



北京 2022 年冬奥会官方合作伙伴  
Official Partner of the Olympic Winter Games Beijing 2022

# 2021 Annual Report

China Three Gorges Corporation



## Basic Information

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CTG  
Weibo Official Account



CTG  
WeChat Official Account



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## Message from Top Management

2021 is a milestone year in the history of the reform and development of China Three Gorges Corporation (CTG). Right before the 100th anniversary of the founding of the Communist Party of China (CPC), President Xi Jinping sent a letter to congratulate the commissioning of the first batch of generating units at Baihetan Hydropower Station on the Jinsha River (the upper reaches of the Yangtze River), drawing a blueprint and chartering the course for CTG's future development, which fully reflects President Xi's great care and expectations for us. His letter has heartened and inspired each employee of CTG.



Lei Mingshan, Board Chairman

雷鸣山



Han Jun, Board Director, President

韩君

In the past year, in the face of various risks and challenges, CTG thoroughly studied and implemented the guiding principles of President Xi Jinping's important speeches and instructions, took solid steps to carry out Party history learning and education, vigorously promoted the Three Gorges Project Spirit, and fulfilled its responsibilities and made remarkable achievement with its loyalty to the motherland, concrete actions, and hardworking spirit. Its total installed capacity and clean energy installed capacity have both exceeded 100 GW, with total assets exceeding 1 trillion yuan. All of its main operating indicators have reached a record high, achieving a good start of its development during the 14th Five-Year Plan period (2021-2025).

In the past year, CTG focused on the carbon peaking and neutrality goals, and implemented the two-tracked development approach, with its main businesses realizing new progress. CTG has successfully built dams in remote mountains and deep valleys as well as along the Jinsha River. It achieved the goals of putting into operation the first batch of generating units of Baihetan Hydropower Station, all units of Wudongde Hydropower Station and the first generating unit of Changlongshan Pumped Storage Power Station in Zhejiang Province before July 1, 2021. These projects have formed

the world's largest clean energy corridor. CTG has been exploring wind and solar power across oceans and deserts. It has started building a number of renewable energy bases, such as the world's largest single PV plus sand control hybrid project and the world's largest floating solar power project, and completed a number of landmark projects, such as the first million-kilowatt offshore wind farm in China. Thanks to these efforts, it has become a stellar provider of wind and solar power. CTG has continuously increased its investment in water governance and purification along the Yangtze River, and other rivers and lakes, explored "Smart Urban Water Manager" and "Smart Integrated Urban Energy Manager" models, completed a number of urban sewage treatment projects to be commissioned and operated, and constantly improved the quality of urban water environment. CTG has also expanded its footprints in the international market along with the completion of a number of major clean energy projects in different parts of the world. The Nam Kong 1 Hydropower Station in Laos has been put into operation; the reservoir gate of the Karot Hydropower Project in Pakistan was closed and began to store water; and many cross-border renewable energy project mergers and acquisitions have been completed. Our international business has shown a huge momentum, evidenced by hydro-wind-solar

multi-energy complementary projects and coordinated advancement in power generation, distribution and sale, which have strongly promoted the building of the Green "Belt and Road".

In the past year, CTG gained greater impetus through deepening reform and innovation with an aim of building a world-class enterprise. CTG has made great efforts to optimize its layout, relocated its headquarter to Wuhan and set up a number of regional branches to better serve and support major national strategies including the coordinated development of the Beijing-Tianjin-Hebei region, the development of the Yangtze River Economic Belt and the rise of central China. It has taken the initiative to deepen the reform, adhered to the principle of "Two Consistencies", steadfastly promoted the three-year action plan for state-owned enterprise (SOE) reform, constantly improved the market-oriented operational mechanism, steadily carried out the mixed-ownership reform of its subsidiaries, successfully completed the A-share listing of China Three Gorges Renewables (Group) Co., Ltd., and introduced strategic partners for China Three Gorges International Corporation. CTG has made all-out efforts in pushing system and institutional reforms to a deeper level, achieving breakthroughs in many areas. With the courage to scale high peaks, CTG has striven to promote

scientific and technological innovation. A number of major innovations have rolled out, such as the world's largest million-kilowatt hydro-generating unit, the world's first typhoon-resistant floating offshore wind turbine, Asia's first VSC-HVDC offshore wind power project, the world's largest all-electric cruise ship "Yangtze River Three Gorges 1", and China's first urban sewage recycling concept plant. The Three Gorges Project was titled as one of the "Top 10 Global Engineering Achievements in 2021", which highlights CTG's responsibility to achieve high-level self-reliance and self-dependence in science and technology.

In the past year, CTG kept in mind its original mission, fulfilled its responsibilities as a central SOE, and made new achievements in the benefit of the people. Faced with the grim situation of energy supply in the cold seasons of 2021, CTG increased its output and pushed to its full capacity. The daily power generation of CTG and the monthly power generation of cascade power stations in the Yangtze River basin have continuously set new records, sheltering people from the chill of winter. To accomplish the mission of consolidating and expanding the achievements of poverty alleviation and effectively dovetailing it with rural revitalization, CTG continues poverty alleviation policies and supervision until the status is secure, innovates ways of assistance, actively promotes renewable

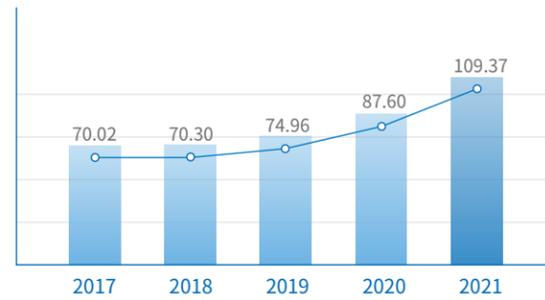
energy projects in rural areas, successfully organizes public welfare activities on the theme of "CTG-sponsored Kids' Trip". Such measures support local high-quality development and help local people improve their living standards. CTG provided generous donations swiftly and facilitated flood relief and post-disaster reconstruction when severe floods hit Henan and Shanxi. It has once again won the "China Charity Award" and ranked first in the public welfare development index among SOEs, with CTG-sponsored charity events well received and highly praised.

In 2022, CTG will thoroughly implement guiding principles of President Xi's important speeches and instructions, and resolutely respond to the president's call that "socialism is achieved by hard work and the new era is the result of constant efforts". We will take on the new mission of serving national strategies with hard work, write a new chapter of the "two-tracked approach", create new achievements, perform our "Six Roles", speed up our pace to build a world-class enterprise.

# Annual Key Performance Indicators

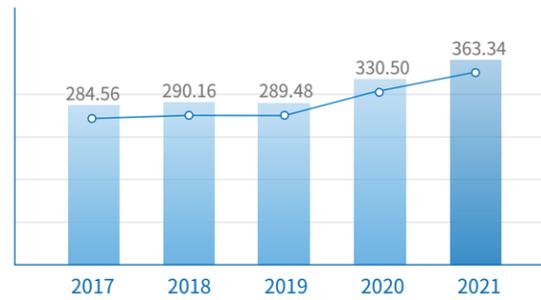
Installed Capacity

Unit: GW



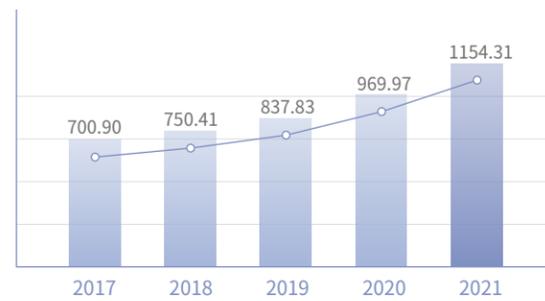
Power Generation

Unit: TWh



Total Assets

Unit: RMB billion



Net Profit After Tax

Unit: RMB billion



EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization)

Unit: RMB billion



Total Taxes

Unit: RMB billion



## Overview



China Three Gorges Project Corporation was founded on September 27, 1993. In 2017, it was renamed China Three Gorges Corporation (CTG). After 28 years of rapid growth, CTG has become the largest hydropower development enterprise worldwide and the biggest clean energy group in China. CTG is among the first batch of 10 pilot central SOEs, selected by the State-Owned Assets Supervision and Administration Commission of the State Council (SASAC) for building world-class model enterprises.

President Xi Jinping attaches great importance to the reform and development of CTG. Since the 18th National Congress of the Communist Party of China, he has made important speeches and instructions nine times, drawing a blueprint for our development and leading the way forward. Particularly, on June 28, 2021, the eve of the centenary of the founding of the Communist Party, President Xi Jinping sent a congratulatory letter on the commissioning of the first batch of generating units at Baihetan Hydropower Station. He hoped that all builders and relevant parties would “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.” The congratulatory letter shows us the way forward and provides the fundamentals to follow, which has inspired us greatly.

Strategic positioning of CTG: Actively serve major national strategies such as the development of the Yangtze River Economic Belt and the Belt and Road Initiative; be a pivotal and leading player in the integration into the Yangtze River Economic Belt in an in-depth manner and the well-coordinated environmental conservation in the Yangtze River basin; 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 of global competitiveness.

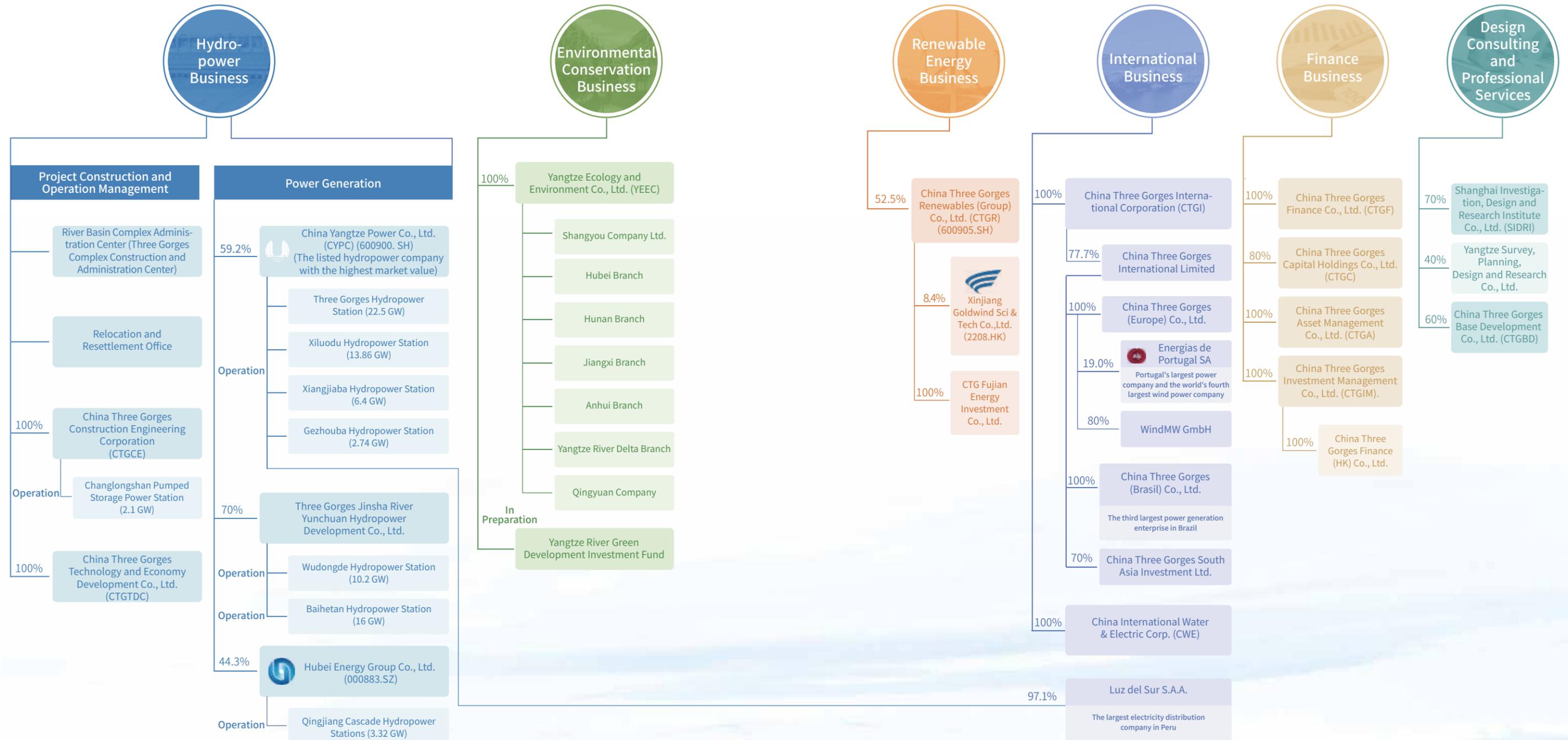
Thoroughly studied and implemented the important speeches and instructions of President Xi Jinping, CTG fully implements the requirements of strategic positioning, gives full play to the “Six Roles”. It strives to implement the two-tracked approach for advancing clean energy development and the ecological conservation of the Yangtze River, and unswervingly become stronger, better and bigger, forming eight business segments (project construction and consultation, power generation and operation, river basin cascade dispatching and comprehensive management, international energy investment and contracting, ecological & environmental protection investment and operation, renewable energy development and operation management, capital operation and financial services, and asset management and base services). Its business covers 31 provinces, autonomous regions and municipalities in China, as well as over 40 countries and regions around the world. The competitiveness, innovation, internal control capability, influences, and anti-risk capabilities of the Company have been continuously enhanced. It has been rated as an A-level enterprise for 14 consecutive years in the performance appraisal of central SOEs.

In 2021, under the strong leadership of the CPC Central Committee with President Xi Jinping as the core, CTG resolutely implemented the decisions and arrangements of the CPC Central Committee, consciously executed the great call of “socialism is achieved by hard work and the

new era is the result of constant efforts”. Focusing on the “14th Five-Year Plan” goals and tasks, CTG took the initiative to take actions, actively explored and innovated to effectively cope with the difficulties and challenges such as the temporary decreased water flow of the Yangtze River, the severe energy supply situation, and the sporadic outbreak of COVID-19. It fully completed the annual production and operation tasks, and achieved major results in reform and development. The high-quality development reached a new level and realized a good start in the “14th Five-Year Plan”. The total installed capacity and clean energy installed capacity exceeded the iconic 100 GW successively; the power generation reached 363.3 TWh, and the power generation of renewable energy jumped to the first place in the world; the total profit exceeded 60 billion yuan, the net profit exceeded 50 billion yuan, and the asset scale exceeded 1 trillion yuan. We were granted national sovereign credit rating again. The indicators such as profit per employee and labor productivity of all employees ranked first among central SOEs.

CTG has wholly-owned and holding subsidiaries such as China Three Gorges Construction Engineering Corporation (CTGCE), China Yangtze Power Co., Ltd. (CYPC) (listed company), China Three Gorges International Corporation (CTGI), Yangtze Ecology and Environment Co., Ltd. (YEEC), China Three Gorges Renewables (Group) Co., Ltd. (CTGR) (listed company), Hubei Energy Group Co., Ltd. (HEG) (listed company), China International Water & Electric Corp. (CWE), and China Three Gorges Capital Holdings Co., Ltd. (CTGC).

# Main Business Segments



# Board of Directors



**Lei Mingshan**  
Board Chairman



**Han Jun**  
Director



**Li Fumin**  
Director



**Wang Yilin**  
Outside Director



**Xia Dawei**  
Outside Director



**Qu Dazhuang**  
Outside Director



**Mi Shuhua**  
Outside Director



**He Guangbei**  
Outside Director



**Cai Yongzhong**  
Employee Director

# Group Leaders



**Lei Mingshan**  
Board Chairman



**Han Jun**  
Board Director, President



**Li Fumin**  
Director



**Wang Liangyou**  
Executive Vice President



**Fan Xiaxia**  
Executive Vice President



**Zhang Dingming**  
Executive Vice President



**Chen Ruiwu**  
Head of Discipline Inspection and Supervision Group



**Zeng Yi**  
Chief Financial Officer



**Lv Tingyan**  
Executive Vice President

# Development Strategy

## Strategic Positioning

The Company should actively serve the development of the Yangtze River Economic Belt and major national strategies such as the “the Belt and Road” initiative; It should be a pivotal and leading player in integrating the Yangtze River Economic Belt and in well-coordinated environmental conservation of the Yangtze River; a safeguard in advancing regional sustainable development; and a leader in promoting the upgrade and innovative development of clean energy industry. It should promote the reform of the enterprise, and accelerate the establishment of an innovative world-class multinational clean energy enterprise of global competitiveness.

## Developmental Approach

The Company should always remember the important instructions of President Xi Jinping to CTG, remain true to the original aspiration and set sail again, keep the mission firmly in mind and take responsibility. With the promotion of high-quality development as the theme, the Company should implement the new national energy security strategy, as well as the strategic plan for building a beautiful China, achieve the vision of carbon peaking and carbon neutrality, strive to implement the two-tracked approach for advancing clean energy development and the ecological conservation of the Yangtze River.

## 4 Major Corridors

The largest clean energy corridor along the Yangtze River

The largest offshore wind power corridor along the coast



The largest green ecological corridor along the Yangtze River

An international clean energy corridor along the Belt and Road

## 6 Roles

A safeguard in advancing the development of the Yangtze River Economic Belt

A pivotal and leading player in well-coordinated environmental conservation of the Yangtze River

A leader in driving China's hydropower industry to “go global”

### Six Roles

A key driver in promoting the upgrade of clean energy industry

A pioneer in deepening SOE reforms

A model in fulfilling social responsibilities

# Core Corporate Culture

## Our Mission

### Harmonizing development with conservation for greater public wellbeing

CTG makes good use of the forces of Mother Nature to generate clean energy for wellbeing of the public. We then reciprocate by well-coordinated environmental 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.

## Our Vision

### 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 strives to implement our two-tracked approach for advancing clean energy development and the ecological conservation of the Yangtze River, and unswervingly become stronger, better and bigger. 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.

## Our Values

### 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.

## Our Motto

### 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.





# Business Development

Xiluodu Hydropower Station



Installed capacity (GW) **13.86**  
 Power generation in 2021 (TWh) **55.35**  
 Year of operation **2013**  
 Normal water level (m) **600**

Baihetan Hydropower Station



Installed capacity (GW) **16**  
 Power generation in 2021 (TWh) **15.59**  
 Year of operation **2021**  
 Normal water level (m) **825**

Wudongde Hydropower Station



Installed capacity (GW) **10.2**  
 Power generation in 2021 (TWh) **38.97**  
 Year of operation **2020**  
 Normal water level (m) **975**

Xiangjiaba Hydropower Station



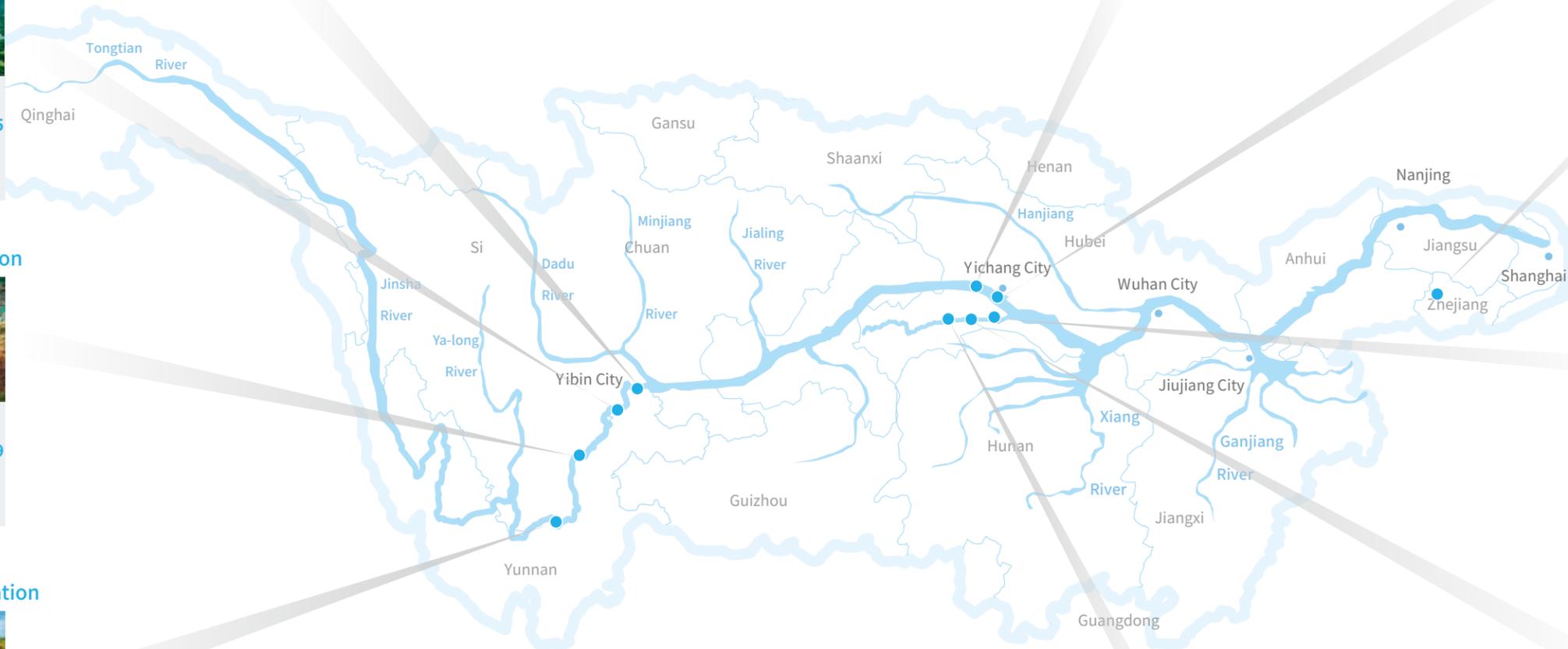
Installed capacity (GW) **6.4**  
 Power generation in 2021 (TWh) **30.06**  
 Year of operation **2012**  
 Normal water level (m) **380**

# Mega hydropower development and operation

Three Gorges Water Conservancy Complex



Installed capacity (GW) **22.5**  
 Power generation in 2021 (TWh) **103.65**  
 Year of operation **2003**  
 Normal water level (m) **175**



Shuibuya Hydropower Station



Installed capacity (GW) **1.84**  
 Power generation in 2021 (TWh) **4.51**  
 Year of operation **2007**  
 Normal water level (m) **400**

Gezhouba Hydropower Station



Installed capacity (GW) **2.74**  
 Power generation in 2021 (TWh) **19.26**  
 Year of operation **1981**  
 normal water level (m) **66.5**

Changlongshan Pumped Storage Power Station



Installed capacity (GW) **2.1**  
 Power generation in 2021 (TWh) **0.6**  
 Year of operation **2021**  
 Maximum power generation water head (m) **756**

Gaobazhou Hydropower Station



Installed capacity (GW) **0.27**  
 Power generation in 2021 (TWh) **1.15**  
 Year of operation **1999**  
 Normal water level (m) **80**

Geheyan Hydropower Station



Installed capacity (GW) **1.21**  
 Power generation in 2021 (TWh) **3.48**  
 Year of operation **1993**  
 Normal water level (m) **200**

As a crucial pillar of the nation, the mega hydropower projects of CTG have supported sustainable energy supply for China's economic and social development. CTG has a total of nine hydropower stations in the main stream of the Yangtze River and the tributaries of the Qingjiang River, with a total installed capacity of 75 GW. CTG has included six reservoirs in the joint dispatch of the middle and upper reaches of the Yangtze River, with a total flood control capacity of 37.64 billion cubic meters, providing significant security, energy and ecological support for the development of the Yangtze River Economic Belt.

CTG operates and manages six cascade hydropower stations on the main stream of the Yangtze River, including the Three Gorges Hydropower Station, Gezhouba Hydropower Station, Xiluodu Hydropower Station, Xiangjiaba Hydropower Station, Wudongde Hydropower Station and Baihetan Hydropower Station. In 2021, the cumulative power generation of the six cascade hydropower stations reached 262.88 TWh, marking that the world's largest clean energy corridor represented by the Three Gorges Hydropower Station has set a historical record for power generation. The comprehensive benefits of the national pillar have been further exerted, contributing CTG's efforts for achieving the country's carbon peaking and carbon neutrality goals. During the winter of 2021 when national power supply was under pressure, the maximum peak output of the six cascade hydropower stations along the main stream of the Yangtze River was 57.59 GW, equivalent to 4.8 percent of the national maximum load during the winter peak. In September 2021, the power generation of six cascade hydropower stations has reached 40.91 TWh, setting a record for a single month.

So far, the number of hydro-turbine generating units operated and managed along the main stream of the Yangtze River has successfully exceeded 100. The world's largest clean energy corridor featuring Three Gorges Hydropower Station provides strong support for the implementation of China's west-east power transmission program.

six cascade hydropower stations during the winter supply guarantee period in 2021



six cascade hydropower stations in September 2021



Total power generation of the 6 cascade hydropower stations in 2021 reached **262.88** TWh

Xiluodu Hydropower Station	Xiangjiaba Hydropower Station	Three Gorges Hydropower Station
<b>55.35</b> TWh	<b>30.06</b> TWh	<b>103.65</b> TWh
Gezhouba Hydropower Station	Wudongde Hydropower Station	Baihetan Hydropower Station
<b>19.26</b> TWh	<b>38.97</b> TWh	<b>15.59</b> 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 Chinese people. It was very uplifting to see it. 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.”

—From President Xi Jinping's speech during his inspection of TGP on April 24, 2018

On April 24, 2018, President Xi Jinping inspected the Three Gorges Project and delivered a speech. Based on the achievement of the “Two Centenary Goals”, he highly rated the Three Gorges Project with the conclusion of “one symbol, three examples”. It is an important milestone in the century-old history of the Three Gorges Project.

2021 is the first year after the overall completion acceptance of the Three Gorges Project. The Three Gorges Project has been operating well throughout the year. The comprehensive benefits of flood control, power generation, navigation, and water resources utilization have been brought into full play, playing a backbone role in the construction of the world's largest clean energy corridor.



Panorama of the Three Gorges Project

### Giving full play to the benefits of flood control and water resource utilization



Flood discharge of Three Gorges Project

During the flood season in 2021, there was one numbered flood in the Yangtze River basin, with the maximum flood peak reaching 55,000 cubic meters per second. The Three Gorges Reservoir controlled floods at staggered peaks, and the maximum peak reduction rate exceeded 40%. The Three Gorges Reservoir successfully completed the first 175-meter water storage target after the overall completion and acceptance of the Three Gorges Project on October 31st. During the water storage period, the cumulative power generation of the Three Gorges Hydropower Station reached a record high for the same period. In 2021, the Three Gorges Reservoir gave full play to its role as a freshwater resource reservoir during the drawdown period, and supplied water to the downstream for a total of 138 days, with a total water supply of about 22.1 billion cubic meters.

### Providing clean energy



Three Gorges Left Bank Power Station

In 2021, the cumulative power generation of the Three Gorges Hydropower Station reached 103.65 TWh, breaking the 100 TWh mark again, equivalent to saving 31.76 million tons of standard coal and reducing carbon dioxide emissions by 86.86 million tons, sulfur dioxide by 19,400 tons, and nitrogen oxides by 20,200 tons, making positive contributions to achieving the country's carbon peaking and carbon neutrality goals.

### Improving navigation conditions



Ships pass through the Three Gorges five-level ship lock

In 2021, the Three Gorges ship locks ran safely, stably and efficiently for 10,100 times, with 40,400 ships and 8,038 passengers passing through, and about 146 million tons of cargoes passing through the locks (an increase of 6.83 percent year-on-year in 2020). The main equipment availability rate was 100 percent. The Three Gorges ship lifts have operated safely for 4,725 carriages in total, with 100,200 passengers, 4803 ships and 3,655,100 tons of cargoes passing through. The 2021 annual planned suspensions for maintenance of the Three Gorges North Line Ship Lock and the first planned suspension for maintenance of the Three Gorges ship lifts were successfully completed, providing a solid guarantee for the continuous safe and efficient operation of navigation facilities.

### Protecting the ecological environment



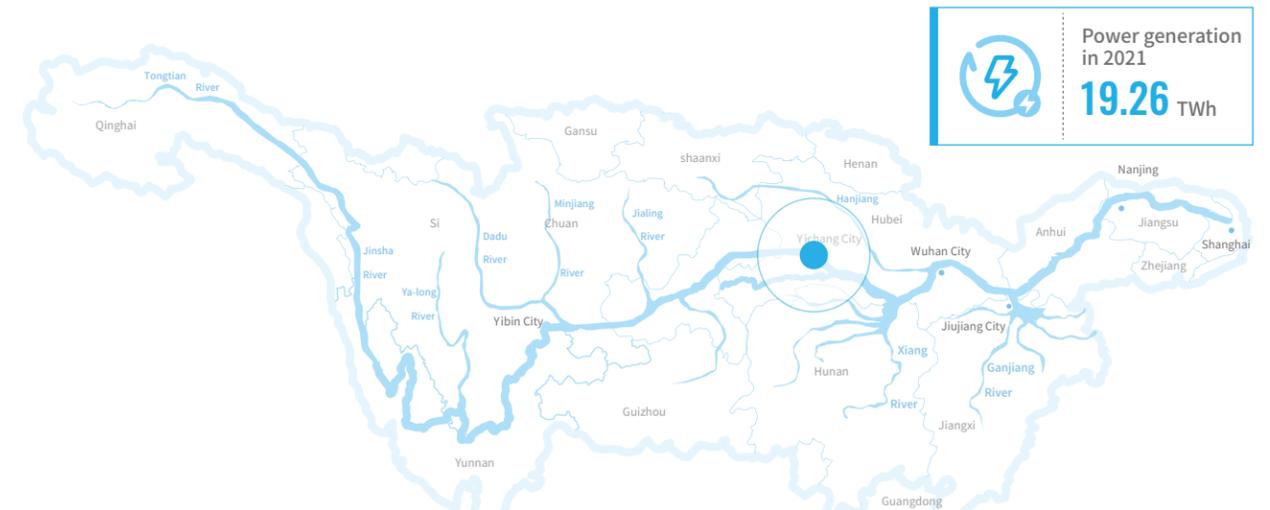
Chinese sturgeon proliferation and release activities

In 2021, the water quality of each monitoring section of the Three Gorges Reservoir was mainly graded from II to III, maintaining a relatively stable situation; a total of 136,000 cubic meters of floating objects were cleaned up in front of the dam, all of which were collected ashore and treated harmlessly; the Three Gorges Dam worked normally. All monitoring indicators were within the designed range, and the reservoir bank remained safe and stable as a whole.



Gezhouba Water Conservancy Complex is located 2.3 km from the downstream of Nanjin Pass, the outlet of Three Gorges in Yichang of Hubei Province, and is 38 km from the upstream of Three Gorges Hydropower Station. It is the navigation cascade of Three Gorges Water Conservancy Complex. It re-regulates the unsteady flow of Three Gorges Hydropower Station and uses the level difference of river sections for power generation. It is not only the first large-scale water conservancy project built on the main stream of the Yangtze River, but also the world's largest low-head, high-flow, run-off hydropower station.

Gezhouba Hydropower Station commenced construction in May 1971 and was completed in December 1988. In 2021, the annual power generation of Gezhouba Hydropower Station exceeded 19.26 TWh, setting a new historical record for the annual power generation.



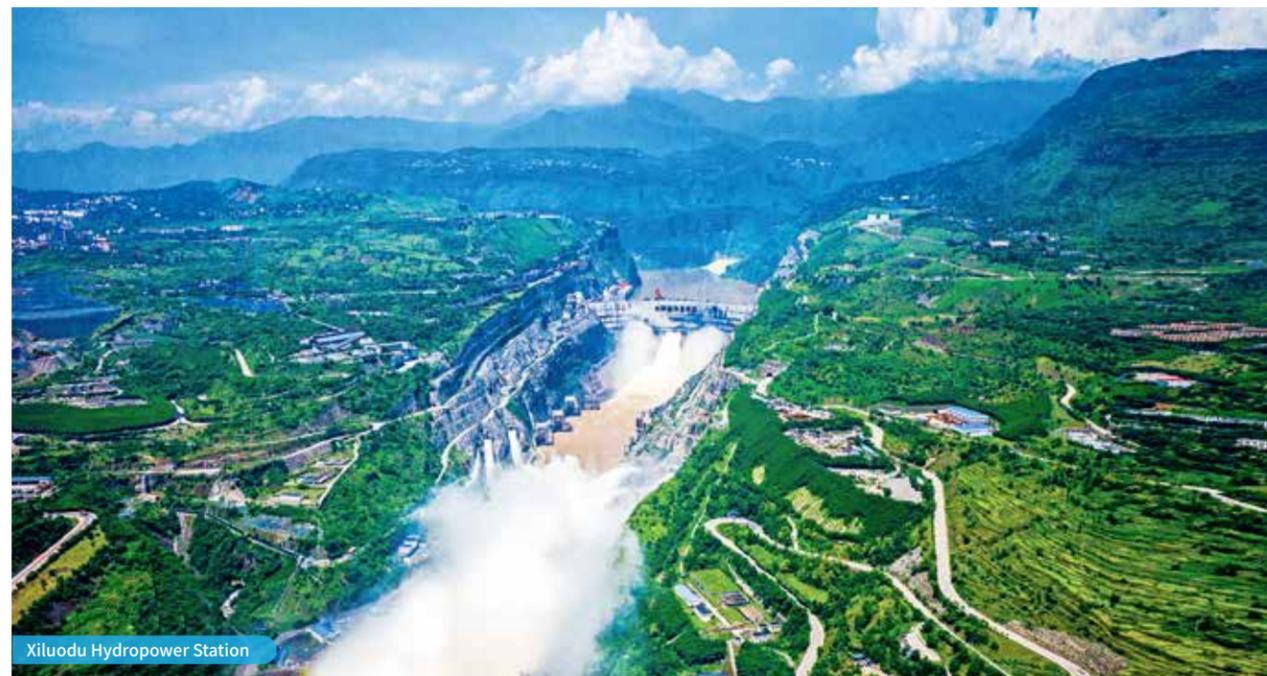
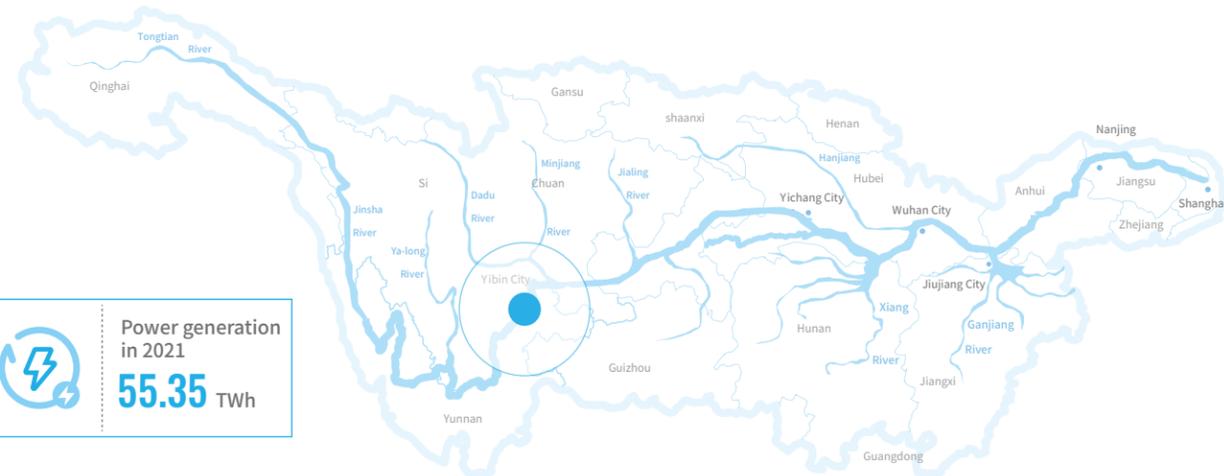
Gezhouba Hydropower Station

## Xiluodu Hydropower Station

Xiluodu Hydropower Station is one of the backbone power projects for China's west-to-east power transmission program. It is also the fourth largest hydropower station in the world. The Station mainly focuses on power generation, and also provides other comprehensive benefits such as flood control, sediment retaining and improvement of downstream navigation conditions.

Xiluodu Hydropower Station has installed eighteen hydro-turbine generating units, with a single capacity of 770 MW. The total installed capacity is 13.86 GW, generating an annual average of 57.12 TWh electricity in the long run. At the normal impoundment level, it can support a reservoir capacity of 11.57 billion cubic meters, including 4.65 billion cubic meters for flood control purposes.

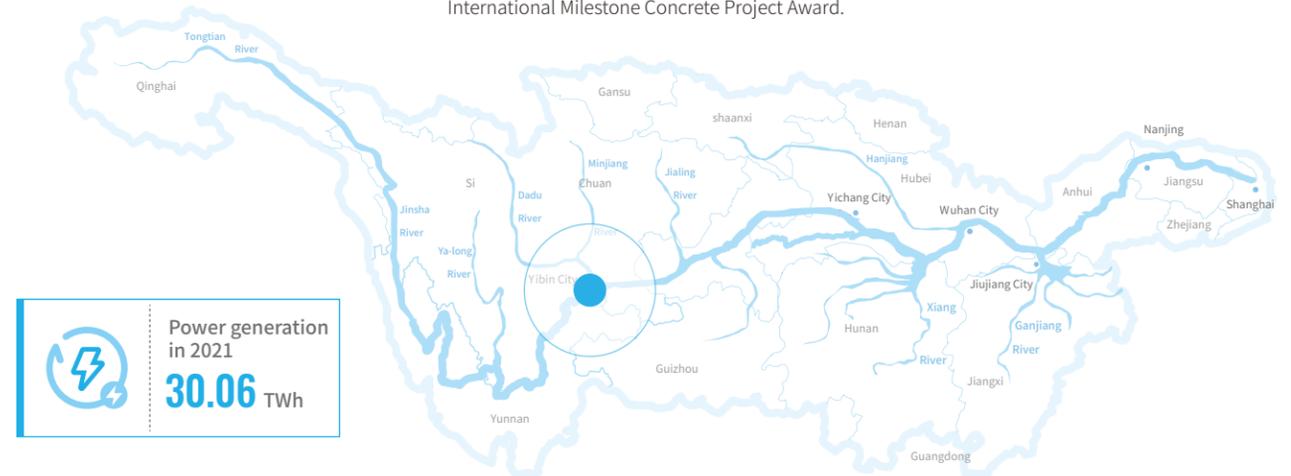
Xiluodu Hydropower Station started construction in 2005, and the river was diverted in 2007. The first batch of generating units were put into operation in July 2013, and the last unit was connected to the grid on June 30, 2014. In September 2016, Xiluodu Hydropower Station won the "FIDIC Outstanding Project of the Year Award 2016".



## Xiangjiaba Hydropower Station

Xiangjiaba Hydropower Station is the eleventh largest hydropower station in the world, located in the lower reaches of the Jinsha River at the border of Sichuan Province and Yunnan Province. It is the last cascade of the lower reaches of the Jinsha River, and a major power source for China's west-to-east power transmission program. Xiangjiaba Hydropower Station mainly focuses on power generation, and also offers benefits of improving the navigation conditions, flood control, irrigation and sediment retaining. Moreover, it can also re-regulate Xiluodu Hydropower Station. It is the only comprehensive hydropower project on the mainstream of the Jinsha River with multiple functions such as irrigation for super-large farmland and navigation.

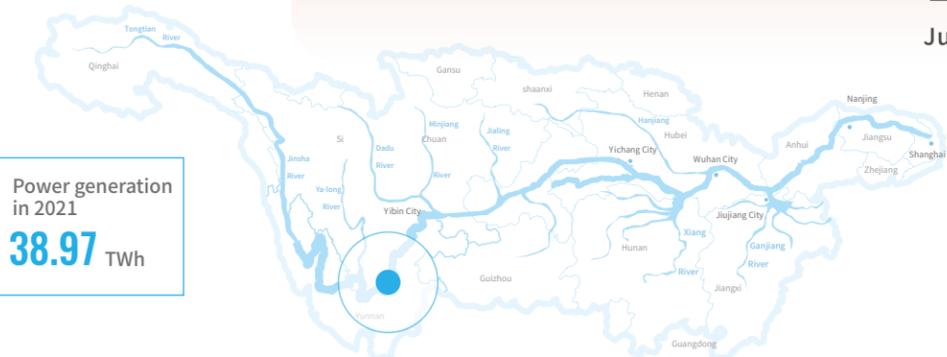
The construction of Xiangjiaba Hydropower Station began in 2006, and the river was diverted in 2008. The first batch of generating units were put into operation in November 2012, and the last unit was connected to the grid for power generation on July 7, 2014. In 2016, the project passed its safety assessment upon completion. In May 2018, Xiangjiaba ship lift was put into trial operation, and the navigation in Jinsha River entered the "era of ship lifts". Xiangjiaba ship lift featured the maximum single-stage lifting height in the world at that time. In 2021, Xiangjiaba gravity dam won the 3rd International Milestone Concrete Project Award.



## Wudongde Hydropower Station

The Wudongde Hydropower Station is a major project in China's west-east power transmission program. It is hoped that you could keep up the efforts to reach for new heights of science and technology while adhering to the new development philosophy, so as to complete the subsequent engineering construction tasks with high standards and high quality and strive to build the Wudongde Hydropower Station into an excellent project. You should adhere to green development with the ecological environment as the priority, advance the exploitation of hydropower resources of the Jinsha River basin in a science-based and orderly manner and harmonize its development with conservation for greater public well-being.

—Xi Jinping  
June 29, 2020



Power generation in 2021  
**38.97 TWh**

Wudongde Hydropower Station is the world's seventh-biggest hydropower station. It is located on the lower reaches of the Jinsha River at the border of Sichuan Province and Yunnan Province, which is a major power source for China's west-east power transmission program. Wudongde Hydropower Station is not only a key project for the western development, but also a major support and landmark project during China's "13th Five-Year Plan" period. It is of great significance to advance national energy structure adjustment, energy conservation and emission reduction, as well as the economic development of the western region and regional economic and social development. Wudongde Hydropower Station mainly focuses on power generation, and also offers comprehen-

sive utilization benefits such as flood control, navigation and local economic and social development.

Wudongde Hydropower Station has installed 12 hydro-turbine generating units with a single capacity of 850 MW. The total installed capacity reached 10.2 GW, generating an annual average of 38.91 TWh electricity in the long run.

Preparatory work of the Wudongde Hydropower Station began in 2011. The project was officially approved by the state in December 2015 after which the construction of the main structure fully commenced.

In 2020, President Xi Jinping made important instructions on the commissioning of the first

batch of generating units at Wudongde Hydropower Station. This is another landmark historical event after President Xi Jinping inspected the Three Gorges Project and delivered an important speech in April 2018.

On June 16, 2021, the final unit of the Wudongde Hydropower Station successfully completed the 72-hour trial operation, and integrated into power grids in southern China for official production. So far, Wudongde Hydropower Station had put all 12 units, each of 850 MW, into production on schedule and fully entered a new stage of operation and management.



Wudongde Hydropower Station

## Baihetan Hydropower Station

President Xi Jinping sent a congratulatory letter on the safe and punctual commissioning of the first batch of generating units at Baihetan Hydropower Station.

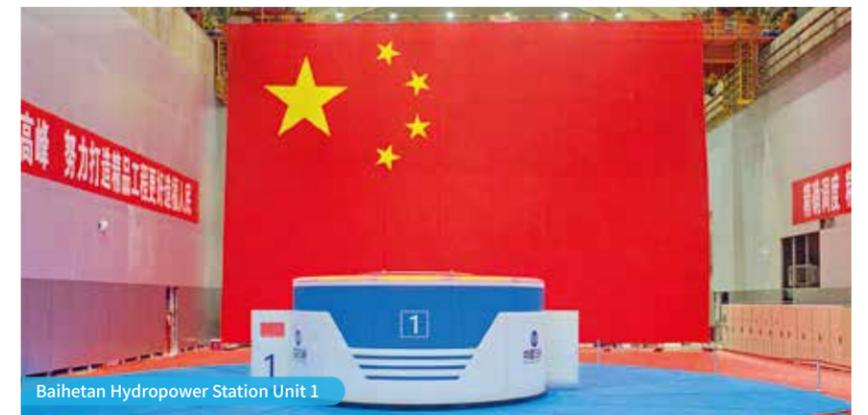
I would like to express my warm congratulations on the safe and punctual commissioning of the first batch of generating units at Baihetan Hydropower Station!

The Baihetan Hydropower Station is a major project of China's west-east power transmission program, also the largest and most technically challenging hydropower project under construction in the current world. Each generating unit of the station has a capacity of 1 million kW, the largest single-unit capacity in the world, marking a major breakthrough in China's high-end equipment manufacturing. You've surmounted difficulties with the spirit of pursuing perfection, scaling heights, dedicating yourselves, and upholding unity and collaboration, and contributed to the construction of a major project of China. This goes to show 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 parties 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



Vice Premier Han Zheng attended the ceremony for the launch of operation of the Baihetan Hydropower Station at the main venue in Beijing



Baihetan Hydropower Station Unit 1

**The construction of the Baihetan Hydropower Station has set multiple world-leading records among hydropower projects**

- ▶ With a single unit capacity of 1 GW, setting a world record
- ▶ The seismic parameters of the 300-meter high dam rank first in the world
- ▶ The whole dam of the 300-meter high dam uses low-heat cement. The concrete ranks first in the world
- ▶ The scale of cylindrical tailrace surge basin is the largest in the world
- ▶ The scale of the free flow spillway tunnel is the largest in the world
- ▶ The comprehensive technical difficulty of the project ranks among the highest in the world

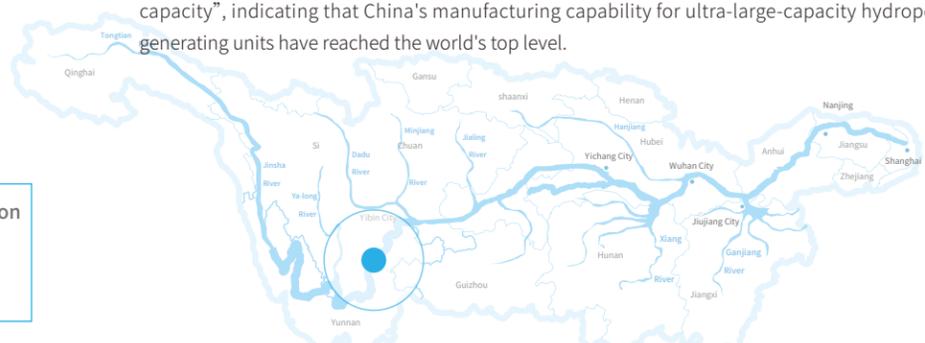
Baihetan Hydropower Station is the second largest hydropower station in the world, the second cascade of the four hydropower stations in the lower reaches of the Jinsha River. It is also the fourth mega hydropower station in China with over 10 GW capacity, after the Three Gorges Project, Xiluodu Hydropower Station and Wudongde Hydropower Station. It is also one of the key power sources for China's west-to-east power transmission program.

Baihetan Hydropower Station mainly focuses on power generation, and also offers the function of flood control. It promotes the local economic and social development and helps lift relocated migrants out of poverty; upon completion, the station also provides comprehensive utilization benefits of sediment retaining, navigation in the reservoir area, and improvement of the navigation conditions in the lower reaches.

With an installed capacity of 16 GW, it guarantees an output of 5.47 GW and generates an average 62.44 TWh of power annually. With a 825m normal impoundment level, the hydropower station supports a total storage capacity of 20.63 billion cubic meters and a regulation storage capacity of 10.4 billion cubic meters. It also allows a flood control storage capacity of 7.5 billion cubic meters.

In 2017, Baihetan Hydropower Station was officially approved and the main project was comprehensively constructed. In 2020, the first dam sections of Baihetan Hydropower Station were poured to the top, and the rotor of the world's first gigawatt-level hydropower generating unit was successfully hoisted.

On June 28, 2021, the first batch of generating units at Baihetan Hydropower Station were commissioned on time safely. 6 units were commissioned throughout the year. Baihetan Hydropower Station directly brings the world's hydropower into an "era of single-unit with a gigawatt-level capacity", indicating that China's manufacturing capability for ultra-large-capacity hydropower generating units have reached the world's top level.



Power generation in 2021  
**15.59 TWh**



Baihetan Hydropower Station

**Changlongshan Pumped Storage Power Station**

Changlongshan Pumped Storage Power Station is located in Tianhuangping Town, Anji County, Huzhou City, Zhejiang Province, which operates on a daily regulation cycle, with a total investment of more than 10 billion yuan. Changlongshan Pumped Storage Power Station is located in the load center of East China power grid. The construction of the power station is conducive to optimizing the power supply structure of East China, improving the operating conditions of East China Power Grid, and enhancing the efficiency, stability and safety of the operation of East China power system. At the same time, it is of great significance for driving the local economic development, creating jobs, stabilizing economic growth, adjusting structure, and improving people's livelihood.

Changlongshan Pumped Storage Power Station is planned to be installed with six vertical shaft single-cascade mixed-flow reversible pumped storage units, each of 350 MW, with a total installed capacity of 2.1 GW. It ranks the third in terms of installed capacity among all pumped storage power stations in China; the rated water head of the power station is 710 meters, ranking second in the world and first in China. The station officially commenced construction in 2015. In 2017, the river was diverted, and the construction of its main part began.

On June 25, 2021, the first generating unit of Changlongshan Pumped Storage Power Station officially was put into operation, serving as a giant "power bank" and a "regulator" of clean energy for power grids in east China. On December 30, Unit 3 of the Changlongshan Pumped Storage Power Station was officially put into operation. So far, over half of all 6 units in the station had been put into operation, and the cumulative power generation of the 3 units in operation reached 600 GWh.

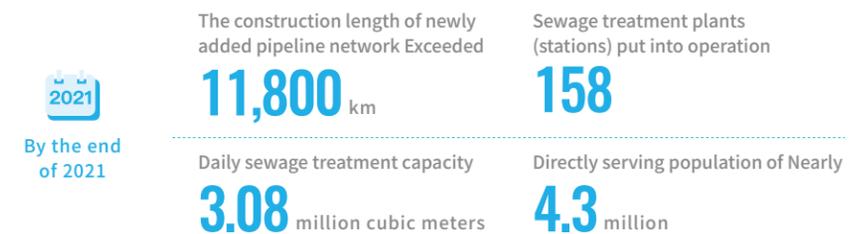


Changlongshan Pumped Storage Power Station

# Ecology and Environmental Protection

CTG actively explores new paths of high-quality development in accordance with the two-tracked development approach for advancing clean energy development and the ecological conservation of the Yangtze River. We spare no effort to grasp the implementation and innovate new models, make new progress in the well-coordinated conservation of the Yangtze River and achieve remarkable results in ecological and environmental protection.

By the end of 2021, the length of the newly added pipeline network for the well-coordinated conservation of the Yangtze River has exceeded 11,800 km. A total of 158 sewage treatment plants (stations) were put into operation, with a daily sewage treatment capacity of 3.08 million cubic meters, directly serving nearly 4.3 million population. Ecological conservation, one of the two tracks of our development approach, has gradually developed and grown, achieving a good start for the “14th Five-Year Plan”.



# Gradual effect of water governance

Water governance models such as the “integrated systems of sewerage pipeline networks and wastewater treatment plants” in Wuhu, Anhui, the “plant-network-river integrated wastewater treatment system” in Jiujiang, Jiangxi, the “plant-network-lake integrated wastewater treatment system” in Yueyang, Hunan, and the “co-governance of two networks” in Yichang, Hubei were effectively implemented, significantly improving the sewage collection rate in pilot cities and the concentration of pollutants in the influent water, basically eliminating 32 black and fetid water bodies in 6 major regions, and improving the urban water environment significantly.



Comprehensive Treatment Project of Shili River and Lianxi River basins in Jiujiang

**January 11, 2021** > The comprehensive treatment project of two river basins (Shili River and Lianxi River) in Jiujiang was successfully selected as one of the “Top 100 Cases of Eco-environmental Innovation Projects in 2020”.

**April 2, 2021** > The National Development and Reform Commission released the list of typical cases of green government and public-private partnership (PPP) projects. The first-phase PPP project for the comprehensive treatment of the water environment system in Jiujiang central urban area was selected.

**September 18, 2021** > The case of CTG's well-coordinated conservation of the Yangtze River was selected into the *Research Report on Corporate Social Responsibility of Central Enterprises (2021)* and awarded as an excellent case.

# Innovative launch of “Smart Urban Water Manager”

CTG systematically planned new ideas for water governance during the “14th Five-Year Plan” period, and innovatively proposed the “Smart Urban Water Manager” model focusing on pipeline networks. According to the general idea of implementing a pattern comprising “projects to be piloted, projects to be planned and promoted in the whole reaches of the Yangtze River”, over 10 research reports have been prepared and formed, and the top-level design of “water manager” has been scientifically formulated.



CTG signed agreements on Smart Urban Water Manager and Smart Integrated Urban Energy Manager with 23 cities and counties

**July 21, 2021** >

The Office of the Leading Group for Promoting the Development of the Yangtze River Economic Belt held an on-site meeting of the well-coordinated conservation of the Yangtze River with CTG's participation in Yueyang, Hunan. CTG signed cooperation agreements on Smart Urban Water Manager with 23 cities (districts and counties) along the Yangtze River, including Jiujiang in Jiangxi, Yichang in Hubei, Wuhu in Anhui, marking a substantial step in the innovation and exploration of new models and mechanisms for the well-coordinated conservation of the Yangtze River.

At the same time, a seminar on Smart Urban Water Manager and Smart Integrated Urban Energy Manager was held. Academicians and experts in the field, leaders of cities along the Yangtze River, representatives of the Yangtze Ecology and Environment Industry Alliance, participated in the seminar. All parties conducted in-depth exchanges on the “well-coordinated conservation of the Yangtze River, focusing on new models, and building Smart Urban Water Manager and Smart Integrated Urban Energy Manager”.

**September 26, 2021** > The first water manager company of Yangtze Ecology and Environment Co., Ltd. - Yichang Three Gorges Ecological Water Manager Co., Ltd. was registered and established.

**November 10, 2021** > Yueyang Three Gorges Smart Water Manager Co., Ltd. was registered and established.



Yueyang Dongfeng Lake after treatment

## Contributions to the “green cycle of pollution reduction and carbon reduction”

CTG promoted distributed photovoltaics and multi-source solid waste collaborative treatment in cities along the river, and facilitated resource recycling, contributing CTG's strength to realize carbon peaking and carbon neutrality goals.



Zhujiqiao Sewage Treatment Plant covered with photovoltaic panels on the roof

July 6, 2021

As CTG's first livestock and poultry manure resource treatment and utilization project - the PPP project of resource treatment and utilization of livestock and poultry manure in Guanyun County, Jiangsu successfully won the bid. The business scope was expanded to agricultural non-point source pollution control.

September 10, 2021

The distributed photovoltaic project of Chengdong Wastewater Treatment Plant in Wuhu was officially connected to the grid for power generation. Based on the successful operation of the first batch of sewage treatment plant plus PV projects in Wuhu, 19 sewage treatment plant plus PV projects have been launched in Jiujiang, Yueyang and other places, with an installed capacity of 23.7 MW.

October 15, 2021

CTG's first waste incineration power generation project - Hubei Yichang domestic waste incineration power generation project started construction smoothly.

October 18, 2021

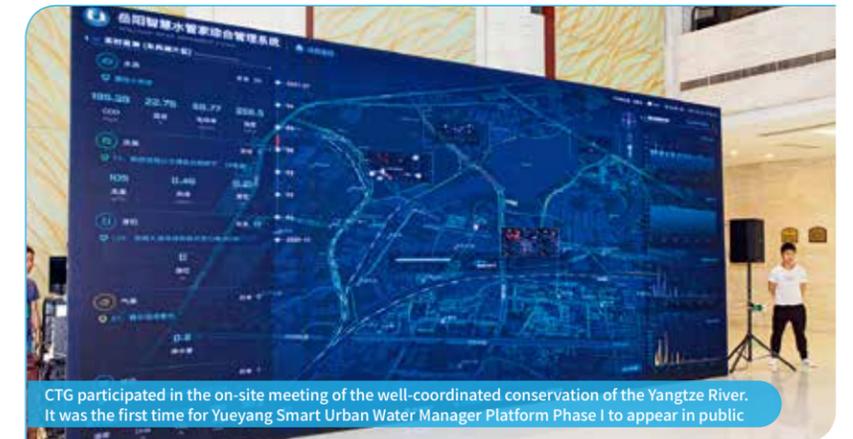
China's first urban sewage concept plant - Yixing Urban Sewage Resource Concept Plant, which was constructed through equity cooperation, was officially commissioned.



Yixing Urban Sewage Resource Concept Plant

## Steady promotion of “smart plus” to consolidate the foundation of scientific and technological innovation

CTG established a standard system for smart water management and built a unified smart water management platform. The first batch of smart water management systems in Wuhu and Jiujiang were put into operation, realizing the fine management of “online assets, online data, online business, and online alarms”. CTG promoted the construction of scientific and technological innovation platforms in an orderly manner, and planned and carried out major scientific and technological programs such as systematic treatment of sludge, kitchen wastes, and large urban inner lakes, thus consolidating the technology research and development foundation for well-coordinated environmental conservation.



CTG participated in the on-site meeting of the well-coordinated conservation of the Yangtze River. It was the first time for Yueyang Smart Urban Water Manager Platform Phase I to appear in public

May 20, 2021

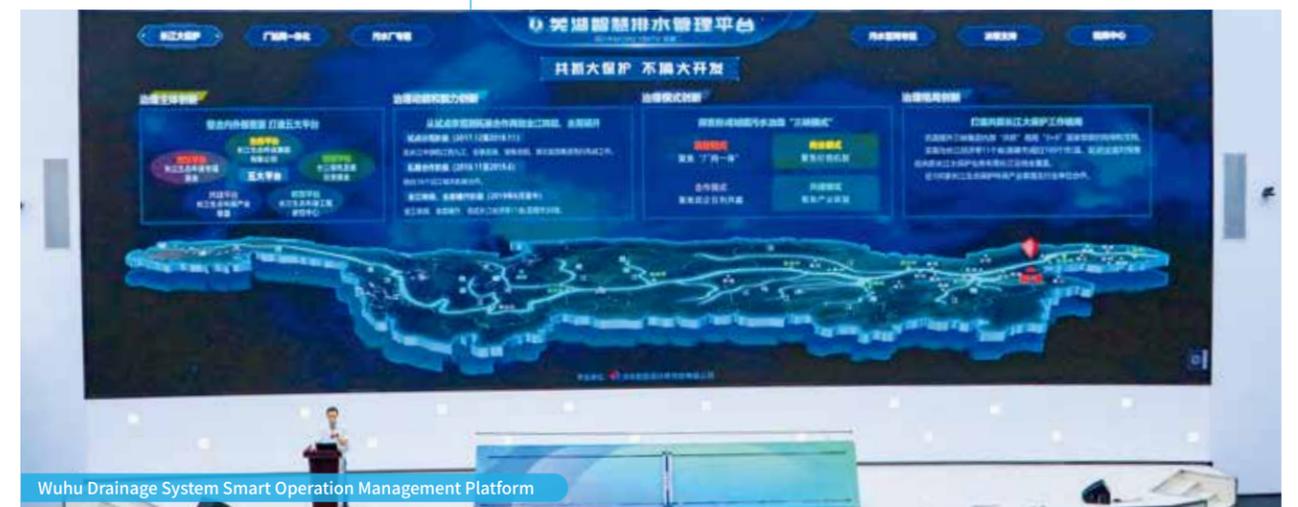
Chongqing Three Gorges Eco-Environment Technology Innovation Center was established, which was a Yangtze River ecological research institute jointly initiated by CTG and Chongqing government.

July 10, 2021

The Academician Workstation of Yangtze Ecology and Environment Co., Ltd., a subsidiary of CTG, was established. The first academician joining was the famous Chinese hydrologist Liu Changming.

August 23, 2021

The “Wuhu Drainage System Smart Operation and Management Platform” created by Yangtze Ecology and Environment Co., Ltd. and PowerChina's East China Survey and Design Research Institute was successfully selected as one of the “2021 Typical Cases of Smart Water Management” by the Science and Industrialization Development Center of the Ministry of Housing and Urban-Rural Development.



Wuhu Drainage System Smart Operation Management Platform

## Protecting the ecological environment

### Ecological restoration

CTG always attached great importance to ecological environmental protection, continued to carry out terrestrial and aquatic ecological restoration in the basin, and funded the construction of rare and endemic species nature reserves. It took multiple measures to protect rare animals and plants in the basin, and contributed CTG's solutions to the protection of biodiversity in the Yangtze River basin.



Pilot restoration project in Baihetan drawdown zone

CTG continued to carry out ecological restoration projects such as the ecological conservation and restoration of Heishui River and the conservation of the natural river reaches at the end of the Wudongde reservoir. It has built a demonstration area for ecological restoration in the drawdown zone of Three Gorges Reservoir area, providing technical support for the ecological restoration in the drawdown zone, thus effectively protecting and restoring the ecological environment.

- Launched the Poyang County Lake Shoreline Ecological Conservation and Restoration (Phase I) PPP Project
- Carried out aquatic ecological monitoring work in the Qingjiang River basin reservoir area
- The restoration pilot project of the Baihetan drawdown zone completed its construction
- The agricultural pollution control project helped the eco-environmental governance and conservation of the Xiongan New Area



Design Sketch of the Poyang County Lake Shoreline Ecological Conservation and Restoration (Phase I) PPP Project

## Protecting rare terrestrial plants



Rare Plants in the Yangtze River

Myricaria laxiflora, National Second-class Key Protected Wild Plants

Adiantum reniforme, National First-class Key Protected Wild Plants

Liriodendron chinense, National Second-class Key Protected Wild Plants

Taxus chinensis, National First-class Key Protected Wild Plant

- CTG has built the largest conservation base for endemic, rare and resource plants along the Yangtze River in China.
- By 2021, a total of 1,300 species of endemic, rare and resource plants have been protected ex situ, of which 560 species of plants that may be impacted by the projects in the Three Gorges Reservoir area proposed in the EIA report has been effectively protected, and about 210,000 endemic and rare plants have been bred cumulatively.

## Protecting rare aquatic animals

Since the first proliferation and release activities of rare fish species such as Chinese sturgeons were carried out in 1984, CTG has released a total of more than 8.75 million fish in the Yangtze River, and consecutively carried out 64 times Chinese sturgeons release activities by the end of 2021. A total of more than 5.04 million Chinese sturgeons were released to the Yangtze River. Among them, over 40,000 second-generation Chinese sturgeons were released, playing a crucial role in supplementing the resources of rare fish such as Chinese sturgeons and realizing the sustainable reproduction of rare fish.

CTG has been conducting the artificial breeding and technical studies of Chinese sturgeons for 40 years. Currently, it has mastered multiple core technologies of Chinese sturgeon protection, and established a full-cycle Chinese sturgeon protection system covering broodstock cultivation, induced reproduction, seed rearing, echelon construction, proliferation and release, as well as effect evaluation, migration monitoring, habitat protection, laying a solid foundation for the rejuvenation of Chinese sturgeon

populations.

From the first ecological regulation experiment in 2011 to the end of 2021, CTG has carried out 16 consecutive ecological regulations. During the ecological regulation period of the Yichang section in 2021, the total reproduction number of the four major Chinese carps reached 8.4 billion, which was more than 100 times the reproduction scale of the four major Chinese carps when the ecological regulation was first

implemented in 2011, indicating that the ecological regulation has a significant effect on promoting the reproduction of the four major Chinese carps in the Yangtze River, which can effectively improve the aquatic ecosystem of the Yangtze River and create suitable hydrological conditions for fish reproduction.



Chinese sturgeon proliferation and release activities in 2021

# Development of Domestic Renewable Energy

In 2021, CTG has made comprehensive breakthroughs in its renewable energy business. The newly installed capacity of renewable energy put into production in the whole year has exceeded 9 GW, with a year-on-year increase of 110%. The cumulative installed capacity of renewable energy has exceeded 26 GW, of which the cumulative installed capacity of domestic offshore wind power was 4.58 GW, ranking first in China and second in the world. The annual power generation was 35.3 TWh. The effective resource reserve of new energy projects in the whole year has reached 22.4 GW, with a year-on-year increase of 146%, of which 12.5 GW was obtained from the first batch of large base projects.

## Domestic renewable energy business distribution map



The newly installed capacity put into operation  
Over **9** GW

The cumulative installed capacity put into operation  
Over **26** GW

Annual power generation  
**35.3** TWh

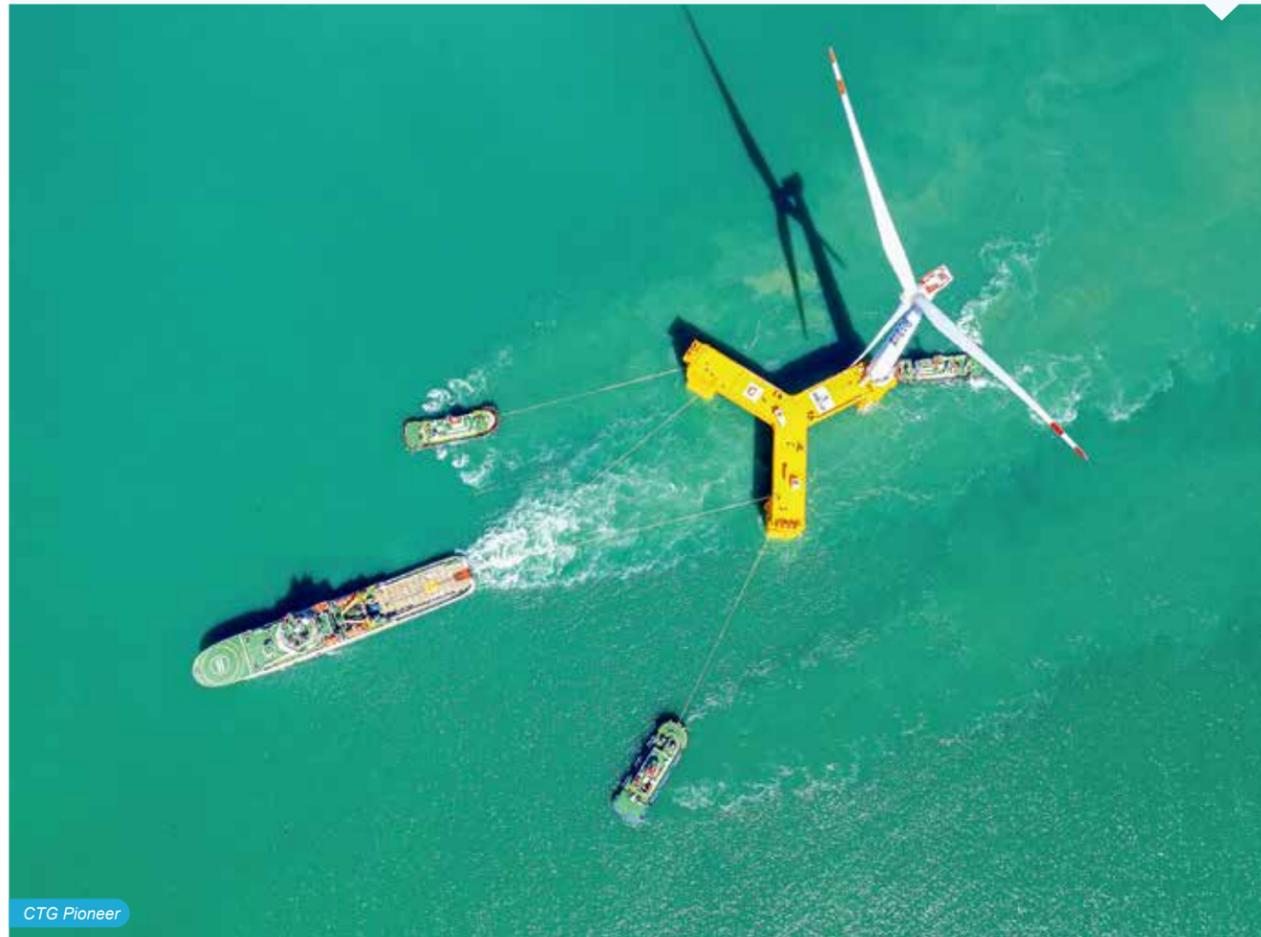
-  Onshore wind power
-  Offshore wind power
-  PV power

## Development of domestic offshore wind power

We steadfastly implement the strategy of “being a leading player of offshore wind power”, and concentrate our strength in developing large-scale offshore wind power projects, with an installed capacity of 4.58 GW. In 2021, it has completed and put into operation with a capacity of 3.24 GW, ranking firmly in the forefront of the domestic industry. Among them, the largest single offshore wind power project in China (214.5 MW) was built in Xiangshui, Jiangsu; the first offshore wind power project (300 MW) in Northern China was built in Zhuanghe, Liaoning Province; the world's first international high-power offshore wind power project (77.4 MW) was built in Fuqing, Fujian Province; the first domestic ±400 kV VSC-HVDC offshore wind power project (800 MW) was built in Rudong, Jiangsu; the offshore wind power project with the largest scale of commencement at one-time (2 GW) was built in Yangjiang, Guangdong; China's longest offshore wind power project (300 MW) was built in Dafeng, Jiangsu Province.

### CTG Pioneer was successfully connected to the grid for power generation

On December 7, 2021, China's first floating offshore wind power platform, equipped with the world's first typhoon-resistant floating offshore wind power unit, formed the CTG Pioneer, which was successfully connected to the grid for power generation at the offshore wind power farm in Yangjiang, Guangdong Province.



CTG Pioneer

### CTG VSC-HVDC Project offshore converter station in Rudong, Jiangsu Province was settled down successfully

On July 18, 2021, the world's largest and first in Asia offshore converter station - CTG VSC-HVDC Project offshore converter station in Rudong, Jiangsu Province, was settled down. It is a VSC-HVDC project with the highest voltage grade, the largest capacity and the longest offshore transmission distance in China, which can effectively solve the problem of large-capacity and long-distance power transmission in the offshore wind power farm.



CTG offshore converter station in Rudong was transported to the construction sea area

### CTG H8-2 Offshore Wind Power Project in Dafeng, Jiangsu Province the first batch of generating units were connected to the grid for power generation

On December 5, 2021, the first batch of generating units of CTG H8-2 Offshore Wind Power Project in Dafeng, Jiangsu Province was connected to the grid for power generation, marking the phased achievement of the furthest offshore wind power project in China. It is of great significance to promote the further development of offshore wind power in China.



CTG H8-2 Offshore Wind Power Project in Dafeng, Jiangsu Province

### CTG Shaba Offshore Wind Power Project in Yangjiang, Guangdong Province realized the full-capacity grid connection

On December 25, 2021, CTG Shaba Offshore Wind Power Project in Yangjiang, Guangdong Province, achieved the full-capacity grid connection, which was the first gigawatt level wind farm to be put into commercial operation in China. It marks that China is the first in the world to have the capabilities of independent research, development, manufacturing, installation and operation for large-capacity typhoon-resistant floating offshore wind power generating units, which is of positive significance to promote the manufacturing and upgrading of high-end offshore wind power equipment in China and explore the wind energy resources.



CTG Shaba Offshore Wind Power Project in Yangjiang, Guangdong Province

## Development of domestic onshore wind power

CTG steadily promoted the development of onshore wind power, continued to consolidate the advantages of concentrated and contiguous development in Inner Mongolia, Xinjiang and other places. It optimized the strategic layout, and vigorously developed onshore wind power with the focus on the construction of bases in the south of the Middle East and UHV transmission facilities.

By the end of 2021, the onshore wind power projects put into operation by CTG have covered 26 provinces and regions, including Inner Mongolia, Xinjiang and Yunnan, with a cumulative installed capacity of 10.6 GW.

**100 MW** Xitieshan Liushaping Wind Power Project, the first domestic high-altitude megawatt level wind power project, was completed in Qinghai Province.

**400 MW** Phase I Wind Power Project of Siziwang Banner Xingfu Wind Farm, the largest single onshore wind power project in China and even in Asia at the current stage, was completed in Inner Mongolia autonomous.

**3 GW** The world's largest demonstration project of "source-grid-load-storage integration" was constructed in Ulanqab city, Inner Mongolia autonomous.



Zhegu Wind Farm in Tibet

### Main projects

**November 19, 2021** CTGR 100MW unsubsidized wind power demonstration project in Kangbao, Hebei Province, was successfully connected to the grid.

**December 22, 2021** 10 generating units of the Zhegu Wind Farm in Cuomei County, which was the world's highest altitude wind power project invested and constructed by CTG and the first decentralized wind power project in Tibet, were connected to the grid, marking the successful operation of China's ultra-high altitude wind power scientific research demonstration project.



CTGR Kangbao 100 MW unsubsidized wind power demonstration project was successfully connected to the grid

### CTG Ulanqab Source-Grid-Load-Storage Integration Project

This project is a new generation grid-friendly demonstration green power station, and will become the single-scale new energy station with the largest scale and highest proportion of energy storage allocation in the world upon completion. The project will take new technologies such as energy storage as a breakthrough, and optimize the scheduling operation through the combination of wind, solar and energy storage to greatly improve the level of clean energy consumption.



CTG Source- Grid- Load- Storage Integration Project in Ulanqab, Inner Mongolia autonomous

## Domestic photo-voltaic business

CTG actively promotes the diversified development of photovoltaics, as well as the large-scale centralized photovoltaic power generation in an orderly manner, and explores business development models such as “photovoltaic+” to form a point-to-area photovoltaic development pattern. By the end of 2021, CTG has put into production photovoltaic projects in 23 provinces and regions including Qinghai, Hubei, Hebei, Sichuan and Shandong, with a cumulative installed capacity of more than 11 GW.



CTGR Project in Nigou Town, Taierzhuang District, Shandong Province

### April 2021

CTGR 50 MW Agricultural and Solar Complementary Project in Nigou Town Taierzhuang District, Shandong Province successfully realized the first batch of generating units connected to the grid.



Commencement Ceremony of Southern Base Project

### October 15, 2021

CTGR 2.1 GW Photovoltaic Solar Thermal Project in Southern Base and Western Base of Qinghai Province officially started construction. This project is one of the first phrase of 100 GW of wind and photovoltaic power base projects announced by Chinese President Xi Jinping at the leaders' summit of the 15th meeting of the Conference of the Parties to the United Nations Convention on Biological Diversity (COP15).



Commencement Ceremony of PV Plus Sand Control Project in Ordos, Inner Mongolia autonomous

### October 16, 2021

The Kubuqi 2 GW PV Plus Sand Control Project in Mengxi Base, Ordos, Inner Mongolia officially started construction. This project is one of the This project is one of the first phrase of 100 GW of wind and photovoltaic power base projects announced by Chinese President Xi Jinping at the leaders' summit of COP15. It is also the largest photovoltaic desertification control project in China.



Commencement Ceremony of Photovoltaic Power Station Project in Fuyang city, Anhui Province

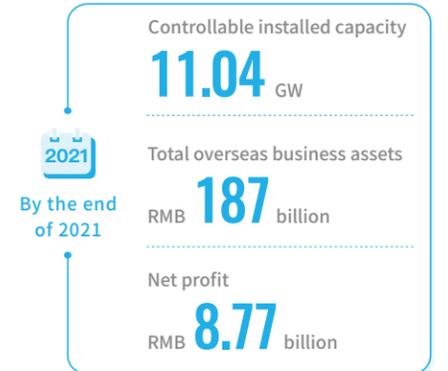
### October 22, 2021

The Photovoltaic Power Station Project, is located in southern Fuyang city, Anhui province and with capacity of 1200MW, which started construction on October 22, 2021. It is the world's largest single floating photovoltaic power station project that comprehensively utilizes the most idle water surface in coal mining subsidence areas.

## International Investment and Operations

In 2021, closely focusing on the strategic goal of building a world-class clean energy enterprise, CTG continuously accelerated the pace of “going global”, and actively participated in the construction of the “Belt and Road Initiative”. It upheld “extensive consultation” and worked on “joint contribution” to realize “shared benefits”. It not only carried forward the spirit of the Silk Road of peaceful cooperation, openness and inclusiveness, mutual learning and mutual benefits, but also actively participated in the global clean energy investment and development to promote the high-quality development of international business.

By the end of 2021, CTG's business has covered nearly 50 countries and regions around the world, with a consolidated installed capacity of 11.04 GW. Its total overseas assets have reached 187 billion yuan; the net profit has reached 8.77 billion yuan.



Cotillas Power Station under the Daylight Project in Spain

### January 22, 2021

CTG Europe, a subsidiary of China Three Gorges International Corporation (CTGI), successfully completed the delivery of the Daylight photovoltaic power station project in Spain, and achieved a good start in the “14th Five-Year Plan” of CTG's international clean energy investment business, marking CTG's first entry into Spain, the largest photovoltaic market in Europe. The Daylight Project acquired this time included 13 photovoltaic power stations with a total installed capacity of 572 MW. It is one of the largest photovoltaic operation projects in Spain with high-quality project assets.



Horus Project site in Spain

### August 12, 2021

CTG Europe successfully completed the delivery of the Horus Project in Spain, marking that CTG's clean energy operation and installed capacity in the Spanish market has reached 1GW, realizing the optimal allocation of wind power and photovoltaic assets.



Alcazar Project

### August 19, 2021

China Three Gorges South Asia Investment Ltd (CSAIL), a subsidiary of CTGI, successfully completed the delivery of the Alcazar Project, which enabled CTG to expand its overseas clean energy investment business to the Middle East and North Africa. The Alcazar Project included 5 photovoltaic power stations and 2 wind power stations located in Egypt and Jordan, with a total installed capacity of 411 MW.



One of Flores onshore wind power farms in Spain

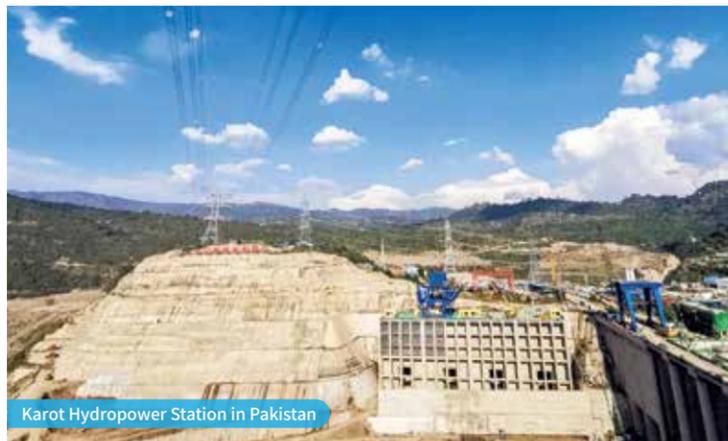
### November 13, 2021

CTG Europe signed an agreement with EDP Renováveis, a subsidiary of Energias de Portugal, and acquired 100% of the Flores Onshore Wind Power Project in Spain, with a total installed capacity of 181 MW.

## Overseas power station operation

### 01 Karot Hydropower Station in Pakistan

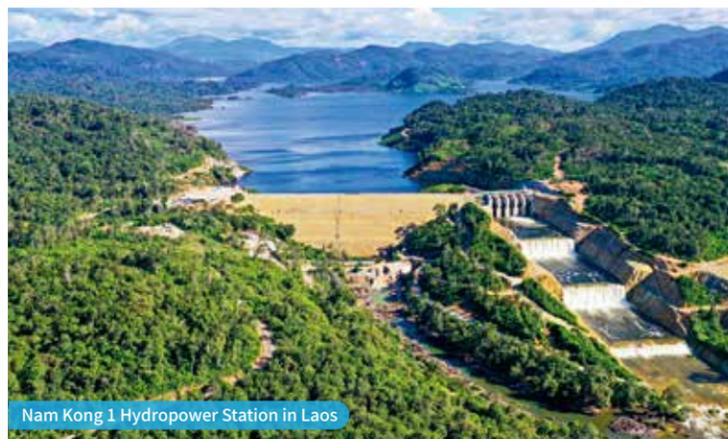
On November 20, 2021, the diversion tunnel bulkhead gate of Pakistan's Karot Hydropower Station invested and constructed by CTG was successfully closed and stored water as planned, laying a solid foundation for the commissioning of the generating units in the first half of 2022.



Karot Hydropower Station in Pakistan

### 02 Nam Kong 1 Hydropower Station in Laos

The Nam Kong 1 Hydropower Station in Laos is the third BOOT hydropower project invested and constructed by CWE in Laos. The project is located in Attapeu Province, southern Laos, with a total installed capacity of 160 MW. On June 29, 2021, the second generating unit completed a 72-hour trial operation, and all units were officially put into operation.



Nam Kong 1 Hydropower Station in Laos

#### Ilha Hydropower Station in Brazil

Installed capacity  
**3.44** GW  
Power generation in 2021  
**9.41** TWh



#### Jupia Hydropower Station in Brazil

Installed capacity  
**1.55** GW  
Power generation in 2021  
**5.61** TWh



#### Nam Ngiep 2 Hydropower Project in Laos

Installed capacity  
**180** MW  
Power generation in 2021  
**420** GW



#### Pakistan Wind Power Project

Installed capacity  
**149** MW  
Power generation in 2021  
**380** GW



#### Meerwind Offshore Wind Power Project in Germany

Installed capacity  
**288** MW  
Power generation in 2021  
**1.05** TWh



#### Kaleta Hydropower Station in Guinea

Installed capacity  
**235** MW  
Power generation in 2021  
**920** GW



#### Chaglla Hydropower Station in Peru

Installed capacity  
**456** MW  
Power generation in 2021  
**2.1** TWh



## International engineering contracting

### Turguson Hydropower Station in Kazakhstan

On July 17, 2021, the Turguson Hydropower Station in Kazakhstan (with a total installed capacity of 24.9 MW), which was constructed by CWE, a subsidiary of CTG, realized that all the generating units were put into operation.



Turguson Hydropower Station, Kazakhstan

### Laos 500 kV Power Transmission and Transformation Project

On June 30, 2021, the main project of the Laos 500 kV Power Transmission and Transformation Project constructed by CWE was completed.



Laos 500 kV Power Transmission and Transformation Project (Xieng Khouang-Naxaithong Section)

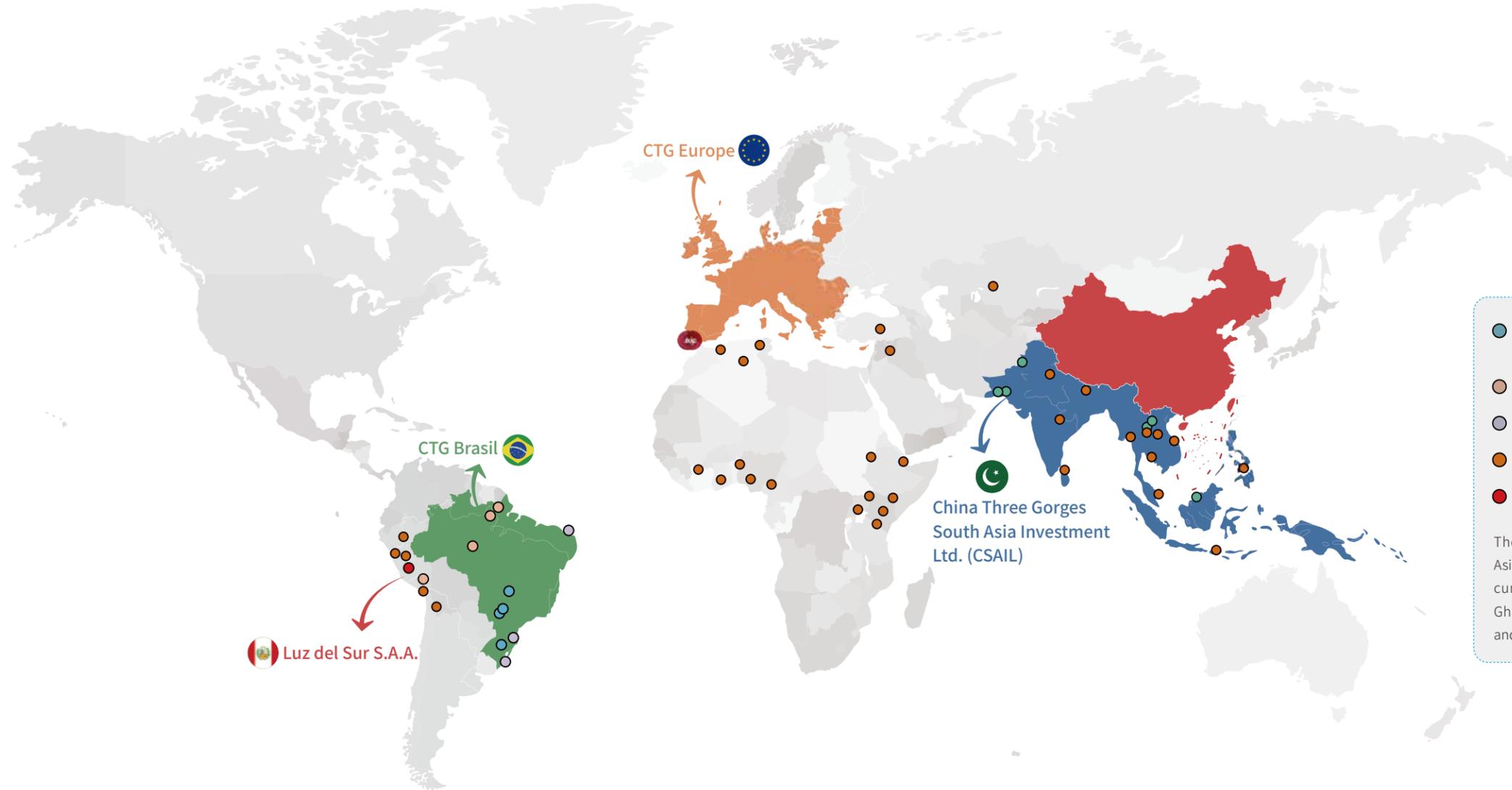
### Souapiti Hydropower Project in Guinea

On June 24, 2021, the Souapiti Hydropower Project in Guinea successfully passed the temporary completion acceptance of the joint acceptance team composed of the power station management company, the owner's project department, and the major project office.



Souapiti Hydropower Project in Guinea

# Global Business Presence



- Hydropower projects where CTG has controlling interests
- Hydropower projects cooperated with EDP
- Wind power projects cooperated with EDP
- International engineering contracting projects
- International power distribution projects

The international engineering contracting business covers Asia, Africa, Europe and the Americas. The contracting projects currently under construction are mainly located in Guinea, Ghana, Laos, Cameroon, Senegal, Uganda, Peru, Kazakhstan and Hong Kong, China.



**CTG Brasil**

With Brazil as its core market, CTG Brasil is the second largest private power generator and the largest private hydropower company in Brazil.



**Luz del Sur S.A.A.**

Luz del Sur S.A.A. provides power transmission and distribution business in Lima and other regions in Peru. It is the largest power distribution and sale company in Peru controlled by China Yangtze Power Co., Ltd (CYPC).



**CTG Europe**

With Europe as its core market, CTG Europe is responsible for the investment business in Europe and North America. It has installed over 1GW of renewable energy in Spain. It is the single largest shareholder of EDP in Portugal.



**China Three Gorges South Asia Investment Ltd. (CSAIL)**

With Pakistan as its core market, CSAIL is responsible for the investment business in South Asia. Many projects invested and developed are included in the construction framework of the "China-Pakistan Economic Corridor".

## International exchange and cooperation

April 22, 2021

In 2021, CTG closely aligned with the development of the global energy trends and innovations, striving to achieve targets for carbon peaking and carbon neutrality goals and sustainable development. It partnering with international organizations and institutions at multiple levels to exchange advanced concepts and best practices, and participated in the formulation of international standards. CTG will continuously play a leading role in the industry.

Lei Mingshan, Chairman of CTG, attended the 3<sup>rd</sup> International Forum on Water Security & Sustainability in Nanjing, Jiangsu, and delivered a speech. Lei Mingshan said that CTG resolutely implemented new development concepts. By upholding the general tone of seeking progress while maintaining stability, CTG strove to implement the two-tracked approach for advancing clean energy development and the ecological conservation in the Yangtze River Basin, promote the high-quality development and contribute to the construction of water security of the Yangtze River and ecological civilization based on the construction of the domestic largest green ecological corridor along the Yangtze River and the global largest clean energy corridor along the Yangtze River.



Lei Mingshan, Board Chairman of CTG, attended the 3<sup>rd</sup> International Forum on Water Security & Sustainability

May 25, 2021

CTG held an online open house event at the San Gaban III Hydroelectric Power Plant in Peru. The event led the audience to visit the power plant in Carabaya Province of Peru online, showcasing CTG's efforts to protect environment, integrate into the local community, and promote local development during construction.



The Online Open House Event at the San Gaban III Hydroelectric Power Plant in Peru

September 7, 2021

The 2021 World Hydropower Congress, organized by the International Hydropower Association, opened online with the theme "Renewables working together in an interconnected world". Han Jun, President of CTG, was invited to attend the opening plenary and delivered a speech entitled "Making the Most of Comprehensive Benefits of Hydropower for a Clean and Beautiful World".



Han Jun, President of CTG, was invited to attend the 2021 World Hydropower Congress

September 26-27, 2021

As one of a series of activities to commemorate the 50th anniversary of the restoration of China's lawful seat in the United Nations, the 2021 Sustainable Development Forum with the theme of "People-Centered Sustainable Development" was held in Beijing. During the Forum, representatives of CTG attended and delivered speeches at three roundtables, including the Sustainable Development Corporate Partnership: CSO Roundtable, the Women Leadership and Sustainable Development Roundtable, and the Youth Leadership for Sustainable Development Roundtable. At the same time, CTG's two cases "Yangtze River Protection: An important pillar to biodiversity protection" and "the Karot Hydropower Project in Pakistan: improving people's sense of fulfillment through green energy cooperation" were included in the China's Progress Report on Implementation of the 2030 Agenda for Sustainable Development (2021) launched during the Forum.



Sustainable Development Forum held in Beijing

# Capital and Finance

In 2021, the capital and finance business of CTG developed steadily. The annual investment income reached 15.81 billion yuan, with a year-on-year increase of 11.1 percent, and the absolute return of investment and its proportion in total profits reached a new high.

February 9  
March 3  
August 13

## In 2021, CTG raised funds of 51 billion yuan through 22 issuances of green bonds, breaking new records in both the number and scale of green bonds

On February 9, 2021, CTG successfully issued the first batch of carbon-neutral bonds in the China Interbank Bond Market. The bonds are 2 billion yuan with a term of three years and a coupon rate of 3.45 percent. On March 3, CTG successfully issued the first batch of carbon-neutral green corporate bonds of 1 billion yuan on the Shanghai Stock Exchange, with a term of 3 years and a final coupon rate of 3.45 percent. On August 13, CTG successfully issued the first "carbon-neutral" bond for non-financial enterprises in the China Interbank Bond Market. The scale of this bond issuance was 3 billion yuan, of which 2 billion yuan was for one-year term with a coupon rate of 2.5 percent, and 1 billion yuan for three-year term with a coupon rate of 2.85 percent.

June 10

## The A-share IPO of CTGR was officially listed on the main board of Shanghai Stock Exchange

On June 10, 2021, the initial public offering (IPO) of A shares of CTGR (Stock abbreviation: CTGR, Stock Code: 600905) was officially listed and traded on the main board of Shanghai Stock Exchange. On the first day of listing, the market value exceeded 100 billion yuan, making it the largest IPO in the history of China's power industry and the listed renewable energy company with the highest A-share market value.



December 10

## CTG and EDP signed the new Framework Agreement on strategic cooperation

On December 10, 2021, on the occasion of the 10th anniversary of CTG's investment in EDP, the two parties held an online meeting of cooperation steering committee and signed the Framework Agreement for the new phase.

December 10

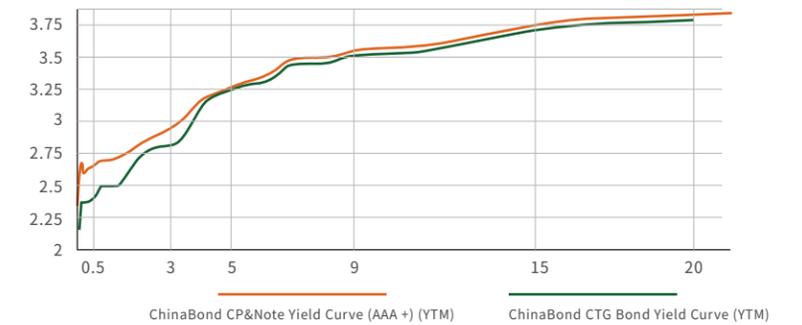
## China Three Gorges International Limited successfully introduced strategic investors

In July 2021, China Three Gorges International Limited, a subsidiary of CTGI, signed the Share Purchase Agreement and the Shareholder Agreement with 5 domestic and foreign strategic investors. On December 10, it successfully completed the delivery and achieved diversification of equity.

December 13

## ChinaBond Pricing Center officially released the ChinaBond CTG Bond Yield Curve

On December 13, 2021, ChinaBond Pricing Center Co., Ltd. (CBPC) officially released the ChinaBond CTG Bond Yield Curve, which is the first publicly released yield curve reflecting the valuation of a single non-financial enterprise bond after railway bonds, and also the first yield curve mainly based on green bonds in the bond market.



# Financial Indicators

## Main Financial Indicators

Main Financial Indicators					
Item	2017	2018	2019	2020	2021
Total assets (RMB billion)	700.90	750.41	837.83	969.97	1,154.31
Owner's equity attributable to parent company (RMB billion)	279.29	290.27	305.24	335.91	364.28
Operating revenue (RMB billion)	90.00	93.94	99.26	111.70	136.03
Net profit after tax (RMB billion)	34.30	35.26	35.22	45.40	50.25
Ratio of operating cost to operating revenue (%)	64.0	65.3	66.1	61.7	68.6
EBITDA (RMB billion)	65.88	64.77	66.61	77.76	86.47
Return on owner's equity (%)	9.5	9.2	8.6	10.1	9.7
Net interest bearing debts (RMB billion)	223.73	246.85	301.00	378.35	449.35
EBITDA interest coverage ratio (X)	6.2	5.3	5.1	5.4	4.9
Net interest bearing debts/EBITDA (X)	3.4	3.8	4.5	4.9	5.2
Total interest bearing liabilities / Total assets (%)	37.0	38.4	41.2	42.9	41.2
Asset liability ratio (%)	47.0	47.3	49.6	50.8	51.9

## Financial Statements

**Consolidated Balance Sheet**

December 31, 2021

Unit: RMB

Company Name: China Three Gorges Corporation	Item	Note VIII	As at December 31, 2021	As at January 1, 2021
<b>Current assets:</b>				
Cash at bank and on hand	1	42,665,638,574.07	38,206,090,716.77	
Δ Settlement reserve				
Δ Due from banks and other financial institutions				
Financial assets held for trading	2	22,447,851,560.69	20,900,801,814.60	
⊕ Financial assets at fair value through profit or loss				
Derivative financial assets				
Notes receivable	3	95,579,164.50	137,507,163.69	
Accounts receivable	4	40,507,624,007.62	23,466,638,027.30	
Receivables financing	5	313,452,576.27	554,727,430.67	
Advances to suppliers	6	11,166,275,338.74	8,415,100,614.33	
Δ Prepayment receivable				
Δ Reinsurance premium receivable				
Δ Reserve receivable for reinsurance contract				
Other receivables	7	2,940,395,545.72	2,721,373,417.55	
Including: Dividends receivable		132,059,787.36	142,368,636.36	
Δ Financial assets purchased under agreements to resell				
Inventories	8	1,981,845,795.23	994,498,381.87	
Including: Raw materials		1,011,878,243.74	526,251,015.07	
Merchandise stocks (finished goods)		224,397,141.18	131,465,688.50	
Contractual assets	9	2,636,882,787.16	847,785,402.81	
Held-for-sale assets				
Non-current assets due within one year	10	6,869,769,689.80	3,606,099,215.43	
Other current assets	11	8,493,593,126.24	5,063,630,072.55	
<b>Total current assets</b>		<b>140,258,907,986.04</b>	<b>106,414,252,258.17</b>	
<b>Non-current assets:</b>				
Δ Loans and advances		490,350,282.70	483,181,776.52	
Debt investments	12	732,027,625.29	927,748,658.50	
⊕ Available-for-sale financial assets				
Other debt investments	13	2,865,037,984.39	3,217,012,580.68	
⊕ Held-to-maturity investments				
Long-term receivables	14	28,282,888,406.55	23,574,412,283.87	
Long-term equity investments	15	155,198,336,182.69	130,604,794,275.74	
Other equity instruments investments	16	32,938,019,446.34	12,621,496,120.14	
Other non-current financial assets	17	1,125,791,927.29	4,713,666,461.26	
Investment properties	18	2,679,121,381.99	2,231,253,992.40	
Fixed assets	19	505,406,061,299.74	462,834,470,449.77	
Including: Original value of fixed assets		705,696,207,519.67	579,244,875,663.40	
Accumulated depreciation		198,931,155,142.27	175,006,008,814.01	
Provision for impairment of fixed assets		1,377,832,696.46	1,427,553,840.47	
Construction in progress	20	155,135,552,800.63	168,272,576,324.13	
Productive biological assets				
Oil and gas assets				
Right-of-use assets	21	7,179,015,896.03	3,514,262,583.01	
Intangible assets	22	91,073,227,188.02	74,271,873,387.75	
Development expenditures	23	18,271,626.79	5,070,811.80	
Goodwill	24	12,859,864,915.72	7,981,282,233.89	
Long-term deferred expenses	25	426,496,393.82	253,405,023.63	
Deferred tax assets	26	13,860,039,110.01	13,521,360,836.23	
Other non-current assets	27	23,781,492,922.31	18,559,414,691.35	
Including: Authorized reserve asset				
<b>Total non-current assets</b>		<b>1,014,051,915,792.31</b>	<b>867,577,882,495.09</b>	
<b>Total Assets</b>		<b>1,154,310,823,778.35</b>	<b>973,992,134,753.26</b>	

**Consolidated Balance Sheet (Continued)**

December 31, 2021

Unit: RMB

Company Name: China Three Gorges Corporation	Item	Note VIII	As at December 31, 2021	As at January 1, 2021
<b>Current liabilities:</b>				
Short-term borrowings	29	18,769,588,771.70	23,073,741,567.85	
△ Borrowings from central bank				
△ Placements from banks and other financial institutions				
Financial liabilities held for trading	30	396,185,823.59	990,152,838.75	
☆ Financial liabilities at fair value through profit or loss				
Derivative financial liabilities	31	757,008,528.80	374,266,673.63	
Notes payable	32	7,935,558,861.00	2,052,047,698.74	
Accounts payable	33	33,592,843,743.36	21,685,688,547.83	
Advances from customers	34	35,544,382.05	66,430,860.35	
Contractual liabilities	35	4,920,207,810.35	3,430,250,653.73	
△ Financial assets sold under agreements to repurchase				
△ Deposits from customers, banks and other financial institutions	36	1,033,342,951.08	1,280,393,342.49	
△ Securities brokering				
△ Securities underwriting				
Employee benefits payable	37	608,455,532.63	460,174,257.94	
Including: Salaries payable				
Welfare payable				
#Including: Employee bonus and welfare funds				
Taxes payable	38	7,826,265,170.91	7,176,342,159.95	
Including: Accrued tax				
7,759,118,401.00				
Other payables	39	33,428,000,346.22	28,251,392,450.99	
Including: Dividends payable				
299,103,103.83				
△ Fees and commissions payable				
△ Reinsurance accounts payable				
Held-for-sale liabilities				
Non-current liabilities due within one year	40	54,821,150,241.10	56,403,035,903.97	
Other current liabilities	41	25,619,302,116.84	12,932,964,617.00	
<b>Total current liabilities</b>		<b>189,743,454,281.63</b>	<b>158,176,881,573.22</b>	
<b>Non-current liabilities:</b>				
△ Reserve of insurance contract				
Long-term borrowings	42	213,906,245,327.98	141,803,161,464.89	
Bonds payable	43	164,976,684,871.13	168,396,299,364.09	
Including: Preferred shares				
Perpetual bonds				
Lease liabilities	44	5,167,262,335.68	3,004,139,616.01	
Long-term payables	45	12,596,071,883.58	13,325,112,656.82	
Long-term employee benefits payable	46	65,728,319.97	81,196,999.29	
Provisions	47	2,102,534,443.15	1,907,635,102.75	
Deferred incomes	48	702,607,155.28	505,916,202.46	
Deferred tax liabilities	26	7,162,262,796.74	5,895,039,444.13	
Other non-current liabilities	49	3,152,333,850.88	1,423,536,670.25	
Including: Authorized reserve fund				
<b>Total non-current liabilities</b>		<b>409,831,730,984.39</b>	<b>336,342,077,520.69</b>	
<b>Total liabilities</b>		<b>599,575,185,266.02</b>	<b>494,518,959,093.91</b>	
<b>Owners' equity:</b>				
Paid-in capital	50	211,781,023,501.31	211,781,023,501.31	
State-owned capital				
Capital from state-owned legal body				
Collective capital				
Private capital				
Foreign capital				
#Less: Payback capital				
Net paid-in capital				
211,781,023,501.31				
Other equity instruments	51	11,291,056,614.80	11,527,183,345.61	
Including: Preferred shares				
Perpetual bonds				
9,972,641,509.44				
Capital reserve	52	39,144,228,059.45	31,746,250,494.28	
Less: Treasury shares				
Other comprehensive income				
-14,576,602,570.27				
Including: Foreign currency translation differences				
-13,601,899,721.93				
Special reserve	53	2,595,690.46	1,133,506.45	
Surplus reserve	54	30,395,183,609.50	28,887,074,535.01	
Including: Statutory surplus reserve				
19,815,848,311.45				
Discretionary surplus reserve				
10,577,301,325.08				
#Reserve fund				
#Enterprise development fund				
#Return of investment				
△ General risk provision				
Retained earnings	55	86,237,147,154.89	64,117,638,821.29	
<b>Total owner's equity attributable to parent company</b>		<b>364,275,232,060.14</b>	<b>337,498,052,385.68</b>	
*Non-controlling interests				
190,660,406,452.19				
<b>Total owners' equity</b>		<b>554,935,638,512.33</b>	<b>479,473,175,639.35</b>	
<b>Total liabilities and owners' equity</b>		<b>1,154,510,823,778.35</b>	<b>973,992,134,733.26</b>	

**Balance Sheet of Parent Company**

December 31, 2021

Unit: RMB

Company Name: China Three Gorges Corporation	Item	Note XIII	As at December 31, 2021	As at January 1, 2021
<b>Current assets:</b>				
Cash at bank and on hand			31,576,101,726.61	25,439,675,213.98
△ Settlement reserve				
△ Due from banks and other financial institutions				
Financial assets held for trading			3,516,567,470.78	250,856,971.54
☆ Financial assets at fair value through profit or loss				
Derivative financial assets				
Notes receivable				
Accounts receivable				
Receivables financing				
Advances to suppliers			232,929,633.67	157,224,635.35
△ Premiums receivable				
△ Reinsurance premium receivable				
△ Reserve receivable for reinsurance contract				
Other receivables	1		1,484,701,732.98	1,150,116,760.14
Including: Dividends receivable			199,878,498.10	828,200.00
△ 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			24,159,000,000.00	13,113,799,760.14
Other current assets			12,665,630,881.79	13,801,186,613.68
<b>Total current assets</b>			<b>73,634,931,445.83</b>	<b>53,912,859,954.83</b>
<b>Non-current assets:</b>				
△ Loans and advances				
Debt investments				18,000,000.00
☆ Available-for-sale financial assets				
Other debt investments				
☆ Held-to-maturity investments				
Long-term receivables			11,832,945,436.94	14,432,945,436.94
Long-term equity investments	2		221,081,883,078.89	207,625,209,649.13
Other equity instruments investments			3,403,047,148.54	1,674,017,468.50
Other non-current financial assets				
Investment properties				
Fixed assets			25,334,334,056.02	26,470,561,805.23
Including: Original value of fixed assets			45,022,327,624.79	44,969,470,307.68
Accumulated depreciation			19,687,993,568.77	18,498,908,502.45
Provision for impairment of fixed assets				
Construction in progress			1,161,030,068.26	764,848,579.29
Productive biological assets				
Oil and gas assets				
Right-of-use assets			55,896,784.67	62,138,954.38
Intangible assets			431,351,895.01	426,567,218.67
Development expenditures				
Goodwill				
Long-term deferred expenses				
Deferred tax assets			621,400,313.08	843,674,282.97
Other non-current assets			151,664,823,566.23	148,641,726,993.78
Including: Authorized reserve asset				
<b>Total non-current assets</b>			<b>415,586,712,347.64</b>	<b>400,959,690,388.89</b>
<b>Total Assets</b>			<b>489,221,643,793.47</b>	<b>454,872,550,343.72</b>

Balance Sheet of Parent Company (Continued)

December 31, 2021

Unit: RMB

Item	Note XIII	As at December 31, 2021	As at January 1, 2021
<b>Current liabilities:</b>			
Short-term borrowings		6,375,700,000.00	7,500,000,000.00
Δ Borrowings from central bank			
Δ Placements from banks and other financial institutions			
Financial liabilities held for trading		452,169,553.86	1,342,106,212.79
Δ Financial liabilities at fair value through profit or loss			
Derivative financial liabilities			
Notes payable			
Accounts payable		91,729,075.47	76,999,313.45
Advances from customers		844,468.25	
Contractual liabilities			
Δ Financial assets sold under agreements to repurchase			
Δ Deposits from customers, banks and other financial institutions			
Δ Securities borrowing			
Δ Securities underwriting			
Employee benefits payable		54,949,347.37	47,075,164.73
Including: Salaries payable			
Welfare payable			
#Including: Employee bonus and welfare funds			
Taxes payable		531,748,203.15	131,827,945.13
Including: Accrued tax		530,870,997.74	131,795,342.88
Other payables		3,076,145,985.31	2,953,862,315.35
Including: Dividends payable			
Δ Fees and commissions payable			
Δ Reinsurance accounts payable			
Held-for-sale liabilities			
Non-current liabilities due within one year		24,786,852,519.47	29,967,176,484.00
Other current liabilities		16,495,073,791.64	2,999,186,320.76
<b>Total current liabilities</b>		<b>51,865,212,984.52</b>	<b>45,018,233,756.21</b>
<b>Non-current liabilities:</b>			
Δ Reserve of insurance contract			
Long-term borrowings		69,984,643,080.00	55,990,339,664.00
Bonds payable		71,025,701,790.46	66,753,929,065.62
Including: Preferred shares			
Perpetual bonds			
Lease liabilities		31,489,933.15	35,093,704.66
Long-term payables			264,612.09
Long-term employee benefits payable			
Provisions		72,286,018.15	72,000,000.00
Deferred incomes		1,234,408,863.05	1,040,772,651.67
Deferred tax liabilities			
Other non-current liabilities			
Including: Authorized reserve fund			
<b>Total non-current liabilities</b>		<b>142,348,529,684.81</b>	<b>123,892,309,698.04</b>
<b>Total liabilities</b>		<b>194,213,742,669.33</b>	<b>168,910,543,454.25</b>
<b>Owners' equity:</b>			
Paid-in capital		211,781,023,501.31	211,781,023,501.31
State-owned capital		211,781,023,501.31	211,781,023,501.31
Capital from state-owned legal body			
Collective capital			
Private capital			
Foreign capital			
#Less: Payback capital			
Net paid-in capital		211,781,023,501.31	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		9,749,211,779.87	9,162,340,470.84
Less: Treasury shares			
Other comprehensive income		482,306,189.41	-20,534,662.34
Including: Foreign currency translation differences			
Special reserve			
Surplus reserve		30,806,562,921.00	29,298,938,793.61
Including: Statutory surplus reserve		20,229,261,595.92	18,721,637,468.53
Discretionary surplus reserve		10,577,301,325.08	10,577,301,325.08
#Reserve fund			
#Enterprise development fund			
#Return of investment			
Δ General risk provision			
Retained earnings		32,216,155,223.11	25,767,597,276.61
<b>Total owner's equity attributable to parent company</b>		<b>295,007,901,124.14</b>	<b>285,962,006,889.47</b>
*Non-controlling interests			
<b>Total owners' equity</b>		<b>295,007,901,124.14</b>	<b>285,962,006,889.47</b>
<b>Total liabilities and owners' equity</b>		<b>489,221,643,793.47</b>	<b>454,872,550,343.72</b>

Consolidated Income Statement

For the year ended December 31, 2021

Unit: RMB

Item	Note VIII	Year ended December 31, 2021	Year ended December 31, 2020
<b>I. Total Operating Revenue</b>			
Including: Operating revenue	56	136,027,269,251.14	111,638,065,785.86
Interest income	57	135,451,012,104.39	111,023,412,941.16
Premiums earned		573,438,996.84	614,651,901.30
Handling charges and commission income	58	2,818,149.91	943.40
<b>II. Total Operating Cost</b>		<b>93,253,822,406.50</b>	<b>71,013,631,908.86</b>
Including: Operating cost	56	69,897,676,359.02	51,264,895,487.73
Interest expenses	57	55,528,744.36	33,121,385.74
Fees and commissions expenses	58	3,385,154.46	2,886,667.20
Cash surrender amount			
Net expenses of claim settlement			
Net provisions for insurance liability reserves			
Policy dividend expenses			
Reinsurance expenses			
Taxes and surcharges		2,599,965,895.64	2,386,949,674.13
Selling and distribution expenses	59	260,944,444.62	180,410,449.68
General and administrative expenses	60	6,800,132,939.69	4,920,782,051.00
Research and development expenses	61	738,482,136.71	288,537,482.96
Financial expenses	62	12,987,706,732.00	11,936,068,710.42
Including: Interest expenses		12,738,180,754.58	9,226,760,669.10
Interest income		363,795,480.54	236,561,945.60
Net exchange losses (net gains to be listed with "-")		92,404,334.26	1,959,041,459.90
Others			
Add: Other incomes	63	1,841,500,081.56	1,162,333,644.98
Investment income (loss to be presented with "-")	64	15,814,637,020.32	14,227,028,915.37
Including: Investment income from associates and joint ventures		8,328,557,354.16	6,977,921,969.87
Gains on derecognition of financial assets at amortized cost			
Gain on foreign exchange (loss to be presented with "-")		-209.46	73,911.67
Net exposure to hedging gains (loss to be presented with "-")			
Gain from changes in fair value (loss to be presented with "-")	65	1,274,992,643.31	265,674,286.51
Loss on impairment of credits (loss to be listed with "-")	66	-368,411,431.94	-1,261,557,792.26
Loss on impairment of assets (loss to be listed with "-")	67	-273,083,609.71	-18,996,831.63
Gains on disposal of assets (loss to be presented with "-")	68	22,716,416.01	55,036,983,674.90
<b>III. Operating Profit (loss to be presented with "-")</b>		<b>61,085,797,754.73</b>	<b>55,036,983,674.90</b>
Add: Non-operating income	69	829,891,257.52	202,320,495.55
Including: Government grants		45,795,969.49	23,133,965.71
Less: Non-operating expenses	70	1,611,601,329.29	2,505,259,764.64
<b>IV. Profit Before Taxes (loss to be presented with "-")</b>		<b>60,304,087,682.96</b>	<b>52,734,044,405.81</b>
Less: Income tax expenses	71	10,059,629,064.05	9,284,220,519.29
<b>V. Net Profit (net loss to be presented with "-")</b>		<b>50,245,058,618.91</b>	<b>43,449,823,886.52</b>
(I) Classified according to attribution of the ownership			
Attributable to the owners of parent company		32,474,599,775.03	28,431,017,771.27
*Attributable to non-controlling interests		17,770,458,843.88	15,018,806,115.25
(II) Classified according to operating continuity			
Profit or loss from continuous operation		50,245,058,618.91	43,449,823,886.52
Profit or loss from termination of operation			
<b>VI. Other Comprehensive Income After Tax</b>		<b>-5,654,031,045.82</b>	<b>-12,511,943,805.29</b>
Other comprehensive income attributable to the owners of parent company (net of tax)	72	-4,789,784,499.15	-9,181,349,481.36
(I) Other comprehensive income not to be reclassified as profit or loss		337,406,901.66	-143,704,831.29
1. Changes in re-measured defined benefit obligations or net assets		10,885,965.11	-23,134,666.60
2. Portion of other comprehensive income not to be reclassified as profit or loss under equity method		211,460,877.58	-120,570,164.69
3. Change in fair value of investment from other equity instruments		315,060,058.97	
4. Change in fair value of the company's credit risk			
5. Others			
(II) Other comprehensive income to be reclassified as profit or loss		-5,337,191,400.81	-9,037,644,650.07
1. Portion of other comprehensive income to be reclassified as profit or loss under equity method		-408,321,641.53	-769,563,954.34
2. Change in fair value of other debt instruments		24,151,343.98	
3. Gain or loss from changes in fair value of available-for-sale financial assets			-3,333,713,418.73
4. Financial assets that can be reclassified as other comprehensive income			
*5. Gain or loss from reclassification held-to-maturity investments to available-for-sale financial assets			
6. Credit impairment provision from other debt investments		15,651,032.77	
7. Gain or loss on effective cash flow hedge		-195,524,706.13	79,909,719.57
8. Translation differences of financial statements in foreign currencies		-4,773,247,429.90	-5,014,276,996.57
9. Others			
*Other comprehensive income attributable to non-controlling interests (net of tax)		-854,246,546.67	-3,330,594,323.93
<b>VII. Total Comprehensive Income</b>		<b>44,591,027,573.09</b>	<b>30,937,880,081.23</b>
Total comprehensive income attributable to the owners of the parent company		27,674,815,275.88	19,249,648,289.91
*Total comprehensive income attributable to non-controlling interests		16,916,212,297.21	11,688,231,791.32
<b>VIII. Earnings per Share:</b>			
(I) Basic earnings per share			
(II) Diluted earnings per share			

**Income Statement of Parent Company**

For the year ended December 31, 2021

Company Name: China Three Gorges Corporation		Unit: RMB	
Item	Note XIII	Year ended December 31, 2021	Year ended December 31, 2020
<b>I. Total Operating Revenue</b>		613,120,335.08	488,838,352.70
Including: Operating revenue	3	613,120,335.08	488,838,352.70
Interest income			
Premium earned			
Handling charges and commission income			
<b>II. Total Operating Cost</b>		10,760,722,937.56	8,498,213,170.77
Including: Operating cost	3	429,833,356.01	417,201,672.90
Interest expenses			
Fees and commissions expenses			
Cash surrender amount			
Net expenses of claim settlement			
Net provisions for insurance liability reserves			
Policy dividend expenses			
Reinsurance expenses			
Taxes and surcharges		110,323,812.95	78,854,200.36
Selling and distribution expenses			
General and administrative expenses		2,827,563,375.11	1,989,972,885.83
Research and development expenses		482,361,052.03	253,062,742.19
Financial expenses		6,710,441,341.46	5,759,121,669.58
Including: Interest expenses		6,851,234,950.07	6,120,624,314.10
Interest income		125,923,049.41	185,799,034.95
Net exchange losses (net gains to be listed with "-")		-38,644,553.88	-193,006,877.89
Others			
Add: Other incomes		1,206,023,956.47	950,266,503.92
Investment income (loss to be presented with "-")	4	24,082,177,757.55	20,749,731,539.53
Including: Investment income from associates and joint ventures		1,015,304,222.21	837,691,643.20
Gain on derecognition of financial assets at amortized cost			
Gain on foreign exchange (loss to be presented with "-")			
Net exposure to hedging gains (loss to be presented with "-")			
Gain from changes in fair value (loss to be presented with "-")		1,168,023,927.35	105,642,393.76
Loss on impairment of credits (loss to be listed with "-")		40,529,152.76	
Loss on impairment of assets (loss to be listed with "-")			-16,173,964.16
Gain on disposal of assets (loss to be presented with "-")		935,100.40	319,300.85
<b>III. Operating Profit (loss to be presented with "-")</b>		16,464,987,292.05	13,780,410,955.83
Add: Non-operating income		991,755.18	8,106,727.22
Including: Government grants		-181,090.66	6,147,402.80
Less: Non-operating expenses		625,979,392.78	1,704,875,463.03
<b>IV. Profit Before Taxes (loss to be presented with "-")</b>		15,840,001,654.45	12,083,642,220.02
Less: income tax expenses		763,285,903.79	-37,529,105.01
<b>V. Net Profit (net loss to be presented with "-")</b>		15,076,715,750.66	12,121,171,325.03
(I) Classified according to attribution of the ownership			
Attributable to the owners of parent company		15,076,715,750.66	12,121,171,325.03
*Attributable to non-controlling interests			
(II) Classified according to operating continuity			
Profit or loss from continuous operation		15,076,715,750.66	12,121,171,325.03
Profit or loss from termination of operation			
<b>VI. Other Comprehensive Income After Tax</b>		502,366,374.98	-1,321,481,934.86
Other comprehensive income attributable to the owners of parent company (net of tax)		502,366,374.98	-1,321,481,934.86
(I) Other comprehensive income not to be reclassified as profit or loss		390,915,796.81	-1,938,849.74
1. Changes in remeasured defined benefit obligations or net assets			
2. Portion of other comprehensive income not to be reclassified as profit or loss under equity method		1,261,951.27	-1,938,849.74
3. Change in fair value of investment from other equity instruments		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		111,450,578.17	-1,319,523,085.12
1. Portion of other comprehensive income to be reclassified as profit or loss under equity method		111,450,578.17	21,483,711.05
2. Change in fair value of other debt instruments			
3. Gain or loss from changes in fair value of available-for-sale financial assets			-1,341,006,796.17
4. Financial assets that can be reclassified as other comprehensive income			
5. Gain or loss from reclassification held-to-maturity investments to available-for-sale financial assets			
6. Credit impairment provision from other debt investments			
7. Gain or loss on effective cash flow hedge			
8. Translation differences of financial statements in foreign currencies			
9. Others			
*Other comprehensive income attributable to non-controlling interests (net of tax)			
<b>VII. Total Comprehensive Income</b>		15,579,082,125.64	10,799,689,390.17
Total comprehensive income attributable to the owners of the parent company		15,579,082,125.64	10,799,689,390.17
*Total comprehensive income attributable to non-controlling interests			
<b>VIII. Earnings per Share:</b>			
(I) Basic earnings per share			
(II) Diluted earnings per share			

**Consolidated Cash Flow Statement**

For the year ended December 31, 2021

Company Name: China Three Gorges Corporation		Unit: RMB	
Item	Note VIII	Year ended December 31, 2021	Year ended December 31, 2020
<b>I. Cash Flows from Operating Activities</b>			
Proceeds from sales of goods or rendering of services		148,170,856,932.92	117,914,667,880.45
△Net increase in deposits from customers, banks and other financial institutions		-210,322,021.36	-899,077,514.06
△Net increase in loans from Central Bank			
△Net increase in placements from other financial institutions			
△Proceeds from premiums of original insurance contract			
△Net amount of reinsurance business			
△Net increase in the insured's deposits and investment			
△Net increase in disposal of financial assets at fair value through profit and loss			
△Proceeds from interests, fees and commissions		443,541,882.46	496,535,615.23
△Net increase of replacement from banks and other financial institutions			
△Net increase in repurchasing			
△Net cash received from securities brokering			
Refund of taxes		232,670,153.68	207,257,981.37
Proceeds from other operating activities		5,890,502,374.64	4,651,101,754.13
<b>Subtotal of cash inflows from operating activities</b>		154,527,249,322.34	122,350,485,717.14
Payments for goods and services		64,751,520,782.35	36,052,428,064.77
△Net increase in loans and advances to customers		567,944,442.90	-994,666.67
△Net increase in deposits with Central Bank and other financial institutions		554,117,490.62	-644,479,191.17
△Payments for cooperation under original insurance contract			
△Net increase of due from banks and other financial institutions			
△Payments for interests, fees and commissions		23,428,611.97	2,817,818.51
△Payments for policy dividends			
Payments to and for employees		10,765,570,837.20	8,939,461,881.85
Payments of taxes		20,777,932,485.21	18,088,469,678.47
Payments for other operating activities		7,937,030,200.05	7,819,770,501.73
<b>Subtotal of cash outflows from operating activities</b>		105,375,565,250.30	64,257,414,987.49
<b>Net cash flows from operating activities</b>		49,151,684,072.04	58,093,070,729.65
<b>II. Cash Flows from Investing Activities:</b>			
Proceeds from disposal of investments		69,539,449,692.54	92,434,886,649.91
Proceeds from return of investments		5,296,045,012.61	-4,733,271,793.24
Proceeds from disposal of fixed assets, intangible assets and other long-term assets		34,413,220.47	90,277,928.55
Proceeds from disposal of subsidiaries and other business units			204,824,045.58
Proceeds from other investing activities		264,967,251.09	184,714,600.14
<b>Subtotal of cash inflows from investing activities</b>		75,134,875,176.71	97,647,975,107.42
Payments for acquisition and construction of fixed assets, intangible assets and other long-term assets		82,766,888,738.95	92,905,999,009.13
Payments for acquisition of investments		94,586,220,820.94	105,718,137,348.10
△Net increase in pledge loans			
Net payments for acquisitions of investment in subsidiaries and other business units		11,417,741,200.49	26,040,280,094.51
Payments for other investing activities		565,547,912.33	24,925,966.66
<b>Subtotal of cash outflows from investing activities</b>		189,336,398,672.71	224,689,343,378.40
<b>Net cash flows from investing activities</b>		-114,201,523,496.00	-127,041,368,270.98
<b>III. Cash flows from financing activities:</b>			
Proceeds from investors		40,694,358,408.44	30,604,043,116.79
Including: Proceeds from non-controlling interests of subsidiaries		40,194,358,408.44	20,174,653,516.79
Proceeds from borrowings		213,607,438,475.41	170,591,808,202.75
Proceeds from other financing activities		1,124,819,159.16	60,768,000.00
<b>Subtotal of cash inflows from financing activities</b>		255,426,616,043.01	201,256,619,319.54
Repayments of borrowings		143,305,529,847.51	108,241,445,926.89
Payment for dividends, profit distribution or interest		31,408,739,839.17	26,658,135,505.41
Including: Distribution of dividends, profit to non-controlling interests of subsidiaries		9,270,405,542.55	7,718,933,472.66
Payments for other financing activities		11,548,478,987.29	1,154,434,614.70
<b>Subtotal of cash outflows from financing activities</b>		186,262,748,673.97	136,054,016,049.00
<b>Net cash flows from financing activities</b>		69,163,867,369.04	65,202,603,270.54
<b>IV. Effect of exchange rate changes on cash and cash equivalents</b>		-577,326,054.17	-1,562,388,109.92
<b>V. Net increase in cash and cash equivalents</b>	71	3,536,701,881.91	-5,708,082,380.71
Add: Beginning balance of cash and cash equivalents		35,010,792,137.78	40,718,874,518.49
<b>VI. Ending balance of cash and cash equivalents</b>		38,547,494,019.69	35,010,792,137.78

Cash Flow Statement of Parent Company

For the year ended December 31, 2021

Item	Note XIII	Year ended December 31, 2021	Year ended December 31, 2020
<b>I. Cash Flows from Operating Activities</b>			
Proceeds from sales of goods or rendering of services		7,769,985.23	7,850,078.13
△Net increase in deposits from customers, banks and other financial institutions			
△Net increase in loans from Central Bank			
△Net increase in placements from other financial institutions			
△Proceeds from premiums of original insurance contract			
△Net amount of reinsurance business			
△Net increase in the insured's 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			
Proceeds from other operating activities		2,392,933,166.55	1,866,087,329.46
<b>Subtotal of cash inflows from operating activities</b>		<b>2,400,703,151.78</b>	<b>1,813,937,598.59</b>
Payments for goods and services		739,601,038.39	337,436,818.14
△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		694,150,217.63	565,061,534.73
Payments of taxes		541,012,776.69	388,422,435.62
Payments for other operating activities		2,129,115,642.08	3,097,328,820.29
<b>Subtotal of cash outflows from operating activities</b>		<b>4,103,879,474.79</b>	<b>4,388,249,608.78</b>
<b>Net cash flows from operating activities</b>		<b>-1,703,176,323.01</b>	<b>-2,574,312,018.19</b>
<b>II. Cash Flows from Investing Activities:</b>			
Proceeds from disposal of investments		65,234,973,172.70	94,418,114,633.05
Proceeds from return of investments		19,654,719,086.52	17,970,385,368.93
Proceeds from disposal of fixed assets, intangible assets and other long-term assets		92,285,807.56	2,356,544.09
Proceeds from disposal of subsidiaries and other business units			
Proceeds from other investing activities		2,600,000,000.00	6,800,000,000.00
<b>Subtotal of cash inflows from investing activities</b>		<b>87,581,978,066.78</b>	<b>119,190,856,546.07</b>
Payments for acquisition and construction of fixed assets, intangible assets and other long-term assets		784,736,754.03	382,951,044.61
Payments for acquisition of investments		94,868,084,583.27	139,659,742,003.61
△Net increase in pledge loans			
Net payments for acquisitions of investment in subsidiaries and other business units			
Payments for other investing activities			
<b>Subtotal of cash outflows from investing activities</b>		<b>95,652,821,737.30</b>	<b>140,042,693,048.22</b>
<b>Net cash flows from investing activities</b>		<b>-8,070,843,670.52</b>	<b>-20,851,837,492.15</b>
<b>III. Cash flows from financing activities:</b>			
Proceeds from investors		500,000,000.00	10,412,500,000.00
Including: Proceeds from non-controlling interests of subsidiaries			
Proceeds from borrowings		95,772,600,000.00	41,056,400,000.00
Proceeds from other financing activities		4,094,240.11	
<b>Subtotal of cash inflows from financing activities</b>		<b>96,276,694,240.11</b>	<b>51,468,900,000.00</b>
Repayments of borrowings		67,122,340,838.98	31,817,872,584.00
Payment for dividends, profit distribution or interest		13,197,244,057.78	10,790,266,554.98
Including: distribution of dividends, profit to non-controlling interests of subsidiaries			
Payments for other financing activities		46,631,820.14	63,066,129.08
<b>Subtotal of cash outflows from financing activities</b>		<b>80,366,236,716.82</b>	<b>42,671,205,268.06</b>
<b>Net cash flows from financing activities</b>		<b>15,910,457,523.29</b>	<b>8,797,694,731.94</b>
<b>IV. Effect of exchange rate changes on cash and cash equivalents</b>		<b>-11,017.13</b>	<b>-3,666,706.83</b>
<b>V. Net increase in cash and cash equivalents</b>	5	<b>6,136,426,512.63</b>	<b>-14,632,121,395.23</b>
Add: Beginning balance of cash and cash equivalents		25,439,675,213.98	40,071,796,609.21
<b>V1. Ending balance of cash and cash equivalents</b>		<b>31,576,101,726.61</b>	<b>25,439,675,213.98</b>

Consolidated Statement of Changes in Owner's Equity

For the year ended December 31, 2021

Company Name: China Three Gorges Corporation	For the year ended 31 December, 2021														
	Balance at the beginning of the year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Balance at the beginning of the year	211,791,023,561.31														
2. Add: Changes in accounting policies															
3. Correction of errors in prior period															
4. Others															
5. Balance on January 1, 2021	211,791,023,561.31														
6. Balance on December 31, 2021	217,927,450,074.14														
7. Total comprehensive income															
8. Total comprehensive income attributable to owner's equity															
9. Total comprehensive income attributable to equity holders of the parent company															
10. Total comprehensive income attributable to equity holders of the parent company															
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65. Total comprehensive income attributable to equity holders of the parent company															
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78. Total comprehensive income attributable to equity holders of the parent company															
79. Total comprehensive income attributable to equity holders of the parent company															
80. Total comprehensive income attributable to equity holders of the parent company															
81. Total comprehensive income attributable to equity holders of the parent company															
82. Total comprehensive income attributable to equity holders of the parent company															

Consolidated Statement of Changes in Owners' Equity (Continued)

For the year ended December 31, 2021

Item	For the year ended 31 December, 2020													
	Field in capital	Preferred shares	Other equity instruments	Capital reserves	Loan losses/deductions	Other comprehensive income	Special reserves	Reserve for contingencies	Reserve for risk provision	Residual earnings	Subtotal	Minority interests	Total owners' equity	
(I) Balance at December 31, 2019	211,791,823,503.21	—	1,304,024,827.76	24,611,082,321.68	-1,660,237,271.44	1,142,144.76	21,239,442,929.84	—	41,379,660,831.91	30,211,666,466.84	113,272,266,426.42	423,843,781,131.96		
ADD: Change in accounting policies	—	—	—	—	—	—	—	—	—	—	—	—		
(II) Balance at January 1, 2020	211,791,823,503.21	—	1,304,024,827.76	24,611,082,321.68	-1,660,237,271.44	1,142,144.76	21,239,442,929.84	—	41,379,660,831.91	30,211,666,466.84	113,272,266,426.42	423,843,781,131.96		
(III) Total comprehensive income	—	—	9,372,441,209.44	4,231,146,142.68	-9,851,432,510.42	-24,611.29	2,273,364,272.28	—	21,239,669,916.84	30,211,666,466.84	2,429,242,962.21	54,529,628,383.39		
(IV) Total comprehensive income to owners/attributable to owners	—	—	9,372,441,209.44	4,231,146,142.68	-9,851,432,510.42	-24,611.29	2,273,364,272.28	—	21,239,669,916.84	30,211,666,466.84	2,429,242,962.21	54,529,628,383.39		
(V) Total comprehensive income to non-controlling interests	—	—	—	—	—	—	—	—	—	—	—	—		
(VI) Profit distribution	—	—	—	—	—	—	—	—	—	—	—	—		
(VII) Profit distribution to owners/attributable to owners	—	—	—	—	—	—	—	—	—	—	—	—		
(VIII) Profit distribution to non-controlling interests	—	—	—	—	—	—	—	—	—	—	—	—		
(IX) Total comprehensive income to owners/attributable to owners	—	—	—	—	—	—	—	—	—	—	—	—		
(X) Total comprehensive income to non-controlling interests	—	—	—	—	—	—	—	—	—	—	—	—		
(XI) Balance at December 31, 2020	211,791,823,503.21	—	1,304,024,827.76	31,362,228,464.36	-1,113,044,154.05	94,205,475.79	23,512,807,202.12	—	62,619,330,748.75	60,423,332,933.68	141,242,603,675.79	477,941,927,279.44		

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Statement of Changes in Owners' Equity of Parent Company

For the year ended December 31, 2021

Item	For the year ended 31 December, 2021													
	Field in capital	Preferred shares	Other equity instruments	Capital reserves	Loan losses/deductions	Other comprehensive income	Special reserves	Reserve for contingencies	Reserve for risk provision	Residual earnings	Subtotal	Minority interests	Total owners' equity	
(I) Balance at December 31, 2020	211,791,823,503.21	—	9,372,441,209.44	8,142,146,479.44	8,379,271.14	—	32,294,075,094.47	—	23,174,176,381.77	24,611,666,466.84	—	284,318,846,927.27		
ADD: Change in accounting policies	—	—	—	—	—	—	—	—	—	—	—	—		
(II) Balance at January 1, 2021	211,791,823,503.21	—	9,372,441,209.44	8,142,146,479.44	8,379,271.14	—	32,294,075,094.47	—	23,174,176,381.77	24,611,666,466.84	—	284,318,846,927.27		
(III) Total comprehensive income	—	—	—	—	—	—	—	—	—	—	—	—		
(IV) Total comprehensive income to owners/attributable to owners	—	—	—	—	—	—	—	—	—	—	—	—		
(V) Total comprehensive income to non-controlling interests	—	—	—	—	—	—	—	—	—	—	—	—		
(VI) Profit distribution	—	—	—	—	—	—	—	—	—	—	—	—		
(VII) Profit distribution to owners/attributable to owners	—	—	—	—	—	—	—	—	—	—	—	—		
(VIII) Profit distribution to non-controlling interests	—	—	—	—	—	—	—	—	—	—	—	—		
(IX) Total comprehensive income to owners/attributable to owners	—	—	—	—	—	—	—	—	—	—	—	—		
(X) Total comprehensive income to non-controlling interests	—	—	—	—	—	—	—	—	—	—	—	—		
(XI) Balance at December 31, 2021	211,791,823,503.21	—	9,372,441,209.44	8,142,146,479.44	8,379,271.14	—	32,294,075,094.47	—	23,174,176,381.77	24,611,666,466.84	—	284,318,846,927.27		

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### 3. Key Audit Matter

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the year ended December 31, 2021. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Accuracy of operating cost	
Key Audit Matter	Summary of the Audit Approach
As refer to Notes VIII. 56 to the consolidated financial statements, Three Gorges Corporation recognized RMB 69.87 billion of operating cost during the year 2021 which mainly consists of the generating electricity cost, which amounting to RMB 41.74 billion.	Our audit procedures included, among others: --Attending and performing stocktaking of the fixed assets. --Examining the accuracy of ownership and classification of the fixed assets.
The generating electricity cost of Three Gorges Corporation mainly consists of depreciation cost of fixed assets and financial levies, etc. which have significant impacts on financial statements.	--Examining the validity of the increase or decrease of the fixed assets, as well as the accuracy of accounting treatments including interest capitalization, etc.
Accordingly, we identify the operating cost as the key audit matter.	--Recalculating the accuracy of fixed assets depreciation and financial levies included in operating costs. --Performing analytical review on the reasonableness of the operating cost for the current and prior years and obtaining sufficient audit evidence if there exist abnormality. --Assessing the appropriateness on the disclosure of Three Gorges Corporation's operating cost.

### 4. Other Information

The management of Three Gorges Corporation (hereinafter referred to as the "Management") is responsible for other information. Other information comprises the information included in the Three Gorges Corporation 2021 annual report, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact. We have nothing to report in this regard.

### 5. 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 fair presentation; and designing, implementing and maintaining internal control which is necessary to enable that the financial statements are free from material misstatement, 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 have no realistic alternative but to do so.

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

## 6. 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 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 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 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.

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.

We also provide those charged with governance with a statement that we have complied with those relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and related safeguards, where applicable.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation prohibited public disclosure about the matter or when, in rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.



April 29, 2022

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

# Corporate Culture

## Upholding the Leadership of Party Building

In 2021, under the strong leadership of the CPC Central Committee with President Xi Jinping at its core, the Party Leadership Group of CTG upheld the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, earnestly studied and implemented the spirit of the 19<sup>th</sup> National Congress of the Communist Party of China and all the 19<sup>th</sup> Plenary Sessions. With the warm celebration of the 100<sup>th</sup> anniversary of the founding of the Communist Party of China as the main line, CTG carried out in-depth study of party history, and solidly promoted the special action of "Central Enterprise Party Building Innovation and Expansion Year". The Group fully implemented the decisions and arrangements of the Party Central Committee and the State Council, as well as the work requirements of the SASAC Party Committee, comprehensively overfulfilled the annual production and operation tasks, successfully achieved a good start in the "14<sup>th</sup> Five-Year Plan" period, making positive contributions to the comprehensive green transformation of economic and social development.



CTG Party Leadership Group Theory Learning Center Group held a seminar on party history learning and education

CTG integrated the study of the Party's hundred-year struggle history and the comprehension of the history of the Three Gorges Project's hundred-year dream realization. The Party Leadership Group carried out over 80 studies throughout the year, driving the majority of cadres and workers to learn the history to be reasonable, confident, moral, and practical. It solidly carried out the practical activity of "I Do Practical Things For The Masses", and completed 67 tasks for the Party Leadership Group and 1,779 projects for the whole group on party history learning to do practical things held by the CTG Party Leadership Group Theory Learning Center Group.



CTG held a report meeting in Beijing to study and implement the spirit of Chinese President Xi Jinping's important speech at the National Party Building Conference of State-owned Enterprises

CTG promoted the special action of "Party Building Innovation and Expansion Year" of central enterprises, deeply carried out the "follow-up reexaminations" on the implementation of the spirit of the national conference on strengthening the Party building in SOEs. It continued to expand the responsibility system, institutional system, implementation system and guarantee system for the management of the party, and vigorously strengthened the team building of cadres and talents. It also promoted the deep integration of the party building work and central work, and comprehensively enhanced the political function and organizational power of grass-roots party organizations.



The Bureau of Publicity (CPC Committee Publicity Department), the Three Gorges Department of the Ministry of Water Resources, and CTG jointly held a state-owned enterprise open day event.

CTG held special activities such as the state-owned enterprise open day entitled "Hundred Years of Efforts, Century-old of Love for the Three Gorges". It built and made full use of the Three Gorges Project, the Jinsha River Giant Hydropower Station and other national demonstration bases for patriotic education and central enterprise demonstration bases for patriotic education, which were reported by the mainstream media throughout the year for 3093 times and appeared on "CCTV News" for 36 times, providing strong spiritual motivation for the implementation of the two-pronged development strategy for clean energy and environmental conservation in the Yangtze River Basin, as well as the acceleration of the building of a world-class enterprise.



The discipline inspection and supervision cadres supervise the discipline enforcement business training

CTG strengthened the education and guidance through pre-appointment talks, daily interviews and communications, pre-holiday warnings and other methods. It also formulated and improved the Employee Integrity Practice Regulations, and regularly carried out publicity and education month activities for the party spirit and incorrupt government education to strengthen the idea consciousness of "no desire for corruption".



The Youth Propaganda Group of CTG launched a lecture circuit to study and implement the spirit of the "July 1<sup>st</sup>" important speech

The Party Leadership Group of CTG led the Communist Youth League to start the implementation of the youth Marxist training project, and built 245 "National Youth Model Awards", 67 youth innovation studios, and 72 youth safety production demonstration posts around the central work. It also focused on helping the youth carry out activities such as apprenticeship, typical tree selection, acquaintance meetings, condensed the majestic youth force of "striving for clean energy and Yangtze River conservation and building a world-class enterprise".

## Playing an Exemplary Role



- ▶ The Construction Department of Baihetan Project won the National Advanced Grass-roots Party Organization in 2021
- ▶ Yang Zongli, Director of the Construction Department of Wudongde Project, won the honorary title of 2021 Stated-Owned Enterprise Model
- ▶ China Three Gorges Renewables Golmud Power Generation Co., Ltd. and Renewables Institute of Shanghai Investigation, Design and Research Institute Co., Ltd. (SIDRI) won the 2021 National Youth Model Award
- ▶ Yang Ning, staff of the Construction Department of Wudongde Project, won the honorary title of 2021 National Outstanding Youth

- ▶ Huang Guiyun, Associate Senior Specialist of the Yangtze Institute of Rare Plants, made it to the "List of Good Samaritans of China"

### List of CTG subsidiaries winning the National May 1 Labour Certificate

- ▶ China Yangtze Power Co., Ltd.
- ▶ Construction Department of Baihetan Project of China Three Gorges Construction Engineering Corporation
- ▶ Jiujiang Three Gorges Water Environment Comprehensive Treatment Co., Ltd. of Yangtze Ecology and Environment Co., Ltd.

### List of CTG subsidiaries winning the honorary title of National Workers Pioneer

- ▶ Flood Discharge Tunnel Intake Team of Baihetan Hydropower Station Supervision Department of Yangtze Three Gorges Technology & Economy Development Co., Ltd.
- ▶ Mechanical and Electrical Installation Division of Construction Department of Wudongde Project of China Three Gorges Construction Engineering Corporation
- ▶ Heating Center of Hubei Energy Donghu Gas Turbine and Thermal Power Co., Ltd.

### List of CTG subsidiaries winning the National May 1 Labour Medal

- ▶ Yang Zongli, Construction Department of Wudongde Project of China Three Gorges Construction Engineering Corporation
- ▶ Wang Zhilin, Construction Department of Baihetan Project of China Three Gorges Construction Engineering Corporation
- ▶ Chen Wenfu, Construction Department of Baihetan Project of China Three Gorges Construction Engineering Corporation



CTG awarded the honorary title of 2020 Outstanding Group to Construction Department of Wudongde Project of China Three Gorges Construction Engineering Corporation and other 15 groups



Mechanical and Electrical Installation Division of Construction Department of Wudongde Project



CTG awarded the honorary title of "2020 Outstanding Team" to 15 teams, including "Power Generation Department of Ezhou Power Generation Company of Hubei Energy Group Co., Ltd."



Construction Department of Baihetan Project



CTG awarded the honorary title of 2020 Labor Model to Tang Zhengyang, Deputy Director of Water Resources Research Center of China Yangtze Power Co., Ltd. and other 15 employees.



Dispatching Division of Qingjiang Dispatching Center of Hubei Energy Group Co., Ltd.

## Protecting Democratic Rights

In 2021, CTG insisted that the enterprise and its employees should develop and progress together. It guided employees to participate in enterprise management through democratic means, set up an electronic mailbox for suggestions, thus unblocking the channels for employees to express their suggestions and demands. The proposal processing of the Employee Representatives Congress was fully completed, and the completion rate and satisfaction rate both reached 100%.



completion rate of the proposals of the Employee Representatives Congress  
**100%**



satisfaction rate for the proposal of the Employee Representatives Congress  
**100%**

## Boosting Employee Development

In 2021, CTG vigorously discovered, selected and trained outstanding young leaders. It also explored a dynamic management mechanism for positions and ranks of managing personnel. Furthermore, it improved and perfected the transfer system, established a mechanism for the exchange and appointment of outstanding young managing personnel to expand the growth space for them.

On November 18, CTG held a talent working conference to summarize and review the talent work and make arrangements for the future.



Talent working conference

## Giving More Care to Employees

CTG adheres to the people-oriented principle, and has always been committed to serving employees and the enterprise development. It organizes a variety of recreational and sports activities, as well as condolences to overseas employees, retirees and employees in difficulty. It also provides young employees' marriage and relationship counseling, strive to improve employees' sense of happiness and fulfillment, mobilizing, exerting and protecting the initiative and enthusiasm of the majority of employees.

## Branding and Publicity

In 2021, CTG actively carried out positive publicity work, responded to sensitive public opinions in a timely manner, and created a favorable atmosphere for public discussions. It further inherited and carried forward the Three Gorges Project spirit. The core philosophy upgrade of corporate culture was basically completed, providing ideological guarantee, spiritual strength and public opinion support for the construction of a world-class clean energy enterprise of global competitiveness.



### The flame exhibition of Olympic Winter Games was successfully held in CTG

On December 15th, on the occasion of the sixth anniversary of the establishment of the Beijing Winter Olympics Organizing Committee and the anniversary of the contract signing with CTG, the flame exhibition of Olympic Winter Games was successfully held in CTG. The events were held in Fengjie County and Wushan County in Chongqing, Wan'an County in Jiangxi, Bairin Left Banner in Inner Mongolia and some schools in Liangshan Prefecture of Sichuan, Pishan County of Xinjiang with CTG's paired-up assistance, and branch venues set up in CTG's affiliated departments.



Flame Exhibition Site of Olympic Winter Games



Trophy of Top Ten Excellent Cases

### Chinese Enterprise Global Image Summit 2021

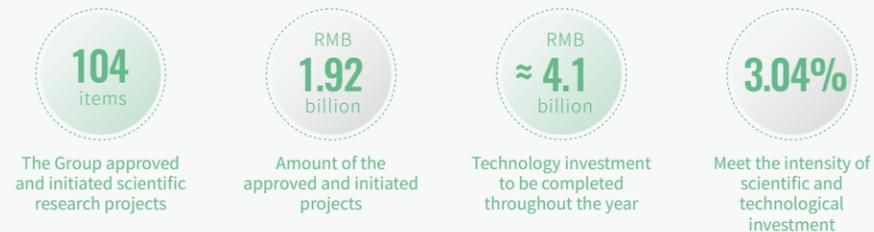
On December 6, the "Chinese Enterprise Global Image Summit 2021" with the theme of "Promoting Sustainable Development and Building a Better World" was held in Beijing. During the summit, the case of "Genetic Code" Helping Biodiversity Conservation declared by CTG News and Brand Center and Three Gorges Brazil Branch was rated as the first outstanding case of "Symbiosis with Nature" in the 2021 Chinese Enterprise International Image Construction Case Collection Activity. It was also selected as one of the "Top Ten Excellent Cases of Chinese Enterprises' Overseas Image Construction in 2021".

# Science and Technology Innovation

- CTG implemented the innovation-driven development strategy, and fully deployed the “14th Five-Year Plan” scientific and technological tasks
- CTG promoted the reform of science and technology management system and mechanism, and improved the continuous growth mechanism of science and technology investment
- CTG strengthened the integration of internal and external scientific and technological innovation resources, and promoted the construction of scientific and technological innovation platforms
- CTG enhanced efforts to tackle key core technologies and made fruitful technological innovation achievements

## Increasing Investment in R&D

CTG continued to increase investments in scientific and technological research and development through various channels, prepared annual scientific and technological investment plans, and provided financial support for launching scientific and technological projects. It completed the second-year work of the Yangtze River Water Science Research Joint Fund co-established with the National Natural Science Foundation of China and the Ministry of Water Resources, and launched the second-phase plan of the Yangtze River Ecological Environmental Protection and Restoration Joint Research Fund.



## Creating Innovation Platform

CTG has been approved with the National Engineering Research Center for Eco-environment in the Yangtze River Economic Belt, China's first self-built national science and technology innovation platform, and 4 provincial and ministerial science and technology innovation platforms. CTG has established new independent innovation research and development institutions such as the Renewable Energy and New Power System Engineering Research Center, the Hydropower Technology Innovation Center, the Green Hydrogen Technology and Application Innovation Center, and the Hydraulic Concrete Engineering Technology Research Laboratory. The CTG Wuhan Science and Technology Innovation Park was established as a platform for the construction, operation and incubation of scientific research achievements of Wuhan Science and Technology Innovation Base of CTG, and the innovation chain of CTG was further optimized.



## Advancing R & D Endeavors

On May 20, 2021, the unveiling ceremony of Chongqing Three Gorges Eco-Environmental Technology Innovation Center (hereinafter referred to as “Innovation Center”) was held in Chongqing. Lei Mingshan, Chairman of CTG, and Xiong Xue, Vice Mayor of Chongqing, jointly unveiled the Innovation Center.



All 3 key technological problems undertaken by CTG have been successfully completed

17 scientific research projects at national, or provincial and ministerial levels were successfully approved, with financial funds close to 300 million yuan

- ▶ Taking the lead in undertaking 2 “open competition” projects of the National Development and Reform Commission
- ▶ Leading 2 key R & D projects of the Ministry of Science and Technology in the 14th Five-Year Plan
- ▶ Undertaking 1 “open competition” project of the Ministry of Industry and Information Technology

Continuing to tackle key technological problems and vigorously supporting the demonstration application of the research results. CTG's 6 technical equipment have been listed as the first set of major technical equipment in the energy field in 2021.

1,000 MW Francis Hydro-turbine Generating Unit

10MW Offshore Wind Turbine

Intelligent centralized control, operation and maintenance system for friendly grid-connected wind-solar-storage stations

Complete set of equipment for offshore wind power VSC-HVDC transmission

Megawatt flywheel energy storage system suitable for inertia and frequency modulation support of new energy power stations

Complete set of equipment for domestic anti-typhoon semi-submersible floating offshore wind power generation system

The first (set of) major technical equipment  
6 items

## Strengthening Independent Innovation

22 awards of the Fourth Science and Technology Progress Award and Technological Invention Award of CTG

19 Science and Technology Progress Awards  
(2 first prizes, 5 second prizes and 12 third prizes)

3 Technological Invention Awards  
(1 first prize, 1 second prize and 1 third prize)

1075 awards for scientific and technological innovation achievements in 2021

## Developing Technical Standards

In 2021, 47 national standards and industry standards prepared by CTG were released and implemented, and the number of completed standards reached a record high, including 10 national standards such as “Basic Terminology of Hydropower Station”, and 37 industry standards such as “Specifications of Project Management for Hydropower and Water Resources Engineering” and “Technical Specification for Low-heat Portland Cement Concrete of Hydropower Projects”. CTG has newly undertaken the tasks of preparing 36 industry standards, including the “Specifications for Hydraulic Concrete Construction”, the “Guidelines for Designing Offshore Wind Turbine Foundation for Protection against Erosion”, and the “Guidelines for Designing of Tidal Current Power Plants”.

CTG has revised the technical standard system table of the Group, and formed the “Technical Standard System Table of China Three Gorges Corporation (2021 Edition)”. 37 CTG standards, such as “Technical Specification for Integrated Control System of Wind Turbine Generator System” and “General Technical Requirements for Zero Carbon Data Center”, were released and implemented in 2021, which provided sound technical support for the two-tracked approach for advancing clean energy development and the ecological conservation of the Yangtze River.

47 national standards and industry standards prepared by CTG were released and implemented

CTG newly undertook the tasks of preparing 36 industry standards

## Gaining Scientific Achievements

In 2021, CTG recommended 49 items (including 34 achievement awards and 15 people awards) to participate in appraising, and won 31 awards for science and technology achievements, including 5 special prizes, 11 first prizes, 11 second prizes and 4 third prizes, as well as 6 person awards, among which Academician Zhang Chaoran was awarded the title of Honorary Member of the International Commission on Large Dams.

CTG has organized and carried out special research on the intellectual property planning of CTG during the 14th Five-Year Plan period, prepared and completed the intellectual property benchmarking report and the intellectual property planning during the 14th Five-Year Plan period, which provides guarantee for guiding the implementation of the intellectual property efforts during the 14th Five-Year Plan period. In 2021, CTG has applied for 1,528 domestic patents, including 625 inventions, 891 utility models and 12 design patents; 951 patents have been authorized, including 98 inventions, 847 utility models and 6 design patents. It has applied for 35 overseas invention patents and 6 overseas utility model patents have been authorized. In addition, it has applied for 247 software copyright registrations, and 200 software copyrights have been obtained. The number of intellectual property applications and authorizations continued to increase year on year.

6 awards for people

31 awards for achievement

## Social Responsibility

2021 was the first year of the 14th Five-Year Plan and the starting year for China to consolidate and expand the achievements of poverty alleviation and effectively link up with rural revitalization, as well as the key year for CTG to implement the “two-tracked approach for clean energy and Yangtze River conservation” and step up the efforts to build a world-class enterprise. CTG has donated a total of 1.519 billion yuan, carried out 351 projects to fulfill its social responsibilities, and achieved a good start in shouldering its responsibilities for the 14th Five-Year Plan, which has fully demonstrated that CTG is ready to live up to its responsibilities.

Total external donation expenditure RMB 1.52 billion

Carried out social responsibility projects 351

### Fully demonstrated a responsible image of CTG

- ▶ 1 group and 1 individual won the commendation of National Poverty Alleviation
- ▶ Won 2 awards - Poverty Alleviation Donation Enterprise Award and Anti-epidemic Donation Enterprise Award of the 11th “China Charity Awards”
- ▶ Ranking 1st in the public welfare development index of SOEs (2021) by the Chinese Academy of Social Sciences
- ▶ Overseas social responsibility efforts won the “Prize for Overseas CSR Fulfillment at the Responsible Golden Bull Awards”
- ▶ 2 cases were included in China's Progress Report on Implementation of the 2030 Agenda for Sustainable Development (2021)
- ▶ 2 cases were included in the “Blue Book on Corporate Social Responsibility of Central Enterprises(2021) and “Research Report on Overseas Social Responsibility of Central Enterprises (2021)”



## Facilitating Rural Revitalization



Commended for National Poverty Alleviation 1 group 1 individual

Commended for Poverty Alleviation at provincial and ministerial levels 6 groups 7 individuals

Leadership Group Meetings in 2021 4 times

## Educational Support



- Built and expanded 5 kindergartens, 1 primary school and 1 middle school throughout 2021.
- Set up 32 CTG Inspirational Classes, donated 300 sets of “CTG Cyber Classes”, transferred 310 volunteer teachers and subsidized 6,365 immigrant college students.
- Successfully held “CTG-sponsored Kids’ Trip - Red Trip for Thousands of Teenagers” in different regions, which was attended by 1132 primary and secondary school students from various regions assisted by CTG, and once again received widespread attention and praise.
- Cooperated with the China Poverty-Alleviation Promotion of Voluntary Service to implement the “Preschooler Mandarin Project” for children in Yi Ethnic Areas, Liangshan, Sichuan, and helped 38,000 ethnic children in rural areas to popularize Mandarin.

## Medical Support

CTG continued to provide medical help with the Three Gorges Medical Assistance Fund to Wushan County, Fengjie County and Wan’an County, and accumulatively donated 62 negative pressure ambulances to Wushan County, Wan’an County, Bairin Left Banner, Pishan County and counties in the reservoir area of Jinshajiang River in Sichuan and Yunnan Provinces to enhance the capability of supported regions to cope with COVID-19 in a normalized manner; In addition, CTG joined hands with the Red Cross Society of China to build 10 rural health stations in Wushan County, getting through the “last kilometer” of grass-roots medical and healthcare. Moreover, CTG teamed up with Xinxing Cathay International Group to carry out the pilot project of precise medical assistance for the disabled in Wushan County, Fengjie County and Wan’an County, helping 125 people with hearing disabilities to receive free cochlear implantation surgery, assisting to let the hearing impaired persons in these regions hear again with targeted support from CTG.

## Industrial Support

Giving full play to its main business advantages, CTG signed clean energy investment agreements with four targeted supported counties and conducted roof distributed photovoltaic projects in the four counties as a whole to build model counties for rural revitalization of clean energy development. The 42.5 MW wind power project in Qingshantou, Wushan County and the 100 MW aquaculture-PV hybrid projects in Wan’an County have been completed and put into operation, with an average annual tax contribution of 10 million yuan per county.

## Cultural Support

The “Xiazhuang Culture Exhibition Hall” in Xiazhuang Village, Wushan County has taken on a new look, and the construction of a model village for rural revitalization has begun to take shape. The “Poetic Bailong” project dedicated to show poetic aesthetics in Bailong Village, Yongle Town, Fengjie County has been completed. Revolutionary sites such as Kang Keqing’s former residence in Luotang Town, Wan’an County, surrounded by green bamboo, have become new bases for red education. The Qidan-Liao cultural tourism industry and other supporting projects in Bairin Left Banner have effectively expanded the influence of tourism.

## Ecological Support

CTG adhered to the philosophy of “lucid waters and lush mountains are invaluable assets”, taking “water pollution treatment, water ecosystem restoration and water resources protection” as the entry point to implement comprehensive management of urban and rural water environment, and constantly enhance the economic and social value of the ecological environment in the supported regions. Besides, CTG implemented a comprehensive control project of urban and rural aquatic environment in Wan’an County to improve the urban and rural ecological environment. Moreover, CTG helped to purchase new energy and environmentally friendly sightseeing boats to reduce oil pollution and exhaust emissions from traditional cruise ships in Wushan County and Fengjie County’s Small Three Gorges Scenic Spot, ensuring the clearness of the river.

## Consumption Support

CTG directly purchased 43.19 million yuan in 2021, and helped to register sales of 37.24 million yuan, effectively reducing the risk of rural residents out of poverty returning to poverty with internal and external efforts, through online and offline events.

## Actively Providing Disaster Relief

When Henan and Shanxi were hit by extremely heavy rain storm and Tongliao in Inner Mongolia was stricken by blizzard, CTG immediately donated more than 50 million yuan to support disaster relief and post-disaster reconstruction, to help people in disaster-stricken areas resume work and life, and earnestly fulfill the social responsibility as a central enterprise.

## Fulfilling Social Responsibilities Overseas

40,000

units of COVID-19 nucleic acid sample preservation solution

1,320

kits of nucleic acid extraction and purification reagent

40,032

COVID-19 detection kits

### CTG won the “Prize for Overseas CSR Fulfillment at the Responsible Golden Bull Awards”

On December 3, 2021, the “13th Blue Book of Corporate Social Responsibility Launch Conference and ESG China Forum Winter Summit 2021” was held in Beijing where CTG won the “Prize for Overseas CSR Fulfillment at the Responsible Golden Bull Awards”.



### The second batch of COVID-19 supplies supported by CTG successfully arrived at the Karot Hydropower Project in Pakistan

On August 3, 2021, the second batch of special epidemic prevention materials for COVID-19 from CTG to support the Karot Hydropower Project in Pakistan successfully arrived at Islamabad International Airport. This shipment included 40,000 units of COVID-19 nucleic acid sample preservation solution, 1,320 kits of nucleic acid extraction and purification reagents, and 40,032 COVID-19 detection kits, which can meet the one-year nucleic acid detection volume for the Karot Project and effectively avoid the risk of outbreak in clusters.

### “Lantsang-Mekong Book House” public service activity was held at the Lycee Park Ngua School in Laos

On February 19, 2021, the “Lantsang-Mekong Book House” public service activity, co-sponsored by Beijing MW Foundation and China International Water & Electric Corporation of CTG and supported by the China Report, was held at the Lycee Park Ngua School in Laos. The completion ceremony of the school renovation supported by China International Water & Electric Corporation of CTG was also held at the same time.



On the newly built hard-surface playground on campus, the local students were performing Lao traditional dances

### The cases submitted by CTG were included in the Blue Book

On December 23, 2021, the “Building a Community with a Shared Future and Shared Responsibility - Research Report on Overseas Social Responsibility of Central Enterprises (2021) Launch Conference” sponsored by SASAC under the State Council was held in Beijing. The “Boldly Taking Corporate Social Responsibility Overseas and Actively Practicing the Concept of Common Development - China Three Gorges - Pakistan Scholarship Program”, submitted by CTG was included as an excellent case in the Blue Book.

# Development Milestones

1993

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



1996

The Gezhouba Power Plant integrated into CTGPC



1994

Construction of the Three Gorges Project kicked off



1997

The Three Gorges Project had a smooth closure of the river



2003

The TGP realized water impoundment, navigation, power generation and China Yangtze Power Co., Ltd. went public.

The TGP entered a development stage where construction and operation management were equally emphasized



2005

The rolling development of the Yangtze River basin got started

Xiluodu Hydropower Project kicked off construction



2006

Xiangjiaba Hydropower Project kicked off construction



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 were completed

Three Gorges Power Plant came into full operation

China Water Investment Corporation was restructured



2009

Power generation assets of the TGP went public

CTGPC was renamed China Three Gorges Corporation (CTG)



2010

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

China Three Gorges New Energy Company was established



2011

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



2012

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



2014

Xiluodu Hydropower Station and Xiangjiaba Hydropower Station went into production and power generation

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



2016

The Three Gorges ship lift went into trial operation



2015

Wudongde Hydropower Station kicked off construction

Hubei Energy Group was integrated into CTG



2017

Baihetan Hydropower Station kicked off construction

CTG was changed from an enterprise owned by the whole people to a wholly state-owned company.



2018

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"



2019

The Three Gorges ship lift passed the completion acceptance

China Yangtze Power Co., Ltd. successfully won the bid for Luz del Sur S.A.A.



2020

The Three Gorges Project won the Special Prize in the National Science and Technology Progress Awards

The Three Gorges Project passed completion acceptance

The first generating units of Wudongde Hydropower Station were put into operation



2021

The first generating units of Baihetan Hydropower Station were put into operation

CTGR went public

The headquarters of CTG was relocated to Wuhan





## Major Subsidiaries

### China Three Gorges Construction Engineering Corporation (CTGCE)

China Three Gorges Construction Engineering Corporation (CTGCE), a wholly-owned subsidiary of CTG, is an investment, construction, management and consulting company that provides clients with professional services throughout the industrial chain of large and medium-sized hydropower projects, pumped storage power stations, water conservancy projects and public infrastructure projects worldwide.

CTGCE, formerly the engineering construction sector of CTG that was founded in 1984, was established in July 2015 by integrating the professional and technical forces of the construction sector. It is the major company for the development and construction of large-scale hydropower projects, and is fully responsible for the construction and management of domestic and international hydropower projects. CTGCE has completed 52.96 GW of hydropower installed capacity and has 16.72 GW installed capacity under construction was, among which 5 hydropower stations, including Three Gorges, Baihetan, Xiluodu, Wudongde and Xiangjiaba, ranked among the top 12 in the world.

CTGCE is extensively involved in the development and construction of pumped storage, wind and solar energy, public infrastructure and other projects, and its engineering consulting and supervision business are all over the world. It has mainly developed and constructed 4 giant hydropower stations in the lower reaches of the Jinsha River, including Xiluodu, Xiangjiaba, Wudongde and Baihetan. Pumped storage power stations such as Changlongshan and Tiantai in Zhejiang Province are under construction. It has also undertaken projects of Jinsha River resettlement accommodation roads, bridge engineering, navigation buildings, ports and wharfs, municipal engineering and construction (such as the Water Cube in Beijing). CTGCE has also built the Murum Hydropower Station in Malaysia, and is building the Karot Hydropower Project and the Kohala Hydropower Station in Pakistan.



### China Yangtze Power Co., Ltd. (CYPC)

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 with the approval of the State Council. It has been listed on the Shanghai Stock Exchange since November 2003 with the stock code of 600900.

CYPC is the largest listed power company in China and the largest listed hydropower company in the world. At present, it owns all the power generation assets of 4 hydropower stations on the main stream of the Yangtze River, namely, Three Gorges, Gezhouba, Xiluodu and Xiangjiaba, with an installed capacity of 45.6 GW. In 2021, while insisting on strengthening and optimizing the main business of hydropower, CYPC actively carried out strategic investment in the upstream and downstream of the industrial chain and related emerging fields. At the same time, it promoted the development of renewable energy integrated with wind-solar-hydro and storage in the downstream of Jinsha River in an orderly manner, and carried out in-depth research on the operation and scheduling of hydro-wind-solar hybrid projects. Moreover, it gave full play to the core competence of large hydropower operation and maintenance, deployed and promoted the development of pumped storage business with high quality, promoted the intelligent integrated energy business, innovated and launched the urban green integrated energy manager model, and actively explored the integrated development of "source, grid, load and storage".

By the end of 2021, CYPC's total assets had amounted to 328.56 billion yuan, with a decrease of 1.0% from the beginning of the year. The asset-liability ratio was 42.1 percent, representing a decrease of 4.1 percentage points from 2020. CYPC has achieved a total profit of 32.41 billion yuan, and its total market value has exceeded 500 billion yuan within the year.



## China Three Gorges International Corporation (CTGI)

China Three Gorges International Corporation (CTGI), established on August 30, 2011, is a wholly-owned subsidiary of CTG with a registered capital of 29.6 billion yuan. By the end of 2021, CTGI had total assets of 102.98 billion yuan, net assets of 48.79 billion yuan and asset-liability ratio of 52.6 percent.

CTGI carries the important mission of CTG to implement the “going global” strategy and build a world-class clean energy group. It has made remarkable achievements in international market development, overseas mergers and acquisitions, engineering construction, and

power station operation and management. Through green field investment, equity mergers and acquisitions and other efforts, CTGI has extensively participated in overseas clean energy cooperation, and achieved fruitful results in serving and implementing the “Belt and Road” Initiative.

By the end of 2021, CTGI had 82 wholly-owned and overseas holding subsidiaries. It wholly owns 2 secondary companies, China Three Gorges International Limited and Three Gorges Development (Malaysia) Co., Ltd. It also uses China Three Gorges International Limited as its

overseas investment platform, and has set up China Three Gorges (Europe) Co., Ltd., China Three Gorges South Asia Investment Co., Ltd., China Three Gorges (Brasil) Co., Ltd., Hydro Global Investment Limited and other investment companies. CTGI is the single largest shareholder of Energias de Portugal (EDP) with its China Three Gorges (Europe) Co., Ltd. owning 19 percent of EDP's shares.

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

Stock Code:

**600905**

With the mission of developing renewable energy, China Three Gorges Renewables (Group) Co., Ltd. (CTGR, Stock Code: 600905) is the strategic implementation force of CTG's renewable energy business.

CTGR has been actively involved in projects of onshore wind power and photovoltaic power generation, vigorously developed offshore wind power, accelerated the construction of large-scale wind power and photovoltaic power generation bases focusing on Gobi deserts and wilderness, further promoted the integration of

source, grid, load and storage, and the development of multi-energy complementary, and actively developed pumped storage, renewable energy storage, hydrogen energy, photothermal and other businesses. At the same time, investment in industries that are highly related to renewable energy business and have complementary advantages and strategic synergies, has basically formed a business pattern of mutual support and coordinated development with wind power and solar energy at the core and supported by small and medium-sized hydropower and strategic investment.

On June 10, 2021, CTGR was successfully listed on the A-share market, setting a number of capital market records such as “the largest IPO in the history of China's power industry” and the “renewable energy listed company with the highest A-share market value”.

In 2021, CTGR fully exceeded its established targets, generating 33.07 TWh of electricity, with total assets of nearly 210 billion yuan. Its operating revenue and profit reached new highs, achieving double-digit growth, and its profitability ranked in the forefront of the domestic industry.

As the implementation company of the renewable energy business of CTG, CTGR has been focusing on the strategic objectives of being “a stellar provider of wind and solar power” and “a leading player of offshore wind power”. It has always attached equal importance to scale and efficiency, implemented the strategy of differentiated competition and cost leadership, and strove to build a new energy company with well-structured industry, excellent asset quality, remarkable economic benefits and advanced management level, making new contributions to the realization of the “New CTG Dream”.



## Yangtze Ecology and Environment Co., Ltd. (YEEC)

CTG has played a pivotal and leading player in well-coordinated environmental conservation of the Yangtze River. Yangtze Ecology and Environment Co., Ltd. (YEEC), being as the implementation force of CTG to carry out well-coordinated environmental conservation of the Yangtze River, was officially established in Wuhan on December 28, 2018, with a registered capital of 30 billion yuan.

With the mission of “conserving the Yangtze River and contributing to green development” and the vision of “keep the waters of the Yangtze River clear and build a first-class enterprise”, YEEC is taking urban sewage treatment as the lynchpin and gradually carrying out water ecosystem restoration, and water resources protection to promote the overall improvement of water environment and water ecosystem quality of 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 operates state-owned assets in accordance with the law.

By the end of 2021, YEEC had signed projects with an investment of more than 150 billion yuan, with its business area expanding from 4 pilot cities, Jiujiang in Jiangxi, Wuhu in Anhui, Yueyang in Hunan and Yichang in Hubei, to 85 cities, counties and districts in 11 provinces and cities in the Yangtze River Economic Belt. It has been widely praised and recognized by the Office of the Leading Group for Promoting the Development of the Yangtze River Economic Belt, local governments and all sectors of society.



## Hubei Energy Group Co., Ltd. (HEG)

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 introduced CYPIC and China Guodian Corporation as strategic investors; in 2008, HEG was restructured into a company limited; in 2010, it was listed as a whole (Stock Code: 000883. SZ); in 2015, it introduced CTG as the controlling shareholder through non-public offering.

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 spread 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. HEG holds shares of multiple listed companies or financial enterprises such as Changjiang Securities, Changyuan Electric Power, and Changjiang Property & Casualty Insurance.

By the end of 2021, 11.69 GW of controllable installed capacity has been put into operation by HEG, with total assets of 73.07 billion yuan and an asset-liability ratio of 50.3 percent. In 2021, it has completed power generation of 36.8 TWh, realized an operating revenue of 22.62 billion yuan and a net profit of 2.4 billion yuan.

## China International Water & Electric Corp. (CWE)

China International Water & Electric Corp. (CWE) is a wholly-owned subsidiary of CTG. It is the first state-owned hydropower enterprises in China to engage in international economic cooperation. CWE was established in 1983. Its origin can be traced back to the Ministry of Water Resources and Electric Power more than half a century ago. The current name was launched in 2017 after the corporate restructuring.

CWE owns prominent main businesses in water conservancy and hydropower, with rich experience in infrastructure construction such as power transmission and transformation, road

and bridge, and port dredging. It has set foot in more than 80 countries and regions in Asia, Africa, Europe and the United States, with permanent overseas offices in 32 countries and regions. CWE has the first-class national qualification for general contracting of water conservancy and hydropower projects, import and export trading rights, and AAA credit rating. It has passed the three-standard system certification for quality management, environmental management, and occupational health and safety management, and had the highest grade contractor license of all project categories in

Hong Kong, China. It has been ranked on ENR's list of the top 250 largest international contractors for 32 consecutive years, and has been ranked on ENR's list of the top 225 largest international design firms.

In 2021, CWE has achieved an operating revenue of 5.92 billion yuan and a total profit of 1.52 billion yuan, with a year-on-year increase of 72.1 percent.

## Shanghai Investigation, Design and Research Institute Co., Ltd. (SIDRI)

Shanghai Investigation, Design and Research Institute Co., Ltd. (SIDRI) was established in 1954. Starting from the planning and design of Xin'anjiang Hydropower Station, the first large-scale hydropower station in New China, which has developed into a large-scale Class A comprehensive design institute focusing on providing the whole process consultation and general contracting services for engineering projects, such as planning, survey, design, consultation, cost, monitoring (inspection), supervision, project management, investment and technical evaluation. In 2014, SIDRI joined CTG through restructuring and reorganization, with a registered capital of 611.65 million yuan.

SIDRI currently has two comprehensive Class A qualifications for engineering survey and engineering consulting, as well as 17 Class A qualifications and more than 20 Class B and other qualifications in various industries such as water conservancy, electric power, construction and environmental engineering. It has leading

professional equipment such as offshore exploration platforms, professional exploration vessels and wave-compensated marine drilling rigs, with 8 professional design institutes, including water conservancy and hydropower, new energy, ecological environment protection, survey and inspection, comprehensive planning, electric power planning, intelligent engineering, construction and municipal administration. In addition, it has set up 4 professional technical support centers, namely, investment evaluation center, engineering cost center, quality and safety supervision and inspection center and engineering construction technology consultation center. It owns 16 domestic and foreign branches, among which 14 are in China and 2 are overseas, including Beijing Branch, Hubei Branch, Tibet Branch, Inner Mongolia Branch and Pakistan Branch. The SIDRI team includes 2 experts who enjoy the special allowance of the State Council, 1 National Candidate of "Millions of Talent Project", 1 National Young

and Middle-aged Experts with Outstanding Contributions, and 5 experts selected for the "Provincial Talent Plan". By the end of 2021, SIDRI has won 11 National Science and Technology Progress Awards, 48 Provincial and Ministerial Science and Technology Progress Awards, 470 Provincial and Ministerial-level and above Engineering Technology Awards, and possessed 461 valid patents (including 110 invention patents). Moreover, SIDRI has edited or participated in preparation and publication of 54 technical standards of various types (including 12 national standards).

In 2021, SIDRI has achieved an operating revenue of 8.59 billion yuan, with a year-on-year increase of 234.3 percent, a total profit of 200 million yuan, a net profit of 180 million yuan and a return on net assets of 16.2 percent.

## China Three Gorges Capital Holdings Co., Ltd. (CTGC)

China Three Gorges Capital Holdings Co., Ltd. (CTGC) was established in March 2015 with a registered capital of 7.14 billion yuan. It is a service platform for new business cultivation, financial investment and capital operation of CTG. Relying on CTG's brand, industrial background and capital advantages, CTGC has continued to strengthen its capability to serve main business and achieved rapid, stable and healthy development.

CTGC has committed to serving the clean energy business, which is the main business of CTG, focusing on serving the well-coordinated environmental conservation of the Yangtze River. It has carried out investment layout around the upstream and downstream of the main industri-

al chain and strategic emerging industries, giving priority to wind power, solar power stations and distributed energy assets, charging piles, data centers, hydrogen energy, energy storage, energy conservation and environmental protection, as well as new technologies, new materials, and new business models of new energy industry chain. It has constantly adjusted and optimized its investment portfolio, and gradually formed three major business segments, namely, strategic direct investment, fund investment and financial leasing, explored the mode of integration of industry and finance, devoted itself to creating long-term wealth appreciation, and becoming the most innovative investment company in the field of clean energy.

CTGC has multiple professional investment and research teams in the fields of securities, PE, renewable energy technology and venture capital at all levels of its headquarters, leasing companies, funds and platform companies, with a total of 235 employees.

In 2021, the total capital assets of CTGC were 83.61 billion yuan, with net assets of 33.12 billion yuan and the asset-liability ratio of 60.4 percent. The total profit was 4.52 billion yuan and the net profit was 4.07 billion yuan.

## China Three Gorges Finance Co., Ltd. (CTGF)

China Three Gorges Finance Co., Ltd. (CTGF) is a non-bank financial institution approved by the People's Bank of China and established in November 1997 to serve CTG and its member units with a registered capital of 5 billion yuan.

As the "platform for capital pooling, settlement, and monitoring as well as financial services" of CTG, the CTGF adheres to the philosophy of "CTG first and service-oriented through stability and innovation". With the mission of "safeguarding capital security, creating financial value and serving the main business", it is responsible for providing centralized fund management, capital settlement, capital financing,

capital monitoring, financial industry development and research, financial strategy implementation and financial talent reserve for CTG. Externally, it connects with the financial market and capital market, and internally provides financial services to the member units of CTG, so as to improve the efficiency of capital management and reduce financing costs. It has gradually developed distinctive businesses such as electronic settlement services, deposits and loans, securities investment, entrusted wealth management and short-term capital allocation, which have played a positive role in improving the efficiency of capital use, promot-

ing internal capital financing and reducing the overall level of external liabilities and financing costs for CTG.

In 2021, CTGF has achieved an operating revenue of 2.2 billion yuan, with a total profit of 1.78 billion yuan and a net profit of 1.36 billion yuan.

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