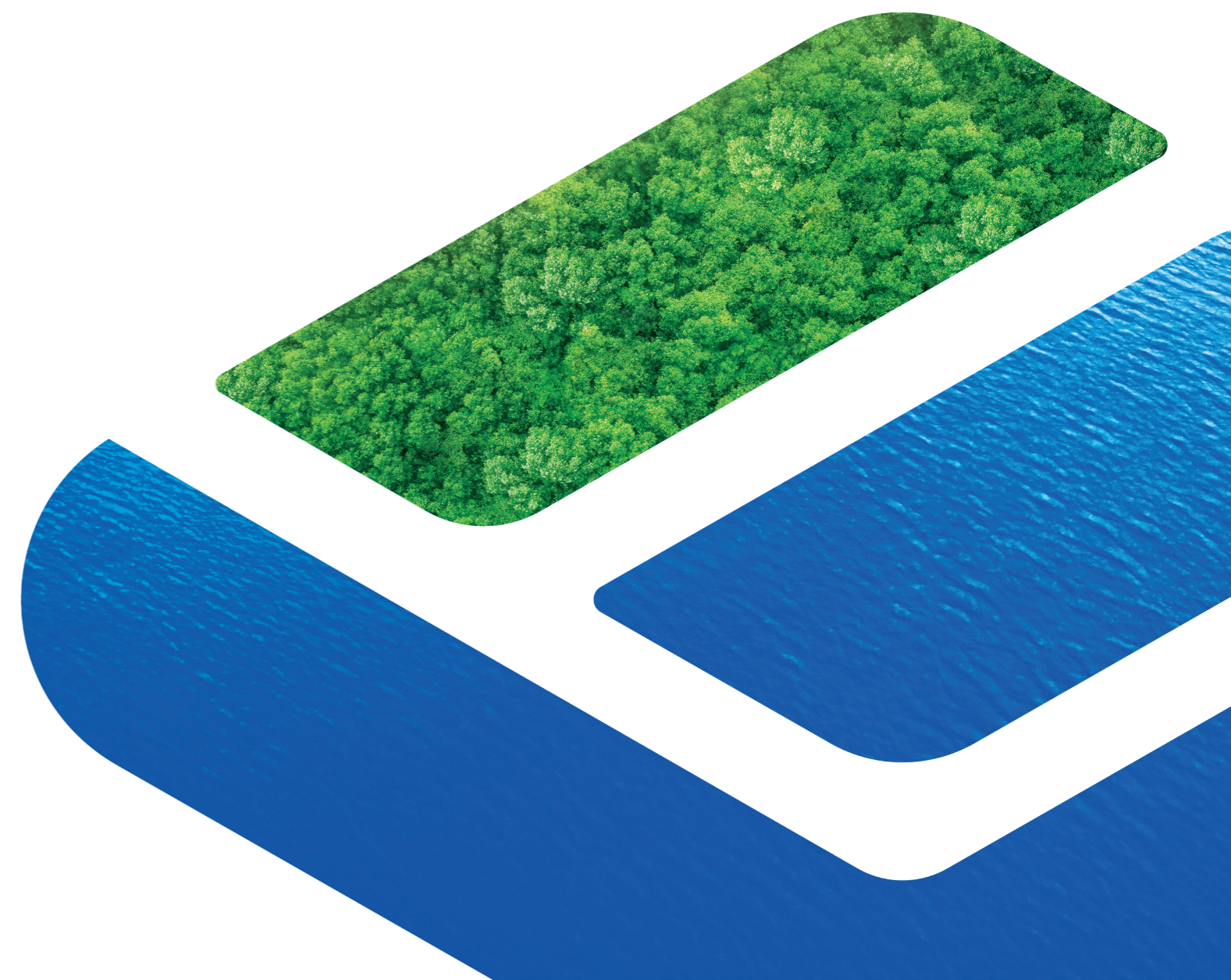


# Unlocking Green For All



GRANDBLUE ENVIRONMENT CO.,LTD.

Stock Abbreviation: Grandblue Environment

Stock Code: 600323

Official Website: [www.grandblue.cn](http://www.grandblue.cn)

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Version No.: V2.0/26.05





Times are changing, but the pursuit of green remains the same. However, the way to achieve green must evolve.

GrandBlue's new logo presents the corporate image of "a green innovation enabler".

### **Design Concept**

The graphic is inspired by the initial letters "GB" of the company name "GRANDBLUE". The shape that extends outward continues the green concept of "infinite recycling" of resources, reflecting the industry characteristics, while also embodying the power to break boundaries, demonstrating the innovative vitality of the enterprise and the brand spirit of "Always Advancing, Never Stopping". The overall design highlights the characteristics of the enterprise such as technology, professionalism, and progress. The color selection mainly adopts blue-green tones, with technology blue as the base and ecological green as the highlight. This emphasizes the preciousness of green. It implies that technology blue can achieve ecological green, showcasing the persistent pursuit of the grandblue people for green ecology.

**Tech Blue** - Symbolizing the continuous breakthroughs in innovation capabilities, like the deep sea, it harbors infinite possibilities;

**Eco Green** - Symbolizing the sustainable development of ecological wisdom, like a forest, it nurtures eternal vitality.

### **Overall Meaning**

By promoting innovation to achieve green development, this symbolizes embodies grandblue's brand value proposition of "Unlocking Green For All", expresses the brand spirit of "Always Advancing, Never Stopping", and demonstrates the infinite pursuit of the mission of "Realizing Harmony between Humanity and Nature."

## Unlocking Green For All

**Where humanity and nature intertwine, guided by the wisdom of the earth, life flourishes in an endless cycle of growth.**

A green future springs from a profound reverence for nature, and is forged through an unyielding pursuit of innovation.

Today, we stand at the vital crossroads of ecology and development. How do we reconcile boundless demand with finite resources? How do we make both green living and thriving progress truly accessible? We believe a transformative solution is not just needed, but essential.

**Grandblue : The Catalyst for Green Innovation, The Pioneer of Green Value.**

We believe that innovation is the singular path to making green truly accessible.

Our innovation transcends mere technological iteration; it is a bold, boundary-breaking re-imagining of green industries. Our innovation is not isolated environmental stewardship; it is the vibrant co-creation of value, rooted in the philosophy of open symbiosis.

**We promise to be driven by innovation and linked by cooperation :**

To empower cities with efficient resource utilization, allowing green to become the vibrant new canvas for urban development.

To energize industries with low-carbon transformation and upgrading, enabling green to become the dynamic new force for enterprise growth.

To safeguard a clean and beautiful future for our homeland, letting green paint a magnificent new tapestry of harmonious coexistence.

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# Strategy-Led Corporate Development

Mission-Driven  
Strategy-Led  
Innovation-Driven Breakthroughs

# Company Profile

Grandblue Environment Co., Ltd.  
(Stock Code: 600323.SH)



## Top 10 Environmental Enterprises in China Top 10 Most Influential Enterprises in Solid Waste Treatment in China



Operating across **20** provinces, autonomous regions, and municipalities, **53** prefecture-level cities, and **78** counties throughout China  
International presence in Southeast Asia

Domestic waste incineration power generation (design capacity) **97,590** tons/day  
Serving over **110** million residents

Among the Top **3** domestic waste incineration power generation nationwide  
No. **1** among A-share listed companies

# History

Over the past two decades since being listed, Grandblue has steadily evolved from a local municipal utility provider into a leading national provider of comprehensive environmental services.

Each milestone reflects Grandblue's unwavering commitment to ecological stewardship, its efforts to solidify operational foundations, expand industry reach, and its proactive pursuit of green development.

▶ **2000**

Listed on the Shanghai Stock Exchange, initially focused on water supply business as its core business

▶ **2004**

Expanded into the sewage treatment sector

▶ **2006**

Entered the solid waste treatment sector through strategic mergers and acquisitions

▶ **2011**

Entered the energy supply sector via targeted acquisitions

▶ **2014**

Scaled solid waste treatment operations nationwide through mergers, acquisitions, and restructuring

▶ **2023**

Expanded internationally, entering overseas markets through mergers and acquisitions

▶ **2025**

Ranked among the Top 3 domestic Waste to Energy enterprises in China, achieved through sustained industry consolidation and innovation

# Brand Culture

Mission

Realizing Harmony between Humanity and Nature

Vision

Powering Green Innovation

Slogan

Unlocking Green For All

Spirit

Always Advancing, Never Stopping

## Core Values

### Three 'Good' and Three 'Sharing'

#### Good city steward

ecological protection  
scientific and standardized approaches  
high-quality and efficient services

#### Good industry model

leading model setting standards for the industry  
technological innovation  
setting benchmarks

#### Good community neighbor

open and honest  
neighborly and beneficial  
harmonious and win-win  
sharing success



#### Sharing of wealth

provide opportunities for career growth  
share development successes  
focus on strivers  
recognize and reward hard work

#### Sharing of capabilities

create an environment empowering employees  
improve capabilities  
enhance individual skills  
realize professional value

#### Sharing of values

adhere to Grandblue's core principles  
offer meaningful work  
practice the Grandblue mission  
elevate the value of life

## Grandblue Employees with Five Qualities

### Aggressiveness

continuous growth, courage to break through barriers, continuous innovation

### Responsibility

diligent and accountable  
courage to take on responsibility  
solve problems

### Reverence

respect for life, nature, and rules  
focus on the bottom line, take the right path



### Altruism

engage and develop others  
achieve mutual assistance and win-win  
situations with colleagues, customers  
and partners

### Integrity

honest and trustworthy  
fair and just

# Company Honors



- Top 10 Environmental Enterprises in China
- Top 10 Most Influential Enterprises in Solid Waste Treatment in China
- Top 10 Waste Incineration Power Generation Enterprises in China
- Most Valuable Investment Award among Listed Companies

- ▶ China Digital Innovation Pioneer Award
- ▶ Asian Corporate Social Responsibility Award
- ▶ Special Contribution Award for Corporate Governance
- ▶ Twenty National “AAA-Level” Domestic Waste Incineration Power Generation Plants
- ▶ Top 10 Environmental Protection Facility Public Access Institutions in China
- ▶ Featured in Business Climate Action Cases at the United Nations Climate Change Conference
- ▶ Recognized as a Global Ecological Restoration and Protection Model by the United Nations
- ▶ Included in the First Batch of Carbon Neutrality and Carbon Peaking Pilot Projects in Guangdong Province
- ▶ Ranked in the Top 10 of the Top 100 ESG Enterprises in the Guangdong-Hong Kong-Macao Greater Bay Area
- ▶ 5A-Level Water Supply Organization by the China Water Supply Service Promotion Alliance
- ▶ Named Most Responsible Enterprise in China’s Water Industry

# Innovative Environment Treatment & Operation Models

Minimizing Comprehensive Social Costs  
Maximizing Green Value

# Green Circular Industry Chain

Grandblue integrates the principles of green development into every facet of its operations—establishing a green circular industry chain spanning solid waste treatment, energy, water supply, and drainage. This creates a scalable and replicable circular industrial system, helping cities build sustainable, low-carbon, and resource-efficient urban ecosystems.

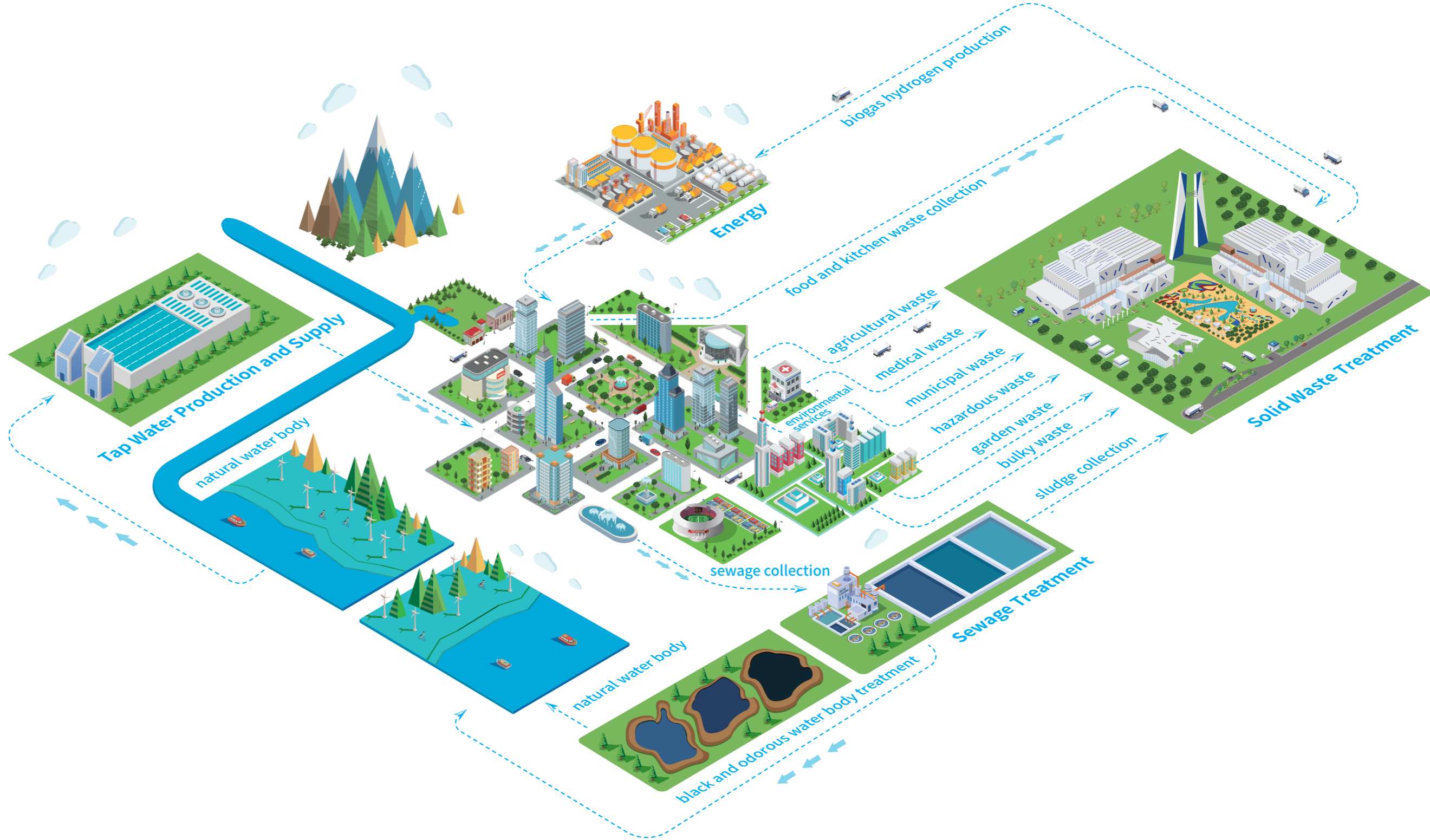
- 🗑️

Solid Waste Treatment  
over **20** years
- 🔥

Energy  
over **30** years
- 💧

Water Supply  
over **40** years
- 🚰

Drainage  
over **20** years



# Vertical and Horizontal Integrated “Grandblue Model” for Multi-Source Solid Waste Collaborative Governance

Aligned with the national goal of building “Waste-free Cities,” Grandblue has developed a vertically and horizontally integrated solution for solid waste management known as the “Grandblue Model.”

This comprehensive framework encompasses a complete industry chain that includes:

Front-end: Intelligent municipal management through “Great Municipal” stewardship services.

Midstream: Efficient waste handling via “Great Diversion” + “Disaggregated Classification” collection and transfer

Back-end: Comprehensive and collaborative treatment and resource recovery from multi-source solid waste.

The “Grandblue Model” is designed to minimize total social costs while maximizing social and environmental value.

## ► Minimizing total social costs

Lower operational costs, reduce pollutant emissions and carbon footprint, reduce government burden in terms of safety and stability assessment, streamline regulatory oversight, and minimize land use for waste infrastructure

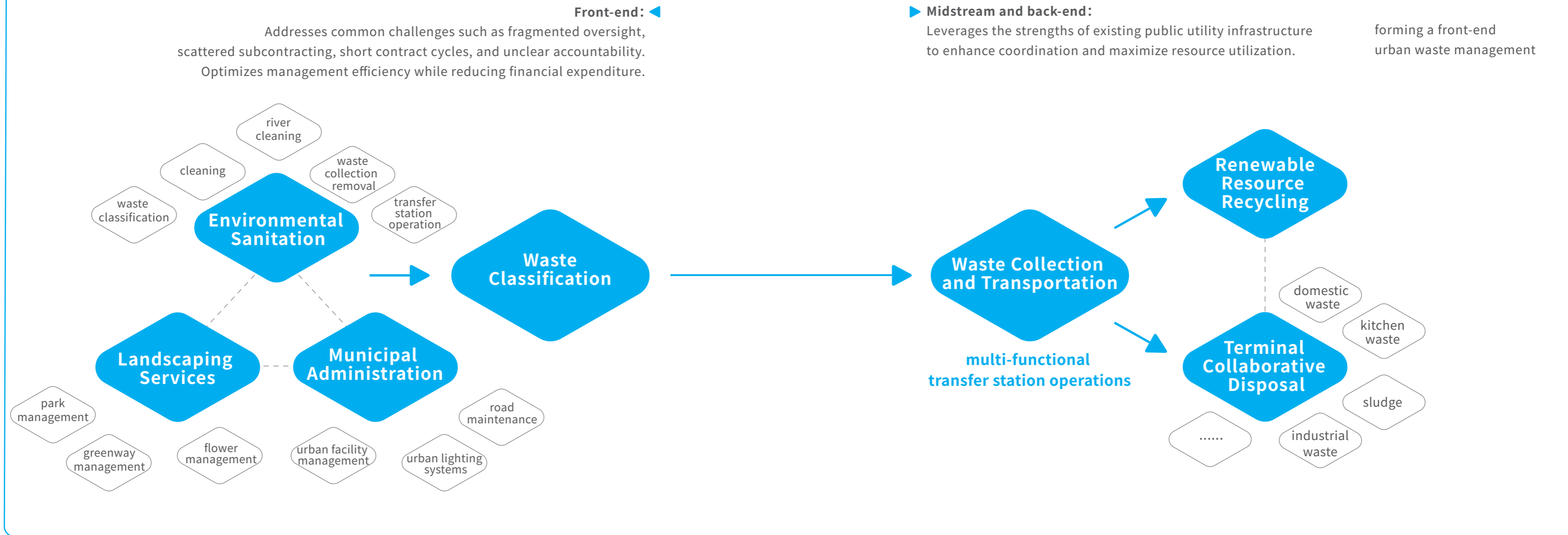
## ► Maximizing social green value

Enhance solid waste resource recovery and energy utilization, improve safety and efficiency in collection, transfer and treatment, and raise public environmental awareness and participation



# Collaborative Integration of “Great Municipal” Urban Environmental Sanitation Service Industry Chain

## Full Chain Management System and Business Platform



## Among the Top 3 in China for Domestic Waste Incineration Power Generation



Grandblue delivers high-quality solid waste treatment services across 20 provinces, autonomous regions, and municipalities including: Guangdong, Fujian, Hubei, Hunan, Hebei, Liaoning, Guizhou, Jiangxi, Heilongjiang, Shandong, Shanxi, Anhui, Inner Mongolia, Zhejiang, Sichuan, Yunnan, Jiangsu, Guangxi, Shanghai, and Hong Kong, covering 53 prefecture-level cities and 78 counties, and serving a population of over 110 million. Internationally, Grandblue also holds equity in multiple waste incineration power generation projects in Bangkok, Thailand, with a combined capacity of 3,300 tons/day.

domestic waste incineration power generation (designed capacity)

**97590** tons/day

domestic waste incineration power generation (operating capacity)

**80240** tons/day

number of domestic incineration power generation projects

**60**

waste compression and transfer

**9115** tons/day

kitchen waste, grease, and fecal waste treatment

**4444** tons/day

agricultural waste treatment

**1049** tons/day

industrial hazardous waste treatment

**225500** tons/year

sludge treatment

**1400** tons/day

bulk waste treatment

**100** tons/day

medical waste treatment

**30** tons/day

domestic waste sanitary landfill capacity

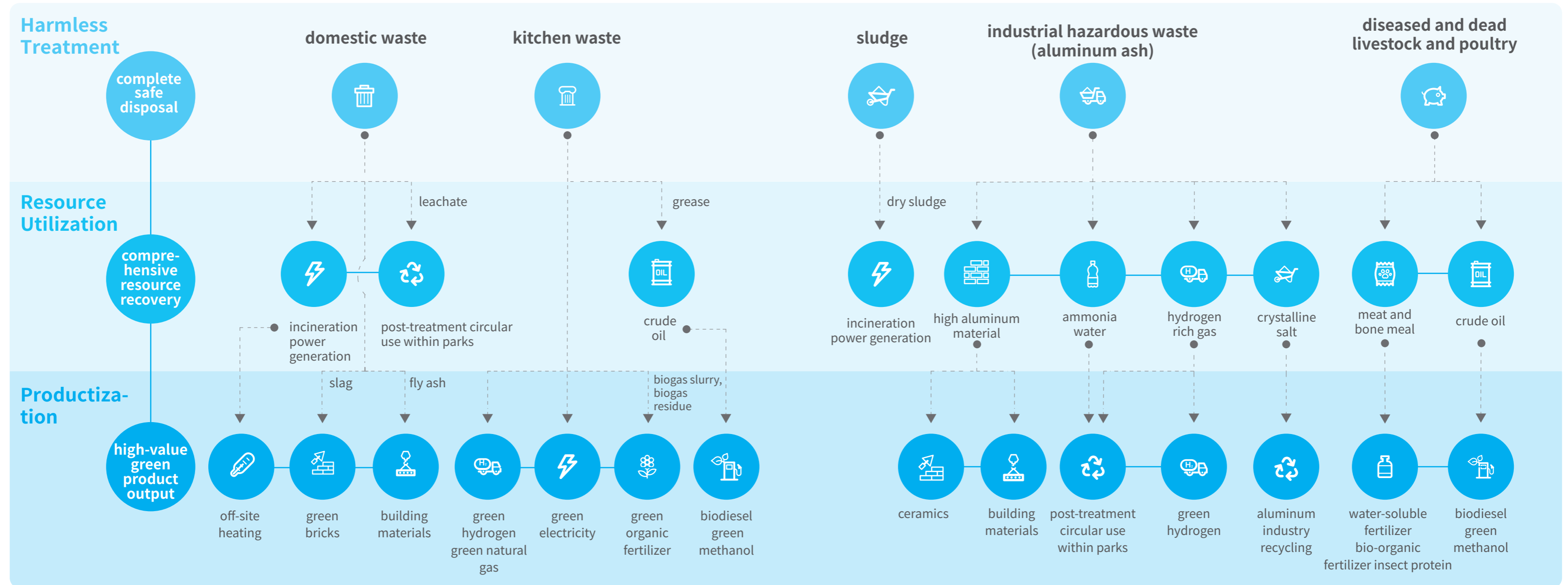
**2.04** million m<sup>3</sup>

slag resource utilization

**550000** tons/year

# Transforming from Resource Utilization and Productization to Green Revenue Generation

Grandblue has evolved its waste management strategy to generate high-value green products, maximizing both environmental and economic returns through sustainable resource conversion.



# Diversified Comprehensive Energy Services Centered on Urban Gas

Grandblue has established a strong foundation in clean energy operations, developing a diversified energy supply system that includes pipeline natural gas, LNG trading, liquefied petroleum gas, and hydrogen energy. This integrated approach delivers green momentum to regional industrial transformation and high-quality development.

pipeline natural gas  
service customers  
**600000** households

annual natural gas supply  
**1** billion m<sup>3</sup>

natural gas pipeline  
network length  
**2750** kilometers

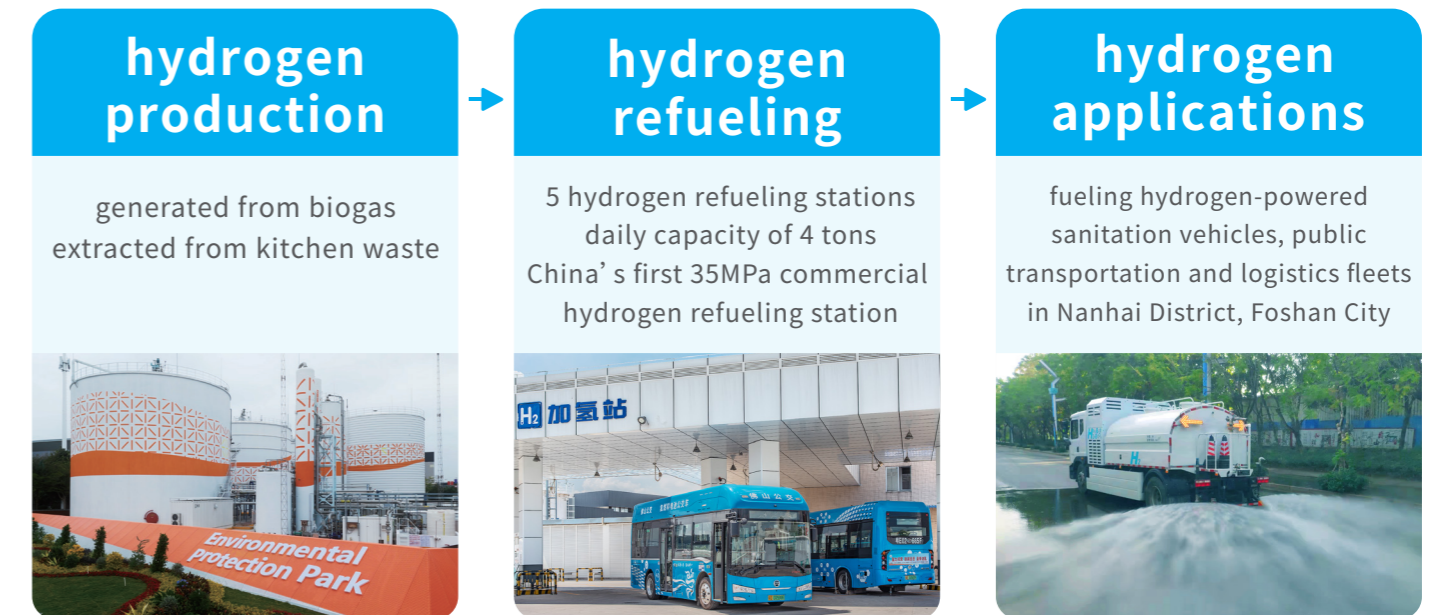
liquefied petroleum  
gas supply  
**36000** tons/year

hydrogen refueling  
station operated  
**5** stations

hydrogen production  
from kitchen waste  
**2200** tons/year

## Pioneering a “solid waste + energy” zero-carbon model

Grandblue is advancing a new model for urban zero-carbon development through the collaborative integration of solid waste and clean energy operations. This innovative framework connects hydrogen “production, refueling, and application.” This integrated model enables a potential carbon reduction of nearly 1 million tons, underscoring Grandblue’s commitment to green innovation and urban sustainability.



## End-to-end Water Service Chain: From Water Intake to Direct Drinking Water

Grandblue has built a comprehensive water supply industry chain, covering every stage from water intake, water production, and water transmission to direct drinking water services to end users. The company actively promotes smart water infrastructure, ensuring efficient resource utilization, safe distribution, and a stable, high-quality water supply for both urban and rural populations.

total daily water supply capacity

**1.7** million m<sup>3</sup>

daily capacity of a single water plant

**1.38** million m<sup>3</sup>

water supply pipe network

**4774** kilometers

drinking water testing capability

**192** items

industry-leading water loss rate (supply-production difference)

**6.41%**

water supply customers

**1.2** million households

### Smart empowerment, serving thousands of households

Benchmarking against China's top-tier standards, Grandblue has achieved refined and intelligent management across the entire water supply chain, from intake to distribution. In Nanhai District, Foshan City (Guangdong Province), Grandblue is pioneering a model of high-quality urban water supply, enabling residents to access both "smart water" and "quality water."

#### smart operation: delivering "smart water"

leveraging digital platforms and intelligent operations, Grandblue supports: 1 million+ user accounts and 2,000+ online monitoring points across the pipeline network

these capabilities enhance supply safety and reliability, maintaining sufficient water volume and stable water pressure

high-quality secondary water supply via smart pump rooms

#### quality enhancement: delivering "quality water"

through its direct drinking water services, Grandblue is elevating water quality standards and driving a transition toward healthier water consumption.

implemented scenarios include: administrative buildings, schools, hospitals, industrial parks, and office complexes.

# The “Grandblue Model” for Water Control: Integrated Plant–Network–Source–River Management

Grandblue has developed a professional, full-chain operational model for water governance known as the “Plant-Network-Source-River Integration” approach. This model encompasses the operation of water purification plants, maintenance of rainwater and sewage pipe networks, household drainage management, and pollution discharge control at river outlets. Through flexible models such as BOT (Build-Operate-Transfer), TOT (Transfer-Operate-Transfer), and entrusted operations, Grandblue promotes the efficient circulation of water resources and protects aquatic ecosystem health.

water purification plants

**21** plants

domestic sewage treatment capacity

**1.01** million tons/day

industrial wastewater treatment capacity

**20000** tons/day

agricultural sewage treatment stations

**87** stations

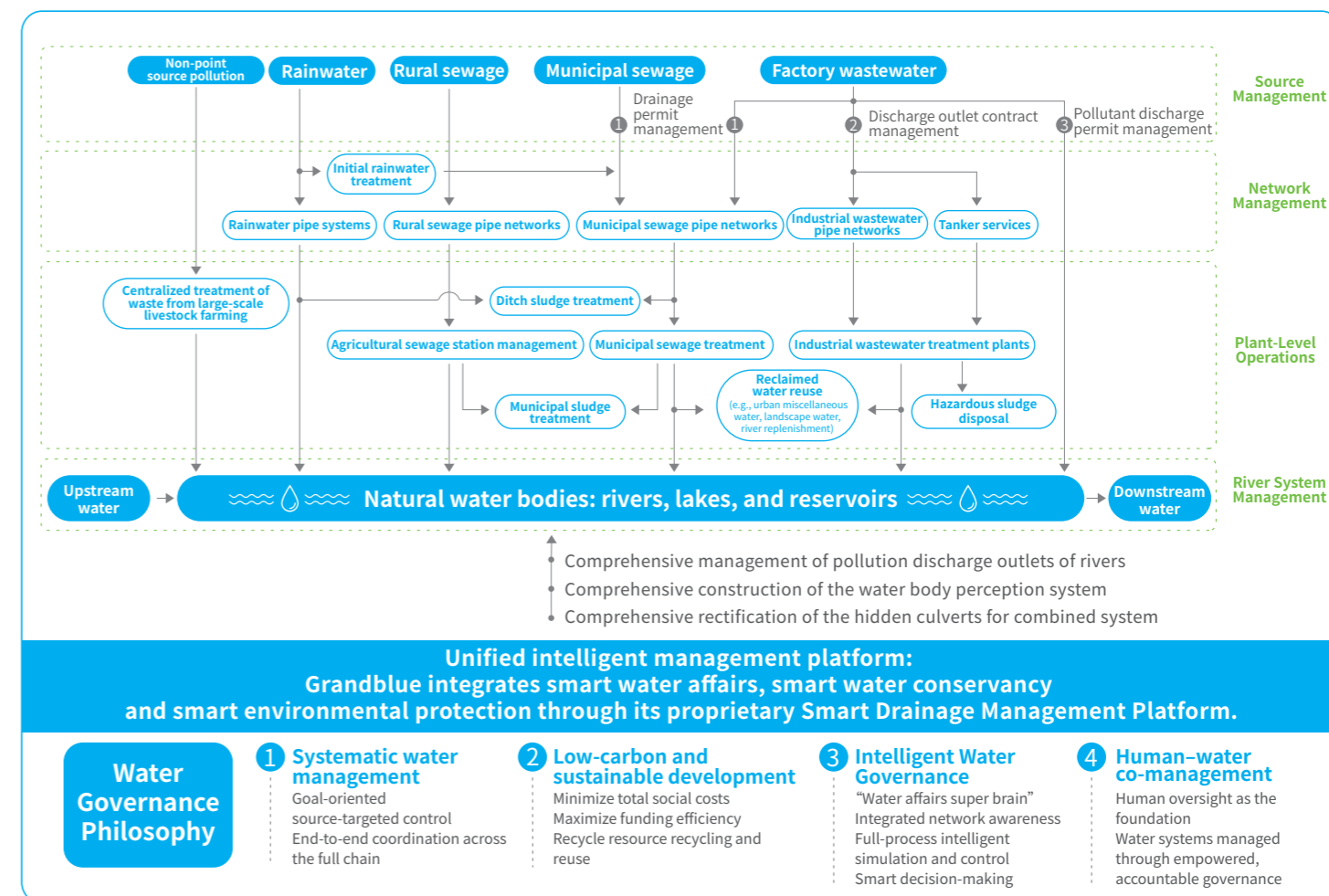
rainwater/sewage/wastewater pipe network operations

over **4000** kilometers

pump station and well operations (rainwater/sewage/wastewater)

**443** stations

## Integrated Control Framework: Plant–Network–Source–River



# Innovative Technology Conversion Capabilities

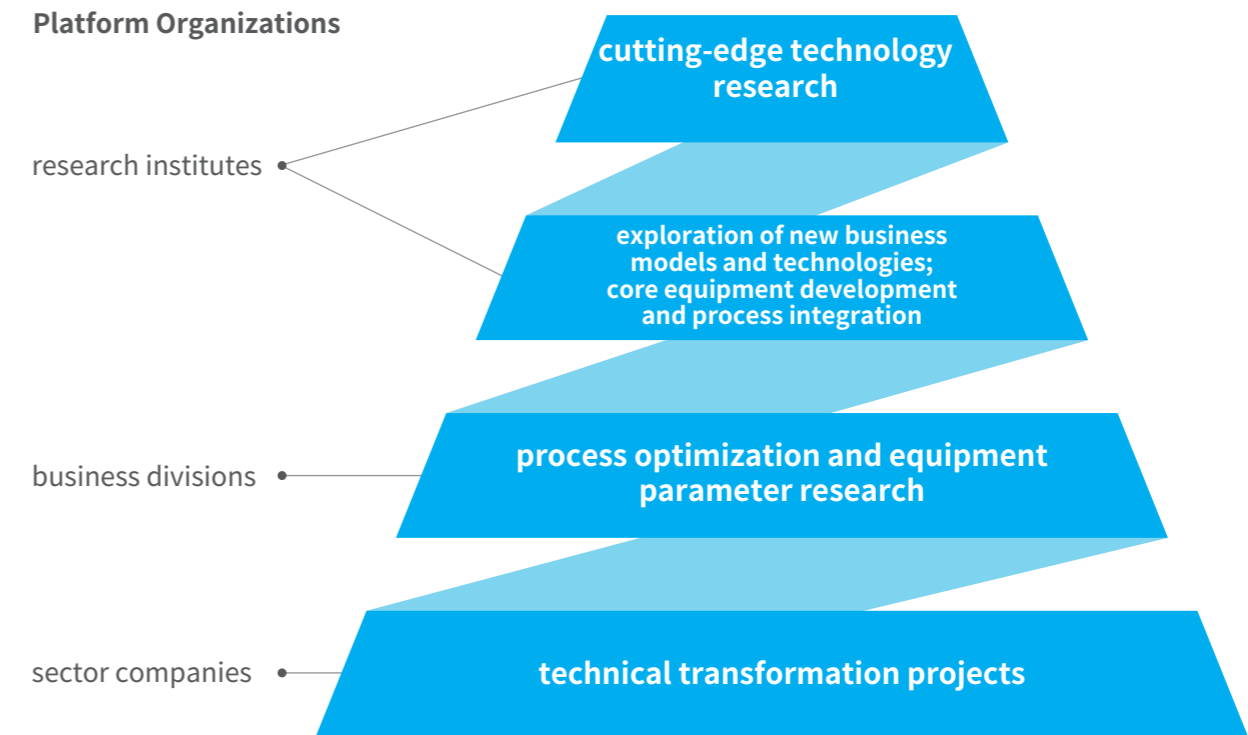
Solve Industry Pain Points to Unlock the  
Full Potential of Green Development



# Robust R&D Innovation Strength

Grandblue has established a full-chain innovation ecosystem built around a “three-tier, four-level” R&D system that spans from research institutions to business divisions and sector-level companies. This structure accelerates the development of new productivity drivers, strengthens core competitiveness, and enables innovation to become the engine of sustainable growth.

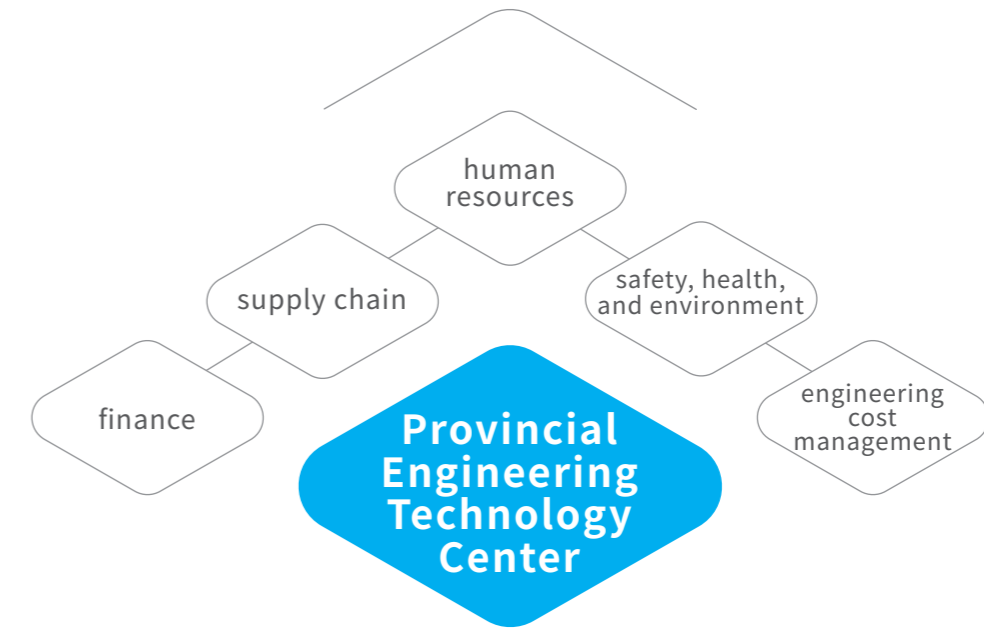
## “Three-Tier, Four-Level” R&D System



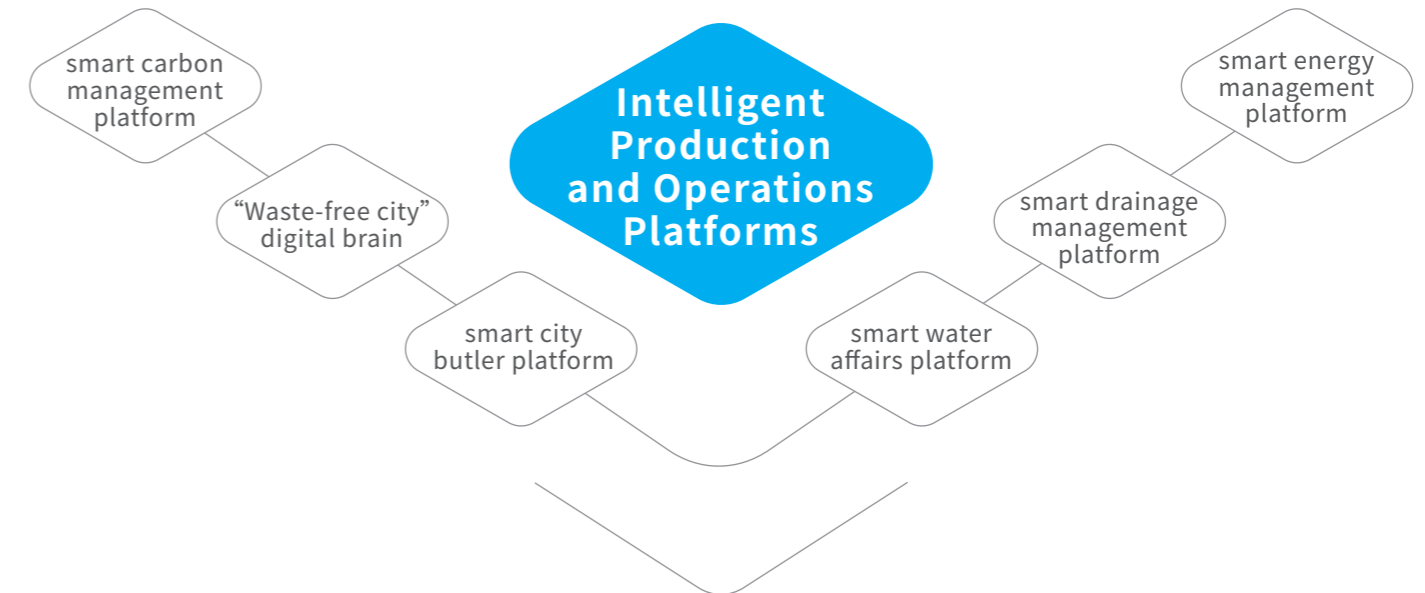
national high-tech enterprises: 9 enterprises	china industry-university-research cooperation innovation demonstration enterprise	“specialized, refined, differentiated, and innovative” enterprises: 4 enterprises	provincial intellectual property demonstration enterprise
enterprise technology center	postdoctoral innovation practice base	provincial enterprise key laboratory for industry-university-research collaboration	provincial engineering technology center

# Digital Intelligence Innovation

Grandblue comprehensively integrates cutting-edge digital technologies with environmental services to build a digital intelligence operation and management system. By leveraging big data, the Internet of Things (IoT), and artificial intelligence, Grandblue improves the precision and efficiency of urban environmental governance, accelerating the transformation toward green, intelligent, and sustainable cities.



## “Information Technology + Business + Management” Trinity Model Comprehensive Digital Intelligence Enables Green Development of Cities



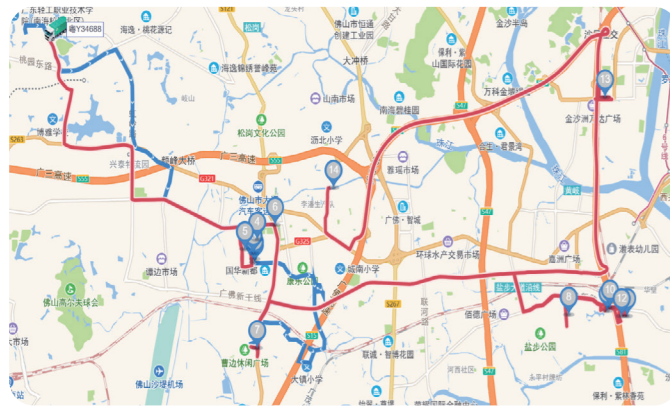
## “Waste-Free City Digital Brain” Enhancing Urban Environmental Governance through Intelligent Integration



### smart city butler platform optimizing urban environmental supervision models

**Model:** Grandblue has developed a comprehensive Smart City Butler Platform that integrates smart sanitation, smart municipal administration, and smart property services. It enables intelligent dispatch and real-time management of personnel, vehicles, equipment, and infrastructure involved in urban environmental operations.

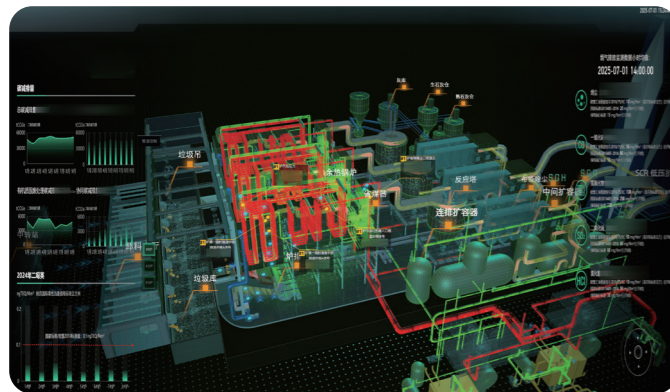
**Results:** Upgraded urban service supervision models, improved operational efficiency and service quality.



### smart collection and transfer system “end-to-end” efficiency in waste management

**Model:** Powered by Grandblue’s proprietary technologies—OmniRoute, a route optimization algorithm, and OmniMap, an industrial-grade mapping engine—this system enables real-time, dynamic route planning for waste collection and transfer.

**Results:** Enhanced efficiency in waste collection and logistics, real-time emergency response capability, refined data-driven operations, enables transparent government oversight and public supervision.



### “Industrial Brain” for waste incineration elevating automation and operational precision

**Model:** Combines traditional incineration control logic with advanced AI-driven predictive models and flame video recognition technology, replacing manual-intensive systems with refined, intelligent automation.

**Results:** Enhanced automation in boiler combustion control, increased power generation efficiency, reduced consumption of environmental protection materials, and lower manual operation intensity and human error.

## Smart Drainage Management Platform Upgrading Modern Water Governance



A nationally leading, all-factor smart drainage platform, built on IoT, cloud computing, big data, and AI technologies. It offers complete integration of regional drainage data and real-time visualization of the “Plant-Network-Source-River” system on a single platform. Enhanced water ecological environment management, strengthened effectiveness of urban water pollution control, consolidated governance capabilities.

## Real-time Online Hydraulic Model Transforming Pipeline Operation and Maintenance



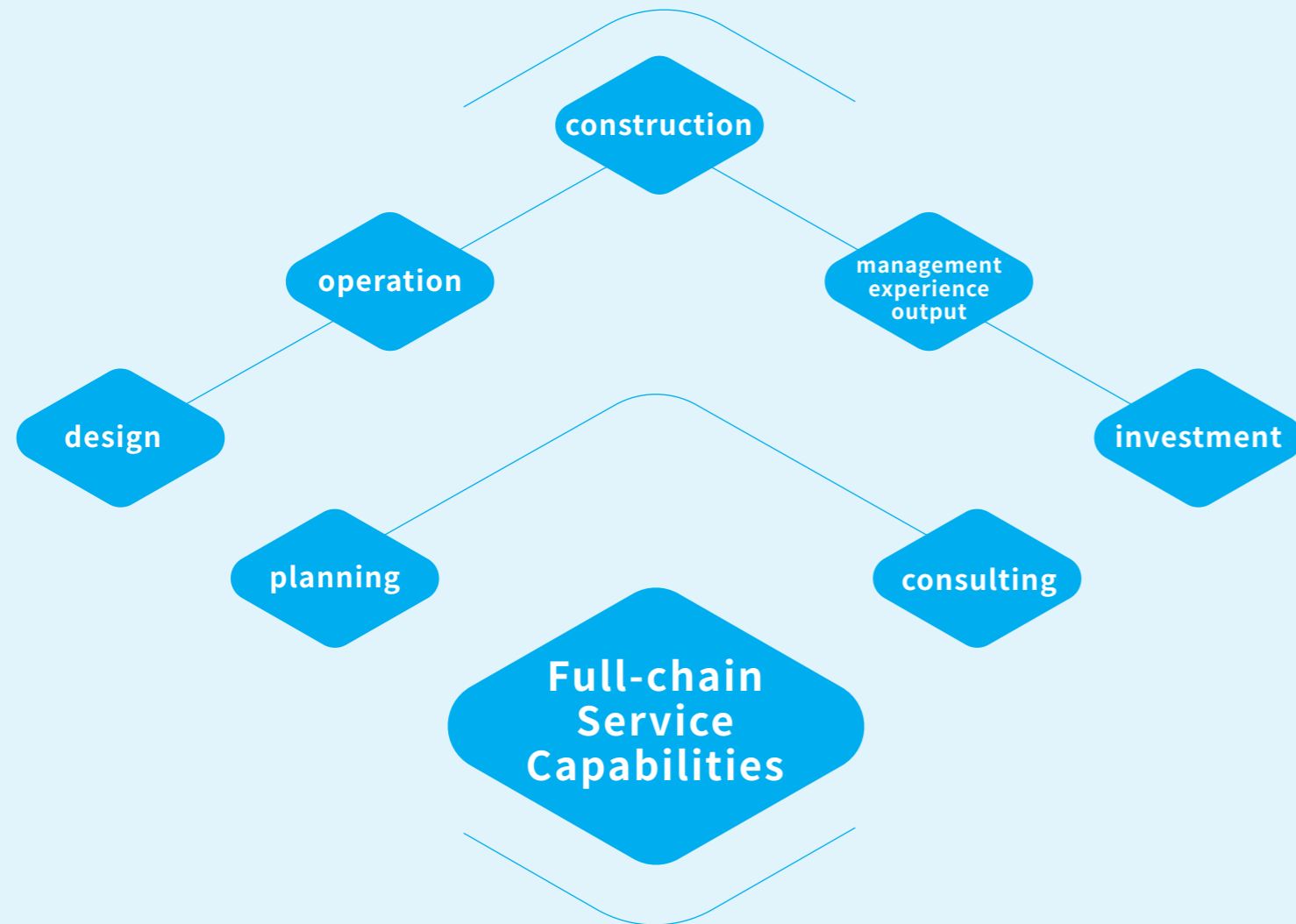
Built on digital twin technology, this model processes over 5 million real-time monitoring data points daily and more than 58 data items per second, delivering 100 million simulation outputs to inform intelligent decision-making. Accurate early-warning monitoring and emergency response, optimized plant-network scheduling, lowered production-to-sales variance, conserved water resources, and stable and reliable water supply for urban residents.

# Innovative Integrated Solutions

Making Green Development Accessible to  
Every City, Enterprise, and Individual



# Flexible, Customizable, and On-Demand Delivery Capabilities



## Municipal Solutions

- ▶ Deliver the “Grandblue Model” of multi-source solid waste collaborative governance, covering the entire lifecycle from source to terminal, with scalable implementation across multiple cities.
- ▶ Provide full-chain services for planning, construction, operation, and management of water-related infrastructure.

## Park Solutions

- ▶ Provide comprehensive environmental protection services, including consulting, trusteeship, and operation across all phases, from planning and construction to project introduction and long-term operation. Serve as an environmental partner to industrial parks by delivering integrated green infrastructure and services.

## Enterprise Solutions

- ▶ Provide complete, full-chain environmental services for enterprises, covering solid and hazardous waste management, energy supply and conservation solutions, carbon reduction management, sewage management, and direct drinking water systems. Deliver customized support from project design and construction to ongoing operation, enabling enterprises to meet environmental compliance and ESG goals effectively.

# Innovative Collaborative Participation Systems

Together, We Become Part of a Green  
Ecosystem



## “Mission-Driven” Sustainable Development Management Model

Grandblue advances sustainability by embedding social responsibility into the core of corporate strategy, forming a unique “mission-driven” management model that integrates sustainable practices into every aspect of operations.

### ► Strategic Integration

Identify critical sustainability breakthroughs by balancing risks and opportunities at each stage of development.

### ► Operational Integration

Engage with stakeholder expectations and explore new business opportunities aligned with sustainability goals.

### ► Cultural Integration

Instill a strong sense of responsibility in employees and cultivate socially conscious corporate citizens.

supporting systems for sustainable development

human resource management system

carbon management system

integrated risk, internal control, compliance, and legal affairs system

anti-bribery system

active safety management system

supply chain management system

## Co-Building “Neighbor-Friendly” Communities



### The “wall-less” Environmental Park Model

Grandblue has pioneered the construction of “wall-less” solid waste treatment and environmental protection industrial parks, integrating treatment facilities into open, multifunctional spaces that combine environmental education, public leisure, and science popularization. These parks have become local landmarks and widely recognized destinations online.

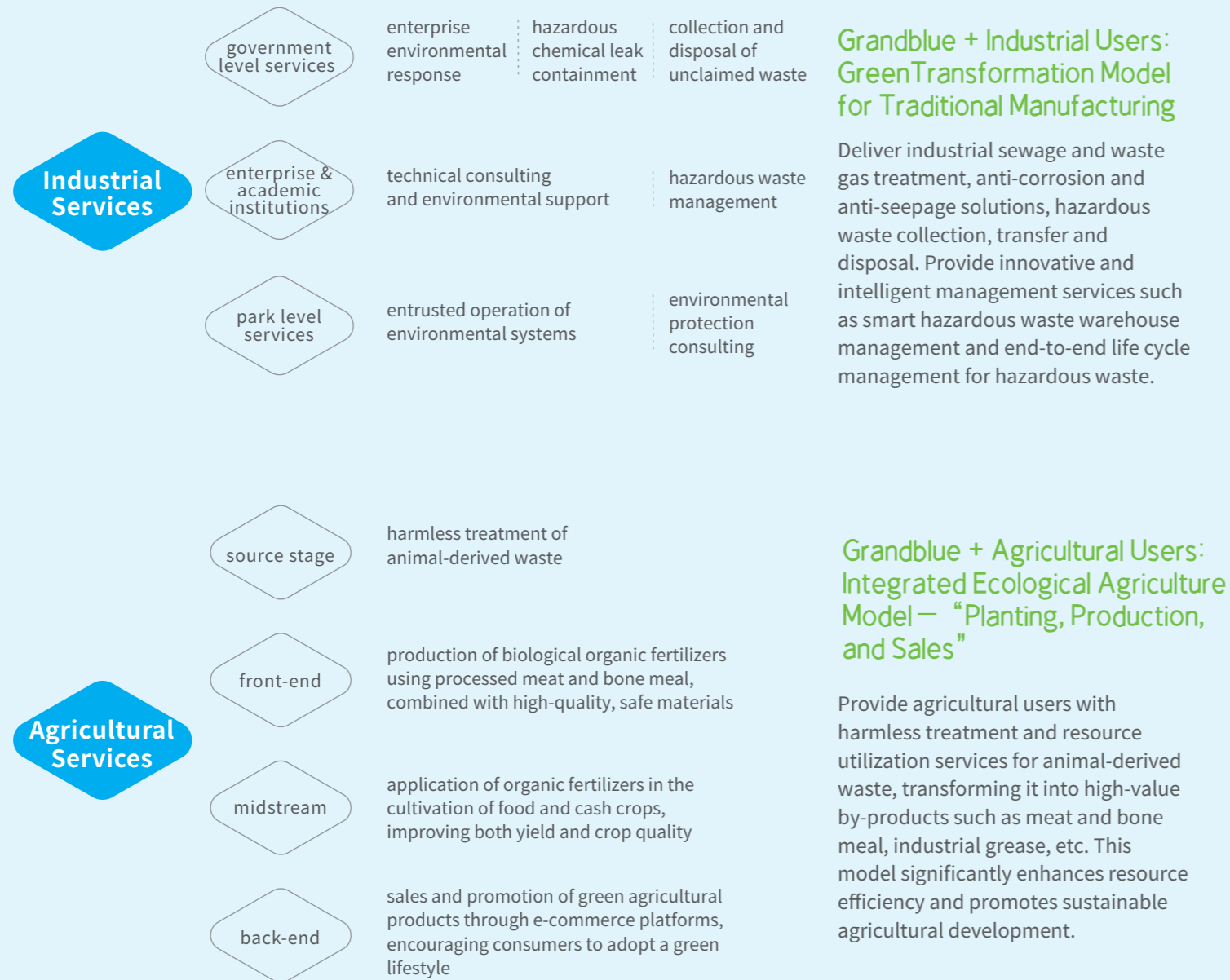
### Fostering Public Environmental Awareness

Grandblue conducts regular environmental education programs, reaching over 200,000 beneficiaries annually. These initiatives raise public awareness and encourage community participation, advancing a model of co-construction, co-governance, and shared responsibility. As one of the first companies in the industry to implement automatic monitoring equipment, public display screens, and real-time data sharing with all levels of ecological and environmental authorities, the Nanhai Solid Waste Treatment and Environmental Protection Industrial Park has become a benchmark solution for addressing “Not In My Backyard” (NIMBY) concerns and building trust in solid waste projects.



- Top 10 Environmental Protection Facility Open Institutions in **China**
- 17 Publicly Open Environmental Protection and Urban Wastewater/Solid Waste Treatment Facilities in **China**

# Promoting a Green and Sustainable Development Ecosystem

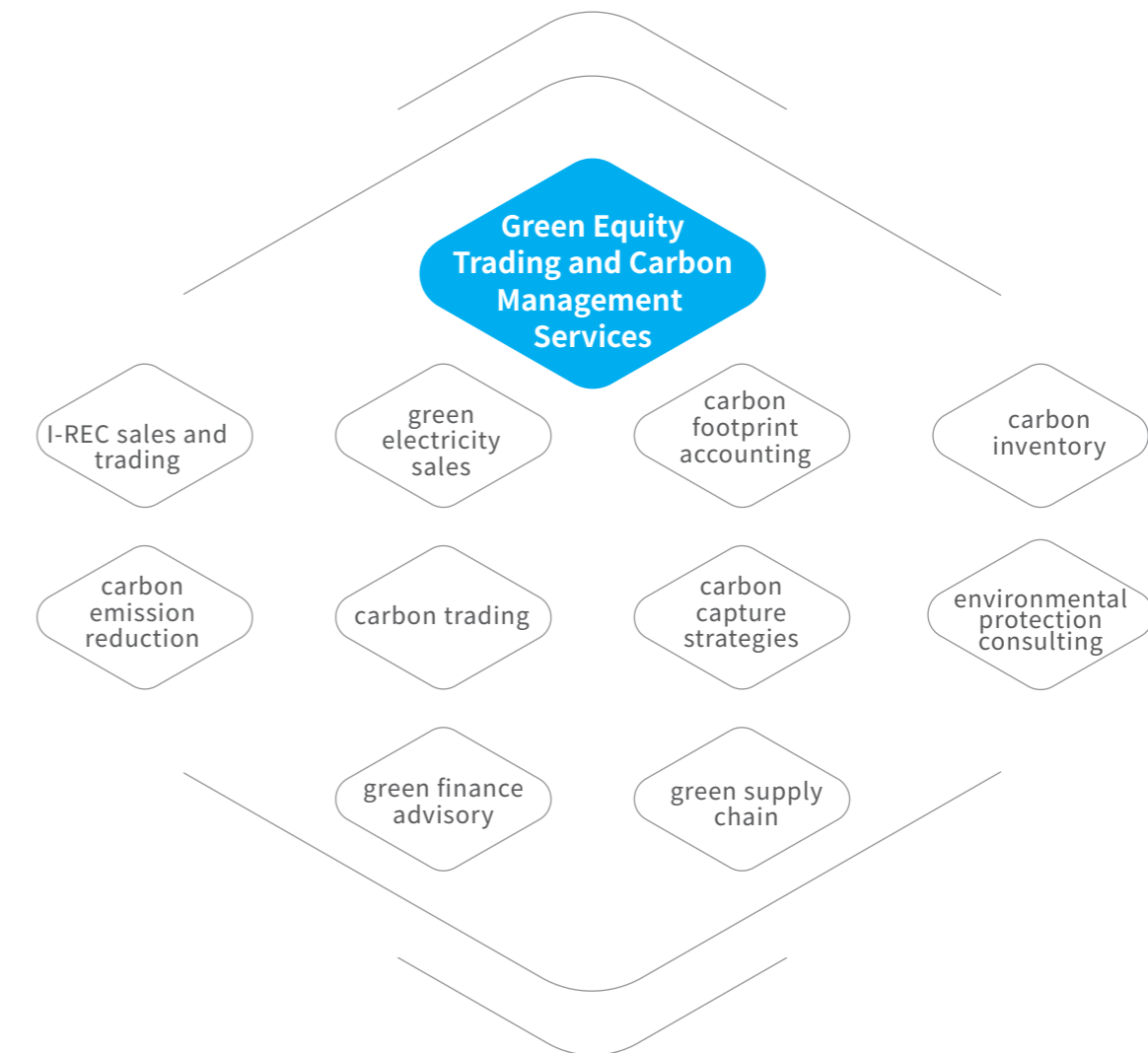


## Accelerating the Transition to a Green and Low-Carbon Economy

Utilize the energy value of domestic waste incineration to supply low-cost, renewable electricity and thermal energy to enterprises.

One-stop green rights management including: International Renewable Energy Certificate (I-REC) application, trading, and settlement; carbon footprint offset and traceability reporting; custom sustainability certification to meet international ESG standards; support for market expansion in global green supply chains.

- ▶ Annual external heat supply exceeds **2** million tons
- ▶ Up to **13** million I-RECs available for annual development

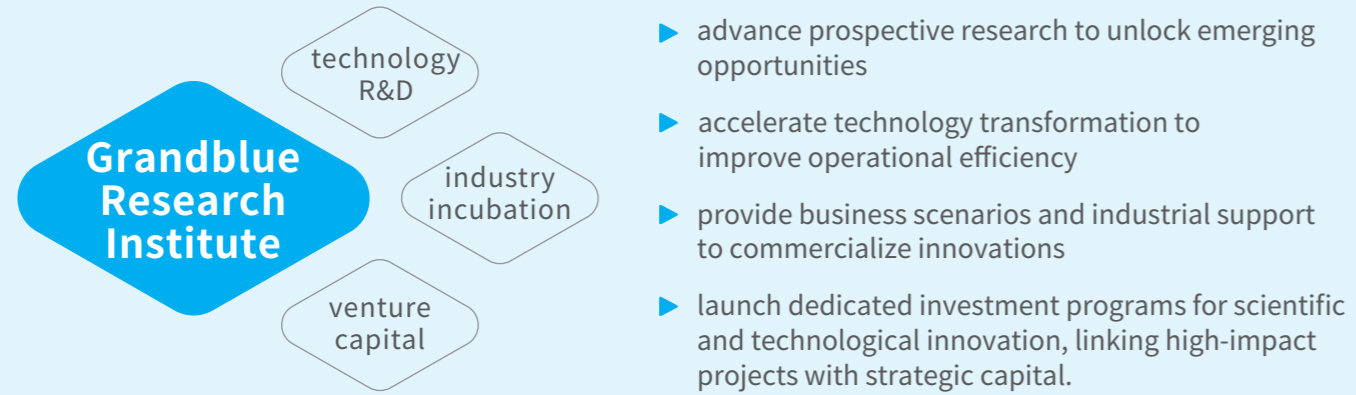


# Innovative Cross-Industry Empowerment Mechanism

Enabling More Industries and Regions to  
Share the Fruits of Green Innovation



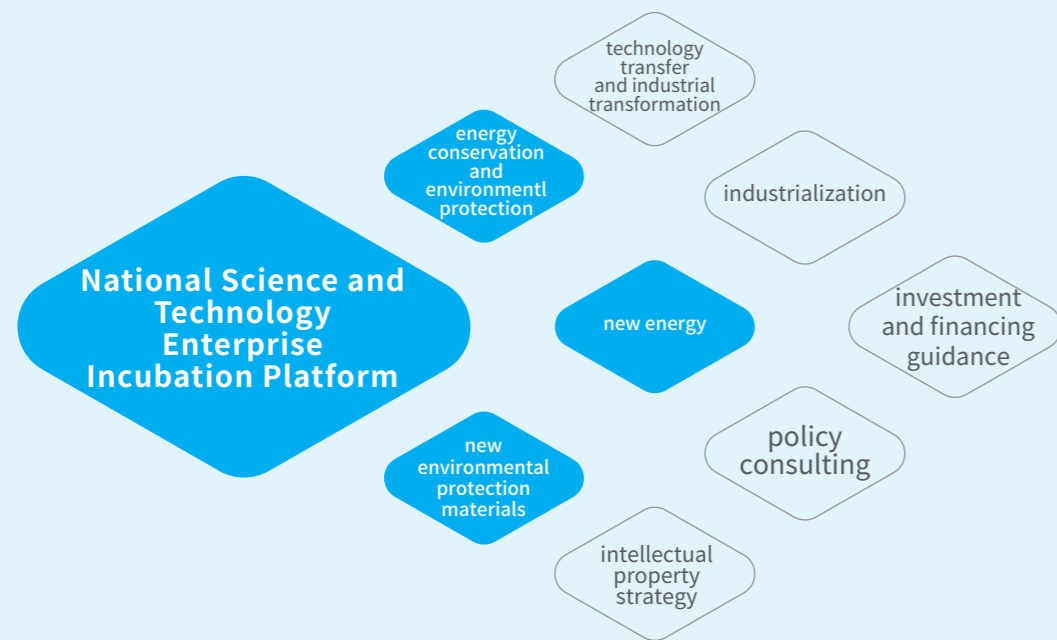
# Open Technological Innovation Platform



- ▶ advance prospective research to unlock emerging opportunities
- ▶ accelerate technology transformation to improve operational efficiency
- ▶ provide business scenarios and industrial support to commercialize innovations
- ▶ launch dedicated investment programs for scientific and technological innovation, linking high-impact projects with strategic capital.

over **561** authorized patents    contributor to 3 **National** standards    participant in 2 **National** key R&D programs

# Grandblue Environmental Protection Industry Incubator



# Innovation Ecosystem

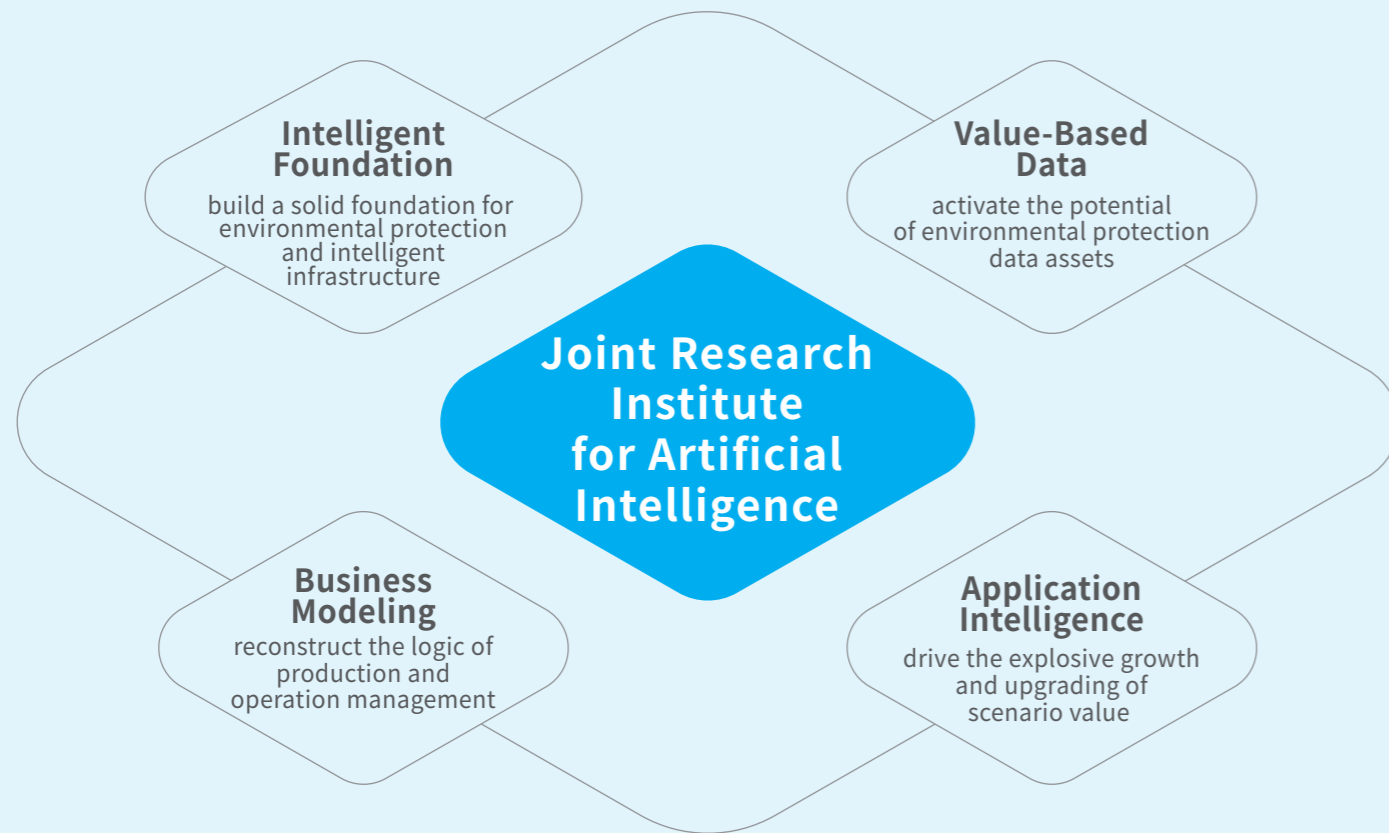
Foster an open and innovative ecosystem, promote the in-depth integration of scientific and technological innovation with industrial innovation, form a joint force for technological innovation breakthroughs, accelerate the transformation and application of scientific and technological innovation achievements, and empower high-end, intelligent and green development.

## Technological Innovation Ecosystem



## Artificial Intelligence Ecosystem

Grandblue has established a Joint Research Institute for Artificial Intelligence, focusing on building a super brain for enterprises and the environmental protection industry, driving the intelligent foundation, value-based data, business modeling, and application intelligence of the environmental protection industry, accelerating the application explosion in vertical field scenarios, and building a new industry intelligence system.



Boundless innovation,  
Infinite possibilities.  
Reconstruct the industrial logic with innovation,  
Connect ecological partners with openness,  
Empower every green innovation to become a force,  
For global transformation.  
Grandblue invites you to,  
Join hands in creating a green future that is within reach!