Huatie Engineering Design Group	China Railway Huatie Engineering Design Group Co., Ltd.
34	China Railway Changjiang Transport Design Group	China Railway Changjiang Transport Design Group Co., Ltd.
35	China Railway Water Conservancy & Hydropower Planning and Design Group	China Railway Water Conservancy & Hydropower Planning and Design Group Co., Ltd.
36	China Railway International Group	China Railway International Group Co., Ltd.
37	China Overseas Engineering Group	China Overseas Engineering Group Co., Ltd.
38	CREC International Engineering Branch	CREC International Engineering Branch
39	China Railway Hi-Tech Industry	China Railway Hi-Tech Industry Corporation Limited
40	China Railway Real Estate Development Group	China Railway Real Estate Development Group Co., Ltd.
41	China Railway Resources Group	China Railway Resources Group Co., Ltd.
42	China Railway Trust	China Railway Trust Co., Ltd.
43	China Railway Finance	China Railway Finance Co., Ltd.
44	China Railway Capital	China Railway Capital Co., Ltd.
45	China Railway Materials Trade Group	China Railway Materials Trade Group Co., Ltd.
46	CREC Cloud Net Information Technology	CREC Cloud Net Information Technology Co., Ltd.
47	China Railway Engineering Equipment Group	China Railway Engineering Equipment Group Co., Ltd.
48	China Railway Wenbao Technological Innovation	China Railway Wenbao Technological Innovation Co., Ltd.



#### 尊敬的读者:

您好!非常感谢您在百忙之中阅读《中国中铁 2024 年度环境、社会与管治报告暨社会责任报告》。为持续 改进可持续发展报告管理工作,我们特别希望倾听您的意见和建议,请您协助完成意见反馈表中的相关问 题,并选择以下方式反馈给我们。 联系电话:010-51878214

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5. 您希望进一	步了解哪些信息?	)							
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### **Opinion feedback**

#### Dear readers,

I hope this message finds you well! Thank you very much for taking the time to read the China Railway Group Limited 2024 Environmental, Social and Governance Report & Social Responsibility Report ! To continuously improve our sustainable development reporting management, we would greatly appreciate hearing your opinions and suggestions. Please assist us by completing the feedback form below and returning it to us using one of the methods provided.

Tel.: 010-51878214

Address: China Railway Plaza, No. 69 Fuxing Road, Haidian District, Beijing

Your Info	ormation							
Name:	Name:		Tel.:					
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	you rate this report ov							
○ Very Good	○ Fairly Good	○ Average	ge O Fairly Poor					
2. Do you think this report reflects CREC's significant economic, social, and environmental impacts?								
⊖ High	○ Fairly High	○ Average	○ Fairly	Low	O Low			
3. How would you rate the clarity, accuracy, and comprehensiveness of the information, data, and								
	disclosed in this report		-	-				
() Good	○ Fairly Good	() Average	() Poor	() Do	not Understand			
4. What aspect of this report are you most satisfied with?								
5. What additional information would you like to know?								
6. Do you have any suggestions for our future reports?								



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