

BROAD ENERGY MANAGEMENT CONTRACT (EMC)

COMPANY AND SERVICE PROFILE



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BROAD Energy Service Co., Ltd.

BROAD Energy Service Co.,Ltd. (BROAD Energy) is a subsidiary of BROAD Group and founded in 2009, responsible for energy management contract (EMC). By utilizing various low carbon technologies, products and the market mechanism, BROAD Energy provides customers with design, investment, construction and operation of large-scale central air-conditioning, industrial cooling & heating systems, along with building energy-saving retrofitting.

BROAD Energy is a pioneer and leader in EMC of central air conditioning and district energy in China. It has been operating an over 80 million m² area with an annual carbon emission reduction of 1.4 million tons.

CUSTOMER VALUES

Risk free

BROAD supplies technologies, invests funds, under takes risks and shares energy saving profit

Worry free

BROAD ensures safety, faultless operation and 100% satisfaction.
Customer can focus on its core business

Energy saving

BROAD ensures high comfort by green carbon reduction technology, energy saving & durable products with over 30 years of operational experience

Cost saving

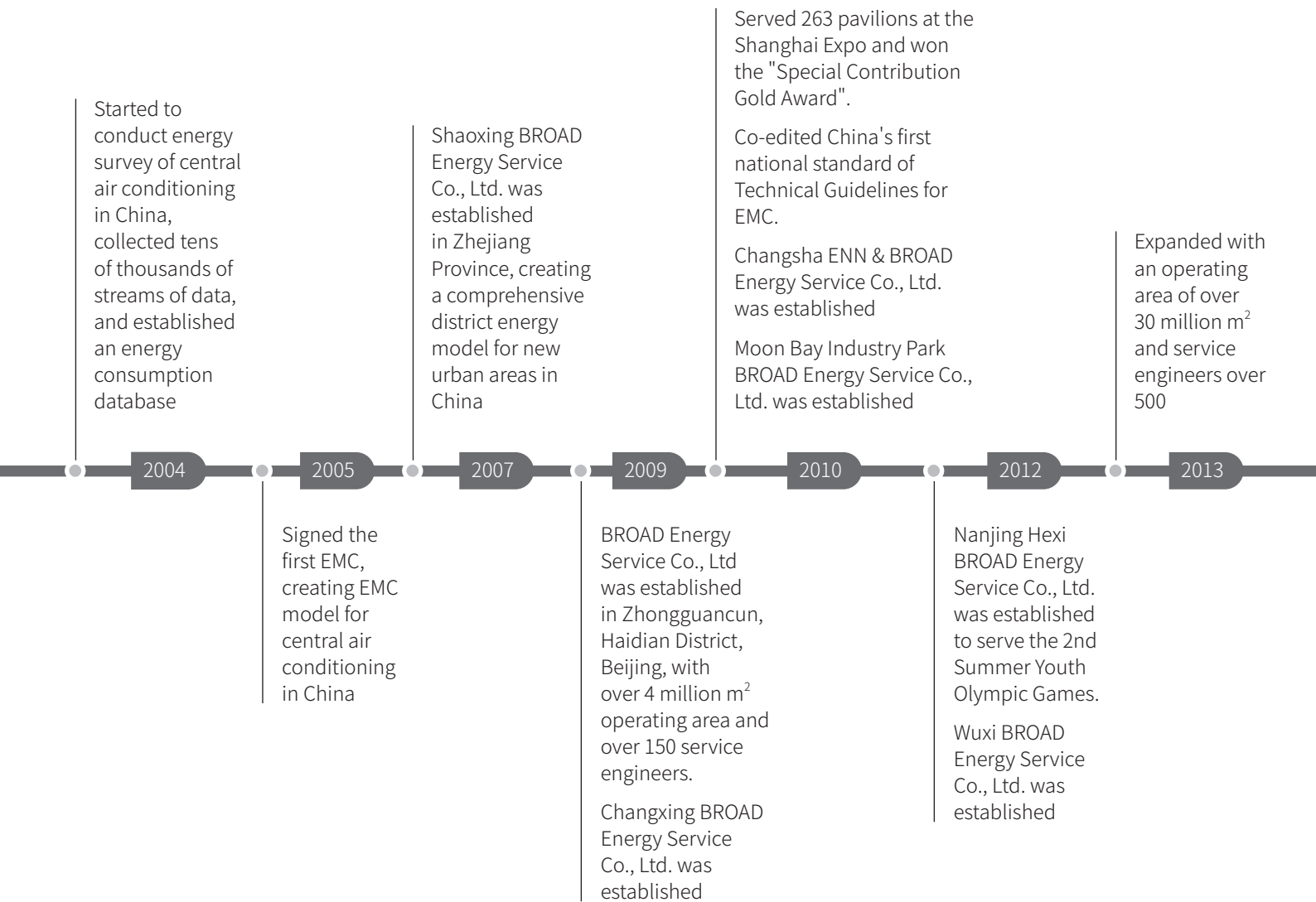
BROAD ensures initial investment savings, no hidden risks in equipment, no energy waste and low operational energy consumption

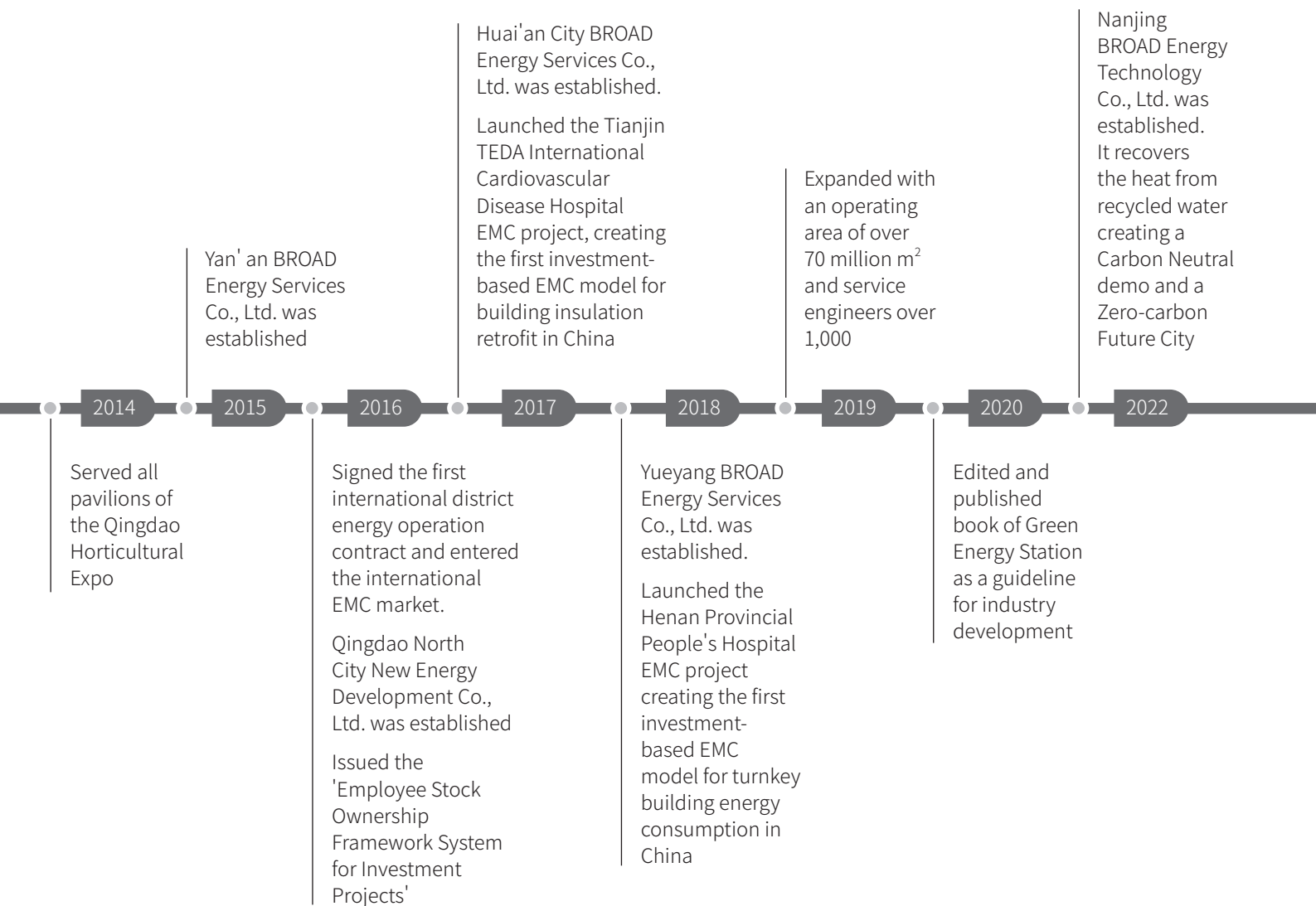
Assets adding

The life span of the equipment is the same as the building.
Packaged system occupies less space.
Property right converted to the customer after contract validity
Increased profits from carbon trading



DEVELOPMENT HISTORY





CORE COMPETENCIES



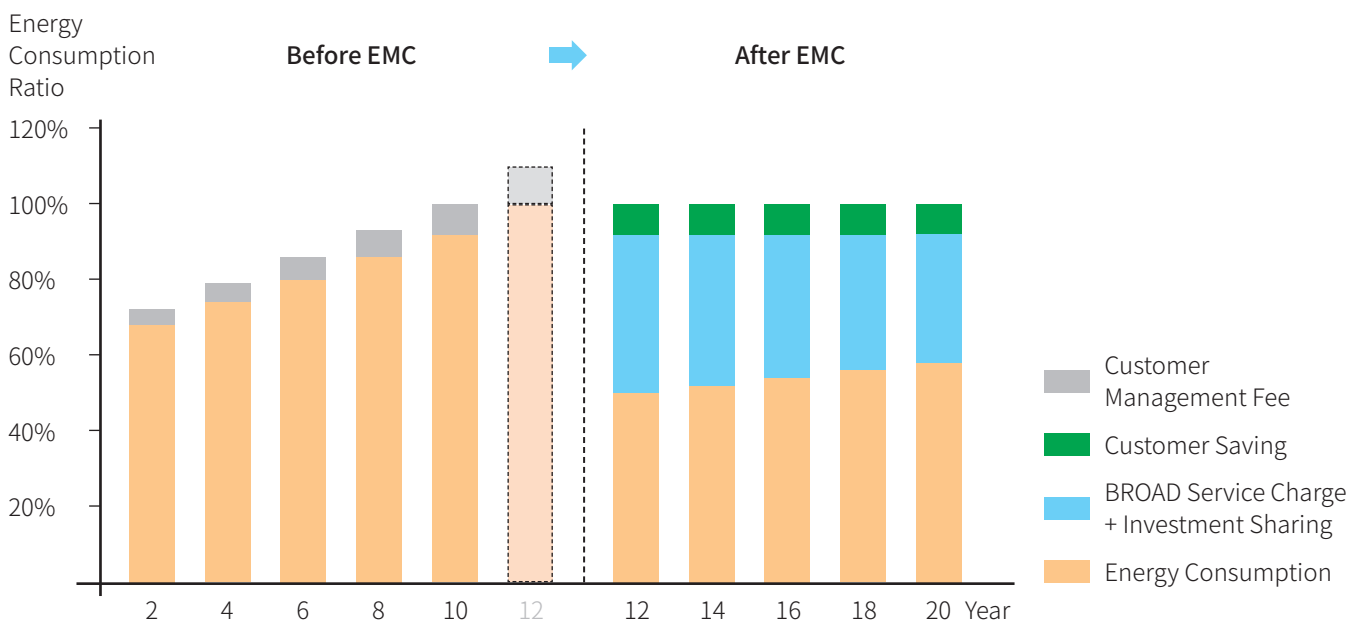
EMC Introduction

The total solution of diagnosis, design, construction and operation

BROAD EMC is based on BROAD's over 30 years' experience in central air conditioning system service, operations management and massive global operation data analysis. It utilizes natural gas, electricity, industrial waste heat, wind, solar energy, geothermal energy, reclaimed urban water and other energy sources according to local conditions on the foundation of BROAD's various energy-saving products and technology applications. With multi-energy complementation, cascade utilization, energy storage and comprehensive supply as the core, and through the computerized and intelligent management, the efficient use of energy can be realized.

BROAD EMC not only provides customers and urban areas with cooling, heating, electricity, steam and sanitized hot water but also offers all-round services including consulting, diagnosis, design, construction and operation. With central air conditioning energy-saving technology, building energy-saving retrofitting and the total solution of urban comprehensive energy applications, BROAD EMC can maintain the optimum balance between comfort and energy consumption.

Comparison before and after EMC retrofitting



EMC Mode 1

Entrust EMC

BROAD takes over the A/C system operations management, including chiller maintenance and water quality management services, meanwhile customer just covers the energy cost. Both sides update the energy cost benchmark every 3 years



Customer shares **50%** of the profit saving with BROAD

Service Scope



A/C system operation



Water quality management



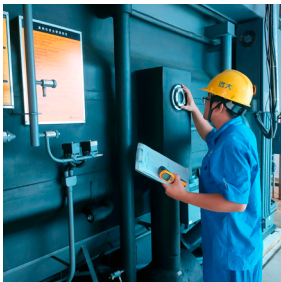
Machine room equipment maintenance



A/C terminal management



A/C patrol inspection



Machine room security

Mode 2

Energy Consumption EMC

According to the site conditions, BROAD implements the energy-saving retrofitting/construction and takes over the cost including air conditioning energy cost, maintenance cost of chiller and terminals



Energy consumption is **10~40%** less than that the customer's self-management

Investment payback period is **5~10 years**

Service Scope

A/C system entrust EMC



Chiller retrofitting/
construction



Distribution system
retrofitting/construction



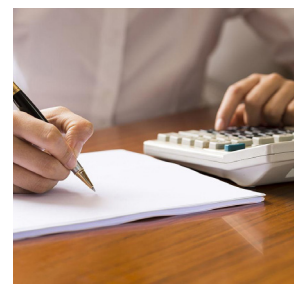
Cooling tower retrofitting/
construction



Heating retrofitting/
construction



Standardized machine
room construction



A/C system energy
purchase settlement

EMC Mode 3

Building Energy Consumption EMC

According to the building energy consumption of water, electricity and gas, BROAD implements energy-saving retrofitting, and takes over the cost including building energy cost, operations and maintenance cost of chiller and agreed upon equipment

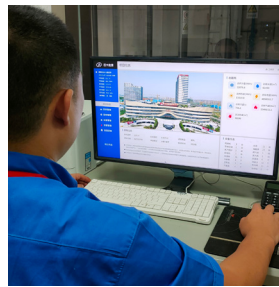


Energy consumption is **3~15%** less than the customer's self-management

Investment payback period is **7~12 years**

Service Scope

A/C system energy consumption EMC



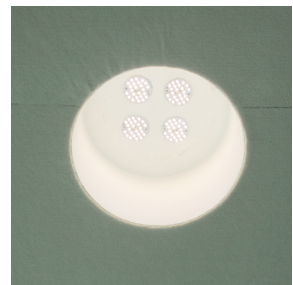
Utilization of the intelligent management system



Utilization of the renewable energy



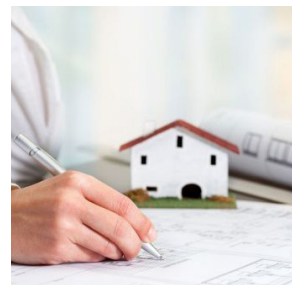
Retrofitting of the boiler system



Retrofitting of lighting system



Retrofitting of other equipment



Building energy purchase settlement

Mode 4

Building Heat Insulation Retrofitting EMC

According to the building envelope and fresh air supply, BROAD implements building heat insulation and energy saving retrofitting, and takes over the cost including air conditioning/ building energy cost, operation & maintenance cost of chiller, and agreed upon equipment



Compared with customer's self-management, energy consumption is **40~60%** less for A/C system energy consumption EMC, or **15~25%** less for building energy consumption EMC

Investment payback period is **15~30 years**

Service Scope

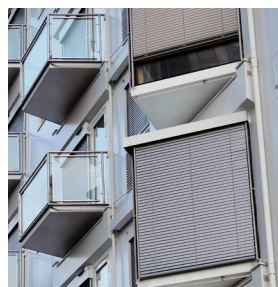
A/C system/Building energy consumption EMC



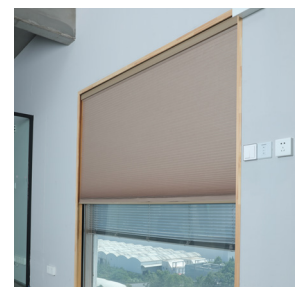
External wall insulation



Multiple-paned window



Exterior shade



Interior shade

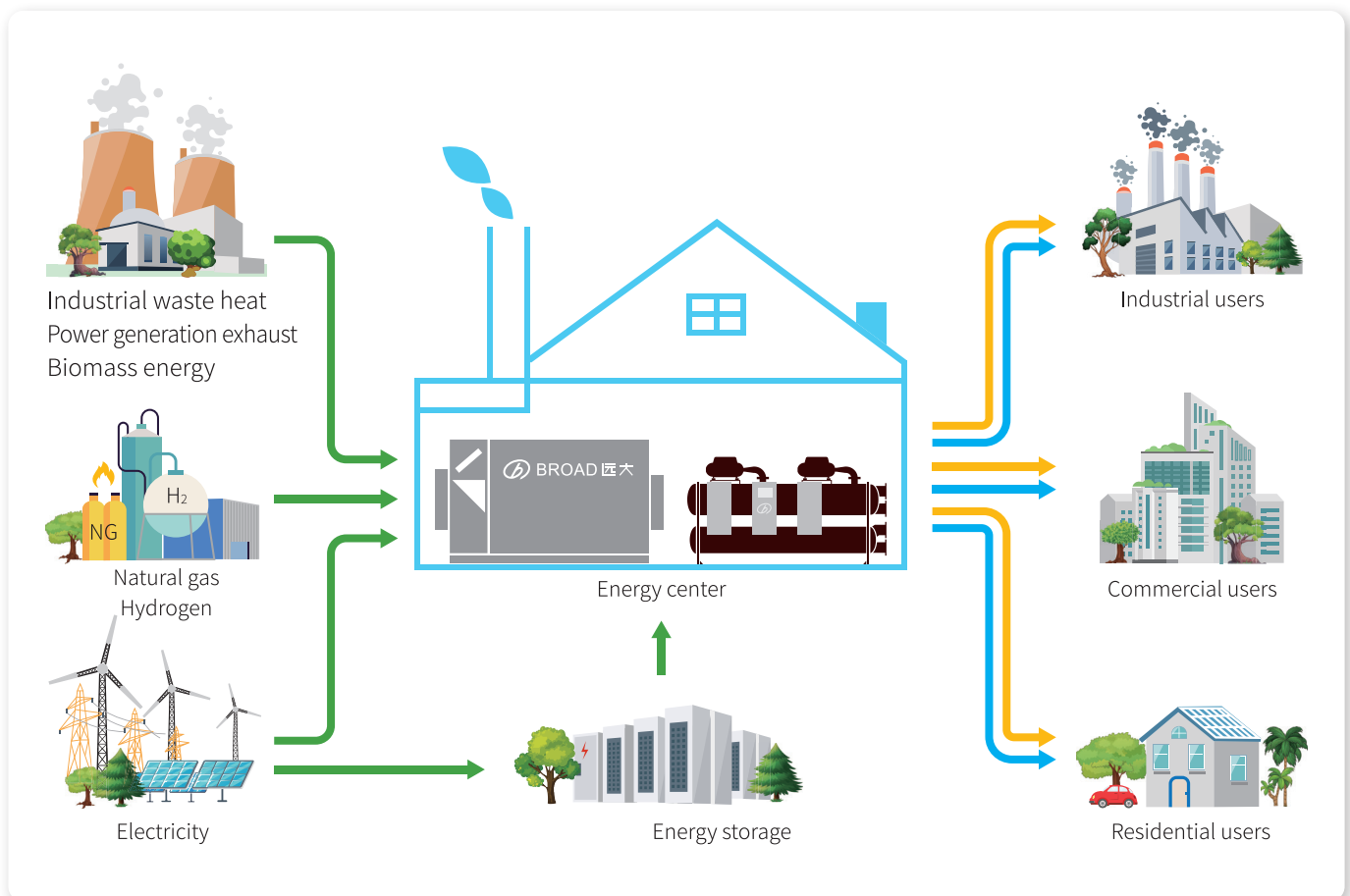


Heat recovery fresh air machine

DISTRICT ENERGY

Technical Proposal

BROAD District Energy is based on one or more centralized energy stations as the core, and utilizes industrial waste heat, power generation exhaust, biomass energy, natural gas, hydrogen energy, and water sources adapted to local conditions in the region, providing multiple users of cooling, heating, electricity, steam, and hot water in the area through distribution pipeline network, and achieves the best energy utilization effect with the least emissions.



Values

For Country

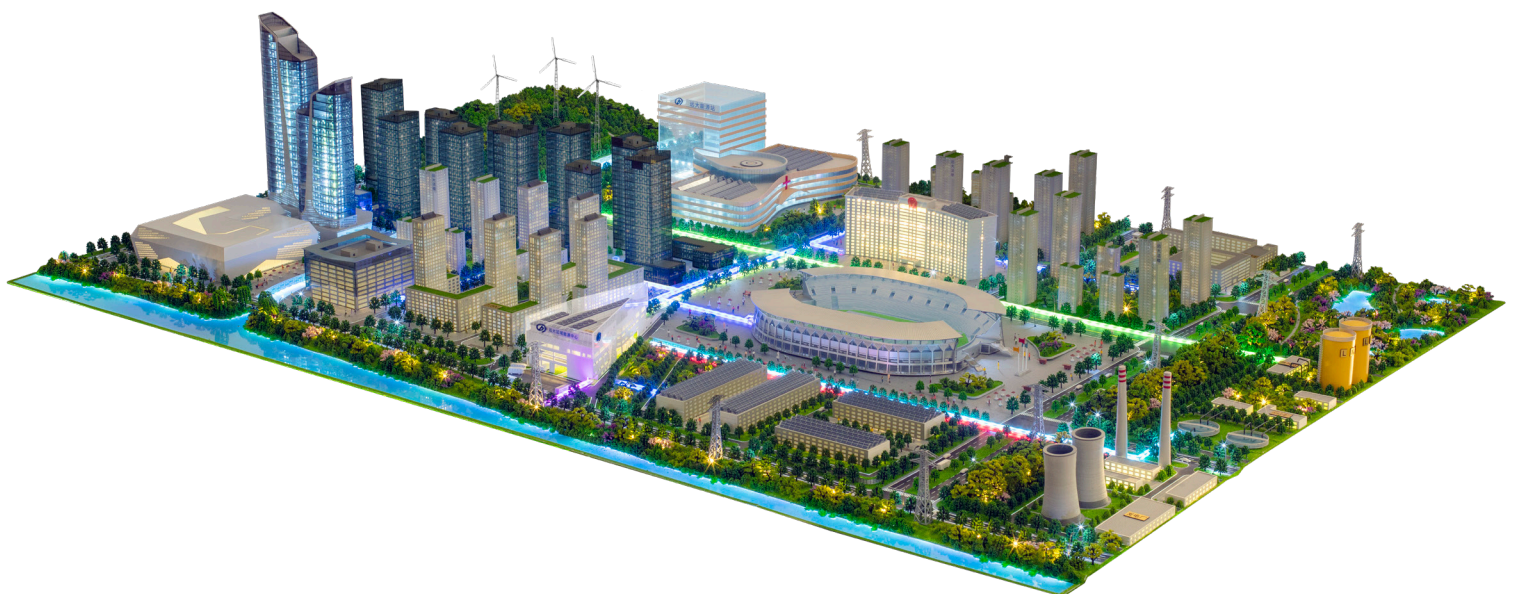
- Intensive and efficient utilization of resources
- Optimize energy supply and demand structure
- Reduce the peak demand of the grid
- Improve energy supply safety
- Reduce the transmission loss of peak load balancing
- Honor commitments for international emission reduction

For City

- Ease the contradiction between energy supply and demand
- Attract investment upon zero-carbon flagship
- Secure the stable urban operation
- Improve urban air quality
- Create a green city signature
- Meet urban emission reduction goal

For the User

- Professional worry-free service
- Zero risk energy supply assurance
- Zero risk noise reduction
- Zero hidden dangers fire safety
- Increased in the area of quality improvement
- Reduce the cost of investment

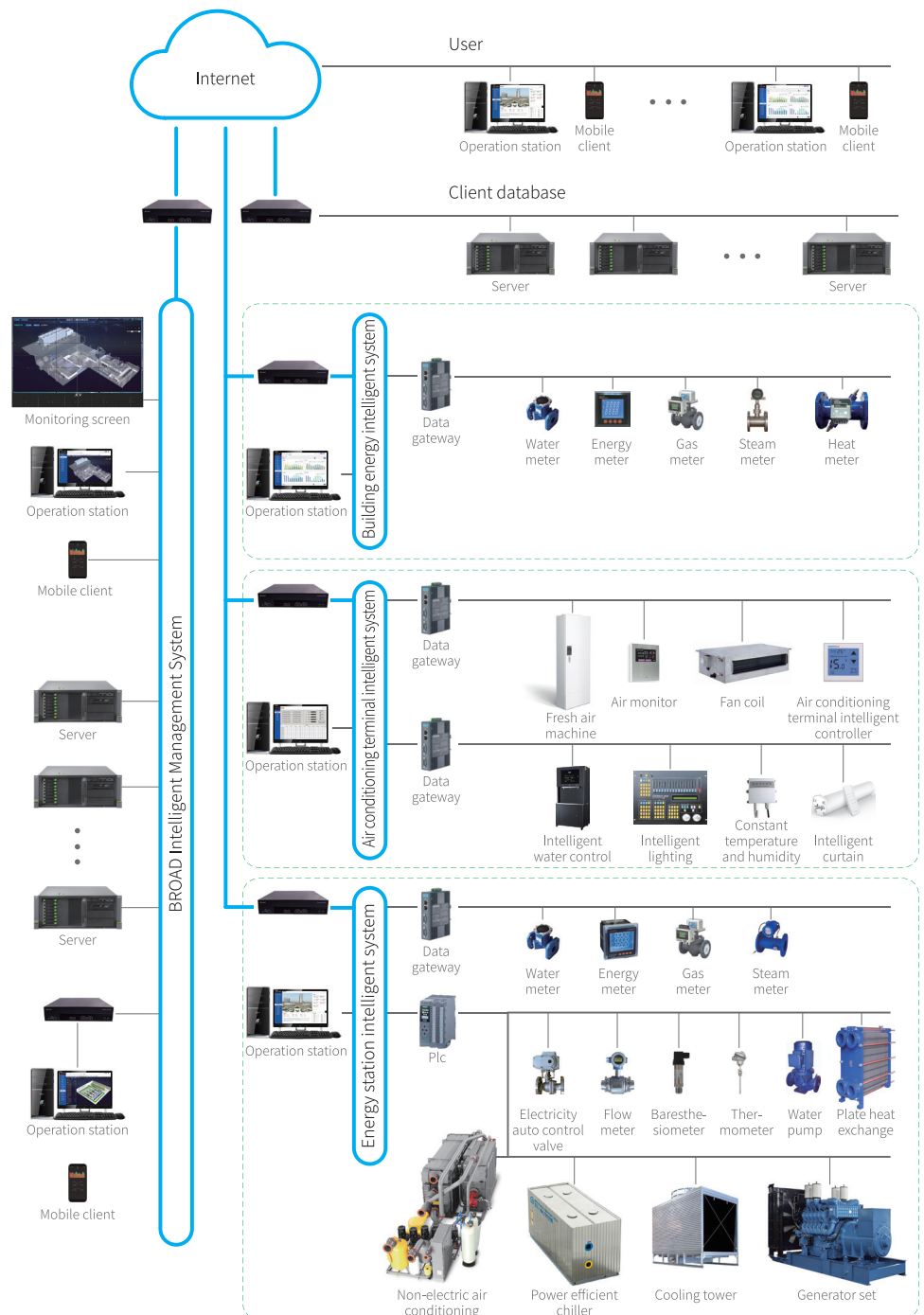


INTELLIGENT MANAGEMENT SYSTEM

Energy Efficiency Management Platform utilizes remote centralized control technology, digital AI technology, and an intelligent monitoring system to achieve real-time prediction, optimization, and dynamic adjustment of building and air conditioning systems, enabling intelligent management and unmanned management of machine room



Integrated
COP > 5.0





System Type

Intelligent system of energy station

Application:

Operational monitoring and management of single energy station, multi-energy station, district energy station

Function:

Real-time display
Classified management
Remote monitoring
System energy consumption
Statistical statement
Historical query
Alarm management
Load regulation

Intelligent system of terminals

Application:

Energy-saving monitoring and management of fresh air machine, AHUs, fan coils, split system air conditioners, etc.

Function:

Data acquisition
Statistical statement
Historical query
Centralized management
Metered charge
Operational analysis
Alarm management

Intelligent system of building energy consumption

Application:

Consumption monitoring and management of building water, electricity, gas(steam), etc.

Function:

Equipment monitoring
Statistical statement
Self-proportional analysis
Analogical analysis
Energy consumption analysis
Alarm management

TECHNICAL ADVANTAGES



Carbon Reduction Consulting

In 1996, we pioneered Global Internet Monitoring system for central air conditioning, with massive energy consumption data and annual consulting construction area of more than 200 million m²



Carbon Reduction Diagnostics

With experience in the operation and management of thousands of buildings, we can provide energy consumption surveys, audits, and system diagnosis, analyze the potential for carbon reduction, and issue carbon reduction reports



Carbon Reduction Design

We can realize all-round carbon reduction design from load calculation, energy combination, equipment customization and system configuration according to the customer's existing energy system and energy demand



Carbon Reduction Proposal

Based on the carbon reduction report and the advantages of BROAD's energy-saving products and technology integration, we can customize a comprehensive energy proposal with the highest energy efficiency

PRODUCT ADVANTAGES



Non-electric Chiller

Green energy: industrial waste heat, power generation exhaust, natural gas, etc.

Energy saving and high efficiency: chiller energy efficiency is 15~30% higher than its peers. Saving investment: three functions in one unit, reducing the machine room footprint.

Safety and durability: titanium heat exchange tube, product lifespan of 60 years.



Power-efficient Chiller

Energy saving: reduce energy consumption by 40% compared to other electric chillers.

Cost saving: magnetic oil free with zero friction technology, saving 90% maintenance cost.

Space saving: 30% lighter and 40% smaller than other electric chillers.



Packaged Water Distribution System

Miraculous electricity saving: water system zero resistance, energy saving 76%.

Complete bacteria killing: automatic dosing to eradicate bacterial reproduction.

100% soft water: corrosion and scale inhibition to ensure chiller energy efficiency.

Cost and space saving: 50% footprint reduction.



Clean Fresh Air Machine

No NO₂ buildup: 100% fresh air.

No dust: indoor air is 100 times cleaner than outdoor air.

No bacteria: static electricity bacteria killing.

A/C energy saving: 80% heat recovery.



Wind Power

Aluminum alloy wind blade, 3 times more durable than fiberglass, 100% recyclable.

Huge blade tip, more wind catching, less noise.

Site assembly, containerized transportation, global accessibility.

Ultra-high tower with self-climbing crane, everywhere in the world can be a wind park.

CONSTRUCTION ADVANTAGES



Construction Specialization

First-class qualification of electromechanical installation, professional management system and standardized procedure, scientific planning and management of safety, quality, progress and cost.



Quality Standardization

Compiling engineering construction process standards for equipment and air conditioning system in machine rooms, establishing construction quality rules and acceptance standards to ensure the project quality.



Process Streamlining

Strictly follow the process standards and construction procedures to control the progress and quality of the project, standardize all aspects of construction, and ensure system safety, stability and energy saving.



Management Standardization

Establishing standards and standardized management from carbon reduction consultation, survey, diagnosis, design, drawing, procurement, implementation, acceptance, operation and post-construction evaluation.

OPERATIONAL ADVANTAGES



High Service Reputation

Operations team with over 1,000 operators provides users with "careful, patient, sincere, comfortable, worry-free" service, and pursues 100% user satisfaction.



Professional Service Team

Complete talent system of R&D, design, production, engineering, service and operations ensures safe, stable and efficient operation.



Rich Maintenance Experience

Providing more than 30 years maintenance services for ten of thousands of central air-conditioning systems, ensuring zero failure and pursuing the same life span of the equipment and the building.



Complete Management System

Established a complete operation and service system to achieve standardized, normalized and refined operation and management.

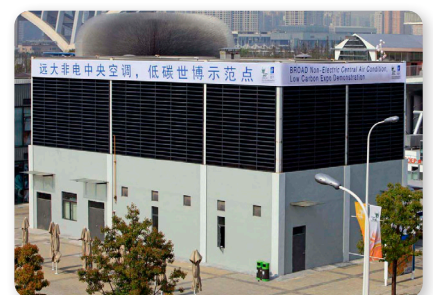
TYPICAL CUSTOMER BRIEFING



Shanghai World Expo 2010 — District Energy

The first registered World Expo hosted by China, the entire 22 energy stations were built and operated by BROAD to provide air conditioning service for 263 pavilions. BROAD was awarded the "Gold Award for Special Contribution" for the World Expo operations assurance by the Shanghai Expo Bureau

- BROAD Energy Supply:
2.2 million m²
- Annual Carbon Reduction:
73,000 tons
Equivalent to planting 4
million trees/year





Nanjing Hexi New Town — District Energy

Nanjing Hexi New Town is a new urban center with five major functions of finance, business, trade, exhibition and culture. It is the largest waste heat district cooling/heating system in China, and utilizes energy cascade with power plant waste heat as the main energy source and electricity and natural gas as the auxiliary sources

- BROAD Energy Supply:
15 million m²
- Annual Carbon Reduction:
120,000 tons
Equivalent to planting 6.6 million trees/year



TYPICAL CUSTOMER BRIEFING

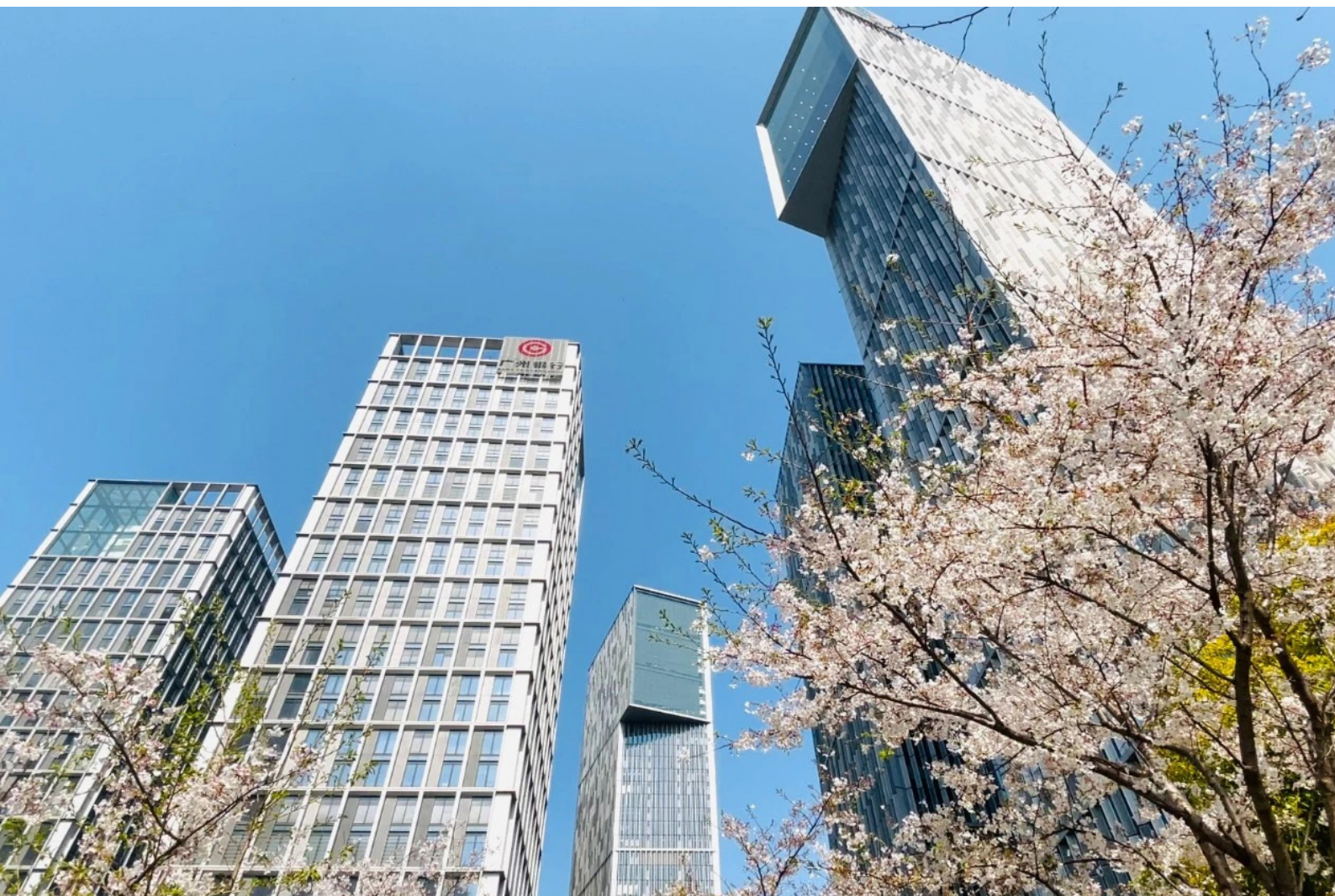


China-Singapore Suzhou Industrial Park Moon Bay — District Energy

Suzhou Moon Bay centralized cooling and heating project is the first cooling station in China to apply for green building certification, and plays a demonstration role in promoting green cooling stations

- BROAD Energy Supply: 1.1 million m²
- Annual Carbon Reduction: **17,000** tons
Equivalent to planting 940,000 trees/year





Nanjing Financial City — District Energy

Located in the core area of Hexi New Town CBD, it is a key project to promote the transformation and upgrading of Nanjing's financial services, and is positioned as "an internationally standard, landmark financial enterprise cluster area"

- BROAD Energy Supply: 1.1 million m²
- Annual Carbon Reduction: **25,000** tons
Equivalent to planting 1.37 million trees/year



TYPICAL CUSTOMER BRIEFING



Yueyang Municipal Office Building — Building Thermal Insulation Retrofit EMC

Using BROAD packaged air conditioning, clean fresh air machine, building thermal insulation retrofit and EMC, achieving win-win for energy saving and fiscal funds saving, awarded as the first batch of "Zero Carbon China" excellent cases

- BROAD Energy Supply: 17,700 m²
- Annual Carbon Reduction: **513 tons**
Equivalent to planting 28,000 trees/year

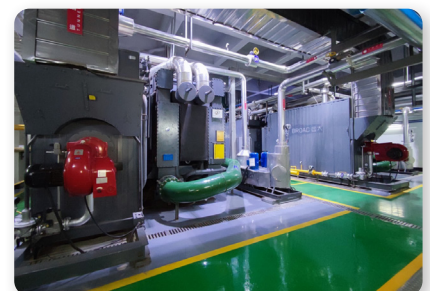




Henan Provincial People's Hospital — Building Energy Consumption EMC

Founded in 1904, it is one of the first national 3A hospitals (top level in China), and has won many honors such as the Outstanding Contribution Award for Hospital Logistics Construction in the Forty Years of Reform and Opening Up, and the National Energy-saving Public Institution Model Unit

- BROAD Energy Supply: 600,000 m²
- Annual Carbon Reduction: **27,000** tons
Equivalent to planting 1.49 million trees/year



TYPICAL CUSTOMER BRIEFING



Xiangya Hospital — Air Conditioning Energy Consumption EMC

Founded in 1906, it is a 3A hospital (top level in China) under directly supervision of the National Health Commission, an affiliated hospital of Central South University, which is directly under the Ministry of Education, and an important center for clinical diagnosis and treatment, medical education and scientific innovation in China. It is well-known as "South Xiangya"

- BROAD Energy Supply: 260,000 m²
- Annual Carbon Reduction: **12,000** tons
Equivalent to planting 640,000 trees/year





Anhui Gujing Group — Air Conditioning Energy Consumption EMC

Gujing Group is one of Top 8 famous liquor enterprises in China, originated from the Gongxing Caofang in the year 1515, ranked NO.1 among the liquor enterprises in Anhui Province, and is one of Top 500 manufacturing enterprises in China

- BROAD Energy Supply:
70,000 m²
- Annual Carbon Reduction:
1,218 tons
Equivalent to planting
67,000 trees/year



TYPICAL CUSTOMER BRIEFING



Haining, China Leather City — Air Conditioning Energy Consumption EMC

The largest leather product manufacturing, sales and logistics base in China, the leader in China's leather industry and its largest, most influential and most competitive enterprise, and the express center for leather pricing, market intelligence and fashion trends

- BROAD Energy Supply: 800,000 m²
- Annual Carbon Reduction: **16,000** tons
Equivalent to planting 900,000 trees/year





Nanchang Binjiang Hotel — Air Conditioning Energy Consumption EMC

One of the founding members of the China State Guesthouse Association, under the Jiangxi Provincial Party Committee Office, it has long served as the Jiangxi Provincial reception base for the Party and state leaders for important meetings

- BROAD Energy Supply: 67,000 m²
- Annual Carbon Reduction: **1,336 tons**
Equivalent to planting 73,000 trees/year



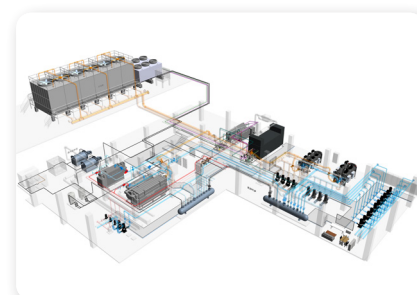
TYPICAL CUSTOMER BRIEFING



Women&Children's Hospital of Hunan — Air Conditioning Energy Consumption EMC + Energy Station Intelligent Management System

It is a women and children specialty hospital that is built according to 3A medical institutions (top level in China) and the JCI international standards. It is committed to creating a "regional women's and children's medical center" in the central and southern regions of China.

- BROAD Energy Supply:
130,000 m²
- Annual Carbon Reduction:
3,770 tons
Equivalent to planting 210,000 trees/year

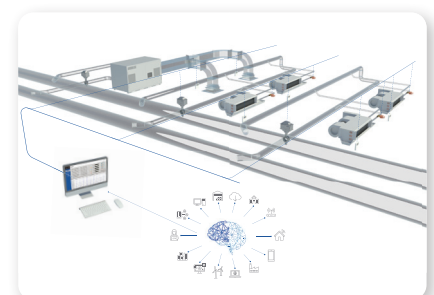




Guizhou Daily — Air Conditioning Energy Consumption EMC +
Air Conditioning Terminal Intelligent Management System

A provincial-level public institution directly under the provincial party committee, publishing the provincial party newspaper "Guizhou Daily" and magazine "Contemporary Guizhou", and hosting a national first-class news website.

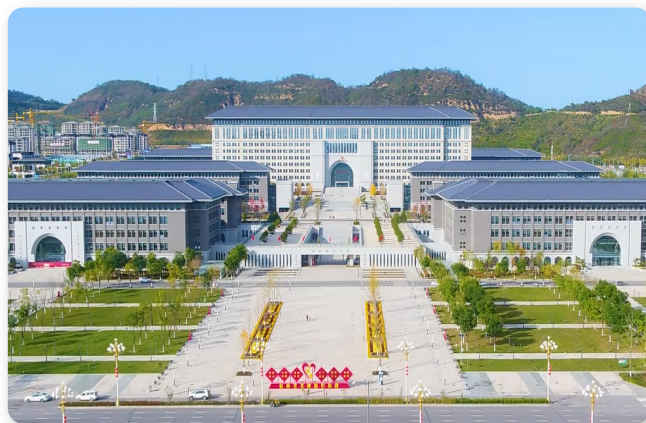
- BROAD Energy Supply:
70,000 m²
- Annual Carbon Reduction:
1,218 tons
Equivalent to planting
66,000 trees/year



TYPICAL CUSTOMER LIST — District Energy



India DLF Gurgaon City



Yan'an New District



Qingdao World Horticultural Expo



Shaoxing Didang New District



Changxing Headquarters Economic Park



Zhoushan Donggang New District

— Building Energy Consumption EMC



Hunan Provincial People's Hospital



Jiangsu Cancer Hospital



Hospital of Zhejiang University in Ningbo



TEDA International Cardiovascular Hospital



The Second Affiliated Hospital of Nanjing Medical University



Xianning Central Hospital

TYPICAL CUSTOMER LIST — Air Conditioning Energy Consumption EMC



Jiangsu Provincial Maternal and Child Health Hospital



Anhui Provincial Children's Hospital, Fudan University



The First Hospital of Lanzhou University



Fudan University



Changsha Huangxing South Road Pedestrian Commercial Street

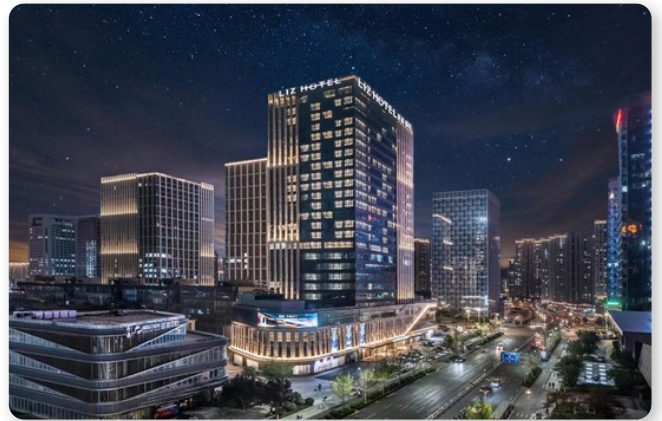


Sheraton Xi'an Cerise Hotel

— Intelligent Management System



Zhengzhou International Trade Center



Jinan Qilu Gate



Ningxia Medical University



The First Affiliated Hospital of Henan Polytechnic University



Tengzhou Central People's Hospital



Air Force Research Institute

BROAD GROUP MISSION

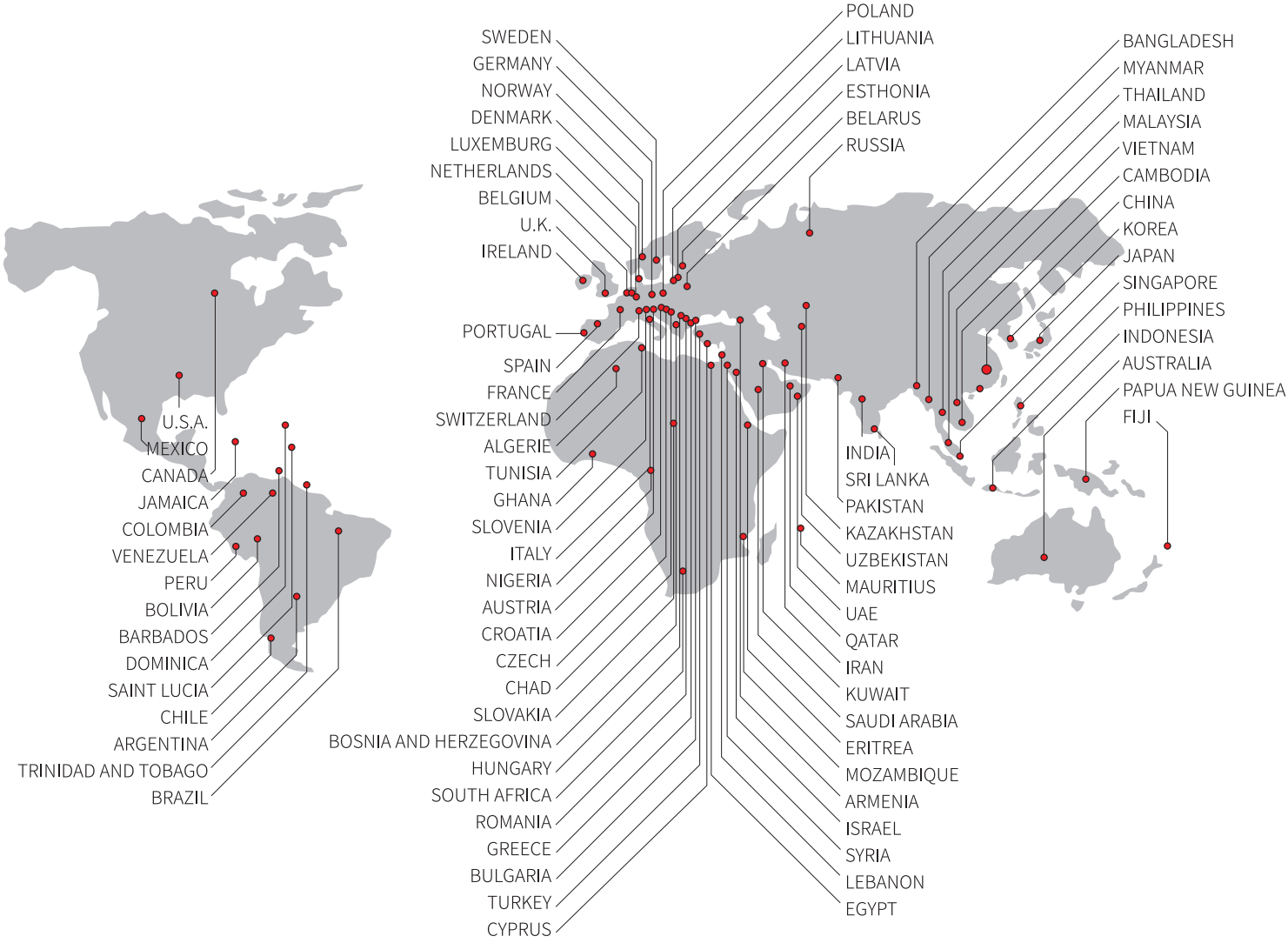
BROAD Group is a privately-owned enterprise founded in 1988 in China with RMB 30,000. The company has developed hundreds of hi-tech products and has never copied any technology of its peers since inception. The mission of BROAD Group is "For Humanity's Future: Using original low carbon & durable technology for the earth. Using original clean & safe technology for humans." Headquartered in Changsha, BROAD Group has exported products to over 80 countries. BROAD subsidiaries are listed below:

1. BROAD Air Conditioning Co., Ltd., established in 1988, manufactures non-electric air conditioning systems and district heating and cooling systems powered by industrial waste heat, power exhaust gas or natural gas with the mission of "continuously deepening research, development and service, leading the world's direction in energy efficiency"
2. BROAD Clean Air Technology Co., Ltd., established in 2005, produces Fresh Air Machines with 80% heat recovery, filtering PM2.5 by 99.9% and bringing in 100% fresh air. The company also produces commercial, household and portable air purifiers and air monitor with the mission of "clean air shared by all humanity"
3. BROAD Nearly Zero Energy Building Co., Ltd., started in 2005, specializes in the design and construction of retrofitted buildings, energy conservation sharing and carbon credit trading with the mission of "recoating existing buildings and reducing carbon footprint by 10 times, for warm winter and cool summer"
4. BROAD Energy Service Co., Ltd., founded in 2009, provides clients with investment consulting, design, implementation and operational service of large central air conditioning systems and industrial heating and cooling systems by means of BROAD low carbon technologies, products and energy management contract (EMC), with the mission of "optimizing resources, being worry-free, money-saving and low carbon"
5. BROAD Renewable Resources Co., Ltd., established in 2008, produces clean oil from industrial and transportation waste mineral oils as raw materials with the mission of "eradicating waste oil pollution for the world"
6. BROAD Sustainable Building Co., Ltd. set up in 2009, supplies ultra-strong and ultra-light stainless steel B-CORE slab series of products which is transforming the world's construction and transportation industries from the foundation. The mission is "building an everlasting civilization." It owns the following subsidiaries:
 - 1) BROAD Holon Co., Ltd. manufactures factory-made stainless steel B-CORE Holon buildings with the mission of "providing all humanity with truly superb housing"
 - 2) BROAD Wind Power Co., Ltd. produces breeze power generation system with the mission of "letting wind power spread across every corner of the earth, benefiting all humanity"
 - 3) BROAD B-CORE Road and Bridge Co., Ltd. develops elevated B-CORE expressway, bridges and vertical factories with the mission of "preventing expressways from cutting apart natural habitats"
 - 4) BROAD Lightweight Transportation Co., Ltd. develops stainless steel B-CORE shells of cars, airplanes and ships with the mission of "making transportation vehicles lighter and safer"
 - 5) BROAD Vacuum Loop Co., Ltd. develops stainless steel B-CORE extremely hi-speed vacuum tubes and train bodies with the mission of "fulfilling the dream of the time tunnel with intercontinental transportation"
 - 6) BROAD B-CORE Slab Co., Ltd. produces B-CORE Slabs for BSB and its partners, with the mission of "setting up the safest factories with the highest efficiency in the world"



BROAD Group
Headquarters
BROAD Town (1km²)

BROAD GLOBAL MARKET — 2022



BROAD ENERGY JOINT VENTURES

Yan'an BROAD Energy Service Co., Ltd.

Address: BROAD Distributed Energy Center, Baota District,
Yan'an City, Shanxi Province
Zip code: 716000
Phone: 0911-8886901
Email: yayd@BROAD.net

Qingdao City North New Energy Development Co., Ltd.

Address: 9th Floor, Times Square, No. 168 Shandong Road,
Shibei District, Qingdao City
Zip code: 266000
Phone: 0532-80933187
Email: jns-qd@BROAD.net

Changsha Xin'ao BROAD Energy Service Co., Ltd.

Address: No. 786 Wangxian Road, Xingsha Town, Changsha
County, Changsha City, Hunan Province
Zip code: 410100
Phone: 0731-89981740
Email: yypx@BROAD.net

Yueyang Huarun BROAD Energy Service Co., Ltd.

Address: No. 9 Yueyang Avenue, Yueyang Economic and
Technological Development Zone
Zip code: 414000
Phone: 0730-8344249
Email: nyly@BROAD.net

Shaoxing BROAD Energy Service Co., Ltd.

Address: BROAD Energy Center, Didang New City, Yuecheng
District, Shaoxing City, Zhejiang Province
Zip code: 312000
Phone: 0575-88622770
Email: sxyd@BROAD.net

Changxing BROAD Energy Service Co., Ltd.

Address: Economic Development Zone, Changxing County,
Huzhou City, Zhejiang Province
Zip code: 313100
Phone: 0572-6201755
Email: cxyd@BROAD.net

Nanjing Hexi BROAD Energy Service Co., Ltd.

Address: BROAD Energy Center, Qing'ao Village, Jianye
District, Nanjing City, Jiangsu Province
Zip code: 210000
Phone: 025-86583840
Email: njhxyd@BROAD.net

Nanjing BROAD Energy Technology Co., Ltd.

Address: Room 508, Building 2, No. 2 Shuanglong Street,
Qinhuai District, Nanjing City, Jiangsu Province
Zip code: 210000
Phone: 025-83306885
Email: njny@BROAD.net

Wuxi BROAD Energy Management Service Co., Ltd.

Address: Wuxi Bus Passenger West Station, Qianzhou Town,
Huishan District, Wuxi City, Jiangsu Province
Zip code: 214182
Phone: 0510-83399234
Email: wxyd@BROAD.net

Zhongxin Suzhou Industrial Park BROAD Energy Service Co., Ltd.

Address: Moon Bay Cooling Center, No. 399 Chuangyuan
Road, Suzhou Industrial Park
Zip code: 215123
Phone: 0512-62898997
Email: zxyd@BROAD.net

Huai'an Comprehensive Energy Service Co., Ltd.

Address: B1206, No. 9 Jiankang East Road, Huai'an City,
Jiangsu Province
Zip code: 223001
Phone: 0517-89888528
Email: BROADxh@163.com

Yixing BROAD Energy Service Co., Ltd.

Address: No. 6 Energy Center, Yixing People's Hospital,
Yicheng Street, Yixing City, Jiangsu Province
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Phone: 0510-85076957
Email: yxyd@BROAD.net



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**BROAD ENERGY'S MISSION:
OPTIMIZE RESOURCE
ALLOCATION, SAVE MONEY
AND LOW CARBON**



100g

To protect forest & water
sources, please imitate us
to adopt compact layout
& thin paper printing

First edition October 2023
Quantity: 1,000
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