



ENN
新奥

新奥天然气股份有限公司
ENN Natural Gas Co., Ltd.







2022 Q1 Results

April 2022

Company Profile

- Listed in 1994, ENN Natural Gas is one of China's leading privately-owned intelligent ecological natural gas operator.
- The company's principal businesses cover the full natural gas value chain, including direct gas sales, retail gas sales, wholesale of gas, integrated energy, energy engineering. It also operates other businesses such as energy production.
- In 2020, ENN Natural Gas completed the acquisition of 369MM shares of ENN Energy Holdings Limited ("ENN Energy") held by Chairman Wang Yusuo (representing approximately 32.8% of ENN Energy's current total shares), upon which ENN Natural Gas consolidated ENN Energy's financials.

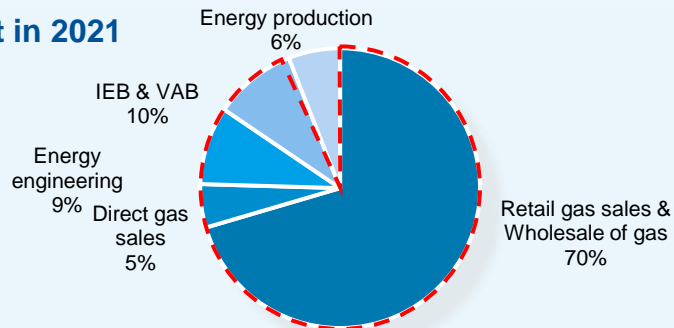
Key Business Segments

Direct Gas Sales	Retail Gas Sales	Wholesale of Gas	Integrated Energy Business	Energy Engineering	Energy Production
					
<ul style="list-style-type: none"> • Purchase natural gas mainly from abroad, supplemented by resources from domestic LNG plants and unconventional resources etc. • Sale of natural gas to domestic commercial / industrial customers, city-gas distributors, power plants and transportation energy etc. • Sale of natural gas to international traders 	<ul style="list-style-type: none"> • Purchase natural gas mainly from three oil majors pipeline gas • Sale of natural gas to end customers through self-owned pipeline network ✓ Sale of piped gas to residential households and commercial / industrial (C/I) customers ✓ Operation of CNG/LNG gas refueling stations 	<ul style="list-style-type: none"> • Conduct natural gas wholesale business to fully utilize its advanced dispatch system, logistics fleet and upstream resources 	<ul style="list-style-type: none"> • Based on customers' need, provide multi-energy products according to energy sources available locally, and customize integrated energy solutions 	<ul style="list-style-type: none"> • Provide integrated engineering service for natural gas engineering, municipal engineering, chemical and pharmaceutical engineering and low carbon and digital intelligence: <ul style="list-style-type: none"> ✓ Engineering design ✓ Equipment manufacturing and integration ✓ Project construction 	<ul style="list-style-type: none"> • Coal products: Mixed coal and clean coal production • Methanol products: The main raw material of methanol products is coal

Revenue by Business Segment in 2021

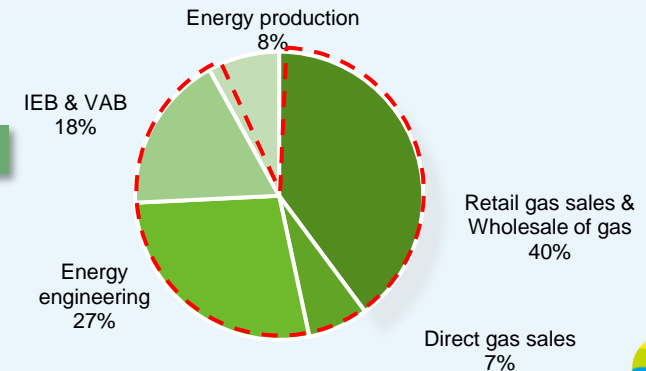
Total Revenue of RMB 116.0 Bil

Natural Gas Value Chain
94%



Gross Profit of RMB 19.4 Bil

Natural Gas Value Chain
92%





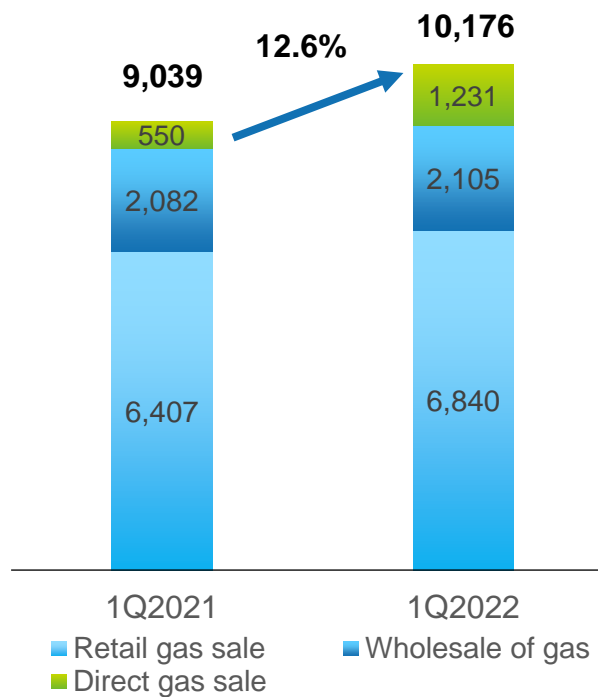
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1. Business Review
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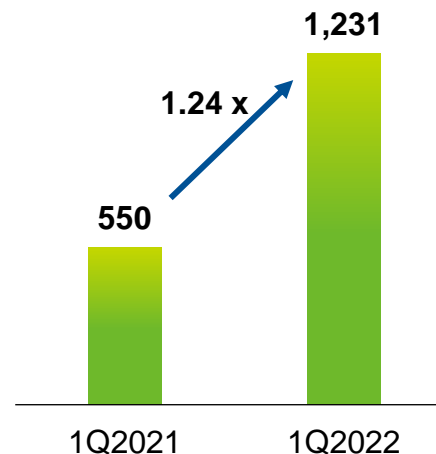
1.1 Natural Gas Sales Business

Total gas sales volume
(mil m³)



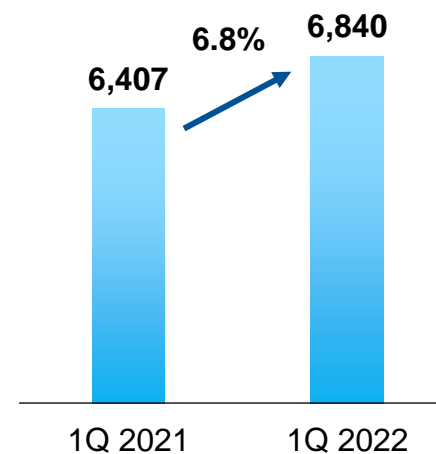
- The company expanded the market of gas refueling stations in Northwest China, explored blank markets such as Aksu, Xinjiang. It will strengthen the scale of gas wholesale market with a market share of 15%

Direct gas sales (mil m³)



- Improved domestic resource acquisitions and integrated domestic and international resources to meet market demands
- Continued to pay attention to the international market situation, adjusted the shipment schedule to expand the scale of direct gas sale

Retail gas sales(mil m³)

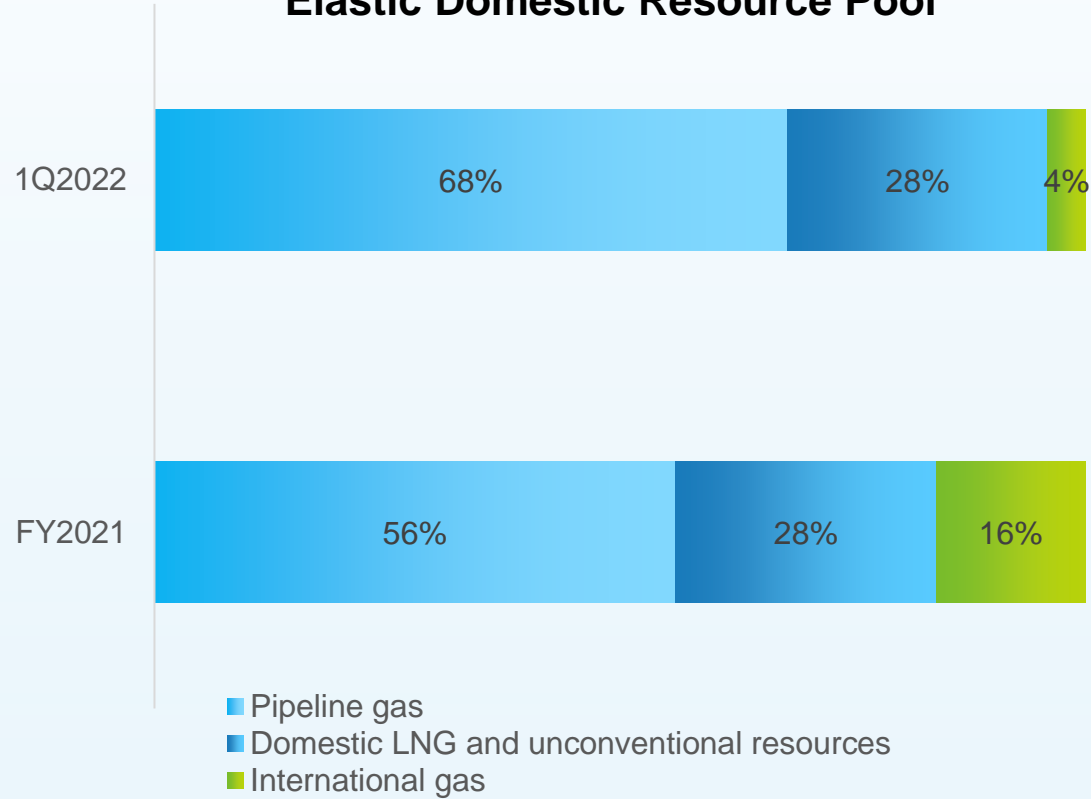


- Price hike for C/I customers already realized pass-through
- Price hike for Residential customers has obtained government subsidies of RMB 120 million



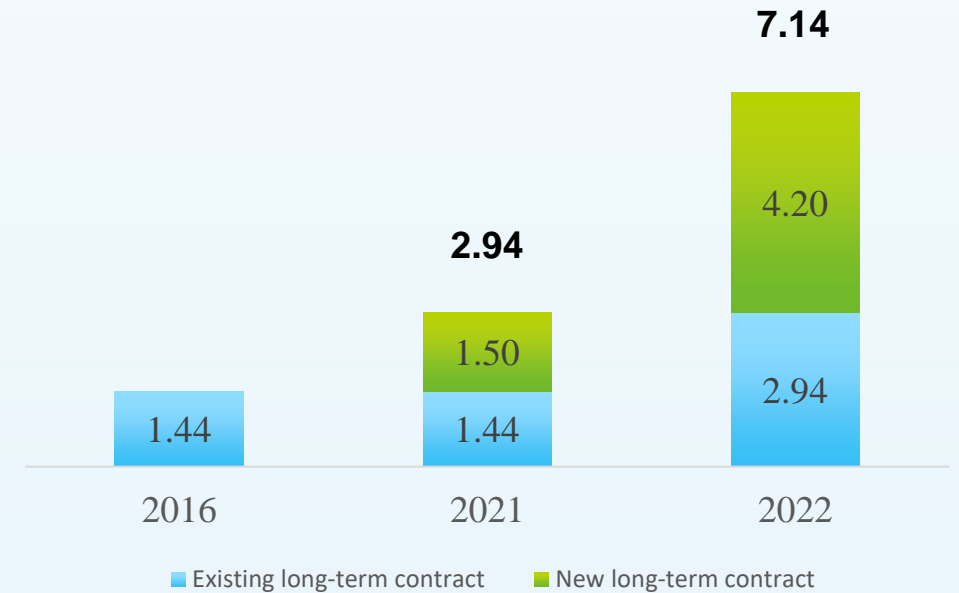
1.2 Elastic Natural Gas Resource Pool

Elastic Domestic Resource Pool



- Establish an elastic resource pool for flexible deployment of resources in both domestic and international markets
- Strengthen ecological cooperation and stabilize domestic pipeline gas resources

Steadily-growing Long-term Contract Resources (mil tons)



- Increase access to long-term contract resources to improve resource stability
- Diversified linked indices and delivery methods

1.3 Natural Gas Transportation, Storage and Delivery System

Utilize PipeChina terminals to ensure the unimpeded access of resources

Unconventional resource uploading and offloading stations

- ✓ 7 uploading stations and 51 offloading stations which covering 10 provinces

Pipe capacity

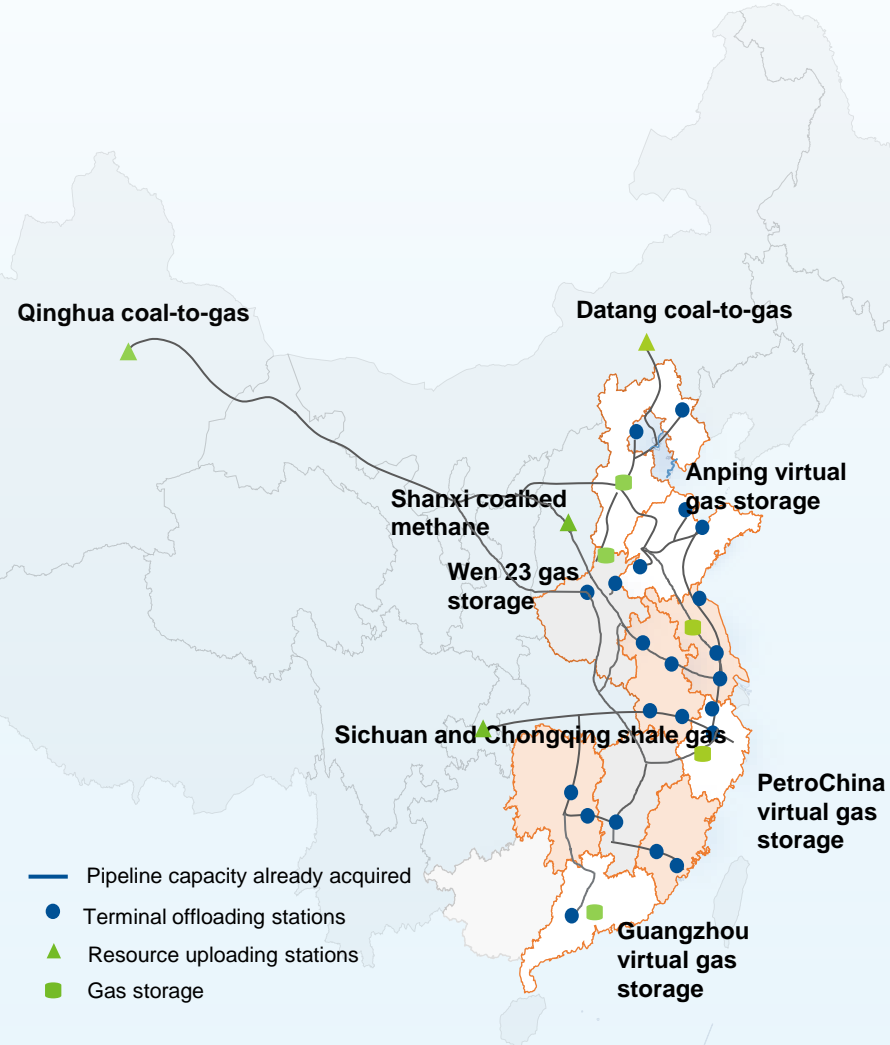
- ✓ Pipe capacity is acquired through “centralized + decentralized acceptance” and the capacity exceeds 3 million m³/day

Real and virtual gas storage

- ✓ Wen 23 gas storage capacity: 60 million m³
- ✓ Balance peak shaving capacity in Jiangsu, Hunan and other places through gas storage

LNG transmission and distribution

- ✓ With over 1,200 LNG tankers with high stability, high flexibility and flexible deployment, the company became the largest LNG transmission and distribution operator in China



Build the three-level scheduling system for matching the supply and demand

Nationwide: data integration to optimize overall demand and supply

Develop an operation plan for all scenarios, and jointly dispatch domestic and overseas pipeline gas and LNG resources through links across land and sea with the support of digital scheduling methods

Regions: overall planning to play the role of upstream and downstream coordination

Connect the pipeline gas and LNG resources in the region, penetrate the management of regional major customers to optimize demand and supply allocation in the region

Enterprises: demand-supply balance adjustment to penetrate resources and customers

Strengthen accurate forecasting of customer demand and resource allocation to balance and optimize the demand and supply allocation among gas projects

Digital intelligence platform

- Yuntu Cloud
- Intelligent matching platform for demand, supply, storage and transportation
- Intelligent scheduling
- Multi-user intelligent platform of terminal

1.4.1 Zhoushan LNG Terminal Asset Injection

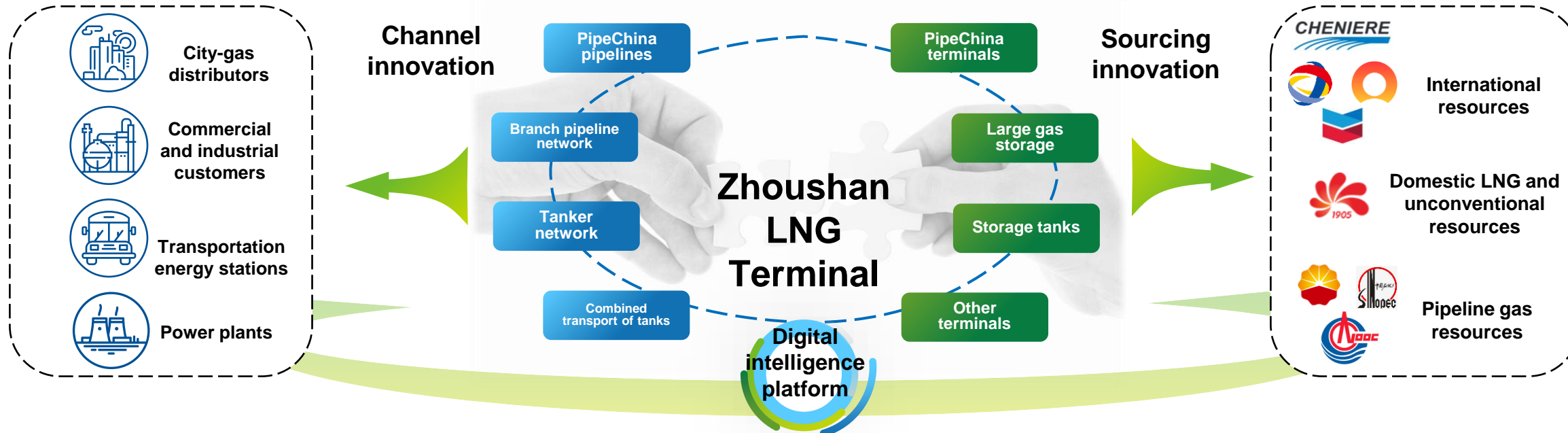
Trading solutions

- Transaction price: RMB 8.55 billion
- Payment method: 50% stock + 50% cash

The general meeting of shareholders
May 5, 2022

SEC review

Equity transfer and share issuance





1.4.2 The Pivot of the Resources Interaction —— Zhoushan LNG Terminal

- **Steadily and orderly advance the construction of the 3rd phase of project to create a benchmark for intelligent low-carbon terminals, with a processing capacity of 410,000 tons in Q1**

Steadily advance the 3rd phase of project construction

Examine and approve the 3rd phase of project

- ✓ It was approved on March 15th, and the long-term treatment capacity is expected to exceed 10 million tons

3rd phase of project cooperation

- ✓ Encourage eco-partners to jointly invest in the construction of the 3rd phase storage tanks.

Deepen the cooperation and innovate the model

Ecological cooperation

- ✓ Continue to introduce partners including Sinopec, PetroChina, CNOOC and Zhejiang Energy to use the terminal windows

Tank capacity rental

- ✓ Cooperate with many city-gas enterprises for tank capacity rental

Establish "low-carbon LNG Terminal"

Green terminal

- ✓ Completed the carbon footprint inspection of terminals in 2021 and obtained the ISO14064 certification
- ✓ Promote the development of carbon neutral group standard with East China University of Science and Technology
- ✓ Start the construction of rooftop photovoltaic projects to optimize the energy consumption structure

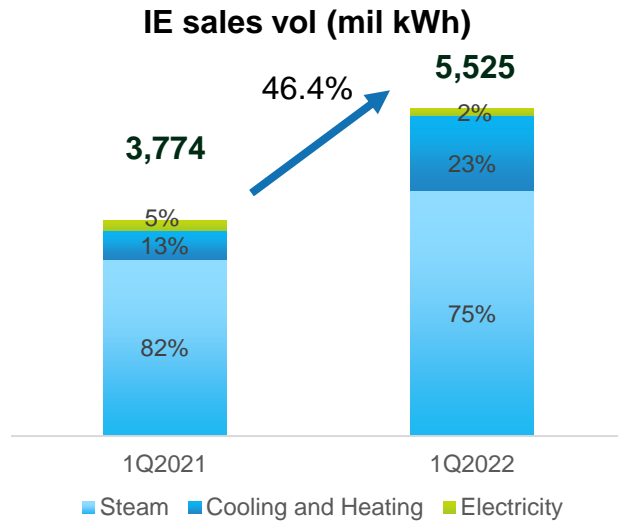
Digital intelligence terminal

- ✓ Constantly upgrade existing digital intelligence products, and promote the application of intelligent production scheduling, intelligent inspection, pipeline integrity and other applications in practice



1.5 Low Carbon Integrated Energy Business

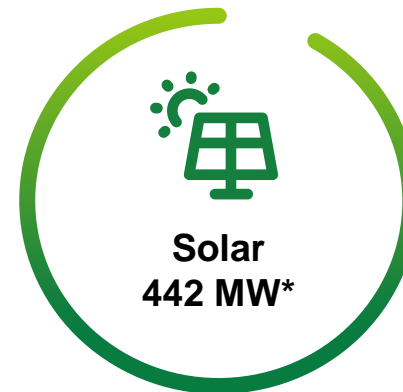
- Provide low-carbon integrated solutions for factories, industrial park, buildings and transportation customers. Relying on the digital platform and intelligent products to create a low-carbon service ecosystem, to meet customer needs for safe, low-carbon, efficient, economic and convenient energy use



Operational Under construction

156 40

Energy Sales Potential
> 36.8 bil kWh



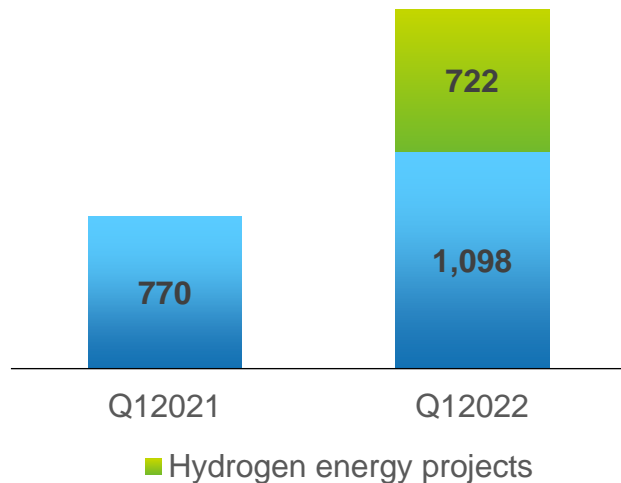
*Note: the contracted solar installed capacity is the cumulative value.



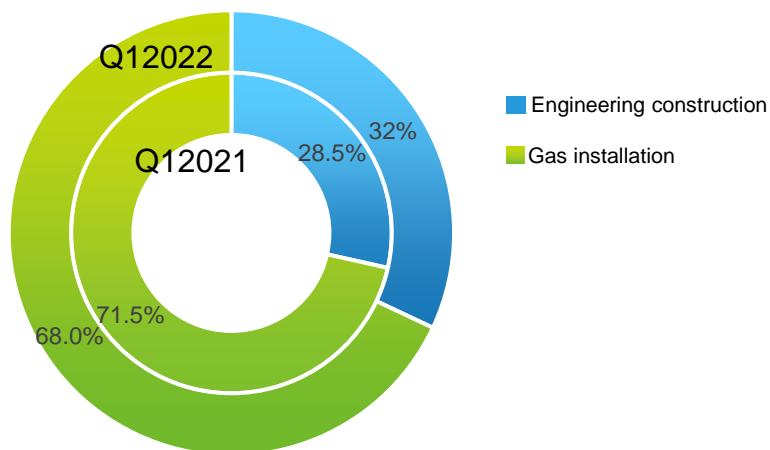
1.6.1 Energy Engineering Business

- 151 new projects were signed in Q1, and the total amount of existing orders reached RMB 2.316 billion

Comparison of contracted amount
(RMB mil)



Revenue breakdown of engineering business



Accelerate the expansion of hydrogen energy projects

- Relying on the technical experience of LNG and hydrogen energy to accelerate the engineering construction projects for the production of LNG and hydrogen by acquiring coke oven gas
- Carry out the R&D of hydrogen energy technology, and acquire key projects through ecological cooperation

Advance the integration of technological innovation

- Explore "3D laser +" business model, integrate 3D laser technology with other businesses such as gyroscope detection, pipeline detection, and standpipe mapping. Improve the level of digital intelligence construction, and assure customer safety and security through the ground and underground integration as well as risk management 3D scenario exploration
- Carry out testing and measuring equipment platform IoT, use digital technology to optimize the application of information management, topographic mapping and other systems in the field of intelligent pipeline network business

Business Aggregate in all scenarios

- Rely on all-scenario advantage to achieve collaborative development of construction business and low-cost gas sources through LNG product underwriting etc.
- Jointly develop business opportunities of Sinopec, PetroChina, CNOOC and Zhejiang Energy with state-owned design units

Technology

14 patented technology
21 mature project applications

Hydrogen production from fossil feedstocks

- China's first large-scale natural gas cracking hydrogen production technology
- Make a breakthrough in catalytic conversion of natural gas and steam-to-hydrogen production technology and continuously improve technical economy

Industrial by-product hydrogen

- The coke oven gas hydrogen production technology is used in many engineering projects undertaken by the Company

Hydrogen production from water electrolysis

- Attracted the 718th Research Institute of China Shipbuilding Industry Corporation to conduct the cooperation, and carry out the domestic leading demonstration of hydrogen production by water electrolysis

Engineering

32 hydrogen production projects

Cover all mainstream hydrogen production paths



Liaoning hydrogen production project



Henan coke oven gas(COG) hydrogen production



Hydrogen energy industrialization application demonstration park of Beijing Winter Olympics

Storage and transmission & fuel cell

Prospective studies and experiments

Hydrogen energy laboratory

- The Company cooperates with well-known colleges and universities to build a hydrogen energy laboratory and jointly carry out multi-scenario hydrogen-mixed experiments

Solid Oxide Fuel Cell (SOFC)

- The power generation efficiency of the self-designed and developed 6kW SOFC system has reached over 60% for the first time in China, and has achieved continuous and stable operation
- Undertake the 30 kW SOFC power generation system project of the Ministry of Science and Technology

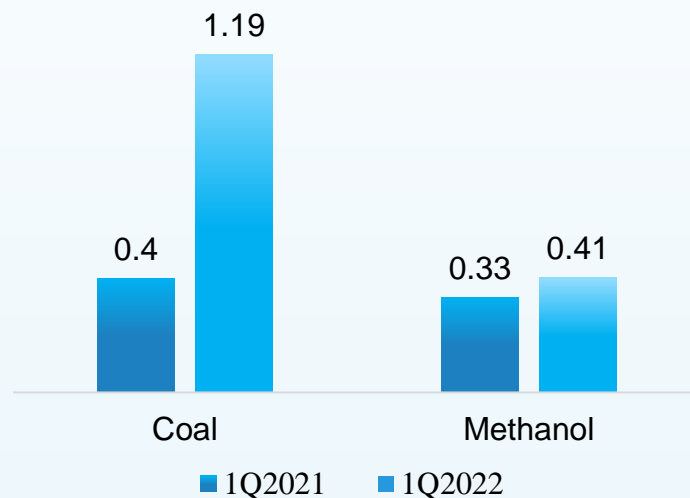


Solid Oxide Fuel Cell



1.7 Energy Production Business

Coal and Methanol sales (mil tons)



	1Q2021	1Q2022
Mixed coal sales price	240	362
Clean coal sales price	448	727
Coal cost	137	182
Methanol sales price	1,633	1,915
Methanol cost	1,496	2,057

Break through the traditional sales model, and play the pivotal role to increase coal production and enhance quality

- ✓ **Upstream resource:** Through the long-term contract and the exchange of cooperative resources, high-quality resources reached 6.5 million tons/ year
- ✓ **Midstream channel:** Obtained 2 million tons/year of station processing capacity such as Machanghao, 2.5 million tons/year of transshipment capacity of ports such as Caofeidian, 900,000 tons/year of railway transportation capacity such as Xinbaoshen, and 3 million tons of automobile transportation capacity
- ✓ **Downstream customer:** Developed end-users such as China Coal and Huaibei Mines and signed long-term contracts of 1.6 million tons with them

Safe and stable production, facilitate the upgrading and transformation of methanol business

- ✓ **Alcohol-based fuels:** Promote methanol fuel pilot projects in all scenarios
- ✓ **Customer structure optimization :** end-users sales increased by 70%+
- ✓ **Master the sales process:** Utilize storage resources to optimize sales process



1.8 Take social responsibilities and enhance ESG Performance

Overall ESG performance

The first time to be included:

MSCI China A Index

Hang Seng (China A) Corporate Sustainability Benchmark Index



BB

MSCI ESG Rating



恒生可持续发展
企业指数系列

A-

Hang Seng Sustainability Index Rating

22

Released the first Green Action Report



Clear carbon reduction targets

By 2025

Greenhouse gas emission intensity to reduce by 20% compared with the base year

By 2030

Greenhouse gas emission intensity to reduce by 50% compared with the base year

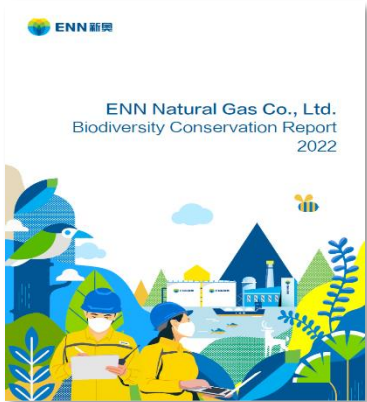
By 2050

Strive to achieve the company-wide “carbon neutrality”

Released ESG Report since 2020



Released the first Biodiversity Conservation Report



- Referring to international guidance published by TNFD, Sustainalytics, etc.
- Including biodiversity conservation measures throughout gas distribution business, integrated energy business, low-carbon transportation, and green offices, thus forming a panorama of biodiversity conservation
- Learning experiences of international leading enterprises from diversified biodiversity conservation actions

The background features a light blue gradient with abstract, colorful geometric shapes (dots, squares, and lines) in shades of blue, green, and yellow, creating a dynamic and modern feel.

Content

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- A stylized bird logo with blue, green, and yellow wings, positioned above the list of contents.
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2.1 High growth results

(RMB mil)	Q1 2022	Q1 2021	Change
Revenue	35,383	25,848	36.89%
Gross profit	4,400	3,911	12.51%
EBITDA	4,047	3,566	13.46%
Net profit	2,853	2,528	12.86%
Net profit attributable to the parent	754	603	25.08%
Core profit	744	486	53.25%
Earnings per share (RMB)	0.27	0.22	22.73%

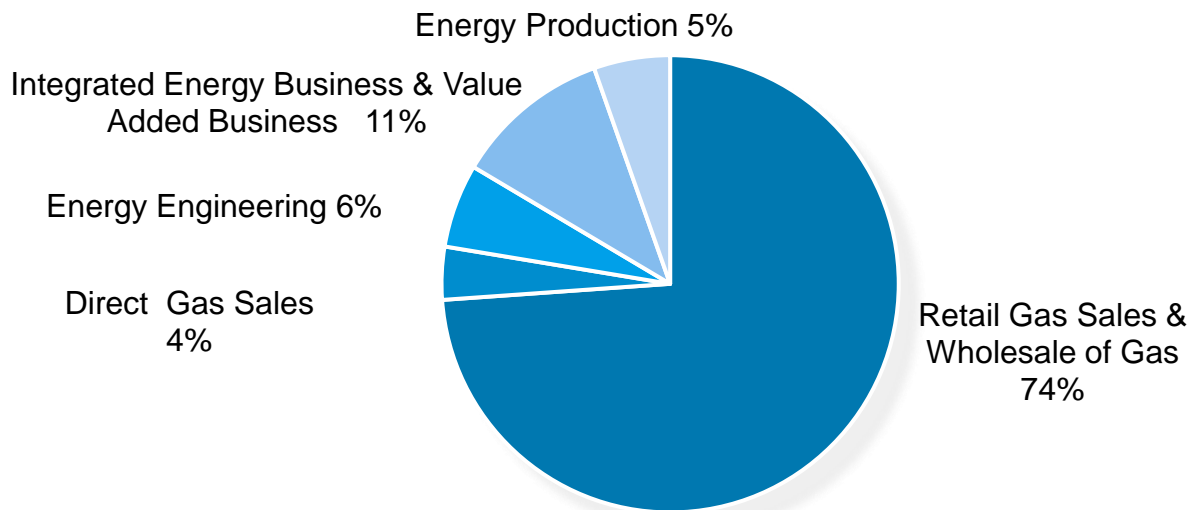


2.2 Core profit

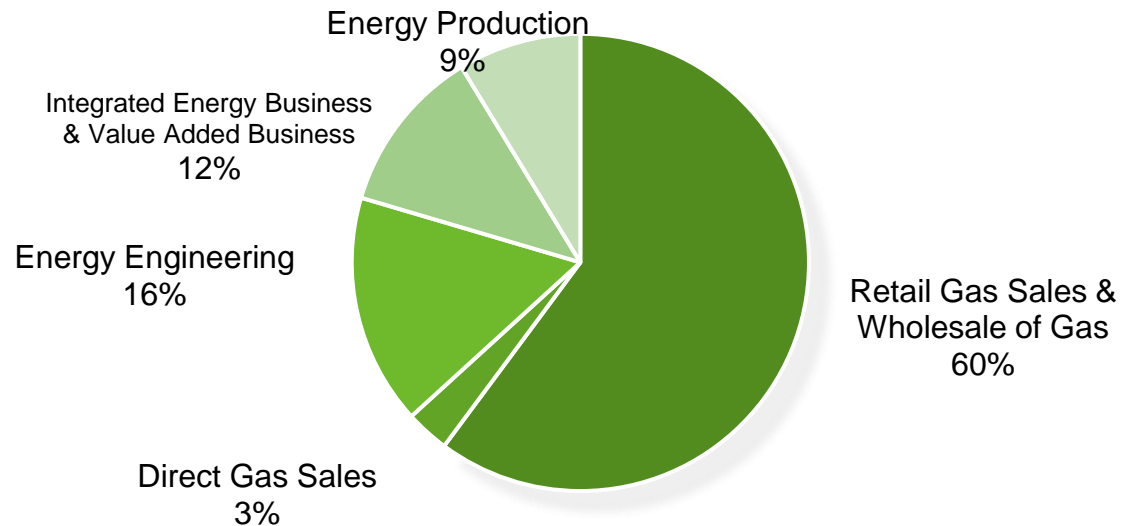
(RMB mil)		Q1 2022	Q1 2021
Net profit attributable to the parent		754	603
Adjustments	AP/OP bad debt accruals	-18	-20
	Non-current asset impairment accruals	-2	-4
	Changes in derivatives' fair value	-6	21
	Change in fair value of financial asset in current period P/L	-4	0
	Change in F/X gain/losses	60	114
	Amortization of stock-based incentive costs	-26	-3
	Gains/losses from disposal of equity investment	0	13
	Gains/losses from disposal of asset	4	-5
Core profit attributable to shareholders of the parent company		744	486

2.3 Revenue and gross profit breakdown

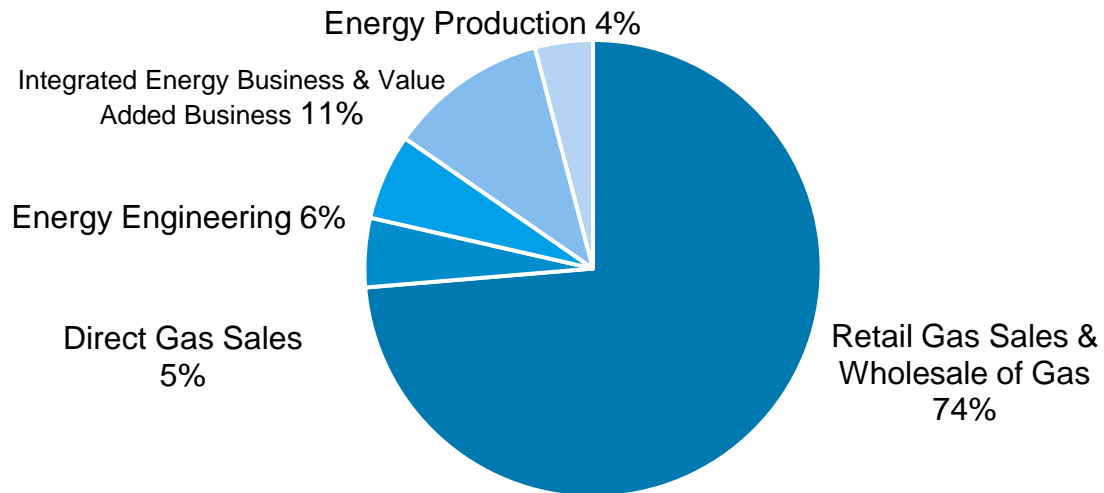
Q1 2022 Revenue



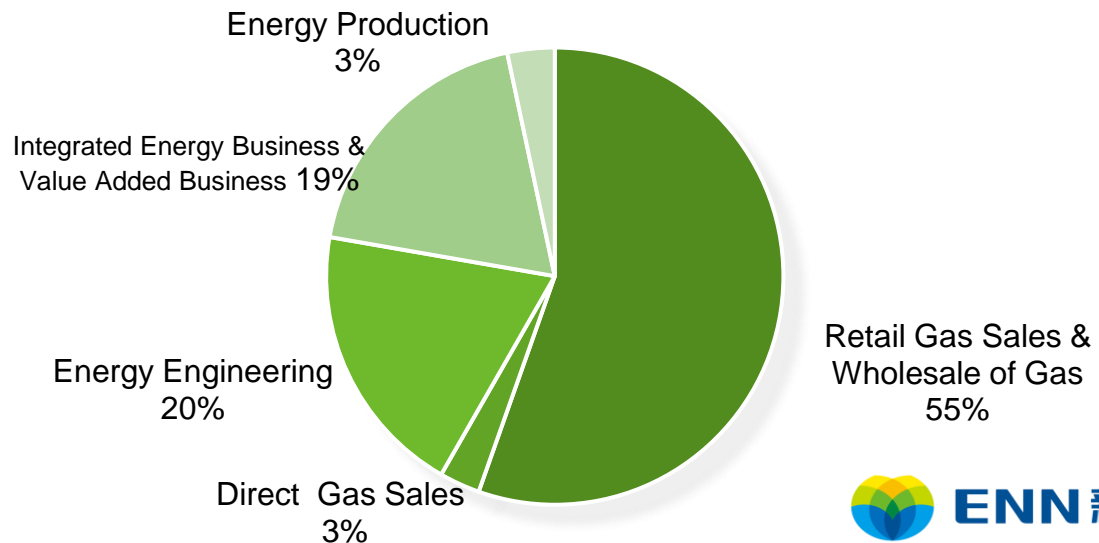
Q1 2022 Gross profit



Q1 2021 Revenue



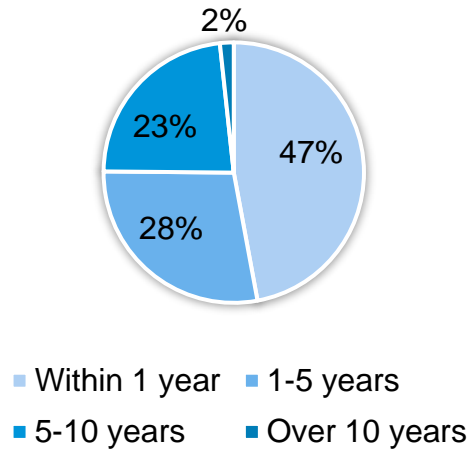
Q1 2021 Gross profit



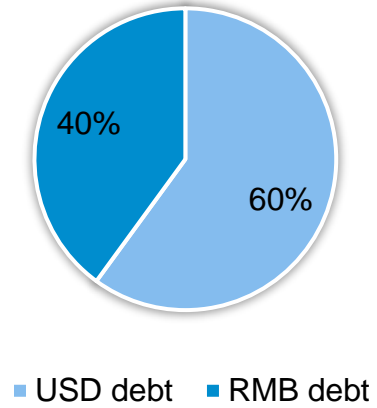


2.4 Ample financial resources and liquidity

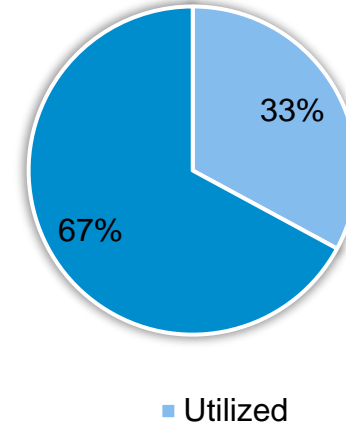
By Maturity



By Currency



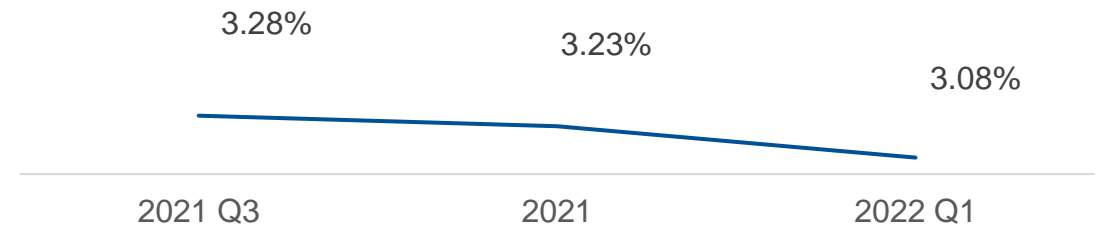
Total Credit Facilities:
RMB 67.5 billion



Credit ratings

Rating Agencies	Ratings
Moody's	Ba1
Fitch	BBB-

Average effective interest rate





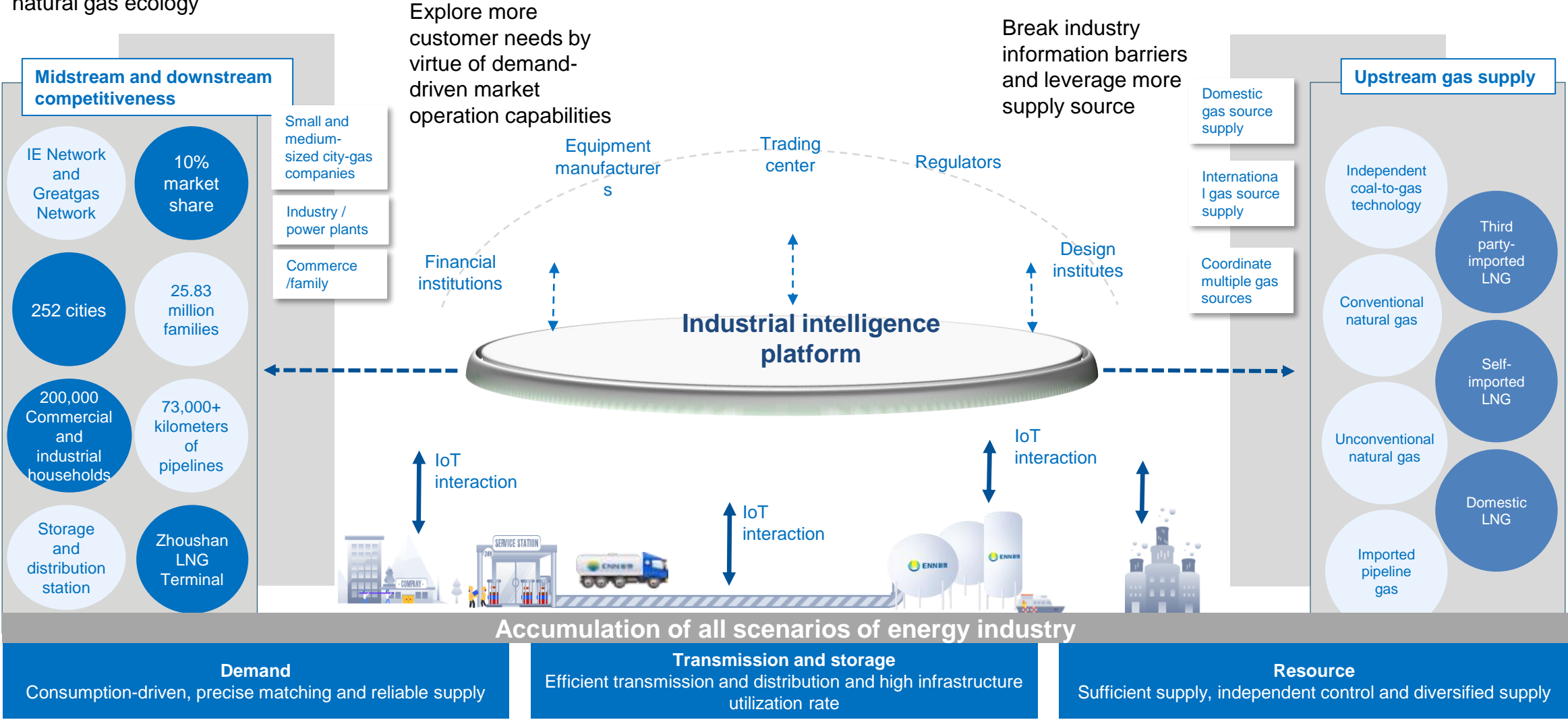
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Appendix 1. Connect with all parties along the natural gas supply chain and become an intelligent ecological operator in the industry

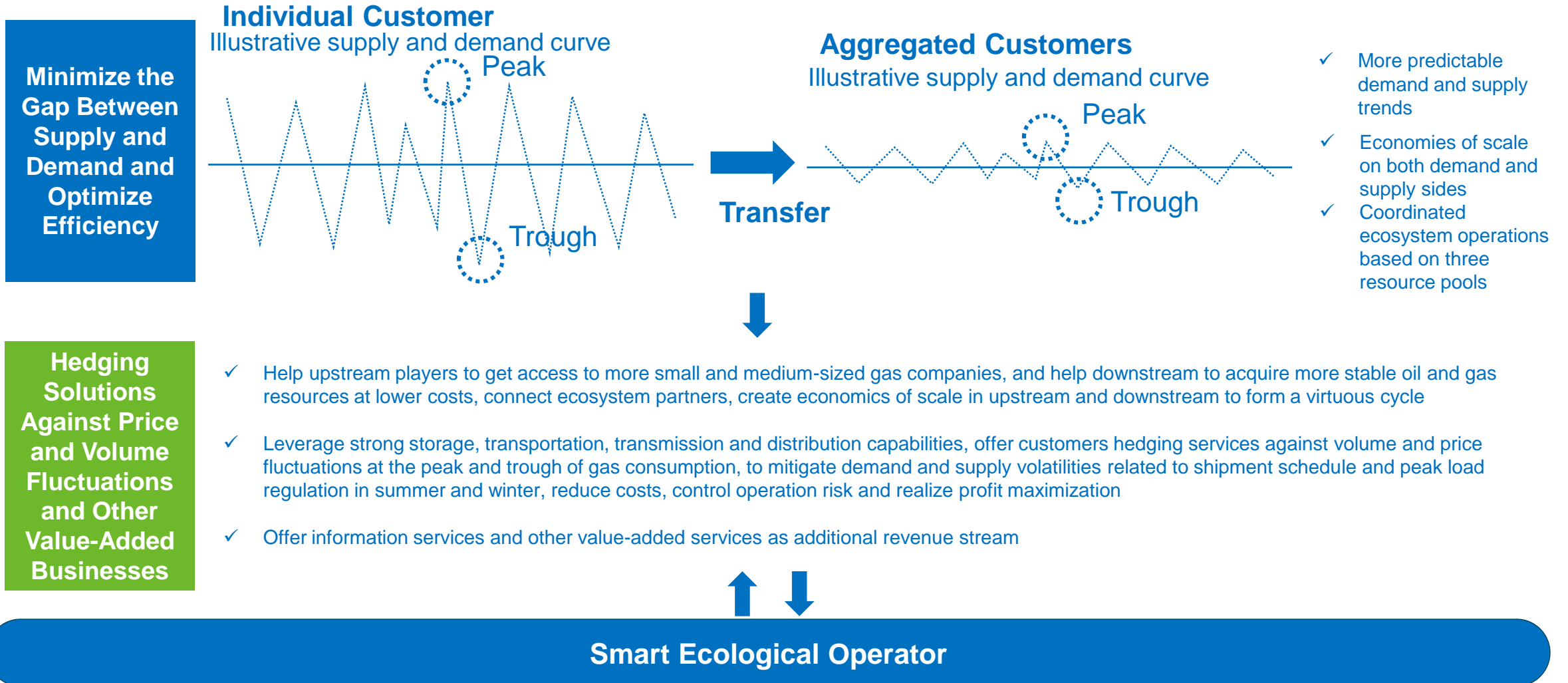
Build an industrial intelligent platform by relying on the accumulation of all scenarios of the natural gas industry, link the lower, middle and upper reaches by using digital technology, empower ecological partners by using smart products, and establish a digital national/regional resource pool, transmission and storage pool and demand pool to realize the intelligent matching of resources, transmission and distribution, and markets in various regions, and promote the common creation and prosperity of natural gas ecology





Appendix 2. Innovative Business - Hedges Against Price and Volume Fluctuations and Information Services

- Provide ecosystem partners with more trading products, more flexible trading options and more transparent trading information based on massive transaction scale brought by ecosystem aggregate effect



Appendix 3. Case studies of low-carbon industrial parks

- Grasp the needs of park customers for carbon supervision, energy conservation and carbon reduction, and energy cost reduction, prioritize renewable energy, complement multiple energies, and integrate demand and supply to develop smart and low-carbon park business



Xuancheng Economic Development Area in Anhui Province



Low-carbon solutions:

- ✓ **Multi-energy integration**, incremental distribution grid + wind + solar + natural gas micro-combustion engine + power plant waste heat
- ✓ Power generation operation and maintenance + boiler hosting operation + digitalisation platform **to improve operational energy efficiency**
- ✓ Configure **energy storage power plants** to complement the distribution grid, regulate electricity allocation and reduce the cost of electricity purchase
- ✓ Realize the **integration** of electricity, heat, gas and digital intelligence networks to create a national intelligent low-carbon industrial park

Energy consumption scale



Steam
350,000 tons/year



Electricity
160 million kWh/year

Emission reduction benefits



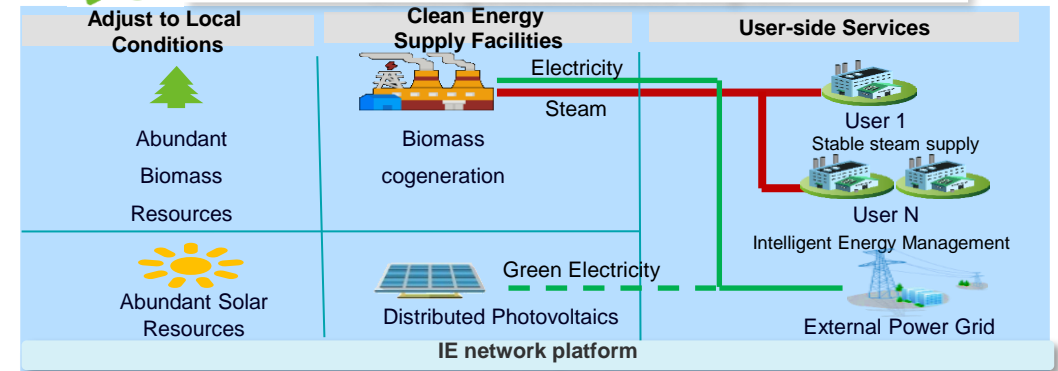
Energy-saving standard
coal equivalent
49,000 tons/year



CO₂ reduction
128,000 tons/year



Yizhou Economic Development Area in Guangxi Zhuang Autonomous Region



Low-carbon solutions:

- ✓ **Renewable energy use**, biomass co-generation + distributed solar energy
- ✓ **Energy management system** optimizes the operation efficiency of equipment and energy used in the park
- ✓ **Carbon trading potential**: Green Power + CCER carbon assets

Energy consumption scale



Steam
250,000 tons/year



Electricity
360,000 tons/year

Emission reduction benefits



Energy-saving standard
coal
26,000 tons/year



CO₂ reduction
68,000 tons/year



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