



光大环境

EVERBRIGHT ENVIRONMENT

Stock Code: 257

Devoted to

Ecology and Environment
for a **Beautiful China**

March 2021



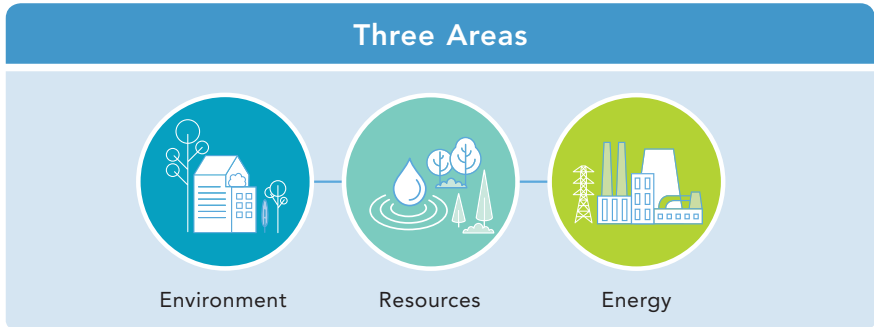
China Everbright Environment Group Limited (“Everbright Environment”), established in Hong Kong in 1993, is a backbone enterprise of China Everbright Group Ltd. Listed on the Main Board of The Stock Exchange of Hong Kong Limited (HKEX) (257.HK), the company has grown into **the largest environmental protection enterprise in China, a leading player in Asia’s environmental protection industry, the world’s largest waste-to-energy (“WTE”) investor and operator, and a world-renowned environmental group.** As the first one-stop integrated environmental solution provider in China, Everbright Environment focuses on the areas of environment, resources and energy, and proactively promotes the “Three Five Eight Seven” development strategy. It has two listed subsidiaries, China Everbright Greentech Limited (1257.HK) and China Everbright Water Limited (U9E.SG & 1857.HK). In 2020, Everbright Environment recorded a revenue **exceeding HKD40 billion**, with total assets **surpassing HKD150 billion** as of 31 December 2020.

Everbright Environment’s projects are located in **over 200 locations** across **23 provinces, municipalities** and **autonomous regions** in China. It has secured **over 470 projects**, with an aggregate investment **exceeding RMB140 billion.**

Overseas business footprint in Germany, Poland and Vietnam



The “Three Five Eight Seven” Development Strategy



Five Capabilities

Market Expansion
Project Construction
Project Operation
Equipment Manufacturing
Technological Innovation

Eight Business Sectors

Environmental Energy

- WTE and synergistic treatment
- To become the world's largest, technologically advanced and high-efficiency WTE investor and operator



Greentech

- Industrial waste treatment, environmental remediation, integrated biomass utilisation, solar energy, wind power and power storage
- To become China's leading intelligent energy supplier dedicated to "Carbon Neutrality" and industrial hazardous waste treatment investor and operator



Environmental Water

- Water environment management
- To become China's leading water environment management service provider



Equipment Manufacturing

- Research and development ("R&D") and manufacturing of environmental protection equipment like waste incineration facilities and relevant consumer products
- To become Asia's largest environmental protection equipment manufacturer and industrial service provider



Seven Aspects as Safeguards

Finance
Bidding and Procurement
Budget
Safety and Environmental Management
Human Resources
Efficiency
Corporate Culture


Eco-recycling

- Waste sorting and resource recycling
- To become China's top investor and operator specialised in full-process waste sorting and resource recycling, with the "Five Points in One Line" process model



Greenery

- Lighting services for different scenarios and purposes including urban streets, landscaping, education and agriculture, and solutions relating to the development of intelligent cities
- To become a domestically leading integrated service provider specialised in energy saving lighting and development of intelligent cities



Envirotech

- R&D of advanced and practical environmental technologies by utilising the "Four-in-One" technological innovation system
- To become a world-class centre dedicated to green technological innovation and commercialisation of research results



Environmental Planning

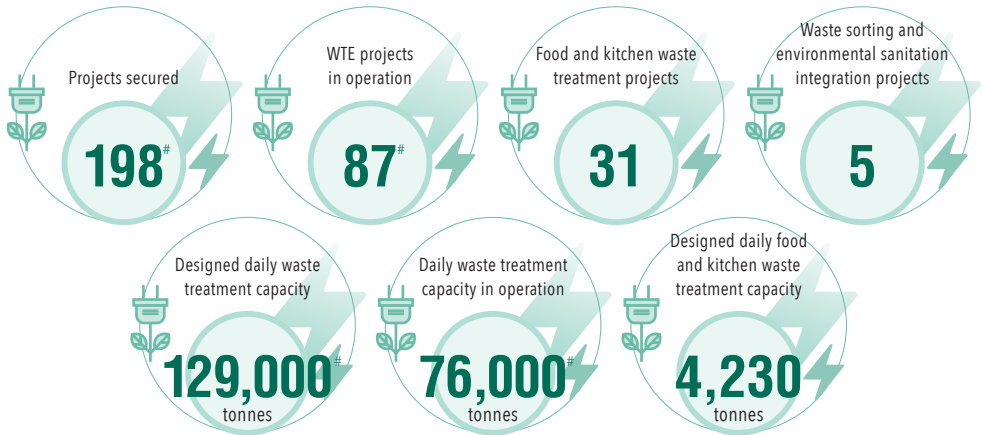
- Development of zero-waste cities and environmental governance planning
- To become China's top planning and design institute



Environmental Energy

The world's largest WTE investor and operator

As Everbright Environment's core business sector with the largest scale and highest business proportion, environmental energy covers WTE, food and kitchen waste treatment, sludge treatment and disposal, leachate treatment, fly ash treatment, methane-to-energy, construction and decoration waste treatment, development of environmental protection industrial parks, etc. The projects of the sector command a total investment surpassing **RMB83 billion**.



[#] including operation and management ("O&M") projects * as of 31 March 2021

Opening-up

Jiangsu Changzhou Waste to Energy Project is China's first fully opened "living room of the city" equipped with public amenities, being shortlisted in the first batch of the Primary Contact Points for the Key Projects of the CCGCEP*



Global layout

Vietnam Can Tho WTE Project was featured in a report series of CCTV's News Network Programme



Solution to NIMBY effect

Zhejiang Hangzhou WTE Project is considered a good example of quelling the Not-in-my-Backyard (NIMBY) effect and bringing positive impact to local communities



Garden-like plant

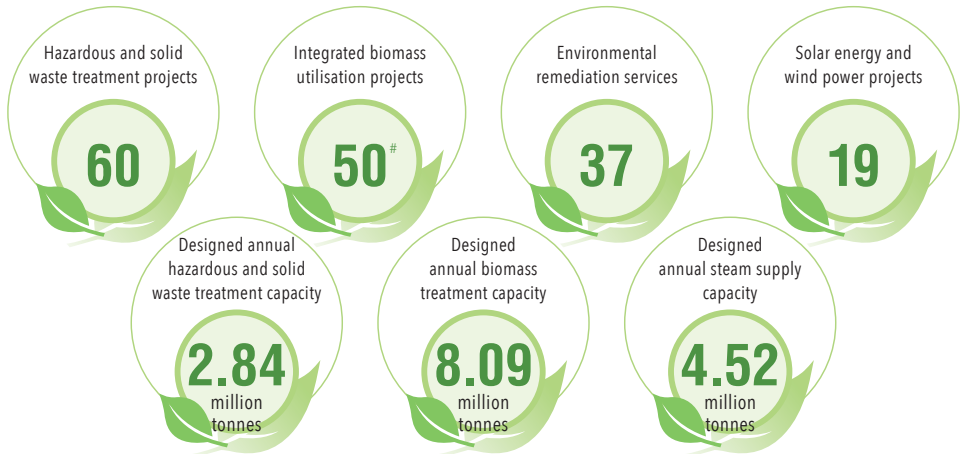
Guangdong Boluo WTE Project is regarded as a new environmental protection hub and ecological garden that integrates environmental protection education, ecological culture and green tourism

* CCGCEP stands for Central Commission for Guiding Cultural and Ethical Progress in China

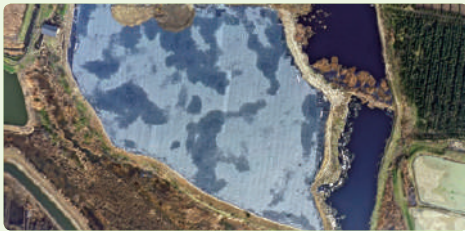
Greentech

China's leading intelligent energy supplier dedicated to "Carbon Neutrality" and industrial hazardous waste treatment investor and operator

China Everbright Greentech Limited ("Everbright Greentech") is listed on the Main Board of HKEX (1257.HK) and controlled by Everbright Environment. Everbright Greentech focuses on hazardous and solid waste treatment, environmental remediation, integrated biomass utilisation, solar energy, wind power, etc. Its projects command a total investment exceeding **RMB31 billion**, in addition to environmental remediation services with a total contract value surpassing **RMB1 billion**.



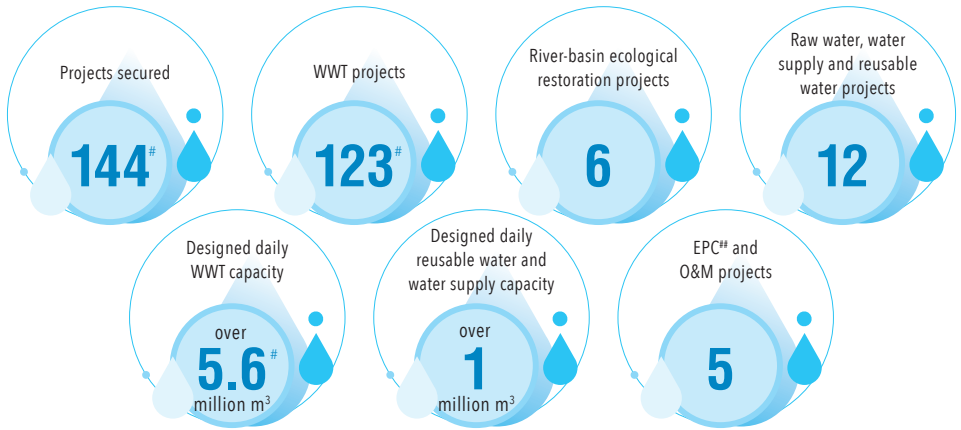
[#] including urban-rural integration projects * as of 31 March 2021



Environmental Water

China's leading water environment management service provider

China Everbright Water Limited ("Everbright Water"), controlled by Everbright Environment, is listed on the Mainboard of Singapore Exchange Securities Trading Limited and the Main Board of HKEX (U9E.SG & 1857.HK). Everbright Water has developed a fully-fledged business coverage, which includes raw water protection, water supply, municipal waste water treatment ("WWT"), industrial WWT, reusable water, river-basin ecological restoration, and sludge treatment and disposal. It has also formed a full industry chain in the water business, including project investment, planning and design, technology R&D, engineering and construction, operations management, among others. The projects of Everbright Water command a total investment **surpassing RMB25 billion**.



including O&M projects * as of 31 March 2021 ** EPC stands for engineering, procurement and construction



Equipment Manufacturing

China's backbone environmental protection equipment R&D institute and manufacturing service provider

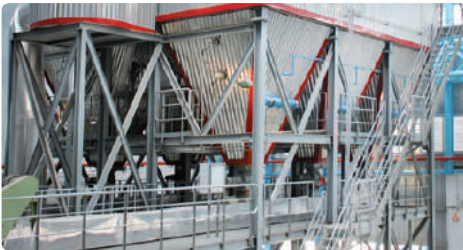
Headquartered in Changzhou City, Jiangsu Province, Everbright Environmental Technical Equipment (Changzhou) Limited represents Everbright Environment's equipment manufacturing sector, and is regarded as a leading environmental protection equipment supplier in China.

Equipment Manufacturing's independently-developed **grate furnaces**, with the processing capacity ranging from **300 tonnes/day to 1,000 tonnes/day**, **leachate treatment system** and **flue gas purification system** have tapped into the first-tier of the environmental protection equipment manufacturing industry. The self-developed equipment of the company has been exported to countries and regions in Southeast Asia, South Asia and North Africa. Equipment manufacturing is also actively exploring opportunities of **consumer products like water purifier**.



Everbright grate furnace series

- The self-developed grate furnaces with daily processing capacity ranging from 300 tonnes/day to 1,000 tonnes/day have received the Technological Advancement Award by the Ministry of Ecology and Environment of the PRC ("MEE")
- The 850 tonnes/day and 1,000 tonnes/day grate furnaces have filled the gap in the domestic market



Flue gas purification system

- The daily average level of online monitored gas emissions of Everbright Environment's projects is superior to the EU 2010 Standard (the Industrial Emissions Directive (2010/75/EU))
- Gas emissions of WTE projects fully comply with relevant national standards



Leachate treatment system

- Through years of effort in self-development and application, equipment manufacturing has formed its leachate treatment technology system, which is able to comply with standards for the discharge or reuse of leachate after treatment



Everbright water purifier series

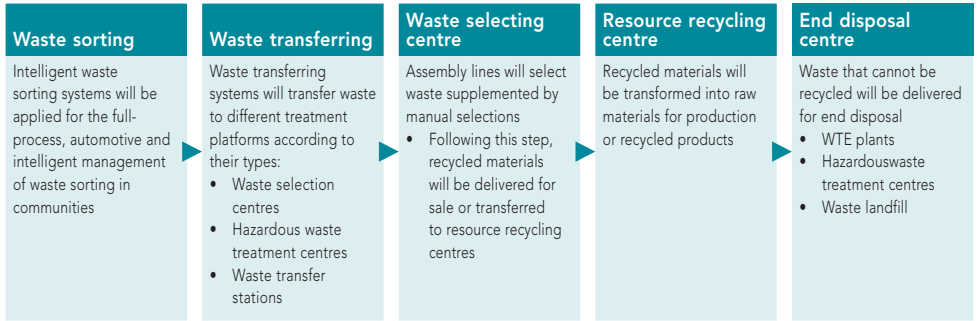
- Equipment Manufacturing launched the water purifier series in 2020, with filter membrane as the core technology. The purifiers could minimise harmful substances in tap water, as verified by professional institutions

Eco-recycling

Devoted to becoming China’s first-class investor and operator dedicated to waste sorting and resource recycling

Everbright Environment’s eco-recycling sector focuses on waste sorting and zero-waste cities, environmental sanitation integration and resource recycling. With the business focuses, eco-recycling has been improving the intelligence level of the waste sorting system and optimising the waste sorting categories at the front-end; integrating the waste collection, transferring and transporting processes at the middle-end, to connect waste sorting business at the front-end with the waste incineration and resource recycling at the back-end; developing resource recycling centres at the back-end, to improve the proficiencies of resource recycling and integrated utilisation, as well as the profitability of waste sorting business.

“Five Points in One Line” Process Model for Waste Sorting



Intelligent Waste Sorting Bins
 The intelligent bins independently developed by Everbright Environment for waste sorting have many features, such as tracing waste sources, working round-the-clock, unsupervised operating, etc.



Environmental Sanitation Integration

Eco-recycling is actively exploring opportunities relating to environmental sanitation integration and waste sorting. The sector’s Yunnan Yuxi Environmental Sanitation Integration Project, with a designed daily waste collecting and transferring capacity of approximately 800 tonnes, can satisfy the waste collection and transferring demand of the Hongta District of Yuxi City.



Greenery



Everbright New Sodium Lamp, lighting the way home

Everbright Environment’s greenery sector adheres to the development philosophy of “Green, Healthy and Intelligent” lighting. It focuses on the R&D, manufacturing and sales of energy-saving, healthy lighting products and core software and hardware relating to the development of intelligent cities that are based on greenery’s intelligent light poles. Greenery aims to provide lighting services for different scenarios and purposes including urban streets, landscaping, education and agriculture, in addition to solutions relating to the development of intelligent cities. By offering one-stop and tailor-made services based on three business models, namely energy management contract (“EMC”), EPC and direct sales, greenery targets to become a domestically-leading integrated service provider specialised in energy-saving lighting and development of intelligent cities.

As compared with high-pressure sodium lamp that is currently widely used for street lighting in China, **Everbright New Sodium Lamp** (the “Lamp”) is



60% smaller in size



Up to 50% lower in energy consumption

Advantages of the Lamp

- High light efficiency
- Good fog permeability
- Excellent lighting effect
- Healthy lighting features
- Low maintenance cost
- Ease of replacement
- Independent intellectual property

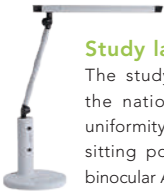
A wide range of application scenarios,

including road, bridge, railway, tunnel, airport, port, factory, square, greenhouse, etc.



Shandong Ji’nan Streetlight Retrofitting EMC Project is greenery’s first project in a provincial capital city, and is regarded as a new benchmark in the energy-saving lighting industry.

Greenery has by far secured multiple streetlight retrofitting projects in Shandong Province and Tianjin Municipality, based on the EMC and EPC models. In addition, it established the Greenery Intelligent Industrial Park in Ji’nan to produce the Lamp, LED lamp, intelligent light pole and other products, aiming to develop the industrial park into a key national innovation hub in the green lighting industry.



Study lamp series

The study lamp products comply with the national AA-level illuminance and uniformity standards; is able to monitor sitting postures of users based on the binocular AI algorithm to help users prevent myopia; and adopt LED installed with solar-like spectroscopic high color rendering index unisplendour chip, which help to reduce damages brought by Blu-ray, strobe, dazzling of the light. The product series has a wide range of choices, with a wide range of application scenarios.

Customised intelligent light pole

The light pole product series has comprehensive functions, including intelligent lighting, environment sensing, security monitoring, public safety rescue alarm, municipal facility monitoring and AI administration for urban areas. The products are considered to be a good platform for the digitalisation of intelligent cities with the “new infrastructure” and a good demonstration of the development of big data, green and low carbon cities.



Envirotech

Innovation and development driven by science and technology

Being the technology R&D innovation engine of Everbright Environment, the envirotech sector has substantially established the “Four-in-One” technological innovation and R&D layout with platforms in Hong Kong, Shenzhen, Nanjing and Qingdao cities, becoming a global platform dedicated to green technological innovation and technology conversion. Envirotech aims to better promote Everbright Environment’s strategic plan of pursuing development that is driven by technology and innovation, and to ensure the commercialisation of the R&D results.

In 2020, envirotech achieved good R&D progress and results in areas such as solid waste treatment, flue gas treatment, water treatment and intelligent control. In addition, the research project of technologies and application in relation to the efficient incineration of large household waste and control of sensitive secondary pollutants was awarded the first prize of the Tianjin Technology Invention Award, and the research project of technologies and application in relation to ecological recycling of urban reusable water was awarded the first prize of the China Construction Science and Technology Award.



1,008
Patents granted

796 utility patents
116 invention patents
91 software copyright licenses
5 appearance patents

* As of 31 December 2020



The self-developed plasma melting technology for fly ash treatment has been recognised to have complied with relevant international standards upon technical assessment.



Everbright-Qingdao University of Technology Institute of Technology and Environmental Technology was awarded a certificate of “Laboratory of Excellence” by the Environmental Resources Association’s international proficiency testing, for its excellent water dioxin testing capability.

Environmental Planning

Positioned to become China's first-class planning and design institute

Everbright Environment's environmental planning sector leverages on **Everbright Ecological and Environmental Planning and Design Institute ("Environmental Planning and Design Institute")** as the main platform, with a focus on the fields of environmental protection and energy. It strives to build core technological capabilities, expand the business scope and develop technological strength, to become a first-class planning and design institute in China.

Environmental Planning and Design Institute possesses a set of design and consultancy qualifications in areas such as electric power, municipal administration and environment, as well as the national qualification for pressure pipeline design.

The institute provides integrated solutions relating to WTE, biomass power generation, food waste treatment, etc. It has developed the design capacity of a full range of waste incineration treatment lines, with capacity ranging from 300 tonnes/day to 1,000 tonnes/day. It has also expanded the design and consulting services to food and kitchen waste treatment, waste landfill, sludge treatment and disposal, integrated slag utilisation, and medical waste treatment.

The institute will leverage on its advantages and engineering experience, to expand various consulting services, as it aims to gradually develop a service system that provides full-process engineering consultancy and full-cycle integrated services. The institute is also carrying out future oriented value-added businesses, such as 3D design, digital delivery, digital factory, engineering data centre, etc.



Rendering of the opening up and upgrading project of Everbright Environment Changzhou WTE Project



Rendering of Everbright Environment Tianjin Beichen WTE Project

Business Performance

- Since 2019, ranked **top in the list of Top 50 Environmental Protection Enterprises in China**
- In 2020, ranked **top** among listed Chinese environmental protection companies, in terms of **revenue and net profit**, by E20 Environment Platform.
- Since 2011, ranked **top in the Top 10 Influential Solid Waste Treatment Enterprises in China**
- Since 2018, **Mr. Wang Tianyi, Chairman of the board and CEO of Everbright Environment** named **Asia's Best CEO** for three years running
- In 2020, **Mr. Wang Tianyi** named the **2018-2019 Green China Person of the Year**
- Since 2014, included as a constituent stock of **Hang Seng China (Hong Kong-listed) 100 Index**
- Since 2013, included as a constituent stock of **MSCI China Index**



Corporate Governance

- In 2020, shortlisted in the **Top 10 Firms with Highest Corporate Governance Index Scores** by the Hong Kong Institute of Directors
- Since 2017, named **the Most Honored Company** in Asia for four consecutive years
- Since 2018, received multiple awards including **Best Corporate Governance**, **Best ESG Metrics** and **Best Investor Relations Company**
- In 2017, received **Hong Kong Corporate Governance Excellence Awards**

Social Responsibility and Sustainability

- In 2019, awarded the 2nd **Advanced Group on Ecological Civilization in China** and was among the **Top Ten Case Studies on Public Participation** by MEE
- In 2016, shortlisted among **Top 10 Green Companies in China** by **United Nations Environmental Programme**
- Since 2017, included in the **Sustainability Yearbooks** launched by RobecoSAM/S&P Global* for multiple times
- In 2020, received an award for **the enterprise' actions on climate change**
- Since 2014, included as a constituent member of **Hang Seng Corporate Sustainability Index**
- In 2016, included as a constituent member of **Dow Jones Sustainability World Index**
- Since 2016, included as a constituent member of **Dow Jones Sustainability Emerging Markets Index**
- Since 2017, included as a constituent member of **FTSE4Good Index**
- Since 2018, included in **Green Supply Chain CITI Index**



Member of **Dow Jones Sustainability Indices**
Powered by the S&P Global CSA



* The sustainability yearbook was previously led and published by RobecoSAM, but S&P Global has begun to lead the work since January 2020.

“ Create Better Investment Value and Undertake More Social Responsibilities ”

With a strong sense of social responsibility and mission, Everbright Environment actively takes part in social charitable activities relating to energy conservation, environmental protection education, charitable donations and environmental greening on a global scale.



- 🚩 To promote and adopt the Euro 2000 Standard (Directive 2000/76/EC) for WTE projects in China
- 🚩 To connect with local government authorities and share real-time project emission data
- 🚩 To disclose hourly average level of gas emissions of all its operating WTE projects
- 🚩 To open up its operating WTE projects for public visits, welcoming supervisions from the society
- 🚩 To open up its environmental protection facilities across all business sectors for public visits



2020 provided quality environmental services to safeguard people's living and environmental safety at home and abroad, and supported local anti-pandemic arrangements, during the COVID-19 pandemic period

November 2017 supported the planning and construction of sports facilities for children in Schönewalde, Germany

2014 – 2020 acted as lead sponsor of Earth Hour Hong Kong for many consecutive years

Since 2014 became a Double Diamond Member of WWF – HK

June 2013 established Everbright Environment Protection Charitable Foundation

Since 2010 engaged in poverty relief activities for Xinhua County of Hunan Province



October 2019 acted as lead sponsor of UNICEFHK's Adventure in the Wood activity, with the donation being used to help children and women in remote areas

Since 2018 supported and joined environmental protection initiatives in celebration of the World Environment Day on the 5th June, through multiple projects

2016 – 2019 sponsored Heifer International Hong Kong's "Read to feed" charity program

2015 supported Yan Oi Tong's Green City Exploration Tour

August 2013 set up Everbright Environment Charitable Foundation in Hong Kong

September 2011 established true love school in Dangshan County of Anhui Province



FEATURED PROJECTS



Jiangsu Changzhou WTE Project (800 tonnes/day) has been awarded as **the national AAA-rated WTE project**. Located closest to residential communities in China, it is the country's first fenceless WTE project that is open for public visits. The project was included in the compilation of most challenging projects since the 18th CPC National Congress and also shortlisted in the first batch of the **Primary Contact Points for the Key Projects of CCGCEP**

Jiangsu Suzhou WTE Project (3,550 tonnes/day)
among first batch of projects awarded as **the national AAA-rated WTE projects**

Jiangsu Wujiang WTE Project (1,500 tonnes/day)
a **national AAA-rated WTE project**

Jiangsu Changzhou Xinbei WTE Project (1,500 tonnes/day)
a **national AAA-rated WTE project**

Guangdong Boluo WTE Project (1,050 tonnes/day)
a **national AAA-rated WTE project**

Shandong Weifang WTE Project (1,500 tonnes/day)
a **national AAA-rated WTE project**

Shandong Rizhao WTE Project (1,000 tonnes/day)
a **national AAA-rated WTE project**

Hunan Yiyang WTE Project (800 tonnes/day)
a **national AAA-rated WTE project**

Anhui Ma'anshan WTE Project (800 tonnes/day)
a **national AAA-rated WTE project**



- Zhejiang Ningbo WTE Project (1,500 tonnes/day)** has been awarded as **the national AAA-rated WTE project**. It is also a benchmark green development project in China



- Jiangsu Nanjing WTE Project (4,000 tonnes/day)** has been awarded as **the national AAA-rated WTE project**. It is the largest WTE project in operation at Everbright Environment



- Zhejiang Hangzhou WTE Project (3,000 tonnes/day)** is a demonstration project that has successfully solved the NIMBY effect. It was awarded **the Luban Prize (National Quality Project)** by the Ministry of Housing and Urban-Rural Development of the PRC ("MOHURD")



- Shandong Ji'nan WTE Project (2,750 tonnes/day)** was awarded the **Luban Prize (National Quality Project)** by MOHURD



- Hainan Sanya WTE Project (1,050 tonnes/day)** has been awarded as **the national AAA-rated WTE project** and selected as a demonstration PPP (Public-private Partnership) project by the Ministry of Finance of the PRC

FEATURED PROJECTS

Anhui Lingbi Integrated Biomass and WTE Projects (Annual treatment capacity of 150,000 tonnes of household waste and 300,000 tonnes of straw)

First of this type and also the first integrated biomass and WTE projects that were constructed all at once in China



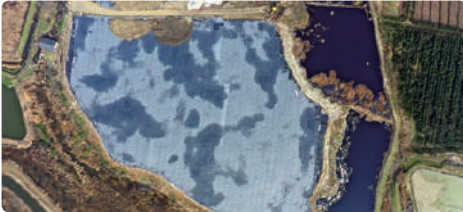
Anhui Lingbi Urban-Rural Integration Projects

Jiangsu Xinyi Hazardous and Solid Waste Treatment Projects (Annual treatment capacity of 88,000 tonnes)

Everbright Environment's first integrated hazardous waste treatment park that provides one-stop urban hazardous waste treatment solutions, such as waste incineration, landfill and harmless treatment of animal carcass



Jiangsu Xinyi Hazardous and Solid Waste Treatment Projects



- #### Jiangsu Suzhou Wujiang Qidu Waste Landfill Integrated Treatment Project

The project adopts technical processes that integrate vertical barrier, in-situ extraction, in-situ chemical oxidation/reduction, and bio-remediation



- #### Jiangsu Changzhou Chemical Plant Land Remediation Project

The project adopts technical processes that integrate cement kiln co-processing, chemical oxidation, room temperature analysis and risk control for soil remediation, and technical processes of in-situ high-pressure rotary spray chemical oxidation for underground water remediation



- #### Jiangsu Changzhou Rooftop Solar Energy Project (installed capacity of 3.7MW)

The project is located in the Wujin High-tech Zone of Changzhou City, the first demonstration cluster for green construction industry and low carbon development in China



- #### Shanxi Ningwu Wind Power Project (installed capacity of 96MW)

The project consists of the Changfangshan wind power plant and the Zhaojiashan wind power plant. It was awarded the High-quality Electric Power Construction Project, "Fenshui Cup" Construction Award and Excellent Project Certificate In Shanxi Province

FEATURED PROJECTS

Jiangsu Zhenjiang Sponge City Construction PPP Project

Among China's first batch of demonstration projects on both the PPP model and sponge city development



Jiangsu Zhenjiang Sponge City Construction PPP Project

Jiangsu Jianguyin WWT Project (190,000 m³/day)

A key demonstration project in the restoration of Taihu Lake



Jiangsu Jianguyin WWT Project



- **Shandong Ji'nan WWT Projects (1,225,000 m³/day)**
 - The projects were shortlisted for the 12 successful global PPP case studies at the 2016 International PPP Forum by United Nations Economic Commission for Europe (UNECE)
 - Plant 1 and 2 under the projects were regarded as the municipal Gold Cup demonstration projects



- **Shandong Zibo WWT Project (250,000 m³/day)**
 - China's first project located in a "heavy industrial city" that complies with the national Grade 1A standard. It is also the first project to have passed the clean production assessment with an excellent grading.



- **Shandong Ji'nan Huashan WWT Project (30,000 m³/day)**
 - It is Everbright Water's first full-underground WWT project and also Ji'nan's first large full-underground WWT project.



- **Jiangsu Nanjing Municipal Water PPP Project**
 - Everbright Water's first river-basin ecological restoration project

FEATURED PROJECTS



- Shandong Rizhao Streetlight Retrofitting EMC Project**

As greenery's first EMC project, it has retrofitted over 12,000 street lamps of Rizhao City by transforming the high-pressure sodium lamps with the Lamp, which is more energy efficient.



- Shandong Ji'nan Streetlight Retrofitting EMC Project**

As greenery's first project in a provincial capital city, it is mainly responsible for retrofitting over 120,000 street lamps in the urban districts of Ji'nan City. It is considered a project in the public interest because it involves no fiscal expenses.



- Greenergy Intelligent Industrial Park**

Located in the JN Pioneer Area of Ji'nan City, Shandong Province, the industrial park produces a series of intelligent lighting products, such as the Lamps, LED lamps and intelligent light poles. Upon completion of the construction work, the industrial park will become an intelligent industrial park and green lighting product R&D and production hub that includes the R&D, design and production of the Lamps, LED lamps, intelligent light poles and intelligent lighting systems.

CORE MANAGEMENT TEAM

Mr. Wang Tianyi
Chairman of the Board &
Chief Executive Officer

Mr. Yang Shiqiao
Deputy General Manager

Mr. Hu Yanguo
Deputy General Manager

Mr. Raymond Wong
Chief Financial Officer

Ms. Li Chunju
Deputy General Manager



Mr. An Xuesong
Deputy General Manager

Mr. Qian Xiaodong
Deputy General Manager

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Everbright Environment official website
www.cebenvironment.com



Everbright Greentech official website
www.ebgreentech.com



Everbright Water official website
www.ebwater.com



Everbright Environment
WeChat account



Everbright Greentech
WeChat account



Everbright Water
WeChat account



Everbright Equipment
Manufacturing
WeChat account



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