BROAD ENERGY
Integrated Energy Expert

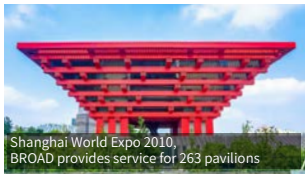
BROAD –
CHINA EMC LEADER

BROAD has been implementing Central Air Conditioning Energy Management Contract(EMC) since 2005, pioneering EMC in China. Practising over 30 years of global experience in central air conditioning technologies and services across 80 countries, combining with the EMC market mechanism, BROAD provides customers with low-carbon design, investment, construction, and operation of central air conditioning, district air conditioning, industrial cooling & heating systems, and building energy-efficiency retrofitting.

By 2023, BROAD has been operating over 80 million m^2 area with annual carbon emission reduction of 1.4 million tons, becoming the leader in China's dual-carbon initiatives.



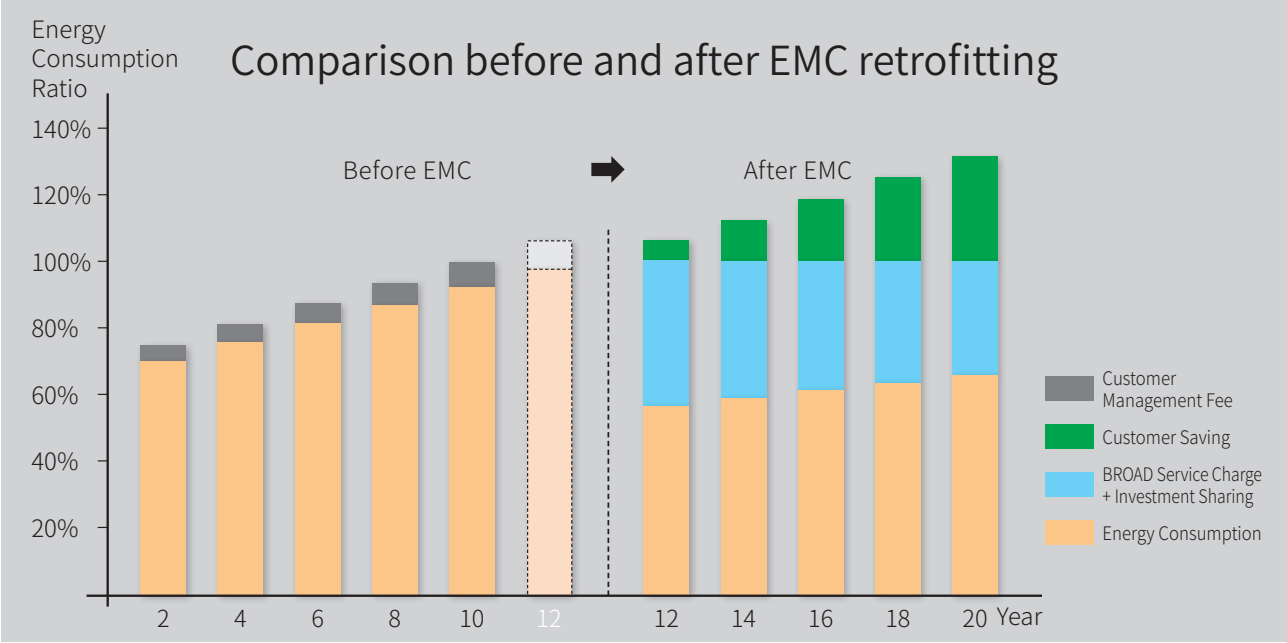

Nanjing Hexi New Town and Nanjing's financial services, BROAD Energy Supply: 15 million m^2


Shanghai World Expo 2010,
BROAD provides service for 263 pavilions


Yan'an New District
BROAD Engergy Supply: 830,000m^2

BUSINESS ADVANTAGES

Database from tens of thousand air conditioning systems and building energy consumption Tailor-made holistic solutions for clients Achieving mutual successes



- A/C 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 of customer's self-management.
- Building Energy Consumption EMC：According to the building energy consumption of utilities, BROAD implements energy-efficiency retrofitting, and takes over the cost including building energy cost, operations and maintenance cost of chiller and contracted equipment. Energy consumption is 3~15% less than the customer's self-management.
- Building Heat Insulation Retrofitting EMC：According to the building envelope condition, 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 contracted equipment. Compared with customer's self-management, BROAD energy consumption is 40~60% less for A/C system energy consumption EMC, or 15~25% less for building energy consumption EMC.
- District energy：It's 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 carbon emissions.

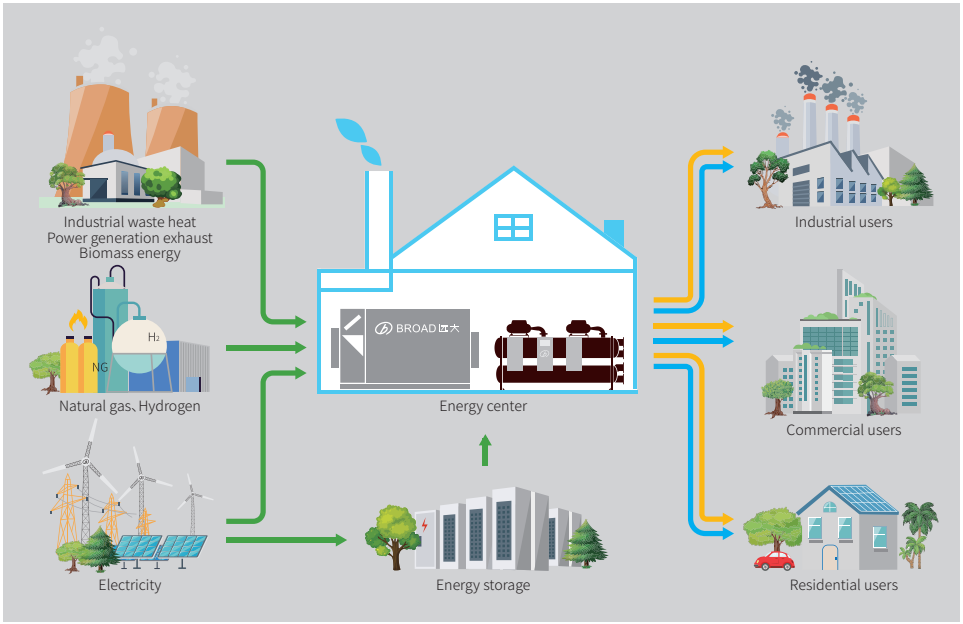
TECHNICAL ADVANTAGES

30 years experience in diagnosis and design
20 years experience in construction and operation
BROAD-made low carbon products:
Air Conditioning, Clean Fresh Air Machine and Wind Power
Optimal balance between
high comfort and low energy consumption


Non-electric Chiller


Power-efficient Chiller


Packaged Water Distribution System




Wind Power


Heat recovery fresh air machine


External wall insulation


Multiple-paned window


Exterior shade


Interior shade

- 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 m^2.
- Diagnosis: With experiences 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.
- Design: We can realize all-round energy-saving design from load calculation, energy combination, equipment customization and system configuration according to the customer's existing energy system and energy demand.
- Solution: Based on the carbon reduction report and the advantages of BROAD's energy-saving products and technology integration, we can customize a comprehensive energy solution with the highest energy efficiency.
- Construction: First-class qualification of electromechanical installation, professional management system and standardized procedure, scientific planning and management of safety, quality, progress and cost.

OPERATIONAL ADVANTAGES

Over 80 million m^2 operational area
Over 20 years management experience
Butler-style energy-saving Services
Worry-free for users


Over thousands of management data


Energy-saving operation


Equipment inspection: ⩾8 times/day


Intelligent management system: System integrated COP＞5.0,
Compared to conventional management the efficiency improvement＞20%


A/C terminal inspection: ⩾8 times/day


Regular maintenance: ⩾once/quarter


Service Evaluation: ⩾once/month


Archives management

- Standardized Management: The pioneer of establishing the national standard for EMC, with over 1,000 management documents.A complete operation and service system to achieve standardized, normalized and refined operation and management.
- Professional Service Team: Complete talent system of R&D, design, production, engineering, service and operations ensures safe, stable and efficient operation.
- Butler-style service: 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 as buildings.
- Excellent Service Reputation: Operations team with over 1,000 operators providing users with "careful, patient, sincere, comfortable, worry-free" service, and pursuing 100% user's satisfaction.