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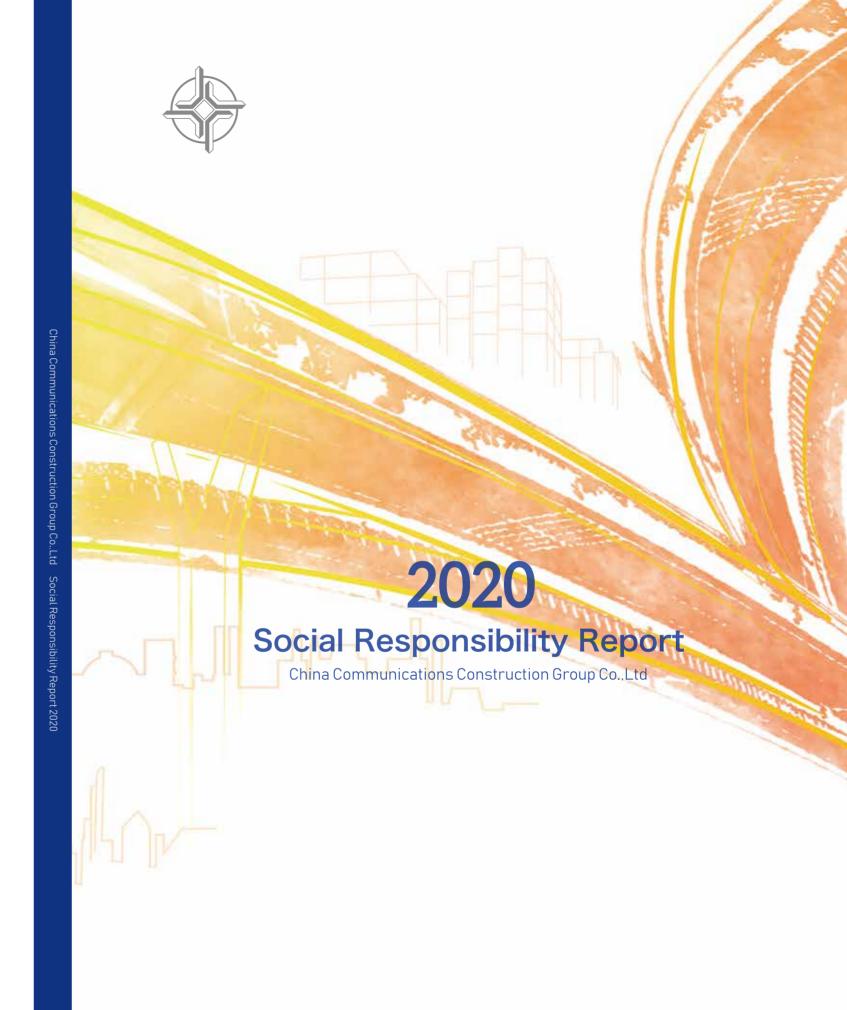
Fax: 010-8201-6804 http://www.ccccltd.com

Environmental considerations for the report publication
Paper: Printed on environmental-friendly paper
Ink: Using environmental-friendly ink to reduce air pollution











The cover design uses a consistent abstract image of bridge to unify the style of five social responsibility reports from 2016 to 2020, reflecting the consistent promises of CCCG in fulfilling social responsibility during the "13th Five-Year Plan" period.

## **ABOUT THE REPORT**

### Organizational Scope

This Report covers China Communications Construction Group Limited and its affiliated branches and subsidiaries. In this Report, China Communications Construction Group Limited is also referred to as "CCCG," "the Company," or "We"

### Period of the Report

This is an annual report, covering the period from January 1, 2020 to December 31, 2020. Some contents may go beyond the above period.

#### Issuance

This Report is the 14th corporate social responsibility report issued by CCCG since 2008.

### **Content Description**

There is no false information or misleading statement in the Report and CCCG guarantees its authenticity, accuracy and completeness.

Should there be any inconsistency between the data disclosed in this Report and the Company's Annual Report, the latter shall prevail. All currency amounts are in RMB yuan unless otherwise stated.

Project and equipment pictures herein all show the projects, devices or equipment products undertaken, owned or used by the Group.

### References

Based on the industry background, this Report highlights the characteristics of CCCG, and conforms to the relevant standards related to sustainable development information disclosure of the industry peers.

#### The key references of this Report are as follows

Guiding Opinions on Performance of Social Responsibility by Central State–Owned Enterprises issued by the State–Owned Assets Supervision and Administration Commission (SASAC) of the State Council

Sustainability Reporting Guidelines issued by the Global Reporting Initiative (GRI)

ISO 26000 – Guidance on Social Responsibility (2010) issued by the International Organization for Standardization (ISO)

Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR 4.0) issued by the Chinese Academy of Social Sciences (CASS)

### Access to the Report

This Report is available in printed and electronic forms. The electronic version can be downloaded from the social responsibility column at the Group's official website: www.ccccltd.cn.

If you have any suggestions and comments on this Report, please feel free to contact us.

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# WORKING HARD AND AIMING HIGH

DEMONSTRATING NEW ACHIEVEMENTS
OF A GREAT POWER



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## **CHAIRMAN'S STATEMENT**



Wang Tongzhou Chairman of the Board, Secretary of the Party Committee



In 2020, major changes unseen in a century set the world in accelerated reactions and our external circumstances underwent profound changes.

In 2020, the Group was confronted with arduous tasks of reform, development and stabilization, but we were striving vigorously.

Facing the severe challenges posed by the global dissemination of COVID-19 and the overlapping of various risks, CCCG adheres to the guidance of Xi Jinping's thoughts on socialism with Chinese characteristics in the new era, forging ahead and assuming responsibility, further promotes the pilot reform of state-owned capital investment companies, drives the implementation of the pilot plan for building China into a country with strong transportation network, strives to resolutely win the tough battle against poverty, and answers the last question on the final paper of the "13th Fiveyear Plan" well.



Wang Haihuai President, Deputy Secretary of the Party Committee



In this year, we have done our best to bring the epidemic under control. We have adhered to setting people and life as our top priority. Furthermore, we have made emergency response, mobilized and deployed our forces and built an outbreak prevention system as soon as possible, so that a work pattern of "consistent command." comprehensive deployment, three-dimensional prevention and control" quickly took shape. CCCC Second Harbour Engineering, CCCC First Highway Engineering Group and CCCC Fourth Highway Engineering and other subsidiaries have completed the construction of anti-outbreak projects such as the "Huoyan" Laboratory, Huoshenshan Hospital and mobile cabin hospitals with high quality and efficiency; China Harbour Engineering (CHEC) and China Road and Bridge Corporation (CRBC) and other subsidiaries have mobilized anti-outbreak materials globally in order to aid our country; more than 2,600 kilometers of highways operated by CCCC Asset Management have reduced or cancelled tolls of approximately 2.2 billion yuan; CCCG has donated more than 76 million yuan in total. We have promoted the integration of normalized outbreak prevention into the whole process of production and operation. The prevention of and fight against the outbreak for domestic and foreign projects have been fulfilled step-by-step, and we have raced the resumption of work and production against the clock. Moreover, we have resolutely achieved "grasping two links at the same time with two promotions" to achieve "double victory" for anti-epidemic battle and resumption of work.

In this year, we have made every effort to win the battle of poverty eradication. 2020 was the finalizing year of poverty alleviation. We have resolutely implemented decisions and deployments of the CPC Central Committee and the State Council, actively played well the role of a central state-owned enterprise as "backbone" and "leader", taken winning the battle of poverty eradication as a major political task, continued to strengthen the "Three Six" working system, deeply advanced project construction for poverty alleviation, and achieved practical and obvious results on poverty eradication. On August 12, CCCG's Nujiang Lianxin Bridge was officially opened to traffic; on October 18, the main work of CCCG's Fugong Munima Bridge was completed; on November 26, CCCG's "turnkey" project Lanping New Era Hope School was officially completed....By the end of 2020, the five counties (cities) of Lushui City, Lanping County, Fugong County, and Gongshan County of Yunnan Province, and Yingjisha County of Xinjiang Province designated as entities for poverty alleviation by CCCG, have been all up and out of poverty. With the biggest responsibility, the greatest strength and the strictest style of work, we have conquered the hardest part in the deeply impoverished areas, contributed the strength of CCCG and provided the CCCG program for creating another unforgettable miracle in the human history. We have been rated as "good" for three consecutive years in the performance evaluation of designated poverty alleviation among central units; CCCC Nujiang Industrial Poverty Alleviation and Development Co., Ltd. has been awarded the honorary title of National Advanced Team for Poverty Eradication.

In this year, we have made bold and resolute advances in the technological innovation. The Proposal of the CPC Central Committee on Formulating the Fourteenth Fiveyear Plan for National Economic and Social Development and Long-Term Goals for 2035 points out that innovation remains at the heart of China's modernization drive. We will strengthen our science and technology to provide strategic support for China's development. In order to further implement the innovation-driven development strategy and comprehensively build a world-class technology-based enterprise with global competitiveness, we actively promote the reform of science and technology system,

continuously optimize incentive mechanism, strive to cultivate an innovation ecology, and do our level best to build an independent, controllable, safe and reliable industrial chain and supply chain system so as to establish first-class industrial strength with first-class technological strength. In 2020, we established a high-end science and technology think tank composed of 40 academicians and experts: planned 35 major research and development directions in 10 fields; obtained four field observation and research bases in the transportation industry; won the special prize of National Science and Technology Progress Award, with the Hong Kong-Zhuhai-Macao Bridge winning the "Super Engineering Award" of the International Bridge Conference, two projects were awarded the ENR Global Best Project Award, and 35 projects were awarded the National Quality Engineering Award.

In this year, we have been determined to fulfill our social responsibilities unswervingly. CCCG has lived up to expectations and striven for the satisfaction of related parties with heart. We have built quality projects and opened the Beijing-Xiong'an Intercity Railway to traffic; we have achieved fruitful results in the joint construction of the Belt and Road Initiative. We have promoted highdimensional development with high-end connections and operations and been committed to building the bridge for communication, road for wealth, port for development, and city for happiness. The Singapore Changi Airport project has been progressing steadily, the Malaysian East Coast Rail Link project has fully resumed, and the Mombasa-Nairobi Railway has operated safely and efficiently during the outbreak period; we have practiced the development concept that "lucid waters and lush mountains are invaluable assets", and have integrated environmental protection into our engineering project design, the whole process of construction and operation, and incorporated the green environmental protection industry into the overall development strategy of the Company, in order to contribute to the objective of carbon neutrality in 2060 with the power of a central state-owned enterprise; we have adhered to the people-oriented philosophy, strengthened the care for staff and continued to create shared value.

"Staying true to the Party's founding mission" calls for responsibility the mission is inspiring, and the times makes heroes. CCCG people will firmly seize the historical opportunity of reform and development in the new era with the sentiment of patriots, reforming spirit, innovative thinking and broad vision. At the new historical starting point, we will make a good start to establish a world-class enterprise with global competitiveness regarding "technology, management, quality", and pay tribute to the centenary of the CPC with outstanding achievements!

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# **FORGING AHEAD: ACHIEVEMENTS IN THE PERIOD OF 13TH FIVE-YEAR PLAN**

We have formed a multilevel and three-dimensional business network covering ten major regions and five major urban agglomerations in China

02

Our overseas layout has covered 139

countries and regions and **278** overseas institutions around the globe



04

The Mombasa-Nairobi Railway has become a new benchmark for China's railway industry chain "going global"

03

The proportion of new business in the newly signed contract value has increased from **35.5%** to

**57.38%** in the past five years

During the period of the "13th Five-year Plan", the Group won 11 National Science and Technology Progress Awards,

3 National Technical Invention Awards, 25 China Civil

Engineering Zhan Tianyou Awards, 41 China Construction

Engineering Luban Awards, and 139 National Quality

Engineering Awards (of which **14** were golden awards)

1 city and 3 counties in Nujiang, Yunnan Province and Yingjisha County in Xinjiang designated as entities for poverty alleviation by CCCG have been lifted out of poverty

With the "Independent R&D and Industrialization of Large-Scale Offshore Cutter Suction Dredging Equipment" winning the special prize of National Science and Technology Progress Award, and the Company has been fully striding forward to a world-class "technology-based" enterprise

CCCC Nujiang Industrial Poverty Alleviation and Development Co., Ltd. has been awarded the title of National Advanced Team for Poverty Eradication





# RESPONSIBILITY FOCUS







The Group helps to win the fight against the COVID-19 and has made an acumulative donation of more than

**76** million yuan

The tolls of the expressways operated by CCCC Asset Management Co. are reduced or exempted by about

22 billion yuan

# **RESPONSIBILITY FOCUS I**

### ASSUMING RESPONSIBILITY OF CENTRAL STATE-OWNED ENTERPRISE AND PASSING "EXTRA EXAM" OF OUTBREAK PREVENTION AND CONTROL

In the spring of 2020, COVID-19 epidemic broke out and struck quickly the world. The epidemic is the command. The prevention and control are our responsibility. General Secretary Xi Jinping has personally given orders and deployed the work on epidemic prevention and control. The whole country worked together to fight against the epidemic and overcome the difficulties. Since the outbreak of COVID-19, the Party Committee of CCCG has resolutely implemented the spirit of General Secretary Xi Jinping's important instructions, adhered to setting people and life as our top priority, resolutely obeyed the overall situation and stood at the front, insisted that "the whole Company is playing one game of chess" and done our best fighting against the epidemic. Thus, we have achieved "double victory" for anti-outbreak battle and resumption of work. CCCG donated a total of more than 76 million yuan to help win the fight against the outbreak. More than 2,600 kilometers of highways operated by CCCC Asset Management opened green channels and reduced or cancelled tolls of approximately 2.2 billion yuan; CCCG staff Liu Yiquan was rated as "National Advanced Individual in Fighting COVID-19" and "National Outstanding CPC Member". Yu Shaohuai, Li Xiaojia, and Ni Qingjiu were honored as "Advanced Individual of Central State-Owned Enterprises in Fighting COVID-19". CCCC Second Harbour Engineering was rated as "Advanced Team of Central State-Owned Enterprises in Fighting COVID-19".

### COMMANDING FORWARD, STRENGTHENING ORGANIZATION AND LEADERSHIP

After the outbreak of the epidemic, CCCG's Party Committee held a special meeting to study and convey the spirit of General Secretary Xi Jinping's important instructions on the prevention and control of COVID-19, as well as the spirit of the conference of the Standing Committee of the Political Bureau of the Central Committee, the conference of the Leading Group of the CPC Central Committee for Response to COVID-19, and the special conference of SASAC in order to make detailed arrangements for the outbreak prevention and control, so that a work pattern of "consistent command, comprehensive deployment, three-dimensional prevention and control" quickly took shape. At the same time, the CCCG's Party Committee issued the "Notice on Fully Mobilizing Party Organizations and Members and Cadres at All Levels of the Company and Resolutely Winning the Fight against the Outbreak Prevention and Control", requiring Party organizations at all levels to resolutely assume responsibilities for the epidemic prevention and control, promptly and fully participating in the outbreak prevention and control.



Be the backbone of outbreak prevention and control as well as resumption of work and production

Three system documents were formulated in the prevention and control of the outbreak to exert pressure and implement responsibilities from various aspects such as organizational guarantee, working incentive and method carrier. We advanced the establishment of Party member vanguards, demonstration posts and volunteers— teams to undertake the tasks of building infrastructure against the outbreak, transportation guarantee and project resumption. 77demonstration posts and vanguard teams were awarded by the CCCG's Party Committee. one person was selected as the National Anti-outbreak Pioneer and National Outstanding CPC Member, and 45 outstanding advanced activists joined the Party through simplified procedures.

# RAISING MEDICAL SUPPLIES THROUGH GLOBAL PROCUREMENT

In the early stage of the outbreak, CCCG insisted on playing one game of chess both at home and abroad, worked hard to fight against the epidemic together. It timely coordinated with 253 overseas institutions in 121 countries and regions around the world, coordinated all parties to build a supply and demand chain between the group headquarters, subordinate units in the epidemic area, and overseas procurement personnel by establishing a working group of resource demand, supply and reception for overseas epidemic protection materials. CCCG arranged dedicated personnel to connect with overseas source channels and material transshipment, contributed with practical actions to China's battle against the epidemic.

#### **CHEC Egypt**

purchased 30,000 pieces of protective clothing and goggles

#### CCCC Malaysia

purchased **4,500** sets of medical protective clothing, **10,000** medical masks and **58,000** pairs of latex gloves

CCCC South America purchased more than

10,000 medical masks from Brazil and Uruguay

#### CHEC

purchased **2,000** pieces of N95 masks from Saudi Arabia and more than **17,000** pieces of medical masks from Qatar

# CCCC First Harbour Engineering UAE project

purchased 136,000
pieces of masks, and its
Bangladesh project purchased
30.000 pieces of masks

#### CCCC Mauritius

raised a total of 2,500 pieces of medical masks and 200 protective clothing

### Zhenhua Heavy Industries

Terminexus raised more than 2.12 million pieces of masks, donated more than 120,000 pieces of masks to domestic port users and provided more than 367,000 pieces of masks to overseas subsidiaries



CCCG rushes to help Wuhan from Cairo tens of thousands of miles away

# GIVING FULL PLAY TO ADVANTAGES, ASSISTING IN INFRASTRUCTURE CONSTRUCTION

As a central state-owned construction enterprise, the Group concentrated all the available resources and dispatched all the disposable forces, raced against time to devote itself to the supporting construction of various hospitals and laboratories.



As of February 20, and other subsidiaries of the Group had respectively built Wuhan "Huoyan" Laboratory and a mobile cabin hospital; participated in the construction of Wuhan Huoshenshan Hospital for 3 times, of Wuhan Leishenshan Hospital for once, of 11 hospitals in Hubei Province and of 6 mobile cabin hospitals in Wuhan.



### All parties worked together to support the construction of "Huoshenshan" Hospital

On January 30, CCCC Second Harbour Engineering received an urgent notice from the Wuhan Municipal Government that the construction of Huoshenshan Hospital lacked welders, riveters, equipment and materials for the installation of movable panels and they were in urgently need of assistance. CCCC Second Harbour Engineering responded to the request immediately and dispatched on the same day an assistance team consisting of 12 people and led by Liu Jianfeng from the Structure Company, a Model Worker of Hubei Province and Skilled Master of Wuhan City. Rushing to the scene, they assisted the construction party in the production of more than 200 sets of roof slabs. 50 sets of power transfer switches and waterproof distribution boxes as well as 10 containers were all delivered to the construction site before four pm on February 1. In the meantime, led by BUCG Daoqiao BIM Center, seven technicians from the BIM Technology Center of CCCC Fourth Highway Engineering participated in the completion of the free modeling task of Wuhan Huoshenshan Hospital. It only took 14 hours from team formation to the completion of the task. Their work was approved and adopted by the organizer and transferred to the construction unit, which has played a positive role in the collision inspection of the construction unit in the construction of the hospital. On the evening of February 2, Wuhan Project Department of CCCC First Highway Engineering Group actively rushed to the Huoshenshan Hospital to support the installation of hydropower equipment. CCCC Xi'an Road Construction Machinery Co., Ltd. provided JD4000 asphalt mixing equipment to participate in the construction of internal and surrounding roads.



### "Huoyan" Laboratory composed an anti-outbreak hymn of CCCG in four days and four nights

In order to speed up the detection of COVID-19 and eliminate suspected cases as soon as possible, it is necessary to build a pathogenic biological safety laboratory – "Huoyan" Laboratory in the shortest time. On January 29, CCCC Second Harbour Engineering received the task of building a laboratory. They immediately transferred the first batch of 12 management personnel from the five units in Wuhan, mobilized more than 100 project workers nearby to stand by on site, and transferred a total of 56 technical backbones in electromechanical, water and electricity, HVAC engineering to the site to cooperate with the construction around the clock. In the meantime, it contacted a number of cooperative units and mobilized workers to participate in the construction of the laboratory. Different from conventional housing construction projects, the construction of the "Huoyan" Laboratory has strict requirements for airflow control and negative pressure environment. The construction personnel of CCCC Second Harbour Engineering overcame the challenges of materials, technology, time, physical fatigue, etc. and built up a "high-standard, high-negative pressure" laboratory with only four days and four nights, which usually takes at least three months to build. There is a magnificent hymn of nearly 300 CCCG personnel working together to fight against the outbreak for this speed and quality.



#### Build "mobile cabin hospitals" to support "a piece of sky" for treating patients

The pneumonia caused by COVID-19 was very serious with a wide range of infections, a large number of people infected. Thus, the treating beds in the hospital were in shortage. The reconstruction of mobile cabin hospitals can quickly achieve the goal of expanding the capacity of admission. From February 5 to 12, CCCC Second Harbour Engineering constructed a mobile cabin hospital in the Rihai Factory as required, and was responsible for transforming Building C into a square cabin hospital. The total construction area is 17,000 square meters and the construction content includes the patient area and the doctor's office area, water and electricity facilities, HVAC, the construction of partitions and containers, where the patient area has 1,445 treating beds, 70 mobile toilets, and the doctor's office area has 70 containers.

# SAFELY AND ORDERLY PROMOTING RESUMPTION OF WORK AND PRODUCTION

Coordinating the epidemic prevention and control and resuming production and operation are not only a great battle but also a crucial test. The Group has fully implemented the spirit of the important instructions of General Secretary Xi Jinping, the decisions and deployments of the CPC Central Committee and the State Council on coordinating the epidemic prevention and control and resuming work and production, and fulfilled a series of requirements of the SASAC on the resumption of work and production of construction enterprises, organically embedded normalized epidemic prevention in the whole process of production and operation, resolutely achieved "grasping two links at the same time with two promotion", organized the resumption of work and production scientifically and efficiently at the fastest speed so as to ensure the successful completion of the annual targets and tasks and to reflect the Group's responsibility and mission in ensuring the stable operation of the national economy.

On February 6, a video conference over the Internet was held for the deployment of work resumption after the 2020 Chinese New Year Holiday. On February 21, a video conference on the resumption of project work and production was held on site. With the overall planning of the Group, the Jingxiong SG6 tender contracted by CCCC First Highway Engineering Group was approved for its resumption of work on February 18, becoming the first batch of projects in Xiong'an New Area and the first project on the entire line of Beijing-Xiong'an Railway. On February 21, Zhenhua Heavy Industries' ship "Zhenhua 26" left with quay cranes for the Dutch and German projects from Changxing Island. On February 28, the Dalian Bay Subsea Tunnel Project of CCCC First Harbour Engineering was officially resumed and the installation of the breast wall and backfilling between the breast walls in the construction area on the north bank began. In addition, CCTV and other media have focused and covered the resumption of work and production of a number of key projects of the Group and manufacturing enterprises, including Minjiang Nivigation-Power Junction Engineering Project in Qianwei by CCCC Fourth Harbour Engineering, Chongqing Wanzhou Loop Project and the West Section of Tianjin-Shijiazhuang Expressway Project undertaken by CCCC First Highway Engineering Group, the 3-contract project of Zhoushan-Daishan Sea Crossing Bridge by CCCC Road and Bridge International Co., shield tunneling machines produced by CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd.

In addition, in the face of the epidemic, small and medium-sized enterprises were in a situation where the capital chain could be broken at any time. The Group did everything possible to provide financial support for upstream and downstream enterprises in the industrial chain, and contributed to the resumption of work and production as well as stable employment.



On February 18, the world's largest-span road-rail steel truss cable-stayed bridge was built with the participation of CCCC Second Harbour Engineering——The sandwich wall concrete of the steel caisson of the main bridge of Changtai Yangtze River Bridge began its pouring for the first time



On February 28, Dalian Bay Subsea Tunnel Project resumed work and production



# CCCC Second Harbour Engineering issued the first asset-backed securities (ABS) for epidemic prevention and control

On February 14, CCCC Second Harbour Engineering issued the first asset-backed securities (ABS) per book building for epidemic prevention and control on the Shanghai Stock Exchange. The issuance scale is 230 million yuan with the maturity of one year and the priority coupon rate of 2.8%. The issuance has been completed within seven days, and the issuance efficiency has created a new record in the history of supply chain financial ABS products. The funds raised in the current special plan for supply chain asset support are mainly used to provide financial support to small and medium-sized enterprises in the upstream of the supply chain, helping them resume production and further supporting the construction of anti-epidemic enterprises at the frontier of epidemic areas, hospitals and scientific research laboratories in epidemic areas and related epidemic investment in the construction of prevention and controlling projects.

# GLOBAL BATTLE AGAINST EPIDEMIC, OVERSEAS EPIDEMIC PREVENTION AND CONTROL

As an important enterprise "going global" in China, after the outbreak of the overseas epidemic, CCCG has done well in his own work under the premise of obeying the overall situation of China's diplomacy politics on the epidemic prevention, and paid close attention to overseas epidemic prevention and control.

### Improving the construction of prevention and control system

It has established an epidemic prevention and control leading group overseas as soon as possible, and set up liaison groups in 113 countries (regions) to form a linkage between the Group headquarters, subordinate units and basis projects; established a grid of prevention and control that is horizontal to the side and vertical to the bottom.

# Strengthening supervision and inspectionStrengthening supervision man

In accordance with the requirements of the SASAC of "Four Investigations and Two Clarifications", "Two Stabilizations" and "Two Prohibitions" , it has carried out epidemic prevention and control investigations one by one on 969 overseas projects and approximately 100,000 overseas employees in 139 countries and regions around the globe, realizing a full coverage of inspections in key countries and projects.

# Strengthening medical protection as well as people-to-people care

It has participated in the establishment of a "Medical and Health Protection Platform of Overseas Staff of Central State-Owned Enterprises" to ensure the health management, medical demands and psychological counseling of its staff overseas.

### Coordinating the supply of anti-epidemic materials

It has organized the procurement of various anti-epidemic materials for overseas countries, meeting their needs of use and storage, and making a continuous and effective supply.

# Strengthening personnel management and control

In accordance with the principle of "Reassuring the People and Local Stabilization", CCCG has strengthened the "Three Assurances" of prevention, treatment and life, started the approval process for foreign affairs during the epidemic prevention and control period, strictly controlled the number of dispatched groups of personnel, prevented the import of overseas epidemics with consistent prevention and joint linkage.

### Actively undertaking social responsibility overseas

It has undertaken urgent construction tasks for mobile cabin hospitals in many countries, and provided moral support and assistance to the host country. So far, CCCG has donated 83 batches of various antiepidemic materials to 35 countries and regions including Germany, South Korea, Italy, Kenya, Malaysia, France, Algeria, the Netherlands, Sweden, Russia, and Bulgaria, totaling approximately 1,702,200 pieces and a rough value of 8.07 million yuan.



Sri Lankan Prime Minister Rajapaksa expresses his gratitude to CHEC Sri Lanka Colombo Port City Project for donating scarce medical supplies to the Sri Lankan government on his personal Twitter account



CCCG East Coast Rail Link project in Malaysia donates 3,000 pieces of N95 masks, 2,000 pieces of KN90 masks, 20,000 pieces of disposable medical surgical masks, 1,200 pieces of medical goggles, 2,000 sets test reagents and other COVID-19 prevention materials to the Malaysian government to help Malaysia carry out the epidemic



CRBC assists in the construction of Senegal's "Huoshenshan" Hospital for free



The Group cooperates with the Kenyan Ministry of Health to vaccinate the overseas employees of the Company



CCCC Project Kuala Lumpur Metro Line 2 donates outbreak prevention materials to local suppliers

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# RESPONSIBILITY FOCUS



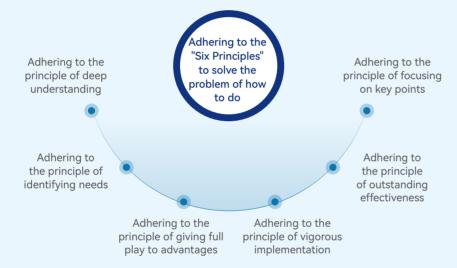


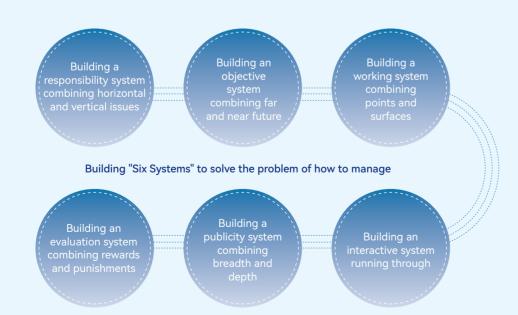


## **RESPONSIBILITY FOCUS II**

### BUILDING A DREAM WITH ONE HEART AND DELIVERING "SATISFACTORY ANSWER" TO POVERTY ERADICATION

CCCG has earnestly promoted its designated assistance in five counties (cities) including Lushui City, Lanping County, Fugong County, Gongshan County in Nujiang Prefecture, Yunnan Province, and Yingjisha County in Xinjiang, explored and continued to improve the "Government + Enterprise, Market + Plan, Long-term + Short-term" targeted poverty eradication model, adhered to the "Six Principles", strengthened the "Six Cohesions", optimized the "Six Systems", coordinated 36 subsidiaries to carry out designated assistance, and formed an efficient, and pragmatic CCCG pattern of poverty eradication with joint effort, which has contributed to the eradication of the 2,000-year-old historic problem of absolute poverty for the Chinese nation. CCCC Industrial Poverty Eradication and Development Co., Ltd. was awarded the title of National Advanced Collective for Poverty Eradication.





Focusing on poverty Focusing on poverty Focusing on poverty alleviation through alleviation through Implementing "Six education transportation industry Cohesions" to solve the problem of what to do Focusing on poverty Focusing on poverty Focusing on poverty alleviation through alleviation through employment Party building

# FOCUSING ON DEEP-ROOTED POVERTY AND HIGHLIGHTING THE RESPONSIBILITY OF CENTRAL STATE-OWNED ENTERPRISES

Five counties (cities) receiving CCCG designated assistance belong to the "Three Regions and Three Prefectures", which are deeply impoverished areas in China and an important battlefield for poverty eradication. Among them, four counties (cities) belong to the 52 impoverished counties listed under the supervision of the State Council's Poverty Eradication and Development Leading Group, accounting for 7.69%; they account for more than 14.29% among the 27 impoverished counties receiving the designated assistance from central state-owned enterprises that have not been lifted out of poverty. They are the poorest in the deeply impoverished areas and hardest part to conquer. During the three-year efforts for poverty eradication (2018-2020), we invested a total of 637 million yuan in designated assistance funds and implemented nearly 150 targeted poverty eradication projects to help 267,500 people and 249 poor villages in Nujiang Prefecture get out of poverty; helped 119,300 people and 117 poor villages in Yingjisha County out of poverty. The Group has been rated as "good" for three consecutive years in the performance evaluation of designated poverty eradication work by the central units and has been awarded with titles of "Poverty Eradication Star Enterprise" and "Advanced Poverty Eradication Unit" in Yunnan Province and Nujiang Prefecture for many times.



On October 15, Wang Tongzhou, Secretary of the Party Committee and Chairman of CCCG participated in the Poverty Eradication Forum of Central State-owned Enterprises under SASAC





CCCC Industrial
Poverty Eradication
and Development
Co., Ltd. is awarded
the honorary title of
National Advanced
Collective for Poverty
Eradication.

### COMBINING BUSINESS ADVANTAGES TO GIVE FULL PLAY TO THE POVERTY ERADICATION POWER OF CCCG

Taking advantage of its main business, CCCG has invested more than 250 million yuan in the construction of the Nujiang Lianxin Bridge and the Fugong Munima Bridge in Nujiang Prefecture. After the completion of the two bridges, they will effectively solve the transportation, production and living problems of more than 30,000 local people. It has put in 16 million yuan to assist in the construction of resettlement sites in Nujiang Prefecture, which has solved the housing problem of more than 3,000 resettlers in 741 households by uprooting their poverty origins. The road to tourist attractions jointly built with Yingjisha County. Xinjiang with an investment of more than 63 million yuan has been put into use, which has solved the traveling difficulty for the people in Chengguan Villiage, Wugia Town, and laid a solid foundation for the development of local tourism industry.



On August 12, CCCG's Nujiang Lianxin Bridge was officially opened to traffic

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Scan the QR-code to watch the short film: Ana and the Bridge

Building the bridge that connects people's hearts

### AIMING AT INDUSTRIAL EMPLOYMENT AND TEACHING PEOPLE TO FISH FOR THE LONG HAUL

The fundamental solutions for poverty eradication are industry and employment. CCCG has invested 368 million yuan to construct and implement the first phase of poverty eradication project of the "incubation zone" in Nujiang Green Spice Industrial Park using the "industrial assistance + construction and operation" model. More than 15 million yuan has been invested to implement poverty eradication projects such as pitaya planting, forage processing, beef cattle breeding, and apiculture of Chinese honeybees, which have promoted the employment of 404 registered poor households to increase their income. It has invested 9 million yuan to continuously support Nujiang Prefecture to hold three "CCCC Cup" China Nujiang River Kayak Wild Water International Competitions, creating an international business card for the cultural and tourism industry of Nujiang Prefecture. Furthermore, it has invested 5 million yuan to build 25 mobile greenhouses in Yingjisha County, Xinjiang, which has solved the problem of concentrated seedling cultivation in 50,000 arch sheds in the county, lifted 16,700 poor people in the two regions out of poverty stably and helped them live well-off lives. Moreover, 652 million yuan has been put in for the industrial investment fund of central state-owned enterprises in poverty-stricken areas to promote the stable eradication of poverty for the poor. At the same time, relying on the projects under construction in Yunnan and Xinjiang, CCCG has precisely strengthened the export of labor services, helped Nujiang Prefecture and Yingjisha County create jobs for more than 1,770 poor people; it has held in Nujiang Prefecture and Yunnan University special recruitment campaign for college graduates from Nujiang Prefecture, in which 71 poor college students have been recruited.

### STIMULATING ENDOGENOUS MOTIVATION AND ELIMINATING **CONSCIOUSNESS POVERTY**

CCCG has actively promoted poverty eradication through education and cut off the intergenerational transmission of poverty. A total of 150 million yuan has been invested to build CCCG Lanping New Era Hope School in Nujiang Prefecture, Yunnan Province to help more than 3.000 relocated students enrolled in school. It has also invested more than 38 million yuan to set up the Scholarship for Poor University Students in Nujiang Prefecture as well as the Teacher Quality Improvement Fund; carried out the reconstruction and expansion projects of Lushui City No. 1 Middle School and Latudi Elementary School in Fugong County, as well as the farmer workshop project. It put in 18 million yuan to provide uniforms for 100,000 students in Yingjisha County, Xinjiang. It also invested 7.88 million yuan to implement doctor training, emergency relief and other projects to effectively improve the medical level of poverty-stricken areas.



On November 26, CCCG's "turnkey" project Lanping New Era Hope School was officially completed

CCCG has attached great importance to the poverty eradication through Party building. It has invested 6.25 million yuan to rebuild and expand the village-level Party member activity centers in Nujiang Prefecture and Yingjisha County, organized the affiliated units to sign the "Responsibility Letter of Joint Construction by Party Branch Pairs" with the assisted counterpart areas to strengthen the support of basic Party building and demonstrate the basic Party organizations as the role of fortress in the battle against poverty. The CCCG Youth League Committee and the Nujiang Prefecture Youth League Committee have established projects such as the "CCCG Youth Funds for Realizing Dreams" and "Youth Learning & Practice Base" to provide financial support to poor students throughout the prefecture.

### RESOLVING THE IMPACT OF EPIDEMIC AND EXPLORING LONG-TERM MARKET MECHANISM

It is of great significance that we promote poverty eradication through consumption, so that urban residents can buy good stuff, products of poverty eradication could be sold at fair prices, a good mechanism for production and sales could take shape, good industries in poverty-stricken areas can be cultivated, the poor could have better ways to increase their income and there will be a good platform for the social participation. In order to stimulate the development of characteristic industries in the counterpart areas and broaden sales channels, so that the common people can have a real sense of gain, CCCG has mobilized all parties to purchase and help sell 12 million yuan of agricultural products in poverty-stricken areas as of the end of 2020. The "Three Regions and Three Prefectures" E-commerce Poverty Eradication Day event was held in Beijing on August 8. The persons in charge of poverty eradication from eight central stateowned enterprises including CCCG brought great local specialties of eight places in "Three Regions and Three Prefectures" to the studio. The total number of viewers reached 3.87 million, and the transaction volume reached 11.2974 million yuan.



"One County, One Industry" products of poverty alleviation through consumption of CCCG



#### CCCG held poverty eradication product exhibition and sales event

On October 26, CCCG's "Facilitating Poverty Eradication through Consumption and Fulfilling the Responsibilities of Central State-owned Enterprises" poverty eradication product exhibition and sales event was held in CCCG Head Office. Taking advantage of the resource endowment of designated poverty eradication areas, and combining local reality, CCCG intensively publicized, displayed and promoted a batch of (more than 10) agricultural products of high-quality and local characteristics, including coffee, morels, walnut oil, olive oil and amomum tsao-ko series from its designated areas of poverty eradication. Through offline and online promotion, online sales and other forms, it has built an online and offline "Internet +" supply and marketing model, opened up the "main channel" of poverty eradication through consumption, and improved the recognition and added value of local specialty product brands, broadened sales channels of local agricultural and sideline products, supported the rapid development of planting and breeding in designated areas of poverty eradication, effectively enhanced the efficient connection of poverty eradication and rural revitalization, and helped people there get rich and increase income.



### **RESPONSIBILITY FOCUS**







"The establishment of CCCG's highend science and technology think tank is an important measure to integrate the wisdom of experts and provide intellectual competence, knowledge and technological support for fulfilling China's major demand and

--Zhang Jianyun, academician of the Chinese Academy of Engineering

strategic deployment."

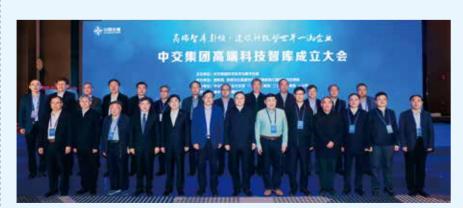
## RESPONSIBILITY FOCUS III

### STIMULATING VITALITY AND TAKING **ADVANTAGE OF "ACCELERATION" FROM** TECHNOLOGICAL INNOVATION

In order to further implement the innovation-driven development strategy and comprehensively build a world-class technology-based enterprise with global competitiveness, CCCG has actively promoted the reform of science and technology system, continuously optimized the incentive mechanism, strived to cultivate an innovation ecology, formulated and implemented a series of important science and technology policies, in order to stimulate and release the innovation vitality and motivation of the vast number of scientific and technological personnel, mobilize the innovation resources of the whole society to a greater extent, strengthen the independent as well as integrated innovation, and build the innovation capacity of central state-owned enterprises under SASAC. The "Independent R&D and Industrialization of Large-Scale Offshore Cutter Suction Dredging Equipment" won the special prize of 2019 National Science and Technology Progress Award, the Hong Kong-Zhuhai-Macao Bridge won the "Super Engineering Award" by the International Bridge Conference, two projects won the ENR Global Best Project Award, 35 projects won the National Quality Engineering Award, and six projects won China Civil Engineering Zhan Tianyou Award.

### CONSOLIDATING THE FOUNDATION FOR INNOVATION WITH TOP-LEVEL STRUCTURE **AS THE GUIDE**

CCCG has established the "Leading Group for Technology Innovation and Key Core Technology Research", established a high-end scientific and technological think tank composed of 40 academicians and experts, added members to the Group's expert committee, formed a youth expert committee, and improved the Group's "1+3" decision-making and consulting system of scientific and technological innovation. Every November is designated as the Group's "Science and Technology Month" to create the environment and atmosphere for the Group to encourage technological innovation through institutional arrangements. In 2020, the Group strengthened its strategic leadership in scientific and technological innovation, actively and orderly supported the preparation of the "14th Five-year" scientific and technological development plan and optimized the discussion draft of it.



In 2020, CCCG's high-end technology think tank composed of 40 academicians and industrial academicians and the widest professional coverage among central state-owned enterprises

### FOCUSING ON INNOVATION MECHANISM TO STIMULATE INNOVATION VITALITY

CCCG has continuously increased its incentives for scientific and technological innovation and vigorously implemented its mediumand long-term incentive policies in order to fully stimulate the vitality of scientific and technological innovation and mobilize the enthusiasm for innovation and creation within and out of the Group to a greater

Increasing the intensity of scientific and technological awards

Actively equity and dividend incentives for technologyhased enterprises

Establishing awards such as Outstanding Technological Innovation Enterprise Award, Outstanding Technological Innovation Team Award, Outstanding Achievement Award, Outstanding Contribution Award and Innovative Talent

Increasing the amount of science and technology awards and calculating them separately so that it would not occupy the total annual salary of each unit.

Implementing a job-dividend incentive mechanism for design and consulting companies and technology-based enterprises in the key industries supported by the Group, strategic emerging industries, and high-end areas of the value

Implementing project income dividend incentive mechanism for scientific research achievements that are representative, innovative, and have a good prospect for achievement transformation, and can form a demonstration effect.

Exploring and developing equity incentive mechanism for technology-based enterprises in the engineering and manufacturing fields with strong willingness to reform, strong technological innovation capabilities, outstanding high-tech elements and a high proportion of R&D personnel.

Advancing staff shareholding and project followup investment in mixed-ownership

Prioritizing the development of staff shareholding mechanism for technologybased enterprises and pilot enterprises of mixed-ownership reform listed in the "Double Hundred Action" and "Science Reform Demonstration" of the SASAC.

Implementing a mechanism of project follow-up investment by technological cadres for the project invested by CCCC Innovation and Entrepreneurship

### FOCUSING ON CAPITAL INVESTMENT TO STRENGTHEN INNOVATION ASSURANCE

enterprises

CCCG has always focused on the national strategy and high-quality development demand, placed technological innovation at the core of the overall development of the Company, striven to achieve technological self-reliance. It has taken multiple measures and continuously increased its investment in science and technology, so as to provide a strong guarantee for building a world-class technological enterprise.

First, adhere to the R&D investment model with funds of headquarters as the drive and funds of secondary enterprises as the main body to ensure that the Group's overall R&D investment growth rate during the "14th Five-year" is not lower than its development growth rate; establishing a mechanism of simultaneous layout, research and development for major projects, and guiding major projects to increase R&D investment.

Second, encourage the undertaking of major national science and technology project research and development, and the headquarters will provide supporting funds as appropriate for major national science and technology projects and national key research and development projects led by the Group and its affiliated companies. For the research and development projects implemented to fill the domestic gaps and make up for shortcomings, they will be supported with "one project one discussion".

Third, promote the deep integration of technology and finance. CCCG Science and Technology Innovation and Entrepreneurship Fund with the initial fundraising scale of 1 billion yuan will be leveraged to drive more social capital focusing on smart transportation, smart city, transportation big data, smart construction, ecological environmental protection, etc., and strengthen the integration of science and finance. We are to try incubators, accelerators, venture capital and other science-finance integration modes, actively incubate outstanding scientific and technology achievements, and enhance the driving power for their transformation.

experts was established. It is the high-end technology think tank with the largest number of

# BUILDING AN INNOVATION ECOLOGY WITH THE SUPPORT OF KEY PLATFORMS

The innovation platform is the core component of CCCG's innovation system and the strategic force of technological innovation. During the "13th Five-year" period, CCCG added two engineering research centers, one surgical observation and research station, two nationally recognized enterprise technology centers, and three post-doctoral research workstations on the national level as well as 56 new innovation platforms of various types on the provincial and ministerial level. Four new field scientific observation and research bases in the transportation industry were approved for the first time. Nine Group R&D centers were newly-built, including two overseas regional R&D centers, the South Asia Regional R&D Center (Sri Lanka) and the West Africa Regional R&D Center (Côte d' Ivoire). CCCG has always attached great importance to the demonstration and leading role of model workers (craftsmen). It has selected and awarded two batches of 19 innovative studios of model workers (craftsmen) in order to provide important supports for industrial upgrading of the Group to achieve development of high quality, high efficiency and highly competitiveness.

At the same time, it has established and improved its intellectual property protection system, formulated the Measures of CCCG for Intellectual Property Management, and integrated the awareness of risk prevention on intellectual property throughout the entire process of scientific research, production and operation activities, promoted the high-quality development of intellectual property, and effectively supported the transfer and conversion of scientific and technological achievements.

# TAKING MAJOR PROJECTS AS THE TRACTION TO CREATE CARRIER OF INNOVATION

Focusing on the main businesses and advantages of CCCG's "Great Transportation" and "Big City" as well as systemic integrated innovation, it has been pooling resources from production, teaching and research, performing cross-field collaborative researches, implementing two major scientific and technological projects, innovating scientific and technological research and development models, and creating a carrier of innovation of systematic, institutionalized and integrated application of research and development for the science and technology.

# Science and technology project: CCCG Intelligent Road

Relying on the highways invested, constructed and operated by the Group, we have made breakthroughs in system research and development in the technical directions of smart pavement, smart roadside equipment, vehicleroad coordination, unmanned driver assistance systems, integrated logistics services, smart transportation systems; integrated and applied modern comprehensive transportation technologies, green highways, smart highways, smart service areas, transportation and travel integration, comprehensive transportation big data and other technologies in order to perform researches and demonstrations. We have achieved the benign interaction between physical engineering and new technologies and became a "smart road pioneer" relying upon the continuous iteration and innovation of the project.

# Science and technology project: CCCG Future City

Docking the national development strategy of smart cities, selecting appropriate regions and urban complexes, coordinating relevant parties to converge and use core technologies such as smart infrastructure, smart factories, smart buildings, smart transportation, smart cities, ecological cities, smart water services and digital communities, we have actively explored and advanced the "CCCG Future City" technology project in phases and step by step, realized the instant update of new technologies and promoted the comprehensive intelligence of production, life and ecology, adopted it as a comprehensive test field for CCCG's technological innovation in the "big city" field in order to build a model of CCCG future city.

# POOLING INNOVATIVE FORCES WITH OPENNESS AND COOPERATION AS THE FOUNDATION

CCCG has always adhered to the combination of independent innovation and open collaboration, striven to give full play to the major role of enterprise in the innovation, actively gathered innovative forces from all parts of society and created an open and cooperative innovation ecology. CCCG has actively integrated into the overall situation of national science and technology innovation, taken the lead in organizing and undertaking more than 50 scientific research projects of the state, various ministries and commissions. Furthermore, CCCG has vigorously strengthened its international cooperation, carried out in-depth cooperation with the International Building Wisdom Alliance and edited the ISO international standards of BIM for water transportation engineering; jointly performed international innovation acceleration activities with the French LAFARGE Group and the Swiss Sika Group on a global scale, which have been successfully carried out for twice. It has formed an annual two-way regular exchange mechanism with the French LAFARGE Group for the backbone of the innovation platform technology.

Taking the lead in organizing and undertaking more than 50 scientific research projects of the state, various ministries and commissions



Closely integrate scientific and technological development trends, national strategies and security, market and on-site needs, regularly publish the list of key R&D demands of CCCG, and jointly carry out technological research with various innovative entities in society. Exploring the implementation of the "revealing the ranking" of major scientific and technological projects and the "cabinet system" of scientific and technological R&D project leaders. The project leaders can make independent decisions to integrate internal and external superior resources, and they are empowered to organize implementation, follow-up evaluation, financial supervision, and promotion of results, etc.



There are currently 110 platforms of various types, involving industrial fields such as highway engineering, waterway engineering, waterway dredging, intelligent transportation, etc., forming clusters of innovation platforms with a chain of innovative links that integrates basic application research, technology research and development, achievement transformation and industrialization. Facing the whole society, CCCG will open up all innovation platforms for scientific research, talent training, popular science education and social services, encourage all sectors of society to actively participate in joint construction. Key laboratories at all levels set up open topics for universities, research institutes and enterprises at home and abroad, with no less than 50 projects per year.



Focus on key areas and key directions such as modern comprehensive transportation, urban development and construction, ocean and water development and governance as well as core equipment, promote the technology cooperation on Belt and Road Initiative, and drive China's technology, standards and core equipment "going global." Accelerate the deployment of regional R&D centers overseas, vigorously carry out international scientific and technological cooperation and actively participate in global engineering scientific and technological innovation as well as governance.

# 20 MAJOR SCIENTIFIC AND TECHNOLOGICAL ACHIEVEMENTS OF CCCG

CCCG insists on the construction of major national projects facing the frontiers of scientific and technological development as well as both domestic and international markets, continuously improves its scientific and technological innovation system, steadily enhances independent innovation capabilities, and constantly breaks through key core technologies. It has attained a series of major scientific and technological achievements, supported a large number of major project constructions and formed unique core technological competitiveness, making "Chinese Road", "Chinese Bridge", "Chinese Port", "Chinese Island" and "Chinese Port Machinery" world-renowned national business cards.

o Key technologies for offshore deep-water port construction

It has solved the problem of insufficient shoreline in China's deep-water ports, giving China the strength to build ports anywhere in the world Underwater tunnel construction technology and equipment

It has promoted China's cross-sea channel and river crossing channel construction technology entering the world's forefront o Road construction technology in permafrost regions

It has filled the world's technological gap in building asphalt roads in permafrost regions

•• o Long-span bridge construction technology and equipment

It has aimed at the structure safety, intelligent construction, intelligent management and service of longspan bridges, forming China's core competitiveness in the field of bridge

 O Construction technology of long and mountainous highway tunnel

CCCG has overcome technical difficulties in the survey, design, construction, operation and equipment of the long and mountainous highway tunnel

ro River basin governance and water treatment technology

It has formed a river basin governance technology system that combines full coverage of supervision and governance, governance of external sources and internal sources, and source control restoration Offshore wind power construction technology

CCCG has conquered key technologies such as offshore wind turbine installation and equipment, wind power foundation construction and equipment, offshore wind farm maintenance, and new materials of wind power and durability

 Super large diameter shield manufacturing and construction technology

CCCG has accumulated experience in construction of large-diameter shields, river- and sea-crossing tunnels under complex geological conditions, and reserved key core technologies

:- O Rapid land formation technology for artificial islands

It has significantly shortened the total construction period of the island tunnel project, saved costs and energy

Engineering analysis and basic design software

In many fields such as bridges, immersed tube tunnels, ports, etc., CCCG has developed design analysis software with completely independent intellectual property rights

•• o Completing set of technology for highway survey and design

It has summarized successful experience of new construction and expansion of major highway projects, and formed a complete set of technologies in the field of highway engineering survey and design o Overseas railway construction and operation technology

It has broken through various barriers for Chinese railways to go abroad, and provided whole industry chain solution for Chinese railways to "go global" o Dredging and land reclamation technology

CCCG has established a theoretical system of dredging excavation and transportation, and pioneered high-precision dredging and automatic dredging of deep foundation trenches

Road traffic safety prevention and control and emergency protection technology

It has created a complete set of theory and technical system of comprehensive prevention, control and intervention for traffic safety that is appropriate for the full life cycle of roads  o Engineering construction technology of inland waterway locks and navigation channels

It has filled the gap in the research of watersaving lock technology and innovated the structure of energy dissipation and beach protection

Fully automated terminal technology

CCCG has formed an overall solution for a fully automated terminal with independent intellectual property rights Offshore equipment manufacturing technology

It has improved China's deepsea resource mining capacity and offshore heavy lifting capacity, breaking through the core technical bottleneck Engineering digital standards and technology

It has filled in the gap of highway and water transportation information model standards in China

•• o Construction technology for large-scale dredging ships and core equipment

It has ended the situation that China's dredging equipment completely relied on foreign imports, marking China's entry into the great country of dredging o Beidou and high-resolution satellite application technology

It has formed GNSS high-precision space-time reference for applications from meters to millimeters in the transportation industry with a wide-area coverage capability





The Songyuan-Tongyu Highway in Jilin opens to traffic

# BUILDER OF NATIONAL STRENGTH IN TRANSPORTATION

Transportation is the key to rejuvenating a country and the foundation of a strong country. Transportation is a basic, leading, strategic industry and an important service industry in our national economy. It has an important position and role in building a new development pattern. CCCG focuses on the construction of national comprehensive transportation corridors, major hubs and logistics networks, makes a full-dimensional layout on great transportation, great cities, rivers, lakes and the seas relying on Group's premium EPC qualifications for road, port and waterway engineering construction projects as well as EPC qualification (level I) for municipal public engineering construction projects to consolidate its leading position firmly, adapts to the trend of digital development vigorously, seeks innovation and strong advantages in smart roads and smart ports. The Group development of the rail transit construction market, explores the integrated management of construction, investment and transportation, integrated management and control of market and production, and improves the "CCCG Railway" branding in order to help build the national strength in transportation in all aspects.



#### The pilot plan for building national strength in transportation was approved

In 2020, the Ministry of Transport approved the pilot plan for building national strength in transportation submitted by CCCG and agreed that the Group should carry out pilot work regarding six areas, namely improvement of integration implementation ability for the integrated transportation infrastructure and the entire industry chain, the construction of the "100-year qualitative project of safety" in transportation infrastructure, the development and application of key technologies, innovation of investment and financing models, improvement of transportation service quality and improvement of global competitiveness.

### RECREATING THE MIRACLE OF "CHINESE ROAD"

CCCG is the world's largest expressway designer and construction operator. During the "13th Five-year" period, it has given full play to the advantages of the entire production chain, built a high-end marketing platform, and won bids for projects such as Hegang-Dalian, Songyuan-Tongyu, Changchun-Fuyu, Linhe-Baigeda and Urumqi-Yuli highways. In 2020, the Group won 10 bids for projects worth over 10 billion yuan and the contract value of Guangxi highway and Chongqing highway projects reached 32 billion yuan and 27.1 billion yuan respectively.



The Wanning-Yangpu Highway in Hainan Province is successfully opened to traffic, marking the east-west and north-south highway in Hainan Province is fully completed



# The full line of Yuli-Qiemo Highway (based on sand) of Xinjiang Urumqi-Yuli Highway Package Project was completed

On September 24, the full S254 line of Yuli-Qiemo Highway (based on sand) of Xinjiang Urumqi-Yuli Highway Package PPP Project is completed by CCCC Third Highway Engineering, which has laid foundations for the full operation in 2021. This highway is invested and constructed by CCCC and its EPC branch is in charge of the management. The Xinjiang Urumgi-Yuli Highway Package PPP Project consists of five projects, namely Xinjiang Urumqi to Yuli, Yuli to 35th Regiment, 35th Regiment to Ruoqiang, Itunbulak to Ruoqiang, and Yuli to Qiemo. With the total length of 1,305 kilometers, it is the largest PPP project in construction currently in China. The Yuli-Qiemo Highway is located in the Tarim Basin between the southern slope of the Tianshan Mountains and the northern foot of the Altun Mountains in southern Xinjiang. The route is 334 kilometers long and passes through the hinterland of the Taklimakan Desert known as the "Sea of Death". It is a highway in the desert with the longest mileage under construction, the widest distribution of mobile sand dunes, the worst construction conditions, severe coldness and summer heat, frequent sandstorms and the most difficult construction in the world. After the completion of the Yuli-Qiemo highway, the driving distance from Qiemo County to Korla City will be shortened by 350 kilometers, and the driving time will be shortened from 12 hours to more than six hours, which can effectively solve the problems such as the long travel time, high cost of living and difficult sales of agricultural products for local residents. At the same time, the area that the route passes through is the oil geological accumulation zone in the Tarim Basin, which will provide strong support for future oil and gas exploration, development and transportation, and further promote the economic and social development of the southern Xinjiang region.

Xinjiang Urumqi-Yuli Highway Package PPP Project has a total length of

1,305 km.

#### CCCG Video





Scan the QR-code to watch the video: What kind of experience is it to build a highway in no man's land



### Yangbajing to Lhasa section of G6 Beijing-Tibet Highway was open for trial run

On October 1, the Yangbajing to Lhasa section of G6 Beijing-Tibet Highway undertaken by CCCC First Highway was open for trial run, which means the journey from Lhasa to Yangbajing would be shortened to one hour. The project is featured by complex and changeable topography, geological disasters, many interference factors in route layout, and great difficulty in coordination. At the same time, due to the characteristics of severe coldness in high-altitude areas, the fragile ecological environment along the route, the difficult environmental restoration, the high social attention and the extremely challenging environmental protection, the construction is very sophisticated. Since the start of construction, employees of CCCC First Highway have fought on the snow-covered plateau against the wind and snow, provided the most comprehensive and high-quality technical services for the project construction and become a reliable technical force in the project construction that have been praised by the owners many times.

#### **CCCG Video**





Scan the QR-code to watch the short film:
The Road

### CONTINUING THE GLORY OF "CHINESE BRIDGE"

CCCG is at the world's leading level in the construction of bridges. It has designed and constructed five of the world's top ten cable-stayed bridges, six of the top ten suspension bridges, six of the top ten alpine canyon bridges, and seven of top ten cross-sea bridges. In 2020, the Group led the development of diversified markets generally and formed a business structure with traditional road and bridge businesses as the core, and with long and huge bridges and river crossings as important components, effectively supporting the sustainable development of road and bridge businesses.



The world's first high-speed railway suspension bridge -Wufengshan Yangtze River Bridge is officially opened



Nanjing Jiangxinzhou Yangtze River Bridge (Nanjing Yangtze River Fifth Bridge) is completed and opened to traffic



Panoramic view of the Ji'nan Jinsha River Bridge of Huaping-Lijiang Highway



The world's largest-span mountain canyon suspension bridge – Jin'an Jinsha River Bridge of Huaping-Lijiang Highway was completed and opened to traffic

The Jin'an Jinsha River Bridge of is an important controlling project of the Huaping-Lijiang Highway Project and undertaken by CCCC Second Harbour Engineering and CCCC Second Highway Engineering, invested and constructed by CCCC with its EPC branch as the head of management. The bridge is a double-tower, double-cable-plane, single-span, simply-supported, plate-truss-combined, stiffening-beam suspension bridge with a main span of 1,386 meters. It is a worldwide construction of a steel truss suspension bridge with high difficulty in mountainous canyons that with complex structure and technology in the "Three High Areas" (high altitude, large elevation difference and high seismic intensity). The vertical height difference between the bridge deck and the valley bottom river surface is 335 meters and has set four records: the suspension bridge with world's largest span in mountains; the world's first bridge with 100% U-rib full penetration welding technology; the bridge deck is 27 meters wide with a span of 1,386 meters, so the width-to-span ratio ranks first in the world; the beam hoisting system of the steel truss has a span of 1,386 meters, which is currently the world's largest span cable crane in the field of bridges.

"After the completion of Huaping-Lijiang Highway, the travel time from Lijiang, Yunnan to Panzhihua, Sichuan will be shortened from the original seven hours to two hours. This is of great significance to help Lijiang to integrate into the Chengdu-Chongqing Economic Circle, speed up the construction of Great Western Yunnan Tourism Ring, Lijiang-Sichuan Economic Corridor, Jinsha River Green Economic Corridor and the Greater Shangri-La Tourism Economic Circle, and promote the development of northwestern Yunnan as well as the rural revitalization and the facilitation of tourism development. This project will benefit 1.1 million people of all ethnic groups along the route and has become the long-awaited project in the public interest that people of all ethnic groups in Lijiang and Panzhihua support and a top priority for the long-term economic and social development of Lijiang and Panzhihua."

——Cui Maohu, Secretary of the Lijiang Municipal Party Committee

The accomplishment of Huaping-Lijiang Highway will benefit million people of all ethnic groups along the route



The largest petrochemical port in China: Sinopec Zhongke Refining and Chemical Port is fully completed and put into use

### POLISHING THE BUSINESS CARD OF "CHINESE PORT"

CCCG is the world's largest port design and construction company. Under the new development pattern with the domestic circulation as the main body and the mutual promotion of the domestic circulation and international circulation, the domestic trade demand in the domestic shipping market continues to increase. In 2020, CCCG followed China's regional development strategy and worked on the construction of the Four Grand Canals, focused on the coordinated development of Beijing-Tianjin-Hebei and the construction of the sea port of the Xiong'an New Area, high-qualitative development of Jiangsu coast, comprehensive development of the north side of Xiaoyangshan, the construction of the riverto-sea intermodal service center at Ningbo-Zhoushan Port, the construction of Shenzhen's "Huge Sea Port", the construction of Guangzhou's Nansha Port area, the construction of a new western land-sea channel and the Hainan Free Trade Port, and the overall layout of the "four horizontal, four vertical" high-grade waterways as well as two networks, and actively expanded the channel improvement, worked on dredging, navigation and hydropower shipping hubs, navigable buildings and port construction and comprehensive development. Furthermore, it accelerated the intelligent upgrading of port machinery automation, and vigorously promoted the smooth flow of "domestic and international circulation" around the construction of smart ports, improvement of logistics efficiency and green manufacturing.

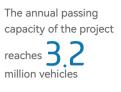


On March 4, Zhenhua Heavy Industries' first batch of smart straddle carriers was officially delivered at the Hutchison CTN terminal in Sweden



# The world's largest cargo-passenger Ro-Ro terminal was opened

On September 26, the world's largest cargo-passenger Ro-Ro (roll-on/roll-off) terminal, which is designed, constructed and purchased by CCCC Second Harbour Consultants (EPC) - Cargo-Passenger Ro-Ro Terminal at Nanshan Operation Area of Xuwen Port Area of Zhanjiang Port was officially opened. The project is a key construction project in Guangdong Province and is located in Nanshan Town, Xuwen County, Zhanjiang City, A total of 16 5,000-ton passenger-cargo Ro-Ro berths and one 5,000-ton Ro-Ro berth for dangerous and special goods have been built, equipped with the supporting construction of breakwaters, navigation channels and dangerous goods inspection stations, comprehensive transportation hubs and other facilities. The project is designed with an annual passing capacity of 3.2 million vehicles and more than 17 million passengers, which can meet the demand for vehicle and passenger throughput in the Qiongzhou Strait in 2030. During the construction of the project, the concept of "smart port" was actively implemented for the convenience of ship docking, the humanization of passenger boarding, the seamless connection of passenger transportation, the integration of vehicle inspections and the intelligent management of information in order to build a golden passage for passengers, vehicles and goods as well as a "three-in-one" modern water and land transportation comprehensive hub. After the completion of the project, the travel time between Guangdong and Hainan is expected to be shortened to more than one hour, which is of great significance for promoting the construction of Hainan Free Trade Port and the interconnection of land and sea transportation infrastructure in Guangdong and Hainan.



Annual passing capacity of the project is more than 17

million passengers



Zhanjiang Xuwen Port Project



# The world's most efficient container terminal for automated loading and unloading passed the completion acceptance

On May 13, the Dubai Universal Terminal at Qianwan Port Area of Qingdao Port (Phase II), which was designed by CCCC First Harbour Consultants. undertaken by CCCC First Harbour Engineering, with its loading and unloading system provided by Zhenhua Heavy Industries, passed the completion acceptance, marking the world's most efficient container terminal for automated loading and unloading was officially put into operation. The wharf adopts a caisson gravity structure, with a coastline of 660 meters in length, including one dedicated berth for 100,000-ton container and one dedicated berth for 30,000-ton container. Its designed annual handling capacity accounts to 1.3 million TEUs. The terminal is equipped with technologies such as the Internet of Things, intelligent control, big data, cloud computing, etc., which can realize full automation of terminal business processes. After the completion of the project, it will be of great significance for Qingdao Port to accelerate the construction of a green and smart port, become a world-class marine port, and help Qingdao develop into an important node city of the New Asia-Europe Bridge.



Dubai Universal Terminal at Qianwan Port Area of Qingdao Port

### HIGH-QUALITY CONSTRUCTION OF "RAIL TRANSPORTATION"

CCCG is the "new force" of China's railway going global and a leader in China's urban rail transportation construction. It has successfully won bids for major projects such as Chengdu Metro Line 17, Tianjin Metro Line 11 and Hangzhou Metro Line 10.



On October 28, the projects of Shenzhen Metro Line 8 Phase I and Shenzhen Metro Line 2 Phase III were officially opened for operation



On December 18, the project of Chengdu Metro Line 17 Phase I was officially opened for operation

#### Sanya Tram Demonstration Line was opened for operation

On October 10, the first tram project invested and operated by CCCG, Sanya Tram Demonstration Line, was officially open for passengers. It is the first domestic tram line to be constructed in the PPP mode and a typical PPP project announced by the National Development and Reform Commission. It is also the first urban rail transit line in Hainan Province. The demonstration line has a total length of 8.37 kilometers and a design speed of 70 kilometers per hour. It starts from Jiangang Road Station in the south and ends at Sanya Railway Station in the north. There are 15 stations on the whole tram line. As a new urban rail transportation method, trams have the characteristics such as intensiveness and efficiency, greenness and environmentally friendly, safety and comfortableness, convenience and punctuality. The opening and operation will effectively improve the public travel experience of its residents, enhance the quality of urban transportation, and expand the urban spatial layout.



Sanya Tram Demonstration Line

Sanya Tram
Demonstration Line
of total **8.37**km
was opened for
operation officially

### **BUILDING HIGH-QUALITY "CCCG AIRPORTS"**

CCCG has given full play to the comprehensive advantages of the airport construction group, focused on key areas such as hub airports, general airports, airport facilities, and promoted the implementation of key projects such as Sanya's new airport. In 2020, the Group won the bid for the major project of Hangzhou Xiaoshan International Airport, and the Singapore Changi Airport project implemented by China Highway Engineering Consulting Corporation was progressing steadily.



# The flight area and road project of Zhoushan Putuoshan Airport passed the completion acceptance

On July 27, Zhejiang's Zhoushan Putuoshan Airport's flight area and auxilliary projects contracted by Airport Construction Engineering Co. passed the completion acceptance. The project is located in the flight area of Zhoushan Putuoshan Airport and was constructed without the stop of flights. With a construction area of 217,000 square meters, it is currently the largest non-stop construction project undertaken by Airport Construction Engineering Co. The main construction content includes the transformation of parallel taxiways, vertical connecting roads, station aprons, service lanes and drainage systems. After the project is put into operation, Zhoushan Putuoshan Airport's assured peak-hour flight capacity will be greatly improved, and its runway utilization rate will be increased. The Putuoshan Airport will be able to receive and send 1.5 million passengers in the near future and 3 million in the medium and long term for domestic and international routes, which could effectively promote the development of Zhoushan Aviation Industrial Park.

The Putuoshan Airport will be able to receive and send

1.5 million passengers in the near future

The Putuoshan Airport will be able to receive and send

3 million passengers in the medium and long term



Zhoushan Putuoshan Airport in Zhejiang

### **OPERATOR OF LIVABLE CITIES**

CCCG is deeply involved in urban renewal activities, continues to increase product quality and innovation advantages, builds a professional construction platform, and enhances the professional operation of municipal and housing construction businesses in key areas such as super high-rise buildings, deep underground projects and green buildings. Focusing on building a humane, livable, resilient, green and smart city, it strives to build a comprehensive urban development brand with obvious characteristics of CCCG. It will become a construction operator of a livable city by fully advancing key projects, summing up experience, innovating models and improving the Group's "Megacity" strategy.



### Build a benchmark new city suitable for business, industry and livability

In 2018, CCCC Investment Company Limited took the lead in forming the CCCG Consortium to implement the Industry-City Integration PPP Project of Wenzhou New High-speed Rail City. CCCG is responsible for the development, construction and operation of the project. In 2020, in the face of unfavorable factors such as COVID-19, the Group forged ahead and exceeded the quota of construction tasks of the year.

The project is located in Ouhai District, Wenzhou, with a total planning area of 14.33 square kilometers and a total investment of 19.988 billion yuan. It is a large-scale comprehensive and key PPP urban development project of CCCG and the largest comprehensive urban development project in Wenzhou's urban construction history. It is one of few (more than 100) new high-speed rail cities nationwide that are directly located in the urban area. Based on pain points of the city, CCCG has deepened the hub complex project west of the station (formerly a tourism distribution center), put forward the development concept of "Station West Integration", which has been highly recognized by the government and fully demonstrated the Group professionalism as an "operator of urban integrated service". It also provides new development ideas and innovation points for comprehensive development projects of CCCG New High-speed Rail Cities.

"The Wenzhou model dedicated by CCCG: A new Chinese high-speed rail city for the world."

--Xinhua News Agency

"The Industry-City Integration PPP Project of Wenzhou New High-speed Rail City is the first all-dimensional development project in the history of Wenzhou's urban construction. It is a highlight block of the Municipal Party Committee and the Municipal Government's key construction and a window to the quality of Ouhai City. It carries the hope and dream of Ouhai's urban construction."

-- Wang Zhenyong, Secretary of the Party Committee of Ouhai District, Wenzhou City



A bird's-eye view of the rendering of Wenzhou New High-speed Rail City



## CCCG Future Science and Technology City was located in Xiong'an New Area

Initiated by CCCC Xiong'an Investment Co., Ltd, combined with CCCC Investment Company Limited and CCCG Real Estate Group Co., Ltd, a business model of "first-level land consolidation + second-level real estate development + third-level industry linkage + fourth-level city operation" innovatively designed won Plot No. 3 in the hub area of Xiong'an Station on December 7 and the "Confirmation of Transaction" was signed on the same day. CCCG plans to invest about 17 billion yuan to build a future science and technology city in the Plot No. 3. This project is one of the first market-oriented projects launched in the new area, and it has important demonstration significance to help the Group build a new model of "enhancing urban growth".

The Group plans to invest about 17 billion yuan to build the CCCG Future Science and Technology City



## CCCG's tallest building - Zhuhai Hengqin Plaza was officially completed

At the end of 2020, the 300-meter office building of CCCG Interchange • Hengqin Plaza in Zhuhai, Guangdong was officially completed. The project is invested and operated by CCCC Urban Investment Holding Co. It is located in the prime location of the offshore financial island in Shizimen Business District, Hengqin. It includes a 300-meter-high office building, two apartments and commercial blocks with a height of more than 100 meters, covering the area of 32,000 square meters, which is the largest project on the financial island. CCCG Interchange • Hengqin Plaza project has unique location advantages, novel design and excellent quality, adopts the whole industry chain system of value planning, layout and design, investment construction, industry introduction, asset operation and capital operation, which fully reflects its advantages in production, financing, and construction. CCCG strives to make it a highly positioned urban business commanding height on the financial island of Hengqin New Area, a gathering place for the national offshore financial industry, wealth management and a new focus of GDP output.

Zhuhai Hengqin Plaza covers an area of 32,000 square meters



Hengqin Plaza is completed



# The first Wanda Plaza in Tibet with the highest elevation in China - Lhasa Wanda Plaza was opened



The first Wanda Plaza in Tibet with the highest elevation in China - the Lhasa Wanda Plaza

On August 8, the first Wanda Plaza in Tibet Autonomous Region with the highest elevation in China, constructed by CCCC Second Highway Engineering was opened to the public. Lhasa Wanda Plaza is located in Chengguan District, Lhasa City, Tibet Autonomous Region. It is an independent large-scale commercial complex integrating socializing, entertainment, gourmet and retail functions. Faced with construction pressures such as tight schedules, heavy tasks, complex cross-construction and difficulty in material transportation, the project team of the No.5 Company of CCCC Second Highway Engineering carefully organized, scientifically deployed and adhered to high quality and strict requirements. They worked in a tenacious style "lack of oxygen does not mean lack of energy; the plateau calls for higher standards" on the snowy plateaus, overcoming the impact of harsh natural environment. With superb construction technology and scientific organization and management, they overcame major construction technical problems such as the construction of ultra-high and large-span daylighting projects and the installation of ultra-high cages, promoted construction in an orderly manner, created quality projects with ingenuity, successfully completed tasks and objectives of various nodes and contributed to the comprehensive construction of a well-off society in Lhasa.



#### Build a green and ecological future city

Through the infrastructure and public supporting project of Nanhai Future City in Yancheng City, which is an EPC project contracted by CCCC First Harbour Consultants, a modern, green and characteristic coastal city will be built in Jiangsu. The construction content includes more than 20 single projects such as park construction, municipal engineering, water conservancy engineering, planning hall, school campus, park commercial buildings and supporting facilities. Nanhai Future City builds a water network system of "one lake and one ring". The Crescent Lake is basically in the center of the future city with a lake surface of 1,200 mu. With the lake as the center, in addition to the retention of existing natural river channels, the extension of the water surface is extended by 1,500 mu. The super-high-rise buildings surrounding the lake should be moderately retreated, leaving the frontline of the lake to supporting public construction projects and citizens. The project is constructed by adhering to the priority of infrastructure, public facilities and landscaping. CCCG strives to form a layout of "city in a park, a park in a city" to showcase the charm of the park city, and actively applies for the "United Nations Human Settlement Environment Award".



Reality image of the core area of Nanhai Future City, Yancheng City



## Create a new business card of urban culture for Yinchuan

The project Yinchuan Cultural Park is composed of the reconstruction project of Yinchuan Culture and Art Expo Center and the EPC project (Phase I) of Yinchuan Cultural Park. The reconstruction project of Yinchuan Culture and Art Expo Center is undertaken by CCCC Third Harbour Consultants, while the EPC project (Phase I) of Yinchuan Cultural Park is undertaken by CCCC Third Harbour Consultants and undertaken by CCCC Third Harbour Engineering jointly. The project Yinchuan Cultural Park is located on the main central axis in the north-south direction of the city center, is an important gateway and window for the South Ring Highway entering the city center. The project is a key project in Yinchuan City, with a total planned land area of approximately 220 hectares. According to the plan, the current main buildings will be transformed into a cultural and art exhibition area based on cultural display experience, so as build a national cultural and sports leisure activity center, Yinchuan cultural industry innovation agglomeration center and a Ningxia cultural tourism destination. After completion, it will be of great significance for optimizing the urban transportation system, improving the urban environment and enhancing the quality of the city.

"Yinchuan Culture and Art Expo Center is a comprehensive exhibition hall integrating functions such as cultural performance, cultural tourism, information exchange, exhibitions and display. It deeply integrates the urban cultural experience space with the cultural and entertainment consumption space of citizens and is a new landmark of Yinchuan culture. We are building Yinchuan Culture and Art Expo Center into a new business card for the local vibrant urban culture."

——Chen Run' er, Secretary of the Party
Committee of Ningxia Hui Autonomous
Region



### Help to build a borderless park city

The Longma Lake Park, which was invested and constructed by CCCC Investment Company Limited and designed by the Southwest Municipal Engineering Design and Research Institute of China, is located on the east side of Sanwan Dayan, Jianyang City, the core area of Jianzhou New City, the eastern new area of Chengdu. The project covers an area of more than 2,450 acres and a lake area of about 1,000 acres. It has four islands and 18 characteristic scenic spots, 15 kilometers of marathon greenway, unmanned driving experience loop. Its forest coverage rate reaches 90%. The project is built based on the concept of "multi-dimensional linking activating a new city", linking ecology, landscape, industry, innovation and creation together to form a beautiful pattern of "boundless park city", fully demonstrating the park city development concept of "simple city with the landscape, the new city upon intelligent creation". Since the opening of the park in July 2020, its unique landscape features and "net celebrity" musical fountains at night have attracted many citizens to visit and tour. It has become another focus of attention in the Fastern New Area.

"We can say that Longma Lake Park is an unbounded urban park with a city in the park, a blend of urban views and a walk-friendly environment. As the geographic center, functional center, image landmark and portal display area of Jianzhou New City, we are focusing on telling good branding stories about Longma Lake well. At the same time, it is also necessary to promote more model works like this that are dedicated to building a park city."

——The operator of Longma Lake Park



Longma Lake Park

### **GUARDIAN OF CLEAR WATER AND SOURCE**

CCCG closely follows the national strategic deployment, implements the business strategy of "Priority in River, Lake and Sea" and clarifies the subdivisions, development goals, paths and carriers. On the basis of consolidating the business of channel dredging and land reclamation, it has focused on the upgrading of ports, comprehensive management of river basins and lakes, marine ecological maintenance and national water network construction. Furthermore, it pays close attention to the construction plans of major projects such as the outlet of the Xiong'an New Area, riverto-sea intermodal service center at Ningbo-Zhoushan Port as well as the new land-sea corridor in the west, actively followed up, strengthened planning and created projects; seized construction opportunities such as the Jinghan Canal, Pinglu Canal, Xianggui Canal, Ganyue Canal and other inland rivers. Relying on the Yongding River project, it has formed a river basin governance model with CCCG's characteristics; followed up with the Yangtze River protection, the high-quality development of the Yellow River Basin and the strategic deployment of the South-to-North Water Diversion; fulfilled the river basin governance demand of Fen River, Tai Lake, Dianchi, etc., using commercial models and advanced technologies to implement high-quality projects.

the Jinjiang River Basin, Sichuan



Ecological treatment and comprehensive restoration of the Yongding River Basin



Ecological protection and restoration of the Fenhe River Basin, Shanxi









Ecological treatment project of wetland water quality in the Lower Reaches of Shibuli River in Anhui



## The first river basin governance project of CCCC Investment Company Limited achieved good results

The PPP project for comprehensive treatment of "Baiyang Qianhe" in Nanxun District, Huzhou City is the first river basin treatment project invested by CCCC Investment Company Limited. The project is located in Nanxun District, Huzhou City, Zhejiang Province, distributed within 10 townships in Nanxun District, covering an area of about 702 square kilometers, with a total investment of 2.22 billion yuan, involving comprehensive management of 83 beautiful villages, five backbone rivers and 20 lakes, including 108 construction subprojects such as embankment protection bank, river dredging, landscape greening, flood control roads, bridge engineering and gate station engineering. During the implementation of the project, the "Guidelines for the Standardization of Management of Investment and Construction Projects", which as river basin management engineering is one of the five major sections, as well as the "Standardization Management Manual for Project Baiyang Qianhe" were compiled and released by CCCC Investment Company Limited, Based on the project, Huzhou City has also issued two local standards and regulations - the "Construction Norms for Xingfu Rivers and Lakes in Plain Areas" and "Evaluation Norms for Xingfu Rivers and Lakes in Plain Areas", which have become the first set of local standards for the construction and evaluation of Xingfu rivers and lakes in Zheijang Province. They are also the first local standards and norms for the Xingfu rivers and lakes formulated in the country.

CCCG has assisted Nanxun District to implement the project "Baiyang Qianhu", vigorously build Nanxun's "Water Town Complex", a modern large river network of "safe, ecological, smart, wealthy and livelihood rivers", so as to comprehensively improve the ecological quality of rivers, construct Xingfu river and lake systems in the whole region, provide beneficial experience for the construction of Xingfu River in Zhejiang Province. In 2020, CCTV has covered the construction of the project under the title of "Chasing dreams in Xingfu Rivers and Lakes". The video of "Beautiful Nanxun: Baiyang Qianhe" was broadcasted on the learning platform of "Learning to be a Powerful Country (xuexi.cn)".

The PPP project for comprehensive treatment of "Baiyang Qianhe" in Nanxun District, Huzhou City with a total investment of

2.22 billion



Project Baiyang Qianhe at Huzhou



# The Nanhe River Basin Ecological Demonstration Project in Shennongjia Forest Region was progressing smoothly

The Nanhe River Basin Ecological Demonstration Project in Shennongija Forest Area is a comprehensive treatment of the ecological environment and human settlements in an area of 35 square kilometers along the Nanhe River Basin. It is a key project for ecological protection in the Yangtze River Economic Zone in Hubei Province and the first PPP project in Shennongjia Forest Area, which is with its remarkable economic and ecological benefits of engineering extremely significant to promote the development of ecological industry and urbanization in forest areas, as well as make Shennongjia to become a world-famous eco-tourism destination. As the design unit of the Nanhe River Basin Ecological Demonstration Project in Shennongija Forest Region, CCCC Second Harbour Consultants has selected experienced experts to establish a project team, given full play to the advantages of professional leadership, carefully designed, increased the guidance and coordination of the entire construction process by the designing unit, actively resolved various issues during the implementation process and reasonably coordinated to ensure the smooth progress of the project.



Ecological Demonstration Project of Nanhe Basin in Shennongjia Forest Region



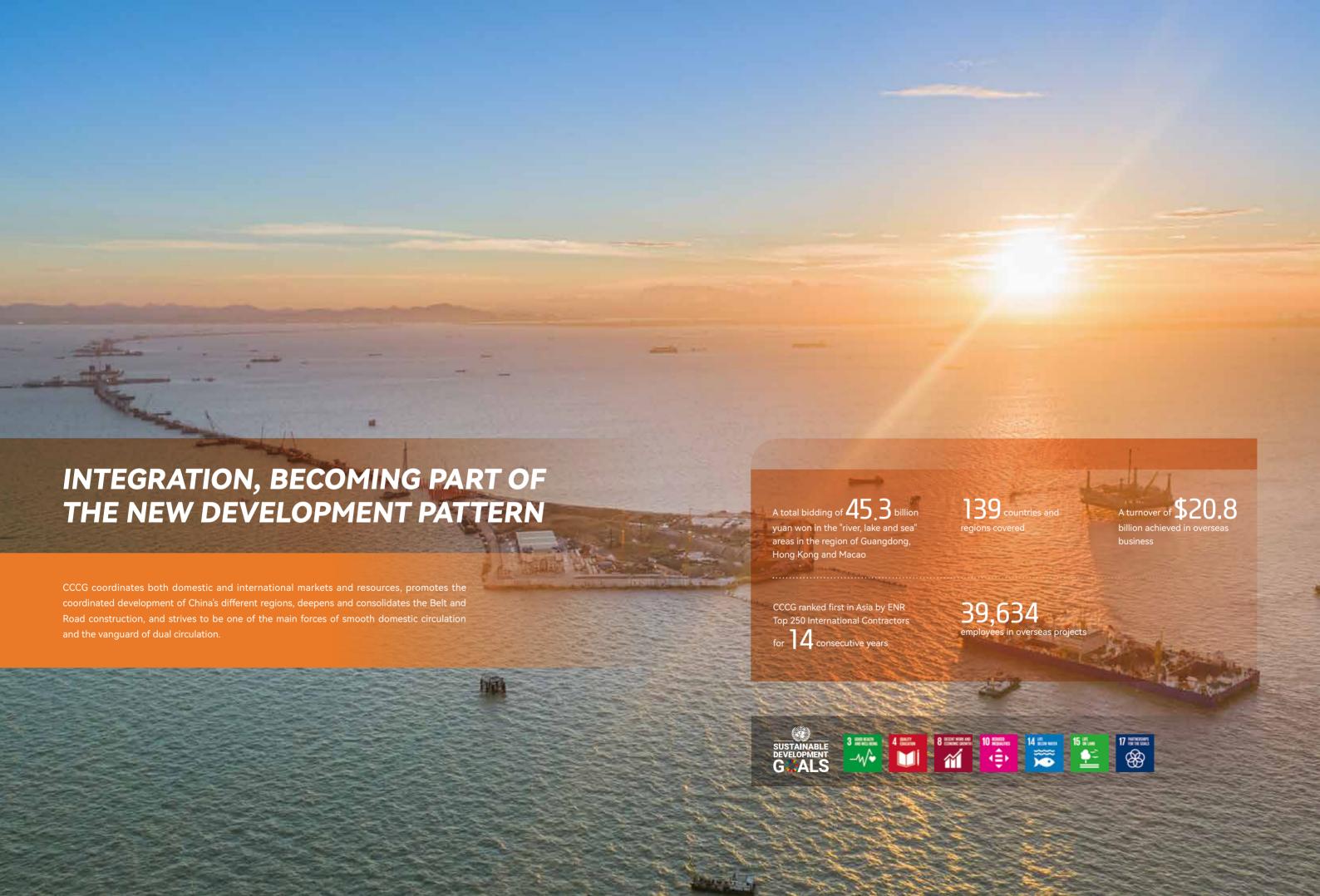
## Ecological protection and high-quality development of the Yellow River Basin and academician forum opened in Shaanxi

On July 29, the Shaanxi Yellow River Basin Ecological Protection and High-Quality Development and Academician Forum hosted by Shaanxi Provincial Development and Reform Commission and CCCG, undertaken by CCCC Dredging and opened in Xi'an. The forum focused on the ecological management of the Yellow River Basin, water safety assurance, water resource conservation and intensive utilization, high-quality development, promotion of the protection and inheritance of the Yellow River culture; jointly discussed the ideas of ecological protection and high-quality development in the Shaanxi section of the Yellow River Basin.

As a leader in the global infrastructure industry, CCCG has been associated with water and accompanied by rivers since its birth. In recent years, it has focused its efforts on Four Fields of overall transportation, overall city, overall water area and globalization. Regarding the overall water area, it has actively planned and constructed a number of projects particularly, making river and lake water system on the national level connected, watercourse dredged and river basin integrated. It is becoming the leader of the comprehensive river basin governance industry. The Group will fully rely on its own strength to further deepen cooperation and contribute more CCCG wisdom, CCCG solutions and CCCG power to the ecological protection and high-quality development of the Yellow River Basin.



Ecological protection and high-quality development of the Yellow River Basin and academician forum in Shaanxi



### **SERVING NATIONAL STRATEGIES**

CCCG has taken the initiative to serve major national strategies such as the coordinated development of the Beijing-Tianjin-Hebei region, the development of the Guangdong-Hong Kong-Macao Greater Bay Area, and the integrated development of the Yangtze River Delta. Focusing on the field of "Megacities and great communications", new infrastructure and new urbanization initiatives and major projects, CCCG has devoted itself to the construction of major projects such as Hangzhou Xiaoshan International Airport, Lianyungang 300,000-ton waterway, Tangshan all-region water governance and cleaning project, Tianjin Metro Line 3, and Xiong'an Technology Innovation City.

### BEIJING-TIANJIN-HEBEI COORDINATED DEVELOPMENT

President Xi Jinping has called for the coordinated development of the Beijing-Tianjin-Hebei region and efforts to achieve more results in transportation, environment, industry and public services. CCCG has been deeply involved in the construction of transportation infrastructure in Beijing-Tianjin-Hebei region, helping to accelerate transportation integration. We have participated in projects such as the Taihang Mountain Expressway, the western section of the Jinshi Expressway in Tianjin, the Hebei Rongwu Expressway, and the Beijing-Dezhou Expressway. CCCG promotes the connectivity of Beijing-Tianjin-Hebei railways, participating in the construction of Tianjin Metro Line 11, Section Two of the Shijiazhuang-Hengshui-Cangzhou-Huanghua Port Intercity Railway, Beijing Metro Line 17, and the southern extension of the Beijing Metro Changping Line. CCCG leads the agglomeration of emerging industries and facilitates the relocation of noncapital functions. We plan and construct Liulin Area of Haihe River in Tianjin, and promote the reconstruction of shanty town of Yanghekou in Qinhuangdao and the Jinzhong Demonstration Town of Dongli District in Tianjin. CCCG actively builds a new model for ecological progress, supports innovation to drive green development, and promotes comprehensive management and ecological restoration of the Jiyun River and Yongding River valleys.



The Xiong'an section of the expressway from Beijing to Xiong'an is fully connected  $% \left\{ x_{i}^{2},x_{j}^{2},...,x_{i}^{N}\right\} =0$ 



The three-dimensional parking building project of Xiong'an New Area's first urban exchange center is completed and accepted



### Going all out to build the Winter Olympics engineering facilities

The National Alpine Skiing Center at the Yanqing Area of the Beijing 2022 Winter Olympics is the highest-grade alpine skiing course and the first alpine skiing course in line with the Olympic standards in China. CCCC First Highway Engineering Group has contracted to build six race trails, 15 technical trails, two haulage trails and two back trails, accounting for 95.8% of the total number of trails. Since 2015, the Group has established the "First Issue" system and defined the "First Project" principle, and made full use of the advantages of our main business to undertake and promote the investment and construction of a number of Winter Olympics projects with high quality. Six subordinate companies have participated in 18 supporting infrastructure construction projects in total, contributing to the Beijing 2022 Winter Olympic Games with first-class implementation results.



### The Beijing-Xiong'an Intercity Railway was fully opened

The Daxing International Airport-Xiong'an section of the Beijing-Xiong'an Intercity Railway, built by the Second Harbour Engineering and the Second Highway Engineering, was officially put into operation on December 27, marking the full operation of the Beijing-Xiong'an Intercity Railway. In this section, Airport Tunnel No. 2 is the control engineering of the railway and the longest open-cut tunnel in China. Known as the "Eye of Xiong'an"-the Rainbow Bridge is a tied-arch bridge that crosses the Daging-Guangzhou Highway. It is a landmark building on the Daging-Guangzhou Highway that connects Beijing and Xiong'an. The Beijing-Xiong'an Intercity Railway is an important trunk line undertaking the millennium transportation task and supporting the national strategy. It is also the first major transportation infrastructure under construction in the Xiong'an New Area. It is of great significance to improve the regional network layout of the Beijing-Tianjin-Hebei region, build a fast and three-dimensional transportation system, and promote the development of the Xiong'an New Area.



Beijing-Xiong'an Intercity Railway

# DEVELOPMENT OF THE GUANGDONG-HONG KONG-MACAO GREATER BAY AREA

President Xi Jinping has pointed out that the development of the Guangdong-Hong Kong-Macao Greater Bay Area is a major national development strategy. It is necessary to promote the efficient and convenient flow of people, goods and other factors, and enhance the level of market integration. CCCG promotes the development of the "great communication" of the Area through technological innovation and model innovation. By 2020, we have signed the contract of the Shenzhen Riverside Expressway project. We have actively explored the "entering city" business, driving urban renewal through transportation infrastructure, comprehensive urban development and feature real estate. We have stepped up the transformation and upgrading of traditional businesses, actively undertaking projects in new areas such as water environment, offshore wind power, river basin governance, and cross-sea passages. A total bidding of 45.3 billion yuan was won in the area of "rivers, lakes and seas" in the Guangdong-Hong Kong-Macao Greater Bay Area in 2020. We have set up a connection and sharing mechanism to promote the development of Hong Kong and Macao in a coordinated manner. We have been engaged in the construction of a number of large-scale key projects with significant social influence, such as the Shenzhen Riverside Avenue, Shenzhen Bao'an International Airport Expressway, Nansha-Zhongshan Expressway, Guangzhou Rail Transit, Baiyun Airport Phase III Expansion and Settlement Project, Guangzhou Nansha Phase IV Automatic Wharf, etc.

A total bidding of 45.3 billion yuan was won in the area of "rivers, lakes and seas" in the Guangdong-Hong Kong-Macao Greater Bay Area in 2020.



With the deep-water channel widening project put into operation, the Guangzhou Port has officially entered a new "two-lane" era



Guangdong's Kaiping-Yangchun Expressway is put into operation to connect the Greater Bay Area with the ASEAN Economic Belt



# The floating installation of five pipe segments for Shenzhen-Zhongshan Bridge was successfully completed

The floating installation task of five pipe segments, including the first non-standard immersed pipe, the first standard immersed pipe and the first deep-water immersed pipe, has been successfully completed for the Shenzhen-Zhongshan Bridge, a key project of the National 13th Five-year Plan and the core project of the Guangdong-Hong Kong-Macao Greater Bay Area. The Shenzhen-Zhongshan Bridge is a world-class cross-sea passage cluster project integrating "tunnel, island, bridge and underwater connectivity". Among them, the submerged tube tunnel, with a total length of 5,035 meters, is the largest submerged tube tunnel in the world. By giving full play to its technical advantages, the builders of CCCG have overcome many world-class problems such as complex geological conditions, large back-silting intensity, super-large span deep burial, and millimeter-level underwater docking, etc., and developed and designed a complete set of offshore submerged tube tunnel construction technology and core equipment, bringing China's offshore submerged tube transportation and installation to an era of automation and intelligence. Upon completion, the project will become the only direct road connecting the two city clusters in the Pearl River Delta, namely, the Shenzhen-Dongguan-Huizhou and Zhuhai-Zhongshan-Jiangmen city clusters. It is of great significance to the improvement of the comprehensive transportation system in the Pearl River Delta region and the acceleration of the integrated development of the city clusters in the Guangdong-Hong Kong-Macao Greater Bay Area.



On June 17, the floating installation of the first immersed pipe of Shenzhen-Zhongshan Bridge was successfully completed

### INTEGRATED DEVELOPMENT OF THE YANGTZE RIVER DELTA

President Xi Jinping has pointed out that we should have a deep understanding of the status and role of the Yangtze River Delta region in China's economic and social development, focus on the key work with priority given to integration and high quality, and promote the integration development of the Yangtze River Delta to achieve continuous results. CCCG has been deeply engaged in the development of the Yangtze River Delta region, and actively participated in the construction of major transportation and infrastructure projects in the region. We successfully won the bidding for projects like the Shanghai S3 Expressway, Shanghai Rail Transit City-Airport Line, Jiangsu Changtai Yangtze River Bridge, Longtan River-Crossing Channel, the highway and railway bi-purposed Yangtze River Bridge of the Chaohu-Ma'anshan Intercity Railway as well as related front-end engineering of the link, and the municipal project of the Smart New City of Nanjing Pukou Development Zone and franchising of supporting facilities.



Trial operation of the Yancheng-Nantong High-speed Railway in Jiangsu Province, an important part of the "coastal passage"



Taihu Lake Tunnel, the longest underwater tunnel in China, realizes the conversion of land and island channels



## Promoting the construction of Changtai Yangtze River Bridge by technological innovation

Changtai Yangtze River Bridge is one of the important river-crossing channels in the State Council's "Comprehensive Three-dimensional Transport Corridor Plan of the Yangtze River Economic Belt". The construction of the bridge officially started in September 2019. The open caisson of Pier 5 of the bridge built by the Second Harbour Engineering first adopts the step type all-steel caisson, which is the world's largest underwater caisson foundation currently under construction. According to the characteristics of soil layer, the Second Harbour Engineering has developed several sets of new equipment for collecting soil, which has realized the visible and controllable subsidence of soil drawing from caisson. When completed, the Changtai Yangtze River Bridge will become the world's first river-crossing corridor integrating expressway, intercity railway and first-class highway. The 1,176-meter span of its main channel will set a new world record for a rail-road cable-stayed bridge. The two arch bridges connecting Tianxing Islet and Lu'an Islet on both sides will also be the world's longest span steel truss rail-road arch bridges. It is of great significance to accelerate the construction of the Yangtze River city cluster, and promote the integrated development of both sides of the river and the integrated development of the Yangtze River Delta region with higher quality.

"With its construction, the Changtai Yangtze River Bridge once again demonstrated to the world the latest achievements of China's modern industrial innovation through innovations in system, materials, structure, equipment and technology."

−−Bridge

### PROMOTING OVERSEAS DEVELOPMENT

Since the 1950s, CCCG has embarked on the road of international development, and carried out substantive businesses in 139 countries and regions. Committed to building bridges connecting hearts, road towards prosperity, ports for development, and cities of happiness, CCCG has promoted the development of local economy, society, people's livelihood, and employment, and has become an important "link" connecting the global countries in a community of shared future.

### IMPLEMENTING GOING GLOBAL STRATEGY

With "one body, two wings" as the core and "four-in-one strategy" as the operating basis, CCCG implements the going global strategy and strives to be a global well-known engineering contractor, urban complex developer and operator, feature real estate developer, comprehensive investor in infrastructure, marine heavy equipment and port machinery manufacturing and system integration general contractor. During the 13th Five-year Plan period, CCCG promoted the transformation of overseas development from priority development to priority, quality and coordinated development, and upgraded our strategy from "CCCG going global" to "global CCCG". A number of landmark projects have been successfully implemented, including the Mombasa-Nairobi Railway, the East Coast Rail link in Malaysia, the Colombo Port City in Sri Lanka, the Gwadar Port in Pakistan and the Karakoram Highway. In 2020, the turnover of the overseas sector of CCCG reached US \$20.8 billion, ranking first in Asia by ENR Top 250 International Contractors for 14 consecutive years.



The Pelješac Bridge in Croatia is four kilometers long. In 2020, we overcame the adverse impact of COVID-19 outbreak and made steady progress in all areas of development



On July 28, 2020, the Karakoram Highway Phase II (Havelian-Thakot) project in Pakistan was put into operation



A freight train fully loaded with containers



### "Star of Africa" illuminating the East African Savannah

Since COVID-19 outbreak, the Mombasa-Nairobi Railway and Nariobi-Malaba Railway, as the main artery of transportation in Kenya, have been running through the three most severely affected areas in Kenya. We maintained round-the-clock transportation and delivered more than 4 million tons of pandemic prevention and basic living necessities to Kenya, ensuring economic development, meeting the basic needs of its people and helping East Africa fight against the outbreak. With real actions, we have shown the sense of responsibility of Chinese enterprises in fulfilling the "building a community with a shared future for mankind" at a critical moment. On June 17, 2020, during a dialogue with Kenyan President Uhuru Kenyatta at the Extraordinary China-Africa Summit on Solidarity Against COVID-19, President Xi Jinping congratulated Kenya on ensuring the constant transport of goods from Mombasa Port to the hinterland of East Africa through the Mombasa-Nairobi Railway.



A freight train crossing the Tsavo Bridge

More than 4 million tons of pandemic prevention and basic living necessities delivered

"Following the outbreak of COVID-19, the Mombasa-Nairobi Railway will help ensure that the entire travel and logistics system is more resilient and sustainable, so as to truly meet the passenger and freight needs of Kenya and the surrounding region."

——The Standard



# A new engine to promote economic development and industrial upgrading in Sri Lanka

On September 17, a ceremony was held to mark the 6th anniversary of the groundbreaking of Colombo Port City in Sri Lanka, which was invested by CHEC. Sri Lankan Prime Minister Mahinda Rajapaksa hailed the project. At present, Colombo Port City has begun to take shape. Reclamation of 269 hectares of land has been completed. And the urban area of Colombo has increased by about 7%. The Port City project will attract more than \$9.7 billion in foreign direct investment to Sri Lanka, add more than \$5 billion in revenue to the Sri Lankan government, and have created more than 8,000 posts locally. It was rated by Forbes as one of the "Five New Cities to Influence the Future". On May 13th, 2020, Sri Lankan President Gotabaya Rajapaksa had a telephone conversation with President Xi Jinping, saying Sri Lanka was ready to strengthen exchanges and cooperation with China in economy, trade, tourism, infrastructure and other fields and smoothly push forward major cooperation projects such as the Colombo Port City.

The Port City project will attract more than \$9.7 billion in foreign direct investment to Sri



Commemoration of the 6th anniversary of the groundbreaking of Colombo Port City in Sri Lanka

#### **CCCG Video**





Scan the QR code to watch the video: SOE Model

### PLOUGHING LOCAL MARKET

While implementing the "going global" strategy, CCCG has actively leveraged its corporate advantages, integrated into and taken root in local areas, and built a close community of shared future and interests with local people. CCCG has developed localized management, actively expanding recruitment channels for local employees, and extensively carrying out training and technology transfer for local employees. We have insisted on giving priority to purchasing local products and services, and helping local suppliers and subcontractors to continuously improve their technical and management level. By the end of 2020, foreign employees of CCCG have accounted for about 70% of our permanent overseas employees.

Foreign employees of CCCG have accounted for about 70% of its permanent overseas employees



### Creating "Chinese quality" in Cambodia

The Phnom Penh–Sihanoukville Expressway Project in Cambodia, invested by CRBC, will connect Phnom Penh, the capital of Cambodia, with the Sihanoukville Port and be Cambodia's first expressway when completed. Due to local conditions, the project has high requirements for high temperature resistance and heavy load. In order to ensure the quality of the project, the project department has specially built a central laboratory, with 12 operating rooms, which can carry out physical and mechanical properties tests and chemical analysis of 201 parameters in 24 categories, such as aggregate and stone materials. In addition to serving the Phnom Penh–Sihanoukville Expressway, the central laboratory will also be open to the Cambodian government and research institutes. It is committed to becoming a shared platform for road construction technology exchange between China and Cambodia, so as to play a greater role in promoting the road construction in Cambodia and to achieve win-win results.

"The central laboratory of the Phnom Penh-Sihanoukville Expressway is currently the most advanced in Cambodia in terms of test instruments and standardization. Chinese builders have brought advanced technology, equipment and experience that have opened up new ideas for Cambodia's road construction."

—— Ibna, Secretary of State Ministry of Public Works and Transport of Cambodia



#### "Living" outcomes from technology transfer

During the operation of the Mombasa-Nairobi Railway, CRBC carried out all-round technology transfer for 123 technical occupations in the railway system, and completed the English version of operation instructions and standards for 98 major technical jobs. We adopted four training forms: RTI prejob training, on-the-job training, in-service training and in-China training. In 13 specialized railway colleges in China, 62 professional basic training courses were offered, and 2,415 Kenyan employees were trained off-job. Five batches of more than 70 outstanding Kenyan staff representatives were selected and sent to Chinese universities for training. Up to now, the localization rate of Kenyan staff has reached 80%.



Kenya train driver promotion test

### **ENHANCING VOLUNTEER SERVICES**

CCCG has actively fulfilled its overseas social responsibility, vigorously promoted the spirit of volunteer service, constantly improved the "Blue Vest" volunteer service system and strengthens the construction of volunteer service platform. In different countries and regions, we have provided social services to the best of our ability according to local conditions, and carried out extensive public welfare activities such as poverty alleviation, emergency and disaster relief, donations for education, medical assistance, environmental protection, and cultural exchanges. "Benefiting one community, improving its environment", we have been widely praised by governments, owners, overseas embassies and consulates of host countries, and setting up a good image of the "Blue Vest".



At the Gwadar Faqeer Primary School in Pakistan built by the Fourth Harbour Engineering, children are glad to use new classrooms and stationery



The Colombo Beautiful Beach Project of the Colombo Port City Project Company of the CHEC is officially launched, calling on the public to keep beaches clean

We went to the quakehit areas in Papua New Guinea immediately, donating money and materials for rescue and relief work. We donated to build the Catumbela China Harbour Middle School in Angola, the first local high school named after an enterprise. Volunteers from the Qatar representative office of the Middle East Regional Center went to the special children's school near Al Saad in Doha to carry out love activities and deliver daily necessities to the children.

Volunteers from the MMHE Dockyard Project Department visited the orphanage in Johor Bahru and donated money and goods.



The General Project Department of the East African Regional Headquarters of the Overseas Division of the First Highway Engineering Group visits children



CHEC launches the "Protect the Blue" environmental protection volunteer activity in Ghana



#### Upholding social responsibility in host countries

The Colombian Mar2 Highway project is a pilot overseas infrastructure investment project of CHEC. The project runs through the former rebel-controlled area and the Indian residential area, with complex social relations, high security risks and high environmental protection requirements. The Project Department set up a social work management team and environmental management team to conduct quarterly monitoring of animals and plants, water quality and air quality. After the outbreak of COVID-19, the Project Department took the initiative to coordinate pandemic prevention measures with the local government and hospitals, donated non-invasive ventilators and complete sets of nucleic acid testing equipment to relevant institutions, and provided necessary living materials for the local lonely elderly and Indian community residents.



#### Rescue and relief work received thumbs up from Vice President of Colombia

Three people were killed and 16 others were missing after heavy rains and mudslides hit the city of Dabeba in Antioquia Province, where CHEC's Mar2 Highway project is located, in Colombia's worst hurricane in 50 years on November 13. Many parts of the No. 62 National Highway collapsed and was washed away. The Project Department immediately joined the rescue and relief, and invested a large number of equipment and personnel to fully support the municipal government in removing silt, dredging roads, evacuating victims and re-opening No. 62 National Highway. The Project Department also organized employees to donate money, and sent clothes and bedding to the victims, which was highly praised by Colombian Vice President Ramirez.



Colombian vice president visits disaster relief staff



### Rebuilding a mangrove forest in Mombasa Port

There is a mangrove plot near the site of CCCG's subsea pipeline processing plant for the new KOT oil terminal project in Mombasa, Kenya. In order to avoid damaging the mangroves, the Project Department, after discussing with the local port authority and the environmental protection bureau, allocated a planting area between the site of the processing plant and the mangrove plot, and successfully planted 45,000 mangroves, so as to minimize the impact of the construction on the environment and maintain local ecological balance.



CCCC builders cultivate young mangroves plants

"We sincerely express our gratitude to the builders of CCCG for upholding the concept of green development and taking into account the protection of mangroves while building the wharf."

—— Representative of Kenya Environmental Protection Bureau



### Creating a "green passage" for baby turtles

The northern shore of the Gulf of Guinea, where the Ghana Tema new container terminal project is located, is an important breeding base for sea turtles in West Africa. To protect sea turtles that lay eggs in the project area from poachers and wild dogs, the Project Department has set up a "turtle breeding center", hired turtle experts to hatch turtles, and set up a "turtle guard" to patrol the beach 24 hours a day in turn. By the end of 2020, more than 17,000 baby turtles have been hatched and released, which has received wide attention and high praise from local society and mainstream media. The video of "Green Tema Terminal" has even been posted on the xuexi.cn app.



The Ghana Tema Project Department is releasing baby turtles



# STRENGTHENING QUALITY ASSURANCE

CCCG has always adhered to the value orientation of "quality first", continuously strengthened quality improvement, promoted the modernization of quality management, cultivated a quality-centered culture, constructed quality projects, and provided CCCG's examples of "strengthening the country by higher quality."

# PROMOTING QUALITY MANAGEMENT

CCCG has made full use of the "big quality" concept, actively carried out benchmarking and upgrading actions, summarized quality management methods, experiences and modes, and constantly advanced the construction of quality supervision and management system. With information-based construction as the starting point, CCCG has promoted the modernization of quality management capabilities.

### Quality supervision •

The quality supervision and inspection system has been established and improved. The Standard Framework and Guidelines of China Communications Construction for Safe Production, Quality Supervision and Energy Conservation and Environmental Protection, General Emergency Plan for Emergency Events of China Communications Group / China Communications Construction " have been issued, and the Measures for Investigation and Handling of Quality Accident Reports and Control Plan Record Form for Major Risk Management of the Company - Quality Risks have been formulated. We have adhered to the problemoriented approach. According to the principle of hierarchical management, we have carried out different forms of quality inspection, continued to improve and implement the risk identification and evaluation form and fulfilled the requirements accurately. The responsible person accountability system for hidden quality hazards has been implemented. We have made sure that measures, responsibilities, funding, timelines and plans are all in place. We have completed the rectification on time to ensure the stability of overall quality.

### Better quality •

We have formulated the 2020 Work Scheme for Creating Excellence in Quality, strengthened the "supervision, management and service" for excellence creation, and provided guidance for 17 projects in this regard. Five projects are recommended to participate in the whole-process quality management consulting work of China Association of Construction Enterprise Management (CACEM). Twenty-two projects have been applied for green building design level evaluation of CACEM.



The floating installation of the first section of immersed pipe of Shenzhen-Zhongshan Bridge is completed

#### Quality informatization and digitalization

Version 2.0 of safety and quality management system platform based on BIM technology has been released to further improve the intelligence of safety and quality management. We have promoted the application of whole-process monitoring information system for concrete production, and strengthened monitoring of production over-standard rate and rectifying problems. We have developed the supporting system of concrete big data analysis, completed two softwares of "CCCG Smart Materials" and "CCCG Smart Mix" to assist projects in selecting raw material suppliers and optimizing mix ratio. The application of process quality inspection information system has been expanded, and the average passing rate of one-time acceptance for processes has reached more than 98%, which has significantly improved quality and efficiency.

#### Safe Quality Engineering in One Hundred Years

We have issued the Scheme for Special Action of China Communications Construction on Research on Construction of "Safe Quality Engineering in One Hundred Years", and carried out the three-year construction research on Safe Quality Engineering in One Hundred Years. By building high-quality projects, we have comprehensively improved the quality of projects, equipment products and services supply, and incorporated the "Safe Quality Engineering in One Hundred Years" project into CCCG's pilot work of "Strengthening the Nation through Communications."

### **CULTIVATING QUALITY-CENTERED CULTURE**

CCCG has focused on cultivating a quality-centered culture with "quality and excellence" as the core, and carried out "Quality Open Day" events to publicize the national policies on high-quality development and spread the knowledge of comprehensive quality management. We have carried out the Quality Month event with the theme of "Building Safe Quality Engineering Project in One Hundred Years, Forging CCCG's Example of Strengthening the Nation through Quality". We have issued higher quality initiative from main leaders to call on all staff to carry out quality improvement action. We have held "Quality Cloud Class" to improve the management level of quality management personnel. We have organized all staff to participate in the national enterprise staff comprehensive quality management knowledge contest held by China Association for Quality with more than 15,000 people taking part. This event has improved employees' awareness of comprehensive quality management, and provided strong spiritual motivation and cultural support for the high-quality development of the Group.

### **BUILDING QUALITY PROJECTS**

CCCG has adhered to strengthening the enterprise through higher quality and improving the enterprise through integrity sparing no effort to create high-quality projects. The Company has strictly abided by the Contract Law, optimized project milestone management, arranged construction schedules scientifically and rationally in order to achieve punctual delivery and excellent quality of projects at the same time all through the whole year. In 2020, the qualification rate of once delivery of the Group's projects was 100%, the qualification rate of project spot check was 98.74%, and four field observations and research bases for the transportation industry were approved. Among them, the Field Scientific Observation and Research Station of Highway Permafrost Engineering on Qinghai-Tibet Plateau, Qinghai Province was selected into the national construction list. The Hong Kong-Zhuhai-Macao Bridge won the "Super Project Award" of the International Bridge Conference. Two projects won ENR Global Best Project Award. Six projects won the Tien-yow Jeme Civil Engineering Prize. Nine projects won the Luban Awards. Thirty-five projects won the National Quality Projects Awards, four of which won the Gold Awards.

#### Winner of National Quality Project Gold Award



Guodian Offshore Wind Farm 6 Zone 2 in Putuo District of Zhoushan



Mombasa-Nairobi Standard Gauge Railway, Kenya



Guangxi Hechi-Du'an Expressway Project



Wuhan Rail Transit Line 6 Phase I Project

### **PROMOTING WORK SAFETY**

CCCG has adhered to the policy of "safety first, prevention in center and comprehensive management", stuck to the red line awareness and bottom-line thinking, strictly implemented the main responsibility of the enterprise, strove to control risks, treat hidden dangers, build systems, strengthen the team, ensure stability, and built a solid line of defense for work safety.

### SAFETY PRODUCTION MANAGEMENT

In accordance with the requirements of "Party and government bearing the same responsibility, one post two responsibilities, and joint management", CCCG pays close attention to the implementation of work safety responsibility, innovates the concept of safety management and improves the work safety system. We constantly increase safety investment and enhance information technology in our safety production. We carry out timely and efficient security inspections to ensure a stable security situation. In 2020, CCCG invested a special fund of 23.61 million yuan on work safety to support 20 research projects.

A special fund of 23.61 million yuan on work safety has been invested



4 projects were awarded the title of "Safe Project" by the Ministry of Transport.

227 projects were awarded the honorary titles of provincial work safety standardized construction site, safe construction site, standardized and civilized construction site, green and civilized construction site and so on.

projects were awarded "Safe Production Standardization Demonstration and Exchange Projects" by the China Construction Industry Association.

6 vessels were awarded "National Safe and Excellent Vessels of National Water Transport System"

4 vessels were awarded the title of "Safe and Credible Vessels of China Maritime Safety Agency"

30 teams won the award of "National Excellent and Safe Team in National Communications System".

7 units were awarded the National Demonstration Enterprises for Building a Culture of Safety

2projects were awarded as "Safe
Transportation" Innovation Cases by the
Ministry of Transport

18 units were awarded the national "Ankang Cup" excellence units



Guangdong Nan'ao Blue Bay Renovation Project

### Building systems

We carry out the "double control" based safety management concept, put forward for the first time the concept of "safety management is the priority management of enterprises", and raise the safety work to the political height. We set up the management goal of "zero accident, zero death toll". We propose the "five in place" thinking for safety and environmental protection management, and set forth the method of "three coverage, four integration and five transformation." 61 safety management systems have been established, and 35 first-class enterprises of the Group have all set up work safety supervision and management departments to consolidate the work safety accountability system in an all-round way.

### Strengthening capabilities

During the pandemic period, we supported the data collection of work safety through the "mobile safety supervision" system. The safety and quality management system platform based on BIM technology was promoted and applied in 36 projects such as Beijing-Xiong'an High-speed Railway and Shenzhen-Zhongshan Bridge. TBM was independently developed to solve the world problem of large deformation trap shield in soft surrounding rock. We developed and built floating, transporting and installing integrated ships and leveling ships by ourselves, which solved problems such as large-tonnage immersed tube floating transportation over long distance, passage in busy waterways and high-precision sinking and installation in deep water areas. Our equipment was modernized to realize "mechanized replacement of workers and automatic reduction of workers."

#### Heavy investment

We formulate Safe CCCG Series Selection Method, and carry out Safe CCCG series award-presenting to set up examples and stimulate units at all levels to devote more to safety management. We increase positive incentives and gave out a total of 10.78 million yuan in rewards in 2020.

### Risk control

We have transcended the limitations of "safety for safety's sake", and formed a regulatory framework of "great safety". During the COVID-19 outbreak, we carried out timely, efficient and remote safety inspection, which was highly praised by the State-owned Assets Supervision and Administration Commission (SASAC) and promoted in central state-owned enterprises. A total of 5,231 projects were investigated, involving 29 level-II units and 118 level-III units nationwide, in a three-year campaign to improve workplace safety and a major campaign to prevent and mitigate disasters. We carried out overseas remote comprehensive supervision and inspection for 11 times. A total of 27 overseas projects, involving 21 countries or regions were covered, with an overall coverage of nearly 100%. The large-scale investigation was carried out on the frontline and at the grass-roots level to comprehensively improve the level of on-site management and operations and promote sustained and stable safety production.

### SAFETY EDUCATION AND TRAINING

CCCG has been constantly strengthening the construction of safety supervision team, innovating work methods, establishing the system of monthly meeting on safety production, and producing warning and education videos on typical accidents. We also organized activities such as safety month, online safety training, online knowledge competition, and taking photos of potential safety hazards to mobilize the initiative and enthusiasm of all staff in work safety.

#### Continuously carrying out the monthly meeting on safety production

Regular meetings go straight to the front line, covering the whole range from the Group to all our project teams. We have realized the timely analysis of accident lessons, and effective borrowing of advanced management experience. A total of 35 subsidiaries and projects exchanged experience at the regular meetings, which played the role of positive guidance and negative warning.

#### Building an accident database

Fourteen typical severe accidents occurring in recent years are selected to make warning educational films. The accidents are vividly and intuitively reflected by the combination of real people telling, simulating and restoring scene description, and 3D animation, which teaches lessons in the best way. Thirty general accident cases were selected to make video animation, and the accident case database was built.

#### Work Safety Month

"Work Safety Month" activities were carried out throughout the whole year. In 2020, leaders in charge of the second and third-level units published 174 signed articles and gave 507 safety lessons. A good atmosphere was created, where the regular work was done as required, and feature activities were carried out with diverse characteristics.



CCCC Second Highway Engineering has organized the construction parties of Urumqi-Yuli project to carry out the signing ceremony on the safety theme



CCCC Dredging has held a launching ceremony of Safe Production Month in Wuhan

### Online training

22 online video safety and environmental protection training sessions were held with the training system of "Pride University", combined with the activity of "One Theme in a Month". The maximum number of participants in a single course reached 37,000, 58 courses were online, 21 special pieces of training were completed, and 234,800 people participated in live learning. A total of 7,311 online training sessions were held by units at all levels, and more than 670,000 people took part in live learning. Two training sessions for 723 principal persons in charge of level–3 units were organized to improve the safety awareness and ability of these heads of units.

### SAFETY EMERGENCY MANAGEMENT

CCCG has formulated the Emergency Management Measures for Emergencies, established the "1+4+20" emergency system, realized the essential change from single to comprehensive response of work safety accidents, and gradually improved the coordinated disposal mechanism. The emergency response functions of 29 Level I enterprises were transferred, 2,619 emergency management organs were set up by all levels, and 3,728 emergency response systems were introduced. We launched the emergency management platform, successfully established a national-level emergency rescue team, and built a "big emergency" management system with the characteristics of CCCG, which strongly supported the safe development of the Group. In 2020, CCCG held 96 emergency drills, involving 8,227 participants. CCCG undertook two activities, namely, the comprehensive maritime emergency drill for work safety of highway and waterway construction, and earthquake rescue training and drill, with high quality, which was highly appraised by the Ministry of Transport and the Ministry of Emergency Management, enhancing the influence of CCCG in the industry.



### Proper handling of safety accidents

In 2020, a falling accident occurred in a project of a subsidiary company of the Group during the plugging operation of the line groove at the stairwell platform, resulting in the death of one person. After the accident, the subsidiary immediately set up an emergency disposal team to go to the scene to guide the emergency rescue and disposal work. The Project Department started the emergency plan immediately, organized the on-site rescue and after-treatment work in a timely manner, and reported the accident to relevant government departments and the superior company within the prescribed time.

In order to draw lessons from the accident, the company took a series of targeted measures, organized and held warning briefings, formulated and improved relevant systems, and strengthened the standardized construction of border protection facilities. We also carried out special rectification work of preventing falling from high places in construction projects throughout the company and conducted a large investigation of work safety, so as to eliminate the hidden dangers in time and avoid the recurrence of similar accidents.



# Hold comprehensive maritime emergency drills for work safety of highway and waterway construction

On October 12, the Ministry of Transport, Guangdong Provincial Department of Transport and CCCG held the 2020 comprehensive maritime emergency drill for work safety of highway and waterway construction at the Shenzhen-Zhongshan Bridge. The drill lasted for 50 minutes, and four subjects were set up, including ship loss-of-control, ship stranding, ship fire, and emergency disposal of people falling into the water. Different forms, including the joint operation of government and enterprise, the joint operation of central ministry and local province, and the coordination of sea, land and air means, were adopted to comprehensively demonstrate the safety management characteristics of offshore project construction. The drill involved the world's first integrated vessel for immersed tube transport and installation, the first grabtype dredger with fixed depth and flat digging function in China, and new life jackets and other rescue equipment equipped with the Beidou system and positioning terminal, which effectively improved the safety and emergency response capacity of offshore construction.



Emergency drill

"CCCG will comprehensively strengthen the safety guarantee of highway and waterway construction. As a problem solver, value creator and solution provider, CCCG will continue to improve the level of safety and quality, provide experience for the Safe Quality Engineering in One Hundred Years, and make contributions to the construction of major national infrastructure."

Wang Tongzhou, Secretary of the Party
 Committee and Chairman of CCCG

### **ACCELERATING GREEN TRANSFORMATION**

"Lush mountains and lucid waters are as valuable as gold and silver." CCCG practices the concept of green development, promotes ecological progress, and strictly implements laws and regulations such as the Environmental Protection Law and the Management of Energy Conservation and Emission Reduction of Central SOEs. We constantly improve green management, vigorously carry out green production, implement green operation, and accelerate green transformation to realize the coordinated development between enterprises and nature.

### **GREEN MANAGEMENT**

CCCG has accelerated the construction of ecological and environmental protection systems, compiled a study manual for ecological civilization thoughts, published the Key Points of Energy Conservation and Environmental Protection Work of CCCG in 2020, and formulated the Three-Year Action Plan for Energy Conservation and Ecological Environmental Protection Work of CCCG (2020-2022). We carried out "expert consultation type" help and quidance, providing education directly to those in need in combination with the inspection work. We carried out compliance rectification, held special meetings such as ecological environmental protection compliance rectification video meeting, and carried out inspection on projects belonging to Level-II units. We have continued to improve the early warning and emergency response mechanism for environmental protection and upgraded the management system for statistics and reporting of energy conservation and environmental protection information, updated the statistical content of statements, and improved the capacity for statistics and monitoring of energy conservation and environmental protection and the level of targeted management. In 2020, we won one grand prize and two second prizes of China Energy Conservation Association's "Energy Conservation and Environmental Protection Patent Awards", one-second prize and one-third prize of the "Awards for Scientific and Technological Progress for Energy Conservation and Emission Reduction", and one-third prize of "Technological Invention Awards for Energy Conservation and Emission Reduction".



## CRBC's Hong Kong Airport 3302 Project won the Environmental Recognition Award

The AA3302 Airport East Tunnel and its ancillary work (Project 3302), built by CRBC, were awarded the Environmental Recognition Award by the Airport Authority Hong Kong on November 26. The project was aimed to build a new traffic tunnel between the original airport runway and the newly built third runway. The construction period was short and the situation was complicated. The project team took the challenge head-on, integrated the concept of environmental protection into the construction plan and temporary structure design, strengthened staff environmental education and on-site inspection, encouraged front-line staff to innovate protection measures, and achieved remarkable results.



### In 2020

It has won 1 grand prize and 2 second prizes of China Energy Conservation Association's "Energy Conservation and Environmental Protection Patent Awards"

It has won 1 second prize and 2 third prize of the "Awards for Scientific and Technological Progress for Energy Conservation and Emission Reduction"

It has won 1 third prize of "Technological Invention Awards for Energy Conservation and Emission Reduction".

Airport 3302 Project has won the Environmental Recognition Award

### **GREEN PRODUCTION**

CCCG advocates green production, adheres to green construction, promotes low-energy, pollution-free and high-efficiency processes, equipment and products, and reduces the negative impact of construction on the environment. We comprehensively strengthen the noise control through various measures such as installing mufflers, soundproof screens and improving green belts; We attach importance to developing a circular economy and explore ways to establish a long-term mechanism for conserving resources. In 2020, the comprehensive energy consumption of ten thousand yuan of business income was 0.0217 tons of standard coal.

The comprehensive energy consumption of ten thousand yuan of business income was 0.0217 tons of



### Implementing green construction

We integrate environmental protection into every aspect of construction and project management, innovate the application of science and technology, and improve intelligent management of green construction. We carry out reasonable arrangement of construction procedures, give priority to energy-saving, efficient, environmentally friendly machinery and equipment and recyclable materials, and improve the efficiency of resource allocation. We protect habitats of animals and plants, strengthen the governance of surrounding environment, and do a good job in ecological environmental protection.



### Developing circular economy

We attach great importance to the development of circular economy, explore the establishment of a long-term mechanism for resource conservation, and realize the transformation into a resource-conserving, environment-friendly and technologyinnovative enterprise. We actively promote resource recycling technologies, such as the use of recycled waste concrete, recycling of PHC pipe pile steam-raised condensate water, sand separation and slurry water pressure filter treatment and application, and rainwater collection and recycling, so as to achieve green and long-term development. We adhere to the scientific use of water to improve water efficiency. We vigorously carry out green construction activities. Through scientific and technical management, domestic sewage in the construction site after filtration and precipitation can be used for car washing, water sprinkling, irrigation, etc., so as to improve the recycling and utilization rate of water resources. We recycle and utilize rainwater at the construction site for structural concrete maintenance, road surface dust removal, etc. We optimize and improve the construction and maintenance process, and use recycling technologies to collect water resources from well point precipitation, and the automatic spray health system and so on to reduce water consumption.



### Explore the application of recycling technologies

In order to solve the problem of rainwater regulation and storage in the construction of "sponge city" and improve the ecological environment, the Fifth Engineering Co., Ltd. of the CCCC First Highway Engineering Group has set up a sedimentation and storage integrated system from Huilongguan, Changping District to Shangdi, Haidian District in Beijing. The rainwater in the bridge deck and the rainwater beyond the infiltration capacity in the green space will drain into the reservoir. The reservoir is made of split PP plastic module material, which can be disassembled manually. This can save machinery and construction period, effectively reduce the amount of excavation and backfill, and achieve high water storage rate, recyclable module, simple construction, space saving, energy saving and environmental protection.



Installation of PP reservoir modules

### **ENERGY CONSERVATION AND EMISSION REDUCTION**

CCCG vigorously develops and applies environmental protection technologies, eliminate outdated equipment, and improve energy efficiency. We optimize the energy structure and strengthen the supervision of energy consumption. We strictly treat sewage and waste, and constantly promote energy conservation and emission reduction.

### Optimizing energy mix and promoting high-quality energy

We develop and utilize new, renewable and clean energy sources, increase the proportion of high-quality energy in the energy consumption structure, and evaluate, plan and implement energy projects through PPP, EMC, BOT and other modes. In 2020, CCCG has consumed clean energies in equivalent to 340,000 tons of standard coal.

### Strengthening supervision over energy consumption and eliminating outdated equipment

We improve the consumption monitoring system of large equipment, and strengthen the real monitoring of the energy utilization of key energy-using equipment. We strictly implement the equipment purchase approval system to ensure environmental protection and energy saving of newly purchased equipment. We strengthen the technical transformation of existing equipment, vigorously eliminate old equipment with high energy consumption and high pollution, and constantly reduce the comprehensive energy consumption of the Group. The CCCC Third Harbour Engineering strengthens the management of fuel consumption of ship motor equipment. Relying on our ship equipment management system, we have developed vehicle fuel consumption management module, strengthened the renewal and transformation of production equipment, abandoned old large ship motor equipment, and purchased new energy-efficient ship motor equipment.

## Proper disposal of hazardous and non-hazardous waste

We improve the list of hazardous waste categories and identification plates, standardize the management of warehouse and ledger for hazardous waste, entrust qualified units to dispose hazardous waste, and increase the intensity of disposal and the frequency of transshipment. We follow the principle of "source reduction, classified management, local disposal, and emission control" to treat harmless waste. We promote the work of "garbage sorting", classify and store household garbage according to local requirements, entrust qualified companies to receive household garbage from vessels for construction, and conduct harmless disposal or utilization as resource of construction waste. Local disposal of metal waste is encouraged, and recycling and comprehensive utilization of waste building materials is encouraged. We expand the harmless treatment and comprehensive utilization of industrial wastes such as fly ash, coal gangue, slag, and used tires, as well as dredged soil, construction waste, sewage and rainwater.

## Attaching importance to scientific and technological R&D and improving energy efficiency

We encourage innovation in ecological and environmental protection technologies and management, increase investment in R&D of energy conservation and environmental protection technologies and independent innovation in technical equipment, and promote the application of energy-efficient, low-carbon and environment-friendly "four new technologies" (new materials, new technologies, new processes, and new equipment). The CCCC Second Harbour Engineering has actively carried out research on key technologies of energy conservation, developed a cluster control system of gas-lift earth-collecting gantry and a mechanical arm underwater excavation robot, so as to enhance the automation and intelligence of construction and improve operation efficiency.

## Reducing sewage discharge and strictly treating sewage

We strictly regulate the environmental impact assessment of construction projects and the construction of environmental protection facilities, implement the pollutant discharge permit system, and comply with the discharge requirements of the government's Comprehensive Discharge Standard for Wastewater (GB8978-1996). In Qingdao Metro Line 13 project, drainage ditches and sedimentation tanks are set for different sewage produced at the construction site, and PH value of water quality is tested weekly to correct problems found and take preventive measures. In the Guinea Aluminum Power Project, the combined treatment process of "SBR + filtration + chlorine disinfection" is adopted for the domestic sewage of the wharf project. Oily sewage is treated by physical and chemical method, and the wastewater treatment process and equipment are advanced.

## Green and low-carbon development to tackle climate change

We take low-carbon development as an important development strategy and an important approach to ecological progress, and take active measures to effectively control greenhouse gas emissions. We issued the Statistical Statement of China Communications Construction for Energy Conservation and Ecological and Environmental Protection, which conducts statistical analysis of carbon dioxide emissions, improves the statistical index system for addressing climate change and the statistical system for greenhouse gas emissions, and makes all-out efforts to address climate change. In 2020, the Group's carbon dioxide emissions were 4.327 million tons, with a year-on-year decrease of 16.09%.

### **GREEN OPERATION**

CCCG adheres to the concept of green development, actively practices green operation and advocates green office. We promote publicity and education to enhance staff's awareness of energy conservation and environmental protection. We carry out public welfare activities on environmental protection, and practice and promote ecological environmental protection.



Practicing green office

We actively practice a simple, moderate, green and low-carbon lifestyle, strengthen the management of daily water and electricity, and actively carry out energy-saving work for heating, air conditioning, power distribution, elevators and other equipment. We advocate paperless office and strictly control office consumption. In the procurement of air conditioners, the Xiamen Data Center of China Transport Information Center selected frequency conversion equipment with advanced intelligent regulation technology, saving energy by 30%.

We carry out the "green lectures" training in the system of Pride University. A total of 12,000 people have been trained, and more than 8,000 people have passed the exams, which have enhanced employees' awareness of environmental protection. For the first time, we held the Energy Conservation and Environmental Protection Month under the theme of "making friends with nature to create harmony", the National Energy Conservation Publicity Week under the theme of "energy conservation and efficiency enhancement for clean water and green mountains", and the National Low Carbon Day under the theme of "green and low carbon for a well-off society in an all-round way". More than 30 rounds of publicity were carried out during the Week to expand the influence of energy conservation and environmental protection.



Strengthening publicity and education



Advocating ecological environmental protection

We strengthen the protection of biodiversity, promote ecological restoration and management, and organize a variety of public activities on environmental protection. In order to protect the underwater ecological environment of the Yangtze River, CCCC Shanghai Dredging Co., Ltd. set up an ecological conservation experiment area, and cast 4,000 fish nests, covering an area of 36,000 square meters. The Fourth Harbour Engineering organizes Blue Vest volunteer activities, advocates green travel, creates a good travel environment for the public, and sets up a green, low carbon, environment-friendly corporate image.

#### CCCG Video





Scan QR code to watch:
"Green CCCG" micro
video exhibition in
Energy Conservation
and Environmental
Protection Month



### **CREATING COMPREHENSIVE VALUE**

Based on its "CCCG in Five Fields" strategy and "Three Identity" positioning, CCCG forges ahead with determination and makes progress and maintains stable growth of various economic indicators; strengthens information disclosure and exchanges with shareholders and protects their rights and interests; establishes and improves customer service systems, keeps customer information safe, improves customer communication mechanisms, and strives to improve customer satisfaction.

### WINNING THE TRUST OF SHAREHOLDERS

CCCG implements the "123456" overall development strategy, adheres to the "three-fold, two-large and two-excellent" market operation policy, and continuously upgrades the operating system and operational quality and efficiency. In 2020, it achieved the revenue of 737.389 billion yuan and the total profit of 34.737 billion yuan, representing year-on-year growth of 12.2% and 8.3% respectively.

#### Compliance and information disclosure

To perform the obligation of information disclosure in a true, accurate, complete and timely manner, China Communications Construction Company Limited (CCCC). a subsidiary of CCCG, has formulated the Measures for Disclosure of Production and Operation Data, Measures for Information Disclosure Management, The Reporting System for Important Information, The Accountability System for Major Errors in Information Disclosure in Periodic Reports, Inside Information Management System, and Measures for the Management of Information Disclosure of Debt Financing Instruments; has disclosed regular reports and interim reports on the websites of the Shanghai Stock Exchange and the Stock Exchange of Hong Kong Ltd. (SEHK) in a timely and compliant manner, and simultaneously disclosed them on the locally designated publications and in the "Investor Relations" section of the company's official website; and in accordance with the requirements of the Shanghai Stock Exchange's latest industry information disclosure guidelines and the needs of investors, has disclosed the company's industry operating information, and enhanced the pertinence and effectiveness of information disclosure. In 2020, CCCC issued a total of 346 announcements, online documents and circulars in Chinese and overseas capital markets, and was awarded a rating of "A", the highest rating in terms of information disclosure, for seven years in a row by the Shanghai Stock Exchange.

#### Better communication

CCCC, a subsidiary of CCCG, takes a comprehensive, efficient, high-quality and smooth approach to investor relations communication, actively implements the "Internet + management" for investor relations and promotes mutual exchanges through the investor hotline, IR mailbox, Chinese and English website sections for investor relations, the SSE e-platform, performance briefings, and non-deal roadshow promotions. In 2020, CCCC participated in 30 investor forums organized by domestic and foreign investment institutions, and held nearly 100 one-on-one and group meetings; and replied to 199 questions from the SSE e-platform.



### MAKING CUSTOMERS SATISFIED

To improve customer satisfaction, CCCG has met customer needs, continuously improved its customer service system, expanded communication channels with customers, and resolutely safeguarded customer rights and interests.





Customer satisfaction surveys on drivers passing toll stations conducted by CCCC Asset Management Co.

### Protecting customer information

CCCG has always respected customer privacy, strictly stored customer information, carried out training on rules and regulations, strengthened employees' awareness of the law, enhanced employees' awareness of confidentiality, and encrypted electronic equipment and documents containing customer information. CCCCTianhe Mechanical Equipment Manufacturing Co. has implemented compliant and standardized management for customer files and established the restriction on the access rights of customer information that anyone is not allowed to consult customer files without permission. When employees of the Market Development Center leave, the department will receive, sort out and file their customer information. China Urban-Rural Holdings Group Co. shall follow the principle of "three prohibitions" to manage customer information, that is, it is prohibited to disclose customer information in private exchanges and communication, talk about customer information in public, excerpt or deliver customer information in non-working occasions. Meanwhile. it established a record of customer information, managed by dedicated employees.

#### Optimizing customer service

For the purpose of promoting corporate reputation and customer loyalty, CCCG has followed the customer-oriented principle and constantly improved customer service, optimizing customer experience. Northeast Regional Headquarters collected customer suggestions through customer return visits and customer satisfaction surveys, gave feedback to the departments and institutes under construction, and made rectification and reform as required so as to maintain the good reputation of the company in this region; The real estate customer service system of Hainan Regional Headquarters put service quality, service efficiency and feedback effect into the scope of performance appraisal, and constantly summarizes, revises and improves the customer service system in daily management; Guangxi Regional Headquarters have compiled subject reports about Pinglu Canal projects, established project leading groups, and positively contacted with Ministry of Transport so as to strive for the government support, providing high-quality projects and good services for customers.

#### Conducting customer satisfaction survey

CCCG's subsidiaries and affiliates conduct customer satisfaction surveys on a regular basis in order to seek for the opinions, suggestions and demands of customers, and make corresponding adjustment to improve customer satisfaction. In 2020, Northwest Regional Headquarters carried out 123 "customer satisfaction" surveys on 77 projects in the region by questionnaire to improve service quality; according to the requirements of Customer Satisfaction Monitoring and Measurement Control Program, CCCCGuangzhou Dredging Co. surveyed domestic projects under construction and the customer satisfaction was up to 100 percent; CCCC Highway Consultants Co. conducted 206 customer satisfaction surveys, with the overall customer satisfaction reaching 98.9 percent; ZPMC carried the questionnaire survey on final users of 108 projects throughout the world, with the overall customer satisfaction reaching 98.38 percent.

#### Managing customer complaints

CCCG has actively responded to customer complaints, established customer complaint handling mechanism, assigned dedicated employees to contact and negotiation, and effectively met customer demands. The Market Development Department of CCCC Dredging is responsible for keeping customer relationship, collecting customer opinions and suggestions, and organizing relevant departments to take actions in a timely manner; CCCC Third Harbour Engineering has established a complete customer complaint system. After receiving the customer complaint, relevant departments shall analyze the complaint and make a preliminary reply within one day, as well as prepare a treatment plan, which is supervised after being approved by directors, then follow up the customer feedback by a return visit in time. At the end of handling, the complaint and its plan shall be filed.

## **WORKING TOGETHER FOR MUTUAL BENEFITS**

CCCG has been forging ahead with its partners to continuously build and improve the supply chain management system, encourage suppliers to fulfill their responsibilities, carry out extensive cooperation and exchanges, and achieve win-win cooperation and shared development.

## BUILDING SUPPLY CHAIN OF CORPORATE SOCIAL RESPONSIBILITY

CCCG has established and perfected supply chain management system, and completed the preparation of the Plan of CCCG for the Construction of Supply Chain Management System and the Plan of CCCG for the Implementation of Supply Chain Management System. According to the Measures of China Communications Construction for Management of Equipment and Materials Suppliers and the Rules of China Communications Construction Company Limited for Management of Materials Suppliers, CCCG has established and improved the control and management mechanism, evaluation mechanism and incentives mechanism in supplier management. In 2020, CCCG participated in the procurement management and benchmark evaluation of centrally administrated state-owned enterprises and won the second place for two consecutive years in the construction category of central SOEs.

### Supplier management

CCCG has adopted the data uploading and examining system for supplier access and assesses the qualification of each supplier in a strict manner; set up a full-process supplier assessment system, managed its suppliers in categories and batches, adjusted the suppliers' level in accordance with the result of the assessment and improved its incentives mechanism which defines in details the standards for classification change in the aim of optimizing its suppliers; established a long-term communication mechanism and conducted calls or annual meetings to award and communicate with excellent suppliers on a regular basis, aiming at establishing long-term cooperation relations with suppliers. In 2020, CCCG had 1,496 suppliers at the headquarters level of the group and all of the supplier had passed the certifications of ISO 9001 Quality Management System, Environmental Management System and Occupational Health and Safety Management System.

### Supplier training

CCCG has provided suppliers with training programs concerning anticorruption, integrity, access and assessment standards so as to help suppliers fulfill responsibilities and acquire development. In 2016– 2020, more than 1,500 suppliers participated in the corporate social responsibility training programs. Among them, CCCG conducted four open online video courses concerning supplier management free of charge in 2020, providing training programs for more than 600 people.

### Material procurement

CCCG has continuously perfected the current system, revised the measures of the management of dedicated materials, and enriched the content of material controls; carried out regional procurement, promoted the local procurement of Hubei, Yunnan and dedicated materials through various measures, so as to achieve win-win cooperation between enterprise and region; continued to improve the functions of material procurement system and expand the scale of e-procurement. In 2020, the Group developed and improved more than 60 new functions of material procurement system and the amount of e-procurement reached 224.85 billion yuan, saving 5.268 billion yuan of costs.

### Supply chain talents cultivation

CCCG has continued to promote professional learning and improved the professional level of supply chain personnel. It successively held online video training classes for experts of supplier performance appraisal, middle or core talents of supply chain management, and key users of material procurement system, with a total of more than 6,000 people; the second TFC Supply Chain Competition was successfully held, in which the first and second teams representing CCCG participated in the national TFC supply chain finals, and ultimately, CCCC First Highway Engineering Group won the champion of 2020 TFC Supply Chain Challenge China Division

### SEEKING COOPERATION WITH OTHER PARTIES

CCCG has insisted on honest operation and fair competition, worked harder to promote high-end cooperation, continuously strengthened strategic coordination, and established cooperation relations with local governments, leading enterprises and famous universities at home and abroad, aiming at mutual benefits and win-win results; pushed forward exchanges within the industry for future development.



High-end cooperation with governments

CCCG has established and improved the high-end cooperation mechanism, optimized the leading functions of regional headquarters, and moved the high-end cooperation between CCCG and the government. In 2020, CCCG signed 28 strategic investment framework agreements with governments of Beijing, Fujian, Chongqing, Wuhan and other places so as to enhance government-enterprise cooperation and advance urban construction.



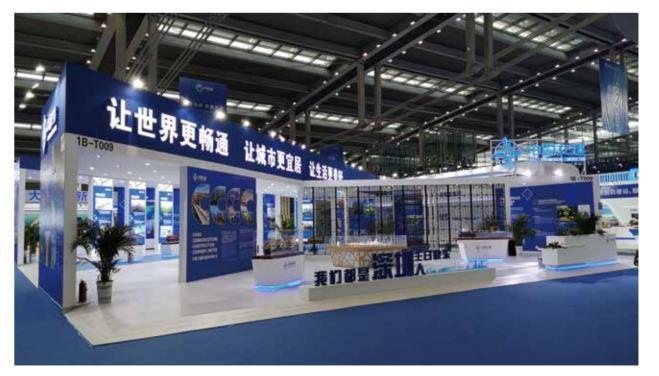
Cooperation with strong enterprises in the market

CCCG has constantly expanded the scope of market connectivity. In 2020, CCCG carried out cooperation with Ping An Insurance Group, China Development Bank, China Unicom, China Highway Engineering Consultants Corporation and other enterprises in many areas, aiming at promoting resource sharing, comparative advantages and mutual benefits with partners



Industry development exchanges

CCCG has positively participated in major national activities and pushed forward industry exchanges. In 2020, CCCG held and joined in the China Beijing International Fair for Trade in Services (CIFTIS), the China International Import Expo (CIIE) and other activities, attended the China Marine Economy Expo and the symposium of the cooperation and development withcentral SOEs in various provinces and cities, aiming at focusing on comprehensive development and the prosperity of the industry.



CCCG attends the China Marine Economy Expo

# ASSISTING EMPLOYEES' GROWTH

CCCG has insisted on the creator-centered talent concept, strictly observed the Labor Law and other laws and regulations, and truly protected the basic rights and interests of employees; carried out diversified and systematic staff training and paved the way for their growth in order to help employees realize their own value; cared for employees' life and ensured occupational health; conducted various recreational and sports activities to build a happy enterprise. In 2020, the total number of formal employees of the group was 160,541, with the signing rate of labor contract and coverage rate of social insurance reaching 100 percent.

## GUARANTEEING RIGHTS AND INTERESTS OF EMPLOYEES

CCCG respects and guarantees the legitimate rights and interests of each employee, adheres to equal employment, eliminates employment discrimination, improves the salary and welfare system, strictly protects the privacy of employees, standardizes employment management, and actively builds up harmonious labor relations.



The second session of the 13th Workers' Congress of CCCC First Highway Engineering Group

Equal employment

Compensation and benefits

Privacy guarantee

CCCG strictly abides by national laws, regulations and policies, bases talent recruitment on the principles of openness, fairness, competition and selection of the best, and equally treats all employees of different nationality, gender, age, race, religion, pregnancy and disability; truly complies with the Provisions on Prohibition of Child Labor, boycotts the recruitment of minors under the age of 16, strengthens the inspection of illegal use of child labor by subcontractors, as well as joins hands with supply chain partners to fulfill the responsibilities; and strengthens the recruitment of local employees to increase the local employment rate, and improve the life quality of local residents.

CCCG timely and fully pays social insurance for employees according to the relevant requirements of national laws and regulations; provides employees with competitive salary by means of studying and formulating incentive management measures for medium and long-term employees, equity incentive of listed companies, project follow-up and other eight supporting implementation rules as well as improve the salary incentive mechanism; offers various forms of employee welfare including commercial insurance for overseas employees, and establishes enterprise annuity system so as to improve life quality of retired employees; strictly implements the relevant national policies and regulations concerning working hours, forbids forced labor, and protects the employees' right to rest and vacation.

In terms of employee recruitment, annual performance assessment, salary management and personnel file management, CCCG strictly protects employees' privacy information concerning work, family, health, salary, etc. Moreover, non-specialized employees are not allowed to view other employees' privacy information except for work needs or strict approval.



Democratic Management

For the employment of dispatched workers, CCCG firmly abides by the new national requirements of labor dispatch, implements the new national policies of labor dispatch, and guarantees equal pay for equal work according to job responsibilities; for the employment of rural migrant workers, CCCG sets up a leading group of salary payment supervision and management, formulates the measures for supervision and management of subcontractor salary payment, and actively participates in the work training meetings and symposiums organized by the SASAC of the State Council, other ministries and commissions; meanwhile, CCCG strictly observes the employment regulations, protects the legal rights and interests of rural migrant workers, timely and fully pays their wage, and carries out self-inspection on the wage payment of migrant workers, aiming at ensuring the compliant and reasonable salary payment. In 2020, CCCG provided jobs for more than 300,000 rural migrant workers, the annual per capita income of whom exceeded 50,000 yuan.

CCCG has established and perfected the democratic management system with the workers' congress as the basic form, organizes employees to participate in democratic management and democratic decision-making, and offers regular supervision and feedback for implementation of proposals, ensuring the lawful rights and interests of employees are effectively guaranteed.

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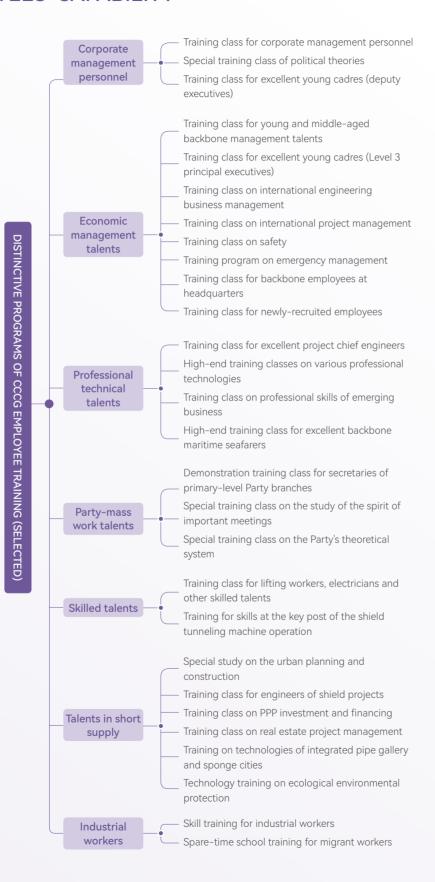
### IMPROVEING EMPLOYEES' CAPABILITY

CCCG has insisted on the concept of "talent is the first resource", constantly stimulated the potential of talents, implemented the strategy of talent priority development, firmly followed the road of talent strengthening enterprises, and gave full play to the leading and supporting role of talents for development. In 2020, seven employees of CCCG were awarded the "national labor model", and Wang Chengqi Studio of Harbour Engineering Design & Research Institute of CCCC Third Harbour Engineering won the "national demonstration model and craftsman talent innovation studio".

### Strengthening staff training

CCCG has actively advanced the construction of its enterprise universities, enhanced the organization and management of employee training and online training courses during the outbreak: constantly optimized the construction of the branch of the management school, the vocational skills appraisal center and all assessment stations; insisted on the leading role of demonstration training benchmark, carried out training programs by graduation and classification. Moreover, with the "11711" talent training project as the center, CCCG has created distinctive training programs for enterprise leaders, Party-massesrelated workers, management personnel, professional technicians, and skilled workers, and fostered a number of influential training brands including "Executive Education," "Middle-aged and Young Cadre Training," "Outstanding Young Cadre," and "Excellent Chief Engineer Class.'

In 2020, CCCG actively explored the "Online + Offline" training mode in the regular epidemic prevention and control; spared no effort to the development of education courses, inviting 159 teachers and developing 763 course resources, recorded more than 300 hours of online courses. introduced the Central Party schools as well as other external authoritative and highquality resources according to the actual condition, and held the Group's first microteaching competition, aiming at gathering excellent learning resources; built its network institute platform based on talent university and moved the pilot use of platforms, training more than 200,000 employees in more than 500 online training programs of all kinds in a year.



### Advancing vocational skills competition and post training

CCCG has vigorously promoted vocational skills competition for skilled personnel, and printed and implemented the Measures of China Communication Construction Group Limited for Vocational Skills Competition; established the platform for skilled talents to compete and exchange with each other by holding one Class I competition and three Class II competitions in five core occupations (types of work), and 17 employees won the title of "Technical Expert of CCCG". The Company has promoted 43 units and 3,109 projects to carry out "Six Competitions (in efficiency, skill, quality, creativity, effect, and contribution) and Six Creations (of high efficiency, craftsmanship, good quality, intelligence, ecology, and harmony)" labor competition, forming a competition promotion model that brings together headquarters and participating units and integrates investment, construction and operation so as to drive the resumption of work and production; organized the national leading labor and skills competition for Beijing-Tianjin-Hebei coordinated development with the participation of 34 projects, 249 teams and 14,962 people, as well as the national highway engineering labor and skills competition with the participation of eight units, 47 projects, 981 teams and 37,913 people in the highway system.

### Skills training for rural migrant workers

Based on management schools and key projects of various units, nearly 600 amateur schools for rural migrant workers have been established around the country to continuously provide skills and quality training for rural migrant workers and cultivate industrial workers in the new era. Up to the end of 2020, more than 500,000 rural migrant workers have been trained, which plays a positive role in terms of improving rural migrant workers' overall quality and awareness of work safety and vigorously promoting the team construction of industrial workers.

### Career development paths

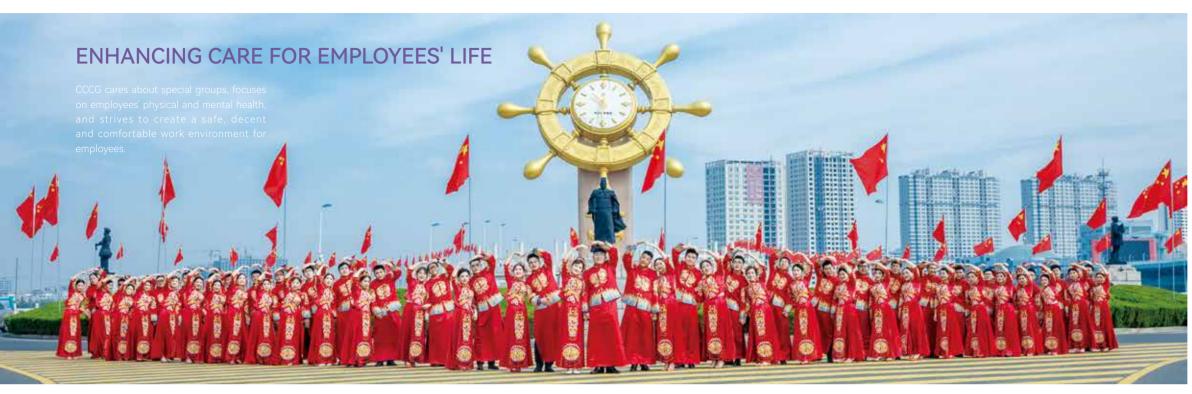
More than

have been trained in total

CCCG has optimized the construction of career paths, built a multi-path development system and pushed forward the career development of employees. During the 13th Five-year Plan period, CCCG stepped up efforts to train technical personnel and young cadres, formulated the Introduction of Highend Talents in Short Supply and Salary Agreement, and established a pool of more than 500 outstanding young cadres.



The promotion meeting for CCCC Dredging (Group) Co. "Six Competitions and Six Creations" Labor Competition



AFER

CCCC Finance Corporation holds special lecture on mental health



The Project Department of Rail Transit Line 3 and Line 4 in Xiamen organizes industrial workers for physical examinations

### Group wedding

### Caring for special groups

CCCG pays attention to the assistance for employees in difficulty, raises and establishes special assistance funds to provide security for the employees in need; cares for female employees, adjusts maternity leave policies of subsidiaries at all levels according to relevant national policies, protects the rights and interests of pregnant women and nursing mothers; cares for front-line employees, by offering solatium and high temperature allowance to employees, and building several supporting facilities such as loving houses and loving stations. In 2020, the Group's trade unions at all levels visited 74,830 employees, provided assistance for 2,810 employees with financial difficulties, and paid more than 8.81 million yuan of assistance fund.



CCCC First Harbour Engineering offers solatium to overseas employees



CCCC Third Harbour Engineering sends winter coats and life supplies for workers

### Caring about occupational health

CCCG has established an occupational health protection mechanism to constantly improve the systems on regular physical examinations for employees and special medical examinations for employees engaged in special or hazardous jobs, ensuring each employee completes examinations; distributed labor protection supplies and equipped with some facilities to spray water and drop temperature based on the conditions of construction sites, aiming at protecting occupational health of employees; carried out diverse seminars on occupational health and education activities in order to improve the employees' awareness of health and ensure their physical and mental health. In 2020, CCCG held 2,530 seminars about occupational health, distributed 147,400 brochures of preventing occupational diseases, issued 5,671 pieces of relevant information, and urged all units to conduct health examinations for 224,000 employees.



CCCC First Highway Engineering Group donates money to severely ill employees



CCCC First Harbour Consultants visit retired cadres

### **ORGANIZING EMPLOYEE ACTIVITIES**

CCCG advocates the concept of happy work and healthy life, and has carried out a series of cultural and sports activities, such as Spring Festival parties, calligraphy workshop, reading season forum of famous scholars, and ant book market, so as to help employees relieve work pressure and enrich daily life; and held group wedding ceremony and matchmaking activities, aiming at making employees happy in family. In 2020, the Group successively conducted "Health China • Happy CCCG" speeches of health popularization five times, organized 18 model workers of provincial, ministerial levels and above to participate in the first model retirement activities in the Guangdong model workers sanatorium, arranged the third "My destiny to meet you here" social events and brisk walking for single young employees and built a new era Art Troupe to perform for Tianjin Metro Line 11 and SG5 Beijing-Xiong'an Expressway of CCCG.



Spring Festival Network condolences







Calligraphy meeting of CCCG



Health lecture



### China Dream • Labor Beauty

The Project Department of Shenzhen-Zhongshan Bridge of CCCC Fourth Harbour Engineering organized the Party of China Dream • Labor Beauty with Workers Art Troupe of Guangdong, which presented a splendid cultural feast to the frontline employees and obtained unanimous applause.



"China Dream • Labor Beauty" special performance for frontline employees by Workers Art Troupe of Guangdong

# PARTICIPATING IN PUBLIC WELFARE CAUSE

CCCG has always insisted on the concept of serving society and making contributions to society, actively fulfilled its responsibilities as a corporate citizen, participated in community building, carried out the "Blue Vest" volunteer service activities, and responded to the calls for emergency rescue and disaster relief, making contributions to the construction of a harmonious society. In 2020, the donations for public welfare cause of CCCG reached 391.1713 million yuan.

The donations for public welfare cause has reached 391.1713 million yuan

# PROMOTING HARMONIOUS COMMUNITY

CCCG has taken initiative to participate in community activities, and conducted activities to help poor students and people in need and improve the people's livelihood. The Company has enhanced efforts to serve the public in a down-to-earth manner, and established good relations with the locals, striving to build a happy and harmonious community.





## First medical care integrated nursing home of CCCG officially opened up

In May 2020, Yuepu Tianyi nursing home, operated by Xunyang company of CCCC Shanghai Dredging, officially opened up. The nursing home integrates medical care, rehabilitation and health care, life care, cultural entertainment, spiritual comfort and other functions. It highlights the characteristics of "integration of medical care and nursing", and has been committed to providing a comfortable environment for the elderly, so that the elderly are truly available to retirement, medical care, study and happiness.





CCCG Real Estate Group Co. visits a primary school at Dongjiu Village, Shanjiang Town



Project Department of Guangzhou Metro Line 12 publicizes community safety



Project Department of Yongtai Highway of CCCC Third Harbour Engineering cares for left-behind children



CCCC Investment Co. promotes legal popularization at Jianzhou New Town on National Constitution Day

### PARTICIPATING IN PUBLIC WELFARE CAUSE

CCCG has constantly followed the voluntary spirit of "Dedication, Friendship, Mutuality and Advancement", perfected the "Blue Vest" volunteer service system, strengthened the volunteer service position construction, stepped up efforts to carry out public welfare activities inside and outside the Company, and fostered the brand image of Blue Vest. In 2020, the Company had 19.987 volunteers, providing a total of 100.297 hours of volunteer services.

19,987 employees are volunteers



Volunteers of Shudong Avenue project of CCCC Second Highway Engineering have paid a caring visit to the Xinyi Shiji Elderly Service Center



Volunteers of CCCC Highway Consultants Co. conduct joint learning and development activities of Serving Two Sessions (NPC & CPPCC)



Book donantion to local schools by the 2-contract project of Longtang-Langtang Expressway by CCCC Road and Bridge International Co.



Volunteers of CCCC Urban Investment Holding Co. conduct love activities to help children study



### Make progress in caring for students' growth in Tibet

The Blue Vest volunteer service team of CCCC Tianjin Dredging Co. has carried out volunteer activities of "Make progress in caring for students' growth in Tibet" for seven years. Fourteen outstanding student representatives and six excellent teacher representatives are selected from 17 primary and secondary schools in Tibet to visit the flag raising ceremony, climb the Great Wall and travel to the Forbidden City in Beijing, aiming to broaden the horizon of students in Tibet, care for their physical and mental health and enhance their deep feelings for the motherland. By the end of 2020, the project has helped 99 teachers and students from 18 primary and secondary schools visit the great rivers and mountains of the motherland and experience Chinese culture. For this reason, it won the bronze medal in the final round of the Fifth China Youth Volunteer Service project competition.



"Making progress in caring for students' growth in Tibet" volunteer service

### CONDUCTING EMERGENCY RESCUE AND DISASTER RELIEF

In the face of earthquakes, landslides, rainstorms, typhoons, floods, droughts, mountain fires and other disasters, CCCG has given full play to its advantages in infrastructure construction, rushed to the sites at the first time, spared no efforts to conduct emergency rescue and disaster relief in order to guarantee the life and property safety of the people, making contributions to the resumption and reconstruction of affected areas. In 2020, CCCG units at all levels participated in 154 tasks, such as flood rescue as well as epidemic prevention and control, with a total of 2,141 emergency equipment and 9,121 people.



Project Department of North Extension Railway Line at Tianfu Avenue of CCCC Fourth Harbour Engineering



The Project Department of Diverting the Yangtze River to the Huaihe River of CCCC Road and Bridge International Co. to has participated in the flood fighting and disaster relief



The Project Department Chengdu Yanqi Lake of CCCC Second Harbour Engineering has rescued people trapped in the flood in Tianfu New District, Chengdu



### Rushing to rescue in Shenshan Village to repair "key roads" for Tibetan area

On June 21, 2020, the project department of Sichuan Dadu River Shuangjiangkou power station of CCCC Second Harbour Engineering received an emergency task to rescue Shenshan village. The continuous heavy rainstorm had made the river water level in Barkam City of Tibetan Qiang Autonomous Prefecture of Ngawa exceeded the historical record, and the suspension bridge, the only exit of Shenshan village, was in danger. After four consecutive days and 10 hours of rescue work every day, the project department had completed the reinforcement of the main body of the abutment and passed the test of the follow-up flooding peaks, which was sincerely appreciated by all the villagers of Shenshan village.



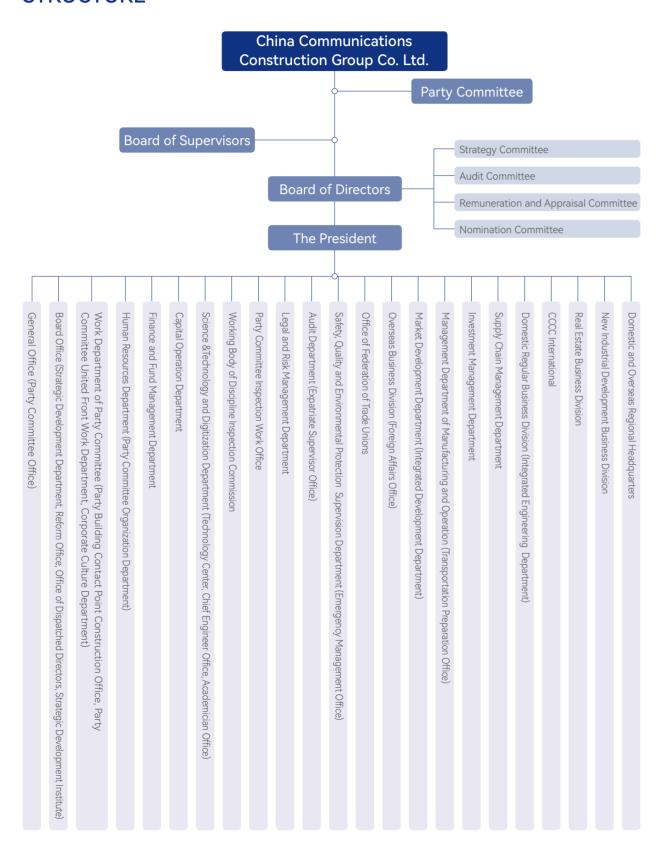
## **ABOUT US**

### **GROUP PROFILE**

China Communications Construction Group Co., Ltd. (CCCG) is the world's leading large-scale infrastructure player that provides whole package solution. It is mainly engaged in, among others, investment, construction and operation of modern transportation infrastructure and integrated urban development, and provides customers with package solution and integrated services relating to investment and financing, consulting and planning, design and construction, and management and operation by leveraging its advantages in the sectors of transport, urban development, waters, and global operations.

CCCG and its affiliated companies have been engaged in infrastructure-related construction, investment and operation for over 100 years, establishing its presence in more than 150 countries and regions around the world. It has constructed a large batch of transportation infrastructure projects representing the world's leading level as well as the highest level of the era, provided sophisticated and complete services for customers, and developed the world's leading technology system. Now, CCCG possesses more than 30 wholly-owned and controlled subsidiaries, and owns several international well-known brands including CCCC, CHEC and CRBC. Being listed on Hong Kong and Shanghai stock exchanges, CCCG boasts strong overall strength, significant brand influence, and growing industry leadership and value creation capabilities.

## **ORGANIZATIONAL STRUCTURE**



### LIST OF SUBSIDIARIES

### Overseas enterprises

China Harbour Engineering Company Ltd. China Road and Bridge Corporation

### Infrastructure enterprises

CCCC First Harbour Engineering Company Ltd.

CCCC Second Harbour Engineering Company Ltd.

CCCC Third Harbour Engineering Company Ltd.

CCCC Fourth Harbour Engineering Company Ltd.

CCCC Dredging (Group) Company Limited

CCCC First Highway Engineering Group Co., Ltd.

CCCC Second Highway Engineering Co., Ltd. CCCC Third Highway Engineering Co., Ltd.

CCCC Fourth Highway Engineering Co., Ltd.

Road and Bridge International Co., Ltd.

CCCC Mechanical and Electrical Engineering Co., Ltd.

CCCC (Shenzhen) Engineering Co., Ltd

### Consulting enterprises

CCCC Water Transportation Consultants Co., Ltd.

CCCC Highway Consultants Co., Ltd.

CCCC First Harbour Consultants Co., Ltd.

CCCC Second Harbour Consultants Co., Ltd.

CCCC Third Harbour Consultants Co., Ltd.

CCCC - FHDI Engineering Co., Ltd.

CCCC First Highway Consultants Co., Ltd. CCCC Second Highway Consultants Co., Ltd.

China Highway Engineering Consulting Corporation

CCCC Infrastructure Maintenance Group Co., Ltd.

CCCC Railway Consultants Group Co., Ltd.

### Airport construction enterprises

China Airport Construction Group Co., Ltd.

### Equipment manufacturing enterprises

Shanghai Zhenhua Heavy Industries Co., Ltd. China Highway Vehicle & Machinery Co., Ltd.

CCCC Xi'an Road Construction Machinery Co., Ltd. CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd.

CCCC Chenzhou Road Construction Machinery Co., Ltd.

### Investment business enterprises

CCCC Investment Company Limited

CCCC Urban Investment Holding Company Limited

CCCC Ocean Investment Holding Company Limited

CCCC International (Hong Kong) Holding Limited

CCCC Asset Management Company Limited

Capital Expressway Development Co., Ltd.

CCCC Xiongan Investment Co., Ltd.

China Urban-Rural Holdings Group Co., Ltd.

CCCC Industrial Investment Holding Co., Ltd.

CCCC Nujiang Industrial Poverty Alleviation and Development Co., Ltd.

CCCC Haixi Investment Co., Ltd.

CCCC East China Investment Co., Ltd.

CCCC Northeast China Investment Co., Ltd.

CCCC Southwest Investment and Development Co., Ltd.

CCCC Northwest Investment and Development Co., Ltd.

CCCC Central China Investment Co., Ltd.

CCCC Beijing-Tianjin-Hebei Investment and Development Co., Ltd.

CCCC Bay Area (Guangdong) Investment and Development Co., Ltd.

### Real estate enterprises

Greentown China Holdings Limited

### Financial enterprises

CCCC Finance Company Ltd.

CCCC Fund Management and Leasing Co., Ltd.

CCCC Financial Leasing Co., Ltd.

### Information technology enterprises

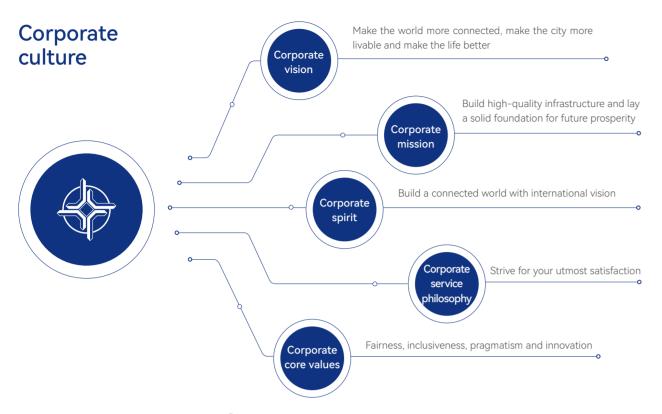
China Communications Information Technology Group Co., Ltd.

### Business and commercial enterprises

China Communications Materials and Equipment Company Limited Chuwa Bussan Co., Ltd.

### Other enterprises

Communications Construction News Co., Ltd.



## **PARTY BUILDING**

CCCG has given priority to political development, resolutely implemented the policies and deployment of the CPC Central Committee and the work requirements made by the Party Committee of SASAC, given full play to the role of leading direction, overall management and implementation, and made overall efforts to reform and develop the Party building, so that high-quality Party building guides its high-quality development.

## STRENGTHENING IDEOLOGICAL AND POLITICAL GUIDANCE, MAINTAINING REFORM AND DEVELOPMENT IN THE RIGHT DIRECTION

CCCG has firmly regarded Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era as the general principle for all work, guaranteed the implementation of First Issue system and established a long-term mechanism of "remaining true to the original aspiration and keeping the mission firmly in mind". In 2020, CCCG held 13 special seminars to study the spirit of important speeches made by General Secretary Xi Jinping and over 70 key contents of Xi Jinping: The Governance of China; carried out 21 sessions of Standing Committee of the Party Committee and deliberated on 168 topics; organized directors and cadres to give more than 300 Party lectures at the front line and achieved 93 research results of Party building, two of which were commended by the Party Committee of SASAC.

## STIMULATING THE VIGOR OF CADRES AND TALENTS, GATHERING HUGE STRENGTHS FOR REFORM AND DEVELOPMENT

CCCG takes the advantages of key minority and backbone forces as the starting point to promote the reform and development of enterprises. The Company has enhanced leadership teams, explored the establishment of a political research and judgment system, formed the Positive Standard and Negative List of Special Assessment of Political Performance, and formulated the Measures for Management of Outstanding Young Cadres; released the vitality of mechanism, completed the allocation of 12 outside directors in the pilot reform of the board of directors, constantly pushed forward the improvement of corporate governance structure, and organized six "Double Hundred Enterprises" to carry out the pilot reform of the tenure system for management members, contract management and professional manager system; strengthened the cultivation of talents and explored the "Online + Offline" training models in order to drive the comprehensiveness and practicality of personnel training.

## IMPROVING THE QUALITY OF GRASSROOTS PARTY BUILDING, ENHANCING THE BASES OF REFORM AND DEVELOPMENT

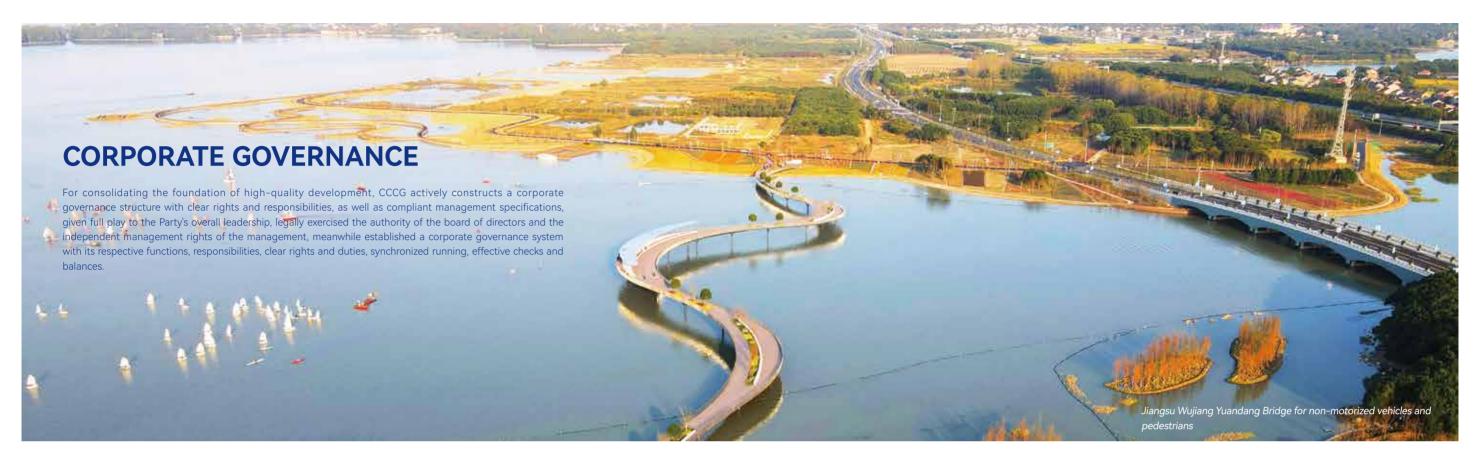
CCCG has transformed the distinctive guidance of "focusing on grassroots" into the practice of focusing on standardization, innovation, integration and publicity. CCCG worked harder to carry out special rectification, special investigation for general election, group training for secretaries of grass-roots Party organizations, strengthen the courses for Party members' education as well as the display windows for work style construction, build a team of Party cadres with "ten truths and ten meetings", meanwhile select and promote 34 sites for excellent Party members' activities; realized the joint cultivation of 60 grass-roots Party building benchmarking units, created the "integration" and "platform" models of grass-roots Party building, and established a management system of Party building, integrating "Party member education, business management, brand publicity and data analysis", and pioneered a new position of digitized Party building; intensified the integration of system and mechanism, working focuses and performance assessment. In general, the Companyhas told the story of CCCG and shown the brand image of CCCG by means of a various, advanced and influential model.

# INSISTING ON STRICT AND FULL GOVERNANCE OVER THE PARTY, STRENGTHENING THE FOUNDATION FOR REFORM AND DEVELOPMENT

CCCG has perfected the supervision system of strictly governing the Party, pushed forward "three non-corruptions" on a whole, and created a good environment with clean and healthy atmosphere in all aspects. The Company strengthens the defense line of supervision at home and abroad, breaks through the blocking points of supervision, carries out special inspections on 11 projects of direct management, and opened up inspection activities of "looking back" on 11 companies so as to expand the scope of supervision coverage and form a greater supervision framework; vigorously implemented the system of Recommendation for Discipline Inspection, intensified the discipline supervision, reinforced the punishment force of corruption, protect the baseline of corruption, and deepened the solutions to symptoms and root causes; and carried out special rectification of the problem of "institutionalization of the headquarters", conducted the responsibility system of first treatment of the Headquarters, and resolutely eliminated "formalism" and "bureaucracy".



Integrity Paper-cutting Activities of Party Style and Integrity Education Month



## GOVERNANCE STRUCTURE

CCCG strengthens the construction of corporate governance system, revises the list of major business management projects made by the Party Committee, and improves the rules and regulations of the Group; effectively implements the functions and powers of the board of directors via holding 12 meetings of the board of directors, 13 meetings of each special committee of the board of directors, and deliberating on 93 topics, steps up the standardized management of proposals, and improves the work quality and efficiency of the board of directors; gives full play to the role of the management, protects their rights to perform their responsibilities in accordance with the law, and improves the decisionmaking efficiency of the Group; promotes the construction of corporate governance of affiliated enterprises, publicizes the special outside director system, and pushes forward the construction of the board of directors and supervisors of pilot enterprises.

## ADVANCING REFORM

CCCG has enhanced the reform of stateowned capital investment company, established the "five types" Headquarters of "Party building leading, strategic control, value creation, service supervision, harmonious and enterprising", streamlined the number of departments from 27 to 18, and promoted the transformation of Group Headquarters to "Operation + Management" Headquarters. In 2020, in three special assessments of "Double Hundred Enterprises" system reform, CCCG Real Estate Group Co., Ltd., CCCC First Highway Engineering Group and China Communications Information Technology Group were assessed as Grade A enterprise; the project Research on Coordinated Innovation and Development of Mixing State-owned Enterprises and Private Enterprises was awarded the special prize of SASAC Research Center (the third Council of central SOEs think tank alliance)

## COMPLIANCE OPERATION

CCCG protects the bottom-line for systematic business risks, insisted on the problem-oriented and bottomline thinking, formulates the Measures of Compliance Management of China Communications Construction Group Ltd., Co. (Trial), and constructs an integrated compliance management organization; strengthens overseas risk prevention actions, carries out overseas risk inspections, organizes and formulates the prevention guidelines of lawful risks for EPC overseas projects, and further improves the "greater compliance" system at abroad; carries out various training programs on compliance and risk management, online training programs on the theory and practices of compliant risk management and compliant supply chains, with a total of more than 8,000 person times, which effectively moved the construction of compliant risk culture of the Group.

## RISK MANAGEMENT AND CONTROL

CCCG continued to improve the construction of legal risk management system, formulated the Measures for Reporting Major Business Risk Events (Trial), carried out risk and compliance management research, and built a coordinated linkage risk management system; carried out special activities of clearing and recovering claims of legal services, promoted the standardization of case management, and actively safeguarded relevant rights and interests; strengthened the legal audit work, focused on key projects, highlighted key sections, and organized and carried out the "eight clearances" work so as to constantly play the role of risk management; enhanced the legal popularization of the seventh Five-year Plan, actively expanded the channels of online legal popularization education, held activities of the collection. evaluation and display of micro audiovisual works on legal popularization, carried out the publicity and education activities for the study of the Civil Code, distributed the pamphlets of the Civil Code, delivered special video lectures with 8,893 employees watching them, and organized legal counsels to carry out a twoday study of the Civil Code, aiming at building the law-based culture of CCCG

## AUDIT AND SUPERVISION

CCCG continued to improve the audit leadership system, management mechanism, work procedures and systems, enhanced the level of audit standardization, digitization and refinement, established the "One + N" internal audit system framework, composed the Guidelines for Practical Operations of Internal Audit, established 168 audit institutions at all levels, equipped with 497 employees, and coordinated with relevant departments and units to drive the audit rectification work, and continuously improve audit quality and efficiency. In 2020, CCCG guided all institutions to complete 3,144 audit programs, 121 percent of the annual plan, and 46.3 trillion vuan of total audit assets, find out 10.694 problems, and put forward 8,973 rectification suggestions. The audit department of CCCC Second Highway Engineering Co. won the title of "National Advanced Enterprises of Internal Audit in 2017-2019"; Shan Xiaopeng of the Company won the title of "National Advanced Internal Audit Worker in 2017-2019".

## RESPONSIBILITY MANAGEMENT

RESPONSIBILITY GOVERNANCE

CCCG has implemented the "13th Five-year Plan for Corporate Culture Construction" in a deep-going way, advanced topdown design on social responsibility management, enhanced social responsibility management and communications. The Group has formulated the "Social Responsibility Management Method of China Communications Construction Group Co., Ltd." and established a social responsibility management work committee. The key leaders serve as its managing directors and the leaders in charge of various fields serve as deputy directors, the heads of various departments at the headquarters serve as its members. Furthermore, the Company has promoted the integration of social responsibility into day-to-day operation according to principles such as strategic orientation, deep integration and extensive participation. It has perfected the social responsibility organizational framework, improved social responsibility management systems, conducted multi-level social responsibility training, participated in the SASAC research project of "Social Value of State-Owned Enterprises in China and South Korea," and comprehensively boosted responsibility management and practice



In 2020, CCCCNujiang Industrial Poverty Alleviation and Development Co., Ltd. of the Group was awarded the national advanced enterprise for poverty alleviation. The picture of CCCC Nujiang Connecting bridge was awarded the most beautiful picture of poverty alleviation by Chinese Academy of Social Science; Comrade Yao Congxue, a poverty alleviation cadre, was awarded the "person of the year for enterprise poverty alleviation". The Group's social responsibility achievements won the "No. 20 comprehensive development index of social responsibility among top 300 Chinese enterprises in 2020", "top three in construction industry" and "Taurus Award of responsibility – Overseas responsibility model enterprise" by Chinese Academy of Social Science; and won the "Social Responsibility Award" of the 14th China listed company value evaluation by People's Daily and SECURITY.

On November 20, the commendation Conference for spiritual civilization construction was held in Beijing and General Secretary Xi Jinping met with the commended representatives. Five enterprises including CCCC Third Harbour Engineering, CCCC Investment Company Limited, CCCC Beijing-Tianjin-Hebei Investment and Development Co., Ltd., the third enterprise of CCCC Fourth Harbour Engineering and CCCC Shanghai Dredging Co., Ltd. were awarded the title of the sixth "national civilized unit" by the Central Committee of Civilization, the number of which were also the most in the commendation conference for national civilized units since the Group set up.



## **RESPONSIBILITY COMMUNICATION**

CCCG has released corporate social responsibility reports for 14 consecutive years, compiled the first poverty alleviation responsibility report, and guided the secondary units to prepare for the enterprise year-end responsibility reports concerning key countries and major projects. The Group conducted innovations in the cooperation models and channels with stakeholders, enhanced communications and exchanges with stakeholders, clearly understood their demands and concerns, and showed the responsibility ideas and actions of the Company to stakeholders, striving to achieve mutual development and progress with stakeholders.

nterested parties	Communication Mechanism and Forms	Response
Regulator (SASAC of the State Council)	Implement all kinds of documents and meeting spirits Business communications with counterpart departments Work reporting, reports and statements	Achieve Class A of comprehensive assessment Promote the corporate control ability Bear the corporate social responsibility
Governments at all levels(local government)	Special meeting reporting and information submission Strategic cooperation High-end business negotiation	Observe the laws and regulations Implement the national policies Operate honestly according to law Sign the strategic cooperation agreements
Shareholders	Regular or interim reports Shareholders' Meetings, written notices Investors' meetings	Maintain the stable profit Safeguard the shareholders' rights and interests Good credit rating
Owners and customers	Contract implementation Visit, meeting communication Documents and correspondences Owners' evaluation and management	Ensure the agreement performance rate and qualified rate of delivery of 100%  Continuous technology, process and product innovation  Provide the satisfactory services
Suppliers	Tendering and bidding, business negotiation  Contract implementation and business correspondence communication	Insist on the principles of integrity, mutual benefit and equal negotiation Good cooperation relationship
Subcontractors	Contract implementation Business correspondence communication	Strictly control safety and quality of subcontracted engineering Good cooperation relationship
Employees	Employee Supervisors, Workers' Congress Seek the reasonable suggestions Training meetings Daily work communication	Stabilize the salary incentive Safeguard the employees' rights and interests Pay attention to the employees' development Carry out all kinds of activities
Community and the public	Exchanges and sympathies in various forms Participate in the social public welfare activities	Environmental protection, civilization cobuilding Support the harmonious development of local society Public donation
NGOs and other third-party institutions	Maintain close contact and information sharing Carry out cooperation	Participate in and organize the social contribution activities  Maintain the communication channels unblocked

# MATERIAL ISSUES

In 2020, aiming at further improving the purpose and responsiveness of the social responsibility report, CCCG analyzed and compared influences of different social responsibility issues on stakeholders and the importance to the corporate development in accordance with material analysis model of social responsibility issues, and then identified high-profile material issues.



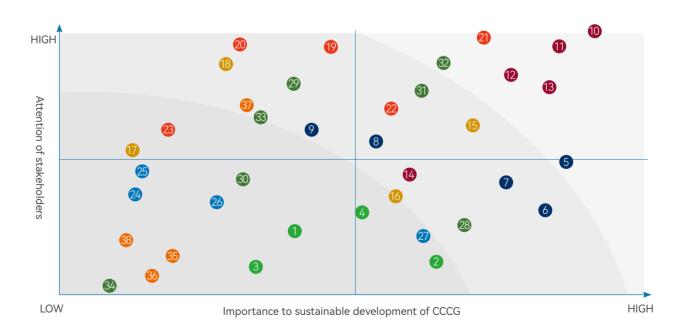
### **ISSUE IDENTIFICATION**

Based on standards of social responsibility at home and abroad, government policy requirements, benchmarking of enterprises and investigation on interested parties, and combining with the corporate development plans, CCCG has established a pool of social responsibility issues, and classified 38 issues into eight categories: responsibility management, corporate governance, quality project, supply chain management, employee responsibility, community responsibility, environmental protection and overseas responsibility performance.

#### Responsibility management Corporate governance Quality project Supply chain management 1. Responsibility strategy 15. Contractor/subcontractor 5. Improved governance 10. Engineering quality 2. Responsibility governance 11. Customers' right and interest screening mechanism structure 3. Social responsibility training 6. Risk management and inside quarantee 16. Standardize tendering and 4. Communication with control 12. Promote the customer bidding interested parties 7. Prohibit commercial bribery satisfaction 17. Promote the contractors/ 13. Scientific and subcontractors to assume the and corruption 8. Regular information disclosure technological innovation responsibility 14. Intellectual property protection 18. Migrant workers' right and 9. Investor relations management interest guarantee Employee responsibility Community responsibility Overseas responsibility performance Environmental protection 19. Compliant employment 24. Public charity 28. Establish the environmental 35. Drive the local employment 20. Employee's salaries and welfare 25. Employees' volunteer activity managementsystem 36. Drive the local employment 21. Employee's health and safety 26. Targeted poverty alleviation 29. Save resources 37. Local environmental protection 22. Employee's training and career 27. Fight against the outbreak 30. Development the circular 38. Local volunteer support development economy 23. Democratic management 31. Green construction and ecological protection 32. Emission management 33. Cope with climate changes 34. Environmental protection publicity

## **TOPIC ANALYSIS**

The Group has conducted a special survey of stakeholders based on 38 social responsibility issues, aiming at understanding the importance of those issues in their minds. Through establishing the two-dimensional matrix of "attention of stakeholders" and "importance to sustainable development of CCCG", CCCG has identified material social responsibility issues and scientifically identified the boundary of the report.



Two-dimensional Matrix of Analysis on Substantial Topics of China Communications Construction

The year of 2021 is the centenary of the Communist Party of China and is At the historical juncture of the "Two Century Goals", guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, China Communications Construction will practice the new development concept, blend in to the new development pattern and plan the new blueprint of the 14th Five-Year Plan based on the new development stage.

We will resolutely shoulder the mission and responsibility of being an important pillar of the national economy, take the initiative to blend into the overall situation and serve the overall situation, seize opportunities to expand the space, spare no effort to stabilize growth and lay a solid foundation for development by assisting in getting through the internal circulation and promoting the double circulation. We will take scientific and technological innovation as the primary driving force guiding the development and carry forward the advantages of being good at innovation and daring to innovate, and pulled by the pilot construction of transportation power and the national strategy of promoting the construction of new-type urbanization, we will increase the strength of integration of science and technology with digitalization.

We will insist on coordinating the development and safety, continuously strengthen the construction of safety system, set up the bottom line thinking and improve the ability of prediction, and we will actively defuse the stock risks and effectively prevent the incremental risks to provide the strong guarantee for the high-quality development of the Group. We will promote the construction of international, professional, high-level and high-quality talent team, optimize the talent selection system, improve the talent development system and innovate the talent motivation system to strive to improve the employees' sense of gains and sense of happiness.

We will continuously improve the management of energy conservation and environmental protection, consolidate the subject responsibility of energy conservation and environmental protection and continuously increase the supervision strength and promote the Three-year Action for Energy Conservation and Ecological and Environmental Protection, and we will comprehensively promote the energy conservation and carbon reduction work according to the China's target of carbon peak by 2030 and carbon neutrality by 2060, solidly carry out the energy conservation and environmental protection compliance rectification and blend the concept of "lucid waters and lush mountains are invaluable assets" into all aspects of daily work.

We will practically perform the social responsibility, be actively devoted to the community construction, be enthusiastic about the public charities and carry out the volunteer services, assist the designated support area, consolidate the achievements of poverty alleviation and achieve rural revitalization in an all-round way. We will insist on the high-standard commercial ethics to further promote the Group's governance level and accelerate building the modernized management system according to the principal line of deeply carrying out "Special Action for Promotion by Benchmarking the World-class Management".

Upon the struggles in the past one hundred years, we are fulfilling our dreams now; for the great cause of centuries, one hundred years are only a prologue.

In 2021, we will insist on the general keynote of seeking progress in stability, and pulled by the objectives of "guaranteeing two and striving for one", we will comprehensively implement "123456" work requirements according to the principal line of deepening the supply-side structural reform and the fundamental driving force of reform and innovation to ensure a good opening and starting of the 14th Five-Year Plan and strive to start the new journey of high-quality development in the new era.

## **APPENDIX**

## **TABLE OF KEY PERFORMANCE**

### **Environmental Performance**

Indicator	Unit	2018	2019	2020
Total annual energy consumption	10,000 tons of standard coal	193.77	182.47	157.34
Comprehensive energy consumption per 10,000 yuan of operating revenue	ton of standard coal/10,000 yuan (current price)	0.032	0.028	0.0217
Carbon dioxide emissions	10,000 tons	571.6	515.7	432.7
Annual electricity consumption	10,000 kWh	311,929.62	325,610.20	245,914.00
Annual gas consumption	normal cubic meters	2,879.35	3,165.70	2,943.00
Annual fuel quantity	10,000 tons	101.05	90.14	82.64

### Social Performance

Indicator	Unit	2018	2019	2020
Total number of employees	Person	127,062	156,428	160,541
Number of overseas employees	Person	38,705	38,020	39,634
Number of recruited graduates	Person	6,809	8,300	8,000
Signing rate of labor contract	%	100	100	100
Signing rate of collective contract	%	99	99	99
Trade union membership rate	%	95	96	100
Social insurance coverage	%	100	100	100
Rate of employees' paid leave	%	97	97	97
Days of paid leave per employee	Day	9.83	10.04	10.18
Coverage rate of physical examination	%	96	97	98
Proportion of female employees	%	15.7	15.73	18.19
Proportion of female managers	%	15	15	15.7
Number of employees with master's degree or above	Person	11,475	15,364	16,098
Number of employees with bachelor's degree	Person	74,939	96,440	97,906
Number of employees with junior college degree	Person	21,459	25,741	24,435
Number of employees with technical secondary school education or below	Person	19,189	17,807	22,102
Employee satisfaction	%	98	98	97
Turnover rate of employees	%	3.15	3.15	3.16
Investment in employee training	10,000 yuan	24,557.91	42,687.81	44,149.92
Number of employees participating in training programs	Person-time	382,816	765,640	1,578,192
Training coverage for general staff	%	100	100	100
Training coverage for middle management	%	100	100	100
Training coverage for senior management	%	100	100	100

Unit	2018	2019	2020
Class hour	63	81	104
Class hour	62	78	102
Class hour	128	136	142
Class hour	114	129	137
Time	1	0	0
Person	12	0	0
Person-time	5,908	3,925	109,064
Hour	1,816	960	156
%	-	-	70.5
%	34.32	40.56	39.35
10,000 yuan	11,195.56	26,160.49	39,117.13
Person	17,940	18,173	19,987
Hour	92,205	94,336	100,297
	Class hour Class hour Class hour Class hour Time Person Person-time Hour % 10,000 yuan Person	Class hour       63         Class hour       62         Class hour       114         Time       1         Person       12         Person-time       5,908         Hour       1,816         %       -         %       34.32         10,000 yuan       11,195.56         Person       17,940	Class hour       63       81         Class hour       62       78         Class hour       128       136         Class hour       114       129         Time       1       0         Person       12       0         Person-time       5,908       3,925         Hour       1,816       960         %       -       -         %       34.32       40.56         10,000 yuan       11,195.56       26,160.49         Person       17,940       18,173

### **Economic Performance**

Indicator	Unit	2018	2019	2020
Total assets	100m yuan	13,658.87	16,164.14	20,002.71
Net assets	100m yuan	3,128.71	3,820.14	5,005.09
Operating revenue	100m yuan	5,830.24	6,569.67	7,373.89
Total profits	100m yuan	286.74	320.89	347.37
Total taxes and fees paid	100m yuan	301.27	312.71	373.37
Number of corruption proceedings against the Group or its employees	Piece	0	0	0
Number of built berths	Piece	-	-	192
Area of reclamation through pumping filling	10,000 square meters	10,432	-	4,720
Amount of dredged earthwork	10,000 cubic meters	46,494	33,900	48,110
Completed mileage of expressway	Kilometer	5,099	3,926	4,538
Completed single mileage of railway and rail transit	Kilometer	1,131	1,017	167
Acceptance rate of project	%	100	100	100
First acceptance rate of project	%	100	100	100
Proportion of product recalls	%	0	0	0
Science and Technology Award with provincial level or above	Piece	195	221	269
Number of newly added patents	Piece	1,712	2,205	2,527
Number of patents owned	Piece	7,950	10,155	14,672
Customer complaint rate	%	0	0	0
Business contract fulfillment rate	%	100	100	100
Number of suppliers	Piece	1,056	1,397	1,496
Proportion of suppliers/subcontractors passing QEOHS Certification	%	100	100	100
Number of potential suppliers rejected for social responsibility non-compliance	Piece	0	0	0
Number of suppliers suspended cooperation for social responsibility non-compliance	Piece	0	0	0

<sup>&</sup>lt;sup>1</sup> Cement and its products and other materials with relatively close transportation distance shall be procured locally and their proportion in the sum total of procurement shall be calculated.

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## **RATING REPORT**



### Rating Report of "2020 Social Responsibility Report of China Communications Construction Group Co., Ltd."

The "China Expert Committee on CSR Report Rating" has selected experts upon entrust from China Communications Construction Group Co., Ltd. to form a rating team in order to rate the "2020 Social Responsibility Report of China Communications Construction Group Co., Ltd." (hereinafter referred to as the "Report").

### I. Rating basis

The Chinese Academy of Social Sciences "China CSR Report Guidelines - Engineering and Construction Industry (CASS-CSR 4.0)" and the "Rating Standards of China CSR Reports (2020)" of China Expert Committee on CSR Report Rating.

#### Rating procedure

- 1. The rating team reviews and confirms the "Process Data Confirmation of CSR Report" as well as related supporting materials submitted by the draftsman group of the "Report";
- 2. The rating team evaluates the drafting process and content of the "Report", and draws up the rating report:
- 3. The vice chairman of the rating expert committee, the leader of the rating team, and the experts of the rating team jointly sign as well as review the rating report.

### III. Rating conclusion

### Process ( \* \* \* \* \* )

The Work Department of Party Committee of the Group takes the lead in setting up a report draftman group, the leaders in-charge of the company steer the overall direction, the department general manager control the key links, the standing committee and the board of directors are responsible for the final review of the report; The report is positioned with a clear functional value as an important tool for preventing social environmental risks, improving the level of social responsibility management, enhancing corporate competitiveness and shaping the brand image of a responsible corporate; substantive issues are identified based on national macropolicies, international and domestic social responsibility standards, industrial benchmarking analysis, company development plans stakeholder surveys, etc.; subsidiary companies such CCCC, Zhenhua Heavy Industries, OriginWater, Greentown China are encouraged to release social responsibility reports to strengthen the vertical management strength of social responsibility; It has planned to publish CSR reports through its official website, and will present the report in the electronic, printed, longgraphic form in Chinese and English versions, revealing excellent process

### Substantiality ( ★ ★ ★ ★ ★ )

The "Report" has systematically disclosed crucial topics with excellent substantive performance, such as the implementation of macropolicies, construction quality management, product innovation, timely project delivery, protection of migrant workers' rights and interests, contractor management, safe production, dust and construction waste management, green building and other key issues in the engineering and construction industry. The description is detailed and adequate.

#### Completeness (★★★★★)

The main content of the "Report" has systematically disclosed 91.72% of the industrial core indicators with excellent integrity performance from the perspectives of "Working Hard and Aiming High, Demonstrating New Achievements of a Great Power", "Integration, Becoming Part of the New Development Pattern", "Higher Quality and Efficiency, Expanding New Space for Sustainable Development", "Harmony and Coexistence, Composing a New Chapter for a Better Future", etc.

#### Balance ( \* \* \* \* \* )

The "Report" disclosed negative data such as "Turnover rate of employees", "Number of major safety accidents", "Death toll in major safety accidents", "Number of corruption proceedings against the Group or its employees", "Customer complaint rate" among others, and stated detailed handling and rectification measures of safety accidents during the project construction Thus, it has excellent balance performance.

#### Comparability (★★★★★)

The "Report" has disclosed the comparison data of 62 key indicators such as "Total profits", "Total assets", "Total donation", "Hours of volunteer activities", "Total annual energy consumption" and "Carbon dioxide emissions" for 3 consecutive years; and has made horizontal comparisons regarding "First in Asia by ENR Top 250 International Contractors", "No. 20 comprehensive development index of social responsibility among top 300 Chinese enterprises in 2020". The comparability result is excellent.

#### Readability ( \* \* \* \* \* )

The "Report" has adopted a topic-based framework, focusing on four systems of "New Achievements, New Pattern, New Space and New Chapter", and expounded the responsibility fulfillment concept, practice and effectiveness of the corporate regarding these key issues, responded to the expectations and appeals of stakeholders; The cover is of a design style of an "abstract long picture of bridge", highlighting its business elements and enhancing the distinctions of the report; the cross-page of chapters has selected panoramic real pictures that suit the topic of the chapter, with imbedded description introduction and key performance so as to help readers quickly grasp the keynote. The embedded QR code has provided extending images to the interpretation of the report content, which has strengthened the communication and dissemination value of the report and achieved excellent readability performance.

#### Innovation ( $\star\star\star\star\star$ )

The "Report" has actively responded to the United Nations Sustainable Development Goals (SDGs) and demonstrated the report's advancement with the times and the responsibility of the Company; With "Assuming Responsibility of Central State-owned Enterprise and Passing "Extra Exam" of Epidemic Prevention and Control", "Building Dream with One Heart and Delivering "Satisfactory Answer" to Poverty Eradication" and "Stimulating Vitality and Taking Advantage of "Acceleration" from Technological Innovation", the report focuses on the corporate's responsible actions and results in the epidemic prevention and control, poverty alleviation, storming of fortifications and technological innovation, highlighting the responsibility sense of central state-owned enterprise; The feedbacks from stakeholders in many spots have proven the effectiveness of responsibility fulfillment and enhanced the credibility of the report; With the formulation of the "China Communications Construction Group Co., Ltd. Social Responsibility Management Measures" and the establishment of a social responsibility management work committee, its social responsibility management system has been further improved, demonstrating outstanding innovative performance.

#### Comprehensive rating (★★★★+)

After evaluating, the rating team has agreed that the process, substantiality, completeness, balance, comparability, readability and innovation of the "China Communications Construction Group Co., Ltd. 2020 Social Responsibility Report" has reached a five-star level, which could be rated comprehensively as "Five-Star Plus". This is a model in corporate social responsibility reports.



CCCG's social responsibility report has received five-star evaluation for four consecutive years, and this is the first time that it has received a five-star plus excellent evaluation

### IV. Suggestions for improvement

It is to increase the disclosure of core indicators of the industry to further enhance the completeness of the report.



Vice Chairman of Rating Expert Committee



Leader of Rating Team

Experts of Rating Team

Scan code to view rating files of the corporate

Issued on: August 20, 2021

## **OPINIONS AND FEEDBACK**

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This Report is the 14th corporate social responsibility report released to the public by CCCG. In order to continuously improve the corporate social responsibility work and constantly enhance the capability and level of corporate social responsibility performance, we are looking forward to listening to your opinions and suggestions. Please assist us to complete relevant questions in the feedback form. You may choose the following options to contact us.

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.What is your overall assessment of this re	eport?			
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s.Are the information, data, and indicators complete?	disclosed in this report clear, accurate and			
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k.What do you think is the most satisfying aspect in this report?				
5.What kinds of information would you like	to learn more about?			
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