

新奥天然气股份有限公司

ENN Natural Gas Co., Ltd.

2025 INTERIM RESULTS

Customer-oriented philosophy, industry-intelligence synergy, and intelligence innovation for the future



Continuous scale expansion of natural gas business

The total gas sales volume increased by 6.4% to 20.33 bcm

Among which, medium- and long-term demand locked in **3.4 bcm**



Newly signed LTA with ADNOC for 1 mil tons

Over 10 mil tons of cumulative volume of

Expansion of advantageous

resource acquisition

per year

LTA signed

Increase in the utilization rate of the Zhoushan LNG Terminal

The unloading volume reached 1.137 mil tons, with a you increase of 11.7%

The third phase of the Project was put into operation in August with its annual unloading capacity increasing by over **10 mil tons**



Solid financial performance

Core profit increased by 1.4% yoy to RMB2,736 mil
Operational cash flow increased by 15.7% yoy to RMB5,573 mil
21.2% of net gearing ratio



5 Promising shareholder returns

Cash dividend per share not less than RMB1.14 in 2025

Annual cash dividend payout ratio not less than **50%** of the core profit attributable to the parent company for the year from 2026 to 2028



Outstanding ESG performance

HIGHLIGHTS

The first and only Chinese public utility company to be awarded an MSCI AAA rating

















Unit: RMB mil

Items	1H2025	1H2024	Change	
Total Revenue	66,015	67,014	-1.5%	
Gross Profit*	9,857	9,851	0.1%	
Net Profit Attributable to Parent	2,408	2,530	-4.8%	
Net profit after deducting non- recurring gains and losses	2,414	1,993	21.1%	
Core Profit*	2,736	2,699	1.4%	
Operating Cash Flow	5,573	4,817	15.7%	

^{*} Gross Profit, including the amount realized on derivatives that are included in investment income

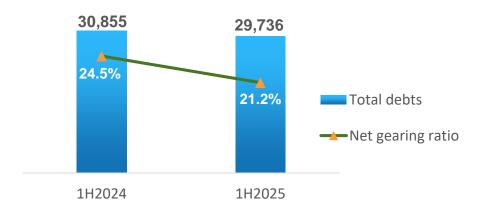
^{*} Core Profit = Net profit attributable to the parent - Changes in FX gains and losses - Changes in fair value of derivatives - Other impairment losses - Amortization of stock incentive costs - Net gain on disposal of non-current assets - Gain on bond repurchases



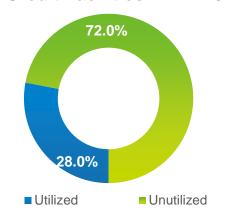
1.2 Strong Financial Position with Sufficient Flexibility

- The credit ratings from S&P, Fitch and Moody's have been upgraded to BBB(Stable), BBB(Stable) and Baa3(Stable) respectively
- CCX ratings maintained the highest rating of AAA

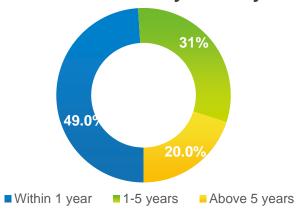
Total debts and Net gearing ratio(RMB mil)



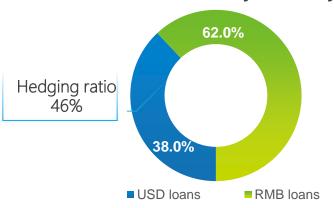
Total Credit Facilities: RMB 75.4 bil



Debt structure by maturity



Debt structure by currency

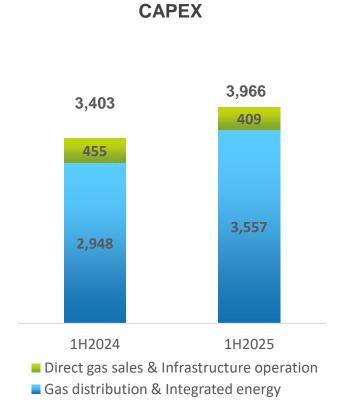




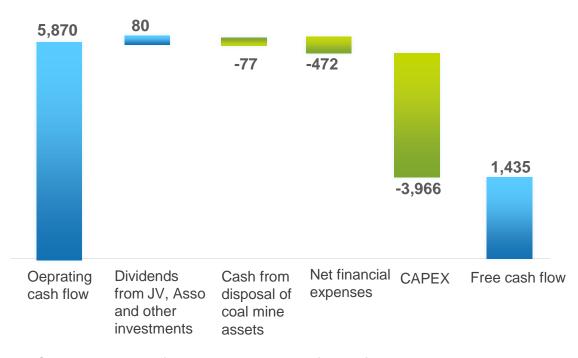


1.3 Prudent Investment Strategies and Abundant Cash Flows

Unit: RMB mil



Abundant free cash flow



^{*} Operating cash flow includes cash flows from derivative instruments not designated as hedging activities

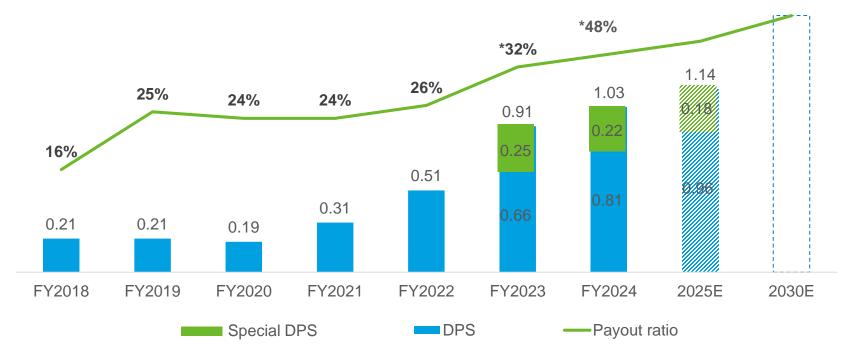




1.4 Steadily Rising Payout Ratio

- From 2023 to 2025, plus special dividend and regular dividend, the cumulative cash dividend per share (including tax) shall not be less than RMB 0.91, 1.03 and 1.14 respectively
- From 2026 to 2028, the proportion of cash dividend distributed each year shall not be less than 50% of the core profit attributable to parent company

Substantially Improved Shareholder Returns (RMB/share)



^{*} Payout ratio of 2023 and 2024, excluding the special dividend











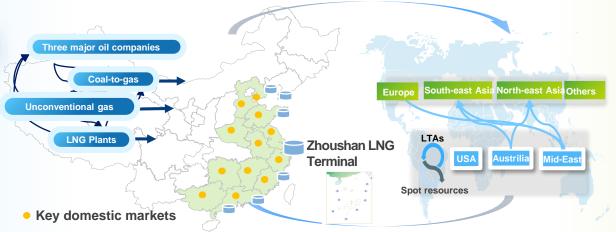




2.1 Leveraging Natural Gas Capabilities Across All Scenarios and Strengthening Domestic-international Synergy to Build Business Resilience

Domestic market

Dynamically identified customer needs
Innovated business models
Developed mid-to-long-term customers



Overseas market

Dynamically optimized resource structure

Refined LTA resources sales

Managed price volatility through a physicalpaper hedging approach

Demands

- Total sales volume 20.33 bcm
- Direct gas sales volume 2.69 bcm
- Volume for medium- and longterm demand 3.4 bcm

Resources

- LTA from CNPC 1.65 bcm
- Imported LTA resources 7 shipments
- Overseas sales 11 shipments
- Imported spot LNG 4 shipments

Zhoushan LNG Terminal

- Unloaded 17 shipments in total
- Unloaded resources from other parties including CNPC, Sinopec and Zhejiang Energy Group of 6 shipments

Trading & Risk management

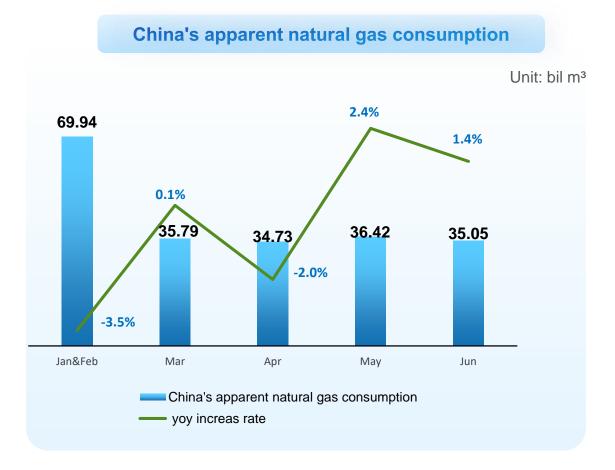
- Manage price volatility risk through structured option products and an innovative five-year product portfolio
- The total commission agency volume and revenue of Tianjin International Oil & Gas Exchange was 2.35 mil tons and RMB 10.3 bil respectively

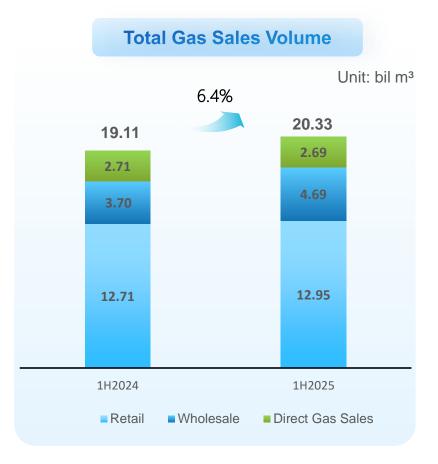




2.2 Continuous Scale Expansion of Natural Gas Business

- Following the Sino-US tariff adjustments in May, natural gas consumption growth turned positive, while the national apparent consumption in 1H2025 fell by 0.9% yoy to 211.97 bil m³ *
- ➤ The company adhered to the strategy of "volume-driven growth", continued to expand its customer base, optimized its resource structure, and improved operational efficiency, led to an 6.4% increase in total gas sales volume to 20.33 bil m³



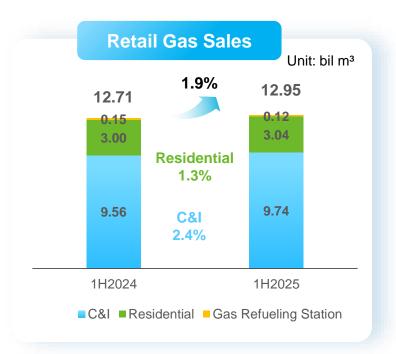








2.3 Steady Growth in Retail Gas Sales



New C&I Installations

Newly Designed daily capacity:

6.286 mi m³/day

No. of customers: 22,000

Cumulative No. of C&I customers:

293,000

New Residential Households

692,000 households

Cumulative Residential Customers: **32.07 million**

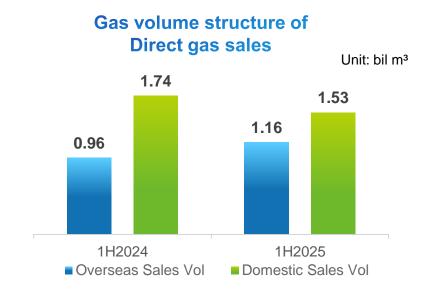
Dynamic understanding of customer demands and continuous expansion of customer base

- Industrial Users:
- Analyzing large customers' energy structure to create differentiated sales plans
- Optimizing process-side technology to expand "electricityto-gas" and "coal-to-gas" businesses
- Commercial Users:
- Using smart tools to identify business opportunities and improve customer conversion
- ➤ Partnering with government and communities and leveraging safety capabilities to implement "bottle-to-pipe" policies and accelerate bulk customer development
- Household Users:
- ➤ Increasing development of existing household customers, boosting pipeline network utilization
- Actively advancing residential price pass-through, achieving a 64% cumulative rate.

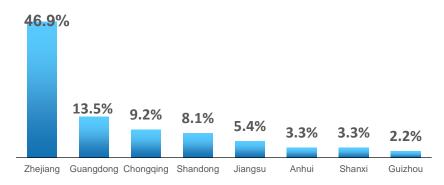




2.4 Link to Domestic and International Markets and Expansion of Direct Gas Sales



Domestic Customer Breakdown



^{*} The remaining 8.1% of the share is mainly distributed in provinces: Hebei, Hunan, Fujian, Henan, Sichuan, Jiangxi, etc

A wide range of products and services and innovative ecological cooperation model

Customer demands



- 15 affiliated urban gas companies under an urban gas enterprise group in Jiangsu Province
- Capabilities to flexibly obtain low-cost sources and avoid the risk of take-or-pay

Cooperation model

- A "fixed-quantity plus incremental gas supply model" to establish a stable three-year partnership, achieving an annual contracted gas volume of 20 mil m³ based on customer demands
- Optimization of resource structure and flexible supply of monthly incremental gas

Dynamic assessment of the international situation and optimization of the delivery of international resources by physical-paper combined hedging

- Strengthened analysis and judgment of the international market and dynamic adjustment of market strategies
- Expansion of the sales network and strengthened development of medium- and long-term customers in Europe and Asia
- Optimization of the arrangement of shipments to achieve maximum value through international and domestic collaboration

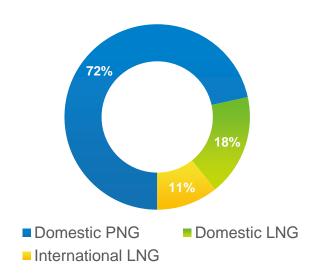




2.5 Strategic Expansion of Diverse and Competitive Resources Based on Customer Demands

- Due to persistently high international gas prices and relatively ample domestic supply, China's LNG imports in 1H2025 decreased by 20.6% yoy to 30.11 mil tons*
- Dynamic optimization of resources structure, development of a stable and flexible resource pool, and reduction of overall resource costs





Domestic PNG includes:

- · Three major oil companies
- LTA with CNPC
- Unconventional resources
- PNG from other third parties

Optimization and expansion of medium- and long-term resources

- Newly signed 15-year LTA with ADNOC, annual supply of 1 mil tons approximately
- Newly signed 10-year LTA with Chevron, annual supply of 0.6 mil tons approximately
- 1,654 mil m³ of LTA with CNPC executed in 1H 2025, a yoy increase of 123 mil m³
- Newly signed 3-year LTA with Sinopec, with 150 mil m³ of supply in the first year

Dynamic optimization of international resource flow

- Adjustment to U.S. resources in response to shifting market supply and demand, and 6 shipments of LTA with Cheniere sold to Europe
- Flexible import of 4 shipments of spot goods to support domestic customers development

Expansion of ecological cooperation

- 1.1 bil m³ of unconventional resource supplies from Yanchang Petroleum, China Suntien Green Energy, Datang, and other partners, a yoy increase of over 400 mil m³
- 1 shipment of eco-friendly resources, representing the first bonded tank resource settlement in Zhoushan



*Source: NDRC

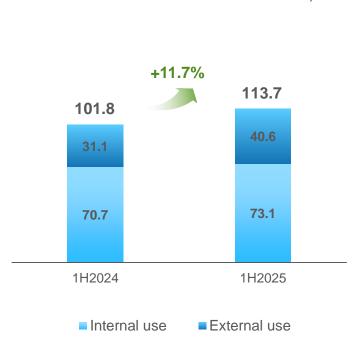


2.6 Expanding pivotal support capacities and enhancing facility utilization rate

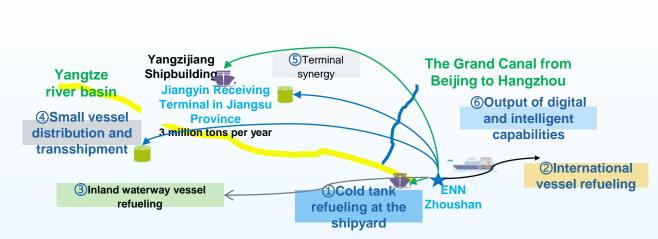
- > 39.8% of average annualized utilization rate of domestic receiving terminals in 1H 2025, a yoy decrease of 19 pp*
- ➤ Through third-party customer attraction and strategic partnerships, the Zhoushan LNG Receiving Terminal recorded a unloading volume of 1.137 mil tons in 1H 2025, a yoy growth of 11.7%

Steady Increase in Unloading Vol

Unit: 10,000 tons



Diversified Service Innovation



- The TK-04 storage tank at the Zhoushan Receiving Terminal has become the first LNG bonded tank in Zhoushan City and completed the first bonded vessel unloading and domestic trade transfer in May
- A strategic cooperation agreement with Yangzijiang Shipbuilding Group to deepen collaboration in areas such as receiving terminal linkage (small vessel distribution) and pre-cooling and refueling technology for marine LNG fuel tanks
- The third phase of the Zhoushan Receiving Terminal Project was put into operation on 6
 August, 2025, with its annual unloading capacity increasing by over 10 mil tons



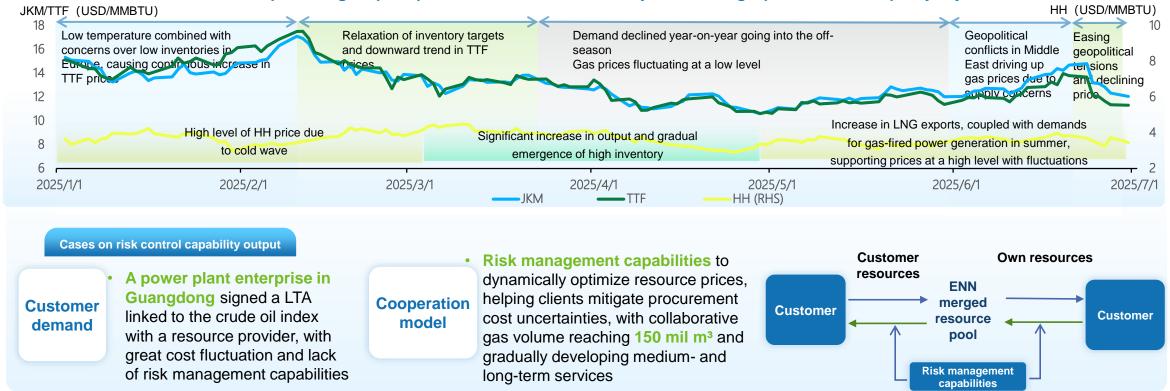
*Source: Siya



2.7 Enhancing Ecosystem Collaboration with Innovative Risk Management Capabilities

- The company established an industry-leading ETMO digital and intelligent risk management system, which effectively managed its own risk exposure
- With energy enterprises' demands for risk management surging, our innovative physical-paper combined hedging ecosystem helped clients navigate these uncertainties
- With the recent opening of ENN's European office, we've expanded our global footprint to provide full-time zone monitoring and dynamically capture international energy market information, from China to Singapore and London

International market experiencing frequent price fluctuations, influenced by factors like geopolitics and tariff policy adjustments



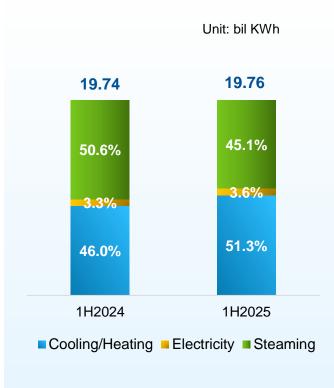




2.8 Steady growth in the integrated energy business

Actively practicing the "integrated energy concept", leveraging the extensive customer base within operational regions and accessible markets, prioritizing customer demands and deploying integrated source-network-load-storage-sales solutions, expanding customer portfolio across industrial parks, manufacturing facilities and commercial buildings to drive steady growth in the integrated energy business.

Integrated Energy Sales Vol



Installed Capacity



- Seizing opportunities from national power reform policies to accelerate the deployment of solar, energy storage, and other power businesses through an integrated energy microgrid model. PV install capacity surged by 231% yoy to 324.5 MW
- enhance system energy efficiency, improve photoelectric conversion rates, reduce losses, and increase the profitability of integrated energy projects, with gross margin increasing by 2.8 percentage points to 15.8%





2.9 Expansion of Incremental Growth Opportunities for the Smart Home Business

- > A number of policies to stimulate consumption and facilitate the trade-in program, with the development of digital and intelligent technologies to unlock growth potential for the Smart Home Business in 1H 2025
- > By leveraging its 32.07 mil household customer base and gaining insights into new safety service demands, the company develops innovative products and services, builds a new model for integrated value creation, and drives the growth of the smart home business

Comprehensive average order value

RMB 649 per household

1H2024 RMB643 per household

Number of transacting customers

3.32 mil

1H2024 3.24mil

ENN's own product competitiveness has been enhanced, leading to a significant increase in sales

- Product aesthetics and functionality have been fully upgraded
- An integrated back-end system has been implemented to guarantee a 4-hour service response and seamless delivery, installation, disassembly, and collection

Gratle

Sales Volume

182,000 units 60% YoY increase

Integrated safety assurance capabilities have enabled the rapid expansion of the "Safety Guard" product

- Product functionality includes dynamic monitoring, realtime risk indication, proactive defense, and closedloop control
- Standardized signing and delivery processes have been established to facilitate rapid expansion



Intelligent Product Contracts

RMB 553 mil

81% YoY increase



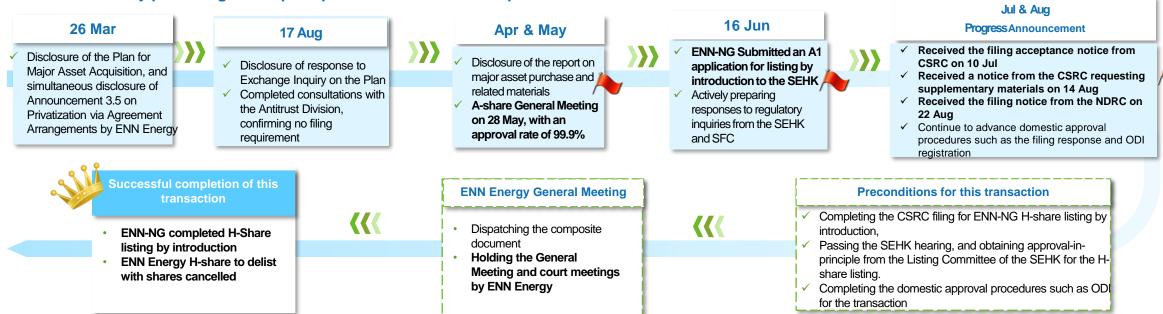


2.10 Progress in Major Asset Reorganization Projects

- ➤ On March 26, 2025, the Company announced a Major Asset Acquisition and Connected Transaction plan to privatize ENN Energy. Its wholly-owned subsidiary, ENN HK, would serve as the offeror via a scheme of arrangement. The privatization would be funded by a mix of cash and H-shares issued by ENN NG. Upon completion, ENN NG will list by introduction on the Main Board of the SEHK, becoming an A+H listed company
- ➤ The transaction consideration consists of cash and shares, with each ENN Energy share held by planned shareholder exchangeable for HK\$24.50 in cash and 2.9427 H-shares to be issued by ENN-NG

Efficiently Promoting the Transaction Process

 Following the initial announcement, the Company has completed consultations with the SAMR Antitrust Division, secured approval at the General Meeting of ENN NG, submitted the A1 Application to the SEHK with acceptance by the CSRC Department of International Affairs, received the filing approval from NDRC, and is actively promoting subsequent procedures to fulfill all requirements

















3.1 Implementing a Customer-Centric Aggregation Model for Natural Gas Business

Driving Demand, Aggregating Resources, and Expanding Scale

- Dynamically understanding customer demands and exploring incremental opportunities through models such as resource combination and risk management
- Deeply understanding customers' demands for low cost and further accumulating medium- and long-term customers
- The GreatGas.cn customer operation products for closed-loop risk customer management
- Boosting Utilization with Facility-lead Ecosystem
 Aggregation
- Ecological customer attraction and self-owned LTA delivery to unleash Zhoushan's facility capabilities
- Expanding ecological cooperation between State Grid and third parties to enhance the utilization rate of facilities
- Enhancing the innovation capabilities of diversified service products and implementing models such as small vessel distribution, ship refueling, and bonded tanks



Matching

Dynamically Aggregating Resources to Reduce Costs

- Dynamically optimizing the domestic resource structure:
 Dynamically optimizing the annual contracts of the three major oil companies; promoting the acquisition of medium- and long-term unconventional resources such as Yancheng and Qinghua
- Reinforcing synergistic advantages through domesticinternational mutual collaboration: Continuously streamline international resource flows and maximize resource value through physical-paper combined hedging based on market judgment
- Strengthening Trading and Risk Control Across Ecosystems to Manage Client Uncertainty
 - A variety of derivative tools to be dynamically utilized to proactively manage risks by integrating different business scenarios
 - Closely monitoring international price fluctuations and locking in profits through position optimization



Elevating platform capabilities to drive industryintelligence synergy for expanding the scale of gas sales



Continuous optimization of customer intelligence capabilities









3.2 Industry-Intelligence Synergy to Expand Integrated Energy and Smart Home Business

Integrated energy business Strengthening Upgraded source-grid-loaddevelopment of storage-carbon-saleintegrated **Plants** intelligence integration energy microgrid Microgrid operations to accelerate growth in power **Buildings** business Small and micro Unleashing the value industrial park of integrated energy Accelerating **Traditional** replication **Exploring** industrial park new models of industry scale Intelligent exhaust air Photovoltaic Biogas New energy control for printing and **REITs** storage mode Commercial dyeing setting processes Virtual power Intelligent complexes, hotels, Electrical drying of food etc plant transactions **Integrated Energy Intelligent Platform**

Intelligence to continuously enhance operational capabilities of integrated energy, and unleash the value of integrated energy

Accelerating development and application of integrated energy simulation

Strengthening platform capability development

Smart Home Business Relying on its customer Comprehensively service and safe understanding the **Business Product** operation capabilities. needs of households development innovation innovating products and , providing a variety of services services for them Upgrade from safety **Operating cost** Cost reduction Model upgrade and kitchen scenarios reduction with intelligence to a higher quality of household life Intelligent customer engagement with demand analytics

C城C家 E-City-E-Home

Built the "E-City E-Home" platform, continuously innovated intelligent products and services, and achieved the upgrading of smart home business

Gas for residential use

Smart Home Utilities

Smart Home Meals





Industry-intelligence synergy and innovation-driven growth

A new situation of leapfrog development in the energy business

Appendix I: Company Overview

- ENN-NG (stock code: 600803.SH) was listed in 1994 and is determined to be a natural gas operator of professional capability platform by leveraging the all-scenario strategic pivots. The company aims to promote the industrial capability and efficiency by aggregating demand, resources and facilities ecology, matching intelligently, leveraging the best practices, building intelligent products and LMs
- Our principal business includes direct gas sales by platform, retail and wholesale of natural gas, infrastructure operation, integrated energy, engineering construction and installation
- The Company operates 263 city-gas projects nationwide, serving 290,000 C/I customers and over 32.07 mil residential customers, respectively

Direct Gas Sales



 The Company mainly purchases natural gas from overseas, supplemented by domestic LNG plants and unconventional resources, and sells gas to city gas companies, energy groups and large industrials, distributors, as well as international utilities, oil & gas companies and energy traders.

600803.SH

Retail & Wholesale of natural gas



- Retail: Our primary focus is purchasing natural gas from the three major oil companies and distributing it to residential clients, C/I customers, and CNG/LNG vehicle refueling stations via our pipeline network
- Wholesale: Complementing our retail gas sales, we procure gas from domestic upstream producers and sell it in bulk to customers outside our pipeline network's reach within our operating region.

2688.HK

Integrated Energy & Value added



- Based on customer needs, the Company selects the best integrated energy solution for customers based on local conditions and provided integrated energy solutions including cooling, heating, steam and electricity
- Based on gas business, extending scenarios to enhance intelligence and expand products and services around household customer needs

Infrastructure Operation



 Operation of Zhoushan LNG Terminal, gas and liquid transmission and distribution pipelines, gas storage and other infrastructure.

Engineering Construction and Installation



- Provide integrated engineering services for natural gas infrastructure, municipal engineering, new energy and digital intelligence, including engineering design, equipment manufacturing and integration, engineering construction
- Provide gas installation services for residential and C/I customers

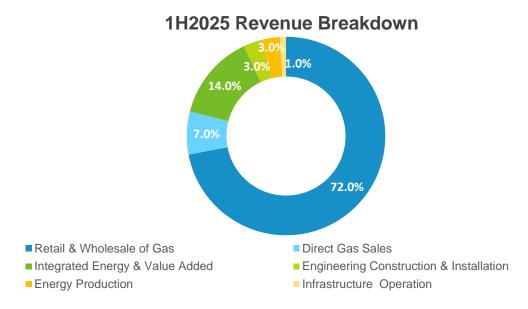
Construction: 600803.SH Installation: 2688.HK

2688.HK

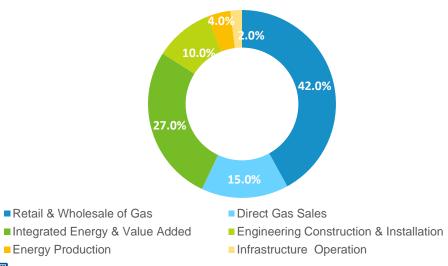
600803.SH



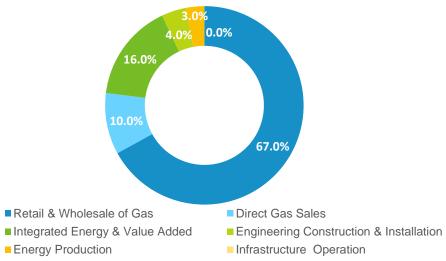
Appendix II: Revenue and Gross Profit Breakdown



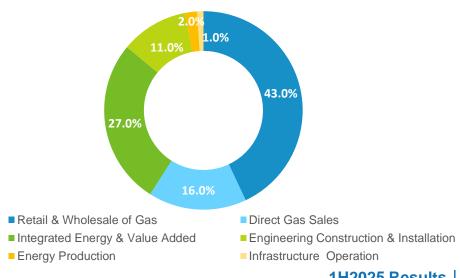
1H2025 Gross Profit Breakdown



1H2024 Revenue Breakdown



1H2024 Gross Profit Breakdown



Appendix Ⅲ: Core Profits

Unit: RMB mil

Main excluded iten	ns in the calculation of core profit	1H2025	1H2024
Net Profit Attributa	ble to Parent	2,408	2,530
	Bad debts and asset impairment	-152	-92
	Changes in fair value of derivatives	-64	7
Non-cash factor	Changes in FX gains and losses	11	-73
	Amortization of share incentive costs	-33	-7
	Gains from disposal of equity investments	4	13
One-off factor	Others	-94	-16
Core Profit Attribut	table to Parent	2,736	2,699



Appendix IV: Net Profits Deducting Non-recurring Profits and Losses

Unit: RMB mil

	s excluded for calculating the profits g non-recurring profits and losses	1H2025	1H2024
Net Profits	Attributable to the Parent	2,408	2,530
	Gains or losses on disposal of non-current assets	19	-10
	Government subsidies included in current profits or losses*	151	305
Excluded Items	Gains or losses from changes in fair value of held-for-trading financial assets/liabilities and return on investment from disposal of held-for-trading financial assets/liabilities and available-for-sale financial assets, excluding effective hedging activities related to the Company's normal business operations	-96	176
	Reversal of provision for impairment of receivables individually tested for impairment	5	11
	Miscellaneous	-16	67
	Affected amount of income tax	-94	-70
	Affected amount of minority equity (after tax)	20	58
Net Profits	Deducting Non-recurring Profits and Losses	2,414	1,993

- ✓ The government subsidies for aging pipeline upgrades and urban community renovation, considered as extraordinary items excluded from net profit as per disclosure requirements. However, these subsidies are closely associated with operations and are part of core earnings.
- ✓ Realized gains attributed to the parent from spot and paper-combined derivatives reached RMB -26 mil, considered as extraordinary items excluded from net profit as per disclosure requirements. However, these gains are generated from operations and are part of core earnings.
- ✓ Foreign exchange losses attributed to the parent resulting from currency fluctuations amounted to RMB 11 mil, considered as part of operating profits as per disclosure requirements. However, these losses do not involve actual cash flows and are not closely tied to operations, and thus are not part of core earnings.



Appendix V: Long-term LNG Contracts

No.	Buyer	Seller	Signing Date	Tenor	Contract vol (mil tons/yr)	Delivery method	Gas resources	Start year	Index-linked
1	ENN Energy	Chevron	2016.08	10 years	0.66	DES	Global resources	2018	JCC
2	ENN Energy	Total	2016.07	10 years	0.50	DES	Global resources	2018	JCC/HH
3	ENN LNG (Singapore) Pte Ltd	Cheniere	2021.11	13 years	0.90	FOB	USA Corpus Christi Sabine Pass	2022	НН
4	ENN LNG (Singapore) Pte Ltd	Novatek	2022.01	11 years	0.60	DES	Global resources	2025	Brent
5	ENN Energy	EnergyTransfer	2022.03	20 years	0.90	FOB	USA Lake Charles LNG Project	2026	НН
6	ENN LNG (Singapore) Pte Ltd	EnergyTransfer	2022.03	20 years	1.80	FOB	USA Lake Charles LNG Project	2026	НН
7	ENN LNG (Singapore) Pte Ltd	NextDecade	2022.12	20 years	2.00	FOB	USA Rio Grande LNG Project	2026	НН
8	ENN LNG (Singapore) Pte Ltd	Cheniere	2023.06	20 years	1.80	FOB	USA SabinePass Liquefaction	2026	НН
9*	ENN LNG (Singapore) Pte Ltd	ADNOC	2025.04	15 years	1.00	DES	UAE Ruwais LNG Project	2028	Brent
10	ENN Energy	Chevron	2025.08	10 years	0.60	DES	Global resources	2028	JCC



Appendix VI: Fully implementing the WISE concept and continuously enhancing the performance of sustainable development

Enviro nment

The third phase of the Zhoushan Receiving Terminal has been put into green operation, setting a new paradigm for the industry

- A total of 180,000 kWh of electricity generated during the trial operation of the cold energy power generation, verifying the technical feasibility of the cold energy dual-loop power generation project
- BOG recovery process to be adopted to achieve an environmental breakthrough of "zero venting" in the pre-cooling of storage tanks, saving 1,477.5 tons of LNG venting volume

Social

Firmly implementing safety precautions and actively fulfilling social responsibilities

- A total of 3,638 safety training sessions organized for employees and contractors, with a combined training duration of 2,910 hours
- 28 joint government comprehensive drills, 26 emergency escape and risk avoidance tabletop exercises, and 107 live-action drills
- Cumulative investment of about RMB11.95 mil in public welfare and charity

Gover nance

Comprehensive upgrade of the board structure and continuous development of an efficient and stable governance structure

- Establishment of a Strategy and ESG Committee and abolishment of the Supervisory Board
- Twenty management systems and fifteen applicable systems for H-share listing
- Launch of 2025 restricted stock incentive plan, and establishment and improvement of the Company's long-term incentive mechanism

Attraction of green funds

The Company invited the China Climate Engagement Initiative (CCEI) to organize an ESG-focused special research visit for 10 domestic and international funds and asset management institutions, with member representatives collectively managing nearly RMB 8 bil in assets



ESG Rating Performance





AAA

22.2



S&P Global

B

67

Awards and Honors

- 《Caijing》 magazine: The Evergreen Award and the Sustainable Development Green Award
- 《Securities Market Weekly》: ESG Golden Dawn Leadership Award of 2024
- Huxiu Website: Responsibility
 Governance Award of 2024
- Observer Information: Best ESG Practice Award
 - MSCI Emerging Market Leader Index
 - Hang Seng A-Share Sustainability Corporate Index
 - Ranked among the top 30 companies in terms of A-share ESG performance
 - Ranked top among all the companies in the Wind All A Index





Appendix VII: Proactive Investment in New Energy to Build a First-mover Advantage

- 50kW SOFC power generation system, fuelled by coke oven gas, is being operated as a demonstration project. This is China's first such project to successfully and stably operate on low-calorific coke oven gas
- National key R&D project, "Integrated Gasification Fuel Cell (IGFC) Power Generation," is underway. The overall design for a 100kW single-thermal-zone system has been completed, and component testing and integration are in progress.

50 kW SOFC power generation system



- Rated Power Output: 50 kW
- Power Generation Efficiency: ≥62%
- Operating Temperature: 680-720°C
- Output Voltage: 380V (AC)
- Fuel Types: Natural gas, hydrogen, coke oven gas
- Dimensions: 2.86m x 2.40m x 2.17m
- Weight: 3.1 tons
- Emissions: No NOx, SOx
- Cumulative Operating Time: 7,000 hours

30 kW SOEC water electrolysis for hydrogen production

30kW SOEC (solid oxide electrolyzer cell)
prototype has successfully completed a trial
run at the Luoyang base. SOEC is an efficient
electrochemical energy conversion device with
high efficiency, fast reaction rates, and broad
application potential, making it a key
technology for green hydrogen production.



- Stack Consumption: 29.58 kW
- System Heating Consumption: 14.03 kW
- Total System Consumption: 43.61 kW
- Hydrogen Production: 11.1 Nm³
- Electricity Consumption per H₂ (per cubic meter): 4.0 kW
- Water Conversion Rate: 70%

