

## CORPORATE SOCIAL RESPONSIBILITY

2020  
ENLIGHTENING THE FUTURE



# TABLE OF CONTENTS

## PART 1 INTRODUCTION

1	About this CSR Report .....	03
2	Letter from our Chairman .....	04
3	About Hengtong Group .....	05

## PART 2 GLOBAL SUSTAINABLE DEVELOPMENT

1	Our internationalization approach .....	12
2	Global network .....	13
3	History of going global .....	14

## PART 3 OUR BUSINESS:CONNECT AND EMPOWER THE WORLD

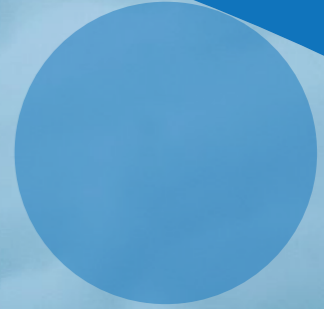
1	Financial and non-financial highlights .....	17
2	Contribute to our shareholders and investors .....	18
3	Product innovations .....	22
4	Hengtong innovation generation .....	37
5	Excellent quality .....	45

## PART 4 CORPORATE RESPONSIBILITY AT HENGTONG

1	Global presence .....	53
2	Change for better world .....	56
3	Responsibility to employees .....	61
4	Environmental sustainability .....	70
5	Care for our communities .....	75

GRI CONTENT INDEX .....	88
-------------------------	----

REPORTING PRINCIPLES .....	90
----------------------------	----



***PART 1***  
**INTRODUCTION**



## 1 About this CSR Report

This annual CSR (Corporate Social Responsibility) report is Hengtong's sixth edition, which is made on the basis of the principles of objectivity, standardization, integrity and transparency. It fully and fairly reflects the company's economic, social and environmental performances from January 2019 to December 2019.

### Time Span

The report covers from January 1, 2019 to December 31, 2019 in which some parts trace back to earlier times.

### Release Cycle

The report is an annual report.

### References Explanation

To facilitate description and explanation, "Hengtong Group Co. Ltd.", "Hengtong", "the Group" and "We" may all refer to "Hengtong Group" in this report.

### Scope of the Report

The branches, subsidiaries and professional institutions of Hengtong Group.

### Source of Data

The data cited in this report is from Hengtong's official documents and related statistics.

### Basis of Preparation

Guidance on Social Responsibility Reporting (GB/T36001), issued by State General Administration of the PRC for Quality Supervision and Inspection and Quarantine (AQSIQ) and the Standardization Administration of PRC (SAC)  
ISO 26000: Guidance on Social Responsibility (2010), issued by International Organization for Standardization (ISO)  
Sustainability Reporting Guidelines (G4), issued by Global Reporting Initiative (GRI)

### How to Get a Copy of the Report

This report is published in paper and electronic format which is available on the company website: [www.hengtonggroup.com/en](http://www.hengtonggroup.com/en).

## 2 Letter Of Chairman

Actively performing our social responsibilities has been the inexhaustible motive force for the sustainable development of the Group. It is our unswerving pursuit.

Ever since its establishment 29 years ago, Hengtong has always been striving to evolve into a world-respected enterprise that will last. Therefore, Hengtong has made great efforts to build a community of shared future with all its partners and integrated CSR into its development strategies and daily operations to achieve the goal of optimizing the Group's economic benefits and maximizing social efficiency.

Innovation is the primary driving force for the enterprise development. While unceasingly expanding its leading-edge positions in telecommunications and electric power, Hengtong makes great efforts in fostering new drivers for its development to boost the transformation, upgrading and high-quality development of the Group. The revenue of 2019 reached 110 billion RMB, with a some 8% year-on-year growth. Having some 20,000 employees, the Group has established 11 manufacturing bases in 8 countries and regions, and its products and services cover more than 150 countries and regions.

Hengtong has been continuously increasing its investment in the development of new products, new technologies and new fields. Its new generation of zero-pollution green optical fiber materials won the Green Manufacturing Project Award of the Ministry of Industry and Information Technology (MIIT). Two of its companies have successively been listed as the Green Manufacturing Demonstration Enterprise by the MIIT. Hengtong also vigorously promotes lean production, informatization and intelligentization, which help shift itself from green manufacturing to green and smart manufacturing. Today Hengtong has 21 demonstration factories certified by the Jiangsu government.

Hengtong commits itself to charity and the alleviation of poverty by helping to develop local industries and education, aiding disabled people, pairing up with poverty-stricken villages, and offering culture aid to those in need. Over the past years, the Group has donated over 650 million RMB to those in need, through benevolence, trying to transmit positive energy and express its values "help and love each other, share and achieve shared prosperity".

Now Hengtong's revenue has exceeded 100 billion RMB. Hengtong will continue to be "open and inclusive", carry out all-round cooperation with its partners, try its best to actualize its "four major transformations", speed up the realization of "5-5-5" targets for internationalization, accelerate the implementation of the "Four Major Strategies" to empower the industry, and practice the principle of green development to achieve sustained and high-quality development of all its businesses.



- The Most Beautiful Striver" in the 70<sup>th</sup> Anniversary of the Founding of New China
- National Model of the Times
- National Model Worker
- National Moral Model (Nomination)
- One Hundred Outstanding Private Enterprisers Since Reform and Opening for 40 Years
- National Splendid Builders of Socialism with Chinese Characteristics
- National Poverty Alleviation Dedication Award
- National Splendid Private Enterpriser Caring About Employees
- National Splendid Enterpriser
- National Charitable Enterpriser of Love
- Yuan Baohua Business Administration Gold Award
- "The Individual Donator" of Chinese Charity Award
- Outstanding Person of Dedication to China Guangcai Program in the 20<sup>th</sup> Anniversary
- Chinese Outstanding Dedication to Charity Award (for Individuals)
- Top 10 Philanthropists in China
- Executive Director of China Society for Promotion of the Guangcai Program
- Executive Director of China Charity Alliance
- Vice Chairman of Jiangsu Federation of Industry and Commerce
- Vice President of Jiangsu Society for Promotion of the Guangcai Program
- Chairman of Jiangsu Guangcai Foundation
- Vice President of Jiangsu Charity Federation
- Honorary President of Suzhou Charity Federation
- Jiangsu Splendid Philanthropists



materials. It has more than 70 wholly-owned and holding companies (including 3 listed companies) and properties in 13 provinces and municipalities in China and many countries and regions around the world.

**187** Ranking 187<sup>th</sup> in the List of Top 500 Chinese Enterprises

**54** Ranking 54<sup>th</sup> in the List of Top 500 Chinese Private Enterprises

**20000** Creating some 20,000 jobs all over the world

**TOP3** Among the top 3 optical-fiber communication enterprises

**TOP4** Among the top 4 in terms of global submarine communications-related delivery

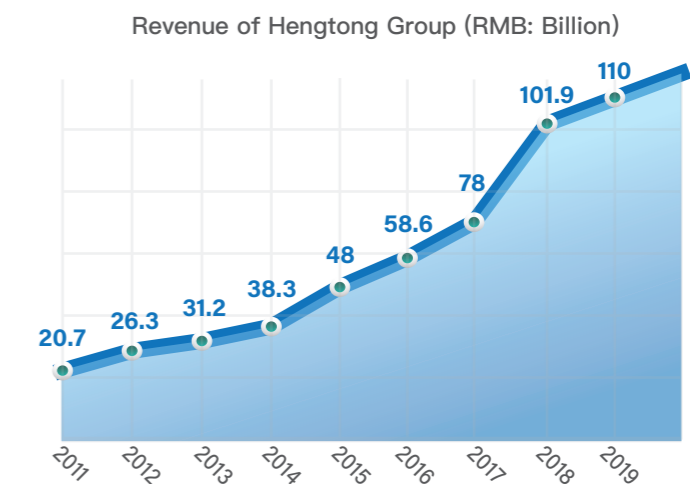
**TOP5** Among the top 5 in the field of EHV and submarine power transmission

**TOP10** Among the top 10 most competitive wire and cable enterprises of China

### 3 About Hengtong Group

Hengtong Group is the largest system integrator and network service provider in China's fiber optic network and smart grid industries. It ranks in the lists of top 500 Chinese Enterprises (187<sup>th</sup> as of 2019), the top 100 Chinese Private Enterprises (54<sup>th</sup> as of 2019), and among the world's top 3 optical-fiber communication enterprises.

Hengtong, founded in 1991, has been focusing on optical fiber & network and smart grid businesses and has become a national innovative enterprise also covering big data and the Internet of things, new energy and





Hengton Optic Comm. Tech Park (Wujiang District, Suzhou City, Jiangsu Province, China)



Hengton Wire&Cable Industry Park (Qidou Town, Suzhou City, Jiangsu Province, China)



Hengton Submarine Power Cable Industry Park (Changshu City, Jiangsu Province, China)



**PART 2**  
**GLOBAL SUSTAINABLE  
DEVELOPMENT**





“

To be strong, enterprises must participate in global competition; to be big, they must expand into global markets.

Enterprises that don't go global today will be absorbed by those do. CSR is the No. 1 responsibility. A great company shall have great sense of responsibility. Hengtong will bring along CSR wheresoever.

”

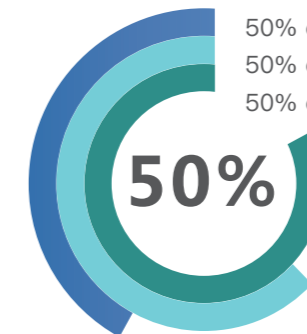
—Chairman Cui

## 1 Our Internationalization Approach



Hengtong Group had its CSR report selected into the China Industry CSR Reports issued by ChinaFederation of Industrial Economics on December 10, 2019.

### The “5-5-5” target of internationalization



50% of our products will be sold abroad  
50% of our capital will be international capital  
50% of our staff will be international talents

### The “Three-step” principle of going global





## 2 Global Network (As of December 31, 2019)

Guided under the concept of openness, inclusiveness, coordination and win-win development, Hengtong integrates global resources to build itself into a world-class company with global competitiveness.



Layout diagram of overseas industrial bases

11

11 Industrial Bases

40+

Sales & Marketing Branches in over 40 Countries

121

Registered trademarks in 121 countries

100+

Products & Services Covering more than 100 Countries

## 3 History of Going Global



In February 2019, Hengtong signed an agreement with Leoni to form a joint venture.



2002 Form a joint venture Japan Fujikura Co., Ltd.



2010 Having a joint venture with OFS



2011 Mergers and acquisition Furukawa Electric Xi'an Branch



2012 Launching its first overseas factory in Brazil



2015 Acquisition of Aberdare, South Africa



2015 Acquisition of Cablescom, Spain



2015 Acquisition of Alcobre, Portugal



2016 Cooperation with Voksel, Indonesia



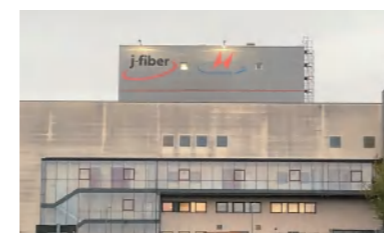
2017 Establishing Hengtong Optic-Electric India Pvt. Ltd



2019 A ground-breaking ceremony for the Hengtong PT. MBG in Indonesia



2019 Hengtong India's Capping and Launching Production



2019 The Establishment of j-fiber Hengtong in Germany



**PART 3**  
**OUR BUSINESS:**  
**TO CONNECT AND**  
**EMPOWER THE WORLD**

May the advent of Hengtong makes everyone's dream come true.

—Chairman Cui Genliang

# 1 Financial and Non-financial Highlights

## 1.1 Graphical representation:



# 2 Contribute to our shareholders and investors

## 2.1 Hengtong Group has three listed companies



HTGD was listed on the Shanghai Stock Exchange in 2003.  
Stock Code: SH600487



Hengxin was listed in Hong Kong in 2010.  
Stock Code: Hong Kong 1085



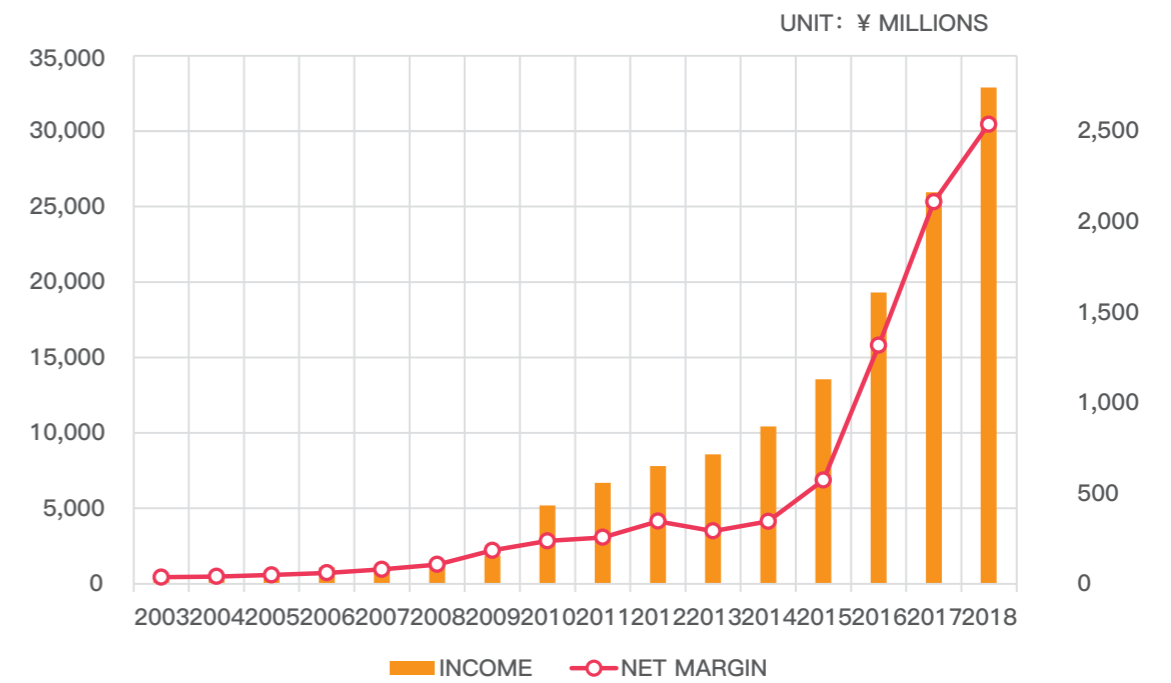
Voksel (an Indonesian company merged by Hengtong in 2015).  
Stock Code: Voksel

## 2.2 Graphical representation: Market value of HTGD



- Selected as the “New Beauty 50” on wall Street Goldman Sachs in 2017.
- Adopted into MSCI index system in 2018.
- Adopted into Shanghai and Shenzhen 300 index sample stocks in 2018 .
- In 2018, Hengtong became one of the nine listed companies in the A-share market “whose market value grows by ten times in the past decade” with a growth rate of 16.51 times according to the Chinese Listed Company Market Value Management Research Center, which published the “Ten-year market value long-distance running champion list.”

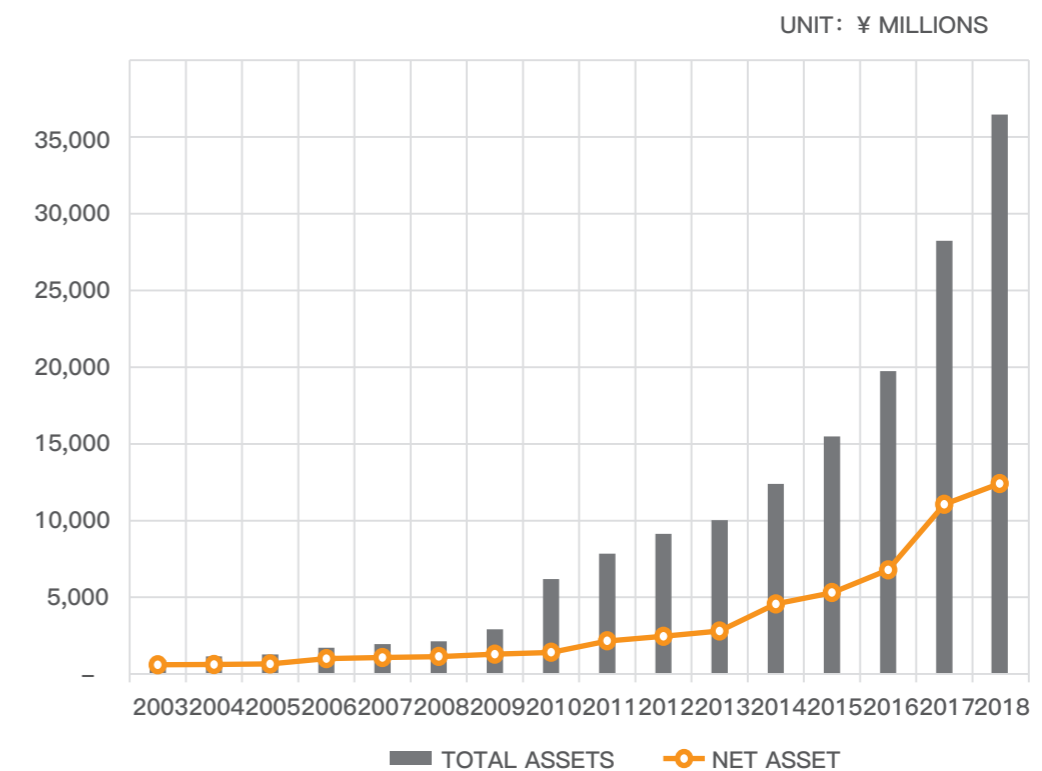
## 2.3 The fast-growing operating performances of HTGD:



The performance grows in high-speed:

The income grows by **30.5%** year on year

The net profit grows by **20.27%** year on year

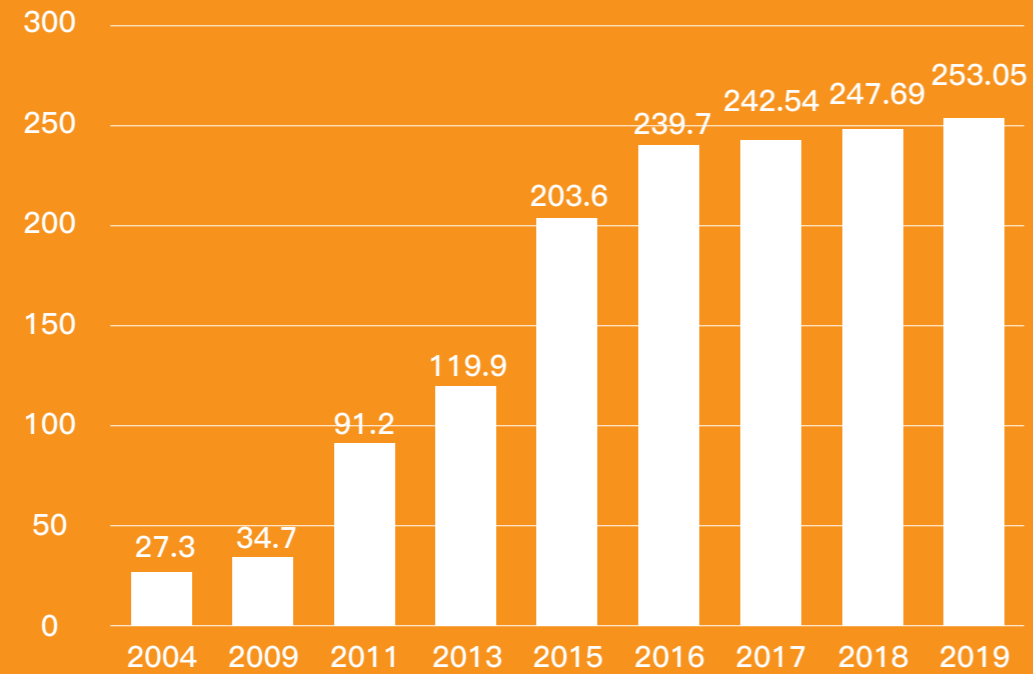


The performance grows in high-speed:

The assets grows by **27.44%** year on year

The net assets grows by **18.24%** year on year

### China's 500 Most Valuable Brands by World Brand Lab (Hengtong Optic-Electric)



## 3 Product Innovations



“

I know Hengtong. I've been there twice. The first time was in 1995, when Hengtong was still a small private company that produced optical cables. The second time was in 2015. Twenty years later, under the guidance of chairman Cui's entrepreneurial spirit, Hengtong seized the opportunity of the times and became a world-leading enterprise in the field of optical fiber's research and production.

”

— Lin Yifu

The famous economist and counselor  
of the State Council

### 3.1 Communication



With the world's leading optical-fiber communication (preform, optical fiber, optical cables, optical devices, optical networks and ocean optical networks), quantum communication, and data communication industrial chains, as well as autonomous core technology, Hengtong is committed to providing fiber optic network, quantum communication, ocean observing network and intelligent marine engineering system solutions and design-construction-operation and maintenance services as one of the engineering EPC general contracting services. It has formed a "product + platform + service" integrated service model, has become the world's leading communications-industry full-value-chain integrated service provider, ranking among the top 3 in the global fiber-optic communications industry.

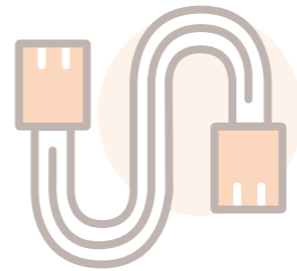
**In Global Optical  
Fiber Communication  
Industry.**

“ The Maldivian government has always had a vision to make it one of the best communication connected countries in South Asia. The entire network construction project has raised the ICT level in the Maldives, making this vision possible. The progress of communication will also promote the rapid development of our country’s economy and society. We thank Hengtong for its contribution to the Maldives.

”

— Azleen Ahmed

Minister of Internal Affairs of Maldives



### Maldives ocean communication project around the island

More than 200 islands were connected into a fiber-optic communications network, making Maldives the country with the most extensive communication coverage in South Asia.



“ Thank you for Hengtong’s excellent products and services.

”

— Bayhaki Kambi

CTO of Comoros telecommunications



### The Comoros undersea optical cable project

It realizes the interconnection of the communication network of the Comoros islands and enables the Comoros islands to achieve high-speed interconnection with East Africa and other countries and regions in the world.



### FTTH project in Sri Lanka

Contract to build “Optical FTTH pilot project” with Sri Lanka national telecommunication, and it will also promote the development of optical fiber into homes nationwide in Sri Lanka.



### FTTH project in Thailand

Cooperation with the Thai operator to implement FTTH project in Thailand, so that the Hengtong broadband access system in Thailand has been comprehensively promoted throughout the country.



### Strategic and project cooperation agreements signed with TelecomEgypt

On the 2<sup>nd</sup> Belt and Road Forum for International Cooperation Roundtable held in Beijing in April 2019, Chinese President Xi Jinping attended and delivered the opening remarks. During the Forum, Hengtong signed strategic and project cooperation agreements with TelecomEgypt.

## 3.2 Electric power



Hengtong is committed to the construction of global energy transmission network, and takes smart grid, UHV and EHV power transmission, UHV marine power transmission system and related high-end products as the driver, and system complete solution and EPC as the two wings. It is transforming itself from a “product suppliers” to “system integration service provider” actively expanding into marine power engineering and ocean observing fields, and building an energy interconnection system solution service provider, which is taking the lead in China and facing to the whole world. It has stepped into the top 5 in the global ocean power engineering and UHV power transmission fields.

### Russian deep-sea UHV smart power grid project

Managing more than 20 world-leading key processes and engineering technologies, Hengtong delivered the project two months before schedule and achieved a first-time acceptance success. Russian President Putin attended the opening ceremony. The Russian Minister of Energy personally presented the “Russian Energy Engineering Outstanding Contribution Award” to Hengtong and sent a letter of thanks to the Department of Energy, Chinese National Development and Reform Commission .



### Energy ring project in Saint Petersburg, Russia



Hengtong manufactured and exported in the first UHV cable project, and helped build the global energy internet.

### Submarine cable EPC project in the Gulf of Finland



With high-quality products and super-level professional skills, Hengtong has successfully completed the delivery work of the submarine cable EPC project in the Gulf of Finland, and won the customer's full recognition.

“

Ethiopia has benefited a lot from the cooperation with Hengtong. Nowadays, Chinese companies can be seen in almost all major projects, including infrastructure, energy, telecommunications, which is related to Ethiopian national economy and people's livelihood. Chinese companies deserve the trust of Ethiopia.

”

— **Mulatu Teshome**  
Ethiopian President

### Light rail project in the capital of Ethiopian, Addis Ababa



The light rail project in the capital of Ethiopian, Addis Ababa, provided the most critical core technology for the Ethiopian capital light rail project—the power transmission system, and this project was visited and confirmed by Chinese Premier Li Keqiang in 2014.

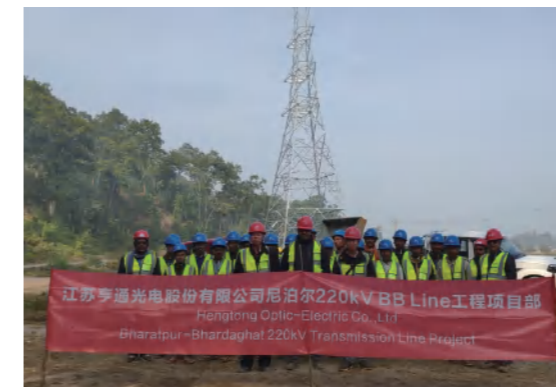
### Ethiopia: 500KV Transmission and Transformation Power Network Project in East Africa

In December 2015, Africa's largest power transmission and transformation project — the Nile Renaissance dam to Ethiopia and Kenya's 500kv power transmission and transformation project was successfully completed. This marks Ethiopia's entry into the era of 500kv voltage infrastructure, which not only ensures that Ethiopia and its neighboring countries can obtain sufficient power supply, but also significantly improves the power transmission capacity, which is equivalent to three times of the total power generation of the country's generators.



### Brazil's trans-amazon smart power grid project

Hengtong has successfully solved the world's key technical problems in the project—the largest span and the largest section in the world, which created two world's Records.



### 220kV BBLine OPGW EPC Project in Nepal, 2019

This project is close by Lumbini, the hometown of Sakyamuni, founder of Buddhism, where rivers, forests and mountains all increase the difficulty of construction. Under Hengtong's efforts this project is applauded by NEA (Nepal Electricity Agency) and local residents as it largely eases the shortage of power supply.



### China's 1<sup>st</sup> 8MW wind turbine cables and wires solution, 2019

On June 30, the Jiangsu Hengtong Power Cable Co., Ltd delivered China's 1st 8MW wind turbine cables and wires solution. It's a combination of R&D of the cable industry and wind power industry, which rendered Hengtong a pace-setting place in and out of China in relevant regard.



### 3.3 Designing our future responsibly

#### 3.3.1 Communication operation

“

The goal of Djibouti Telecom is to strengthen its position as a regional hub at the crossroads of Asia, Africa and Europe. The cooperation between PEACE and DARE will realize the digital and economic transformation of the Republic of Djibouti.

”

— Mohamed Assoweh Bouh

The General manager of the Djibouti Telecom



Hengtong PEACE Transoceanic International Communication Project: China's First Private Enterprises Invested and Operated International Marine Communication Line

The PEACE submarine cable will connect the three most populous continents in the world: Asia, Africa and Europe. Its backbone will land in Pakistan, Djibouti, Egypt, Kenya and France. It is an important communication backbone connecting Asia–Europe and Africa–Europe economic corridors.

#### 3.3.2 New-generation communication technology

Focus on 5G communication infrastructure products, solutions and industrial applications, accelerates the research and development of 5G communication products, integrating and developing 5G micro–base stations, exploring 5G solutions, and expanding to industrial Internet and smart city applications.



### 3.3.3 THz communication technology

Terahertz technology is one of the top ten technologies that will change the future of the world in the 21st century.



In November 2017, Hengtong established Jiangsu Hengtong Terahertz Technology Co., Ltd. in cooperation with the technical team of the Joint Laboratory of Beijing University of Posts and Telecommunications and Queen Mary College of London University to jointly lay out the wireless communication industry.

2018–2019: Breakthroughs in key devices and essential technologies have been achieved.

Watching 3D with the naked-eye and the 2.5KM terahertz communication test have been realized.

### 3.3.4 Silicon photonic chip

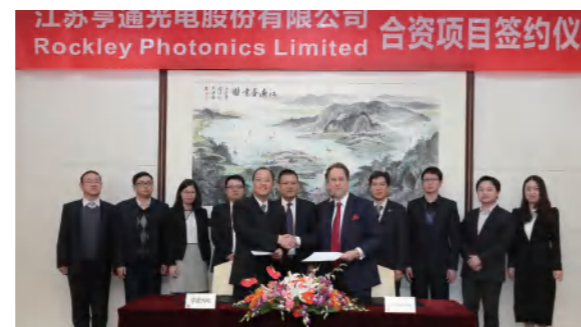
Silicon photonic technology is a potential, strategic and forward-looking technology for the future, which enables photons to serve as information carriers for signal transmission security and reliability.

In December 2017, Hengtong established Jiangsu Hengtong Lockley Technology Co., Ltd. with the joint investment of Britain Lockley Silicon Photonic Co.,

Ltd. to produce and sell 25/100g silicon photonic modules.

In September 2018, the first trial production and reliability test of 100Gbps silicon photonic chip were completed, and the test platform for silicon photonic chip was built.

In March 2019, the development of 400G silicon photonic chip and photonic transceiver technology was launched.



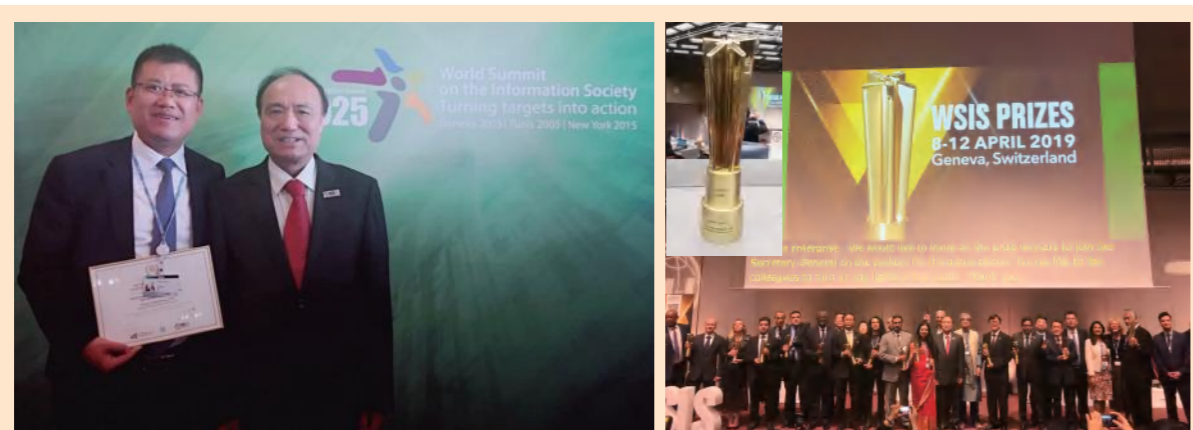
### 3.3.5 Quantum communication

“Jiangsu Hengtong Qasky Quantum Information Research Institute Co., Ltd.” with “University of Science and Technology of China Anhui Qasky Quantum Technology Co., Ltd.” and “Quantum Optoelectronics and Microdisciplinary Laboratory” jointly with “Beijing University of Posts and Telecommunications” were established. It has an independent core and intellectual property of quantum key communication, and lays out the entire industrial chain of quantum communication, providing a complete solution for quantum key communication and escorting the information security of communication and the Internet.



The construction of “Jiangsu Province Nanjing–Suzhou Quantum Trunk Line Construction Project” has been undertaken, and some indicators have reached the international leading level.





The quantum-communication project submitted jointly by Hengtong and China Union won the highest prize “Winner” on April 9, 2019, during the WSIS held by ITU in Geneva. This is China’s only project to receive the highest prize this time.

**The only quantum wave division routing industry-scheme level patent in the world**

The problem of automatic addressing of quantum information, full-time all-pass quantum network routing technology were solved, and the patent has been authorized by China, the United States, Japan and another eight countries.

**The only F-M phase coding scheme in china which is leading in the world**

Full immunity to the full-line disturbances of quantum communication, long-term stability, independence of channel environment interference were achieved. And patent authorizations from China, the United States, and Japan, also won the first prize of the Military Weapons and Equipment Science and Technology Award and the first prize of the Ministry of Education Technical Invention Award.



USA

The EU

The China

The Japan

**3.3.6 Information Security of Industrial Control System**

With the rapid development of industrial digitalization and networking, the industrial control system is used to monitor and control industrial production processes and ensure the normal operation of industrial equipment. It is widely used in petroleum, petrochemical, water conservancy, electric power, production, manufacturing, etc. However, with the increasing openness of industrial control system, system security vulnerabilities and defects are easier to be exploited by viruses, and the importance and urgency of industrial control safety work is increasingly prominent.



Hengtong takes the key information infrastructure security laboratory as the core foundation and starts from the development needs of the information security industry. It also covers the research and innovation of information security products, the training and certification of information security professionals, the emergency security drill service of information security and the industrial safety competition activities. Hengtong undertakes the testing of industrial products and the training service of industrial safety professionals in enterprises.



### 3.3.7 Marine communication and energy interconnection industry

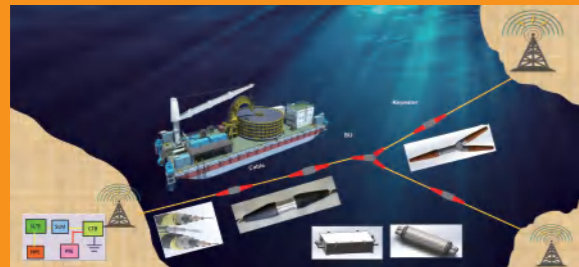
#### Hengtong Intelligent Submarine Cable Factory



The world's advanced production equipment and testing equipment, with Asia's highest 180 meters high cable production tower, supported by a 20000 tons freight terminal.



Hengtong delivered 10000 kilometers of submarine cables around the world, breaking the monopoly of international ocean giants in this field.



The industry chain of "product + engineering + operation service" was built, and the system integration solution was improved for the submarine observation internet of things and the aquatic ecological network of rivers and lakes, leading the development of ocean economy age.

A system solution was developed based on the integration of marine communication and power network products and applications. The submarine observation Internet of Things, river and lake aquatic ecological network were promoted with some others as well. We contributed to the construction of the global intelligent ocean.



“ The company in Changshu has broke the monopoly of foreign submarine cable giants on large-length UHV undersea cable technology, and it reflects the world level of Chinese manufacturing. It will play a huge role in promoting the development of China's marine transmission technology!

—Yang Liming  
Chief cable expert of China



On April 13th 2018, the world's first large-length 500KV cross-linked polyethylene fiber optic composite submarine cable successfully passed the delivery test in Hengtong Submarine Power Cable Co., Ltd, and it marks that Hengtong becoming the first submarine cable manufacturer in the industry to achieve this. It is the first large-length 500kv cross-linked polyethylene photoelectric composite submarine cable without any connectors in the world, and its length is up to 18.15 km, and has created the world record for "the highest voltage grade in the world and the longest single cable without connector."

### 3.3.8 Improve the Construction and Operation of New Energy Charging Network

A new-energy vehicles industry chain was preliminarily created which contains wire control system, intelligent charging pile infrastructure, interconnected intelligent charging big data cloud service platform.



Intelligent control system for new energy vehicles were developed in cooperation with Fujikura.



We invest in National Charging Co.,Ltd.and lay out the new energy vehicles charging business of the future.

## 4 Hengtong Innovation Generation

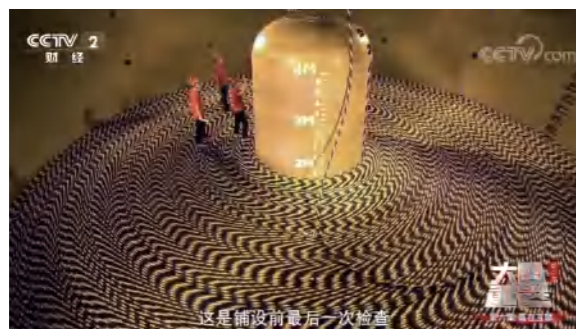
Innovation lies everywhere, and there's no boundary for innovation. If we don't change and innovate today, we will fall behind tomorrow and will be eliminated the day after tomorrow.

“ Innovation is the driving force of development, and talent is the source of innovation. ”

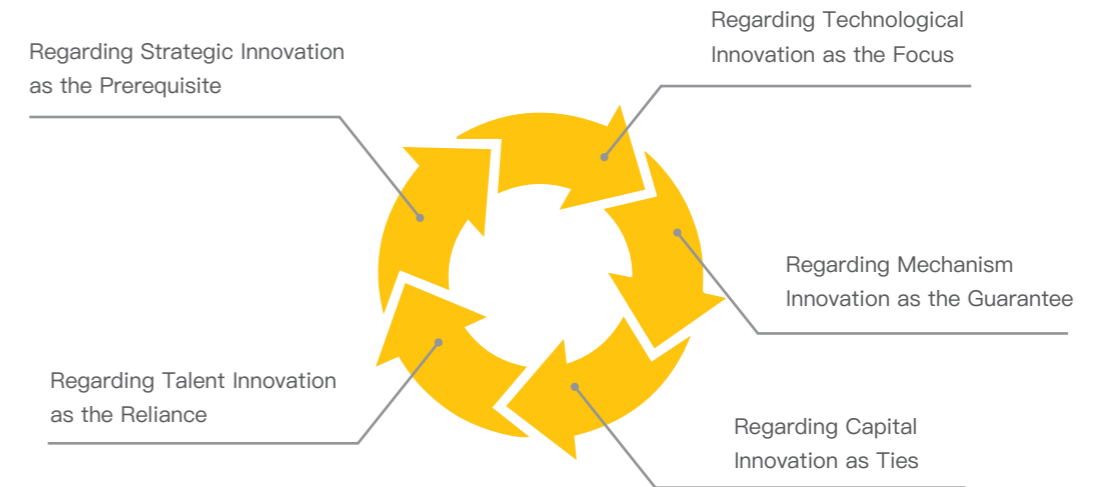
—Chairman Cui



Hengtong creates an innovative ecosystem of “five in one” which includes strategy, talent, technology, mechanism and capital, and it forms a large number of independent core technologies representing the international frontier. Products and series of solutions are applied to high-end optical fiber network, UHV and smart grid, big data, Internet of Things, smart city/community, new energy and marine engineering, high-speed rail, metro and aviation, and all these high-end markets and areas. They create a number of the world's records in a series of major projects around the world as well.



### “Five-pronged” innovative ecosystem



## 4.1 Intellectual Property Rights

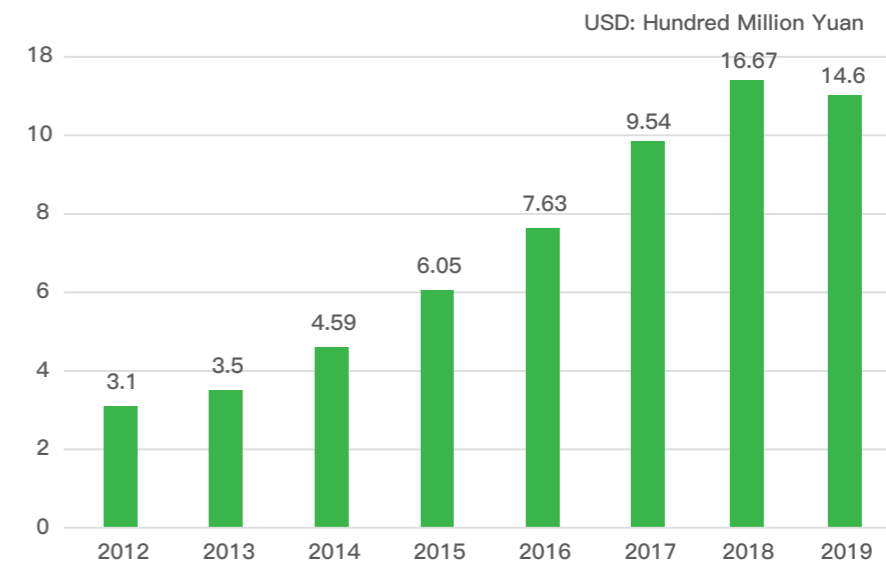
“ Intellectual property rights are the foundation of enterprise survival and development. When Chinese enterprises go out, they must understand, learn and make good use of intellectual property rights. ”

—Chairman Cui

### 4.1.1 Constant R&D Investment

IPD Research and Development System 4000+ R&D Personnel

The costs on the constant R&D investment



### 4.1.2 Standard formulation and patent number rank first in the national counterparts.

 **485**

National, provincial and ministerial level new product development: 485 items

 **3,164**

Authorized patents: more than 3,164 items (including: 541 invention patents)

 **289**

Leading and participating in the formulation of national and industrial standards: more than 289 items

 **NO. 1**

Number of core patents and standards: No. 1 in China

In 2019, Hengtong received 26 new product certifications from 18 countries and regions, and accumulated 64 product certifications from 27 countries and regions. Certified products include: optical cable, optical fiber, ODN, eight-line cable, data cable, elevator cable, duct optical cable, OPGW, high-voltage cable/land cable, submarine cable, photoelectric compound cable, passive components, etc. The certification countries include the United States, Germany, Norway, Kazakhstan, Poland, Thailand, Brazil, and Turkey. Among them, electric round aluminum rods and 8000 series alloy rods, optical cables, optical fibers, ODN, submarine optical cables and other products have been certified internationally.

**3 items**  
Participation in international standards

**80 items**  
International patent application

### 4.1.3 International Product Certification



### 4.2 Innovation Platform

Hengtong owns state-level enterprise technology centers, key laboratories, academician workstations, postdoctoral workstations and other innovation platforms. It undertakes more than 320 national science and technology projects such as Nation 863 and Natural Science Foundation project, winning the highest award in electronics industry—the first of Science and Technology of China Electronics Society, Yuan Baohua management gold medal, and becomes the country's industrial base project, the national intelligence manufacturing demonstration project, and the national green manufacturing integration project.



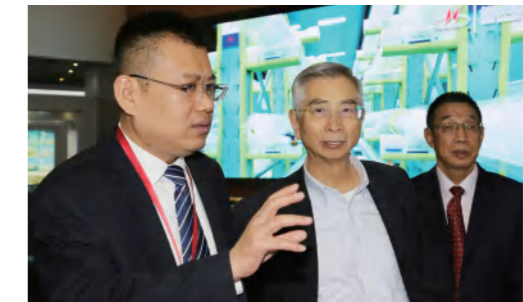
Academician Zhou Ji (The second from left), the former President of the Chinese Academy of Engineering, visited Hengtong



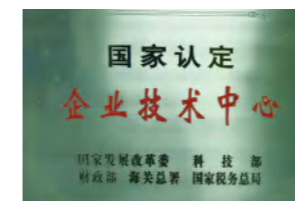
Zhao Zisen (The third from left), the father of China optical fiber and academician of Chinese academy of engineering, appreciated Hengtong's innovation



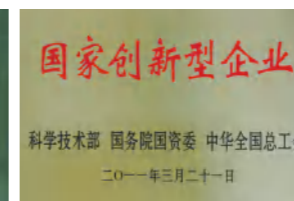
Wu Hequan, the academician of the Chinese Academy of Engineering, gave an academic lecture for Hengtong



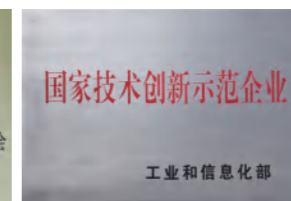
Ni Guangnan (The second from left), the academician of the Chinese Academy of Engineering, visited Hengtong



National Certified Enterprise Technology Center



National Innovative Enterprises




National Technological Innovation Demonstration Enterprises



State-level Demonstration Enterprise of Deep Integration of Information and Industrialization

**1** 

State-level Enterprise Technology Center

**1** 

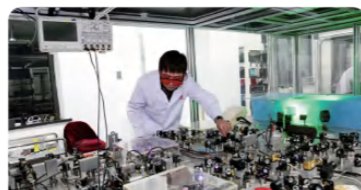
TÜV Rhine Authorized Laboratory in the Field of Optic Fiber and Cable in the world

**6** 

National and Provincial Key Laboratories



**State-level Enterprise Technology Center**



**1** 

Postdoctoral Workstation

**2** 

Academician Workstations

**16** 

Provincial Engineering and Technology Research Centers

### 4.3 Results of Innovation



“ Hengtong breaks through the foreign technology monopoly, and has independently developed and mastered the core technology of optical fiber and preform. It has found a way to achieve transformation, upgrading, and independent development by relying on scientific and technological innovation. It is a typical case of science and technology industrialization led by enterprises. And Hengtong is the pride of our national enterprises!

”

— Academician Lu Yongxiang  
The former president of the Chinese Academy of Sciences

#### 4.3.1 Communication Field

- The ultra-large size preform was researched and developed independently (Diameter:200MM, length:6000MM, single rod drawing length:15000KM), the drawing of which is the longest in the world;
- The world's first “all-band ultra-low loss, ultra-long distance, ultra-large capacity” optical fiber communication system;
- The first global telecommunication level “large effective area optical fiber” land optical cable (G. 654E) engineering application was completed;
- The first UUA ultra-low loss, ultra-large area single-mode optical fiber in china;
- The world's first phase-coded long-distance wide-area commercial quantum trunk line;
- China's first 400G high-capacity ultra-low loss optical fiber, winning the bid for the country's “industrial strong foundation project.”



The only one that masters the key core technology of optical fiber communication—optical fiber preform, and it breaks foreign monopoly and promotes the implementation of the Broadband China Strategy.

### 4.3.2 Marine Field

- It is the first company in china that researched and developed G. 654 and G. 652 low-loss high-strength submarine optical fiber;
- Completed the deep-sea trial of the submarine optical cable at a depth of 5000 meters, with the actual water depth reaching 8000 meters, and it broke the international monopoly;
- The world's first "extreme length (312km) with feeder-free relay-free submarine cable";
- The submarine cable breaks through the technical barriers of the highest voltage grade (500kV), the maximum length (35km or above) and the maximum section (3500mm<sup>2</sup>) in the world;
- The length of a single submarine optical cable reaches 315 kilometers, which creates a world record;
- The world's first 30KM 220kV single root 1600mm<sup>2</sup> submarine cable without connector;
- The world's first large length AC "500kV cross-linked polyethylene insulated submarine cable";
- The large-length, low-loss and relay-type submarine optic cable was researched and developed, and it is leading in the world.



The international sea trial at 5000-meters deep sea of optical cable launched by Hengtong in the Mariana trench of the Pacific Ocean, with a measured depth of 8000-meters (which is the only one in china) .



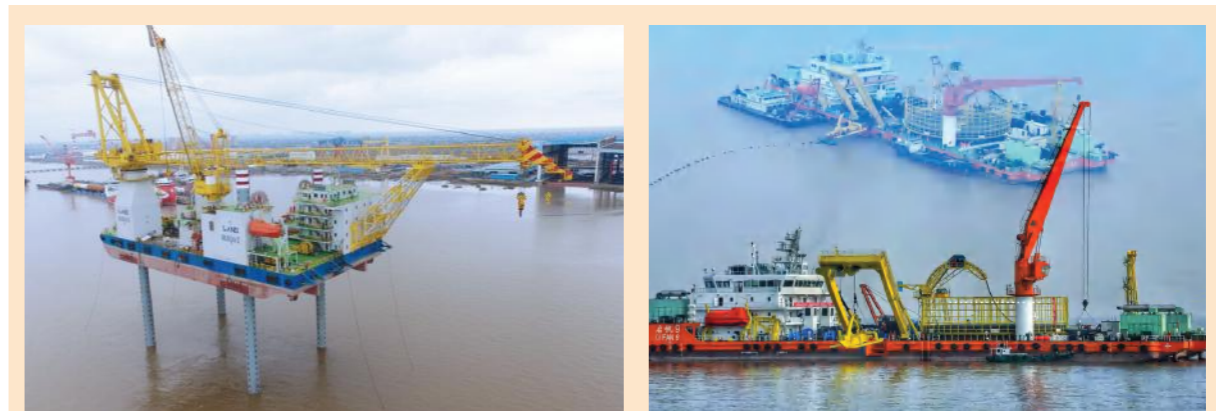
The 220KV submarine cable invented by Hengtong created a world's record----"the longest single root of submarine cable without connector."



Hengtong Changshu International Marine Industry Park set sail for blue economy on November 9, 2019

### 4.3.3 Electricity Field

- Brazil's Amazon OPGW project created two world's records of "the largest cross section" and "the largest span."
- Participated in the world's first state grid Changji-Guquan ±1100kV UHV DC power transmission project, and the technology is leading in the world;
- Participated in the UHV DC transmission project and independently developed the world's first ultra high voltage, large span, ultra low loss OPGW products;
- World's first dry insulation 500kV1\*1800mm<sup>2</sup> without connector;
- Participated in china's first 110kV voltage level OPPC line;
- Participated in china's first temperature measurement, double circuit OPPC line;
- The world's first single-root large-length 500kV cross-linked polyethylene insulated submarine cable without connector, and it has successfully passed the 580kV , 60mins test.



Hengtong undertook the world's first ±1100kV UHV DC line, and it created three world's records (Highest voltage grade, Max capacity and Longest distance).

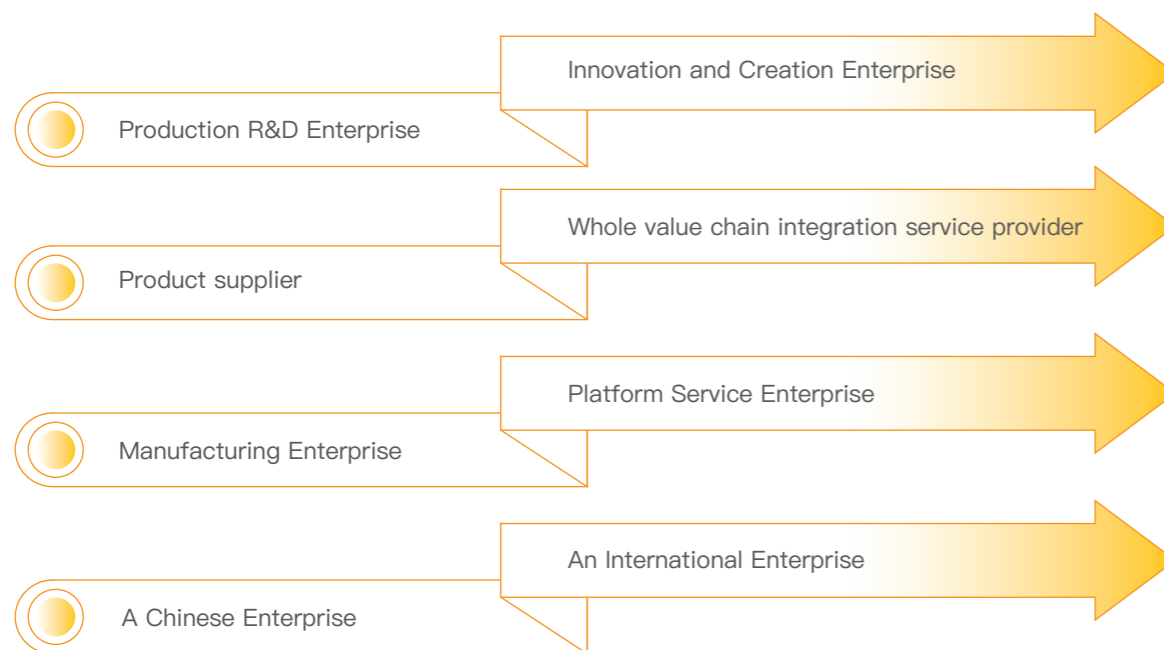


## 5 Excellent Quality

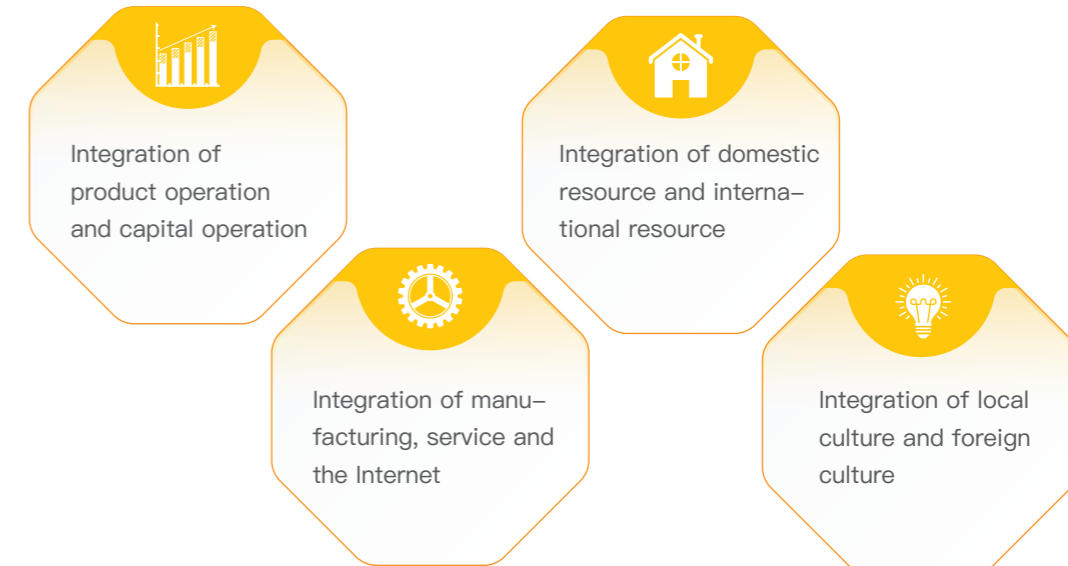


As the largest system integrator and network service provider in the field of fiber optic network and power grid in China, Hengtong has been committed to product R&D and high-end manufacturing in the field of communication and electricity. We continuously optimize and adjust products and industrial structure. Through the innovation in management concepts and models, we have gradually formed a "quality manufacturing" management model with the aim of smart factory, IT-based management and lean manufacturing, in which technology innovation is the core. By doing so Hengtong has achieved a number of firsts in the world and in the industry.

## Hengtong's four major transformations



## Hengtong's four major integrations



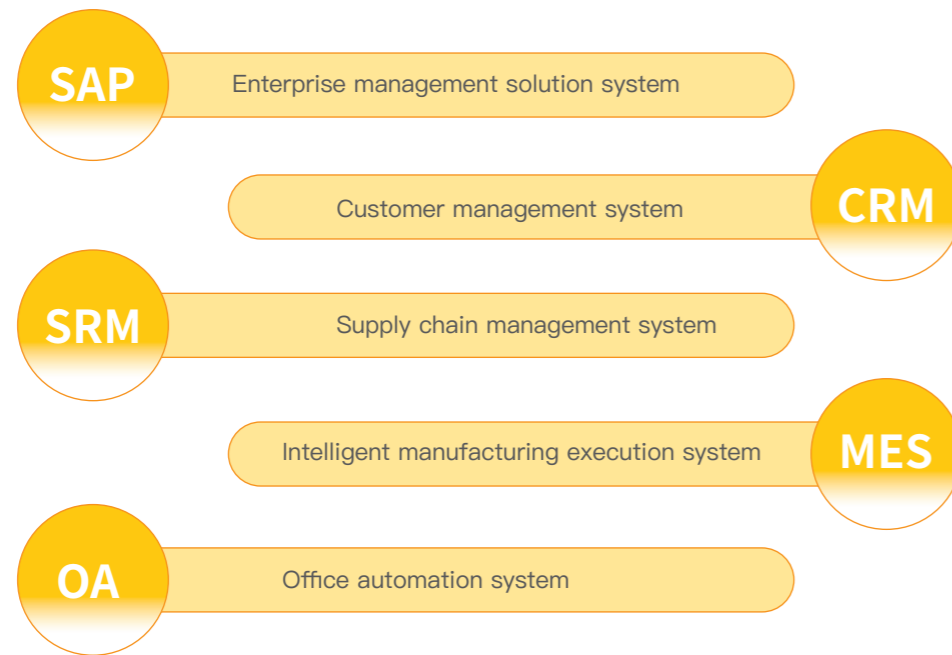
Under the guidance of internationalization, Hengtong is using information technologies to manufacture and manage the factories and strive to realize a smart manufacturing system in which machines work to replace people in some lines and things are all connected with internet. We have 21 intelligent manufacturing demonstration factories verified by the government of Jiangsu Province which are capable of fast, flexible and customized delivery.



## The concept of using information technologies to manufacture and manage the factories



### Five information systems



Hengtong fully implements the Six Sigma quality management system and methods, makes every effort to reduce the cost and finally achieves the breakthrough of enterprise competitiveness with the pursuit of Zero-defect business. In addition, Hengtong has certificates issued by ISO9001, TS16949 quality management system, environmental management system, occupational health management system, measurement management system, China Compulsory Product Certification (CCC), Electric Energy (Beijing) Product Certification Center Certification (PCCC), CE, GJB9001B, mining product safety, South African National Bureau of Standards Certification (SABS); and also the product certificates from China, the United States, Britain, France, Germany, DET NORSKE VERITAS.

## Roadmap for the development of Hengtong QEHS internationalization

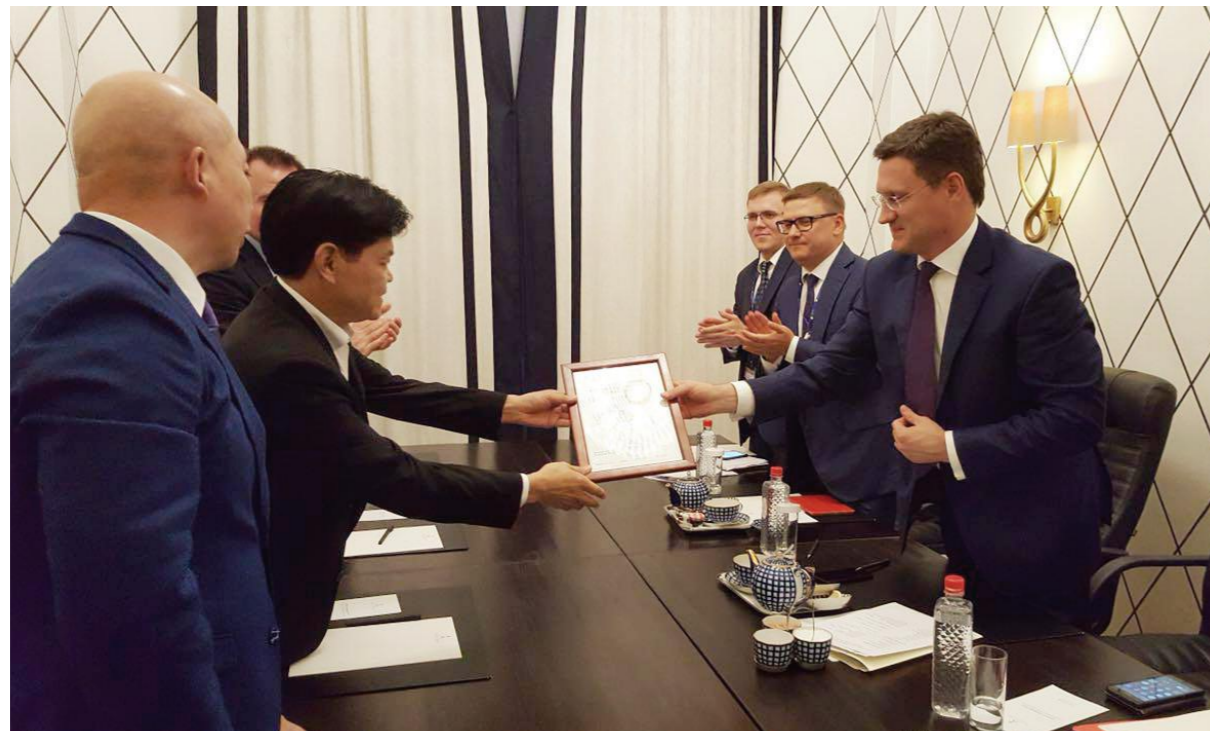
In 2018, Peter, a consult, started two studies and made a proposal on QEHS based on the demands of European market.



- He completed 10 market access questionnaires and passed the Australian third-party audit, India Sapura two-party audit and US Fluor's qualified supplier access audit.
- Hengtong made a good impression to potential customers and received recognition from international high-end customers.
- Based on high-end customers, Hengtong continues to improve the management level of QEHS.

Hengtong's products are of good performance which helps build an excellent brand image. We won awards such as the national quality benchmark, China Export Quality and Safety Demonstration Enterprise, China Quality Award Nomination Award, and Asia Pacific Quality Organization's highest award on Global Excellent Performance.





In 2015, the Russian Ministry of Energy awarded Hengtong “Outstanding Contribution Award of the Material Supply Sector of the Russian Ministry of Energy”, and Minister Novak issued the certificate to Cui Genliang.



**The 2019 Dialog between Consular Officials and Entrepreneurs in the Yangtze River Delta**

On December 16, consuls general from 9 countries in Shanghai and some 250 delegates from the diplomatic, corporate and government sectors in the Yangtze River Delta attended the dialog in Wujiang. The dialog was held by Hengtong Group under the theme of “New Opportunities of BRI and Innovative Development of Yangtze River Delta.”



The Chinese Ambassador in Spain, H.E. Lü Fan and the President of Aragon, Javier Lambán, visited Cablescom on March 26, 2019.

**Hengtong Global Strategic Partner**



**Overseas Market Activities**





**PART 4**  
**CORPORATE**  
**RESPONSIBILITY**  
**AT HENG TONG**

For an enterprise to develop itself, whether it is at home or abroad, it needs not only the support from the government, society, and employees, but also the trust and support from local people and employees. It must firstly fulfill its social responsibilities.

It is necessary to form a community of interests and a community of responsibility with the government, society and employees of this country. Sticking to this we can walk steadily, and go further.

—Chairman Cui Genliang

## 1 Global presence

Hengtong Group actively participates in global economic governance and expresses the standpoint and appeal of the Chinese business community within the multilateral regime such as APEC, G20 and BRICS. Chairman Cui has attended major international conferences for many years, and actively participated in the seminars, and proposed policy recommendations, which were highly recognized by the Chinese government and the international business community.

### APEC CEO Summit



November 2018 Port Moresby, Papua New Guinea (26<sup>th</sup>)



September 2012 Vladivostok, Russia (20<sup>th</sup>)



October 2013 Bali, Indonesia (21<sup>st</sup>)



November 2014 Yanqi Lake, Beijing, China (22<sup>nd</sup>)



November 2017 Da Nang, Vietnam (25<sup>th</sup>)

### G20 Business Summit (B20 Summit)



September 2016 Hangzhou, China (8<sup>th</sup>)



May 2017 Berlin, Germany (9<sup>th</sup>)

### BRICS Business Forum



September 2017 Xiamen, China (8<sup>th</sup>)



August 2017 Johannesburg, South Africa (9<sup>th</sup>)

## “The Belt and Road” Forum for International Cooperation



May 2017 Beijing, China (1<sup>st</sup>)



April 2019 Beijing, China (2<sup>nd</sup>)

### Building a Incorruptible Road Seminar



September 2017 Beijing, China

## 2018 National Affairs Forums



September 2018 Beijing, China

## 19th South Africa Smart Energy Week



May 2019, Cape Town, South Africa

## Global Optical Fiber and Cable Conference

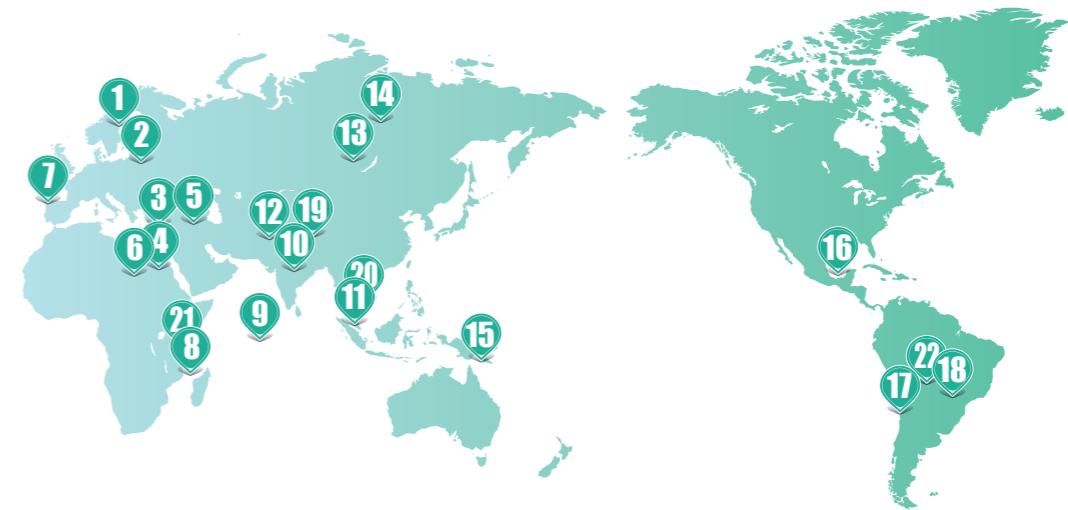


November 2019, Shanghai, China

## 2 Change for a better world

“Look at the world map to do business, go global along The Belt and Road.” Hengtong actively implements the “The Belt and Road” initiative under the guidance of Silk Road spirit of peaceful cooperation, openness and inclusiveness, mutual learning, mutual benefit and win-win cooperation. Wherever Hengtong business develops, the social responsibility will arrive. We have undertaken a large number of large-scale projects along “The Belt and Road”, which helped improve the level of communications and power infrastructure construction.

### 2.1 Smart Marine International Project Brought Positive Reputation for “China Innovation”



1. Finland Gulf 35kV Ocean Grid EPC Project
2. Latvia National Broadband EPC Project
3. Turkey Ocean Optical Fiber Network Project
4. Egypt Ocean Optical Network Project
5. Turkey Railway Communication Project
6. Nile Submarine Optical Communication Network Project in Egypt
7. WindFloat Atlantic Export Cable System EPC&M Project
8. Comoros Submarine Optical Network Project
9. Maldives Trans-island Ocean Communication Project
10. Indian Optical Communication Project
11. Malaysia Ocean Communication Project
12. Pakistan PV Power Station Project (the largest monomer globally)
13. Construction of China-Pakistan Economic Corridor
14. Saint Petersburg Energy Environment Project in Russia
15. Papua New Guinea Ocean Communication Project
16. Belize Ocean Optical Network Project in Central America
17. Santiago Wind Farm Project in Chile
18. Brazil Cross-Amazon Intelligent Grid Project
19. Nepal 220KV BB-Line electric power transmission line turnkey project
20. Cambodian Hun Sen Park 115KV HV project
21. Tanzania 33KV turnkey project
22. Bolivia 500KV electric power line project



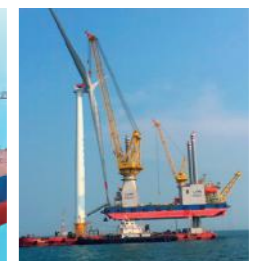
Hengtong submarine cable deep-sea test ship in the Mariana trench



Hengtong seabed rock-socketed pile foundation drilling platform



“Hengtong Lande” wind power foundation pile construction ship



“Huadian Wenqiang” self-propelled offshore wind power operation platform

## 2.2 Papua New Guinea National Marine Communications Project

The Papua New Guinea Marine Communications Project undertaken by Hengtong completed the first phase of delivery before the 2018 APEC meeting. After the completion of this project, it will greatly improve the communication status of PNG.

- Connect 14 most dense coastal population cities in PNG.
- Cover more than 55% of the population in PNG.
- Expect that by 2026, will meet more than 70% of the nation's bandwidth demands.
- Meet the bandwidth needs of PNG in the next decade or more.

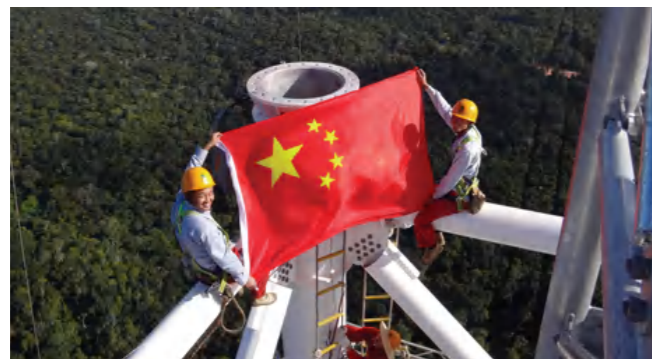


## 2.3 West India Corridor Project

The West India Corridor project, from Gawwarar Nehru Port to New Delhi, will become an important cargo gateway connecting East and West India after establishment.



## 2.4 Brazil's cross-Amazon smart grid project



Hengtong successfully solved the world's key technical problems of the Brazil's cross-Amazon smart grid project — the project created two world records in the grid project --- the largest span, the largest cross section.



## 2.5 Spain Cablescom: turnover increased by 95%

In 2016, Cablescom was acquired by Hengtong Group. In 2018, Cablescom's revenue almost doubled, with a 95% increase and created 60 additional jobs. The company's workforce has increased about 100 since the acquisition. "We have a lot of synergy with the Group in product, technology and business." Veronica Iliescu, CEO of Cablescom said. Due to the shortage of fiber in recent years, "the Group has provided fiber for Cablescom and has been supporting and assisting us in providing cables to European customers."



On July 19, 2019, Cui Genliang, Founder and Chairman of the Board of Hengtong Group, visited Cablescom. He congratulated Cablescom for the results obtained and the recent "Chamber of Commerce of Zaragoza Export Award 2018". Verónica Iliescu, CEO of Cablescom, then conveyed this congratulation to all the staff in Cablescom.



# ABERDARE

## 2.6 South Africa ABERDARE: Introduced Hengtong's independent intellectual property rights

In 2015, Hengtong acquired ABERDARE, the largest cable manufacturer in South Africa and sub-Saharan Africa. After the acquisition, Hengtong retained all the management and technical backbone, adhered to local operations, and the company smoothly transitioned. In order to enhance ABERDARE's market competitiveness and product advantages, Hengtong has also increased its investment and promoted a series of technological transformation and new investment projects. Through a series of efforts, ABERDARE cable quickly had a high profit growth that year. In addition, along with the continuous expansion of industrial investment, Hengtong has also introduced new technologies and new equipment with independent intellectual property rights to South Africa, helped to improve the local industry level.



Sites	Month	Project Name	Project Description
PMB	FEB	Aber-School	Provision of extra lessons in English, Mathematics and Physical Science
PMB	MAR	Aber-School	Provision of extra lessons in English, Mathematics and Physical Science
PMB	APR	Aber-School	Provision of extra lessons in English, Mathematics and Physical Science
PMB	MAY	Aber-School	Provision of extra lessons in English, Mathematics and Physical Science
PMB	JUN	Aber-School	Provision of extra lessons in English, Mathematics and Physical Science
PMB	JUL	Aber-School	Provision of extra lessons in English, Mathematics and Physical Science
PMB	AUG	Aber-School	Launch of the Computer Centre at Aber-School
PMB	AUG	Aber-School	Provision of extra lessons in English, Mathematics and Physical Science
PMB	SEP	Aber-School	Provision of extra lessons in English, Mathematics and Physical Science
STD	JAN	Good Shepard Sisters	Soup Kitchen for needy children
STD	JAN	Sinethemba Childrens Home (Elec)	Safe Haven For Children
STD	JAN	Yizani Sakhe Home based Care	Orphanage for destitute children
STD	FEB	Good Shepard Sisters	Soup Kitchen for needy children
STD	FEB	Sinethemba Childrens Home (Elec)	Safe Haven For Children
STD	FEB	Yizani Sakhe Home based Care	Orphanage for destitute children
STD	MAR	Good Shepard Sisters	Soup Kitchen for needy children
STD	MAR	Sinethemba Childrens Home (Elec)	Safe Haven For Children
STD	MAR	Yizani Sakhe Home based Care	Orphanage for destitute children
STD	APR	Good Shepard Sisters	Soup Kitchen for needy children
STD	APR	Sinethemba Childrens Home (Elec)	Safe Haven For Children
STD	APR	Yizani Sakhe Home based Care	Orphanage for destitute children
STD	MAY	Good Shepard Sisters	Soup Kitchen for needy children
STD	MAY	Sinethemba Childrens Home (Elec)	Safe Haven For Children
STD	MAY	Yizani Sakhe Home based Care	Orphanage for destitute children
STD	JUN	Good Shepard Sisters	Soup Kitchen for needy children
STD	JUN	Sinethemba Childrens Home (Elec)	Safe Haven For Children
STD	JUN	Yizani Sakhe Home based Care	Orphanage for destitute children
STD	JUL	Good Shepard Sisters	Soup Kitchen for needy children
STD	JUL	Sinethemba Childrens Home (Elec)	Safe Haven For Children
STD	JUL	Yizani Sakhe Home based Care	Orphanage for destitute children
STD	AUG	Good Shepard Sisters	Soup Kitchen for needy children
STD	AUG	Sinethemba Childrens Home (Elec)	Safe Haven For Children
STD	AUG	Yizani Sakhe Home based Care	Orphanage for destitute children
STD	SEP	Good Shepard Sisters	Soup Kitchen for needy children
STD	SEP	Sinethemba Childrens Home (Elec)	Safe Haven For Children
STD	SEP	Yizani Sakhe Home based Care	Orphanage for destitute children
GOC	APR	Growing Up Africa	"Growing Up Africa"
GOC	JUL	None	Silver Creek School (A mining school in Mooi noi)

### CSR performances of Aberdare in 2019



## 2.7 Indonesia Voksel: revenue with a growth of 26 times

In January 2016, after completing the acquisition of the equity of Voksel in Indonesia, Hengtong quickly injected its experience of efficient management, advanced technology and first-class team into Voksel to promote Voksel's brand influence and market share in Indonesia, South-east Asia, South Asia, Middle East and South America. Just one year on from the acquisition, in 2016, Voksel's revenue reached 2,022.3 billion rupiah and net profit of 159.391 billion rupiah, a year-on-year increase of 26 times.



In addition to VOKSEL, on March 21, 2019, PT. MAJU BERSAMA GEMILANG (MBG), another project with investment from Hengtong held a ground breaking ceremony for the launch of the new plant in the Kawasan Industry Kendal, Kendal-Jawa Tengah, Indonesia



### 3 Responsibility to employees

Talent strategy is the leading strategy for Hengtong's development. Hengtong creates a healthy and progressive culture atmosphere for employees, takes various measures to ensure the occupational health and safety, legitimate rights and interests of employees to the maximum extent and strives to create a good employment environment where talents can realize their own value.

Talents strategy	Talents mechanism	Incentive mechanism
<ul style="list-style-type: none"> <li>● Build a management team with international background and integrity</li> <li>● Cultivate a technical team that aims at the forefront of the industry and innovation studying</li> <li>● Build a team of employees with high quality and high skills</li> </ul>	<ul style="list-style-type: none"> <li>● Position competitive recruitment system Group review system</li> <li>● Job inspection system Internal dual selection system</li> <li>● Job agency system Job rotation system</li> </ul>	<p>Hengtong takes performance and results as guidance, and establishes short-term, mid-term and long-term assessment and incentive mechanisms, so that employees can share the results of the company's operation and development and achieve common development.</p> <ul style="list-style-type: none"> <li>● short-term: Annual performance incentive</li> <li>● mid-term: Economic value added incentive</li> <li>● long-term: Stock options incentive</li> </ul>

#### 3.1 International talents

In the process of promoting the layout of globalization, overseas talent training has always been the top priority, and an international talent system from independent training to introduction and absorption has been formed to accelerate the development of the international talent team. At present, the international talent team of hengtong keeps growing, with more than 500 employees in various positions including professional technology, international business and overseas support, with some 5,000 foreign employees.



#### 3.2 World-class talent team

##### Case: Charles Jeremy Brown

Charles Jeremy Brown is an industry-leading expert in Marine communications industry and a world-renowned expert. Currently, he is the chief scientist of Jiangsu Hengtong ocean optical network system co., LTD., a member of the European federation national engineers association. He used to be the technical director of many large international marine optic cable projects and has 28 years of onshore and offshore work experience in the marine optic cable industry. He came to China to work in 2014, and won the 2016 Jiangsu friendship award and the 2016 Jiangsu international science and technology cooperation award.



Charles Jeremy Brown taking photo with Chinese Deputy Premier Liu He



Charles Jeremy Brown received the friendship award from the Chinese government in 2018. The award is the highest honor given by the Chinese government to foreign experts who have made outstanding contributions to China's modernization drive. Chinese Premier Li Keqiang met with them in Beijing.

In 2019, Jeremy Brown was honored as the Honorary Citizen of Suzhou.

##### Case: Social impact of new hires and growth of Cablescom



Cablescom has incorporated 112 employees as a result of increase in production that has been experienced between 2018 and 2019 at Zaragoza plant.

### 3.3 The career development

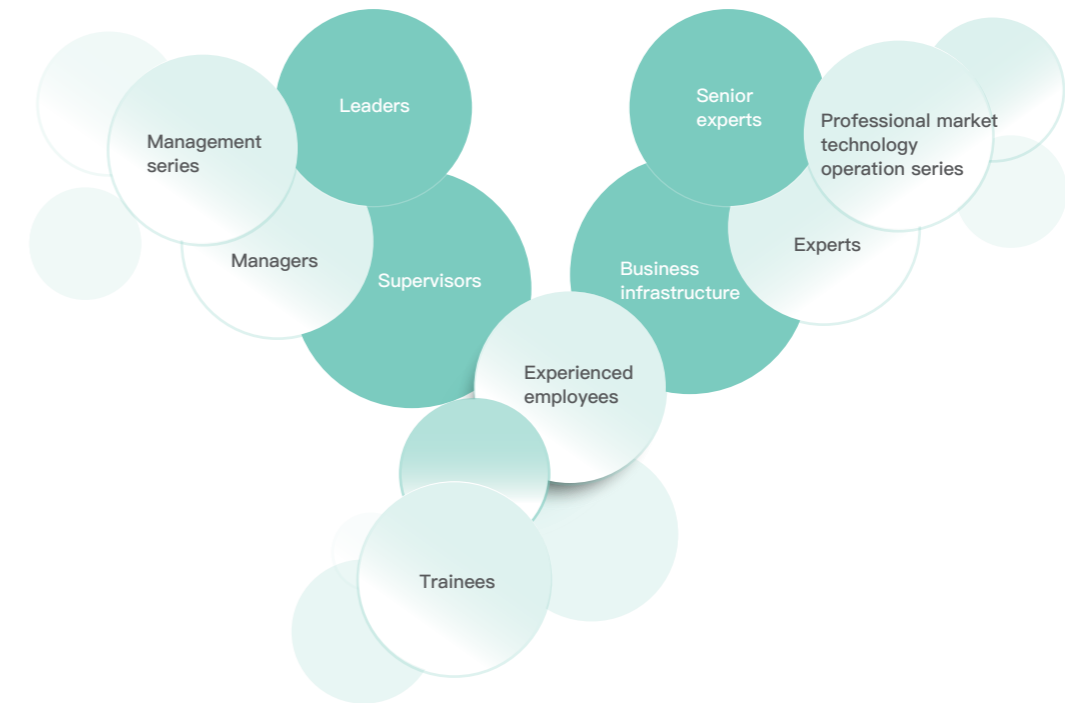
Hengtong adheres to the "talent is the most important resource of the enterprise" concept, innovates the way of talents cultivation and introduction and focuses on building an international talent team that is suitable for the development of an internationalization strategy, with the right quantity, an effective structure and matching professional structure. Hengtong established its own Academy of Management. With the mission of "leading the development of talents and promoting the evolution of organizations", Hengtong Academy of Management disseminates the culture of Hengtong and supports the implementation of the strategy.



#### 3.3.1 Career development system

- Promote job competency evaluation, strengthen the dynamic management of in-service personnel and support team, and build an internal talent market to make the best use of talents.
- Improve the group's training management system and promote the establishment of an internal learning organization.
- Establish training planning for senior executives, professional managers and middle managers and carry out various training projects.
- According to the group's development strategy, Hengtong formulates talent development strategy, improves human resources mechanism, broadens career development channels and stimulates talent team activities.

#### 3.3.2 Development channel



#### 3.3 Rights and interests protection

Hengtong strictly abides by various labor laws and regulations, ensure all employees are signed up the employment contracts and are covered by the social insurance system (five social insurance and one housing fund). Hengtong advocates that everyone shall be given equal opportunities, guaranteeing that employees are not discriminated against on the basis of race, gender, age or other factors and opposing all forms of forced labor.



Hengtong actively and steadily pushed forward the reform of the salary and welfare system, established a salary system and incentive system that is in line with the working characteristics of personnel in various positions and highlights the value of their positions and work performance. A stable salary growth mechanism has been established, with the annual income of frontline employees increasing by more than 12% and that of all employees by 8%.

In accordance with the overall requirements of the state for establishing a multi-level social security system, Hengtong will play its part in various social security works and safeguard the vital interests of employees. Hengtong will strictly abide by the principle that the state implements the five major social insurances for the elderly, the unemployed, medical treatment, workers' injuries and female workers' childbearing as well as the housing provident fund and ensure that all types of insurance are paid in full and on time.



- In overseas investment and trade, Hengtong abides by the laws of the host country, respects the customs of the host country and safeguards the rights and interests of local employees.
- For the operation and management of new overseas M&A enterprises, we adhere to the following principles:
  - The management team remains unchanged (stable management team ensures the retention of core personnel), and excellent local talents are selected, retained and cultivated;
  - Give priority to corporate culture and cultivate the sense of belonging and identity of employees in the newly acquired enterprises;
  - Promote the localization of global marketing talents, accelerate the integration of overseas M&A enterprises marketing talents and strengthen the training of local marketing talents on Hengtong products and technologies.

Considering the psychological conditions of the original employees in the overseas companies which are newly acquired, we insist on not downsizing workforce, not closing the plants. Plus, we will closely connect with labour union in cooperation, and solve concerns of our overseas employees.



## Case: National Model Enterprises of Harmonious Labor Relations



Hengtong gave a speech on the Speech Tour of National Model Enterprises of Harmonious Labor Relations (Jiangsu Stop) on October 16, 2019 in Nanjing as one of the laureates of the 4<sup>th</sup> National Model Enterprises of Harmonious Labor Relations.

## Case: South Africa Black Economic Empowerment Act

Black Economic Empowerment was approved by the South African parliament in 2003 and formally implemented in 2004, requiring all companies in South Africa to sell their shares at a minimum ratio of 25.1% to people who are "black" and "historically treated unfairly". The company of Hengtong in South Africa, acquired less than two years ago, was soon awarded the highest grade in BEE score rating, which accounted for less than 10% of South African enterprises, and became a model enterprise for implementing BEE law in South Africa.

An EMPOWERDEX Generic Scorecard Preliminary Report

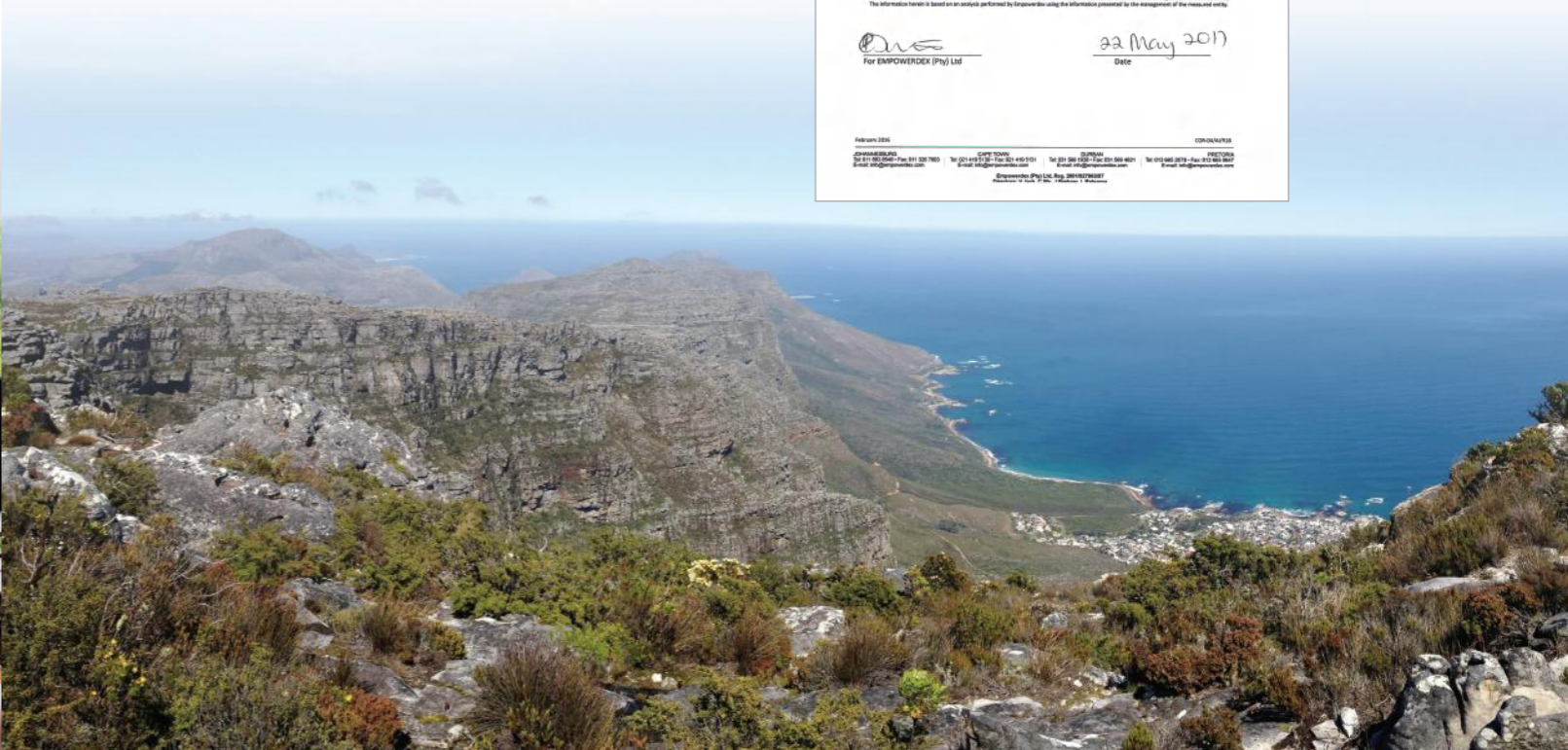
**ABERDARE CABLES (PTY) LTD**  
Registration Number: 159465338/17

**AAA+**

LEVEL 1 CONTRIBUTOR			
SUBJECT	EMPOWERDEX SCORE	TARGET SCORE	B-BBEE INDICATOR
Ownership	A	25.00	25.00 Black Ownership
Management & Control	A	15.00	15.00 Black Ownership Percentage
Skills Development	A	25.00	25.00 Black Skills Development
Enterprise & Supplier Development	A	20.00	20.00 Black Supplier Development
Local Procurement	A	25.00	25.00 Black Supplier Development
Charter Score	AAA+	100.00	100.00 Black Supplier Development
Preparation & Audit	Yes	Yes	Yes
Preparation & Audit	15/15	15/15	15/15
Reporting Period	2017	2017	2017
Reported Period	1/1/2017	31/12/2017	1/1/2017 - 31/12/2017

Preliminary Report for discussion purposes only.  
This verification report is an independent opinion in terms of the Department of Trade and Industry's Code of Good Practice (September 2013).  
The verification opinion is based on an audit performed by Empowerdex using the information provided by the management of the measured entity.

*[Signature]* 22 May 2017  
For EMPOWERDEX (Pty) Ltd Date



### 3.4.1 Safeguarding the rights and interests of female employees

In addition to safeguarding the basic rights and interests of –female employees in accordance with national laws and regulations, all female employees enjoy holiday on international women’s day on March 8. Companies and departments will organize various activities such as sightseeing and giving holiday gifts to them so that they can spend their holiday in a meaningful way.



On Women’s Day 2019, Ms. Veronica Iliescu stands out as an excellent professional at the head of one of the most important companies in Aragón, CablesCom.







### 3.4.2 Occupational health and safety

Through the transformation and upgrading of production equipment, Hengtong continuously reduces the labor intensity of employees, improves the working environment and conditions of employees and provides effective safety protection for occupational health.



### Occupational health and safety measures

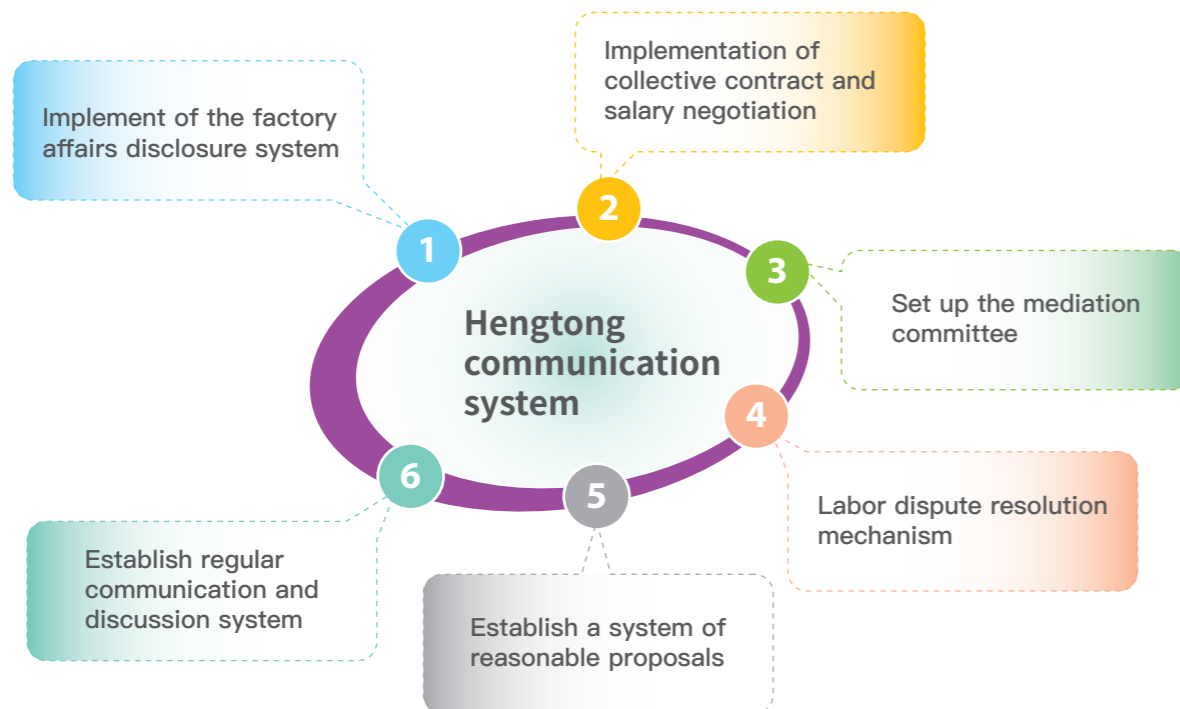
 <p>All the enterprises of Hengtong have been approved by OHSAS18001 occupational health and safety management system certification, ISO14001 environmental management system certification.</p>	 <p>Annual staff health check, occupational disease prevention and inspection.</p>	 <p>High summer temperature allowance , summer labor insurance supplies.</p>	 <p>Strict implementation of safety measures, with labor insurance supplies in place in a timely manner.</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



Evacuation drill in Cablescom (Safety: emergency plan), 2019

### 3.4.3 Barrier-free communication

Hengtong attaches great importance to two-way communication with employees and listens to their opinions, which not only gives time to their initiative and creativity, but also provides a source of innovation for enterprises to improve management and efficiency.



## 4 Environmental Sustainability

Hengtong actively practices the concepts of circular development, green development and low-carbon development. Creating ecological civilization, green garden type factories, named "The first batch of China's energy efficiency five-star industrial enterprises", awarded "China communication industry green energy saving innovation award" and "National green environmental protection product" by ministry of industry and information technology and won the "Global living environment green technology (product) example" award.



### 4.1 Green manufacturing

Hengtong promotes the green management of the whole process, builds the green manufacturing of the whole life cycle of the optical communication industry chain, maximizes the reduction of the negative impact of the production operation and the whole life cycle of products on the environment and is committed to achieving the harmonious coexistence between enterprises and nature.

“ This is a successful case of Chinese independent innovation, a source of pride for Chinese private enterprises and a contribution to the world's optical communications industry! ”

—Academician Lu Yongxiang  
The former President of the Chinese Academy of Sciences



### 4.1.1 World's largest green optical fiber manufacturing base in one complex

Hengtong has successfully developed a new generation of green optical fiber materials and became the first high-tech enterprise in China and the second in the world with this technology.



The world's largest green fiber prefabricated preform manufacturing base has been fully completed in Hengtong. This green technique reduces 18,000 tons of hydrogen chloride emission per year and 860,000 m<sup>3</sup> rare gas importation. It sets an example for the Chinese optical fiber industry in terms of green manufacturing and has been honored with titles such as Made in China Strong Industrial Foundation Project, Intelligent Manufacturing Project, Green Manufacturing Demonstration Project, etc.

### 4.1.2 China East Taihu Lake ecological perception network

China East Taihu Lake ecological perception network demonstration project adopts the advanced sensor technology of Hengtong, sustainable 24 hours non-stop for water quality monitoring, grasps relevant data of water ecology in time, breaking through the technical bottleneck of relatively low frequency of conventional monitoring, so as to realize the real-time monitoring of the water environment in the true sense and promote the continuous improvement of water quality of Taihu Lake watershed.



### 4.1.3 Hengtong new energy vehicle system solutions



With the increasing environmental pollution and the depletion of natural resources, more and more people have realized the importance of environmental protection and resource conservation. In 2018, Hengtong made use of advantageous resources to lay out charging networks in 70 key cities across the country, laid out charging stations for bus, business and travel, electric logistics vehicle operation and supporting charging market and provided people with green, high-quality new energy vehicle solutions.



Shandong province Dongying city fishing and light complementary project



150MW offshore wind farm project in Indonesia

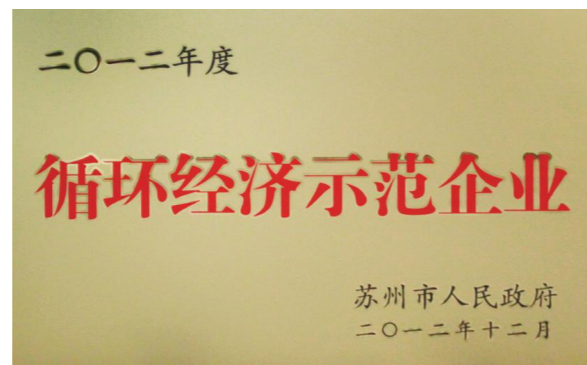
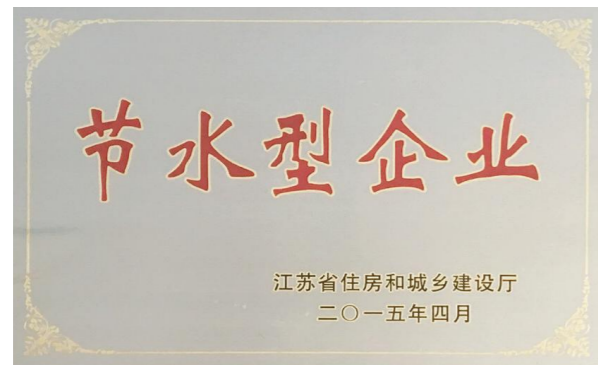
### 4.1.4 Hengtong is committed to offshore wind power engineering business and EPCI business

- 27**  
Possessing world's leading marine engineering core technology with 27 patents
- EPCI**  
Equipped with super-large offshore wind power construction ship equipment and EPCI general contracting qualification and capability
- Professional**  
Possessing a mature professional management and construction team of Marine engineering

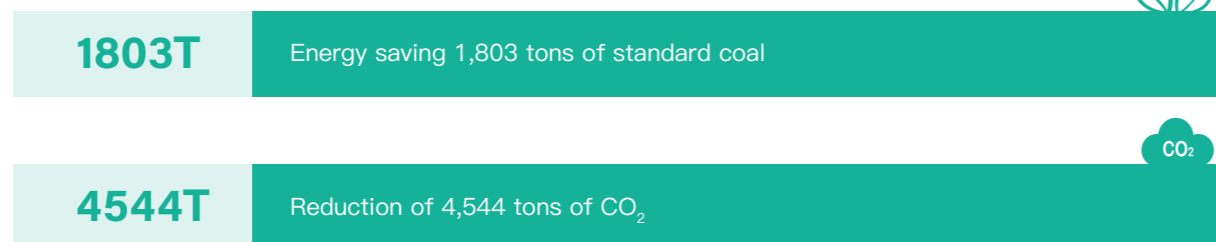


## 4.2 Energy conservation and emissions reduction

Hengtong has always regarded energy conservation and emission reduction as an important measure of a sustainable development strategy and focused on energy conservation technology innovation and consumption reduction by tapping potential. It has successively established and improved various energy management rules and regulations and relatively reasonable energy consumption quota indexes for products. It has successively won the “Provincial and municipal advanced water-saving enterprise”, “circular economy demonstration enterprise” award, Suzhou “Star of energy efficiency” five-star enterprise and the first “Energy saving trading certificate” in Wujiang district.



## Energy conservation and emission reduction in 2019



## 4.3 Promotion of Environment Protection

Hengtong attach great importance to building a green and environmental protection culture. By organizing and carrying out various professional trainings and publicity activities related to environmental protection, we strengthen the green and environmental protection education of employees, strive to guide employees to establish the concept and consciousness of green and environmental protection, encourage employees to actively participate in environmental protection public welfare activities and make their own positive contributions to environmental protection.



### Case: Hengtong Global Forest Plan

Hengtong global forest plan is a large-scale environmental protection public welfare project launched in 2018, which is a flagship activity of Hengtong group to practice global green action. Starting in March 2018, Qidu town, Wujiang district, the birthplace of Hengtong group, Hengtong is planned to carry out afforestation and green environmental protection activities around the world relying on the group's industrial bases around the world. In the first phase, it is planned to plant 20,000 trees within 3-5 years to achieve the goal of planting a tree for each employee, put the green environmental protection concept into practice. And this project will guide more people to participate in the green environmental protection cause.



### Case: Hengtong Smart Energy

Hengtong attended the International Clean Energy Expo in September 2019 in Hangzhou with three blocks namely Smart Ocean, New Energy Vehicle and Smart Energy together with their latest system solutions under the theme of “Energy Changes the World, Wisdom Leads the Future.”



## 5 Care for Our Communities

Over the past 20 years, while making itself larger and more competitive, Hengtong has been taking the initiative on social responsibility and actively repaying society. The total amount of charitable donations involved has exceeded 650 million yuan. Hengtong group was awarded "Top ten charity enterprises", the China charity award "The most caring donation enterprise, The most caring donation individual" title many



times. And Chairman of the group Cui Gen liang is awarded "China's top ten philanthropist", "China glorious cause 20 years outstanding contribution award", "The second China charity outstanding contribution (individual award)".

### 5.1 Hengtong Charity Foundation

In 2011, in line with the concept of "Benefitting from the society and returning to the society", Hengtong Group and Cui Genliang, Chairman of the Board of Directors, initiated to donate 50 million yuan and were approved by the Ministry of Civil Affairs to establish the "Hengtong Charity Foundation". This is the first private enterprise charity foundation in Jiangsu province to be directly administered by the Ministry.



In 2018, Hengtong Charity Foundation won the 4A rating from the National Industry Association of the Ministry of Civil Affairs of China, making it one of the 13 foundations in China to receive this award.



#### 5.1.1 Serving communities

Community participation and development is a fertile soil for enterprises to achieve stable operation and development. Hengtong always cares about the community where we live and the country where we do business and is committed to realizing the harmonious coexistence between the enterprise and the community.



#### Oliver's House Soup Kitchen – GOC "Oliver's House"

Oliver's House is a non profit organisation that was founded for the purpose of providing social services for the disadvantaged communities of Benoni and Daveyton. They run a soup kitchen (feeding scheme) for the immediate informal settlements. In contribution, Aberdare GOC donated groceries and sitting benches.





**CASE**

### Donation of Fogging Equipment

As one of company's attention in term of health and environment, on 31 January 2018, PT. Voksel Electric Tbk was provides 2 units of fogging equipment to the village of Limusunnggal to be used for surrounding area. we also invite a doctor to conduct healthy talk regarding "dengue fever."



**CASE**

### Free Medical Checkup and treatment



### Blood Donation



### 5.1.2 Caring for children's growth

**CASE**

### Treatment of children with congenital heart disease in Yunnan province, China

In 2012, Hengtong Charity Foundation organized 100 children aged 0-14 years old from poverty-stricken ethnic minority families in Dehong prefecture and Pu'er city in Yunnan province to receive free surgery in Beijing Air Force General Hospital for congenital heart disease.



## Chongqing rural left-behind children caring project



2013, Hengtong Charity Foundation in cooperation with the China glorious cause foundation, directionally donated 5 million yuan to support China Glorious Cause Foundation in Chongqing Wuyang, WuXi and Qianjiang .The project of "Glorious Love Home -- Home of Harmony" implemented in 10 pilot villages in three counties.

## Sinethemba – PE



Sinethemba is a centre established with the aim to provide assistance to homeless and drug-addicted street children.

## Baby Moses Home –GOC

Baby Moses is a baby and child sanctuary based in Roodepoort. This home shelters babies, from as young as new born right up to teenagers who are abandoned or abused. Safety is a priority with babies and hence we have donated a heat pump to ensure that hot water is always at controlled levels for the babies. We have also donated bunk beds.



## 5.1.3 Contribution to community education

Hengtong actively pays attention to the development of community science and education and makes continuous contributions to community education. Hengtong united with government and staff volunteers to work together to improve the community education environment, enrich the community education resources and provide talent resources for the future development of the community.



## Aber-School Project

The Aber-School Project commenced in April 2017, the objective of the project is to empower impoverished youth from our closest neighbouring community which is 9 km from Aberdare Pietermaritzburg factory.

The Aber-School project currently has 85 learners, 25 Grade10 learners, 30 Grade 11 learners and 25 Grade 12 learners. All 25 of the Grad 12 learners passed their matric, 10 learners received distinctions and 12 of the 25 learners received merit passes ie legibility to enter universities to study at Tertiary Institutions. Aberdare Cables pays the tutors for the extra lessons. The introduction of tablets to the programme has assisted learners to gain additional computer skills.

The Aber-School Project was invited to join the celebration of the ANC and president Ramaphosa on Thursday 10th January 2019 at the host school Siqongweni where the classes take place weekly. Siqongweni High School have been commended by the president for their exemplary effort and for producing good matric results. The School Governing Body together with the Department of Education extended the invitation to Aberdare Cables as they believe that the Aber-School Project has made a great impact to the school and the results. The event was attended by the CEO, HR Executive of Aberdare Cables and the General Manager, HR team from Aberdare Pietermaritzburg factory.

President Ramaphosa congratulated Aberdare Cables for their initiatives in making a difference to the youth of South Africa through the introduction of the Aber-School Project. He encouraged learners to take up the opportunity to get the extra lessons so that they may get the best matric results they can.

The President offered to equip the school with a Science Laboratory and a Library. Aberdare Cables offered to assist the school with a Computer Centre.



**CASE**

### Constructions of PAUD or ECED

PT. Voksel Electric Tbk. also concern in education by give donation for built PAUD PELITA HATI in Limusnunggal. The construction has been completed and the opening ceremony was on 12 April 2018 and it attended by the inspector from education ministry. it is expected that this PAUD becomes a raw model for the village Limusnunggal.



**CASE**

### 56 schools benefit from Hengtong's Firefly Initiative

Hengtong's "Firefly Reading Initiative" is carried out in the form of donating books to schools for mass reading. It is named in the hope of enlightening wisdom with little donation as little sparks light the wildest fire. As of the end of 2019, Hengtong has made donation to 35 public schools and 21 schools for immigrant workers' children. It also initiated many projects such as the Citizen's Study and the 24-Hour Self-Service Library.



### 5.1.4 Charitable giving

With gratitude, Hengtong has donated a total of over 50.0 million yuan to the charity federation of Wujiang district, Suzhou, where the headquarters is located, to support the development of charity in Wujiang district.



Hengtong charity foundation also made donations for the construction of schools, health centers, nursing homes, culture squares, activity centers for the elderly, kindergartens and other social service facilities in Wujiang district. In 2018, Hengtong donated 1 million yuan to establish the "Wujiang district Hengtong supporting army care fund" to care about the living conditions of the veterans in Wujiang.



At the same time, Hengtong charity foundation has donated more than 35 million yuan to provincial and municipal public welfare charities at all levels for poverty alleviation, legal aid, cultural inheritance and other related projects.

**CASE**

**Donation for Surrounding Neighborhood**



Facing with Wenchuan, Yushu, Ya'an earthquake, Zhouqu landslides, Funing tornado disaster, Hengtong charitable foundation co-founder Hengtong group organized and mobilized all subsidiaries and employees to donate to the disaster area at the first time. Accumulated donations and goods amounted to more than 20 million yuan .Hengtong gave a helping hand to the people in the disaster areas and supported post-disaster reconstruction.

<p><b>Wenchuan earth-quake in 2008 donated 12 million yuan of money and goods</b></p>	<p><b>2009, typhoon morakot in Taiwan donated 380,000 yuan</b></p>	<p><b>In 2010, the mudslide in Zhouqu donated 200,000 yuan</b></p>
<p><b>2010 Yushu earth-quake donated 2.2 million yuan</b></p>	<p><b>2013 Ya 'an earth-quake donated 8.44 million yuan</b></p>	<p><b>2016, Funing tornado donated 860,000 yuan</b></p>

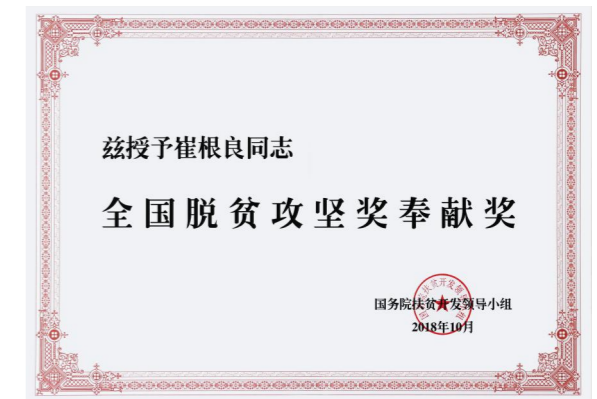
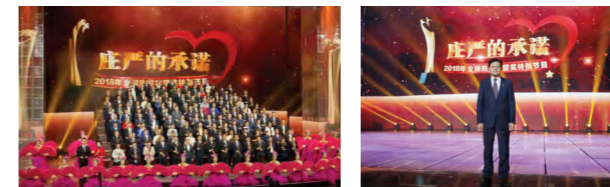


In 2017, after the Jiuzhaigou earthquake, Hengtong cooperated with the operators to obtain the "emergency pass" within one hour, and produced 1000 kilometers of fiber optic cable within 36 hours to assist the disaster area and ensure smooth communication in the disaster area of Jiuzhaigou.



**5.1.5 Targeted Poverty Relief**

In recognition of the significant contribution made by Chairman of the Board of Directors of Hengtong Group in poverty alleviation work, the State Council of China awarded Cui Genliang the honorary title of national poverty alleviation contribution in October 2018.



Eradicating poverty is a critical task for China at present. Eradicating poverty fundamentally is China's greatest contribution to mankind. As an international enterprise with social responsibility, Hengtong takes an active part in it, insisting on starting from the side, starting from the local and gradually spreading to all the poor areas. In order to implement the relevant requirements of targeted poverty alleviation by the central govern-

ment, Hengtong has teamed up with the people's government of Tubuka town, Dongchuan district, Kunming city, Yunnan province to donate 10 million yuan to the building of the memorial hall of the red army crossing the river in Shuju village of the town to cultivate the red tourism industry and help the local people to get rid of poverty.



In October 2018, the All-China Federation of Industry and Commerce and the Poverty Alleviation Office of the state council awarded Hengtong Group the "Advanced Private Enterprise of Targeted Poverty Alleviation Action", in order to encourage the non-public sector to participate more actively in targeted poverty alleviation and make new contributions to winning the targeted poverty alleviation battle.



Hengtong also went to Guangchang county in Jiangxi province, Miyun district in Beijing, Qingyang city in Gansu province, Xinan prefecture and Tongren city in Guizhou province, Ganzi prefecture and Liangshan prefecture in Sichuan province, Dehong prefecture in Yunnan province and Baisha li autonomous county in Hainan province to carry out targeted poverty alleviation work, with a total donation of more than 10 million yuan.



Initiated by Hengtong and Wujiang District Disabled Persons' Federation, "Help Disabled People Realize the Dream Initiative" aims at enabling poor disabled families in Wujiang to enjoy modern living conditions. From 2011 to 2019, we have carried out activities to help disabled people realize their dreams for 9 consecutive years. We have donated color TV sets, refrigerators and other home appliances to some 2,000 poor disabled families, realizing the full coverage of modern home appliances for poor disabled families in Wujiang district.



In 2014, Hengtong Charity Foundation donated 8 million yuan for the construction of mass cultural square in Qidu town, Wujiang district. The cultural square is not only a platform for the concentrated display of traditional culture in Jiangsu province, but also an important place for local elderly activities, which greatly enriches the spiritual and cultural life of local elderly people. In addition, the foundation has donated over 7 million yuan to support the construction and operation of Suzhou General Social Welfare Hospital, Soochow University for the Elderly, Wujiang Social Welfare Hospital, Wujiang Nursing Home, Qidu Recreation Center for the Elderly and other elderly care institutions, building a happiness wall for the elderly welfare undertakings in Suzhou.

Hengtong Charity Foundation undertakes the demonstration project of "Hexian Anqi Project" led by the Ministry of Civil Affairs. Taking Jiangxi province as a pilot, this public welfare charity project guides

the whole society to pay attention to the basic living security of the elderly in the old revolutionary base areas through the reconstruction of the basic living facilities of pension institutions. Its ultimate goal is to improve the living facilities of pension institutions in more backward areas of the country.

Since 2015, Hengtong has been operating in Suzhou. A day care centre for the elderly was set up in the community under the "Hexian Anqi" Elderly Cre project.



## GRI CONTENT INDEX

Goal	Primary indicator	Secondary indicators	Third-level indicators	Remarks
Social responsibility	Legal ethics	Compliance with laws and regulations		P65-69
		Core strategy considers social responsibility		P4\P6\P37-38\P54-87
		Against corruption, healthy business ethics		P54-57
		Social responsibility performance		P6\P13\P18\P41\P62
		Tax contribution	Tax and tax growth	P17
	Taxation demonstration		P17	
	Safety and Quality	Quality management system		P45-48
		Quality control method		P47-48
		Product quality certification		P48
		Accident response		P45
		No serious quality		P49
		Incidents and safety incidents		P49-50/P67-68
	Technological innovation	R&D		P38
		Developing good products		P42-44
		Transformation of results		P41
		Patent application and ownership		P39
	Honesty	Completing communication and disclosure mechanisms, stakeholder communication		P17-21
		Real and legal products and information		P22-36
		Management on integrity, fair trade, and elimination of fraud		P6
		Respecting and protecting intellectual property rights		P38-39
		Creating a credible environment		P49-50
		Supply chain relationship		P49-50
	Consumer Rights	Always providing quality products		P29-36
		Fair marketing		P49-50
Perfect after-sales service system		P45-50		
Product recall and compensation		P45-50		
Consumer protection		P48		
Shareholders' equity	Ensuring reasonable returns for shareholders		P17-21	
	Protection and relief of minority shareholders' rights		P17-21	
	Maximizing shareholder will		P17-21	
	Good relationships among Investors		P53-60	

Goal	Primary indicator	Secondary indicators	Third-level indicators	Remarks	
Social responsibility	Employee rights	Respect for labor and respect for human rights		P64-66	
		Compliance with labor laws and systems		P67-69	
		Against discrimination		P65-66	
		Employees' training		P63-64	
		Trade union activity		P67-69	
		Occupational health and safety		P67-68	
		Harmonious labor relations		P67-69	
		Creating career opportunities		P64-66\P6	
	Energy and environment	Environmental protection	Environmental protection measures		P70-74
			Environmental protection Awareness		P70
			Environmental protection Standards		P74
			Products and service		P71-72
			Environmental protection Projects		P74
			Guiding and creating sustainable consumption		P73-74
		Energy conservation	Circular Economy		P73
			Clean energy		P71-72
			Technological innovation		P73
			Quantitative results		P73
		Sustainable development	Sustainable Development Strategy		P6-73
			Sustainable performance		P29-36
	Sustainable use		P29-36		
	Harmonious community	Community relations	good relationship		P75-87
			Good ecology		P75-87
			Radiation effect		P75-87
		Charity	Charitable donation		P75-87
			Charity concept propagation		P76
			Social charity projects		P75-87
		Responsibility management	Corporate culture with a sense of social responsibility		P4/P23/P53 P70/P75
			Responsible management agencies and personnel		P75-87
			Social responsibility project		P75-87
Emergency response			P75-87		
Good public image			P49/P70-87		
Social responsibility honor			P4/P84		

## REPORTING PRINCIPLES

Hengtong disclaims all warranties, express or implied, with respect to the contents of this manual, including but not limited to warranties of merchantability or fitness for a particular purpose, unless required by applicable law.

To the extent permitted by law, Hengtong Group Co., Ltd. shall not compensate for any special, incidental, indirect or consequential damages arising out of the use of the contents of this manual, nor any profits, Compensation for data, goodwill or expected saving.