

HENGTONG GROUP

ENLIGHTENING THE FUTURE

HENGTONG GROUP OVERVIEW



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Company Overview

Innovation

Global Business Layout

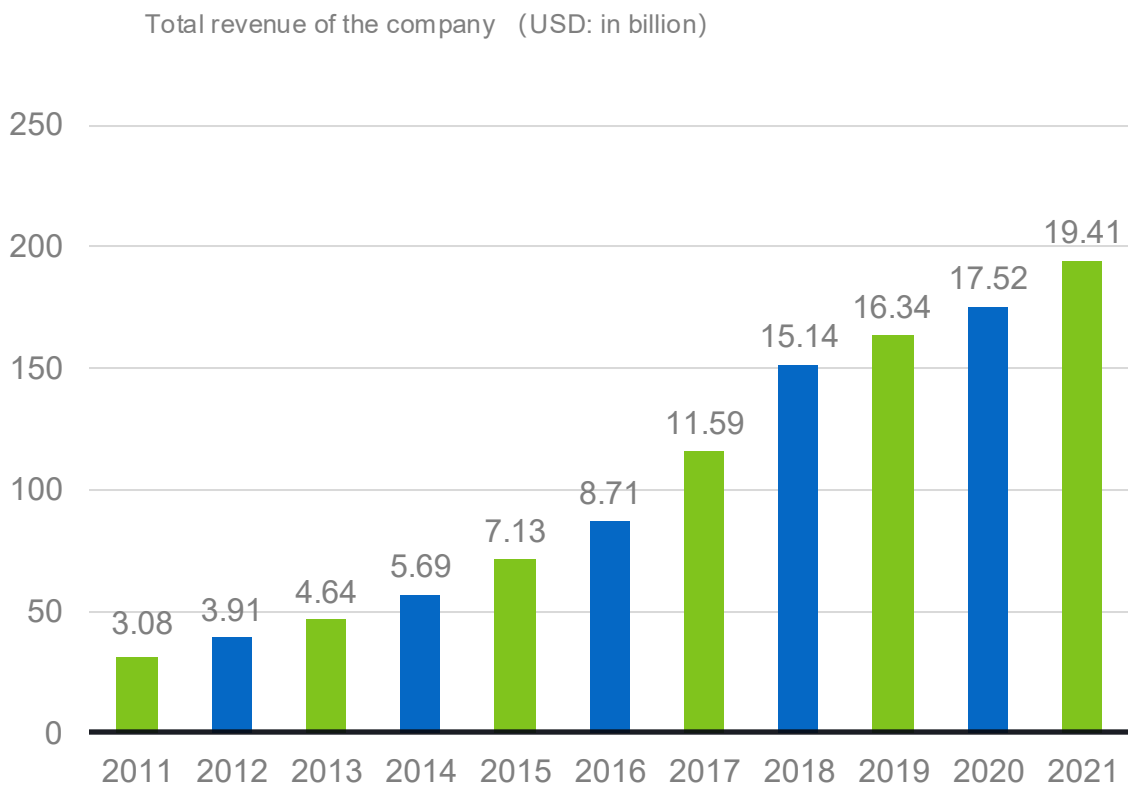
Social Responsibility

Company Overview



- Hengtong was found in **1991**
- Hengtong is dedicated to Optical Communication Networks, Power Networks, IoT, Clean Energy, and Emerging Materials
- Hengtong integrates optical and power network and provides network service
- **70+** subsidiaries (including **3** listed companies-with the fourth to be listed soon)
- **12** Industrial companies in **9** countries (excluding China)
- Top **3** in optical fiber communication (by CRU)
- Top **5** in high voltage and marine electric power engineering

Company Overview



195 Top 500 Enterprises in China

60 Top 500 Private Enterprises in China

20,000 Employees worldwide

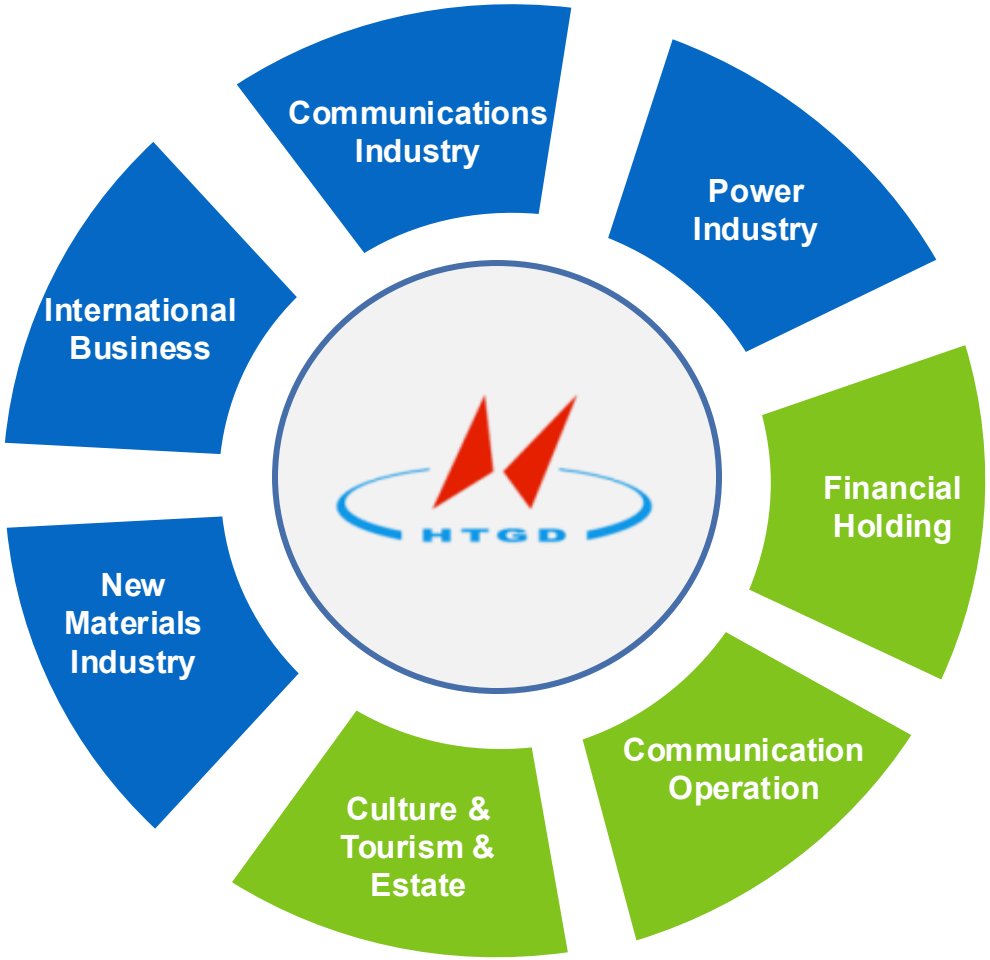
5,000+ Overseas employees

Company Overview

Structure of the Group



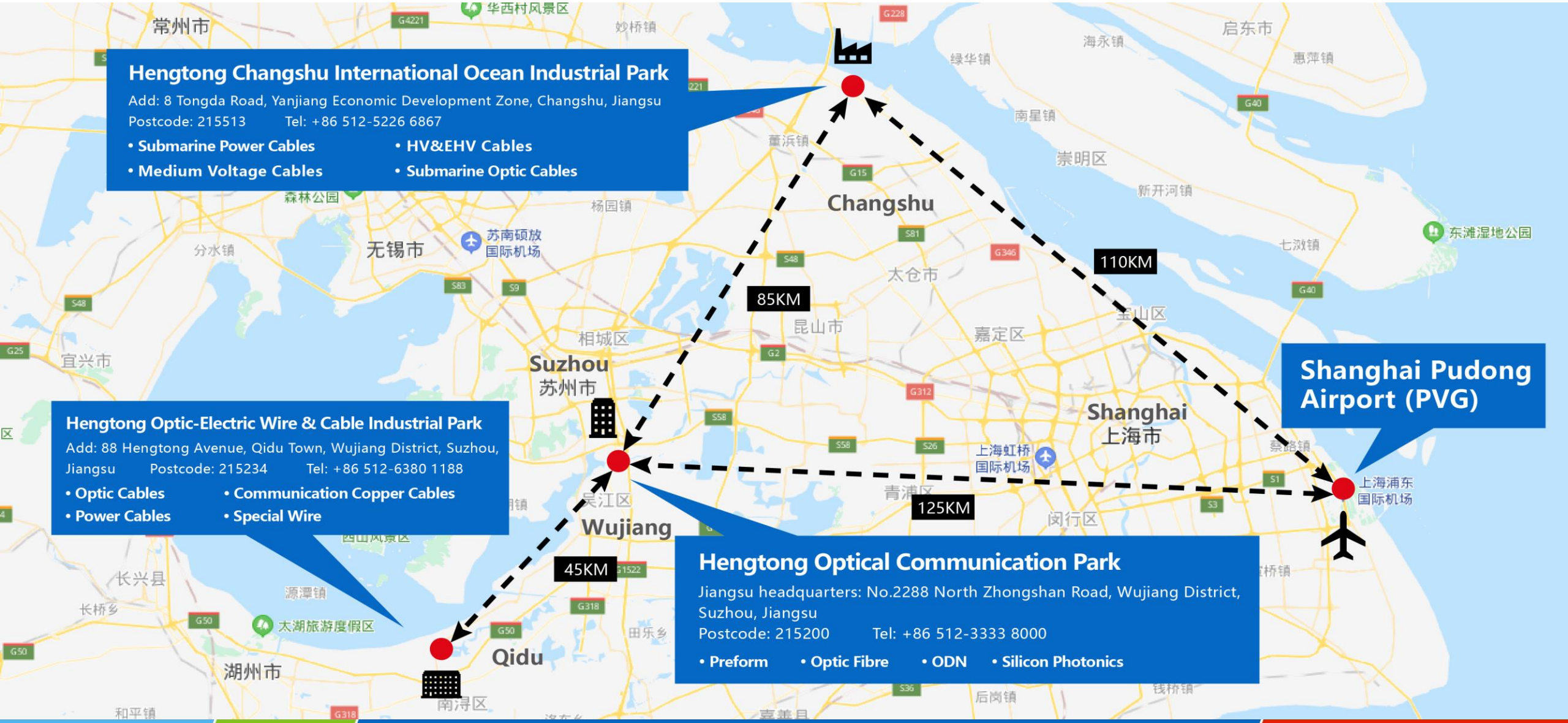








Company Overview



Company Overview

HENGTONG GROUP
ENLIGHTENING THE FUTURE

Communications–Serving major operators, equipment producers, fields like marine communications, IoT, big data, etc.)

A world leading integrated service provider across the communications industry value chain

Optical Communication Industry Chain
ODN | Device Industry | Fibers

- Rod fiber copper cable
- Low energy consumption and green data
- Silicon photonics
- 5G front-haul solutions
- Industrial special equipment

Wireless Communications

- 5G antenna
- 5G connection
- 5G RF device filtering
- 5G wireless coverage

5G Smart Application and Safety

- Smart city smart application
- Big data and IoT
- Network optimization and security
- Industrial control security

- With the world's leading optical fiber communications industry chain (optical preform-fiber-cable-device-network), Hengtong has become an integrated service provider in the entire value chain;
- Hengtong has developed core technologies independently, which include optical fiber preforms, optical fiber drawing, semiconductor quartz devices, 100G/400G silicon optical chips and modules, ultra-large length submarine cable technology, ocean observation network, and optical fiber sensing.

Company Overview

Communications–Serving major operators, equipment producers, fields like marine communications, IoT, big data, etc.)

A world leading integrated service provider across the communications industry value chain

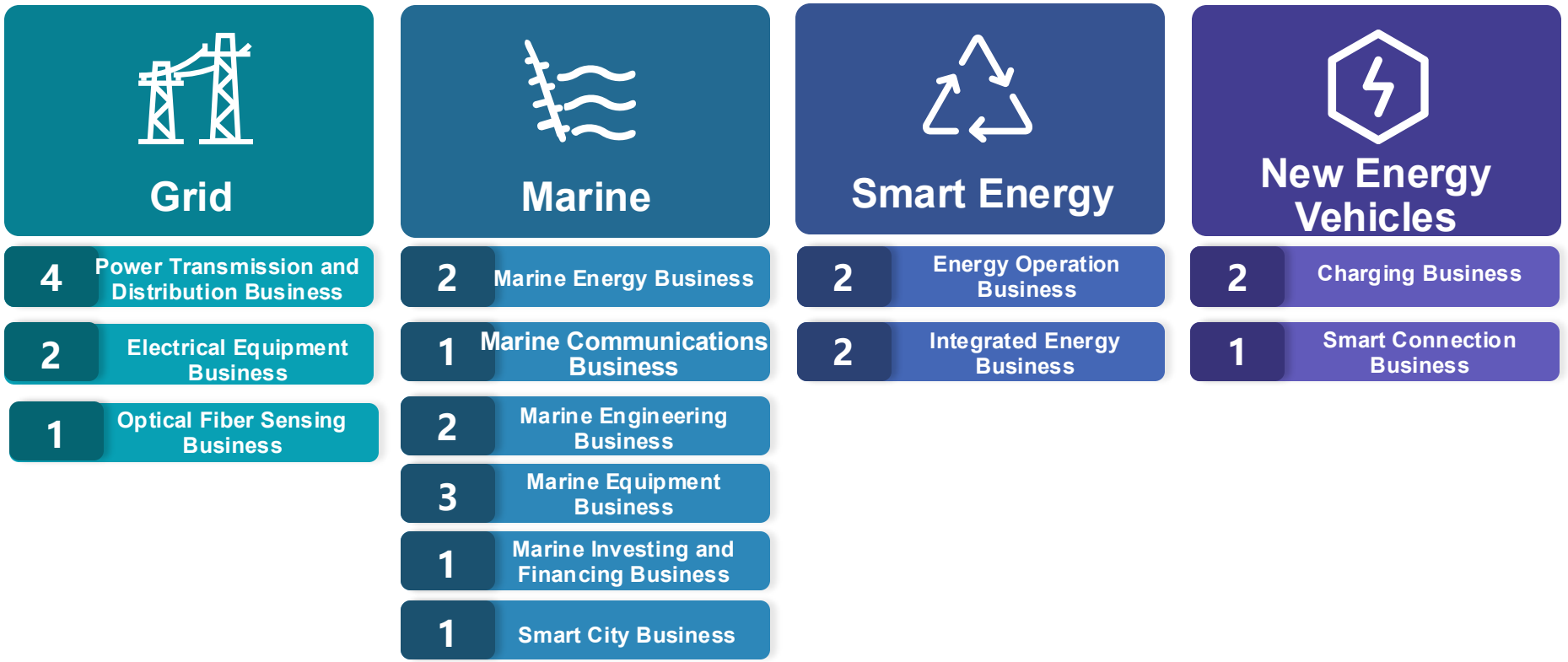
EPC Service	Marine Communications and Management	Next Generation Communication Technologies and Materials
Communications engineering Communications EPC	Marine communications Marine equipment Marine communication operation	Millimeter wave high-speed wireless transmission Terahertz technology applications Chip and Sensing Technology Emerging materials semiconductors and titanium alloys Wired and wireless convergence All-optical network technology

- With the world's leading optical fiber communications industry chain (optical rod-optical fiber-optical cable-optical device-optical network), Hengtong has become an integrated service provider in the entire value chain;
- Hengtong has developed core technologies independently, which include optical fiber preforms, optical fiber drawing, semiconductor quartz devices, 100G/400G silicon optical chips and modules, ultra-large length submarine cable technology, ocean observation network, and optical fiber sensing.

Company Overview

Power–Smart grid, marine energy, energy internet, marine communication, smart integrated energy, new materials and other fields

Service provider for global energy interconnection system solutions



- Hengtong develops high-end products. It provides complete solutions and engineering turnkey contracting to its clients, transforming from a product supplier to a system integration service provider. Hengtong is extending towards the fields of marine power engineering, and providing advanced energy interconnection system solutions to the world.
- Hengtong's core technologies are: ultra-high voltage submarine cables and accessories, smart grid technology, heat storage/electricity, offshore wind power system integration, electric vehicle formation and charging equipment, etc.

Company Overview

HENGTONG GROUP
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New Materials

Titanium alloys, copper alloys, aluminum alloys, precision copper foils, polymer materials R&D

Hengtong develops new materials and aims to build a world-class industrial cluster

Titanium alloys



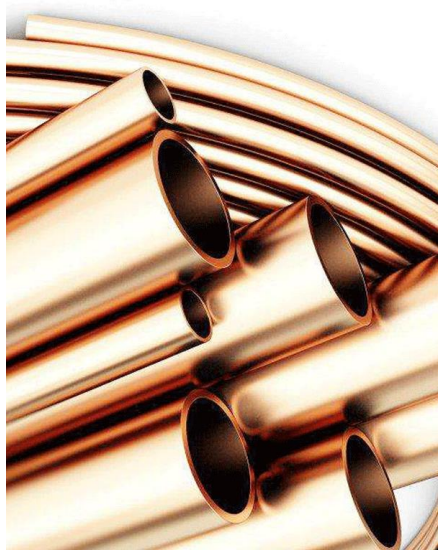
Copper alloys



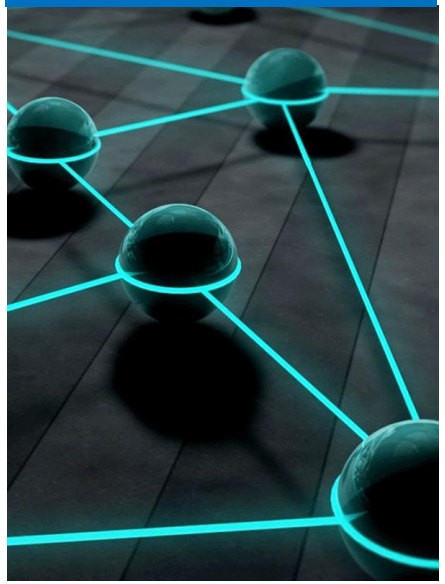
Aluminum alloys



New energy copper foil



Composite material

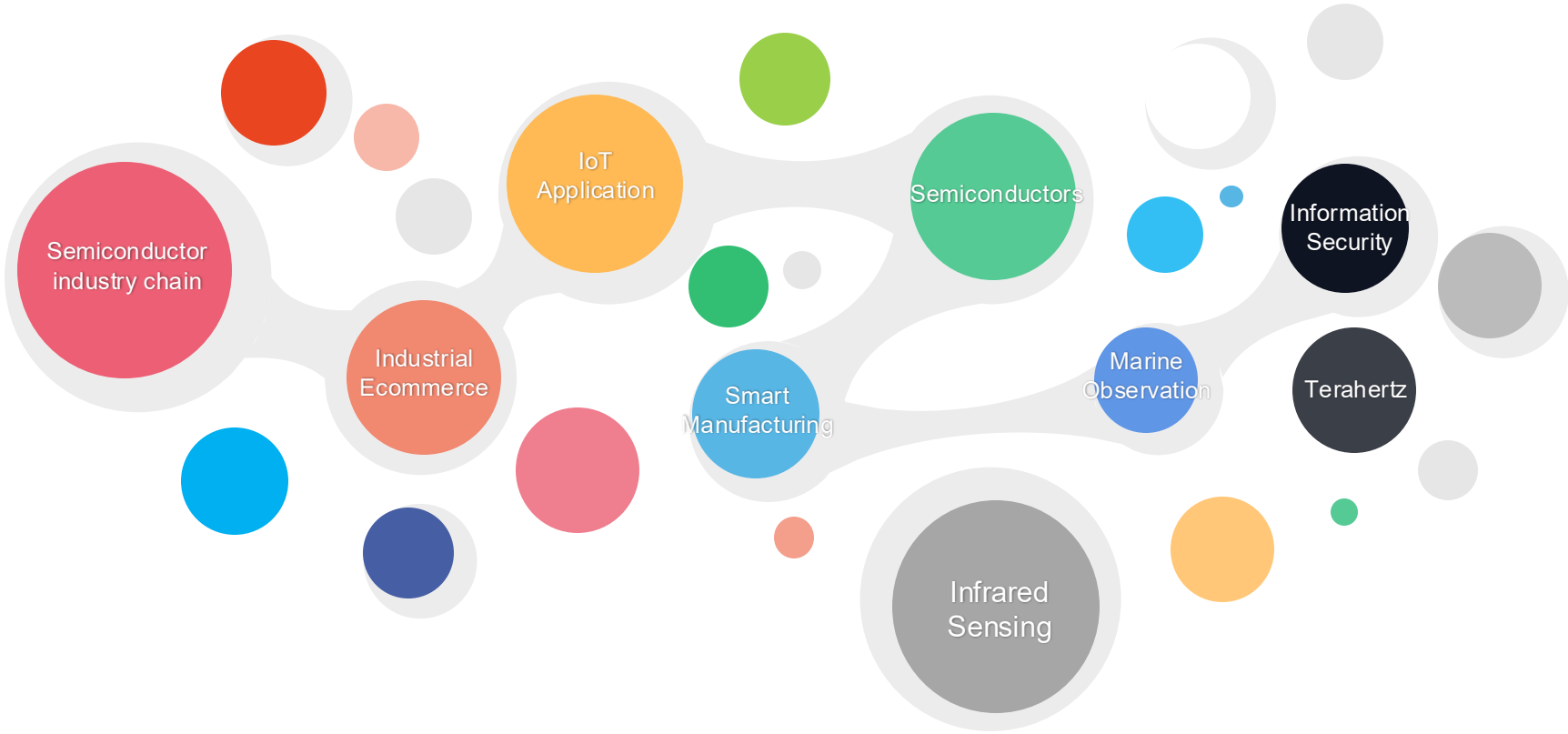


Company Overview

New Industry

Hengtong develops semiconductors, new generation batteries and quartz materials, and intelligent equipment.

Hengtong aims to create a strategic industrial growth pole that reaches world standards



Innovation

HENGTONG GROUP
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Strategy Innovation

Corporate Vision

Build a world-famous brand
Become an outstanding global enterprise

High-tech, High quality, Global

Corporate Mission: Create Excellence, Advocate Civilization

Become a century-old enterprise
Become a global top-class enterprise



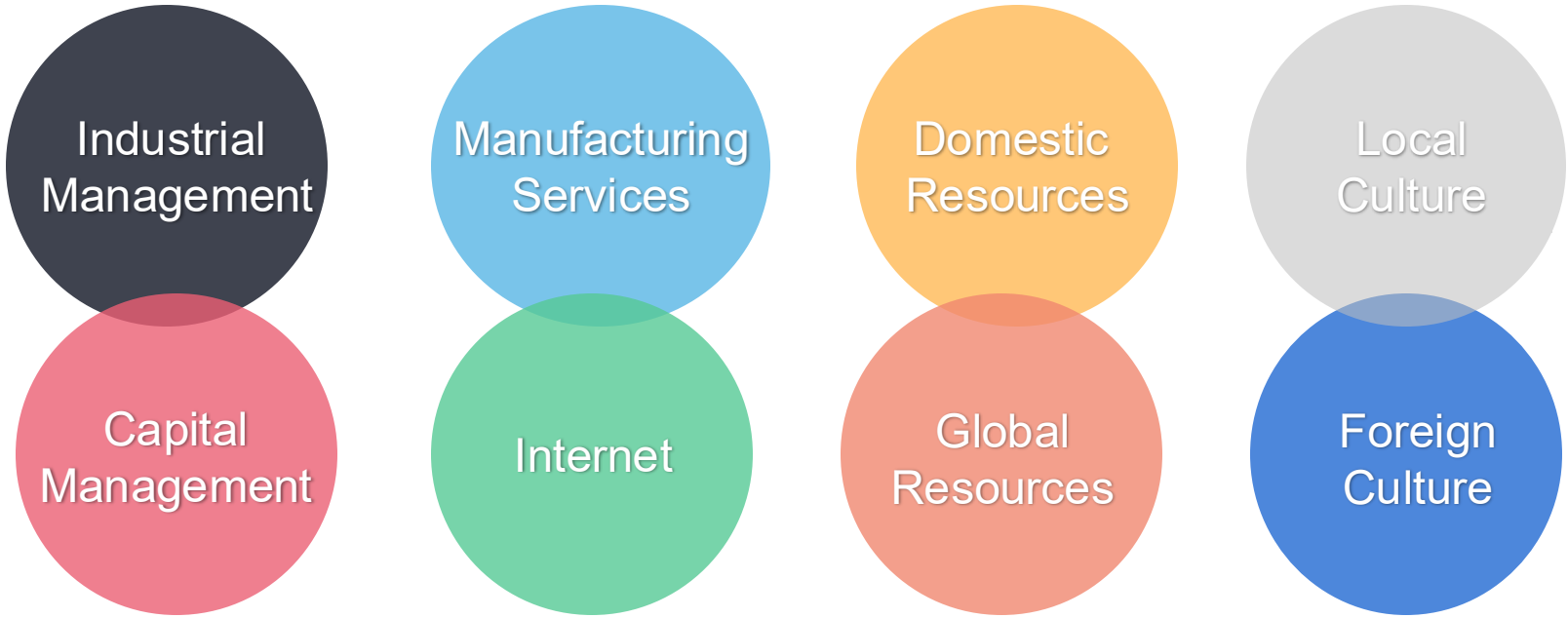
Hengtong's Innovation Ecology

1. Strategic innovation is the first step
2. To remain competitive, focus on technology development and innovation
3. Cultivate talents. Always look for new ways to train and cultivate employees.
4. Put importance on capital innovation
5. Develop and innovate the mechanism

Innovation

HENGTONG GROUP
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Four Collaborations



Innovation

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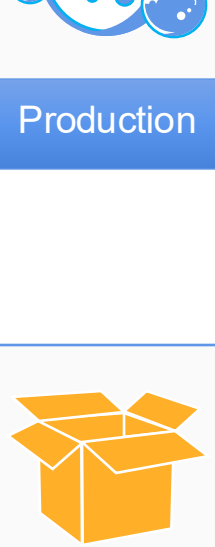
Strategic Transformations



Production → Innovation and Creation



Manufacturing → Platform Service



Product Supplier → Full Value Chain Integration



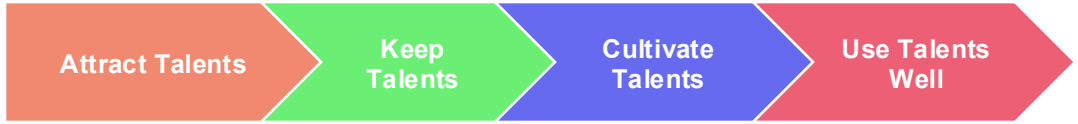
Local → Global

Innovation

Talents

Hengtong's Talents-First Strategy

- Build a management team with international backgrounds
- Build a strong technical team that can develop top-level technologies through researching and innovating
- Build a team that strives for excellence and high quality



Hengtong Values

(Strategy determines success, management determines excellence, moral qualities decide product quality, actions determine status)

"Four principles"

(Honesty, hard work, contribution, win-win)

Building Four Communities

(Community of Responsibility, Community of Interest, Community of Business, Community of Mission)

Innovation

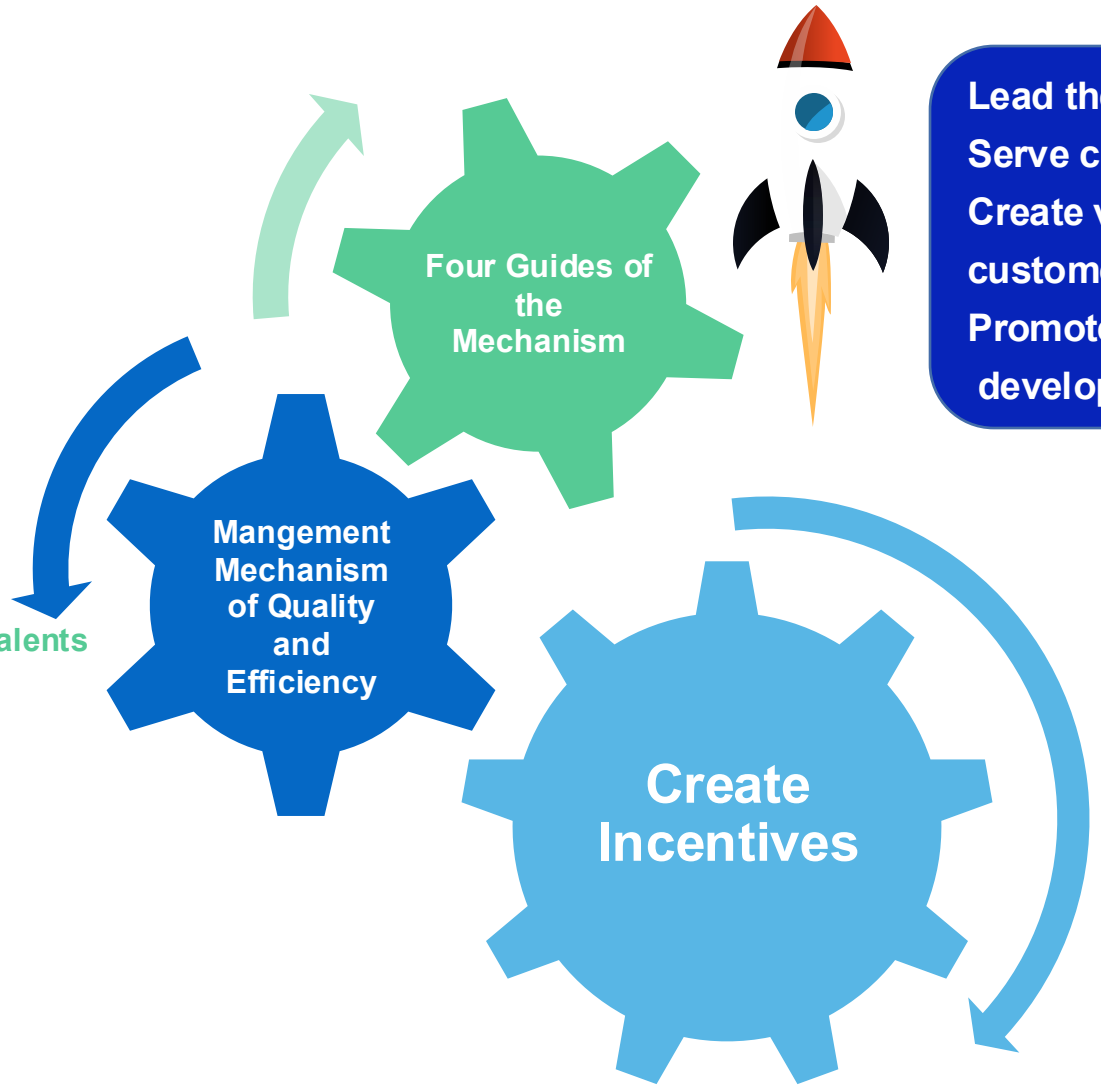
Mechanism

Intelligent factory:
Maximize the utilization of robots

Management Informatization:
SAP/MES/SRM/CRM/OA
online working, paperless office, information integration, platform mobilization

Lean Manufacturing:
Lowest Cost / Fastest Speed / Attract Talents
personalized customization, customized production, flexible manufacturing

National Intelligent Manufacturing Pilot Plant



Lead the market
Serve clients
Create value for customers
Promote industry development

Short term
Annual performance incentive

Venture
Partnership Mechanism

Medium term
EVA Benefit Sharing Incentive

Long term
Incentive stock option

Innovation

Technological Innovation

2	2	5	7	24	16
National enterprise technical center	Post-doctoral scientific research workstation	Academician workstations	National key laboratories	Provincial and ministerial-level laboratory technical research centers	Provincial enterprise technology center

Hengtong's number of standard customization and patents ranks first among its domestic counterparts. Hengtong has presided over and participated in setting more than 600 international and industry standards, especially in optical fiber optical network, marine communication, ultra-high voltage submarine cables, and marine engineering equipment. It has more than 4,000 authorized patents such as PCT and invention patents, ranking at the top among its domestic counterparts.

Innovation

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Hengtong is a leading R&D platform:
it has dozens of R&D platforms overseas and domestic, and it has many industrial research institutes.

















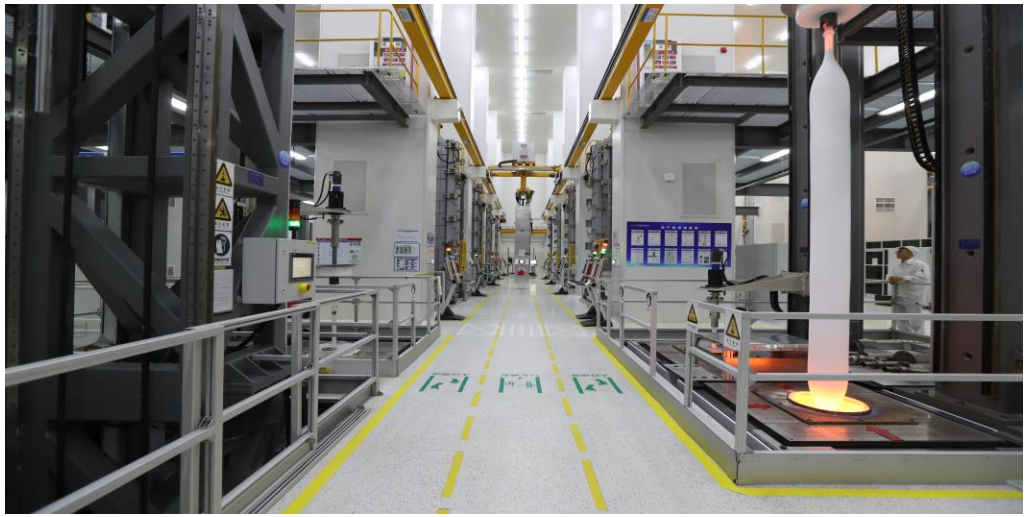


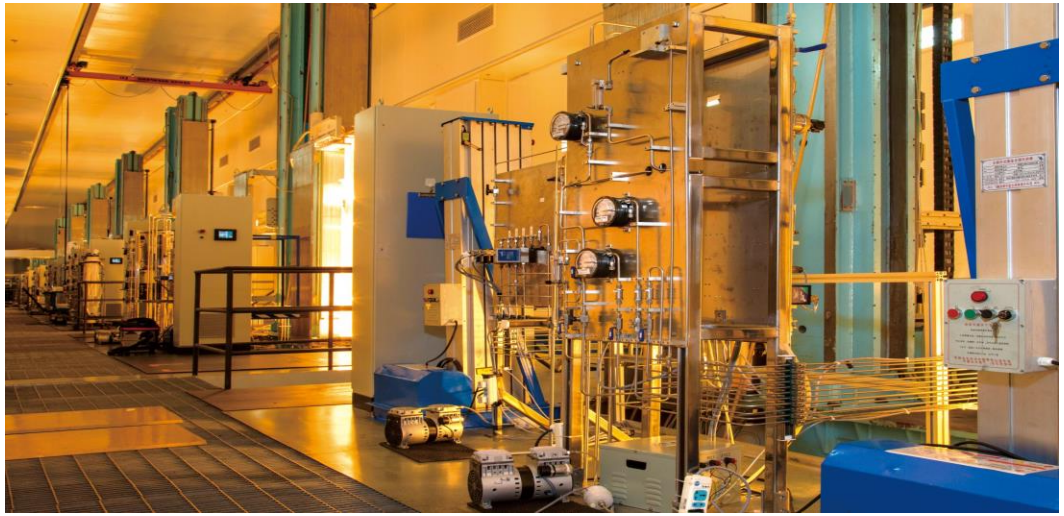


Innovation

HENGTONG GROUP
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World leading intelligent manufacturing workshops









Innovation

World leading innovative development achievements

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Communications



- Hengtong independently researched and developed a new generation of green optical fiber materials, which has been selected as a National Green Intelligent Manufacturing Project;
- Hengtong launched China's first 400G high-capacity ultra-low loss optical fiber, which was selected as a national "Industrial Strong Foundation Project";
- Hengtong launched the world's first "full-band ultra-low loss, long-distance, super-capacity" optical fiber communication system;
- Hengtong launched the world's first carrier-grade "large effective area optical fiber" terrestrial optical cable (G.654E) engineering application;
- China's first UUA ultra-low loss, ultra-large area single-mode fiber;
- Science and Technology Progress Award of Society of Optical Engineering China, first prize;

Marine



- Hengtong is the first enterprise in China to complete the laying of 40,000 km of submarine optical cables;
- Hengtong produced the world's first "ultra-long, ultra-low loss non-relay submarine optical cable";
- Hengtong is China's first enterprise to enter the world's 500kV Ultra-High Voltage Submarine Cable Technology Leading Enterprise List;
- Hengtong produced the world's first large-length 500kV AC optical fiber composite submarine cable;
- Completed the Hanjiwei Project-- the most complex water ecological monitoring project crossing the Yellow River, the Yangtze River, and Moling;
- Hengtong is part of the National Key R&D Program (R&D and Demonstration Application of Key Technologies for Dynamic Cables for Floating Offshore Wind Power);
- Hengtong won the China Machinery Industry Science and Technology Progress Award, first prize, for its ultra-high voltage XLPE insulated optical fiber composite submarine cable system;

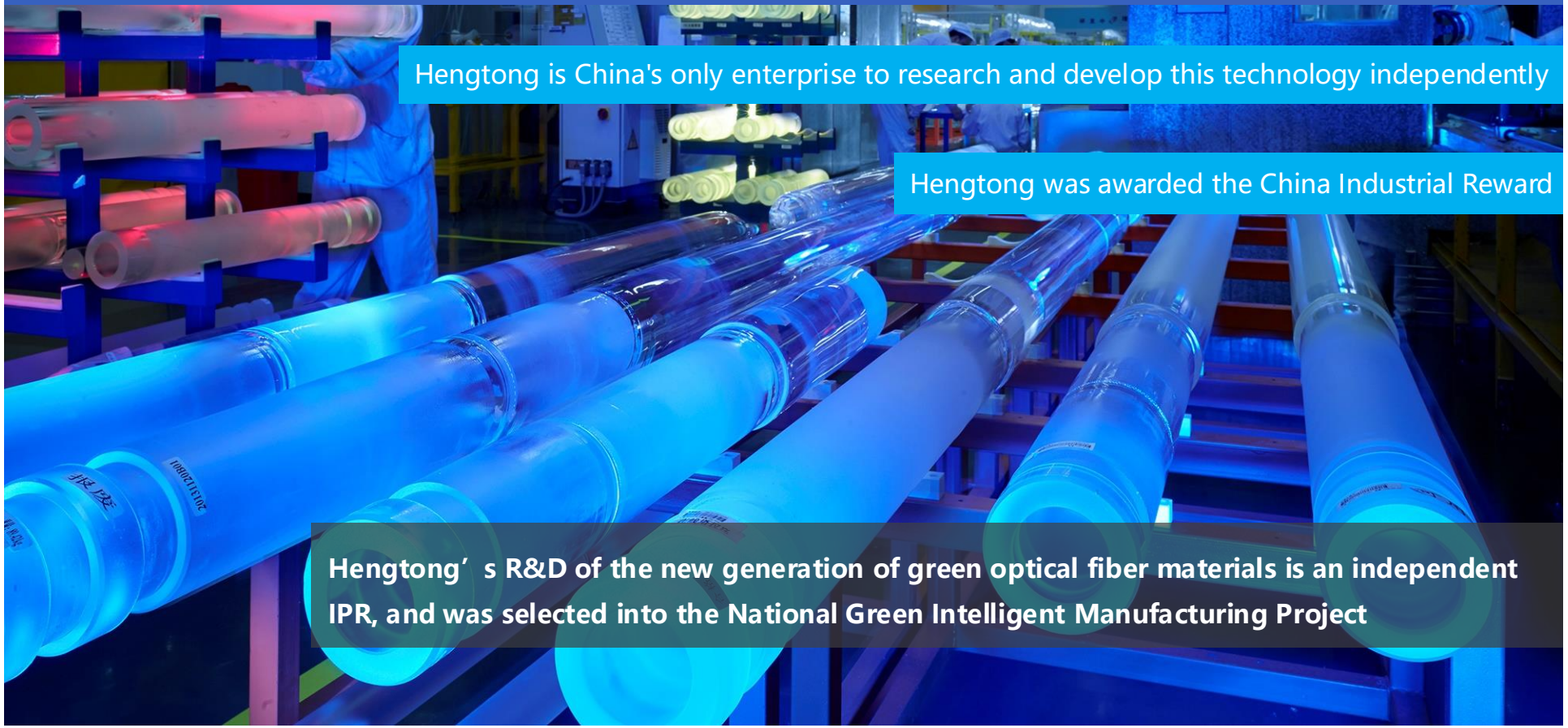
Power



- Hengtong's cross-Amazon smart grid project has created two global firsts in cross-section and span";
- Hengtong completed the construction of the world's first and leading State Grid Changji-Guquan ±1100kV UHV DC transmission project;
- Hengtong built the world's first high-voltage, large-span, ultra-low loss OPGW product system;
- Hengtong produced the world's first ultra-high voltage 500kV 1*1800mm2 single longest submarine cable;
- Hengtong was awarded the National Science and Technology Progress Award, second prize, for its aluminum alloy energy-saving transmission wire and multi-scenario application;

Innovation

Hengtong has completed independent research and development of the first generation of light rod manufacturing technology and equipment



Hengtong is China's only enterprise to research and develop this technology independently

Hengtong was awarded the China Industrial Reward

Hengtong’s R&D of the new generation of green optical fiber materials is an independent IPR, and was selected into the National Green Intelligent Manufacturing Project

Innovation

Hengtong marine optical cable successfully passed the 5000-meter international deep-sea test



Innovation

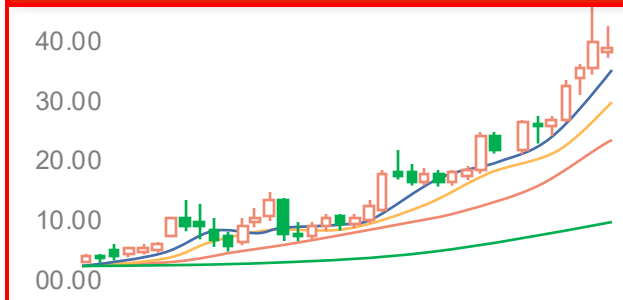
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Completed construction of the world's first ±1100kV UHV DC transmission line



Global Business Layout
——Capital

In 2003 Hengtong was listed in China
Stock Code：SH600487



- In 2017, Hengtong was selected into Wall Street Goldman Sachs Group "New Beautiful 50"
- In 2018 Hengtong was included in the MSCI index system
- In 2018 Hengtong was included in the CSI 300 Index
- In 2018, with a 16.51-fold increase in market value, Hengtong became one of the nine listed companies in the A-share market whose market value increased by more than 10 times within 10 years. The nine listed companies were listed in the "Ten-Year Market Value Champion List" released by the China Listed Company Market Value Management Research Center, an authoritative organization.





Cable Technology was listed in Hong Kong in 2010
Stock code: Hong Kong 1085



In 2015, Hengtong acquired Voksel, an Indonesian listed company.
Stock symbol: Voksel

Global Development

—— Some overseas enterprises acquired by Hengtong

Indonesia: Voksel was founded in 1971. It was listed in the Indonesian Stock Exchange in 1990. It is the main supplier of Indonesia's National Grid and Indonesia Telecom. As an old listed company in optical cable manufacturing, Voksel is strongly competitive.

South Africa: ABERDARE was founded in 1946. It is the largest manufacturer of opto-electronic cables in South Africa, with a local market share of 40%. ABERDARE supplied and provided services for all the stadiums in the 2010 World Cup. ABERDARE supplies optical cable projects to large-scale power plants constructed by the South African National Power Company

Spain : CablesCom, an old Spanish manufacturing company, was founded in 1971. CablesCom once served the first high-speed rail in Paris.

Portugal: Alcobre was founded in 1910. It focuses on power infrastructure, mining and telecommunications.
The industrial segment accounts for about 74% of sales.

These companies of decades have accumulated unique advantages in quality, technology and brand. Acquiring companies overseas enables Hengtong and the factories it acquires to make their respective advantages complementary to each other. Doing so also allows Hengtong to quickly enter the local market, speed up the process of going global, and enhance the industrial chain, therefore allowing Hengtong to become more competitive.

Global Business Layout



Layout diagram of overseas industrial bases

9 Sales Companies

12 Overseas Industrial Bases

(with a new factory under construction in Mexico)

40+ Overseas Offices

150+ Global coverage

Global Business Layout

HENGTONG GROUP
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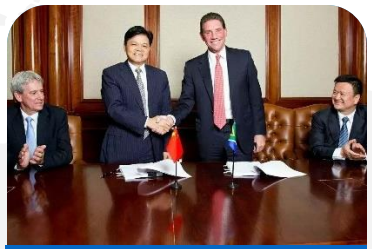
2002 Signing ceremony with Fujikura



2011 Signing ceremony with the World Top 500 Furukawa



2015 Acquisition of Aberdare, South Africa



2015 Acquisition of Alcobre, Portugal



2010 Signing ceremony with OFC, USA



2014 Creating the first overseas production base, Brazil



2015 Acquisition of CablesCom, Spain



2016 Cooperation with Voksel, Indonesia

Global Business Layout



Hengtong India foundation stone laying ceremony



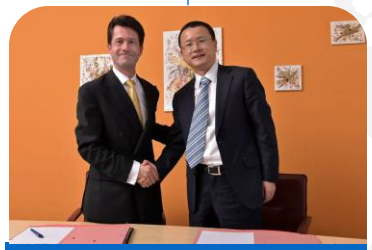
PT. MBG foundation stone laying ceremony



AMHT put into production

2019

2020



Joint-venture with LEONI, Germany



Hengtong plans to create overseas factory, Egypt



Joint-venture with Alcon Marepha, Africa

Global Business Layout



HTEG put into production



Acquisition of j-fiber GmbH

2021

2022



ABTech put into production



MBG put into production



Creating a new factory in Mexico

Global Business Layout

——Manufacturing bases

CablesCom



Founded: 1971
Main business: OFC, Communication and signaling cables
Area: 77,000 ㎡

Alcobre

Founded：1910
Main business: Household cable, LV
Area: 42,000 ㎡



HT CABOS



Founded: 2014
Main business: OFC
Area: 8,000 ㎡

Voksel

Founded: 1971
Main business: OFC，LV, MV, HV, Aluminum rod
Area: 168,000 ㎡



Global Business Layout

——Manufacturing bases

Aberdare



Founded: 1946

PMB Plant

Main business: Rubber sheath, ABC cable

Area: 32,300 ㎡



STD Plant

Main business: LV, ML & HV , paper insulating cable

Area: 40,000 ㎡

JFHT

Founded: Mar. 2019

Main business: OF

production area: 2,000 ㎡



AMHT



Main business: OF

Operation: May, 2020

Global Business Layout

——Manufacturing bases

HTEG



Main business: OF

Operation: 2021

MBG

Main business: OF, OFC,
Submarine OFC, ODN
Operation: 2021



ABTech



Main business: OF, OFC

Operation: 2021

Global Business Layout

——Global projects



1. Gulf of Finland 35kV Offshore Power Grid EPC Project
2. Latvia National Broadband EPC Project
3. Turkey Marine Optical Fiber Network Project
4. Egypt Marine Optical Network Project
5. Turkey Railway Communication Engineering
6. Egypt Nile Submarine Optical Fiber Communication Network Project
7. WindFloat Atlantic Project (Portugal)
8. Comoros Submarine Optical Network Project
9. Maldives Roundabout Marine Communication Project
10. Indian Optical Communication Project
11. Malaysia Marine Communication Engineering
12. Pakistan Photovoltaic Power Station Project
13. China-Pakistan Economic Corridor
14. Russia St. Petersburg Energy Ring Project
15. Papua New Guinea Marine Communications Project
16. Belize Submarine Optical Network Project in Central America
17. Chile Santiago Wind Farm Project
18. Brazil's Trans-Amazon Smart 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 Projec
22. Bolivia 500KV Electric Power Line Project



Gulf of Finland 35kV Offshore Power Grid EPC Project



Maldives Roundabout Marine Communication Project



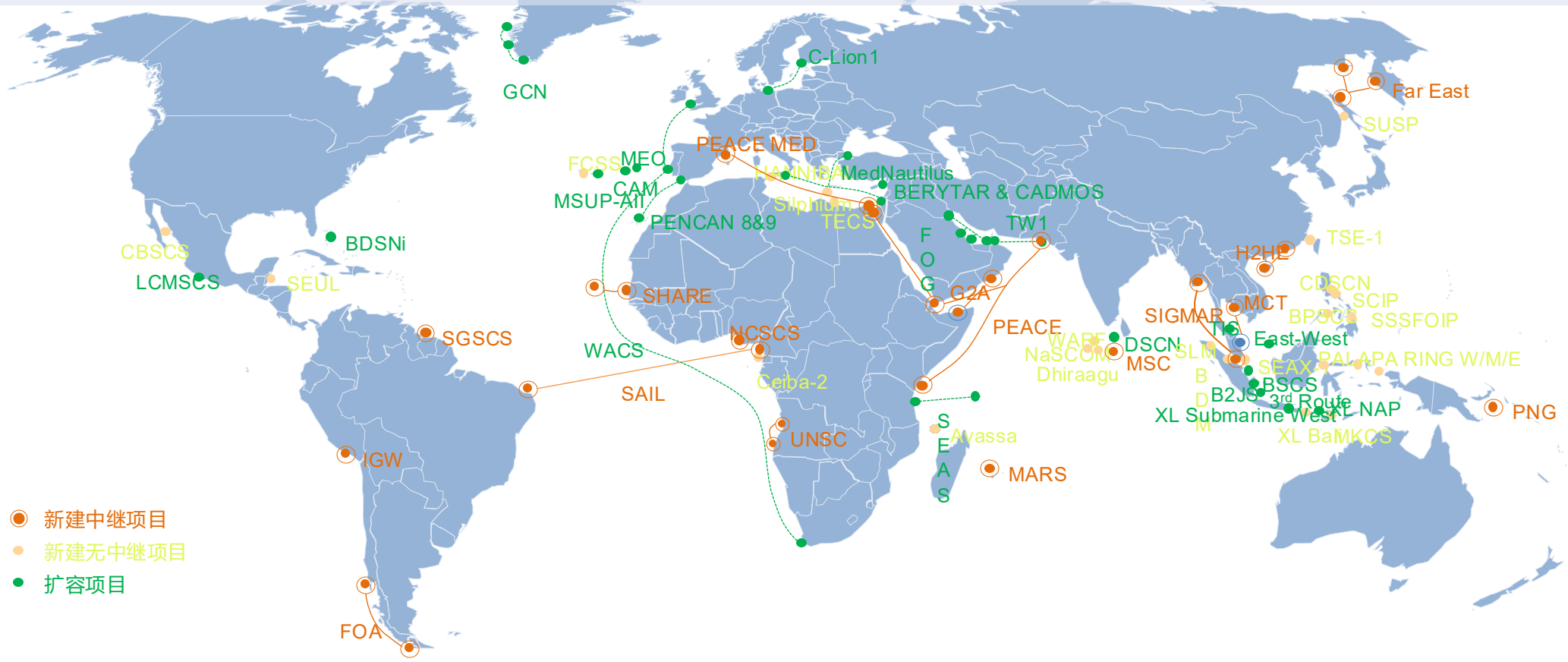
Malaysia Marine Communication Engineering

Global Business Layout

——Submarine fiber-optic communication projects

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Hengtong is one of four companies in the world and the only company in China that has the entire global marine optical fiber network industry chain



Service 70+
Countries and regions

100+
Projects

70000+ km

Global Business Layout

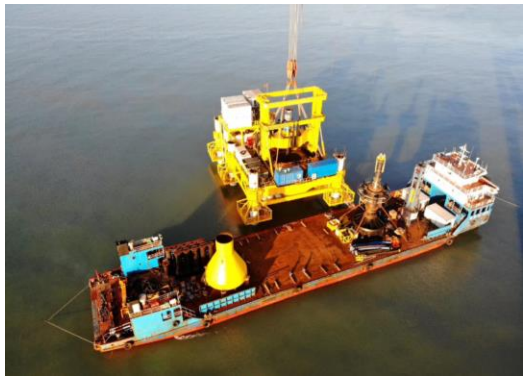
——Marine business engineering capacity

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Overview of Hengtong's 10,000-ton international submarine cable terminals











Hengtong owns more than ten international large marine construction vessels













Construction in international waters and oceans such as Vietnam, the Philippines, Europe, and East Africa

Social Responsibility

——CSR philosophy

Contributing

Caring, inclusive

Pro-environment



Value-creating

Profit maximization

Law-abiding

CSR– First and foremost responsibility

Social Responsibility

——People-oriented



Vaccination, HTIN



Staff Achievement Award, Alcobre



Yearly donation initiated by Hengtong
3,000+ jobs to the disabled in 30 years



Safety Company Certificate, Cablescom



Female model worker



Model Company of Harmonious Labor Relations

Social Responsibility

——Giving back



亨通慈善基金会
Hengtong Charity Foundation

中国社会组织评估等级
CHINA SOCIAL ORGANIZATION EVALUATION GRADE
AAAA
有效期至2023年12月
中华人民共和国民政部
MINISTRY OF CIVIL AFFAIRS,P.R.CHINA

The 1st non-public offering of charity fund initiated by private company in Jiangsu Province

Purpose

Promoting social welfare with a people-oriented approach and a focus on people's wellbeing; dedicating to a harmonious society by helping the endangered, financing the impoverished, and caring about public good.

Guideline

Starting from ourselves and local communities, and radiating over the society; true-hearted, life-long entire-staff charity with responsibility

Social Responsibility
——Giving back

- China Charity Foundation Award (6th, 7th, 8th and 10th)
- Top 500 Social Responsibility Award
- Special Award of Social Responsibility China
- Donation of over 700 million yuan



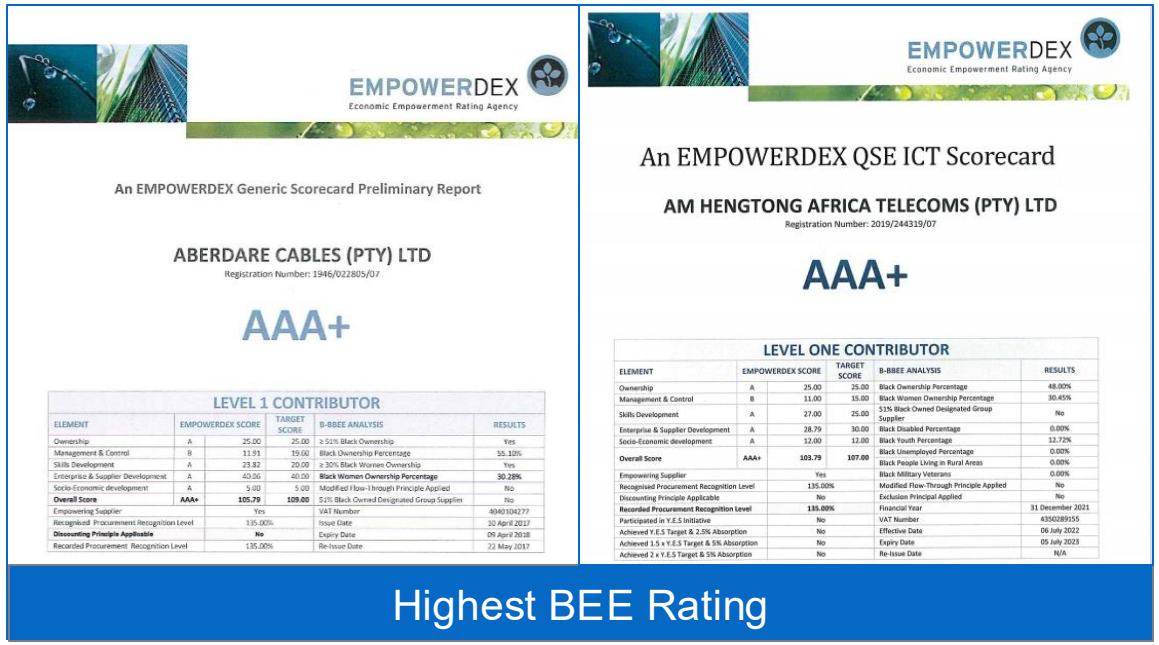




Social Responsibility
——Giving back

创造卓越 CREATE EXCELLENCE 崇尚文明 ADVOCATE CIVILIZATION

Hengtong's Aberdare and AMHT in South Africa ranked LEVEL 1 in BEE Rating



Highest BEE Rating

Aberdare, Hengtong's acquisition in South Africa, was awarded the highest grade LEVEL 1 in BEE rating within 3 years after acquisition. AMHT, a joint venture established by Hengtong in South Africa in 2019, was awarded the highest grade LEVEL 1 in BEE rating in 2022.
Only less than 10% of South African enterprises can achieve this, making Hengtong a model enterprise for implementing BEE Act in South Africa.



CEO of ABERDARE reported to the president on CSR



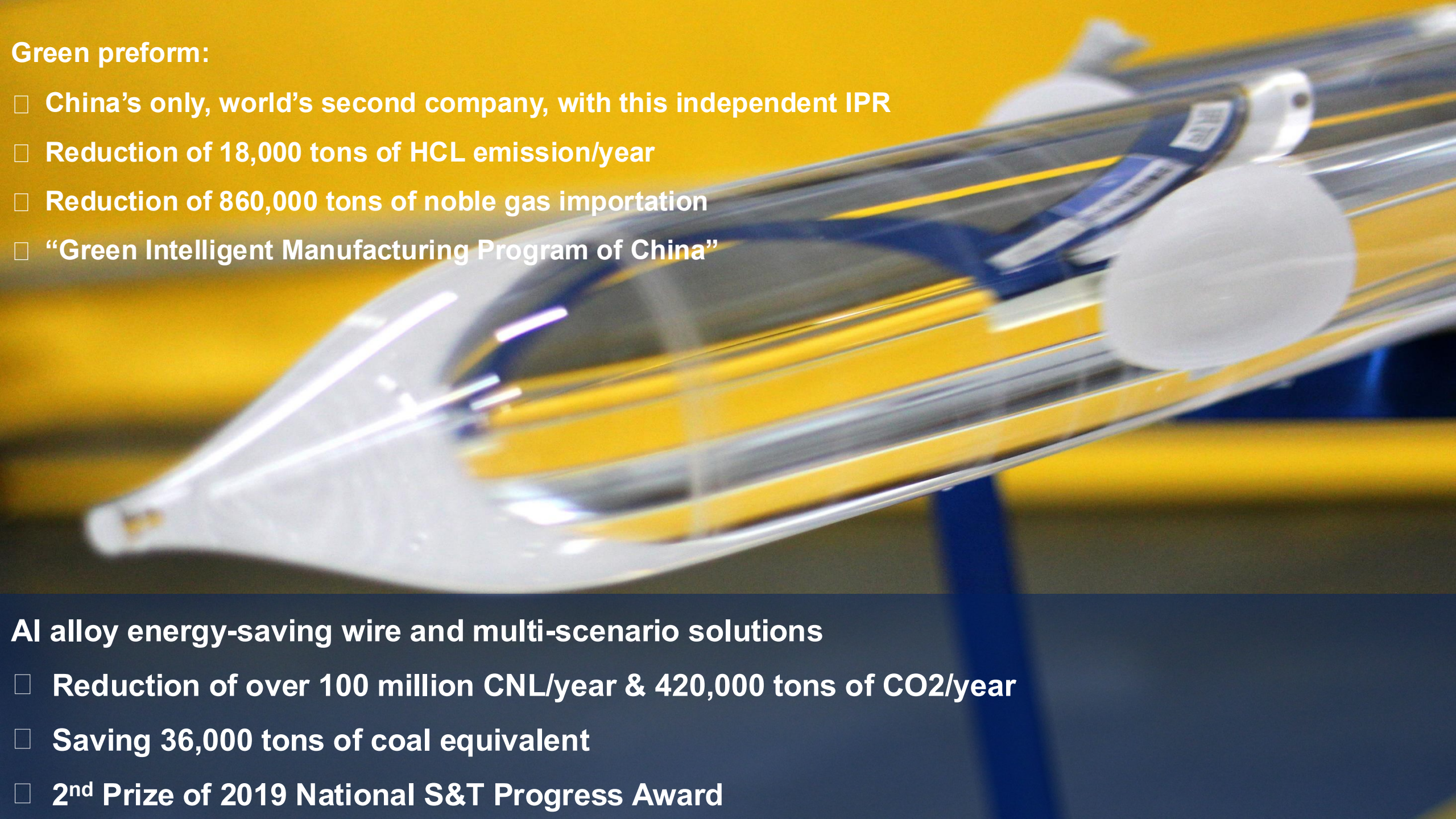
AMHT donated the school for the disabled

Social Responsibility

——Balanced, coordinated and sustainable development

HENGTONG GROUP
ENLIGHTENING THE FUTURE





Green preform:

- China's only, world's second company, with this independent IPR
- Reduction of 18,000 tons of HCL emission/year
- Reduction of 860,000 tons of noble gas importation
- "Green Intelligent Manufacturing Program of China"

Al alloy energy-saving wire and multi-scenario solutions

- Reduction of over 100 million CNL/year & 420,000 tons of CO2/year
- Saving 36,000 tons of coal equivalent
- 2nd Prize of 2019 National S&T Progress Award



- WindFloat Atlantic, Portugal (25MW): the world's 1st semi-submersible offshore windpower project, sufficing 60,000 households' demand for electricity

- Puti Island Wind Power Project, Leting, Hebei (30MW): The 1st offshore wind power project under construction in Noth China, saving 244,000 tons of coal equivalent, cutting emission of SO2 emission by 4,202.47 tons, CO by 56.9 tons, CO2 by 625,700 tons, water by 225,000 tons

- Xihe Photovotaic Power Generation Project, Shandong (100MW): 142,000,000 degrees/year, 3,560,000,000 degrees over 25 years

Wailuo Wind Power Project, Zhanjiang, Guangdong (198MW): saving 170,000 tons of coal equivalent, 350,000 tons of CO2, 280 tons of SO2

Social Responsibility

——Balanced, coordinated and sustainable development



















Social Responsibility

——Balanced, coordinated and sustainable development

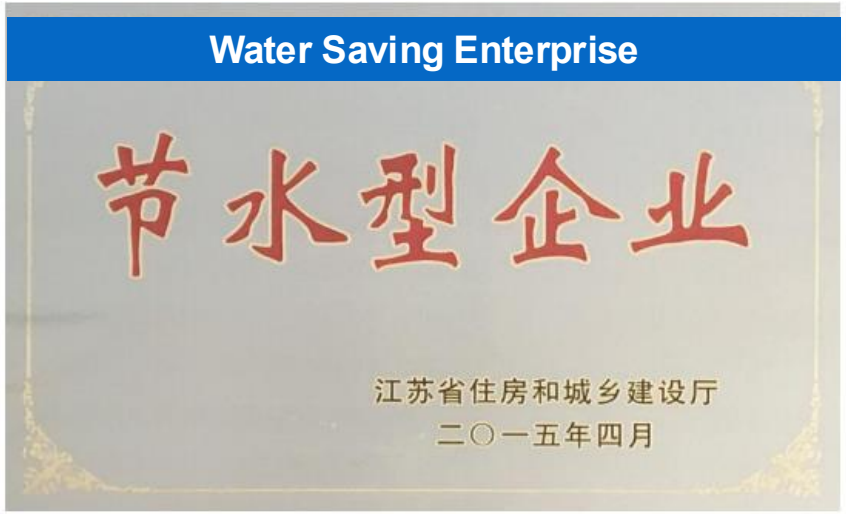


Social Responsibility

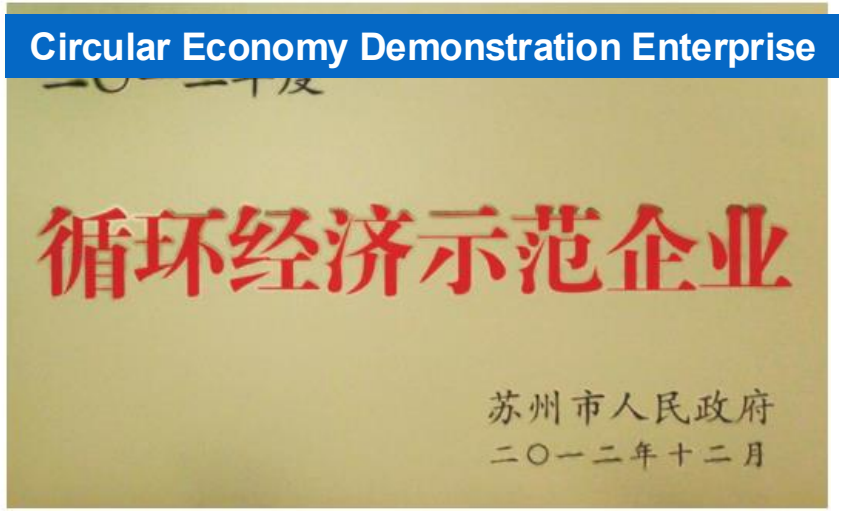
——Balanced, coordinated and sustainable development

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Water Saving Enterprise



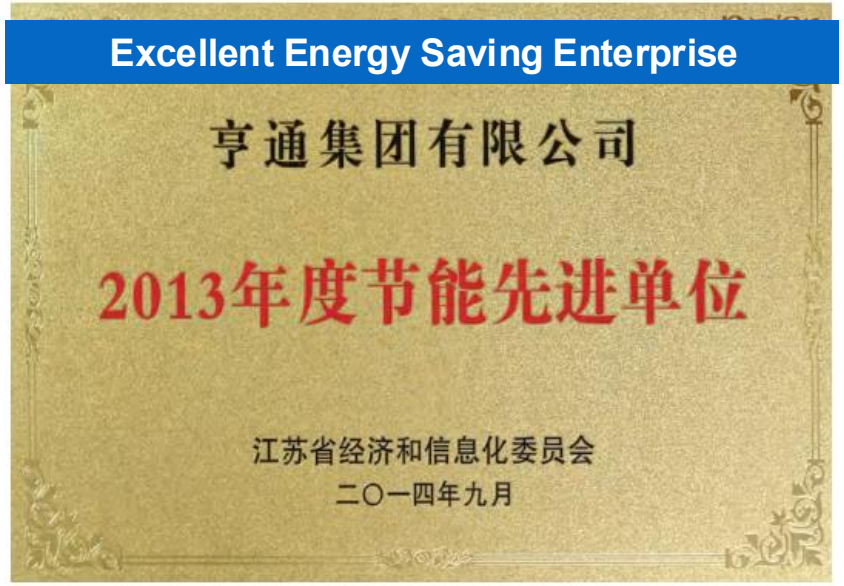
Circular Economy Demonstration Enterprise



S&T Progress Award

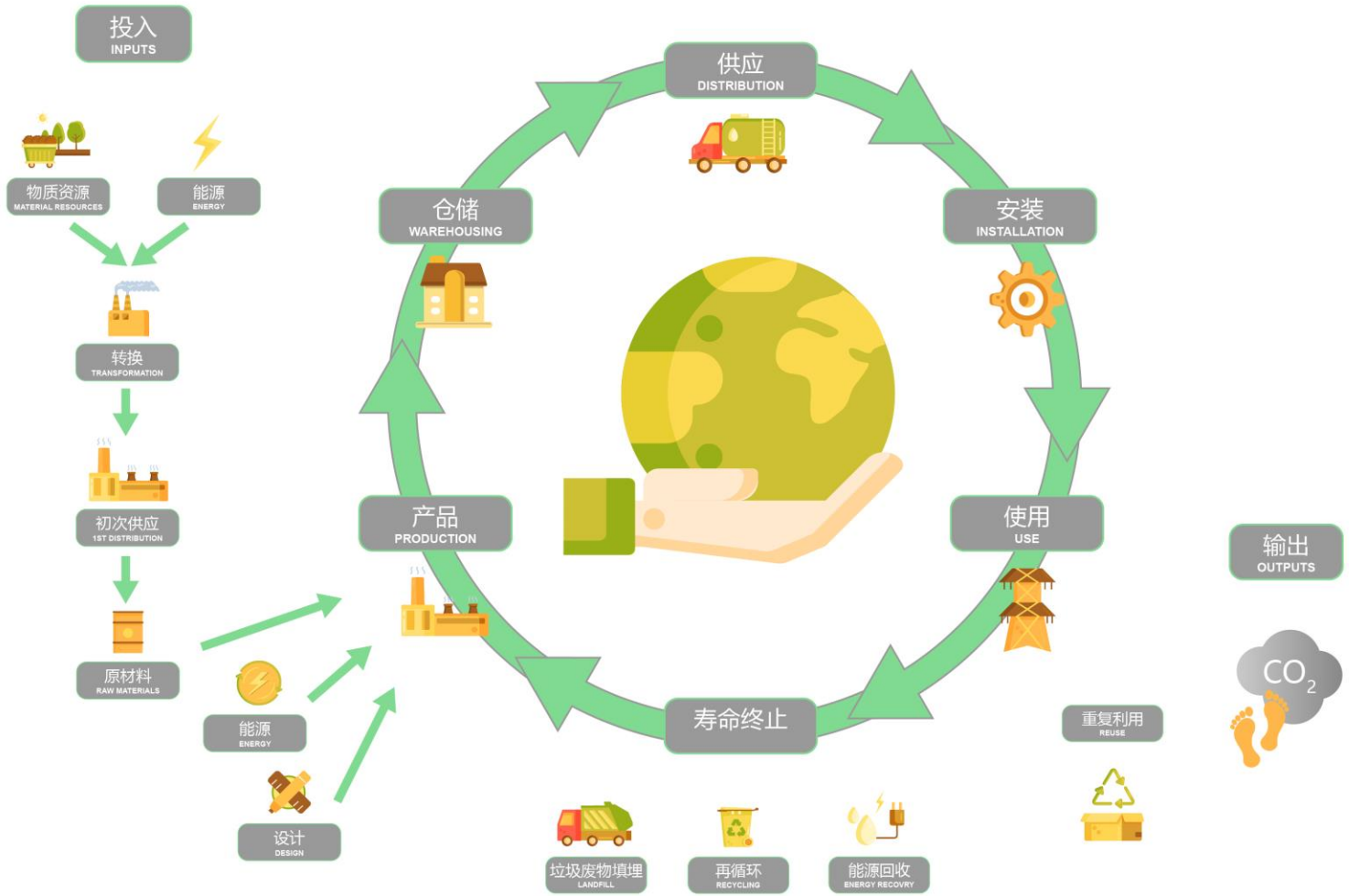


Excellent Energy Saving Enterprise



Social Responsibility

——Balanced, coordinated and sustainable development



Social Responsibility

——Enlightening the future with technology

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THANK YOU!

@hengtong group

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