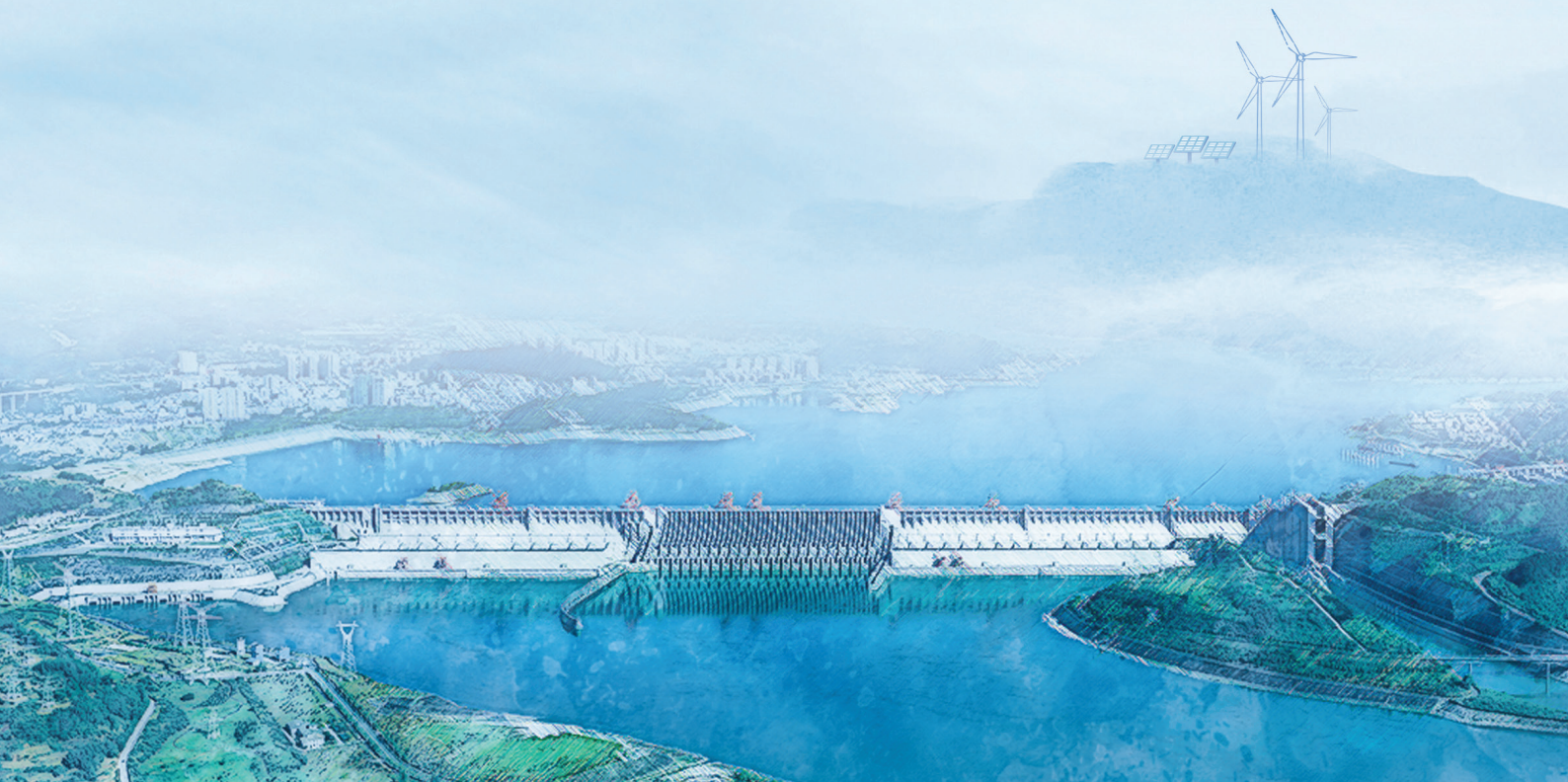




中国三峡
China Three Gorges Corporation

2022 Annual Report

China Three Gorges Corporation



Basic Information

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Abbreviation: CTG

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CTG
Weibo Official Account



CTG
WeChat Official Account



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Message from Top Executives

2022 is a year of profound significance. With unwavering determination and persistent commitment, we have tackled a slew of unprecedented challenges, including the historically lowest water level of the Yangtze River, the maximum supply pressures, and the stubborn recurrences of the Covid-19 pandemic. Our painstaking, diligent and unremitting efforts have yielded the completion of multiple national pillar projects to ensure sturdy energy supply while preserving pristine river waters. Our resolute dedication has empowered us to scale the heights of technological prowess through self-reliance and tenacity. These remarkable achievements, attained through arduous effort, serve as a testament to our unwavering resolve. We must treasure these hard-earned accomplishments.

The year of 2022 is marked by our deep footprints on the green and low-carbon path and our devotion to high-quality projects and eco-friendly development. The Baihetan Hydropower Station once again broke new ground in China's hydropower undertaking, while the Wudongde Hydropower Station received the honor of "FIDIC Highly Commended Project of the Year – Energy and Power: Renewables". The world's largest clean energy corridor has been fully established, and the completion of a number of mega hydropower stations has solidified our role as a global leading player in hydropower. The inaugural batch of national renewable energy base projects has been developed in an accelerating manner. The construction of China's first 10 GW-level renewable energy mega base was started in the Kubuqi Desert and the central and northern regions of Ordos. CTG Onshore Renewable Energy Headquarters has been officially established, and the offshore wind power corridor is rapidly taking shape. These achievements embody our unwavering determination to chase after the wind and sun. The Changlongshan Pumped Storage Power Station in Zhejiang has commenced full-scale power generation, and a series of pumped storage projects are underway. These "green power banks" bear witness to our relentless pursuit of constructing a renewable energy system. Our efforts to enhance the sewage pipeline network infrastructure have been intensified. The concept of the "Smart Urban Water Manager" has evolved from theory into practice. In the comprehensive effort to protect the Yangtze River, nearly one hundred billion yuan has been invested, and the tranquil beauty of "fish darting in clear waters" incarnates the strong steps we have taken to preserve our Mother River. The Karot Hydropower Station in Pakistan has been fully put into commercial operation, heralding a series of successful overseas acquisitions of renewable energy assets. President Xi Jinping recognized three hydroelectric projects in Sudan with a signed article, hailing them as landmarks of Sino-Arab friendship. CTGI has achieved credit ratings equivalent to China's national sovereign level from international rating agencies.

The year of 2022 is marked by our leading role in reliable energy supply and our green electricity to illuminate countless homes for a more beautiful China. Confronted with the dual challenges of a global energy crisis and the impacts of extreme weather, we have issued an unwavering pledge to ensure uninterrupted power and gas, and uninterrupted generating units operation. We have demonstrated crucial leadership during critical times. CTG's green electricity has illuminated the "City of Dual Olympics", contributing to the comprehensive achievement of carbon neutrality for the Beijing Winter Olympics, and lighting up the path we collectively tread towards the future. Our green electricity has provided robust support for summer power demand peak, with the highest daily power generation across the entire group exceeding 1.7 TWh. The cascade hydropower stations along the Yangtze River mainstream have reached a peak output of over 56 GW. In July, the Three Gorges Hydropower Station set multiple peak shaving records, utilizing limited water resources to increase unit output, effectively alleviating power supply shortages in Central, Eastern, Southern, and Southwest China. Our green electricity provides a stronger momentum for the green drive. Domestic daily renewable energy generation exceeded 200 GWh for the first time. The entire group achieved record-breaking monthly power generation for seven consecutive months, with annual power generation hitting a historic high. Our renewable energy generation consistently ranks first globally. The significant value of green electricity is fully highlighted, serving as a powerful engine for propelling comprehensive green transformation in economic and social development.

The year of 2022 is marked by our commitment to reforms and innovation and our growth as a central state-owned enterprise (SOE) with great significance. Anchoring ourselves to the goal of becoming a world-class enterprise, we have devised an accelerated plan to build a world-class company, undertaken four specialized actions, and established a clearer timetable, roadmap, and task list for constructing a

world-class enterprise. We have actively carried out critical reform tasks, completed the three-year action plan for SOE reform. We implemented adjustments and reforms within our headquarters and affiliated institutions, established business departments, improved market-oriented operating mechanisms, and carried out asset securitization for the Wudongde and Baihetan Hydropower Stations. This has continuously enhanced the vitality and internal driving force of our corporate development. We have scaled the peaks of technological innovation, witnessing the emergence of a series of groundbreaking and pioneering innovation achievements: the world's largest 16 MW offshore wind turbine, China's first deep-sea offshore wind turbine installation vessel, the world's first 2,000-ton-level offshore wind installation platform, the world's largest pure electric cruise ship in terms of cargo capacity, and China's first large-scale green and zero-carbon data center. These innovations have significantly propelled the development of China's manufacturing industry towards high-end, intelligent, and environmentally friendly directions.

The year of 2022 is marked by our dedication to programs benefiting the people and our contributions to better well-being for fulfilling our responsibilities as a central SOE. We have fully played our exemplary role in fulfilling social responsibilities, being the first SOE to set up a social responsibility department in headquarters. One after another, our aid projects have created a new landscape of rural revitalization, our distinctive programs have ignited new hopes for better lives, and our numerous donations have aggregated positive energy in times of hardship. As a result, CTG as a central SOE has gained greater popularity among people. During the severe drought in the Yangtze River Basin in the summer and fall, we took decisive actions, in total disregard of returns, to conduct two rounds of drought relief water releases and one tidal intrusion prevention operation. Approximately 5.6 billion cubic meters of water were discharged in total, effectively meeting water demands

for irrigation in the middle and lower reaches of the Yangtze River, urban and rural water supply along the main stream, and combating saltwater intrusion at the Yangtze River estuary. We strengthened the operational management of the Three Gorges Project navigation facilities, achieving a milestone as the annual cargo throughput at the Three Gorges ship locks surpassed 150 million tons for the first time, further highlighting the benefits of the Yangtze River as a "Golden Waterway".

The year of 2023 marks the beginning of fully implementing the thrust of the 20th National Congress of the CPC, a crucial year for advancing the goals of the 14th Five-Year Plan, and also the 30th anniversary of the establishment of CTG. We are about to embark on an expedition filled with glory and dreams. Anyone working hard would win the favor of the era; anyone forging ahead would exude brilliance like starlight. Let us bear in our mind that empty talk harms the country, while hard work rejuvenates the nation. Let's resolutely implement the principle as called on by President Xi Jinping that "Socialism was established through action, and so will be the new era." Let's stride forward with higher morale, stay united to embrace the future, make sustained efforts to compose a new chapter of "two-tracked approach", and make new contributions to the modernization featuring harmony between humanity and nature.



Board Chairman

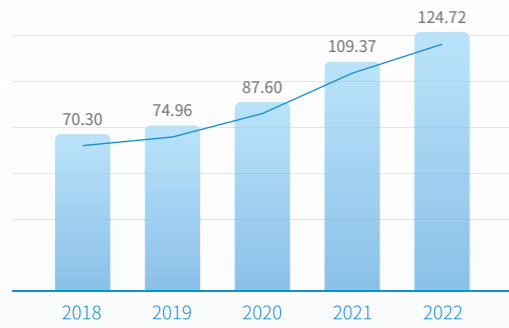


Board Director, President

Annual Key Performance Indicators

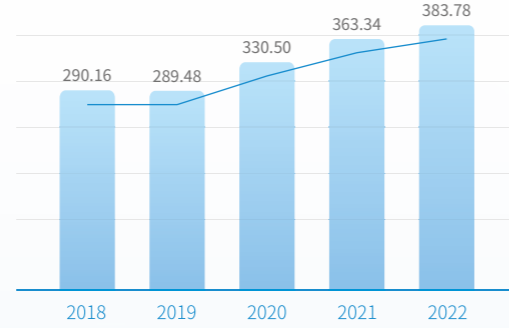
Installed Capacity

Unit: GW



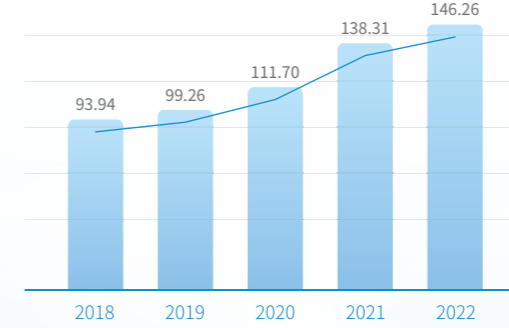
Electricity Generation

Unit: TWh



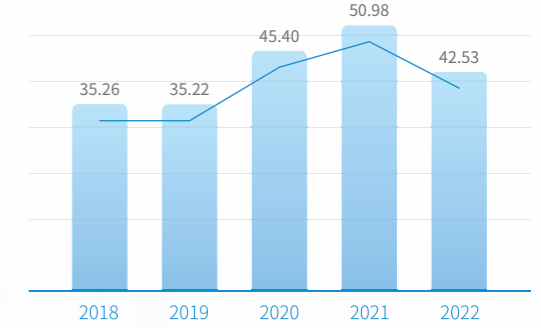
Revenue

Unit: billion RMB



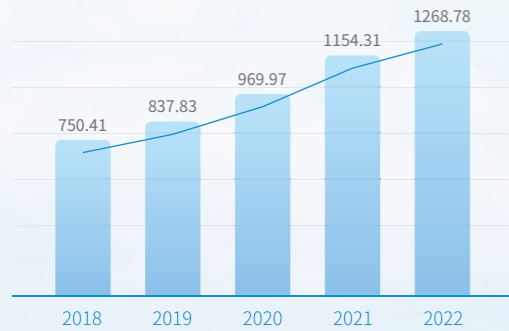
Net Profit after Tax

Unit: billion RMB



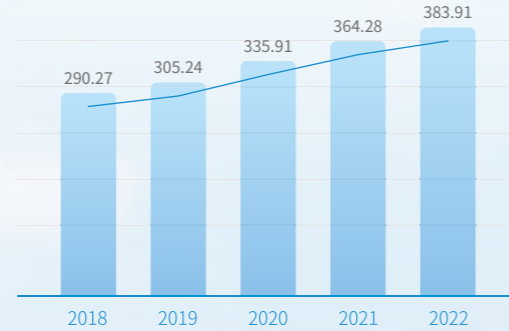
Total Assets

Unit: billion RMB



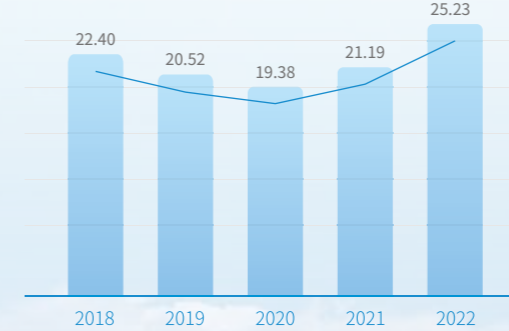
Owners' equity attributable to the parent company

Unit: billion RMB



Total Tax Payment

Unit: billion RMB



EBITDA

Unit: billion RMB



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Company Introduction

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Company Overview

On September 27, 1993, the China Three Gorges Project Corporation was established to build the Three Gorges Project. On September 27, 2009, it was renamed as China Three Gorges Corporation. On December 28, 2017, the company underwent a transformation from an enterprise owned by the whole people into a wholly SOE. CTG has experienced continuous, rapid, and high-quality development over 30 years. It has become the world's largest hydropower development and operation enterprise and a leading clean energy group in China. It is among the first batch of pilot central SOEs selected by the State-Owned Assets Supervision and Administration Commission of the State Council (SASAC) for building world-class model enterprises.

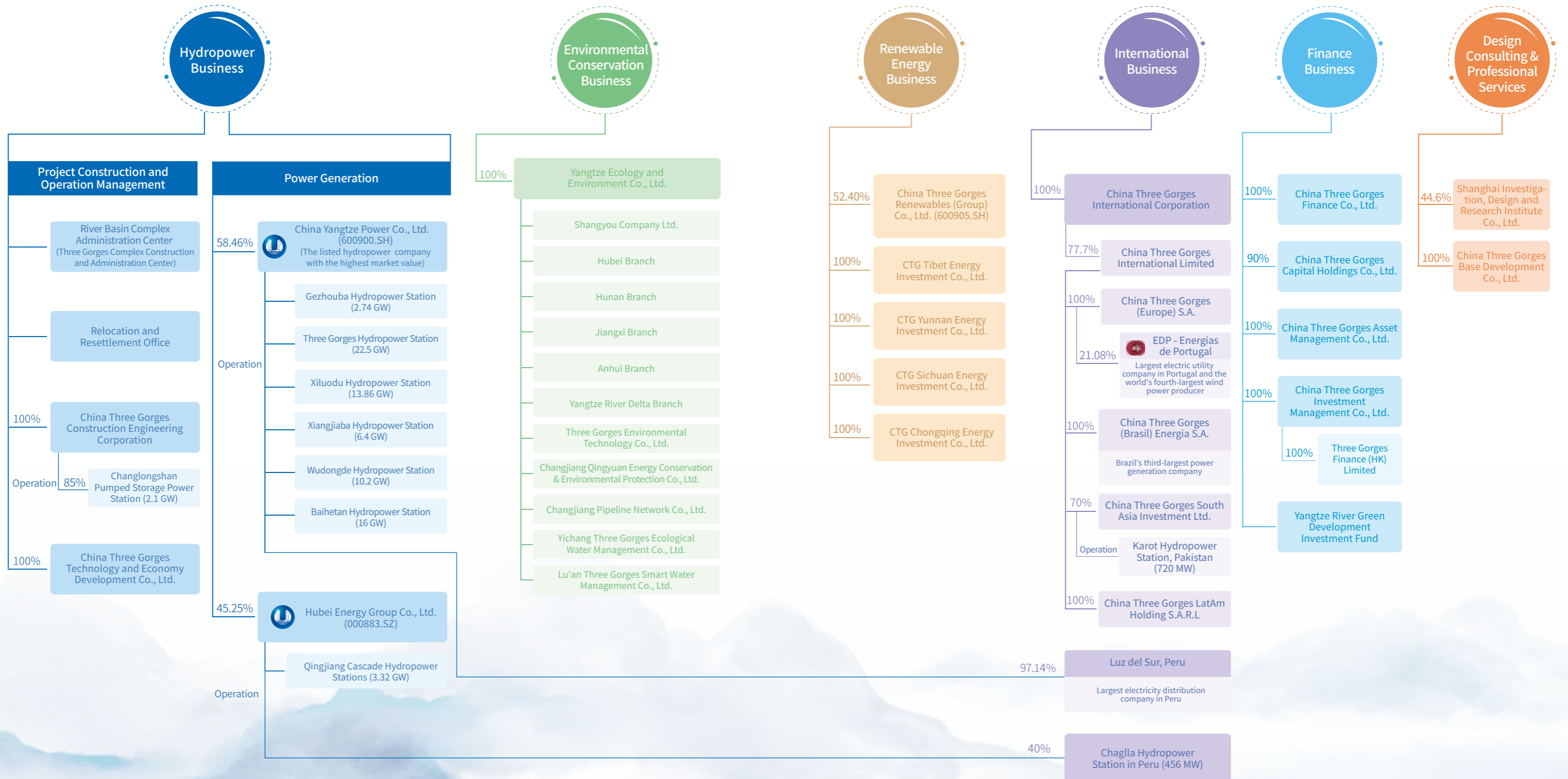
Since the 18th National Congress of the CPC, General Secretary Xi Jinping has provided significant speeches and instructions to CTG on multiple occasions. These instructions underscore the CPC Central Committee's high regard and sincere concern for CTG under the leadership of Comrade Xi Jinping as the core. They have also set the direction for the group's current tasks and future development, offering fundamental guidance. Strategic positioning of CTG: Actively serve the development of the Yangtze River Economic Belt and other major national programs; be a pivotal and leading player in the integration into the Yangtze River Economic Belt and the well-coordinated environmental conservation in the Yangtze River; be a safeguard for promoting regional sustainable development; take a lead in promoting the upgrade of the clean energy industry and in driving China's hydropower industry to "go global"; and continue deepening reform and pursue innovation-driven development to speed up the developing of CTG into an innovative world-class multinational clean energy enterprise with global competitiveness.

CTG is currently rooted in a new development stage, fully and comprehensively implementing the new development philosophy, constructing a new development landscape, and promoting high-quality development. CTG is dedicated to implementing its two-tracked approach for advancing clean energy development and the ecological conservation of the Yangtze River. During the 14th Five-Year Plan period, CTG aims to become a world-class clean energy group and a leading ecological conservation enterprise in China. It strives to make significant contributions to achieving carbon peak and carbon neutrality, and promoting comprehensive green transformation in economic and social development.

As of the end of 2022, CTG's consolidated installed capacity has reached 125 GW, with total assets amounting to 1.27 trillion yuan. CTG has maintained its national sovereign-level credit rating and continues to lead among central SOEs in various key indicators. It has received "A" rating in the annual performance assessment of central SOEs for 16 consecutive years.

CTG consists of various wholly-owned subsidiaries and subsidiaries with controlling interests, including China Yangtze Power Co., Ltd. (a listed company), China Three Gorges International Corporation, China Three Gorges Construction Engineering Corporation, China Three Gorges Renewables (Group) Co., Ltd. (a listed company), Hubei Energy Group Co., Ltd. (a listed company), Yangtze Ecology and Environment Co., Ltd., China Three Gorges Capital Holdings Co., Ltd., China Three Gorges Finance Co., Ltd., and Shanghai Investigation, Design & Research Institute Co., Ltd.

Main Business Segments



Board of Directors



Lei Mingshan

Board Chairman



Han Jun

Board Director



Li Fumin

Board Director



Wang Yilin

External Director



Xia Dawei

External Director



Qu Dazhuang

External Director



Mi Shuhua

External Director



He Guangbei

External Director



Hua Mei

Employee Director

Leadership Team



Lei Mingshan

Board Chairman



Han Jun

Board Director and President



Li Fumin

Board Director



Wang Liangyou

Executive Vice President



Chen Ruiwu

Head of Discipline Inspection
and Supervision Group



Zeng Yi

Chief Financial Officer (CFO)



Lv Tingyan

Executive Vice President



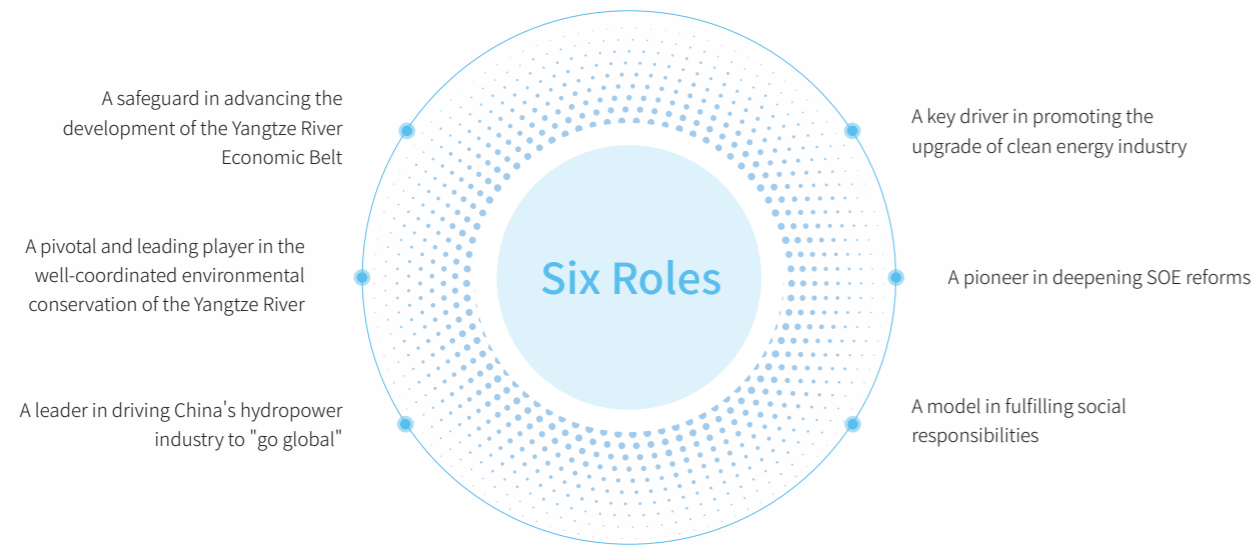
Wang Wubin

Executive Vice President

Development Strategy

Strategic Positioning

Actively serve the development of the Yangtze River Economic Belt and other major national programs; be a pivotal and leading player in the integration into the Yangtze River Economic Belt and the well-coordinated environmental conservation in the Yangtze River; be a safeguard for promoting regional sustainable development; take a lead in promoting the upgrade of the clean energy industry and in driving China's hydropower industry to "go global"; and continue deepening reform and pursue innovation-driven development to speed up the developing of CTG into an innovative world-class multinational clean energy enterprise with global competitiveness.



Developmental Approach

With a commitment to promoting high-quality development, we implement the new national energy security strategy, follow the strategic planning of building a beautiful China, and work towards achieving carbon peak and carbon neutrality goals. We strive to implement our two-tracked approach for advancing clean energy development and the ecological conservation of the Yangtze River.

Core Corporate Culture



Harmonizing Development with Conservation for Greater Public Well-being

CTG makes good use of the forces of Mother Nature to generate clean energy for well-being of the public. We then reciprocate by conservation of the Yangtze River. In so doing, we promote harmonious coexistence between humankind and nature, advance the comprehensive green transformation of economic and social development, and contribute to realizing people's aspirations for a better life.



Striving for Clean Energy and Yangtze River Conservation and Building a World-class Enterprise

CTG grounds its efforts in the new development stage, applies the new development philosophy, serves and integrates itself into the new development pattern, promotes high-quality development and implements our two-tracked approach for advancing clean energy development and the ecological conservation of the Yangtze River. We aim to become one of the world's top clean energy and ecological conservation enterprises by 2035, through unwavering efforts to enhance our business quality and size.



Innovation-driven Development for a Carbon-neutral and Win-win Future

CTG came into being as the result of reforms, while innovation is the force that strengthens it. Both reform and innovation are part of our corporate DNA.

Resolutely committed to green development, we strive to be a pacesetter in achieving targets for peak carbon emissions and carbon neutrality.

We respect and treasure the value of others, and seek shared growth and development with our employees and the industry, so as to create a better future for all.



Empowering a Greener World

CTG adheres to a path to green development that prioritizes ecological conservation. By increasing our capacity to provide clean energy and quality ecological products, we empower a greener world and support the sustainable development of humankind.

We are willing to work with everyone to promote green and low-carbon lifestyles, and build a beautiful world for all.

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Business Development


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Hydropower Development and Operation


Gezhouba Water Conservancy Complex 01

Installed Capacity (MW) **2,735**
 2022 Power Generation (TWh) **17.43**
 Year of Operation **1981**
 Normal Reservoir Water Level (meters) **66**




Three Gorges Project 02

Installed Capacity (MW) **22,500**
 2022 Power Generation (TWh) **78.79**
 Year of Operation **2003**
 Normal Reservoir Water Level (meters) **175**




Xiangjiaba Hydropower Station 03

Installed Capacity (MW) **6,400**
 2022 Power Generation (TWh) **31.55**
 Year of Operation **2012**
 Normal Reservoir Water Level (meters) **380**




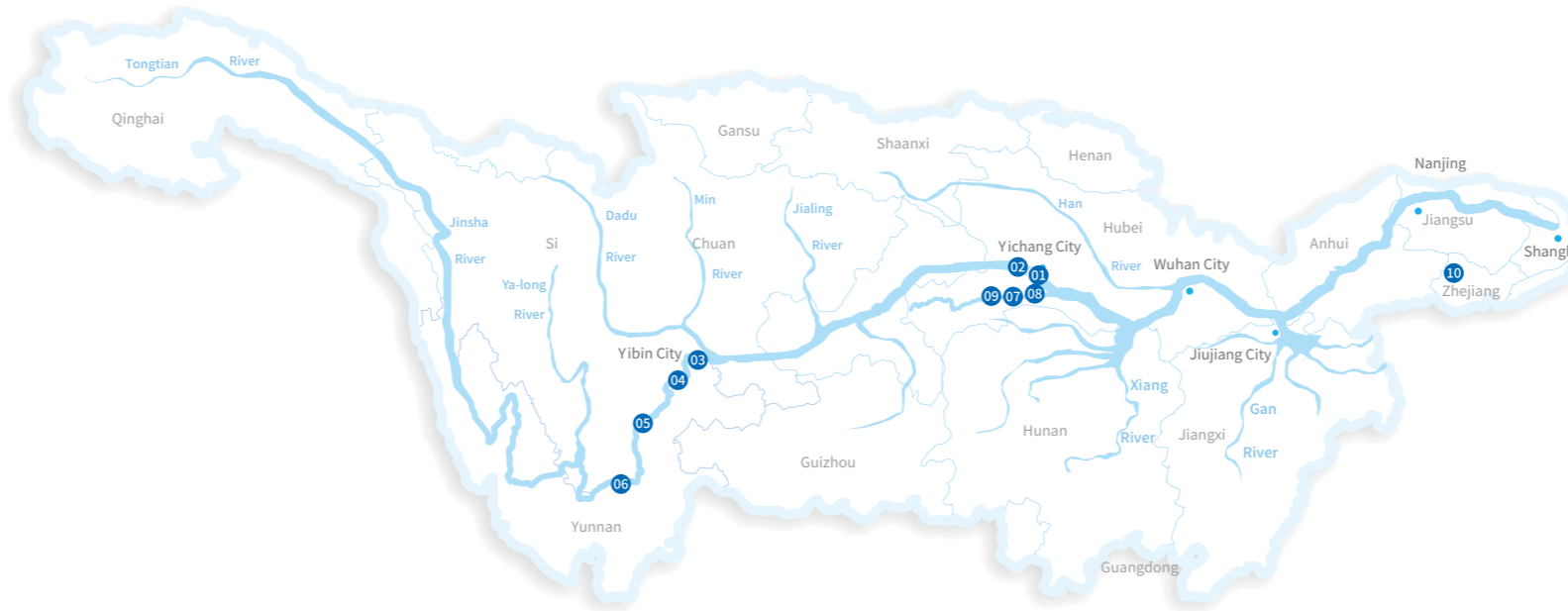
Xiluodu Hydropower Station 04

Installed Capacity (MW) **13,860**
 2022 Power Generation (TWh) **57.8**
 Year of Operation **2013**
 Normal Reservoir Water Level (meters) **600**




Baihetan Hydropower Station 05

Installed Capacity (MW) **16,000**
 2022 Power Generation (TWh) **40.06**
 Year of Operation **2021**
 Normal Reservoir Water Level (meters) **825**


Wudongde Hydropower Station 06

Installed Capacity (MW) **10,200**
 2022 Power Generation (TWh) **36.61**
 Year of Operation **2020**
 Normal Reservoir Water Level (meters) **975**




Geheyan Hydropower Station 07

Installed Capacity (MW) **1,212**
 2022 Power Generation (TWh) **2.51**
 Year of Operation **1993**
 Normal Reservoir Water Level (meters) **200**




Gaobazhou Hydropower Station 08

Installed Capacity (MW) **270**
 2022 Power Generation (GWh) **870**
 Year of Operation **1999**
 Normal Reservoir Water Level (meters) **80**



Shuibuya Hydropower Station 09

Installed Capacity (MW) **1,840**
 2022 Power Generation (TWh) **3.18**
 Year of Operation **2007**
 Normal Reservoir Water Level (meters) **400**



Changlongshan Pumped Storage Power Station 10

Installed Capacity (MW) **2,100**
 2022 Power Generation (TWh) **2.27**
 Year of Operation **2021**
 Rated Head (meters) **710**



The World's Largest Clean Energy Corridor

CTG's large-scale hydropower projects, as pillars of the nation, have provided robust energy support for China's development and contributed to the realization of the Chinese Dream of national rejuvenation.

In 2022, the world's largest clean energy corridor located along the Yangtze River mainstream became fully operational. This corridor includes six hydropower stations: Wudongde, Baihetan, Xiluodu, Xiangjiaba, Three Gorges, and Gezhouba, with a combined installed capacity of 71,695 MW. Through scientific scheduling and efficient water release, the average annual power generation output reaches 300 TWh, effectively coping with stretched power supply in central, eastern China, as well as provinces like Sichuan, Yunnan, and Guangdong. This has provided significant support for the stable operation of the power grid and the transmission of electricity from western to eastern regions.

These six power stations form a cascade reservoir system with a total storage capacity of 91.9 billion cubic meters, serving as both a strategic freshwater resource reservoir and flood control mechanism. They have a combined flood control capacity of 37.6 billion cubic meters, contributing to over 53% of the total flood control capacity in the Yangtze River Basin flood control stewardship.

In addition to flood control, these power stations play a vital role in water resource utilization and ecological scheduling. The reservoirs are adept at water resource regulation, and each serves as a significant reservoir for freshwater storage. Moreover, the cascade reservoirs have conducted ecological scheduling experiments for 12 consecutive years, significantly benefiting the breeding of fish species like the four major Chinese carps.

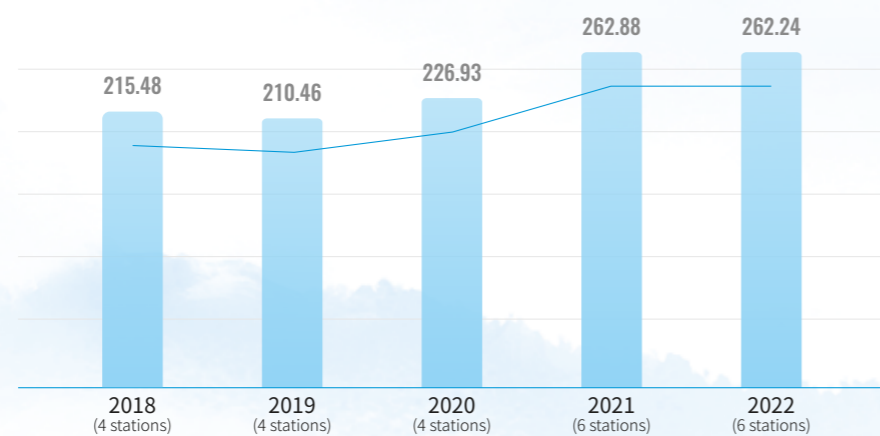
By the end of 2022, the cumulative electricity generation from the world's largest clean energy corridor had exceeded 3,300 TWh, equivalent to saving over 900 million tons of standard coal and reducing carbon dioxide emissions by more than 2.8 billion tons.



The combined installed capacity of the six cascade hydropower stations is

71,695 MW

Total electricity generation from the cascade hydropower stations Unit: TWh



Three Gorges Project

The Three Gorges Project, which is a crucial pillar of the nation, was created through the hard work and independent efforts of the Chinese people. It is very uplifting to see it with our own eyes. The successful completion and operation of the Three Gorges Project have made the dream of developing and utilizing the Three Gorges resources, which has been pursued by generations of Chinese people, a reality, and it has become an important symbol of China's development since the reform and opening up. It stood out as an example showing the advantages of China's socialist system in pooling national strength to carry out great undertakings, an example of the wisdom and creativity of the Chinese people, and an example of the progress of the Chinese nation towards prosperity and strength.

—Xi Jinping
April 24, 2018



Year of Operation
2003



Total Installed Capacity
22.5 GW



Electricity Generation in 2022
78.79 TWh

On April 24, 2018, President Xi Jinping inspected the Three Gorges Project and delivered an important speech. From the perspective of achieving the "Two Centenary Goals," he highly praised the Three Gorges Project as "one symbol, three examples". This event marked a significant milestone in the hundred-year history of the Three Gorges Project.

In 2022, the overall operational performance of the Three Gorges Project was excellent. Its comprehensive benefits in water resources, electricity generation, navigation, and ecology were fully realized. The project played a pivotal role as the backbone in constructing the world's largest clean energy corridor along the Yangtze River.

Panorama of the Three Gorges Project

Flood Control and Water Resource Utilization



In the period from July to September 2022, the Yangtze River Basin experienced an exceptionally rare drought in its history. The Three Gorges Reservoir received a cumulative inflow of 100.7 billion cubic meters, marking the lowest recorded inflow since 1877. Given the extremely low water inflow, the Three Gorges Reservoir fully supported the special joint drought relief and water supply operation of the Yangtze River Basin's reservoir group. The reservoir continuously optimized its operational strategies, striking a balance between ensuring power supply and meeting drought relief water demands. From July to September, a total of 1.51 billion cubic meters of water were released to supplement downstream water levels, effectively halting the downward trend of river levels. This measure ensured crucial water supply for the growth of autumn crops in irrigation areas. Additionally, in October, a tidal intrusion management strategy was implemented, leading to an accumulated increase in water supply of 4.06 billion cubic meters. This approach played a positive role in mitigating tidal intrusion at the Yangtze River estuary.

Generating Clean Energy



In 2022, the Three Gorges Hydropower Station generated a total of 78.79 TWh of electricity. In recent years, the Three Gorges Hydropower Station has effectively played the role of an energy supply stabilizer, successfully completing over 40 significant power supply assurance tasks, including those for the 100th anniversary of the founding of the Communist Party of China, the 70th anniversary of the establishment of the People's Republic of China, the 20th National Congress of the CPC, and the Beijing Winter Olympics. In August 2022, responding to the demand for power supply assurance, the Three Gorges Hydropower Station reached a peak daily load adjustment capacity of up to 9 GW, fully unleashing its power supply assurance capabilities.

Improving Navigation Conditions



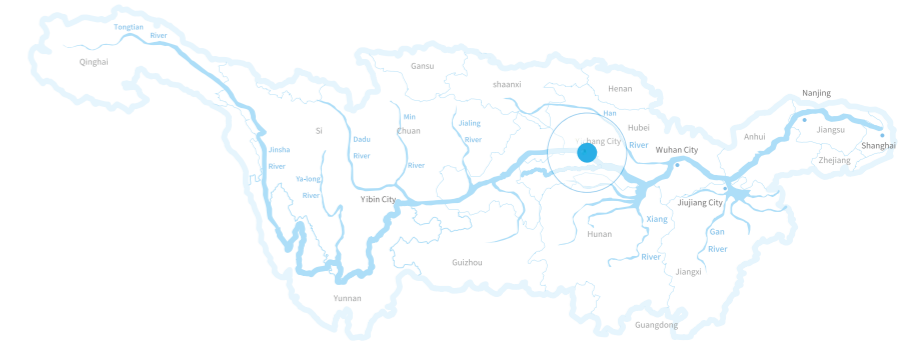
In 2022, the Three Gorges Project navigation system achieved a historic milestone with a shipping throughput of 160 million tons, marking a new record. This achievement includes the operation of the ship locks for 10,400 times, passage of 40,600 vessels, and a cargo throughput of 156 million tons (a 6.78% increase compared with 2021), setting the highest cargo throughput record since the opening of the navigation to commercial vessels in 2003. The Three Gorges ship locks successfully completed 4,470 safe lifting cycles, with 4,506 vessels passing through and a cargo throughput of 3.52 million tons. The planned maintenance and repairs of the Three Gorges south ship locks and the Three Gorges ship locks were successfully carried out, ensuring the continuous safe and efficient operation of the navigation facilities.

Protecting Ecological Environment



In the year 2022, the water quality at various monitoring sections of the Three Gorges Reservoir mainly maintained Class II standards, showing a relatively stable trend. A total of 6,764 cubic meters of floating debris were cleared from the reservoir area, all of which were collected and underwent harmless treatment. Two rounds of ecological scheduling experiments were conducted for the natural reproduction of adhesive and sedimentary eggs from fish in the reservoir area. The total spawning scale in the monitored sections of the reservoir area was approximately 110 million eggs. Two ecological scheduling experiments were carried out to promote the natural reproduction of drift eggs from fish below the dam. During the ecological scheduling period, the total egg production at the Yidu section reached 15.7 billion eggs, including 8.9 billion eggs from the "Four Major Chinese Carps", which marked the highest spawning scale in years.

Gezhouba Water Conservancy Complex



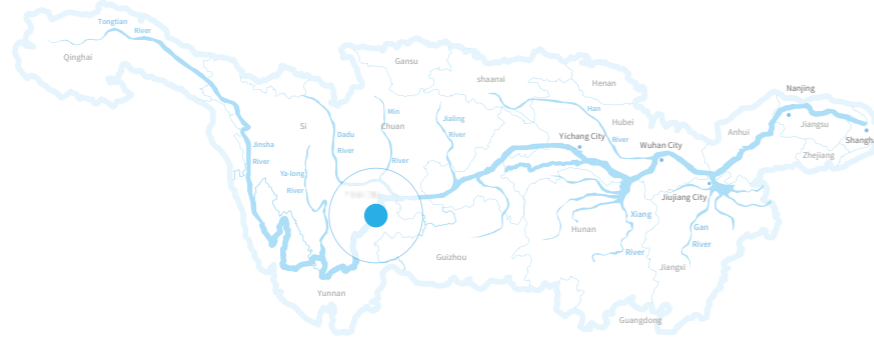
	Year of Operation 1981
	Total Installed Capacity 2,735 MW
	Electricity Generation in 2022 17.43 TWh

Gezhouba Water Conservancy Complex is located 2.3 km downstream of Nanjin Pass, the outlet of Three Gorges in Yichang City of Hubei Province, and is 38 km downstream of the Three Gorges Hydropower Station. It is a navigation cascade facility of the Three Gorges Project. It re-regulates the unsteady flow of Three Gorges Hydropower Station and uses the level difference of river sections for power generation. Gezhouba Water Conservancy Complex represents China's first self-designed, constructed, manufactured, installed, operated, and managed large-scale water conservancy project on the mainstream of the Yangtze River. Often referred to as the "First Dam of the Yangtze River", it remains to be the world's largest low-head, high-flow, run-off river hydropower station.



Gezhouba Water Conservancy Complex

Xiluodu Hydropower Station



Year of Operation
2013



Total Installed Capacity
13,860 MW



Electricity Generation in 2022
57.8 TWh

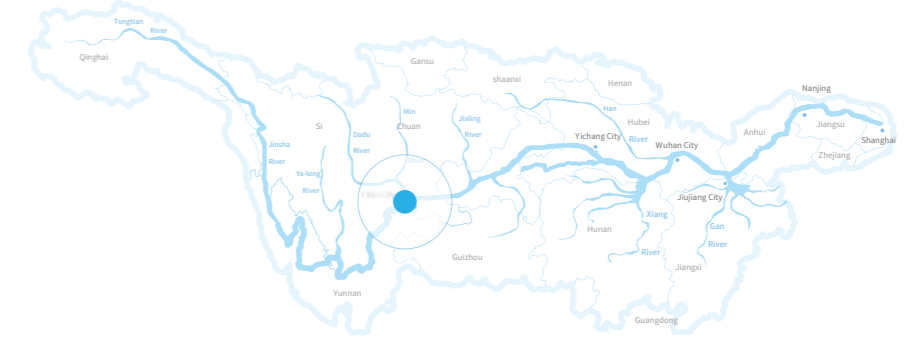
Xiluodu Hydropower Station, the world's fourth-largest hydroelectric power station, is located in the Jinsha River Gorge section on the border of Leibo County in Sichuan Province and Yongshan County in Yunnan Province. It serves as a key source of electricity for China's west-east power transmission program. Xiluodu Hydropower Station primarily focuses on power generation while also providing comprehensive benefits such as flood control, sediment retention, and improvement of downstream navigation conditions.

In 2016, Xiluodu Hydropower Station was honored with the FIDIC 2016 Engineering Project Excellence Award.



Xiluodu Hydropower Station

Xiangjiaba Hydropower Station



Year of Operation
2012



Total Installed Capacity
6.4 GW



Electricity Generation in 2022
31.55 TWh

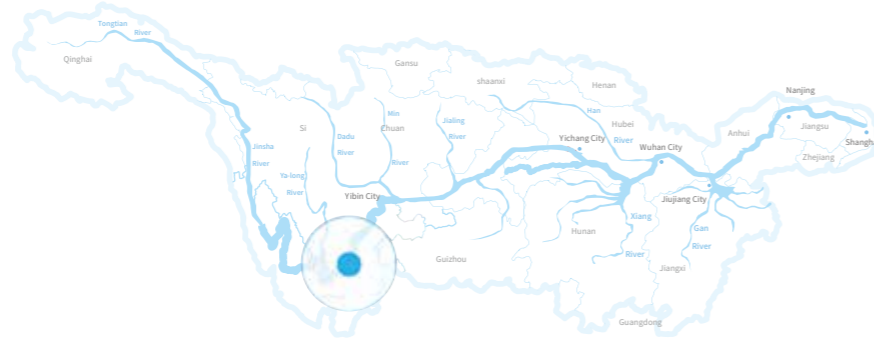
Xiangjiaba Hydropower Station is the 11th largest hydropower station in the world. It is located at the estuary of the Jinsha River Gorge, where Yibin City of Sichuan Province borders Shuifu City of Yunnan Province. This station serves as the final leg of cascade in the downstream Jinsha River hydropower development and is a key source for China's west-east power transmission program. Xiangjiaba Hydropower Station's primary purpose is electricity generation, and it also provides benefits such as flood control, navigation, irrigation, and sediment retention.

In 2022, the Xiangjiaba Gravity Dam was honored with the 3rd "International Milestone Concrete Project Award".



Xiangjiaba Hydropower Station

Wudongde Hydropower Station



	Year of Operation 2020
	Total Installed Capacity 10.2 GW
	Electricity Generation in 2022 36.61 TWh

Wudongde Hydropower Station, the world's seventh-largest hydropower station, is located at the intersection of Luquan County in Kunming, Yunnan Province, and Huidong County in Liangshan Prefecture, Sichuan Province. It is the first cascade facility of four downstream hydropower stations along the Jinsha River. Wudongde Hydropower Station is a significant national project for implementing the west-east power transmission program, with comprehensive benefits including power generation, flood control, and navigation, playing a crucial role in promoting local economic development.

On June 29, 2020, the first batch of generating units at Wudongde Hydropower Station commenced operations, and President Xi Jinping provided important instructions. This marked another milestone in CTG history after President Xi Jinping's inspection of the Three Gorges Project in April 2018 and his subsequent significant speech.

In 2022, Wudongde Hydropower Station received the honor of the "FIDIC Highly Commended Project of the Year – Energy and Power: Renewables".



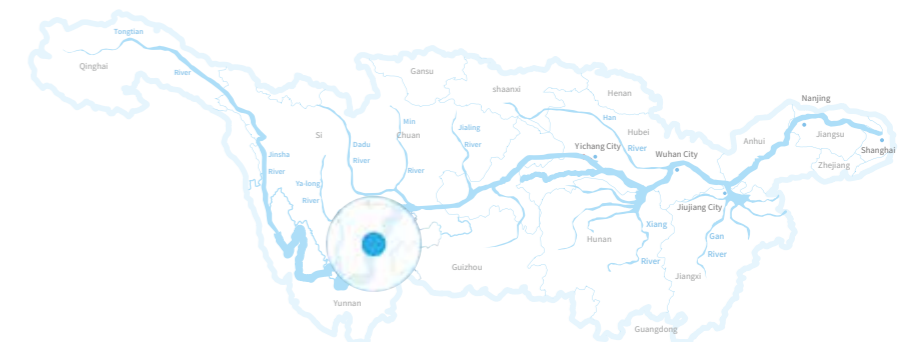
Wudongde Hydropower Station

Baihetan Hydropower Station

The Baihetan Hydropower Station is a major project of China's west-east power transmission program, also the largest and most technically-challenged hydropower project under construction in the current world. Each generating unit of the station has a capacity of 1 GW, the largest single-unit capacity in the world, marking a major breakthrough in China's high-end equipment manufacturing. Based on your selfless dedication, your concerted efforts and your unremitting pursuit of perfection, you've surmounted untold difficulties, scaled one new height after another, and contributed a lot to the construction of a major project of China. This substantiates our conviction that socialism is achieved by hard work and the new era is the result of constant efforts. It is hoped that all builders and relevant stakeholders would advance the station's follow-up work, and make greater contributions to achieving the country's carbon peak and carbon neutrality goals and promoting the comprehensive green transformation of economic and social development.

— Xi Jinping
June 28, 2021

	Year of Operation 2021
	Total Installed Capacity 16 GW
	Electricity Generation in 2022 40.06 TWh



Baihetan Hydropower Station, the world's second-largest hydropower station, is situated at the junction of Ningnan County in Sichuan Province and Qiaojia County in Yunnan Province. It's the second cascade facility on the downstream of the Jinsha River, playing a crucial role in the west-east power transmission program. Baihetan Hydropower Station contributes a lot to power generation, flood control, improved navigation, and the advancement of local economic and social development.

Baihetan Hydropower Station stands as the world's most complex hydropower project to date, with six key technical indicators at the forefront of global innovation: single unit capacity of 1 GW, scale of underground caverns, scale of pressure relief tunnels, scale of cylindrical tailrace surge chambers, first-ever full use of low-heat cement concrete for the entire dam, and seismic parameters for a 300-meter-high arch dam.

On December 20, 2022, all units of Baihetan Hydropower Station were successfully put into operation for electricity generation. This marked the comprehensive completion of the world's largest clean energy corridor and the maiden impoundment of the reservoir to its normal water level of 825 meters. Various operational indicators were exceptional. On December 31, President Xi Jinping praised the full operation of Baihetan Hydropower Station in his New Year's message for the year 2023.






The Commissioning Ceremony of All Units at Baihetan Hydropower Station

Pumped Storage Power Station

Accelerating the construction of a new type of power system centered around renewable energy is a crucial foundation for building a renewable energy system. The establishment of pumped storage facilities is a key measure to support the large-scale development of renewable energy sources. It holds significant importance in enhancing the flexibility of the power system, ensuring energy security, and facilitating the construction of a renewable energy system.

As the world's largest hydropower development and operation enterprise and China's leading clean energy group, CTG actively serves the national energy strategy. It is actively expanding its pumped storage business, having adopted a sustainable development approach characterized by "reserving, approving, constructing, and operating" a rolling development pattern of projects.

Changlongshan Pumped Storage Power Station

	Year of Operation 2021
	Total Installed Capacity 2.1 GW
	Electricity Generation in 2022 2.27 TWh

Changlongshan Pumped Storage Power Station is located in Tianhuangping Town, Anji County, Zhejiang Province. Situated at the heart of the load center of the East China Power Grid, the station is equipped with a total of six 350 MW pumped storage units, amounting to a combined installed capacity of 2.1 GW. Its primary functions include peak-shaving, valley-filling, frequency and phase modulation, and system backup for the East China Power Grid. On average, the station can contribute an additional power generation of 2.435 TWh during peak demand periods, enhancing the grid's regulation capability, optimizing the power source structure, and improving the operational conditions of the East China Power Grid.

On June 30, 2022, all the six units of the Changlongshan Pumped Storage Power Station were commissioned for electricity generation.



Changlongshan Pumped Storage Power Station

CTG is vigorously advancing pumped storage power projects. In 2022, projects in various locations including Tiantai and Songyang in Zhejiang Province, Pingtanyuan, Qingjiang, and Baohuasi in Hubei Province, Zhangye in Gansu Province, and Shitai in Anhui Province, were all under construction in full swing, collectively contributing to a total installed capacity of 9.5 GW. Drawing on the quality and safety management experience from large-scale hydropower projects, CTG is committed to ensuring that each of these projects is crafted into a high-quality, safe, and reliable engineering masterpiece.



The construction mobilization meeting for the Tiantai Pumped Storage Power Station

The Tiantai Pumped Storage Power Station is located in Yongxi Township, Tiantou Town, Tiantai County, Zhejiang Province. It is a key implementation project within the "14th Five-Year Plan" period under the National Mid- to Long-Term Development Plan for Pumped Storage (2021-2035). It is also the first Pumped Storage Power Station initiated for construction by CTG during the "14th Five-Year Plan" period. The power station is designed to have 4 reversible hydroelectric generating units with a single unit capacity of 425 MW, a total installed capacity of 1.7 GW, and an estimated annual power generation of 1.7 TWh.

On December 28, 2021, the construction mobilization meeting for the Tiantai Pumped Storage Power Station was held at the construction site. In 2022, the main construction of the Tiantai Pumped Storage Power Station has been steadily progressing.



Upper reservoir rendering of Pingtanyuan Pumped Storage Power Station

The upper reservoir of the Pingtanyuan Pumped Storage Power Station is located in Jiuzihe Town, Luotian County, Huanggang City, Hubei Province. It is a significant energy project in Hubei Province during the "14th Five-Year Plan" period. It's also the first approved pumped storage project in Hubei Province since the "11th Five-Year Plan," as well as the first approved pumped storage project by CTG following the release of the National Mid- to Long-Term Development Plan for Pumped Storage (2021-2035) by the National Energy Administration. The total installed capacity of the power station is 1.4 GW, and it is expected to generate around 1.44 TWh annually.

On the morning of February 14, 2022, the foundation work for the Pingtanyuan Pumped Storage Power Station was officially inauguraetd, marking the commencement of the construction phase.



Rendering of Zhangye Pumped Storage Power Station

Zhangye Pumped Storage Power Station is located in the Ganjiang Town of Ganzhou District and the Baiyin Mongolian Township of Sunan Yugur Autonomous County, Zhangye City, Gansu Province. It is a key project within the "14th Five-Year Plan" period under the National Mid- to Long-Term Development Plan for Pumped Storage Energy (2021-2035), a major provincial-level project in Gansu Province in 2022, and a key development project of CTG. The power station is planned to have 4 units of 350 MW reversible pump-turbine units, with a total installed capacity of 1.4 GW and an expected annual power generation of about 1.637 TWh.

On October 20, 2022, the Zhangye Pumped Storage Power Station project was approved by the Gansu Provincial Development and Reform Commission.



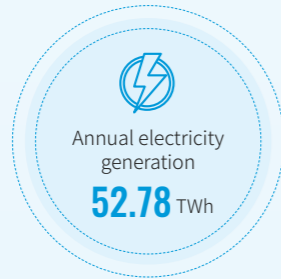
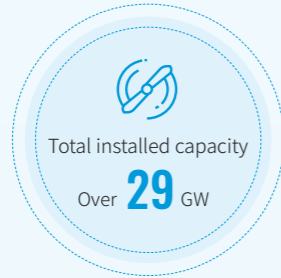
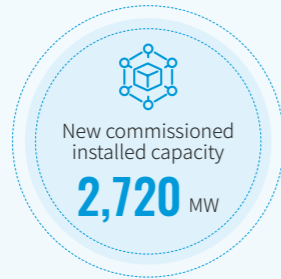
The lower reservoir of Shitai Pumped Storage Power Station

The Shitai Pumped Storage Power Station is located in Shitai County, Chizhou City, Anhui Province. It is a key implementation project during the "14th Five-Year Plan" period according to the National Mid- to Long-Term Development Plan for Pumped Storage (2021-2035). It is also the first pumped storage project initiated by CTG in Anhui Province. The power station operates as a daily regulation pumped storage facility and is planned to have 4 sets of single-machine capacity 300 MW vertical-axis single-stage mixed-flow reversible turbine generator units. The total installed capacity is 1.2 GW, and the expected annual power generation is approximately 1.471 TWh.

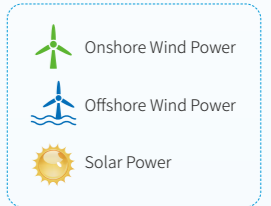
On November 18, 2022, the Shitai Pumped Storage Power Station project received approval from the Anhui Provincial Development and Reform Commission.

Domestic Renewable Energy Development

CTG continues to make sustained efforts in building a renewable energy system, actively promoting a development landscape that combines hydropower as the foundation with the joint development of wind and solar power, both onshore and offshore, fostering complementary multiple energy sources to better serve the "dual-carbon" goals. Focusing on large-scale onshore bases and concentrated development of offshore wind power, CTG is driving the differentiated and high-quality development of its renewable energy business. In 2022, CTG's renewable energy business expanded across more than 30 provinces and regions in China, adding over 100 GW of new resources and commissioning over 2,720 MW of new installed capacity. The total installed capacity surpassed 29 GW, and the annual electricity generation reached 52.78 TWh, showing a growth of over 30% compared with the previous year, contributing to both socio-economic development and the transition to a green and low-carbon future.



Distribution Map of Renewable Energy Businesses in China



Development of Offshore Wind Power in China

CTG strives to become a leading player in offshore wind power, and comprehensively advances the concentrated and contiguous development of offshore wind power in key regions. In 2022, CTG added over 2,000 MW of offshore wind power resources, resulting in a cumulative installed capacity of approximately 4580 MW for domestic offshore wind power, making it the leader in China and a front-runner globally. This achievement has led to the preliminary establishment of the world's largest offshore wind power corridor.

September 28, 2022

The world's first new-generation 2000-ton-level offshore wind power installation platform, named Baihetan, invested and constructed by CTG, was officially delivered and put into operation in Nansha, Guangzhou.



"Baihetan" offshore wind power installation platform

November 23, 2022

The 16 MW offshore wind turbine developed jointly by CTG and Goldwind was unveiled at the Fujian Three Gorges Offshore Wind Power International Industrial Park. The turbine represents a significant breakthrough in China's high-capacity offshore wind turbine manufacturing capabilities, marking the achievement of an international leading level in large-capacity offshore wind turbine technology.



The 16 MW wind turbine unit has been successfully manufactured

December 16, 2022

CTG's first offshore wind power project in Shandong—Changyi Ocean Ranch and CTG 300 MW Offshore Wind Integration Demonstration Project were combined for full-capacity grid-connected power generation.



Changyi Ocean Ranch and CTG 300 MW Offshore Wind Integration Demonstration Project

Development of Onshore Wind Power in China

CTG steadily advancing onshore wind power development, continuing to consolidate its advantages in concentrated development in regions like Inner Mongolia and Xinjiang. It is optimizing its strategic deployment, focusing on construction in the central, eastern, and southern regions, as well as bases for supporting high-voltage transmission, and vigorously promoting onshore wind power. By the end of 2022, CTG had commissioned onshore wind power projects in 27 provinces and regions, with a cumulative installed capacity of approximately 11.42 GW.

March 3, 2022

CTG received approval from the Sichuan Development and Reform Commission for the Jinlin Wind Power Project in Mianning County, Liangshan Prefecture, Sichuan Province, with a total installed capacity of 200 MW. This is CTG's first wind power project in Sichuan during the "14th Five-Year Plan" period, and it is also currently the largest single-unit wind power project in Sichuan Province.



Jinlin Wind Power Project Commences Construction

November 2, 2022

CTG successfully completed the installation of all 31 wind turbines for the first phase of the 500 MW No.1 Wind Power Project in Baotou Renewable Energy Comprehensive Application Demonstration Zone.



Wind Turbine Hoisting Site

Photovoltaic Business in China

CTG actively promotes diversified photovoltaic development, systematically advancing large-scale centralized photovoltaic power generation, exploring "photovoltaic plus" and other business development models, and establishing a point-to-area landscape of photovoltaic development. As of the end of 2022, CTG has commissioned photovoltaic projects in 26 provinces and regions including Qinghai, Hubei, Hebei, Sichuan and Shandong, with a cumulative installed capacity of 13.22GW.

June 6, 2022

CTG successfully launched its first centralized photovoltaic project in Tibet, the 20 MW Tianjing Yiqingxiang pasture and photovoltaic complementary project in Baxoi County, Qamdo. With the implementation of this project, CTG has achieved comprehensive coverage of clean energy development and construction types including wind, solar, hydro, and storage in Tibet.



The Tianjing Yiqingxiang 20MW Pasture and Photovoltaic Complementary Project in Baxoi County

September 28, 2022

The 50 MW Xiaoyangwo Photovoltaic Power Station project in Yunnan Province, invested and constructed by CTG, was officially put into operation. This marks the first commissioned and operational project within the first batch of 2.7 GW wind and solar projects (in Yunnan Province) at the "Jin Xia Base". The Jin Xia Base is one of the nine major clean energy bases planned under China's "14th Five-Year Plan" and is included in the first list of large-scale wind and photovoltaic base construction by the National Energy Administration. The successful operation of the Xiaoyangwo project signifies the initial achievement of the Jin Xia Base's development.



The Xiaoyangwo Photovoltaic Power Station Project

December 28, 2022



Groundbreaking Ceremony for the Kubuqi Base Project

The pilot project of the 1 GW photovoltaic power generation project, led by CTG, for the Renewable Energy Base project in the Kubuqi Desert has its construction inaugurated in Dalad Banner, Ordos City, Inner Mongolia Autonomous Region. This project is currently the world's largest wind and solar power base project developed and constructed in desert, Gobi, and arid areas. It also represents China's first construction of a gigawatt-level renewable energy mega-base project. The total installed capacity of the project is 16 GW, with a planned total investment of over 80 billion yuan.

Renewable Energy Storage Business in China

The 19th National Congress of the CPC proposed accelerating the planning and construction of a renewable energy system, marking a significant strategic vision by the CPC Central Committee in response to new situations and tasks. CTG consistently focuses on the need for the rapid development of renewable energy on a large scale. It strengthens research on integrated technologies for renewable energy storage and "source-grid-load-storage" synergy, scientifically and rationally arranges new businesses such as renewable energy storage, hydrogen energy, and solar thermal energy. This aims to achieve better complementarity among wind, solar, and storage, fostering synergies, and vigorously promoting the "renewable energy plus" model. This endeavor contributes to establishing a new power system and a renewable energy system, and offers the "CTG Solution".

March 2022



Qingyun Project

CTG's Qingyun Energy Storage Demonstration Project became one of the first independent energy storage stations to participate in the national electricity spot market. Located in Qingyun County, Dezhou City, Shandong Province, the Qingyun project is CTG's first independent energy storage station and one of the first energy storage demonstration projects in Shandong Province. It has the capability to use energy storage to "shave peak and fill valley," adjust power demand, achieve off-peak energy storage and release of green electricity, and promote the realization of "24-hour green electricity supply" in Qingyun County.

June 2022



CTG Ulanqab "Source-Grid-Load-Storage" Test Base

At CTG Ulanqab "Source-Grid-Load-Storage" Technology Research and Development Test Base, CTG launched a series of research achievements, including the integrated power router demonstration project for "source-grid-load-storage", a large-scale comprehensive simulation and experimental platform for renewable energy and energy storage, key technologies and engineering applications of megawatt-hour-level solid-state lithium-ion battery storage, megawatt-level DC-coupled lithium-ion battery/ supercapacitor hybrid energy storage system, and flywheel energy storage system. These achievements have set multiple "firsts" and "industry records" in terms of domestic technology and industry practices.

August 28, 2022



Integrated Wind, Solar and Hydrogen Production Demonstration Project in Inner Mongolia Autonomous Region Commences

CTG's first hydrogen production project, Junghar Banner Narisong Photovoltaic Hydrogen Production Industry Demonstration Project in Ordos City, the Inner Mongolia Autonomous Region, had its construction inaugurated, marking a significant step for CTG in the field of hydrogen energy.

International Investment and Operations

CTG is closely aligned with the strategic goal of building a world-class clean energy conglomerate. It has been accelerating its international expansion and actively participating in the "Belt and Road" initiative. Adhering to the principles of "consultation, co-construction, and sharing", the corporation promotes the "Silk Road Spirit" of peaceful cooperation, openness, inclusiveness, mutual learning, and win-win cooperation. It proactively engages in global clean energy investment and development, promoting the development of a human community with a shared future.

By the end of 2022, the total controllable installed capacity overseas has reached 12.61 GW, the total assets exceeded 200 billion yuan and the total profit exceeded 7 billion yuan.



International Investment and Acquisition

May 11, 2022

CTG LatAm, one of CTGI's subsidiaries, completed the equity delivery of three solar power plants in Mexico, with a total installed capacity of 416 MW. On November 9, the equity delivery of the Perote II power plant (with an installed capacity of 119 MW) was also completed.

Up to now, the Kinich in Mexico has now completed the asset delivery of four power plants with a total of 535 MW, representing a significant breakthrough for CTG in the Latin American renewable energy sector.



Xoxocotla Photovoltaic Power Station



Navojoa Photovoltaic Power Station



Perote II Photovoltaic Power Station



Guanajuato Photovoltaic Power Station



Flores Onshore Wind Power Project in Spain

June 27, 2022

CTG Europe, a subsidiary of CTGI, successfully completed the equity delivery of the Flores onshore wind power project in Spain. This project comprises 12 onshore wind farms with a total installed capacity of 181 MW.



On-site Survey by CTG Brasil Renewable Energy Team

October 2022

CTG Brasil, a subsidiary of CTGI, commenced the construction of its first renewable energy Greenfield photovoltaic project named Arinos in Brazil. The project has an installed capacity of 413 MW and includes the construction of a 500kV boosting substation and transmission lines for grid connection. During the construction phase, the project is expected to create nearly a thousand job opportunities in local area. Once operational, it is projected to generate an average annual electricity output of approximately 0.855 TWh.



Equity Transfer Ceremony

December 23, 2022

CTG Europe, a subsidiary of CTGI, successfully completed the equity delivery for the Belvis Photovoltaic Greenfield Project in Spain and the Roadrunner Photovoltaic Project. The Belvis project consists of 3 planned power stations with a total installed capacity of 104 MW, while the Roadrunner project includes 27 photovoltaic power stations with a total installed capacity of 619 MW.

Overseas Power Plant Operation



Luz del Sur in Peru

Since 2022, Luz del Sur, a company in Peru, has ensured orderly production and operation through effective control and careful scheduling. Stable distribution of electricity has been maintained, guaranteeing the normal power supply for the capital region of Peru. Various operational indicators remain at the forefront of the industry, resulting in positive social and economic outcomes.

Peru



Karot Hydropower Station in Pakistan was put into full operation

On June 29, 2022, the first hydropower investment project of the China-Pakistan Economic Corridor, the Karot Hydropower Station in Pakistan, developed and invested by CTG, was put into full commercial operation.

Pakistan



The rotor of Unit 3 at Jupia Hydropower Station was successfully lifted and reinstalled in the machine pit after the retrofit

On December 2, 2022, significant progress was achieved in the large hydropower retrofit project by CTG Brasil. The rotor of Unit 3 at Jupia Hydropower Station and the stator of Unit 4 at Ilha Solteira Hydropower Station were successfully lifted and installed in the machine pit cavern on the same day.

Brazil

Ilha Solteira Hydropower Station in Brazil

Installed capacity **3,444** MW
Electricity generation in 2022 **9.71** TWh



Jupia Hydropower Station in Brazil

Installed capacity **1,551** MW
Electricity generation in 2022 **5.65** TWh



Wind Power Project in Pakistan

Installed capacity **149** MW
Electricity generation in 2022 **0.34** TWh



Meerwind Offshore Wind Farm in Germany

Installed capacity **288** MW
Electricity generation in 2022 **1.11** TWh



Chaglla Hydropower Station in Peru

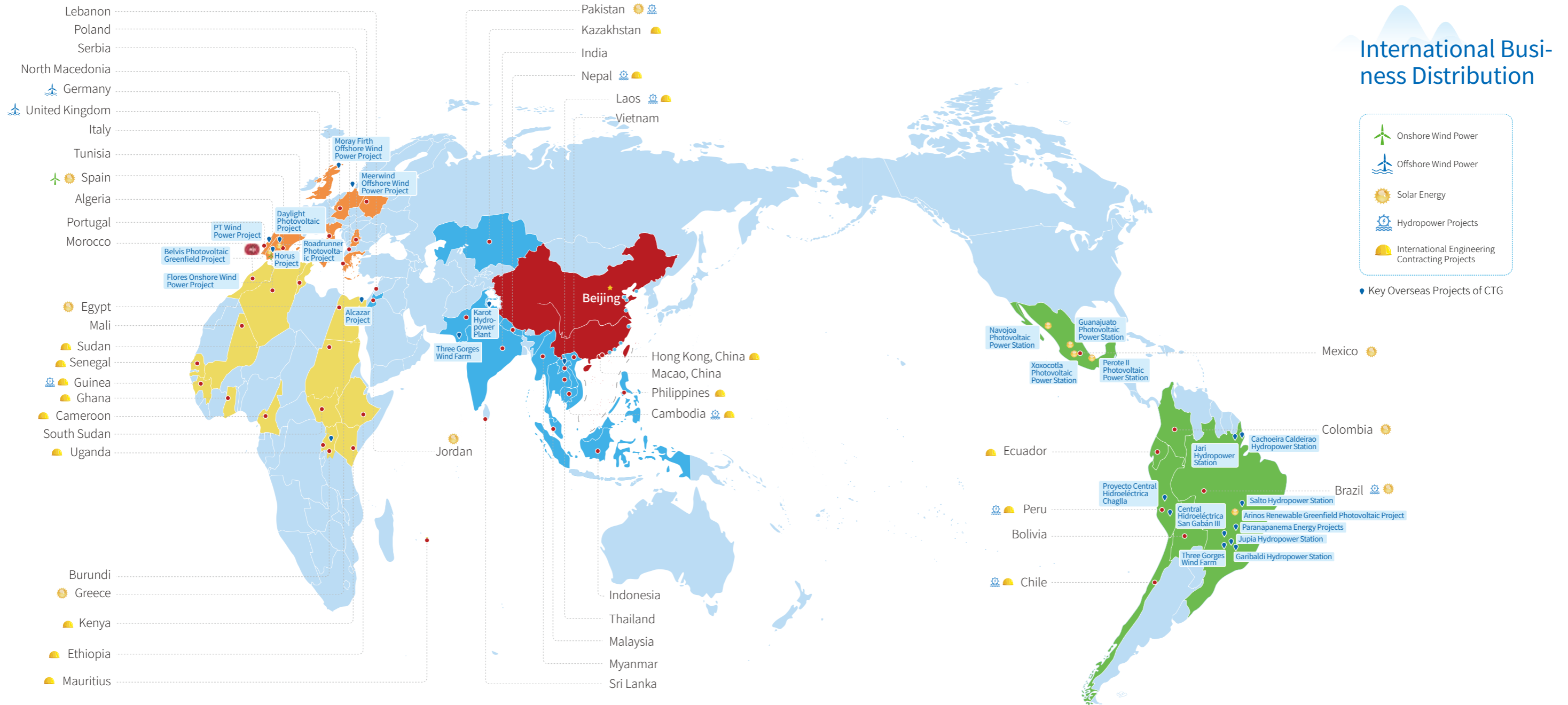
Installed capacity **456** MW
Electricity generation in 2022 **1.69** TWh




Karot Hydropower Station in Pakistan

Installed capacity **720** MW
Electricity generation in 2022 **1.84** TWh







CTG Europe

CTG Europe focuses on European markets, while being responsible for investment in Europe and North America. With an installed renewable energy capacity of over 1 GW, it is the largest single shareholder of EDP (Energias de Portugal).


Luz del Sur Peru

Luz del Sur operates distribution and transmission businesses in areas including Lima, Peru. It is the largest electricity distribution company under the control of China Yangtze Power Co., Ltd. in Peru.


CTG LatAm

Established in 2020, CTG LatAm focuses on providing clean energy for regions in Latin America outside of Brazil, with Colombia as its central hub.


CTG Brasil

Focusing on the Brazilian market, the company is the second-largest private power provider in Brazil and the third-largest nationwide.


CTG South Asia Investment Ltd.

With Pakistan as its core market, the company is responsible for investment operations in the South Asian region. Several projects invested and developed by the company are included in the framework of the "China-Pakistan Economic Corridor".

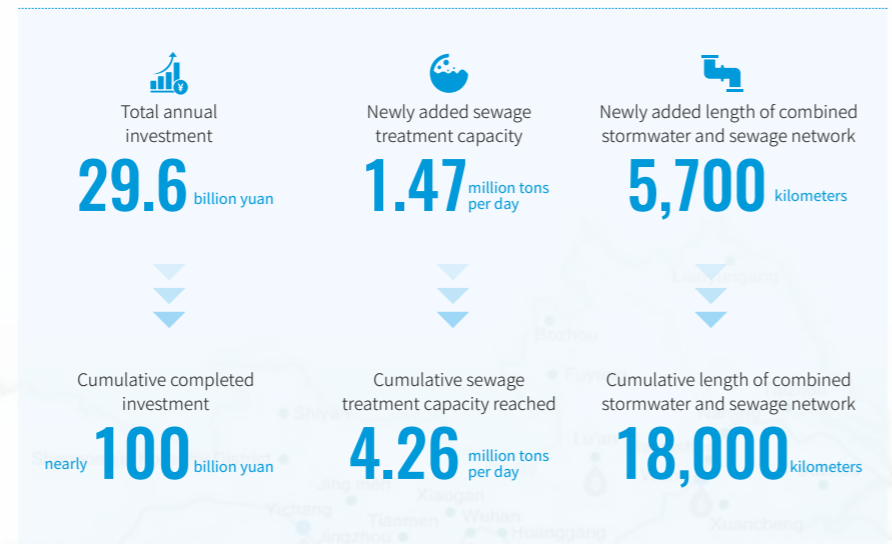
Ecology and Conservation

In 2022, CTG earnestly implemented President Xi Jinping Thought on Ecological Civilization, actively advancing the Yangtze River protection efforts into a new stage characterized by "systematic, sustainable, and high-quality" measures. The corporation consistently optimized the deployment for its Yangtze River protection initiatives, vigorously promoting project construction. Unwaveringly committed to biodiversity conservation, it continued to carry out protection activities for terrestrial and aquatic biodiversity within the Yangtze River Basin. The implementation of joint ecological scheduling experiments for the cascade of mainstream reservoirs in the Yangtze River and the continual enhancement of a comprehensive, full-lifecycle species protection system were priorities. In 2022, CTG became the first central SOE in China to showcase its commitments on the official website of the United Nations Convention on Biological Diversity.

Conservation of the Yangtze River

CTG earnestly implements President Xi Jinping's important speeches on promoting the development of the Yangtze Economic Belt. With the comprehensive guidance of the National Development and Reform Commission and other ministries and strong support from provinces and cities along the Yangtze River, the corporation has carried out numerous effective initiatives. Its business landscape has been expanded comprehensively, covering all 11 provinces and cities along the river. In terms of business fields, it has steadily expanded from urban sewage treatment to the "4+1" project. Continuous exploration and innovation have led to models and mechanisms such as the "integrated systems of sewerage pipeline networks and wastewater treatment plants" and "Smart Urban Water Manager", gradually showcasing the effectiveness of governance efforts.

As of the end of 2022



Effective Implementation of Smart Water Management Mode

CTG has consistently adhered to deepening comprehensive water environmental management. Building upon the integrated systems of sewerage pipeline networks and wastewater treatment plants, the corporation has explored and put into practice the "Smart Urban Water Manager" model. Continuous improvement of the top-level design of Smart Water Management mode has led to the successful creation of a benchmark demonstration facility in Lu'an. In September 2022, during an on-site meeting for the joint efforts of central SOEs, including CTG, organized by the National Development and Reform Commission for the protection of the Yangtze River, Smart Water Management mode in Lu'an gained unanimous recognition from municipal governments along the Yangtze River. The promotion of Smart Water Management mode yielded practical results, resulting in the establishment of Water Management companies in various locations including Yueyang in Hunan, Jiujiang in Jiangxi, Yichang and Xiantao in Hubei, Wuhu and Lu'an in Anhui. These companies coordinated project assets and operations, with the Lu'an Smart Water Management company achieving substantive operation.



Comprehensive Launch of Pipeline Network Action

In December 2022, CTG established the Yangtze Pipeline Network Platform Company in Wuhan, Hubei Province, serving as the main implementing entity for the pipeline network strategy. A systematic plan was developed, creating a project list and urban action plans for the 2022-2025 Pipeline Network Action. Cooperation agreements for the Pipeline Network Action were signed with the first batch of four cities: Lu'an and Wuhu in Anhui, as well as Yichang and Wuhan Donghu High-tech Zone in Hubei. Yichang in Hubei took the lead in exploring the "pay-for-performance" mechanism for sewage treatment.



Signing Ceremony for the Pipeline Network Action Cooperation Framework Agreement

Urban Sewage Treatment Shows Effective Results

As the projects in cooperation with cities along the Yangtze River are gradually completed and put into operation, the effectiveness of CTG's sewage treatment efforts becomes increasingly evident. The corporation has been deeply involved in the four pilot cities of Jiujiang in Jiangxi, Wuhu in Anhui, Yueyang in Hunan, and Yichang in Hubei. It has continuously built exemplary benchmarks for urban sewage treatment with the goal of achieving "complete collection, full treatment, and up to standard". Currently, the first-phase projects in the four pilot cities have been mostly completed, meeting the initial needs of urban development. This has significantly increased the density of the pipeline network, substantially raised the inflow COD concentration, and essentially completed the rehabilitation of black and fetid water bodies.

Four Pilot Cities



Shili River in Jiujiang after treatment

Jiujiang in Jiangxi

The Shili River in Jiujiang is referred to by the local people as the river at their doorstep. Over the years, due to issues such as inland water pollution and outdated drainage systems, the Shili River had turned into a black and fetid water body. CTG joined hands with the local government, implementing measures such as source control, interception and diversion, internal source management, ecological restoration, and maintaining water quality. These efforts completely eradicated pollution sources in the Shili River and led to the return of migratory birds.



Wetland in Jiangdong, Wuhu after treatment

Wuhu in Anhui

CTG has invested in the construction of an artificial wetland park in Wuhu. The water in the park comes entirely from the adjacent Zhujiqiao Sewage Treatment Plant, where 40,000 tons of treated tail water meeting standards are discharged daily. The water is directed into the park through underground pipelines. By utilizing a water quality assurance technology that involves "subsurface flow wetland + enhanced purification wetland + ecological retention lakes", the treated tail water undergoes further purification, thus improving the water environment in the basin and enhancing the urban water ecological landscape.



Dongfeng Lake in Yueyang after treatment

Yueyang in Hunan

Dongfeng Lake in Yueyang was once used for urban water storage, aquaculture, and wastewater disposal. Due to its location in an industrial area with a dense population, the lake suffered from long-term pollution and foul odors. Through measures like improving the sewage network in the area, constructing detention ponds to control overflow, implementing lakebed dredging, and ecological restoration as part of the plant-network-lake integrated wastewater treatment system, Dongfeng Lake's Ecological Park with clear waters and lush shores was officially opened. The lake, once known for sewage, has transformed into a scenic attraction.



Riverside in Xiaoting, Yichang after treatment

Yichang in Hubei

Xiaoting District in Yichang, located beside the Yangtze River, serves as an important gateway connecting the east and west of Yichang city. It's also a key area for the expansion of emerging industries in Yichang. CTG and the Yichang municipal government signed a cooperation framework agreement to jointly establish a green development demonstration zone as part of well-coordinated conservation of the Yangtze River efforts. The expansion and improvement project of the Xiaoting sewage treatment plant was among the first ones whose construction has been inaugurated. This project effectively enhanced the capacity for collecting and treating industrial and domestic wastewater in Xiaoting District, significantly reducing the risk of industrial park wastewater entering the river. Xiaoting, which once struggled with the issue of industrial pollution along the river, has begun to experience a revitalized transformation.

Ecological Conservation

As the world's largest hydropower development and operation enterprise and a leading clean energy group in China, CTG consistently integrates the concept of ecological priority and green development into the entire process of clean energy development, construction, and operation. It adheres to high standards and strict requirements to implement various ecological and environmental protection measures. The corporation's efforts in ecological conservation for cascade hydropower stations have consistently been at the forefront of the industry and have garnered high recognition from national ecological and water administration authorities.



Ecological Restoration

CTG continues to enhance ecological restoration, focusing on the integrity of the ecosystem and the systematic rehabilitation approach for the watershed. It improves the ecological environment of reservoir hydro-fluctuation zones, addresses soil erosion and desertification, and establishes a solid green foundation for the construction of a Beautiful China.



Wudongde hydro-fluctuation zone ecological restoration pilot area

- ▶ A restoration experiment covering 436,900 square meters of hydro-fluctuation zone has been conducted in the Wudongde and Baihetan reservoir areas, and the vegetation in the experimental area is thriving.
- ▶ Ecological restoration on Guangyang Island in Chongqing follows the logic of ecosystems, implementing measures such as "protecting mountains, managing water, afforesting, cultivating fields, clearing lakes, nurturing grass, and safeguarding belts." It comprehensively advances ecological restoration and management of mountains, water systems, wetlands, and hydro-fluctuation areas along both sides of the river. This effort establishes a harmonious "mountains, rivers, forests, fields, lakes, and grass" community of life.
- ▶ In the Kubuqi Desert in Inner Mongolia, construction is underway for the world's largest wind and solar power base in Gobi and other desert regions. It utilizes desert resources while improving ecological functions, achieving a multi-purpose ecological restoration of the desert.



Chongqing Guangyang Island



Wind and Solar Power Base in Kubuqi Desert

Protection of Endangered Terrestrial Plants

CTG is actively engaged in research on the protection of rare and unique plant resources in the middle and upper reaches of the Yangtze River by employing strategies such as on-site protection, relocation protection, and artificial breeding research. Through activities such as resource surveys and the development of collection and preservation technologies, endangered wild plants affected by habitat degradation are relocated and protected. Rare plant gardens are also established. By the end of 2022, the Yangtze Rare Plant Research Institute has cumulatively protected a total of 29.8 thousand plants of 1,380 species belonging to 491 genera across 140 families of rare and unique plant resources. This accomplishment marks a historic milestone in the scale of plant resource protection.



Yangtze Rare Plant Research Institute



Wild plant under state Grade-I conservation — Adiantum Nelumboides X. C. Zhang

Protection of Endangered Aquatic Animals

CTG has been deeply committed to the conservation and research of the Chinese sturgeon and other rare and unique fish species in the Yangtze River. Focusing on breeding techniques, juvenile cultivation, and developmental regulation within the artificial population construction of the Chinese sturgeon, continuous scientific research has been conducted. After successfully achieving the breakthrough of second-generation full artificial reproduction technology for the Chinese sturgeon, the corporation has further succeeded in the large-scale breeding of 250,000 juveniles.

From 1984 to 2022, CTG has carried out 65 consecutive releases of Chinese sturgeon, with a cumulative release of nearly 5.3 million fish.

For 12 consecutive years, CTG has been conducting multi-objective ecological regulation from the Three Gorges reservoir to the downstream cascade reservoirs on the Jinsha River. This aims to create favorable hydrological conditions for fish breeding. In 2022, a record-breaking 17 ecological regulation experiments were conducted, promoting spawning and reproduction of fish in the Yangtze River mainstem and effectively harnessing the ecological functions of the cascade reservoirs.



Yangtze Rare Fish Conservation Center



2022 Chinese Sturgeon Proliferation and Release Activity

Capital and Finance

In 2022, CTG's capital and finance businesses experienced steady development. The restructuring of Jinsha River projects was steadily advanced, and continuous efforts were made in green finance innovation. The rotational improvement plan for equity investment assets was earnestly executed, and the quality enhancement plan for listed companies was effectively implemented. The corporation achieved investment returns of over 13 billion yuan for the year, with investment income contributing over 25% to the total profit.

2022

Establishment of the Yangtze Green Fund

With the approval of the National Development and Reform Commission (NDRC), NDRC in partnership with CTG, officially established the Yangtze Green Fund. This fund is dedicated to ecological environmental protection and clean energy development. By the end of 2022, the fund's subscribed capital reached 12 billion yuan, with a paid-in capital of 7.2 billion yuan. It has already invested in green development projects such as Qinghai Lihao Semiconductor, achieving a high-level initial operation.

March 23,
2022

SIDRI Completes Capital Increase and Share Expansion

On March 23, 2022, Shanghai Investigation, Design and Research Institute Co., Ltd. (SIDRI) successfully raised capital of 940.9 million yuan, marking a significant step towards transitioning from a wholly SOE to a diversified ownership enterprise.

June 1,
2022

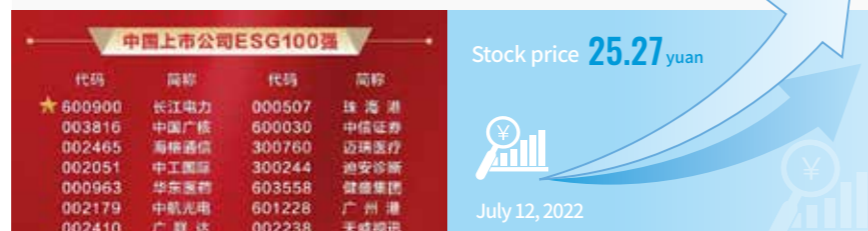
Issuance of 10 Billion Yuan Green Technological Innovation Convertible Bonds

On June 1, 2022, CTG issued 10 billion yuan of green technological innovation convertible bonds, marking the first batch of domestically labeled technological innovation bonds. The bonds have a 5-year term, a coupon rate of 0.1%, and a redemption price of 108 yuan at maturity. The initial conversion premium is set at 10%. This issuance gained recognition from various investors in the market, with a total subscription size of approximately 11 trillion yuan.

July 12,
2022

Ranked among the Top 100 ESG Chinese Listed Companies of 2022

On July 12, 2022, the stock price of China Yangtze Power Co., Ltd. (CYPC), a subsidiary of CTG, surpassed 25 yuan for the first time, reaching a peak of 25.27 yuan. Its market capitalization reached a high of 574.7 billion yuan, positioning it as the leader in the domestic A-share power sector and the second largest globally among listed power companies. CYPC was honored as one of the Top 100 ESG Chinese Listed Companies of 2022.



July 21,
2022

Completion of 300 Million US Dollar Bond Issuance and Pricing

On July 21, 2022, CTG successfully completed a 300 million US dollar bond issuance with a 3-year term and a coupon rate of 3.625% (yield of 3.698%, T+46bp). This issuance achieved a negative new issue premium of 20 basis points and an interest spread of 46 basis points, setting a record for the lowest pricing spread in the history of USD bond issuances by Chinese enterprises of the same term.

November
14, 2022

Steady Progress in Major Asset Restructuring of Lower Jinsha River Hydropower Stations

In November 2021, CTG initiated the major asset restructuring of the lower Jinsha River hydropower stations. On July 19, 2022, the asset restructuring plan was successfully approved by the State-owned Assets Supervision and Administration Commission (SASAC) of the State Council. On July 20, it was approved by the CYPC shareholders' meeting. Finally, on November 14, it received formal approval from the China Securities Regulatory Commission (CSRC).



The Second Extraordinary Shareholders' Meeting of CYPC in 2022, Beijing Venue

December
20, 2022

Awarded the Best Listed Company for Investor Relations Management

CTG's subsidiary, China Three Gorges Renewables (Group) Co., Ltd. (CTGR), had its stocks included in the CSI 300 and SSE 180 indices in December 2021 and was added to the SSE 50 index in June 2022. It has become a blue-chip stock in the renewable energy sector of the A-share market. On December 20, 2022, at the 12th Hong Kong International Financial Forum and China Securities Golden Bauhinia Awards Ceremony, CTGR was honored with the Best Listed Company for Investor Relations Management award.





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Key Financial Indicators

Key Financial Indicators					
Project	2018	2019	2020	2021	2022
Total Assets (RMB billion)	750.41	837.83	969.97	1154.31	1,268.78
Owner's Equity Attributable to the Parent Company (RMB billion)	290.27	305.24	335.91	364.28	383.91
Operating Revenue (RMB billion)	93.94	99.26	111.70	138.31	146.26
Net Profit after Tax (RMB billion)	35.26	35.22	45.40	50.98	42.53
Ratio of Total Cost and Expenses to Operating Revenue (%)	65.3	66.1	61.7	68.6	73.3
EBITDA (RMB billion)	64.77	66.61	77.76	86.47	94.59

Key Financial Indicators					
Project	2018	2019	2020	2021	2022
Return on Owner's Equity(%)	9.2	8.6	10.1	9.7	7.4
Net Interest-Bearing Debt (RMB billion)	246.85	301.00	378.35	449.35	502.23
EBITDA Interest Coverage Ratio (X)	5.3	5.1	5.4	4.9	4.7
Net Interest-Bearing Debt/EBITDA (X)	3.8	4.5	4.9	5.2	5.3
Interest-Bearing Debt/Total Assets (%)	38.4	41.2	42.9	41.2	42.8
Debt-to-Asset Ratio (%)	47.3	49.6	50.8	51.9	53.5

Financial Statements

Item	Note VIII	As at December 31, 2022	As at January 1, 2022
Current assets:			
Cash at bank and on hand	1	40,386,286,679.02	42,603,638,374.07
Δ Settlement assets			
Δ Pay from banks and other financial institutions			
Financial assets held for trading	2	21,031,145,542.40	22,447,851,560.69
② Financial assets at fair value through profit or loss			
Derivative financial assets	3	649,567,603.65	
Notes receivable	4	360,831,836.35	95,579,164.50
Accounts receivable	5	38,716,340,125.03	40,507,624,007.62
Receivables financing	6	27,455,324.01	511,452,576.27
Advances to suppliers	7	10,685,809,303.39	11,166,275,358.74
Δ Prepayment receivable			
Δ Reinsurance premium receivable			
Δ Reserve receivable for reinsurance contract			
Account receivable for central and management			
Other receivables	8	4,056,276,673.34	2,953,311,440.13
Including: Dividends receivable		732,581,542.22	132,099,787.36
Δ Financial assets measured under agreements to resell			
Investments	9	2,146,186,553.93	1,961,845,793.23
Including: Raw materials		938,666,334.21	1,011,878,243.74
Merchandise stocks (finished goods)		181,802,460.59	224,397,141.18
Contractual assets	10	2,526,592,434.03	2,636,882,287.16
Held-for-sale assets			
Non-current assets due within one year	11	3,719,265,566.20	6,850,769,889.80
Other current assets	12	2,599,311,369.21	8,493,591,126.24
Total current assets		146,905,460,141.29	140,270,823,880.43
Non-current assets:			
Δ Loans and advances		4,408,408.37	490,330,282.70
Date assets	13	530,331,581.53	732,027,625.29
③ Available-for-sale financial assets			
Other debt investments	14	2,796,306,316.55	2,865,037,084.39
④ Held-to-maturity investments			
Long-term receivables	15	20,973,765,090.60	28,243,888,636.55
Long-term equity investments	16	175,773,033,926.08	155,253,394,044.97
Other equity instruments investments	17	11,211,669,196.22	12,934,919,646.34
Other non-current financial assets	18	13,087,166,324.01	1,123,791,922.29
Investment properties	19	2,606,604,452.37	2,678,121,583.99
Fixed assets	20	660,909,676,093.17	506,651,808,726.32
Including: Original value of fixed assets		893,265,229,336.70	787,013,323,403.66
Accumulated depreciation		230,585,283,549.13	199,204,482,601.68
Provision for impairment of fixed assets		1,846,370,595.47	1,327,832,696.46
Construction in progress	21	60,867,620,532.75	134,760,332,654.36
Productive biological assets			
Oil and gas assets			
Right-of-use assets	22	8,851,460,846.41	7,179,015,896.03
Intangible assets	23	113,073,082,254.32	84,465,363,285.44
Development expenditures	24	113,064,330.57	11,271,626.79
Goodwill	25	14,351,386,555.93	12,859,064,915.72
Long-term deferred expenses	26	492,540,472.78	424,636,393.82
Deferred tax assets	27	15,034,521,800.38	13,860,059,110.01
Other non-current assets	28	20,776,737,773.46	32,932,698,345.25
Including: Authorized reserve asset			
Total non-current assets		1,321,874,274,538.60	1,017,520,612,234.85
Total Assets		1,268,780,243,679.89	1,157,791,436,115.31

Item	Note VIII	As at December 31, 2022	As at January 1, 2022
Current liabilities:			
Short-term borrowings	29	19,108,721,311.91	18,769,588,771.70
Δ Borrowings from central bank			
Δ Placements from banks and other financial institutions		1,300,624,000.00	
Financial liabilities held for trading	30	509,285,144.78	396,185,823.59
④ Financial liabilities at fair value through profit or loss			
Derivative financial liabilities	31	501,338,721.81	757,068,528.80
Notes payable	32	2,630,387,640.18	7,933,538,863.06
Accounts payable	33	45,487,844,144.04	33,592,841,743.36
Advances from customers	34	28,641,497.04	33,544,382.04
Contractual liabilities	35	4,840,733,465.77	4,920,207,816.35
Δ Financial assets sold under agreements to repurchase		1,612,365,983.56	
Δ Deposits from customers, banks and other financial institutions	36	1,795,252,999.24	1,053,342,951.08
Δ Securities brokering			
Δ Securities underwriting			
Employee benefits payable	37	1,678,548,208.79	608,455,532.63
Including: Salaries payable		97,446,748.90	
Wages payable		1,438,323.16	
Including: Employee bonus and welfare funds			
Taxes payable	38	4,858,773,219.51	7,836,265,170.91
Including: Accrued tax		4,786,707,589.78	7,759,118,401.00
Other payables	39	42,732,685,214.19	33,441,275,401.17
Including: Dividends payable		454,960,922.20	299,101,103.83
Δ Fees and commissions payable			
Δ Reinsurance accounts payable			
Held-for-sale liabilities			
Non-current liabilities due within one year	40	63,233,077,767.41	54,821,150,241.10
Other current liabilities	41	8,582,217,221.39	23,619,303,116.84
Total current liabilities		197,965,496,679.62	189,736,725,336.54
Non-current liabilities:			
Δ Reserve of insurance contract			
Long-term borrowings	42	264,831,330,915.03	231,906,245,327.98
Bonds payable	43	182,223,229,303.07	164,976,684,871.13
Including: Preferred shares			
Perpetual bonds			
Lease liabilities	44	6,416,209,154.66	5,167,362,335.68
Long-term payables	45	11,951,968,072.21	12,396,071,883.59
Long-term employee benefits payable	46	71,194,169.80	65,728,319.97
Provisions	47	2,552,720,784.27	2,102,534,461.15
Deferred incomes	48	721,179,145.53	702,607,155.28
Deferred tax liabilities	49	8,813,915,730.34	7,162,262,796.74
Other non-current liabilities		2,747,183,057.02	3,152,333,850.88
Including: Authorized reserve fund			
Total non-current liabilities		486,328,840,331.93	499,831,780,984.39
Total liabilities		684,294,337,011.55	689,568,506,320.93
Owners' equity:			
Paid-in capital	50	212,171,613,501.31	211,781,023,501.31
State-owned capital		212,171,613,501.31	211,781,023,501.31
Capital from state-owned legal body			
Collective capital			
Private capital			
Foreign capital			
#/Less: Payback capital			
Net paid-in capital		212,171,613,501.31	211,781,023,501.31
Other equity instruments	51	11,873,191,443.07	11,291,056,614.80
Including: Preferred shares			
Perpetual bonds		9,972,441,599.44	9,972,441,599.44
Capital reserve	52	42,234,574,867.50	39,144,328,059.45
Less: Treasury shares			
Other comprehensive income		-10,913,902,079.35	-13,232,705,327.32
Including: Foreign currency translation differences		-8,400,414,219.65	-12,227,524,208.46
Special reserve	53	27,298,312.83	2,595,690.46
Surplus reserve	54	31,960,762,916.51	30,395,183,690.50
Including: Statutory surplus reserve		21,379,137,108.25	19,815,848,311.43
Discretionary surplus reserve		10,577,391,325.08	10,577,391,325.08
#Reserve fund			
#Enterprise development fund			
#Return of investment			
Δ General risk provision			
Retained earnings	55	96,569,582,245.21	86,722,725,193.76
Total owner's equity attributable to parent company		383,913,121,207.10	366,114,107,341.96
*Non-controlling interests		206,572,785,461.24	192,088,868,452.38
Total owners' equity		590,485,906,668.34	558,202,975,794.34
Total liabilities and owners' equity		1,268,780,243,679.89	1,157,791,436,115.31

Consolidated Income Statement

For the year ended December 31, 2022

Item	Note VIII	Year ended December 31, 2022	Year ended December 31, 2021
Company Name: China Three Gorges Corporation			
Unit: RMB			
I. Total Operating Revenue		146,258,682,958.22	138,306,474,299.79
Including: Operating revenue	56	145,826,735,367.22	137,730,217,153.04
△ Interest income	57	427,017,286.03	573,438,996.84
△ Premium earned			
△ Handling charges and commission income	58	4,932,304.97	2,818,109.91
II. Total Operating Cost		107,272,656,002.55	94,854,379,511.97
Including: Operating cost	56	77,860,558,433.11	70,880,727,630.68
△ Interest expenses	57	41,191,788.97	55,528,744.36
△ Fees and commissions expenses	58	3,125,057.03	3,385,154.46
△ Cash surrender amount			
△ Net expenses of claim settlement			
△ Net provisions for insurance liability reserves			
△ Policy dividend expenses			
△ Reinsurance expenses			
Taxes and surcharges		2,979,449,977.00	2,509,965,855.64
Selling and distribution expenses	59	287,157,162.64	260,944,444.62
General and administrative expenses	60	8,142,989,761.68	6,728,450,311.29
Research and development expenses	61	719,324,723.42	738,442,136.71
Financial expenses	62	17,243,861,098.70	13,536,855,194.29
Including: Interest expenses		16,821,388,539.96	13,007,703,032.29
Interest income		1,175,408,692.53	1,391,452,901.73
Net exchange losses (net gains to be listed with "-")		879,647,992.52	1,399,727,940.03
Others		1,993,055,334.40	1,841,500,081.56
Add: Other incomes	63	13,222,457,192.22	15,889,861,631.93
Investment income (loss to be presented with "-")	64	10,178,573,925.93	8,382,781,965.77
Including: Investment income from associates and joint ventures			
Gains on derecognition of financial assets at amortized cost			
Gain on foreign exchange (loss to be presented with "-")		-25,817.04	-309.46
Net expenses to hedging gains (loss to be presented with "-")			
Gain from changes in fair value (loss to be presented with "-")	65	573,961,409.31	1,234,992,643.31
Loss on impairment of credits (loss to be listed with "-")	66	-667,220,511.32	-368,411,431.94
Loss on impairment of assets (loss to be listed with "-")	67	-2,392,788,021.69	-273,083,609.71
Gains on disposal of assets (loss to be presented with "-")	68	198,078,124.32	22,716,416.01
III. Operating Profit (loss to be presented with "-")		31,911,544,585.87	61,818,676,309.52
Add: Non-operating income	69	374,755,178.99	629,891,237.52
Including: Government grants		39,959,235.42	45,795,909.49
Less: Non-operating expenses	70	1,232,218,105.50	1,611,003,329.28
IV. Profit Before Taxes (loss to be presented with "-")		31,054,079,659.36	61,037,569,217.76
Less: Income tax expenses	71	8,526,220,669.84	10,059,629,864.05
V. Net Profit (net loss to be presented with "-")		42,527,858,989.52	50,977,931,373.70
(i) Classified according to attribution of the ownership			
Attributable to the owners of parent company		24,551,219,701.34	32,386,661,945.17
*Attributable to non-controlling interests		17,976,725,288.18	18,591,329,228.53
(ii) Classified according to operating continuity			
Profit or loss from continuous operation (net loss to be presented with "-")		42,527,858,989.52	50,977,931,373.70
Profit or loss from termination of operation (net loss to be presented with "-")			
VI. Other Comprehensive Income After Tax		4,874,833,154.76	-4,618,330,990.95
Other comprehensive income attributable to the owners of parent company (net of tax)	72	2,297,169,645.08	-3,764,084,444.28
(i) Other comprehensive income not to be reclassified as profit or loss		-422,060,885.69	537,406,801.66
1. Changes in re-measured defined benefit obligations or net assets		17,904,592.32	10,835,965.17
2. Portion of other comprehensive income not to be reclassified as profit or loss under equity method		-36,818,339.30	211,460,877.58
3. Change in fair value of investment from other equity instruments		-398,147,138.71	315,060,038.97
4. Change in fair value of the company's credit risk			
5. Others			
(ii) Other comprehensive income to be reclassified as profit or loss		2,719,230,530.77	-4,301,491,345.94
1. Portion of other comprehensive income to be reclassified as profit or loss under equity method		-1,435,825,796.94	-408,221,641.53
2. Change in fair value of other debt instruments		-13,817,622.30	24,151,343.98
*3. Gain or loss from changes in fair value of available-for-sale financial assets			
4. Financial assets that can be reclassified as other comprehensive income		-971,848.97	
*5. Gain or loss from reclassification held-to-maturity investments to available-for-sale financial assets			
6. Credit impairment provision from other debt investments		-91,062,777.55	15,651,032.77
7. Gain or loss on effective cash flow hedge		441,810,520.34	-195,524,706.13
8. Translation differences of financial statements in foreign currencies		3,827,109,988.81	-3,737,547,375.03
9. Others		-8,011,921.62	
*Other comprehensive income attributable to non-controlling interests (net of tax)		2,577,663,509.68	-854,246,546.67
VII. Total Comprehensive Income		47,402,692,144.28	46,359,600,182.75
Total comprehensive income attributable to the owners of the parent company		26,848,289,346.42	28,622,517,500.89
*Total comprehensive income attributable to non-controlling interests		20,554,402,797.86	17,737,082,681.86
VIII. Earnings per Share:			
(i) Basic earnings per share			
(ii) Diluted earnings per share			

Note: Items marked with * in the table are exclusively for consolidated financial statements; items marked with △ are exclusively used for financial enterprises; items marked with ☆ are applicable to enterprises that have not implemented the new financial instrument standards.

Consolidated Cash Flow Statement

For the year ended December 31, 2022

Item	Note VIII	Year ended December 31, 2022	Year ended December 31, 2021
Company Name: China Three Gorges Corporation			
Unit: RMB			
I. Cash Flow from Operating Activities			
Proceeds from sales of goods or rendering of services		170,863,788,126.58	148,170,856,932.92
△ Net increase in deposits from customers, banks and other financial institutions		687,494,864.62	-210,322,021.36
△ Net increase in loans from Central Bank			
△ Net increase in placements from other financial institutions		1,300,000,000.00	
△ Proceeds from premiums of original insurance contract			
△ Net amount of reinsurance business			
△ Net increase in the insurer's deposits and investment			
△ Net increase in disposal of financial assets at fair value through profit and loss			
△ Proceeds from interests, fees and commissions		411,500,445.82	443,541,882.46
△ Net increase of replacement from banks and other financial institutions			
△ Net increase in repurchasing		1,012,000,000.00	
△ Net cash received from securities brokering			
Refund of taxes		7,199,657,247.04	232,670,153.68
Proceeds from other operating activities		8,365,273,381.49	5,890,502,374.64
Subtotal of cash inflows from operating activities		189,839,714,065.55	154,527,249,322.34
Payments for goods and services		73,395,307,360.34	64,751,520,782.35
△ Net increase in loans and advances to customers		-507,575,517.94	567,964,442.90
△ Net increase in deposits with Central Bank and other financial institutions		-427,705,365.85	554,117,490.62
△ Payments for compensation under original insurance contract			
△ Net increase of due from banks and other financial institutions			
△ Payments for interests, fees and commissions		23,022,390.03	23,428,611.97
△ Payments for policy dividends			
Payments to and for employees		13,393,495,934.14	10,763,570,837.20
Payments of taxes		27,399,604,543.51	20,777,932,885.21
Payments for other operating activities		10,920,180,185.47	7,937,030,200.05
Subtotal of cash outflows from operating activities		124,196,329,529.70	105,375,565,250.30
Net cash flows from operating activities		65,643,384,535.85	49,151,684,072.04
II. Cash Flows from Investing Activities:			
Proceeds from disposal of investments		64,882,788,001.07	69,539,449,692.54
Proceeds from return of investments		4,954,543,792.01	5,296,045,012.61
Proceeds from disposal of fixed assets, intangible assets and other long-term assets		90,910,733.85	34,413,220.47
Proceeds from disposal of subsidiaries and other business units		6,457,859.56	
Proceeds from other investing activities		384,986,107.93	264,967,251.09
Subtotal of cash inflows from investing activities		70,319,886,494.42	75,134,875,176.71
Payments for acquisition and construction of fixed assets, intangible assets and other long-term assets		65,427,828,845.17	82,766,888,738.95
Payments for acquisition of investments		67,682,411,247.53	94,586,220,820.94
△ Net increase in pledge loans			
Net payments for acquisitions of investment in subsidiaries and other business units		2,250,352,692.73	11,417,741,200.49
Payments for other investing activities		199,501,749.07	565,547,912.33
Subtotal of cash outflows from investing activities		140,560,894,534.50	189,336,398,672.71
Net cash flows from investing activities		-70,240,208,040.08	-114,201,523,496.00
III. Cash flows from financing activities:			
Proceeds from investees		3,461,642,550.11	40,694,358,408.44
*Including: Proceeds from non-controlling interests of subsidiaries		8,071,652,550.11	40,194,358,408.44
Proceeds from borrowings		194,340,947,024.03	213,607,438,475.41
Proceeds from other financing activities		354,198,797.75	1,124,819,150.16
Subtotal of cash inflows from financing activities		208,156,788,371.89	255,426,616,034.01
Repayments of borrowings		153,212,105,712.32	143,305,529,847.51
Payment for dividends, profit distribution or interest		40,682,099,930.83	31,408,739,839.17
*Including: Distribution of dividends, profit to non-controlling interests of subsidiaries		10,968,651,238.81	9,276,405,542.55
Payments for other financing activities		9,651,197,293.58	11,548,478,987.29
Subtotal of cash outflows from financing activities		203,545,602,936.73	186,262,748,673.97
Net cash flows from financing activities		-388,814,564.84	69,163,867,360.04
IV. Effect of exchange rate changes on cash and cash equivalents		755,401,572.80	-577,326,054.17
V. Net increase in cash and cash equivalents		-4,230,236,496.27	3,536,701,881.91
Add: Beginning balance of cash and cash equivalents		38,547,494,010.49	35,010,792,137.78
VI. Ending balance of cash and cash equivalents		34,317,257,514.22	38,547,494,010.69

Note: Items marked with * in the table are exclusively for consolidated financial statements; items marked with △ are exclusively used for financial enterprises.

Balance Sheet of Parent Company

December 31, 2022

Unit: RMB

Item	Note XIII	As at December 31, 2022	As at January 1, 2022
Current assets:			
Cash at bank and on hand		16,616,656,159.23	31,576,101,726.61
△ Intergovernmental reserve			
△ Financial assets held for trading		1,325,835,065.17	3,516,567,470.78
△ Financial assets at fair value through profit or loss			
△ Derivative financial assets			
Notes receivable			
Accounts receivable			
Receivables financing			
Advances to suppliers		316,968,525.47	232,929,633.67
△ Premiums receivable			
△ Reinsurance premium receivable			
△ Reserve receivable for reinsurer contract			
Account receivable for centralized management			
Other receivables	1	933,601,415.90	1,484,701,732.98
Including: Dividends receivable		340,315,384.93	199,878,498.10
△ Financial assets purchased under agreements to resell			
Inventories			
Including: Raw materials			
Merchandise stocks (finished goods)			
Contractual assets			
Held-for-sale assets			
Non-current assets due within one year		18,196,750,652.34	24,159,000,000.00
Other current assets		22,188,889,033.56	12,665,630,881.75
Total current assets		59,572,700,851.67	71,634,911,445.83
Non-current assets:			
△ Loans and advances			
Debt investments			
△ Available-for-sale financial assets			
Other debt investments			
△ Held-to-maturity investments			
Long-term receivables		532,945,436.94	11,832,945,436.94
Long-term equity investments	2	231,058,094,206.36	221,081,883,078.89
Other equity instruments investments		3,200,183,173.12	3,403,047,148.54
Other non-current financial assets			
Investment properties			
Fixed assets		25,312,445,086.65	25,334,334,056.02
Including: Original value of fixed assets		46,178,254,681.26	45,022,327,624.79
Accumulated depreciation		20,865,677,594.61	19,687,861,568.77
Provision for impairment of fixed assets			
Construction in progress		1,492,830,366.43	1,161,030,068.26
Productive biological assets			
Oil and gas assets			
Right-of-use assets		15,869,153.70	55,898,794.67
Intangible assets		430,151,524.45	431,353,855.01
Development expenditures			
Goodwill			
Long-term deferred expenses			
Deferred tax assets		630,068,392.59	621,400,313.08
Other non-current assets		174,496,751,279.91	151,664,823,566.23
Including: Authorized reserve asset			
Total non-current assets		438,069,359,624.65	415,586,712,347.64
Total Assets		497,642,059,476.32	489,221,643,793.47

Note: Items marked with * in the table are exclusively for consolidated financial statements; items marked with △ are exclusively used for financial enterprises; items marked with # are exclusively used for foreign-invested enterprises; items marked with @ are applicable to enterprises that have not implemented the new financial instrument standards.

Balance Sheet of Parent Company (Continued)

December 31, 2022

Unit: RMB

Item	Note XIII	As at December 31, 2022	As at January 1, 2022
Current liabilities:			
Short-term borrowings		2,001,433,055.51	6,375,700,000.00
△ Borrowings from central bank			
△ Borrowings from banks and other financial institutions			
Financial liabilities held for trading		1,114,208,440.15	452,169,553.86
△ Financial liabilities at fair value through profit or loss			
Derivative financial liabilities			
Notes payable			
Accounts payable		112,776,793.81	91,729,075.47
Advances from customers		3,449,959.92	844,468.25
Contractual liabilities			
△ Financial assets sold under agreements to repurchase			
△ Deposits from customers, banks and other financial institutions			
△ Securities borrowing			
△ Securities underwriting			
Employee benefits payable		65,341,302.60	54,949,387.37
Including: Salaries payable			
Welfare payable			
Including: Employee bonus and welfare funds			
Taxes payable		343,516,859.87	531,748,205.15
Including: Accrued tax		341,163,235.89	530,876,997.74
Other payables		1,469,283,287.98	3,076,145,985.31
Including: Dividends payable			
△ Fees and commissions payable			
△ Reinsurance accounts payable			
Held-for-sale liabilities			
Non-current liabilities due within one year		29,205,844,895.17	24,786,852,519.47
Other current liabilities		3,063,568,891.28	18,495,073,791.64
Total current liabilities		37,383,423,486.23	55,865,212,984.52
Non-current liabilities:			
△ Reserve of insurance contract			
Long-term borrowings		71,035,107,696.00	68,984,643,080.00
Bonds payable		89,125,898,994.45	71,025,701,790.46
Including: Preferred shares			
Perpetual bonds			
Lease liabilities		2,923,156.27	31,489,933.15
Long-term payables			
Long-term employee benefits payable			
Provisions			
Deferred incomes		72,286,018.15	72,286,018.15
Deferred tax liabilities		1,116,009,757.77	1,234,408,863.05
Other non-current liabilities			
Including: Authorized reserve fund			
Total non-current liabilities		161,172,225,632.64	142,548,525,684.81
Total liabilities		198,755,649,118.87	198,413,738,669.33
Owners' equity:			
Paid-in capital			
State-owned capital		212,171,613,501.31	211,781,023,501.31
Capital from state-owned legal body		212,171,613,501.31	211,781,023,501.31
Collective capital			
Private capital			
Foreign capital			
Less: Payback capital			
Net paid-in capital		212,171,613,501.31	211,781,023,501.31
Other equity instruments		9,972,641,509.44	9,972,641,509.44
Including: Preferred shares			
Perpetual bonds		9,972,641,509.44	9,972,641,509.44
Capital reserve		9,836,192,379.78	9,769,211,779.87
Less: Treasury shares			
Other comprehensive income		405,375,895.95	482,506,189.41
Including: Foreign currency translation differences			
Special reserve			
Surplus reserve		32,369,851,717.80	30,808,562,921.00
Including: Statutory surplus reserve		21,792,556,392.72	20,228,261,595.92
Discretionary surplus reserve		10,577,301,325.08	10,577,301,325.08
#Reserve fund			
#Enterprise development fund			
#Return of investment			
△ General risk provision			
Retained earnings		34,130,734,953.17	32,216,135,223.11
Total owner's equity attributable to parent company		298,886,410,357.45	295,007,901,124.14
*Non-controlling interests			
Total owners' equity		298,886,410,357.45	295,007,901,124.14
Total liabilities and owners' equity		497,642,059,476.32	489,221,643,793.47

Note: Items marked with * in the table are exclusively for consolidated financial statements; items marked with △ are exclusively used for financial enterprises; items marked with # are exclusively used for foreign-invested enterprises; items marked with @ are applicable to enterprises that have not implemented the new financial instrument standards.

Income Statement of Parent Company

For the year ended December 31, 2022

Unit: RMB

Item	Note XIII	Year ended December 31, 2022	Year ended December 31, 2021
I. Total Operating Revenue		562,232,125.04	613,120,335.08
Including: Operating revenue	3	562,232,125.04	613,120,335.08
△ Interest income			
△ Provision earned			
△ Refunding charges and commission income			
II. Total Operating Cost		10,733,537,179.42	10,766,722,937.56
Including: Operating cost	3	362,141,280.09	429,833,356.01
△ Interest expenses			
△ Fees and commissions expenses			
△ Cash surrender amount			
△ Net expenses of claim settlement			
△ Net expenses for insurance liability reserves			
△ Policy dividend expenses			
△ Reinsurance expenses			
Taxes and surcharges		137,744,092.83	110,523,812.95
Selling and distribution expenses			
General and administrative expenses		3,298,602,210.18	2,827,563,375.11
Research and development expenses		236,766,339.70	682,361,052.03
Financial expenses		6,698,281,256.62	6,710,441,341.46
Including: Interest expenses		6,779,839,403.51	6,855,234,950.07
Interest income		155,812,251.22	125,923,049.41
Net exchange losses (net gains to be listed with "-")		65,205,459.60	-38,644,553.88
Others		1,301,716,914.90	1,309,923,956.47
III. Profit Before Tax		25,648,107,370.53	24,082,177,757.55
Including: Investment income (loss to be presented with "-")	4	2,382,721,467.68	1,013,304,222.21
△ Gains on derecognition of financial assets at amortized cost			
△ Gain on foreign exchange (loss to be presented with "-")			
△ Net expenses to hedging gains (loss to be presented with "-")			
△ Gain from changes in fair value (loss to be presented with "-")		-15,948,163.63	1,168,023,927.35
△ Loss on impairment of credits (loss to be listed with "-")		11,002,243.86	66,529,152.76
△ Loss on impairment of assets (loss to be listed with "-")		-499,828,026.70	
△ Gains on disposal of assets (loss to be presented with "-")		39,791,702.18	935,100.40
Others		16,513,536,996.76	16,464,987,292.05
IV. Profit After Tax		400,300.98	993,755.18
Including: Government grants		186,113.44	-131,090.66
Less: Non-operating expenses		171,397,811.66	625,979,392.78
V. Profit Before Tax		16,142,539,676.08	15,840,001,454.45
Less: Income tax expenses		309,498,482.12	763,285,903.29
VI. Net Profit (net loss to be presented with "-")		15,833,041,213.96	15,076,715,551.16
(I) Classified according to attribution of the ownership			
Attributable to the owners of parent company		15,833,041,213.96	15,076,715,551.16
*Attributable to non-controlling interests			
(II) Classified according to operating continuity			
Profit or loss from continuous operation (net loss to be presented with "-")		15,833,041,213.96	15,076,715,551.16
Profit or loss from termination of operation (net loss to be presented with "-")			
VII. Other Comprehensive Income After Tax		-75,771,580.56	502,366,374.98
Other comprehensive income attributable to the owners of parent company (net of tax)		-75,771,580.56	502,366,374.98
(I) Other comprehensive income not to be reclassified as profit or loss		-137,047,759.02	398,915,796.81
1. Changes in re-measured defined benefit obligations or net assets			
2. Portion of other comprehensive income not to be reclassified as profit or loss under equity method		15,100,222.53	1,261,951.27
3. Change in fair value of investment from other equity instruments		-152,147,981.55	389,653,845.54
4. Change in fair value of the company's credit risk			
5. Others			
(II) Other comprehensive income to be reclassified as profit or loss		60,276,178.46	111,450,578.17
1. Portion of other comprehensive income to be reclassified as profit or loss under equity method		60,276,178.46	111,450,578.17
2. Change in fair value of other debt instruments			
△1. Gain or loss from changes in fair value of available-for-sale financial assets			
△2. Financial assets that can be reclassified as other comprehensive income			
△3. Gain or loss from reclassification: held-to-maturity investments to available-for-sale financial assets			
△4. Credit impairment provision from other debt investments			
△5. Gain or loss on effective cash flow hedge			
△6. Translation differences of financial statements in foreign currencies			
△7. Others			
*Other comprehensive income attributable to non-controlling interests (net of tax)			
VIII. Total Comprehensive Income		15,526,269,633.40	15,579,082,123.64
Total comprehensive income attributable to the owners of the parent company		15,526,269,633.40	15,579,082,123.64
*Total comprehensive income attributable to non-controlling interests			
VIII. Earnings per Share:			
(I) Basic earnings per share			
(II) Diluted earnings per share			

Note: Items marked with * in the table are exclusively for consolidated financial statements; items marked with △ are exclusively used for financial enterprises; items marked with ☆ are applicable to enterprises that have not implemented the new financial instrument standards.

Cash Flow Statement of Parent Company

For the year ended December 31, 2022

Unit: RMB

Item	Note XIII	Year ended December 31, 2022	Year ended December 31, 2021
I. Cash Flows from Operating Activities			
Proceeds from sales of goods or rendering of services		12,818,791.81	7,769,985.23
△ Net increase in deposits from customers, banks and other financial institutions			
△ Net increase or (loss) from Central Bank			
△ Net increase in placements from other financial institutions			
△ Proceeds from premium of original insurance contract			
△ Net amount of reinsurance business			
△ Net increase in the insured deposits and investment			
△ Net increase in disposal of financial assets at fair value through profit and loss			
△ Proceeds from interests, fees and commissions			
△ Net increase of replacement from banks and other financial institutions			
△ Net increase in repurchasing			
△ Net cash received from securities brokering			
Refund of taxes		64,180,576.67	
Proceeds from other operating activities		2,179,800,854.49	2,392,933,166.53
Subtotal of cash inflows from operating activities		2,256,899,422.97	2,400,703,151.78
Payments for goods and services		456,559,946.32	739,601,038.39
△ Net increase in loans and advances to customers			
△ Net increase in deposits with Central Bank and other financial institutions			
△ Payments for compensation under original insurance contract			
△ Net increase of due from banks and other financial institutions			
△ Payments for interests, fees and commissions			
△ Payments for policy dividends			
Payments to and for employees		619,732,574.05	694,150,217.63
Payments of taxes		1,237,589,382.01	541,012,776.69
Payments for other operating activities		1,918,808,766.39	2,129,115,442.08
Subtotal of cash outflows from operating activities		4,232,690,668.77	4,103,879,474.79
Net cash flows from operating activities		-1,975,791,245.80	-1,703,176,323.01
II. Cash Flows from Investing Activities:			
Proceeds from disposal of investments		58,444,724,316.23	65,234,973,172.70
Proceeds from return of investments		23,450,646,210.35	19,654,719,886.52
Proceeds from disposal of fixed assets, intangible assets and other long-term assets		35,189,829.24	92,285,807.56
Proceeds from disposal of subsidiaries and other business units			
Proceeds from other investing activities		11,300,000,000.00	2,600,000,000.00
Subtotal of cash inflows from investing activities		93,230,560,355.82	87,581,978,866.78
Payments for acquisition and construction of fixed assets, intangible assets and other long-term assets		1,620,217,757.07	784,736,254.03
Payments for acquisition of investments		93,414,100,000.00	94,868,084,983.27
△ Net increase in pledge loans			
Net payments for acquisitions of investment in subsidiaries and other business units			
Payments for other investing activities		17,689,479.45	
Subtotal of cash outflows from investing activities		95,052,807,236.52	95,652,821,737.30
Net cash flows from investing activities		-1,821,446,880.70	-8,070,843,670.52
III. Cash flows from financing activities:			
Proceeds from investors		390,590,000.00	500,000,000.00
* Including: Proceeds from non-controlling interests of subsidiaries			
Proceeds from borrowings		68,997,712,500.00	95,712,600,000.00
Proceeds from other financing activities		4,094,240.11	
Subtotal of cash inflows from financing activities		69,388,302,500.00	96,276,694,240.11
Repayments of borrowings		62,225,948,952.54	67,122,340,838.90
Payment for dividends, profit distribution or interest		18,230,276,975.14	13,197,264,057.78
*Including: distribution of dividends, profit to non-controlling interests of subsidiaries			
Payments for other financing activities		81,385,470.20	46,631,820.14
Subtotal of cash outflows from financing activities		80,536,711,397.88	80,366,236,716.82
Net cash flows from financing activities		-11,148,408,897.88	15,910,457,523.29
IV. Effect of exchange rate changes on cash and cash equivalents		-13,798,543.00	-11,017.13
V. Net increase in cash and cash equivalents		-14,939,445,967.38	6,136,426,512.63
Add: Beginning balance of cash and cash equivalents		31,576,101,726.61	25,439,675,213.98
VI. Ending balance of cash and cash equivalents		16,636,655,759.23	31,576,101,726.61

Note: Items marked with * in the table are exclusively for consolidated financial statements; items marked with △ are exclusively used for financial enterprises.

Audit Report



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Auditor's Report

DHSZ[2023]No. 000408

To China Three Gorges Corporation

1. Opinion

We have audited the financial statements of China Three Gorges Corporation (hereinafter referred to as the "Three Gorges Corporation"), which comprise the consolidated and parent company's balance sheet as at December 31, 2022, the consolidated and parent company's income statement, the consolidated and parent company's cash flow statement, and the consolidated and parent company's statement of changes in owners' equity for the year then ended, and the related notes to the financial statements.

In our opinion, the accompanying financial statements of Three Gorges Corporation present fairly, in all material respects, the consolidated and parent company's financial position as at December 31, 2022, the consolidated and parent company's results of operations and cash flows for the year then ended in accordance with Accounting Standards for Business Enterprises.

2. Basis for Opinion

We conducted our audit in accordance with China Standards on Auditing for Chinese Certified Public Accountants. Our responsibilities under those standards are further described in the "Auditor's Responsibilities for the Audit of the Financial Statements" section of our report. We are independent of Three Gorges Corporation in

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accordance with the Code of Ethics for Chinese Certified Public Accountants, and we have fulfilled our other ethical responsibilities of the code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

3. Responsibilities of the Management and Those Charged with Governance for the Financial Statements

The Management is responsible for the preparation of the financial statements in accordance with Accounting Standards for Business Enterprises to achieve a fair presentation; and designing, implementing, and maintaining internal control which is necessary to enable that the financial statements are free from material misstatements, whether due to fraud or error.

In preparing the financial statements, the Management is responsible for assessing Three Gorges Corporation's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Management either intends to liquidate Three Gorges Corporation or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing Three Gorges Corporation's financial reporting process.

4. Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are generally considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

During the course of the audit, in accordance with auditing standards, we exercise professional judgment and maintain professional skepticism. We also carry out the following works:

- (1) Identify and assess the risks of material misstatement of the financial

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statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

(2) Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of its internal control.

(3) Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Management.

(4) Conclude on the appropriateness of the Management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on Three Gorges Corporation's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements in accordance with the auditing standards or, if such disclosures are inadequate, we shall modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause Three Gorges Corporation to cease to continue as a going concern.

(5) Evaluate the overall presentation, structure, and content of the financial statements, and also whether the financial statements represent the underlying transactions and events in a manner that achieves a fair presentation.

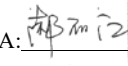
(6) Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within Three Gorges Corporation to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision, and performance audit of the group. We remain solely responsible for our audit opinion.

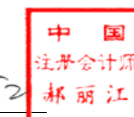
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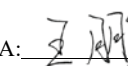
We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, etc., including any significant deficiencies in internal control that we identify during our audit.

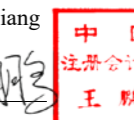
Da Hua Certified Public Accountants
(Special General Partnership)
Beijing, the People's Republic of China

April 28, 2023

CICPA: 
Hao Lijiang



CICPA: 
Wang Peng

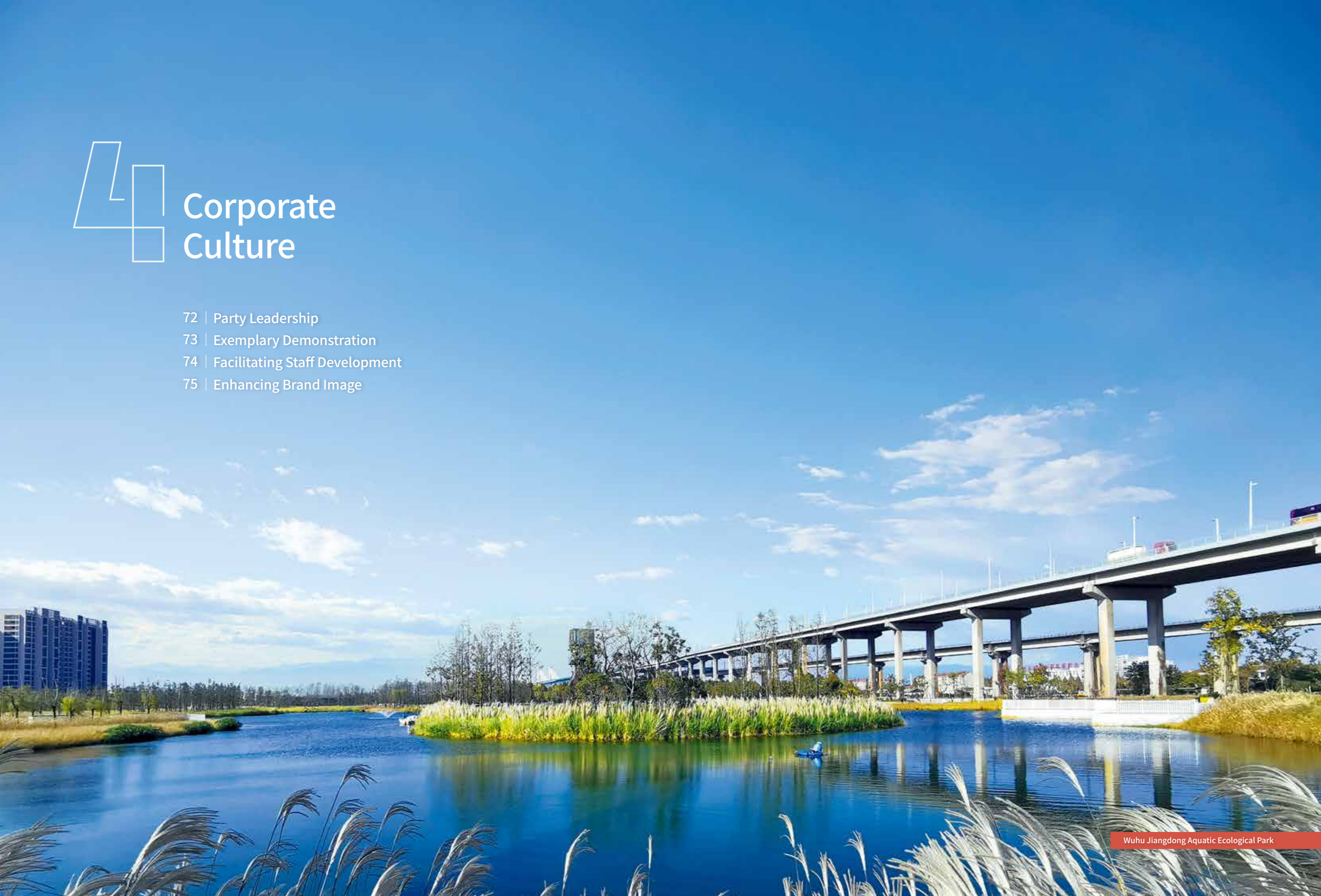


The English translation is prepared for reference only. Should there be any inconsistency, the Chinese version shall prevail.



Corporate Culture

- 72 | Party Leadership
- 73 | Exemplary Demonstration
- 74 | Facilitating Staff Development
- 75 | Enhancing Brand Image



Party Leadership

In the year 2022, CTG, guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, focused on embracing the main theme of studying and implementing the resolutions of the 20th National Congress of the CPC. The company deeply internalized the important guidance and instructions by President Xi Jinping and the decisions made by the CPC Central Committee. With high-quality Party building leading the way to ensure high-quality development, CTG united and led its employees to work diligently. They vigorously pursued the implementation of two-tracked approach to advance clean energy and the ecological conservation of the Yangtze River, maintaining stable operation. Through these efforts, they made significant contributions to the harmonious coexistence between humans and nature and the construction of a socialist modernized country in all respects.



On July 6, 2022, the Theory Learning Team of CTG Party Group organized a collective visit to the former site of the CPC Central Committee in Wuhan. During this visit, they revisited the Party's history, paid respects to the revolutionary martyrs, and drew strength to move forward. The aim was to promote a long-term mechanism of learning from Party history, serving as a continuous source of inspiration.



On October 25, 2022, CTG convened an expanded meeting of the Theory Learning Team of CTG Party Group to convey and study the spirit of the 20th National Congress of the CPC. Mr. Lei Mingshan, Board Chairman, conveyed the main message of the Congress and emphasized the imperative to adhere to Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era. He underscored the importance of translating the major decisions and arrangements of the 20th National Congress of the CPC into practical actions and advancing the high-quality development of CTG.



On November 5, 2022, as a representative of the 20th National Congress of the CPC, Mr. Lei Mingshan, Board Chairman, delivered a lecture on the spirit of the congress at the headquarters of CTG. He emphasized that learning and implementing the spirit of the 20th National Congress of the CPC is the primary task for the current and future periods. He stressed the importance of carefully organizing activities to guide all Party members and staff to deeply comprehend the main messages on CPC leadership. He encouraged everyone to consciously align their thoughts and actions with the spirit of the 20th National Congress of the CPC, and to unite in concerted effort for the construction of a modern socialist country and the great rejuvenation of the Chinese nation.

Exemplary Demonstration



2

groups were awarded the title of **National Workers Pioneer**

2

employees were honored with the **National May 1st Labor Medal**

2

families were respectively honored with the titles of **13th National Model Family** and **National Most Beautiful Family of 2022**

3

organizations were awarded the **provincial May 1st Labor Award**

2

groups were honored with the **provincial Workers Pioneer title**

3

employees were awarded the **provincial May 1st Labor Medal**

1

employee was honored with the title of **Craftsman of Hubei**



The Hydraulic Maintenance Division of the Mechanical and Hydraulic Repair Department at the Three Gorges Power Plant of CYPG was awarded the National Workers Pioneer



The Production and Operation Department of Hubei Jingzhou Coal Port Co., Ltd., a subsidiary of Hubei Energy Group Co., Ltd (HEG), was honored with the National Workers Pioneer

On April 24, 2022, CTG held the 2022 Commendation Conference for Labor Model and Outstanding Youth. During the conference, awards were presented to the Outstanding Group, Outstanding Team, Labor Model, and Outstanding Youth (11th session) of CTG for the year 2021.



CTG's 2022 Commendation Conference for Labor Model and Outstanding Youth

Outstanding Group

Including 10 groups such as the Baihetan Hydropower Plant of CYPG.

Outstanding Team

Including 10 teams such as the Environmental Protection Center of the River Basin Complex Administration Center.

Labor Model

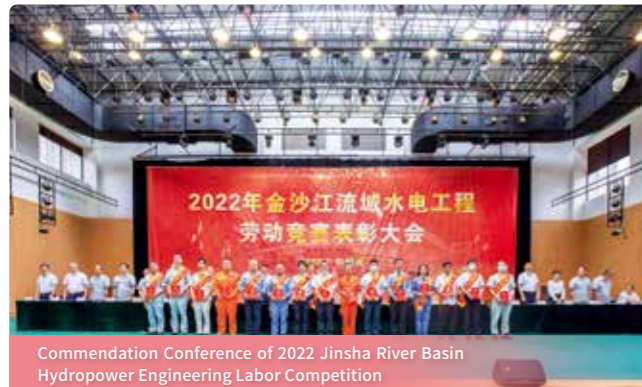
Including 10 employees, such as Qiu Liwen, in charge of ecological restoration at the Yangtze Rare Plant Research Institute of Yangtze Eco-Environment Engineering Research Center.

Outstanding Youth

Including 11 employees such as Yin Likun, Director of the Comprehensive Energy Center at the Science and Technology Research Institute.

Facilitating Staff Development

In 2022, CTG vigorously promoted labor competitions focusing on Jinsha River hydropower engineering, environmental conservation of Yangtze River, and the development of large-scale wind power farms and hydropower plants. A commendation conference for the Jinsha River hydropower engineering labor competition was convened. To foster technological self-reliance and innovation, the 9th Employee Innovation Achievement Soliciting and Evaluation was carried out. And employees were encouraged to participate in evaluations for awards by the organizations such as the Workers Union of China Energy, Chemistry and Geology, the China Electricity Council, and Hubei Province Employee Technical Innovation Awards. Efforts were also initiated to establish exemplary employee (model worker, craftsman) innovation workshops.



Commendation Conference of 2022 Jinsha River Basin Hydropower Engineering Labor Competition



Blue Power Innovation Workshop of Gezhouba Power Plant, CYPC



CTG 2022 New Employee Training

On July 4, 2022, the opening ceremony of CTG's 2022 New Employee Training was held in Wuhan. CTG President Han Jun attended the event. Under the theme of Leaving Footprints on the Journey to A World-Class Enterprise, Han Jun delivered the first lecture to the new employees.

Enhancing Brand Image

In 2022, CTG actively engaged in brand promotion and upgrade of its core corporate culture to keep up with the pace of the construction of a globally competitive world-class clean energy enterprise.



Winter Olympics Torch Relay



Lei Mingshan, CTG Board Chairman, attends the award ceremony and being interviewed



Wudongde Hydropower Station Stamp, Baihetan Hydropower Station Stamp

1 From February 2nd to 4th, 2022, the Beijing 2022 Winter Olympics Torch Relay, themed Embracing the Winter Olympics, Embracing a Brighter Future, took place in Beijing, Yanqing, and Zhangjiakou. Twenty representatives of cadre and staff members from CTG participated in the torch relay.

2 On February 21, 2022, the second Chinese Great Brands Summit, hosted by the China Central Television, was held in Beijing. CTG was selected as one of the top ten National Pillar Brands. Projects like the Baihetan Hydropower Station represented the best practice of green electricity initiatives promoting corporate brands.

3 On June 28, 2022, the National Education Demonstration Base event and the inaugural ceremony of the special postage stamps for Hydropower Construction were held at the Baihetan Hydropower Station. This set of two special postage stamps issued by China Post, titled Hydropower Construction, features the designs of Wudongde Hydropower Station and Baihetan Hydropower Station.

5

Technological Innovation

- 78 | Increasing R&D Investment
- 78 | Building Innovative Talent Pools
- 79 | Advancing Innovation Platforms
- 80 | Achieving Fruitful R&D Results

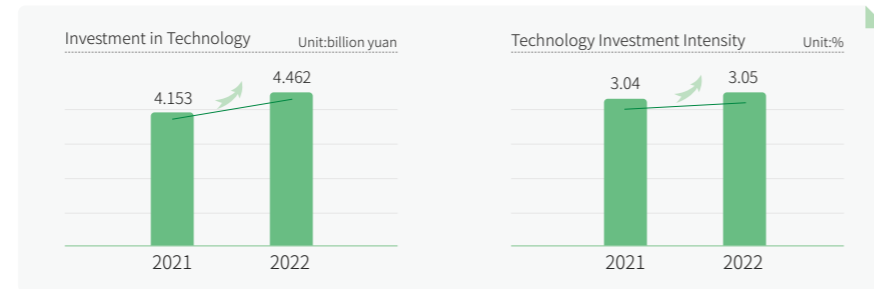


CTG upholds the innovation-driven development strategy and has constructed the national-level technological innovation platform. The efforts in implementing major technological projects have yielded remarkable results, exemplified by significant achievements like the National Science and Technology Progress Award.

- ▶ Delve deep into a three-year action plan for technological system reform and continually improve our technological innovation institution and mechanisms.
- ▶ Benchmark against the world's foremost enterprises in the field of technological innovation.
- ▶ Unveil the "14th Five-Year Plan" for technological innovation.
- ▶ Implement a R&D project bidding mechanism via open competition, under which the first batch of projects have found their most suitable leading performers via assessments.

Increasing R&D Investment

In the year 2022, CTG has steadfastly increased investment in R&D through various channels, ensuring financial support for the advancement of technological projects.



Building Innovative Talent Pools

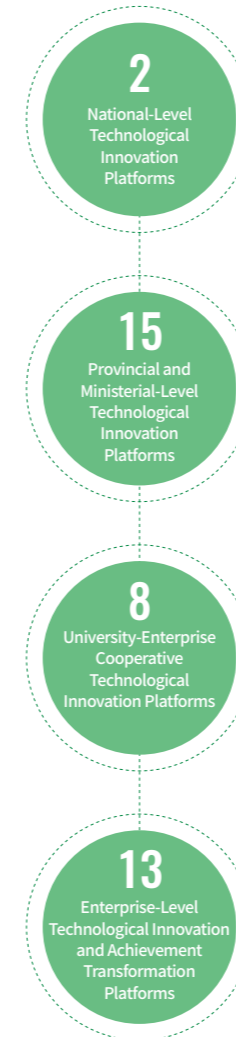
Initiating Talent Recommendation Initiatives

Proactively recommending and cultivating national-level talents, including candidates for academicians, and outstanding scientific and technological leaders in central SOEs. Facilitating the applications for industry association awards. A total of 14 individuals were nominated, with 12 granted awards.

Encouraging Employee Innovation

- CTG's 5th Science and Technology Progress Award and Technical Invention Award has been launched to grant rewards to a total of 23 projects:
- Special Prize: **2** projects First Prize: **3** projects Second Prize: **8** projects Third Prize: **10** projects
- CTG's 2021 Technological Innovation Achievement Award recognized a total of **1,685** projects with prize amounting to **12.26** million yuan
- CTG's 9th Employee Technical Achievement Award gave awards to 85 projects, including:
- First Prize: **6** projects Second Prize: **18** projects Third Prize: **25** projects Excellence Award: **36** projects

Advancing Innovation Platforms



Dedicated Efforts in Establishing National-Level Technological Innovation Platforms

- ▶ Enhancing the construction of the National Engineering Research Center for Eco-Environment in the Yangtze River Economic Belt.
- ▶ Collaborating with Hehai University to co-construct the National Engineering Research Center for Efficient Utilization of Water Resources and Engineering Safety.

Advancing the Construction of Provincial and Ministerial-Level Technological Innovation Platforms

- ▶ Facilitating the establishment of the State Key Laboratory of Water Pollution Traceability and Control for Environmental Protection.
- ▶ Advancing the construction of the Hubei Smart Hydropower Technology Innovation Center.
- ▶ Advancing the construction of the Hydropower Technology Innovation Center of Southeast Tibet (Tibet Autonomous Region).
- ▶ Advancing the construction of the Hubei Key Laboratory of Smart Yangtze River and Hydropower Science.
- ▶ Advancing the construction of the Hubei Field Scientific Observation Research Station for the Three Gorges Reservoir Ecosystem.
- ▶ Secured approval for co-construction of the Qinghai Key Laboratory for Compressed Air Energy Storage.
- ▶ Secured approval for co-construction of the Ministry of Education Engineering Research Center for Offshore Wind Power Technology.

Collaborating with Universities to Co-Construct Joint Innovation Platforms

- ▶ Collaborating with Nankai University to establish the Joint Research Center for High-Efficiency Utilization of Solar Energy.
- ▶ Collaborating with Qinghai University to establish the Joint Laboratory for Compressed Air Energy Storage.
- ▶ Advancing the collaboration with Wuhan University to establish the Joint Laboratory for Water, Wind, and Solar Energy Hybrid Projects.

Forging Independent Technological Innovation Platforms

- ▶ Developing a Hydropower Technology Innovation Center.
- ▶ Developing a Research Center for Renewable Energy and New Power Systems Engineering.
- ▶ Developing a Green Hydrogen Center.
- ▶ Developing an Ecological and Environmental Engineering Research Center.
- ▶ Developing a Hydraulic Concrete Technology Laboratory.
- ▶ Developing CTG Academicians and Experts Workstations.
- ▶ Developing CYPC Postdoctoral Research Station.



On June 7, 2022, CTG inaugurated the Academician Wang Yanxin Workstation in Wuhan



On October 26, 2022, CYPC Postdoctoral Research Station was officially established and awarded in Yichang

Achieving Fruitful R&D Results

16
National-Level
Key Science
and Technology
Projects

Approximately
200
million yuan of
financial support

Technology Awards

On July 17, 2022, SASAC announced the annual and term-based operational performance assessment results. CTG was honored with the title of Enterprise with Outstanding Technological Innovation Contributions for the 2019-2021 term.



Given the approval of 16 National Key Science and Technology Projects and the receipt of nearly 200 million yuan of financial support, the number of approved national projects and the funding amount for the year 2022 surpassed the cumulative total during the "13th Five-Year Plan" period.

Intellectual Property Rights

In 2022, CTG achieved new heights in various aspects of intellectual property. A total of **1,644** patent applications were completed both domestically and internationally, with **1,153** patents granted. Notably, the number of authorized domestic invention patents and overseas patent grants increased by **2.86** times and **4.5** times, respectively, compared with the previous year.

Key Achievements

Successful Pass of Evaluation-Acceptance for Breakthrough Engineering Projects

CTG has undertaken three key engineering tasks in the first phase, including "Localization Research on Integrated Control System of Offshore Wind Turbine Units", "Design and Development of Floating Offshore Wind Turbine Units", and "Research and Demonstration Application of Key Technologies for Flexible DC Transmission in Offshore Wind Power". All three tasks have been completed on schedule and have smoothly passed the acceptance evaluation conducted by national ministries and commissions.



CTG Dongyue Temple Data Center

Completion and Operation of Phase 1 of CTG Dongyue Temple Data Center

On March 29, 2022, the first phase of CTG Dongyue Temple Data Center, which is the first large-scale green and zero-carbon data center in China, was successfully completed and commissioned.



Testing Baihetan Power Plant Industrial Control System

Successful Application of Independent and Controllable Industrial Control Systems at Baihetan and Three Gorges Power Plants

On April 14, 2023, the domestically developed and controllable core system's hydroelectric generator speed controller concluded its factory acceptance testing. On December 20, it was successfully demonstrated in the Baihetan Power Plant's 1 GW unit, which boasts the world's highest single-unit capacity. On May 24, the S · CTG independently controllable large Programmable Logic Controller (PLC) was smoothly put into operation in the local control unit (LCU) of Unit 12 at the left bank power station of the Three Gorges Dam. This marked the first application of CTG's independent brand S · CTG large PLC, representing a significant milestone in the progress of the safety-controllable project for the industrial control system at the Three Gorges Complex.



Wudongde Vessel

Delivery and Operation of Wudongde and Baihetan Platforms

In June and September 2022, the first domestically built integrated deep-sea offshore wind construction vessel, the Wudongde, and the first domestically built 2,000-ton-level offshore wind power installation platform, the Baihetan, were delivered and commissioned.



Social Responsibility

- 84 | Providing Targeted Assistance
- 86 | Ensuring Effective Assistance in Reservoir Areas
- 86 | Aiding Xinjiang, Tibet, and Qinghai
- 87 | Engaging in Public Welfare and Charity
- 87 | Fulfilling Overseas Responsibilities

CTG attaches great importance to fulfilling corporate social responsibilities, always bearing in mind the original aspiration of benefiting the people. This commitment is seamlessly integrated into our development strategy and operational management at every level, adhering to transparent communication and striving to set an example in fulfilling our corporate social responsibilities.

In 2022, CTG was honored with

- Responsibility Golden Bull Award · Responsibility Management Award
- Rural Revitalization Award at the 17th People's Enterprise Social Responsibility Award Conference
- 1st Inner Mongolia Charity Award

Investment of **400** million yuan in targeted assistance funds Implementation of **60** targeted assistance projects A total annual consumption assistance amount of **96.60** million yuan

Industrial Assistance

A total of 34 industrial assistance projects have been implemented to support the development of distinctive industries in the assisted areas, thereby expanding channels for increasing income and prosperity of the local people. This includes the implementation of four CTG characteristic town projects in Anping Town of Fengjie County, Quchi Township of Wushan County, Luotang Township of Wan'an County, and Biliutai Town of Bairin Left Banner. Efforts are actively being made to facilitate the implementation of rural renewable energy investment projects in the targeted assistance counties (banners).



Lei Mingshan, CTG Board Chairman, visited Bairin Left Banner in Chifeng City, Inner Mongolia Autonomous Region, to conduct research on targeted assistance efforts



Han Jun, CTG President, visited Wushan County in Chongqing Municipality to conduct research on targeted assistance

Providing Targeted Assistance

Implementation of **34** industrial assistance projects

A total of **13,025** individuals have received training cumulatively

Talent Assistance

CTG actively carried out training for front-line managers and talents, combing online and offline approaches.



Ecological Assistance

CTG intensified efforts in ecological and environmental protection, improving local people's living environment, and adopted a blended approach of "ecological restoration + cultural elements + agritainment" to improve the riverbank of Jiuwan River in Luoping Town, Wushan County. In addition, ecological governance was implemented in Hailitu Village, Fuhe Town, Bairin Left Banner, to create livable, business-friendly, and picturesque rural areas.

Cultural Assistance

In Wushan County, Chongqing Municipality, CTG constructed the Times Exemplary Figure Square, established the Xiazhuang Cliff Road Education Base and the tourism brand, and vigorously promoted cultural and scenic tourism projects such as Dachang Ancient Town and CTG Village · Zhuzhi Village. In Wan'an County, Jiangxi Province, CTG was deeply involved in developing the Tianbei Peasants' Picturesque Village.



The Picturesque Village with lucid water and lush mountains

Organizational Assistance

We have initiated the "Learning and Building Together" party building assistance activities, facilitating the establishment of the Xiazhuang Campus of the Party School of the Wushan County Committee in Chongqing Municipality. We are also promoting the inheritance and promotion of the "Xiazhuang Spirit" and contributing to the development of significant national red education bases, such as the Kang Keqing Former Residence in Luotang Township, Wan'an County, Jiangxi Province.



Ensuring Effective Assistance in Reservoir Areas

Implementation of assistance projects **25**

A total annual investment exceeding **39** million yuan

Three Gorges Reservoir Area

Continuously carrying out assistance actions such as infrastructure development and ecological restoration, with a focus on creating a livable, business-friendly, and picturesque reservoir area. These efforts effectively enhance the well-being of relocated residents and promote the prosperity and development of the reservoir area.

Jinsha River Reservoir Area

Consolidating and expanding the achievements in improving livelihoods such as housing and healthcare, actively implementing education-focused assistance projects, and comprehensively enhancing the quality of life for relocated residents in the reservoir area.



Jinsha Community Rose Garden

Implementation of assistance projects **44**

A total annual investment of **140** million yuan

Aiding Xinjiang, Tibet, and Qinghai

Adhering to the decisions and instructions of the CPC Central Committee, CTG is comprehensively and multilaterally ensuring stability of border areas, and promoting shared prosperity.

Xinjiang

CTG provided paired-up assistance to Pishan County, carrying out 6 support projects that span education, culture and tourism, as well as enhancing skills and capabilities in various fields. These efforts aim to boost local economic development and improve the well-being of the people.

Tibet

CTG provided paired-up assistance to Dengqen County and formulated 20 assistance measures. In Medog County, 10 assistance projects have been implemented, contributing to the industrial development, economic growth and people's betterment.

Qinghai

CTG contributed to the construction of a photovoltaic base in Hainan Prefecture, effectively promoting the development of the local renewable energy industry. CTG also implemented projects such as congenital heart disease assistance, hospital support, and ecological public welfare forests, effectively enhancing rural infrastructure and public service levels.

Engaging in Public Welfare and Charity



Families in CTG Love House

The cumulative number of accommodations provided for disadvantaged families with illness has reached **496**

A donation of **50** million yuan was provided to support earthquake relief efforts in Luding, Sichuan

A total donation of **47.88** million yuan was provided to support the anti-epidemic efforts in various places, including Guizhou Province, Inner Mongolia Autonomous Region, Wuhan City, and Lanzhou City

- CTG invested in the construction of CTG Love House in Wuhan and Beijing to effectively help families of sick children address basic living difficulties.
- CTG provided assistance to earthquake, flood prevention, and disaster relief efforts in Sichuan, Anhui, and Chongqing regions; donated funds to support the resumption of work and production in Lanzhou and Inner Mongolia, actively fulfilling its responsibilities as a central SOE.
- CTG kept donating to the Happy Smiles charity project, which has helped over 600 impoverished children with cleft lips and palates receive free corrective surgeries. CTG also partnered with Xinxing Cathay International Group Co., Ltd. to implement a cochlear implant project, enabling more than 250 hearing-impaired patients to regain their hearing.

Fulfilling Overseas Responsibilities

January 2022

CTG's case Taking Overseas Social Responsibility through Educational Poverty Alleviation - "CTG Scholarship Program in Pakistan" was recognized as one of the Best Poverty Alleviation Practices in the 2nd Collection of Global Poverty Reduction Cases.



April 2022

CTG released over 200 Chinese sturgeons and local fish species in both Yichang, Hubei, China, and Brazil simultaneously. This effort, conducted on opposite sides of the globe, involved "Fish Ambassadors" working together across time and space to safeguard the rivers and ecosystems.



Doctors on fish conservation from China and Brazil

September 6, 2022

The opening ceremony of the CTG's scholarship program in Colombia was held at Universidad de Bogotá Jorge Tadeo Lozano, Colombia. The implementation of this scholarship program reflects CTG's active commitment to corporate social responsibility, providing valuable opportunities for local university graduates to broaden their employment prospects and offering outstanding students the chance to intern at CTG LatAm.

December 2022

CTGI was honored with the Responsibility Golden Bull Award · Overseas Responsibility Award.

Development Milestones



China Three Gorges Project Corporation (CTGPC) was established
Fulfill the mission of "building the Three Gorges Project and developing the Yangtze River"

1993

1994

Construction of the Three Gorges Project kicked off

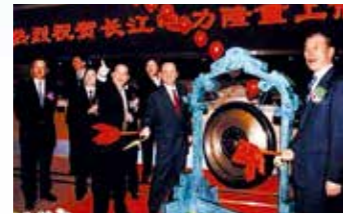


The Gezhouba Power Plant integrated into CTGPC

1996

1997

The Three Gorges Project had a smooth closure of the river



The TGP realized water impoundment, navigation, power generation
China Yangtze Power Co., Ltd. went public
The TGP entered a development stage where construction and operation management were equally emphasized

2003

2005

The rolling development of the Yangtze River Basin got started
Xiluodu Hydropower Project kicked off construction



Xiangjiaba Hydropower Station project kicked off construction

2006

2008

CTG became China's largest hydropower enterprise, and implemented comprehensive clean energy development and internationalization strategy
Construction of the principal parts of the Three Gorges Project was completed
Three Gorges Power Plant came into full operation
China Water Investment Corporation was restructured



Power generation assets of the TGP went public
CTGPC was renamed China Three Gorges Corporation (CTG)

2009

2010

The Three Gorges Project stored water with a height of 175m for the first time
China Three Gorges Renewables was established



Acquired a 21.35% stake of EDP and became its single largest shareholder

2011

2012

The underground power plants of the Three Gorges Project went into production for power generation



Xiluodu Hydropower Station and Xiangjiaba Hydropower Station were fully commissioned
Shanghai Investigation, Design & Research Institute Co., Ltd. was integrated into CTG
CTG became the world's largest hydropower development enterprise and China's largest clean energy enterprise

2014

2015

Wudongde Hydropower Station kicked off construction
Hubei Energy Group was integrated into CTG



The Three Gorges ship locks went into trial operation

2016

2017

Baihetan Hydropower Station kicked off construction
CTG changed from an enterprise owned by the whole people to a wholly SOE

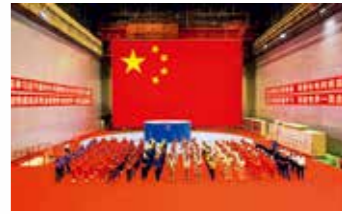


Chinese President Xi Jinping inspected the Three Gorges Project and gave the Three Gorges Project a high evaluation of "one symbol, three examples"
Yangtze Ecology and Environment Co., Ltd. was established to assume a new mission of the "conservation of the Yangtze River"

2018

2019

The Three Gorges ship locks passed the completion evaluation-acceptance
China Yangtze Power Co., Ltd. successfully won the bid for Luz del Sur S.A.A



The Three Gorges Project won the Special Prize in the National Science and Technology Progress Awards
The Three Gorges Project passed completion evaluation-acceptance
The first generating units of Wudongde Hydropower Station were commissioned

2020

2021

The first generating units of Baihetan Hydropower Station were commissioned
CTGR went public.
The headquarters of CTG was relocated to Wuhan



All 16 units of 1 GW at the Baihetan Hydropower Station have been fully commissioned
The construction of the world's largest clean energy corridor has been completed

2022



Major Subsidiaries

China Yangtze Power Co., Ltd.

Stock Code
600900

China Yangtze Power Co., Ltd. (CYPC), founded on September 29, 2002, is a limited liability company established by CTG as the main sponsor. It has been listed on the Shanghai Stock Exchange since November 2003. In September 2020, the Global Depository Receipts issued by CYPC under the Shanghai-London Stock Connect program were listed and traded on the London Stock Exchange.

CYPC is primarily engaged in hydroelectric power generation, investment and financing, pumped storage, integrated smart energy solutions, renewable energy, and distribution and sales of electricity. Its operations span across various countries, including China, Peru, Brazil, and Pakistan. It is the largest publicly listed power company in China and the largest hydroelectric power company in the world. The company operates and manages a cascade of six hydroelectric stations, including Wudongde, Baihetan, Xiluodu, Xiangjiaba, Three Gorges, and Gezhouba. This cascade forms the world's largest clean energy corridor, effectively ensuring flood control, navigation, water supplement, and ecological security in the Yangtze River Basin, providing strong impetus for green development in China's economy and society.

In 2022, CYPC's six cascade hydroelectric stations along the Yangtze River achieved a cumulative annual power generation of 262.249 TWh. The company achieved a total operating revenue of 52.06 billion yuan, a total profit of 26.313 billion yuan, and a net profit of 21.649 billion yuan, with a weighted average return on equity of 11.73%. The company's market capitalization reached a peak of 574.7 billion yuan during the year and was recognized as the "Best A-share Governance Practice Listed Company" by the China Securities Regulatory Commission in 2022.

China Three Gorges International Corporation

China Three Gorges International Corporation (CTGI) was established in 2011 as a subsidiary of CTG. It carries the significant mission of implementing the "going global" strategy and building a world-class clean energy group. Through greenfield investment and equity acquisitions, it actively participates in overseas clean energy cooperation, and achieves fruitful results in serving and implementing the "Belt and Road" Initiative.

With nearly 120 overseas subsidiaries and branches, CTGI has a presence in markets across Europe, the Americas, Asia, and Africa. Its subsidiary, China Three Gorges (Europe) S.A. (CTG Europe), focuses on clean energy investment and development in Europe and North America. China Three Gorges (Brasil) Energia S.A. (CTG Brasil) is the third-largest power generation enterprise in Brazil. China Three Gorges South Asia Investment Ltd. (CSAIL) has become a pioneer in clean energy investment in Pakistan. China Three Gorges LatAm Holding S.A.R.L (CTG LatAm) specializes in clean energy investment and development in Latin America. Asia-Africa Green Energy Investment Limited concentrates on clean energy investment and development in Asia and Africa.

Throughout its business expansion, CTGI adheres to the development principles of green, excellence, co-construction, and sharing. It engages in extensive and profound cooperation with renowned domestic and international institutions like the International Finance Corporation (IFC) under the World Bank, the Silk Road Fund, China-Latin America Fund, Goldwind Science & Technology Co.,Ltd., and industry peers. It is committed to global green electricity investment and development. Additionally, it actively upholds the CTG's concept of benefitting all integrating harmonious co-progress and coexistence into its corporate development. With the goal of integrating into local community, it steadily promotes activities such as water supply, road construction, environmental protection, hospital and school construction, disaster relief assistance, and the establishment of educational scholarships in host countries and regions. These actions embody the concept of a shared human destiny, earning trust and support from governments and the local people, and shaping a responsible global corporate citizen image.

As of the end of 2022, CTG's total assets exceeded hundreds of billions of yuan, and its total installed capacity for power generation exceeded 18 GW.



China Three Gorges Construction Engineering Corporation

China Three Gorges Construction Engineering Corporation (CTGCE), a subsidiary of CTG, originated from the core hydropower development and construction business of CTG and can be traced back to the Project Construction Department and the Electro-Mechanical Engineering Department of CTGPC in 1993. In July 2015, CTG established China Three Gorges Construction Management Corporation as the main entity responsible for large-scale hydropower project development and construction, undertaking domestic and international hydropower development and construction projects. In September 2017, CTG and its subsidiary companies jointly invested to establish Three Gorges Electro-Mechanical Engineering Technology Corporation, which is responsible for the electromechanical engineering construction and management of clean energy project development. In November 2020, CTG integrated China Three Gorges Construction Management Corporation and Three Gorges Electro-Mechanical Engineering Technology Corporation, formally establishing CTGCE.

CTGCE actively advances key project construction, and accelerates the strategic layout of core business. Over the past 20 years, it has accumulated rich experience in project investment, construction, and management through the construction and management of large-scale global hydropower projects such as Three Gorges, Xiluodu, Xiangjiaba, Wudongde, Baihetan, and Pakistan's Karot Hydropower Station, as well as participation in projects like Inner Mongolia Hohhot and Zhejiang Changlongshan Pumped Storage Power Station, wind power, solar power plants, and public infrastructure. It has developed capabilities in project investment and development integration, large-scale hydropower project construction and management, hydropower technology and technological innovation, and hydropower standard leadership, and has assembled a team of professionals with a reasonable age structure, comprehensive professional configuration, and rich construction management experience. It has obtained certifications for quality, environmental, and occupational health and safety management systems. Its subsidiary, China Huashui Hydroelectric Development Co., Ltd., holds a first-class qualification for general contracting of water conservancy and hydropower engineering.

China Three Gorges Renewables (Group) Co., Ltd.

Stock Code

600905

China Three Gorges Renewables (Group) Co., Ltd. (CTGR), a subsidiary of CTG, is the strategic implementation entity for CTG's renewable energy business.

CTGR actively develops onshore wind power and photovoltaic power, vigorously promotes offshore wind power, accelerates the construction of large-scale wind power and photovoltaic power bases in Gobi and other desert regions. It earnestly promotes the integration of "source-grid-load-storage" and the development of hybrid energy projects. It also actively engages in pumped storage, new energy storage, hydrogen energy, and solar thermal businesses. Simultaneously, it invests in industries related to the renewable energy business that have high relevance, complementary advantages, and strategic synergies. This has essentially formed a business framework where wind power, solar energy, energy storage, and strategic investments support each other and develop together.

In June 2021, CTGR was officially listed on the main board of the Shanghai Stock Exchange, marking the largest IPO in the history of the domestic power industry. It also became the renewable energy company with the highest A-share market value in the same period.

In 2022, CTGR's business has covered 30 provinces, autonomous regions, and municipalities across the country. The installed capacity that is connected to grid has exceeded 26 GW, and the generated power has reached 48.35TWh. The total assets exceed 260 billion yuan. Operating income, profits, and other indicators have reached new highs, achieving double-digit growth. The installed capacity and profitability are among the forefront of the domestic industry.

Hubei Energy Group Co., Ltd.

Stock Code

000883

Hubei Energy Group Co., Ltd. (HEG) was established in 2005 by the merger of the former Hubei Qingjiang Water & Electricity Investment Company and Hubei Electric Power Development Company. In 2007, HEG successively engaged CYP and China Guodian Corporation as strategic investors; in 2008, HEG was restructured into a company limited; in 2010, it was publicly listed as a whole; in 2015, it engaged CTG as the controlling shareholder through non-public offering, transforming into a subsidiary of CTG.

HEG's main business includes energy investment, development, and management. As a listed company with the most comprehensive energy business in China, HEG is committed to enhancing the energy security guarantee capacity of Hubei Province and promoting the construction of a regional integrated energy development platform of CTG, with business sectors including hydropower, thermal power, nuclear power, renewable energy, natural gas, coal trading and financial investment. At present, two major energy bases of hydropower in western Hubei and thermal power in eastern Hubei have been built; new energy projects are present all over Hubei Province, with the market share ranked first in the province. The coal storage and distribution and natural gas supply guarantee network in Hubei Province has been gradually built.

As of the end of 2022, HEG's total assets were 78.93 billion yuan, with net assets of 36.92 billion yuan and an asset-liability ratio of 53.22%. The company has commissioned a consolidated installed capacity of 12.4076 GW, making it the largest power energy enterprise in Hubei Province.

Yangtze Ecology and Environment Co., Ltd.

Yangtze Ecology Environment Co., Ltd. (YEEC) is a wholly-owned subsidiary of CTG and serves as the main entity responsible for eco-environmental protection business. It was formally established in Wuhan on December 28, 2018, with a registered capital of 30 billion yuan.

YEEC faithfully practices the mission of conserving the Yangtze River and contributing to green development and the vision of keeping the clear waters of the Yangtze River and building a first-class enterprise. The company takes urban sewage treatment as the lynchpin, carries out water pollution prevention and control, gradually engages in water ecological restoration, and water resource protection, aiming to comprehensively improve the water environment and water ecological quality of the Yangtze River Economic Belt. Mainly relying on the construction of the Yangtze River Economic Belt, YEEC is responsible for planning, design, investment, construction, operation, technology research and development, products and services related to ecology, environmental protection, energy conservation, and clean energy, and it operates state-owned assets in accordance with the law.

Oriented to the integrity of the ecosystem and the systematic conservation approach for the Yangtze River Basin, YEEC adheres to the principle of plant-network-river-lake-shore integrated wastewater treatment system. It cooperates with local governments along the Yangtze River to invest in and operate a series of comprehensive water environment treatment projects. The contracted investment amount for these projects has exceeded 150 billion yuan. The business area has expanded from the pilot cities of Jiujiang in Jiangxi, Wuhu in Anhui, Yueyang in Hunan, and Yichang in Hubei to 85 cities and counties in 11 provinces and municipalities across the Yangtze River Economic Belt. Significant progress has been made in water treatment in these areas, with all 32 key polluted water bodies having been remedied. This achievement has gained widespread recognition and praise from the Office of the Leading Group for Promoting the Development of the Yangtze River Economic Belt, local governments, and various sectors of society.

In 2022, YEEC completed fixed asset investments of 21.19 billion yuan and achieved new investments of 27.1 billion yuan.

China Three Gorges Capital Holdings Co., Ltd.

China Three Gorges Capital Holdings Co., Ltd. (CTGC) was established in March 2015 with a registered capital of 7.143 billion yuan. It serves as the business incubation, financial investment, and capital operation service platform of CTG. Leveraging the brand, industrial background, and financial advantages of CTG, CTGC continuously strengthens its ability to serve the main business, achieving rapid, stable, and healthy development.

CTGC has always focused on serving the clean energy business, which is the main business of CTG, and the well-coordinated environmental conservation of the Yangtze River. It engages in investment deployment along the upstream and downstream of the main business industry chain, as well as strategic emerging industries. Key investment targets include wind power, solar power plants, distributed energy assets, electric vehicle charging stations, data centers, hydrogen energy, energy storage, energy efficiency, environmental protection, and new technologies, materials, and business models in the renewable energy industry chain. The company continuously adjusts and optimizes its investment portfolio, gradually forming three major business sectors: strategic direct investment, fund investment, and financial leasing. It explores models that combine industry and finance, aiming to create long-term wealth appreciation and become the most innovative investment company in the clean energy field.

China Three Gorges Finance Co., Ltd.

China Three Gorges Finance Co., Ltd. (referred to as TGF) was established in November 1997 with a registered capital of 5 billion yuan. It is a non-banking financial institution that specifically serves the member entities of CTG, approved by the People's Bank of China.

As a fund collection, settlement, monitoring platform, and financial service platform for CTG, TGF adheres to the CTG first and service-oriented philosophy featuring stable and innovative operation. Its mission is to ensure fund security, create financial value, and serve the development of the core business. It actively contributes to optimizing resource allocation, reducing financial costs, safeguarding fund security, and enhancing operational efficiency within CTG. TGF has gradually developed distinctive financial services such as fund settlement, deposit and loan services, bill acceptance, non-financing guarantees, securities investment, and financial consulting. It is currently fully engaged in the construction of new-generation treasury systems for the corporation, aiming to become a first-class treasury-type financial company with prominent industrial characteristics. This will contribute to accelerating the development of a world-class financial management system that aligns with CTG's path toward becoming a world-class enterprise.

Shanghai Investigation, Design and Research Institute Co., Ltd.

Shanghai Investigation, Design and Research Institute Co., Ltd. (SIDRI) was founded in 1954, starting with the planning and design of China's first large-scale hydropower station, the Xin'anjiang Hydropower Station. It has grown to become a large Grade A comprehensive design institute capable of providing full-process engineering consulting services. Its business scope covers various stages of engineering construction projects, including investment consulting, survey, design, cost consulting, supervision, operation, and maintenance consulting.

In 2014, after restructuring and reorganization, SIDRI became a subsidiary of CTG. It holds comprehensive Grade A qualifications in engineering investigation and engineering consulting, as well as Grade A qualifications in multiple industries such as water conservancy, power, construction, and environmental engineering. The institute comprises eight comprehensive business branches: Water Conservancy and Hydropower, Renewable Energy, Ecological Environmental Protection, Survey and Testing, Comprehensive Planning, Power Planning, Smart Engineering, and Architectural Municipal Engineering. It has established four professional technical support centers: Engineering Cost, Investment Review, Quality and Safety Supervision, and Engineering Construction Technology Consulting. The institute also has 16 branch offices in Beijing, Hubei, Tibet (Sichuan), Inner Mongolia, and other regions.

As the technical support platform, R&D and development platform, and talent development platform of CTG, SIDRI possesses over ten research platforms including a national enterprise technology center, academician expert workstations, and the Taihu Lake Basin Water Science Research Institute. It was granted the second prize of the National Science and Technology Progress Award consecutively in 2018 and 2019.

In 2022, SIDRI, as a pilot entity for mixed-ownership reform designated by the National Development and Reform Commission, completed the tasks related to engaging strategic investors as scheduled.

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