



煤氣
Towngas



The Hong Kong and China Gas Company Limited (0003.HK)

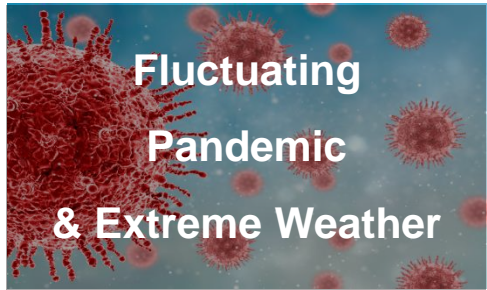
FY2022 Annual Results

17 March 2023

2022 Review



- Energy costs surged
- Gas source supply under tension



- Weak demand for natural gas
- Dollar margin narrowed



- Distributed PV from 0 to 1
- Secure industrial parks contracts



Embrace Brightening Future



- Mild energy prices volatility
- Stabling gas sources supply



- Rebounding demand for natural gas
- Dollar margin increasing



- Seize share in industrial parks and expedite grid connection
- Realise profits in carbon/green power trading

2022 Business Highlights




Hong Kong, China Gas Business


Total Gas Sales Volume

27,398 TJ  1%

Customers

2 million  30,000

Total Revenue

8.5 billion  6%

Tariff increased 4.4% in August, generating annual revenue of


320 million



Mainland Business

Note: Excluding Shanghai Gas


Total Gas Sales Volume

41.8 billion m³  5%

City Gas Sales Volume

32.1 billion m³  3%


City Gas Projects

315  12


Customers

37.29 million  2.25 million

Water Business

1.59 billion tonnes  6%

Environment

1.39 million tonnes  12%



Renewable Business

Accumulative

80 Zero-carbon Industrial Parks

PV (As at March 2023)

Contracted: **1.8** GW

Grid-connected: **1** GW




Extended Business


Total Revenue

8.7 billion

Hong Kong, China

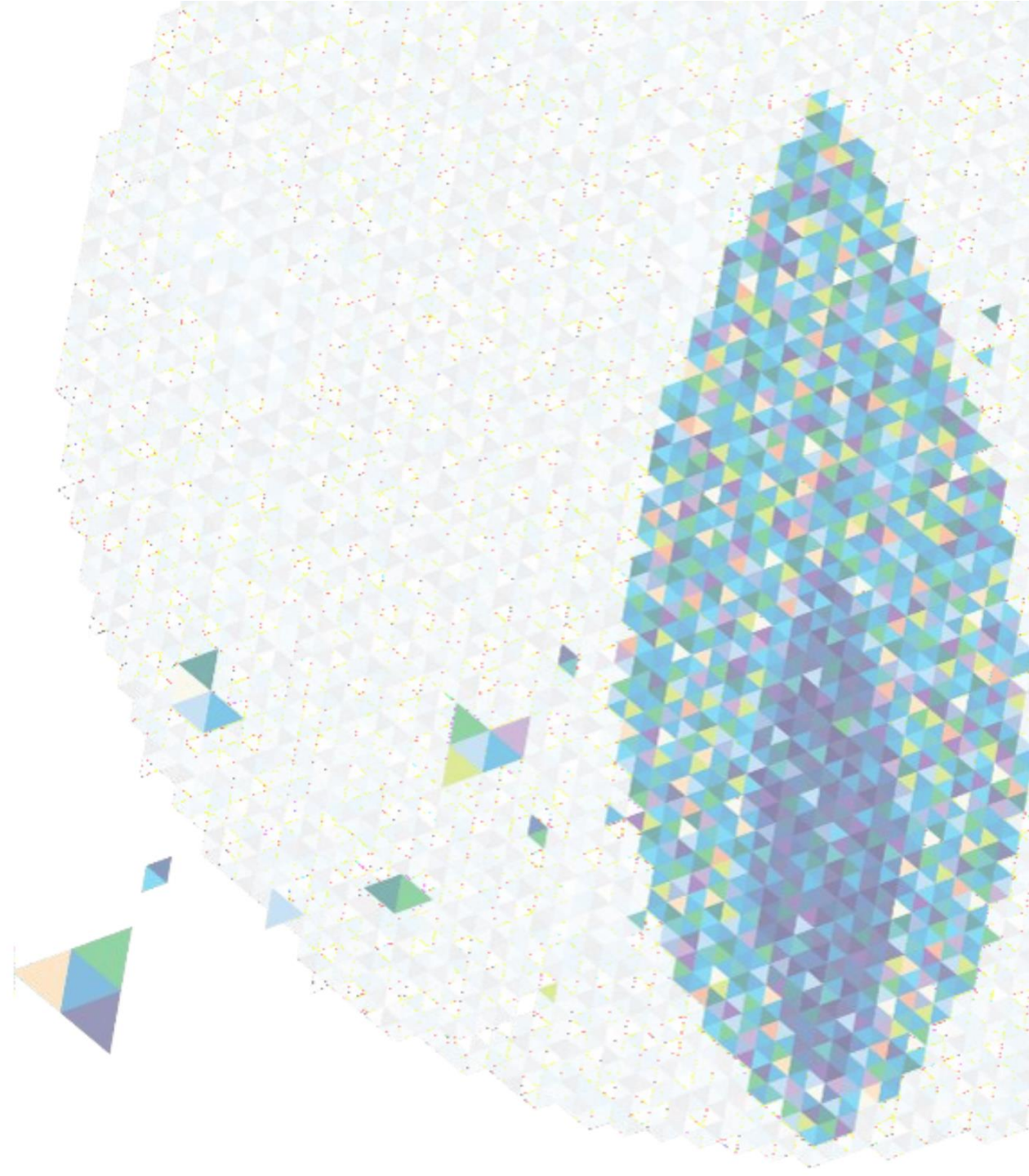
2.1 billion  5%

Mainland

6.6 billion  2%

(Unit: HK\$)

ESG



Symposium Covering All Aspects of E, S and G

Corporation



The Secretary for Environment and Ecology of the HKSAR Government, Mr. Tse Chin-wan, officiated at the ceremony

Summit – Over 20 experts and scholars took turns to speak on ESG-related hot topics

Approximately **5,000** people attended online and onsite

Well-known professionals and scholars in the political, business and academic sectors from public utilities, financials investment, social welfare and corporate governance gave speeches and participated in round-table discussion

Responding to Risks Related to Sustainable Development



Climate-related and Nature-related Directive Guide

The first company in Hong Kong to adopt the TNFD framework in ESG-related risk disclosures



TCFD & TNFD

Referenced both frameworks in responding to climate and nature-related risks and opportunities, as well as the impact of future operational plans on climate change and ecosystems

The TNFD Forum

TNFD Forum

Joined TNFD Forum, becoming one of the 800+ members of the global multi-disciplinary consultative group of institution

Upgrade in ESG rating

S&P Global 51->67 (Upgrading)

Included in the **Dow Jones**

Sustainability Asia for the **first time**

MSCI 

Upgrade to **“A”** in 2022

Major awards and recognition

UNSDG ACHIEVEMENT
AWARDS 2022
HONG KONG
聯合國可持續發展目標 香港成就獎

Garnered 4 awards in SDG Achievement Awards Hong Kong



Centre for Business Sustainability (CBS), The Chinese University of
Hong Kong

No.1 of the Greater Bay Area Business Sustainability Index and the
Hong Kong Business Sustainability Index



HKICPA 2022 “Best Corporate Governance and ESG” Awards

HKQAA

Hong Kong Green and Sustainable Finance Awards 2022

Hong Kong and China Gas Company (0003.HK) won:
“Pioneering Organization in ESG Disclosure Enhancement” award

Towngas Smart Energy (1083.HK) won:
“Outstanding Award for Green and Sustainable Bond Issuer –
(Smart Energy) Largest Single Sustainability Linked Bond” award

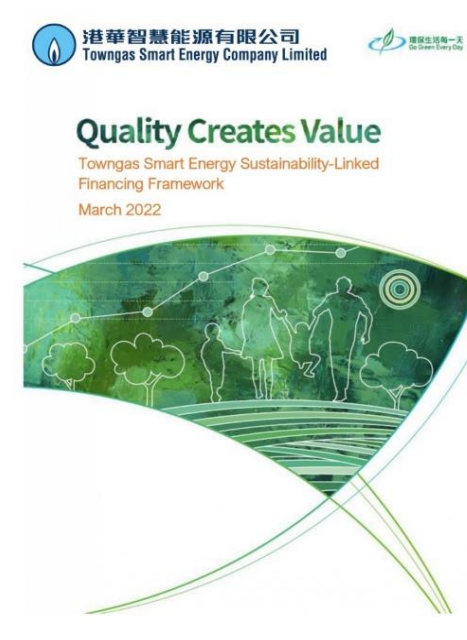


The Asset

The Asset Triple A Sustainable Capital Markets Awards 2022

The group issued US\$200 million sustainability-linked bond and won:

“Best Sustainability-Linked Bond” award



AGENDA

Financial Highlights

P.9

Business Review

- **Utility Businesses**

- Hong Kong, China Gas Business

P.14

- Mainland Gas Business

P.20

- Water and Environmental Business

P.26

- **Smart Energy**

- Renewable Energy

P.29

- “Gas+” Energy Management

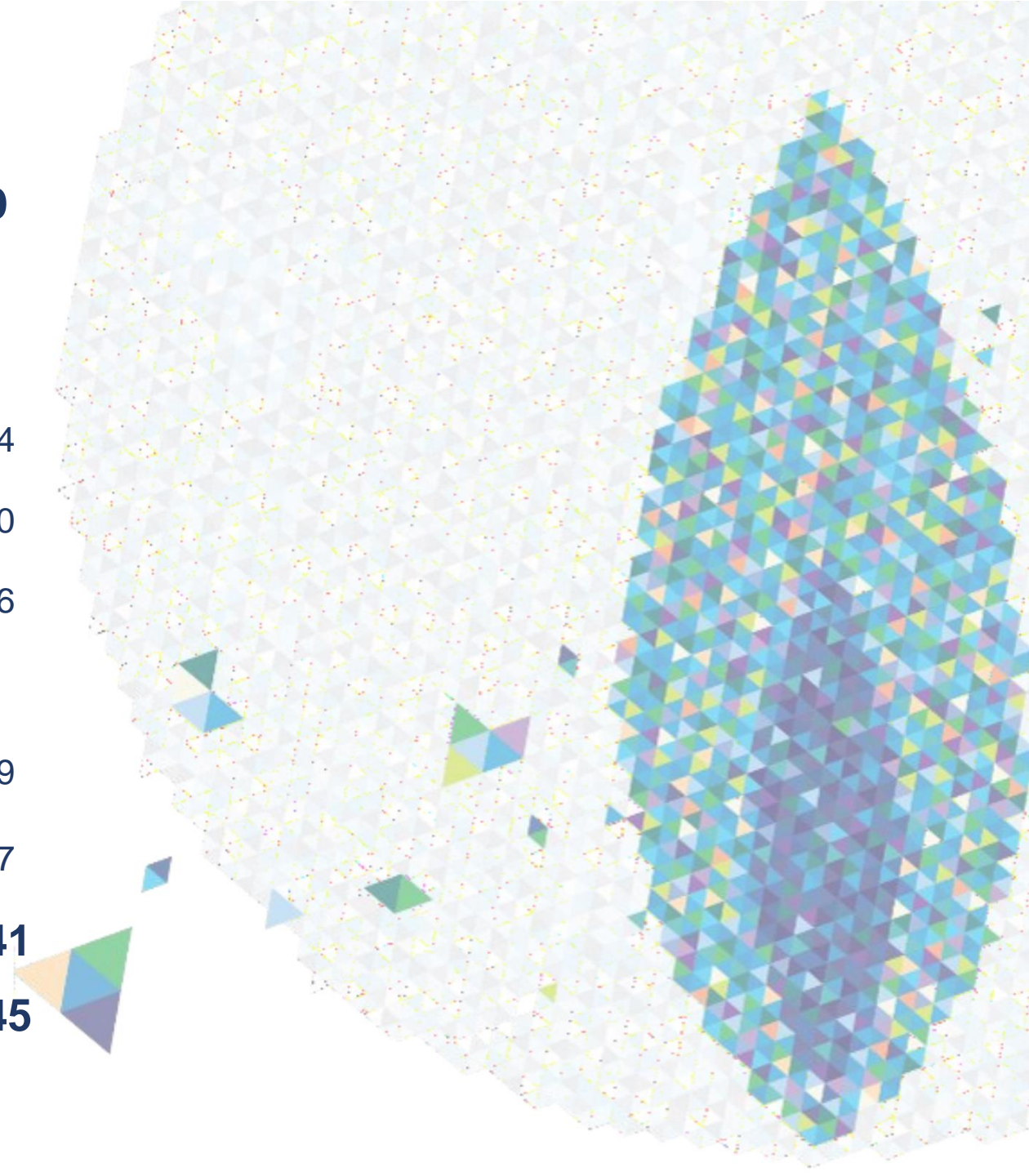
P.37

- **Extended Business**

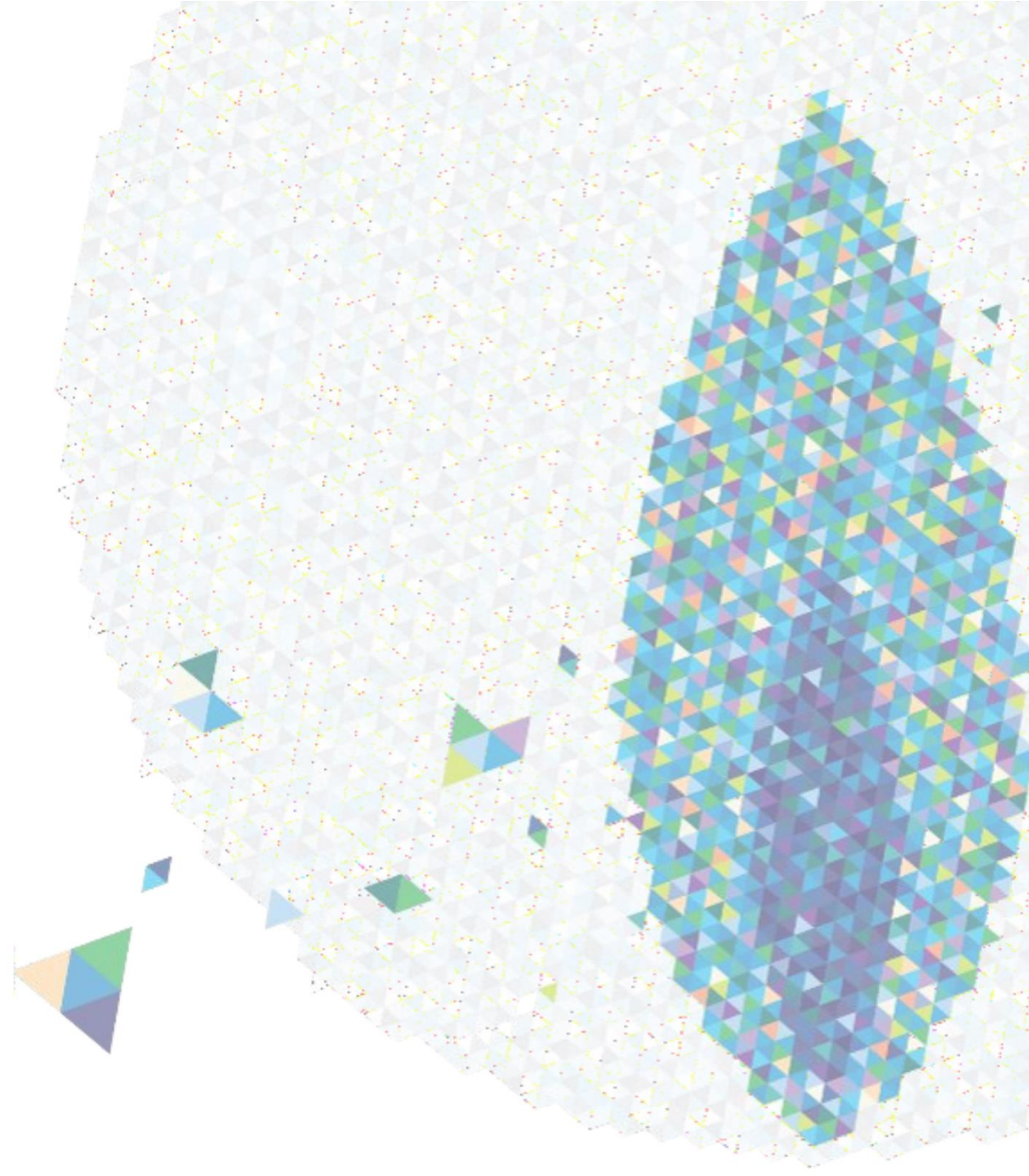
P.41

- **Business Guidance**

P.45



FINANCIAL HIGHLIGHTS



Operating Profit after Tax



Hong Kong , China Gas Business

HK\$ **3.41** billion



1%



Mainland Business

HK\$ **2.49** billion



30%



Other Operation Business

HK\$ **0.14** billion



32%

Full Year Operating Profit after Tax: HK\$ 6.04 billion ↓ 16%

FY2022 Annual Results – The Hong Kong and China Gas Company (0003.HK)



(Unit: million HK\$)	FY2021	FY2022	Changes	
Revenue	53,564	60,953	↑	14%
Operating Profit after Tax	7,167	6,040	↓	16%
Net Financial Expenses and Provision for Assets	(2,150)	(730)	-	-
IFC Revaluation Change	-	(62)	-	-
Profit Attributable to Shareholders	5,017	5,248	↑	5%
Basic Earnings per Share (HK Cents)	26.9	28.1	↑	5%
Dividends per Share (HK Cents)	35	35	-	-
Interest Coverage Ratio	8.4x	7.1x	-	-

(Unit: billion HK\$)	31 Dec 2021	31 Dec 2022
Total Assets	168.1	168.5
Net Assets	81.8	75.1
Cash and Bank Balances	10.6	13.3
Total Borrowings	55.1	59.3
Net Gearing Ratio*	35.2%	38.0%
Average Cost of Debt	3.1%	3.1%

Credit Rating:

MOODY'S : A1

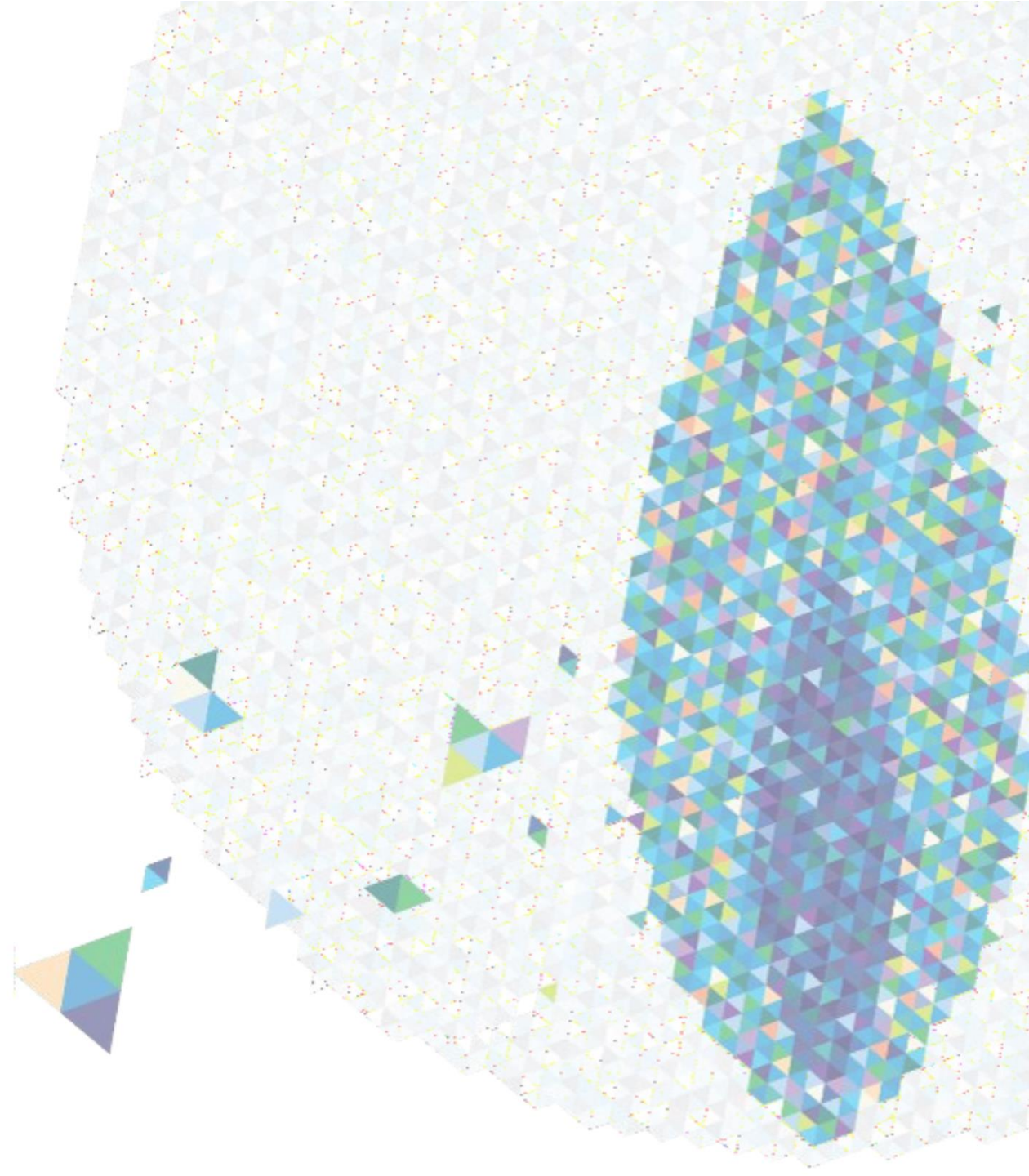
S&P Global Ratings : A-

*Note: After exiting from Shanghai Gas, the net gearing ratio will drop to around 35%

Group Capital Expenditure: HK\$ 8.32 billion

(Unit: HK\$ billion)	2021	2022
0003.HK (including 1083.HK)	8.39	8.32
1083.HK	2.78	3.37

HONG KONG, CHINA GAS BUSINESS





Gas Volume -1.0 %
27,398 TJ
(800 million m³,
NG equivalent)



Gas Supply Reliability
99.99%



Pipeline Network Coverage
86%



Customers +30,145
Reaching **2 million**



Household Penetration Rate
74%



ESG
The Cleanest Fossil Fuel
(**<5% of Hong Kong's total CO₂ emissions**)
Hydrogen is the new business of the future



Gas Sales Growth in Hong Kong, China

Classification	Target Customers		FY2022	As of 2027
Residential	Domestic Use (Cooking, clothes dryer, bathroom hot water supply, etc.)	222,700 New customers over the five years	74 TJ	545 TJ
Industrial and Commercial	Gas Cooling/ Heating Applications	Ocean Park, Towngas Telecom, airport and North District Hospital	195 TJ	1,370 TJ
	Diesel Replacement Projects	Hospitals, food production plants and laundries		
	New Projects	Hotels, hospitals, crematoriums and Maxim's new food processing plant		
	Hydrogen Energy Projects	Franchised bus companies, heavy duty vehicles		
	Indoor Air Quality (Dehumidification)	Hotels, hospitals and office		

Promotion of Carbon Reduction Programs



North District Hospital

- Landfill gas: **1.5 MW** combined Heat and Power (CHP) system

Maxim's Food Factory

- Residual heat at Tai Po Gas Plant used for dehumidification in food production



Regal Hong Kong Hotel

- With **481 rooms** in downtown Causeway Bay
- Steam boilers converted from diesel to gas

Kwai Chung Crematorium

- **4** crematoriums converted from diesel to gas



Hydrogen Energy Development Advantages



A **3,700-kilometre** pipeline network stretching across all districts



160 years of experience in safe operations



Relatively low production and transportation costs



Endless supply **without the need of large storage**

Supported by Government Policy

- **Hong Kong's Climate Action Plan 2050:** trials of hydrogen fuel cell bus and heavy duty vehicles
- **Hong Kong Roadmap on Popularization of Electric Vehicles:** development and applications of hydrogen fuel cell vehicles and its infrastructure

The secretary of the Environment and Ecology, Mr. Tse Chin-wan, visited the hydrogen energy system



The convenor of the Executive Council, Ms. Lau Suk-ye, visited the hydrogen energy system



Large-scale Industrial Parks

Projects Under Construction of Industrial Park : **2.4MW**



Industrial Customers

Hung Hom Industrial Building
Project: **175KW**

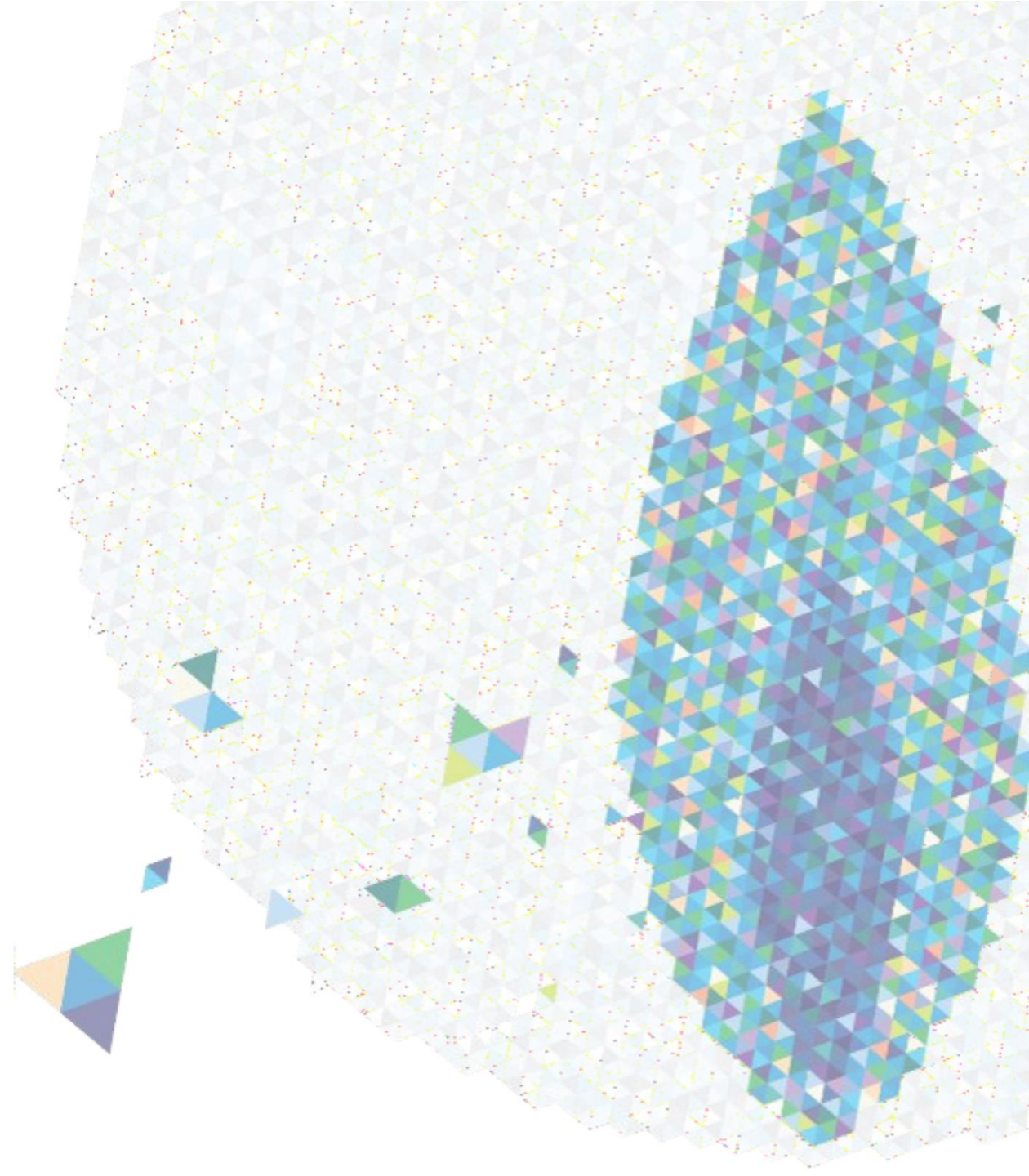


Business Customers

Sha Tin Commercial Building
Project: **150KW**



MAINLAND GAS BUSINESS



Total Volume of Gas Sales*

Total Gas Volume

41.8 billion m³ **↑ 5%**

City Gas

32.1 billion m³ **↑ 3%**

Dollar Margin

0.42 RMB **↓ 0.06**
RMB

City-gas Projects

315

↑ 12

new projects

customers

37.29 million

↑ 2.25 million

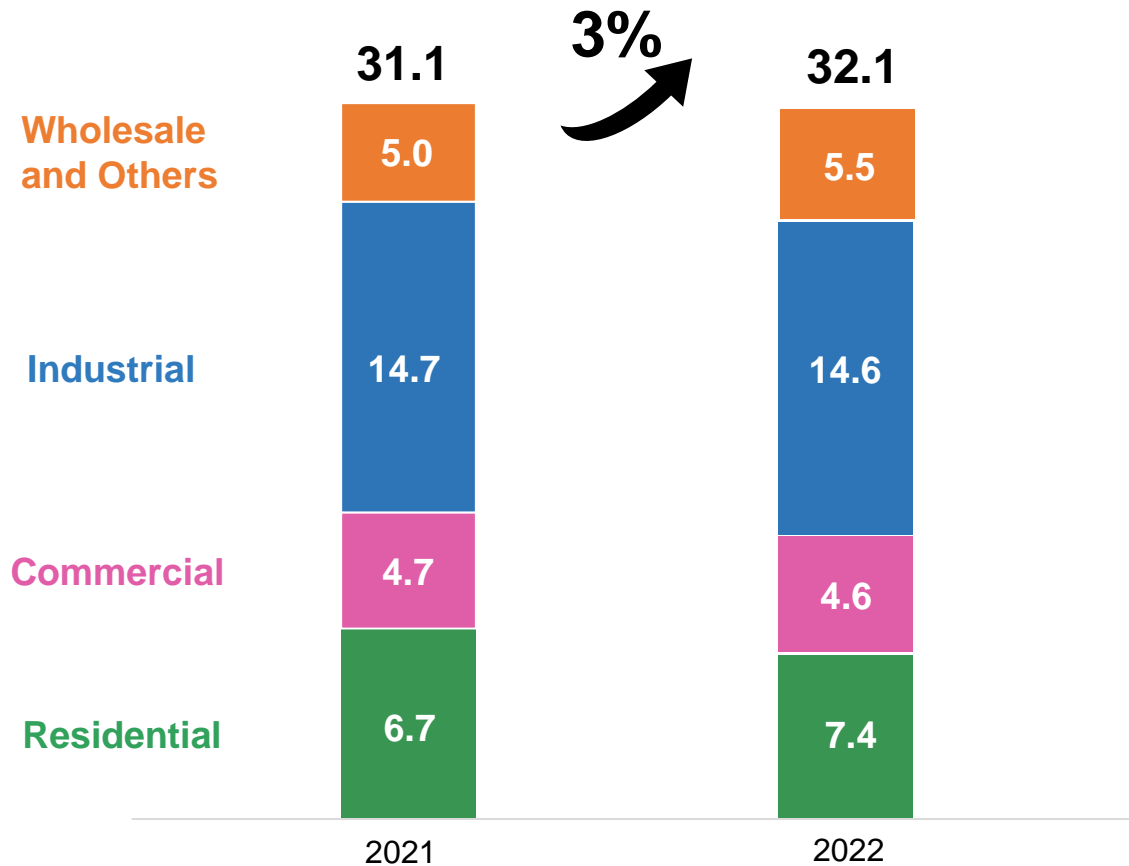
new customers

Note: *Excluding Shanghai Gas

Continuous Growth in Gas Volume, Stable Gas Sales Mix

Gas Sales Volume

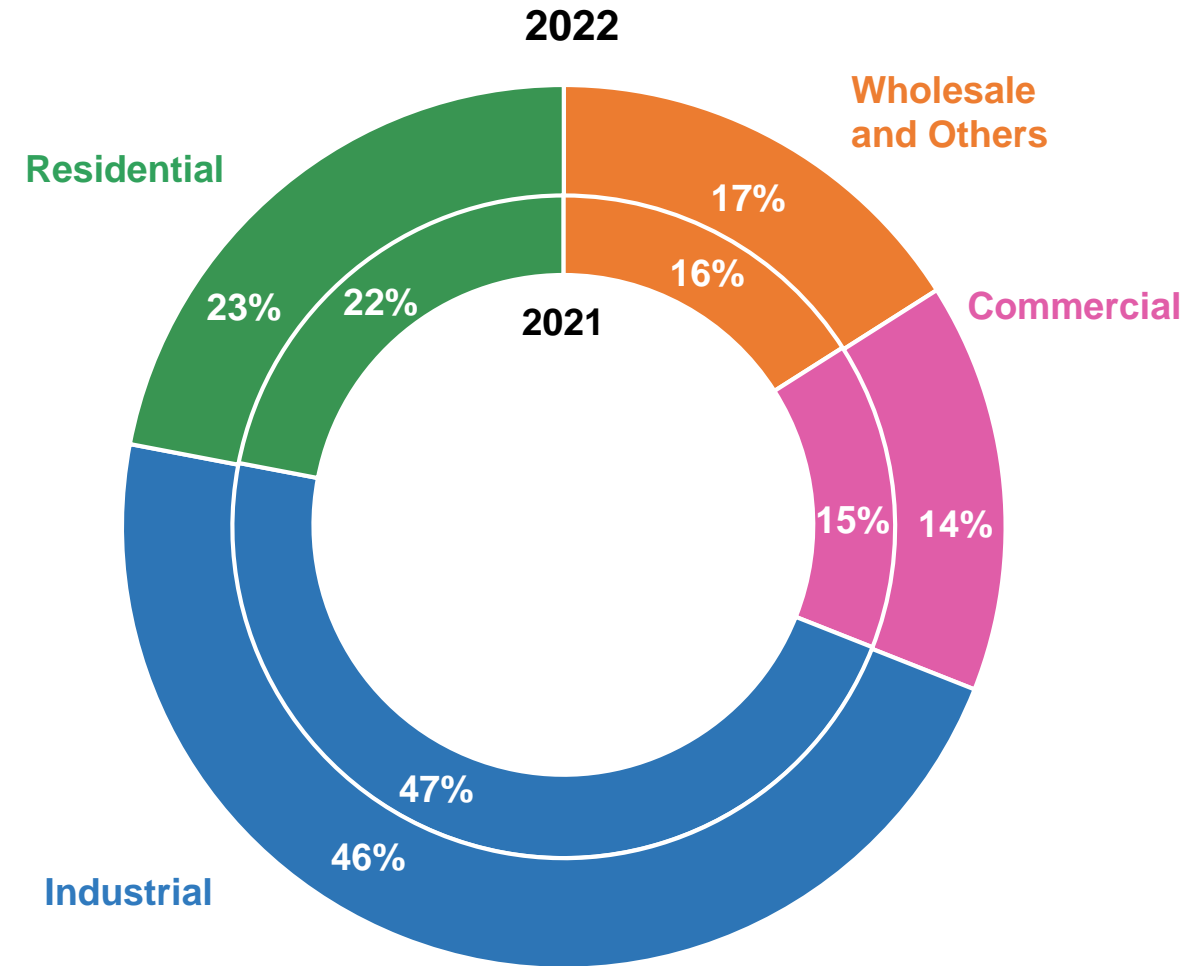
(Unit: billion m³)



FY2022 National Natural Gas Consumption

↓ 1.7% YoY

Gas Sales Mix



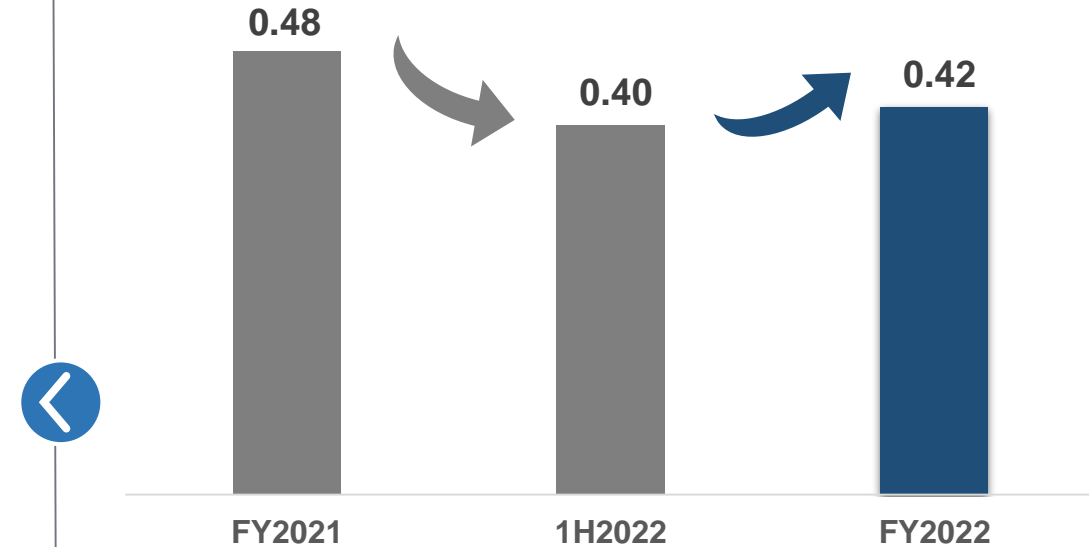
Upstream Gas Cost Surged Sharply, Dollar Margin Gradually Stabilised

Selling Price, Cost and Dollar Margin

(Unit: RMB/m ³)		2021	2022	Changes
Selling Price	Residential	2.69	2.71	↑ 0.02
	Commercial	3.05	3.47	↑ 0.42
	Industrial	2.98	3.73	↑ 0.75
	Wholesale	2.75	3.41	↑ 0.66
Average Selling Price		2.91	3.42	↑ 0.51
Average Gas Cost		2.43	3.00	↑ 0.57
Dollar Margin		0.48	0.42	↓ -0.06

Dollar Margin Trend

(Unit: RMB/m³)



- Non-residential gas price achieved cost pass through
- Diversified gas supply sources, with 14% from non-Three Major supplier
- Several provincial capitals are supported by government subsidies

Enhance the Commercial Value of Resources of the Group and the Ability to Coordinate Supplies of Natural Gas

Capability of self-managed gas source coordination

2022: ≈ 1 billion m^3  2023: estimated to reach 2 billion m^3 , reducing the gas cost by 0.1 RMB/ m^3

-  Domestic resources
-  Import resources
-  Invested resources



Speed up project construction and secure LNG import by long-term contracts

- Will be in operation in mid-2023.

The commercial functions of Jintan Gas Storage Tank gradually emerging

- **Trade volume increased:** the trade volume was 400 million m^3 in 2022, achieving a turnover three times that of the working gas volume, and is expected to increase to 600 million m^3 in 2023.
- **Wide variety of business:** storage trading, storage services, gas sales, etc.

Accelerate project construction and gradually release production capacity

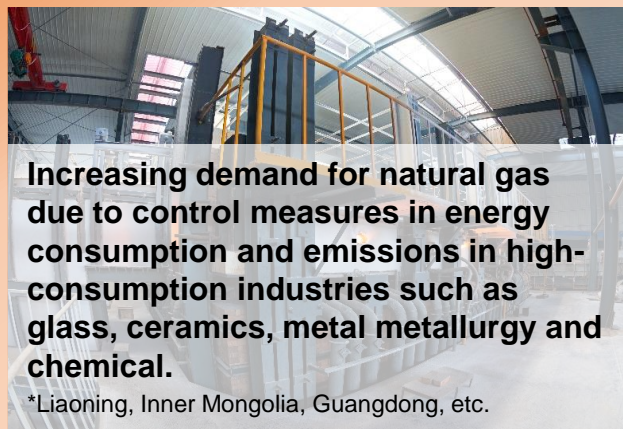
- Phase I will be in operation in mid-2023.



Primary Natural Gas Consumption and the Proportion of Primary Energy Consumption Continue to Rise

The proportion of national natural gas consumption to primary energy consumption continue to rise from 8.5% in 2022 to 15% in 2040.

Industrial Customers



Increasing demand for natural gas due to control measures in energy consumption and emissions in high-consumption industries such as glass, ceramics, metal metallurgy and chemical.

*Liaoning, Inner Mongolia, Guangdong, etc.

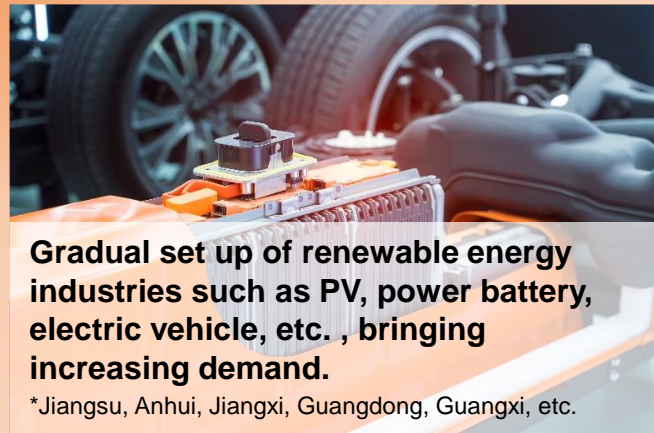
Commercial Customers



LPG cylinder-to-pipeline conversion continues to progress, backing a safe urban development.

*Coastal cities such as those in Eastern China and Southern China

City Gas New Projects



Gradual set up of renewable energy industries such as PV, power battery, electric vehicle, etc., bringing increasing demand.

*Jiangsu, Anhui, Jiangxi, Guangdong, Guangxi, etc.



Multiple means in C&I clean space-heating contributing to improving urban living standards.

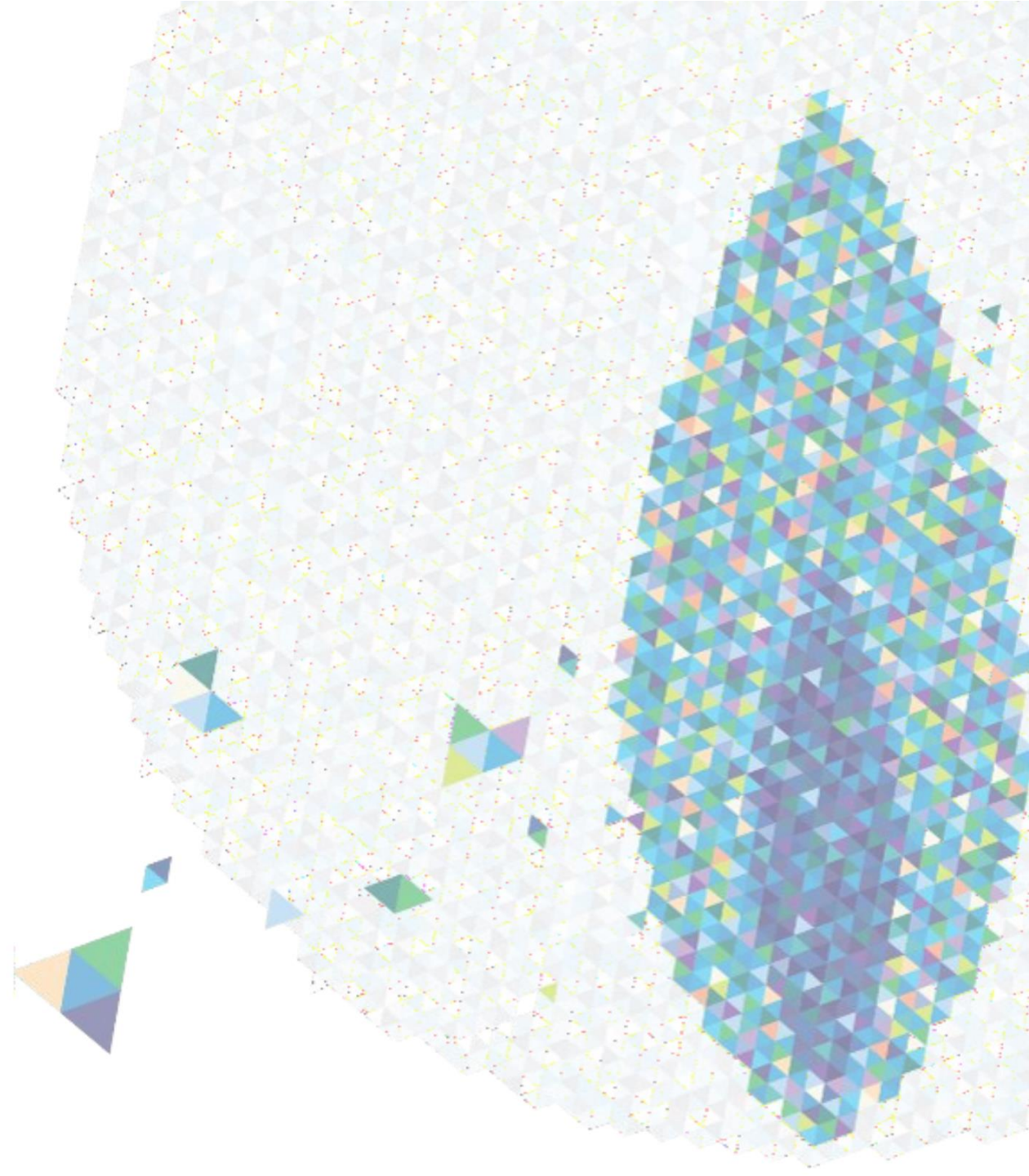
*Cities in the mid-and downstream of the Yangtze River and Northern China



Strategic cooperation with SOEs, continue to explore the potential of city gas projects.

*Anhui, Jiangxi, Guangdong, Liaoning, Inner Mongolia

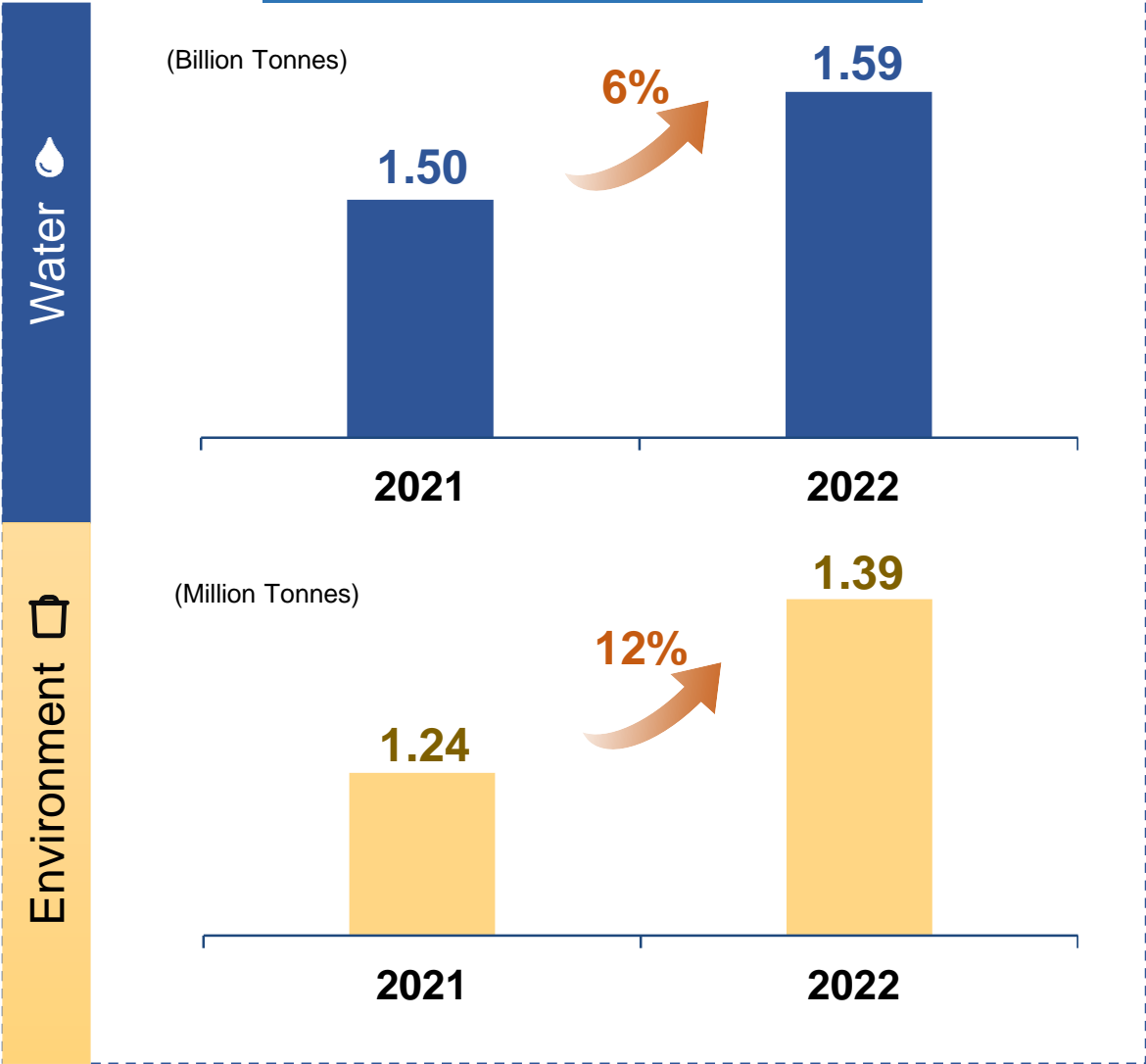
MAINLAND WATER & ENVIRONMENT



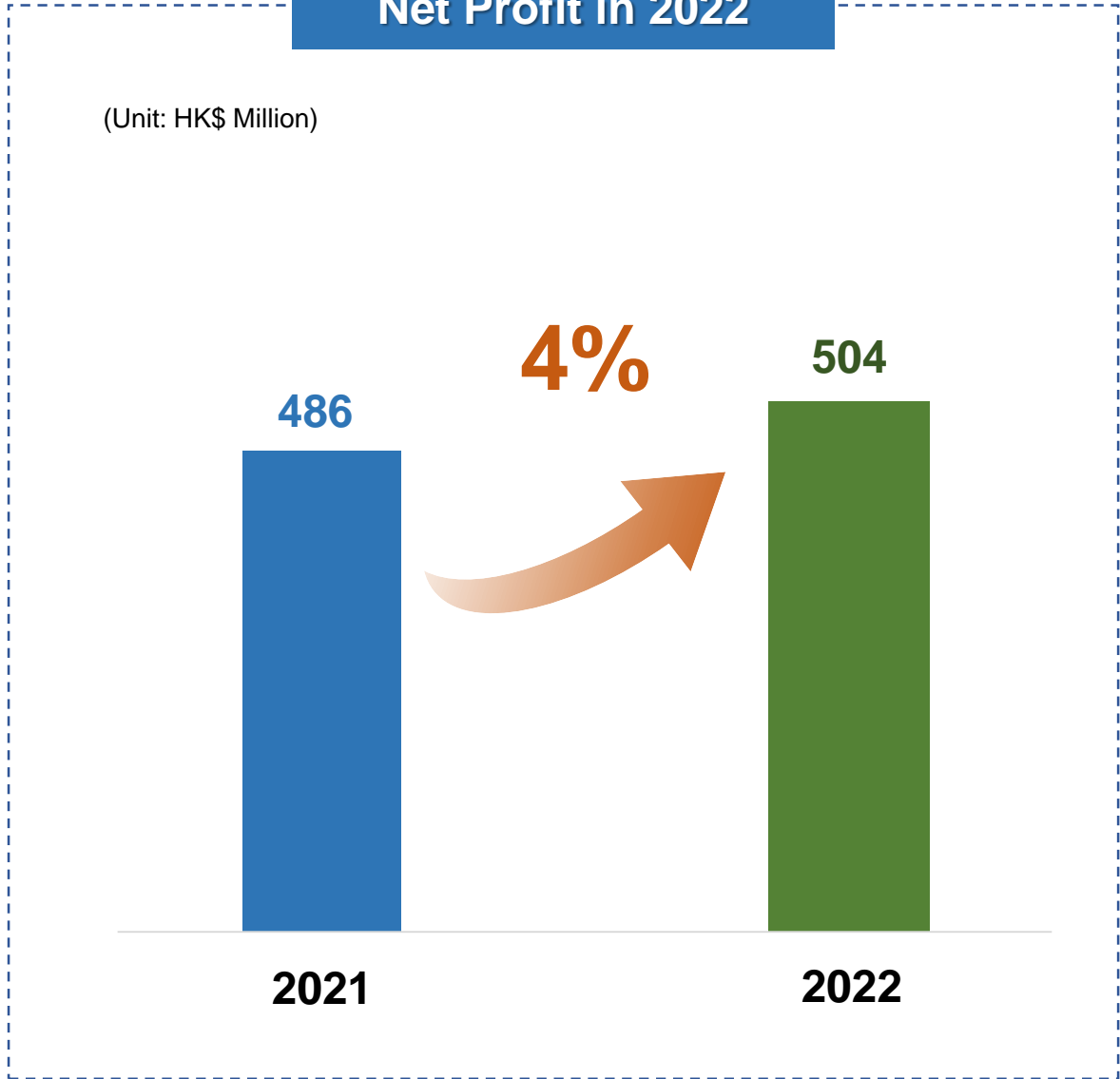
Profits Increased with Steady Development Despite Downward Pressure of Economy (14 Projects in Total)



Business Volume in 2022



Net Profit in 2022



- **Target the advancement of environmental projects; focus on the development of industrial wastewater and sanitation businesses and comprehensive wastewater management of industrial parks and related businesses in East China.**



Industrial wastewater project in Wujin District, Changzhou
(Under construction and in operation in July 2023)



Changzhou waste incineration power generation project
(Under construction and expected in operation by the end of 2025)

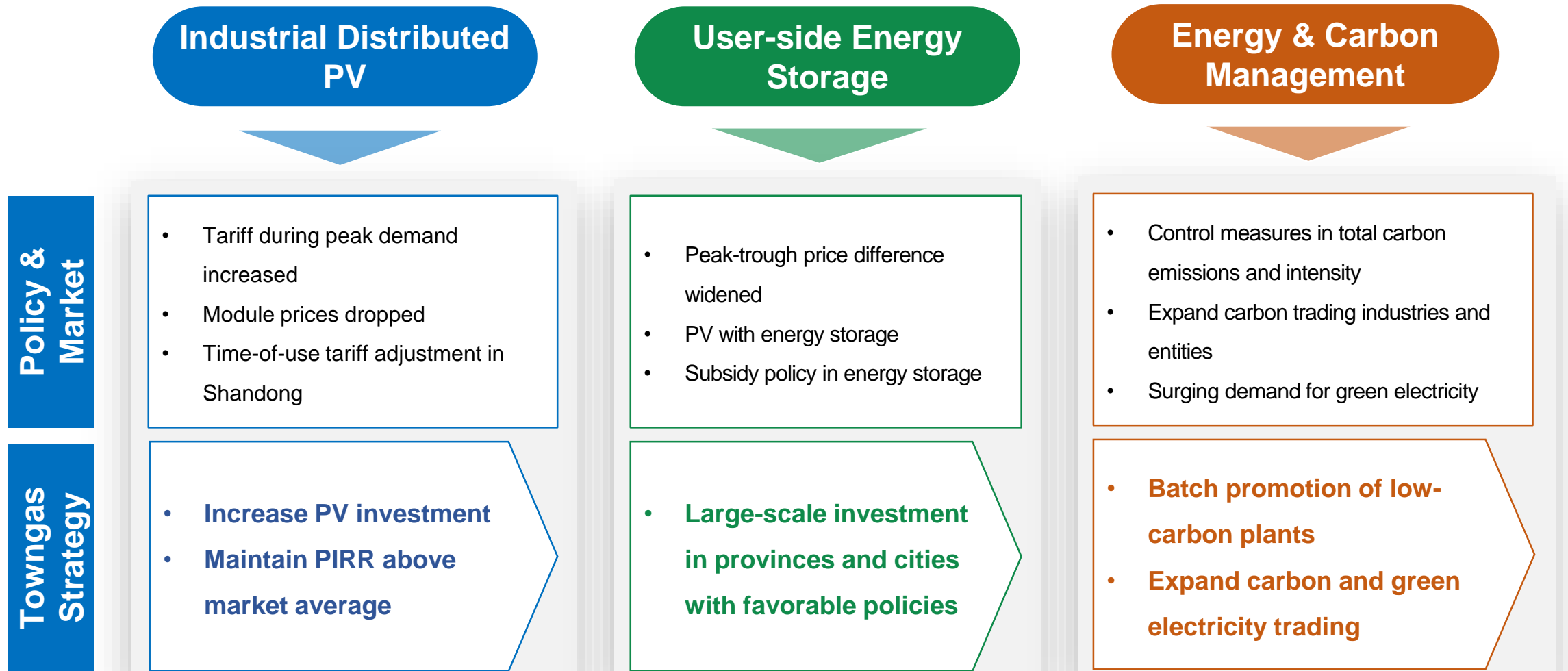
- **The A-share listing of Foshan Water is expected to be in 1H 2024.**

SMART ENERGY

- **RENEWABLE ENERGY**
- **“GAS+” ENERGY MANAGEMENT**



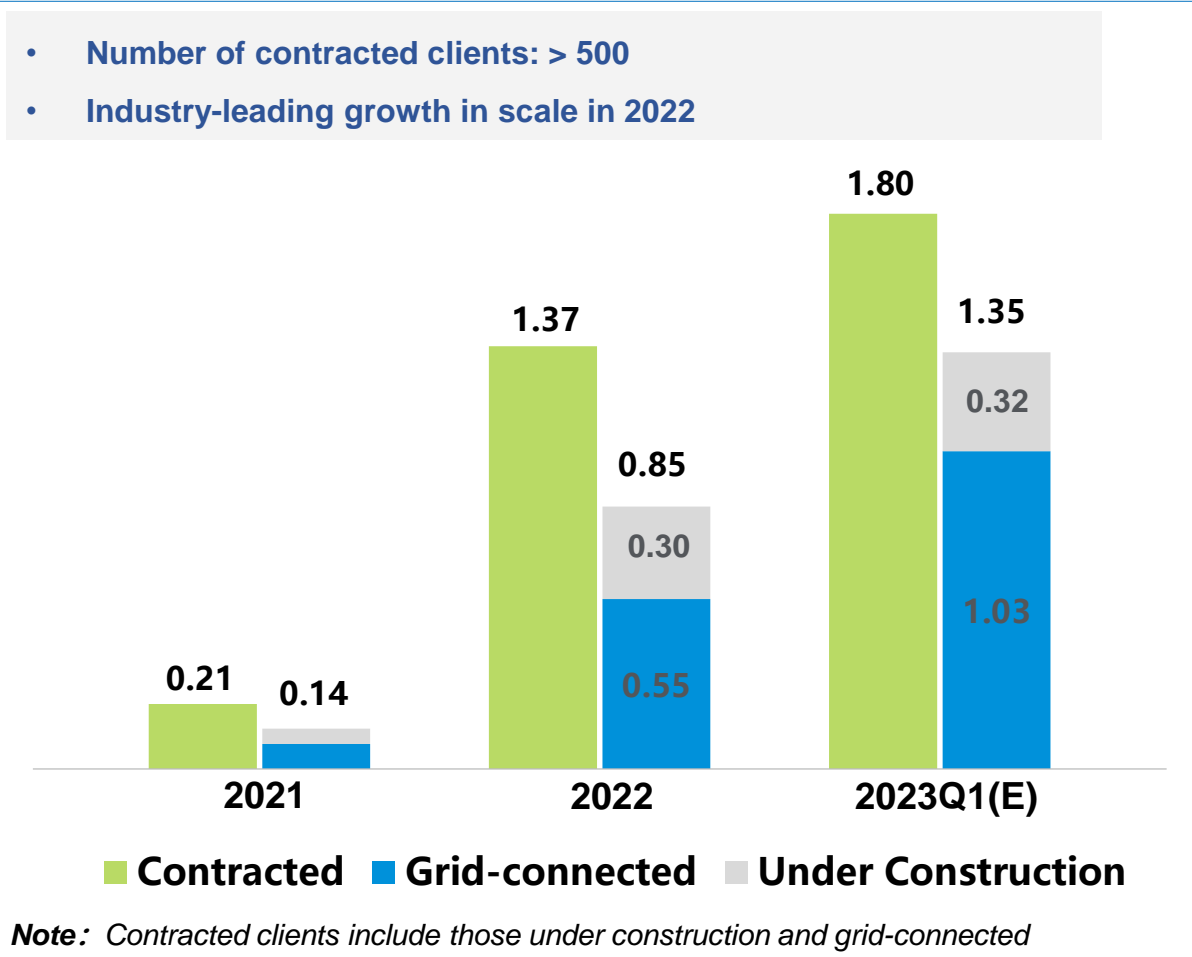
Positive Policy Environment Supports Prosperous Achievements in 2023



Zero-carbon Industrial Parks (80)

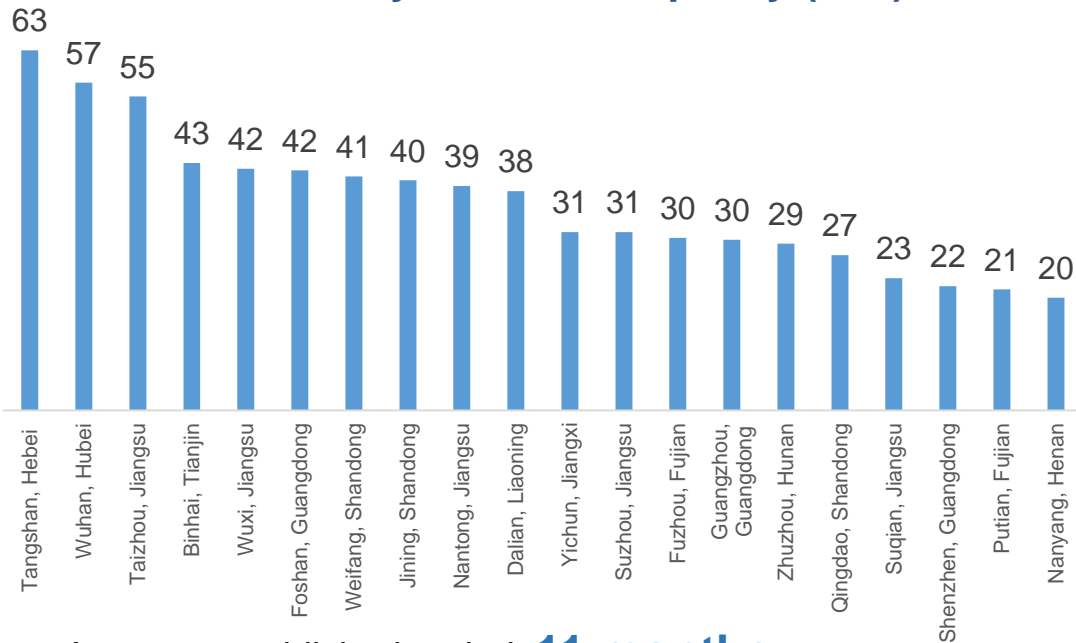


PV: Accumulative Contracted and Grid-connected (GW)



Average Contract Capacity > 30MW (Industrial Parks established for 1 year)

Top 20 Industrial Parks Ranked by Contract Capacity (MW) *



- Average established period: **11 months**
- Average contracted scale: **36MW**

*Note: Data as at 31 December 2022

Key Success Factors

- **Marketing:** Government support, gas synergy
- **Service:** Carbon management, energy efficiency management, green power trading
- **Engineering:** GW-grade construction, operation and maintenance management
- **Risk Management:** Compliance process, professional teams, efficient tools
- **Intelligence:** Management platform, PV cloud, device cloud

Average PIRR >10%
(Projects in operation for over 6 months)

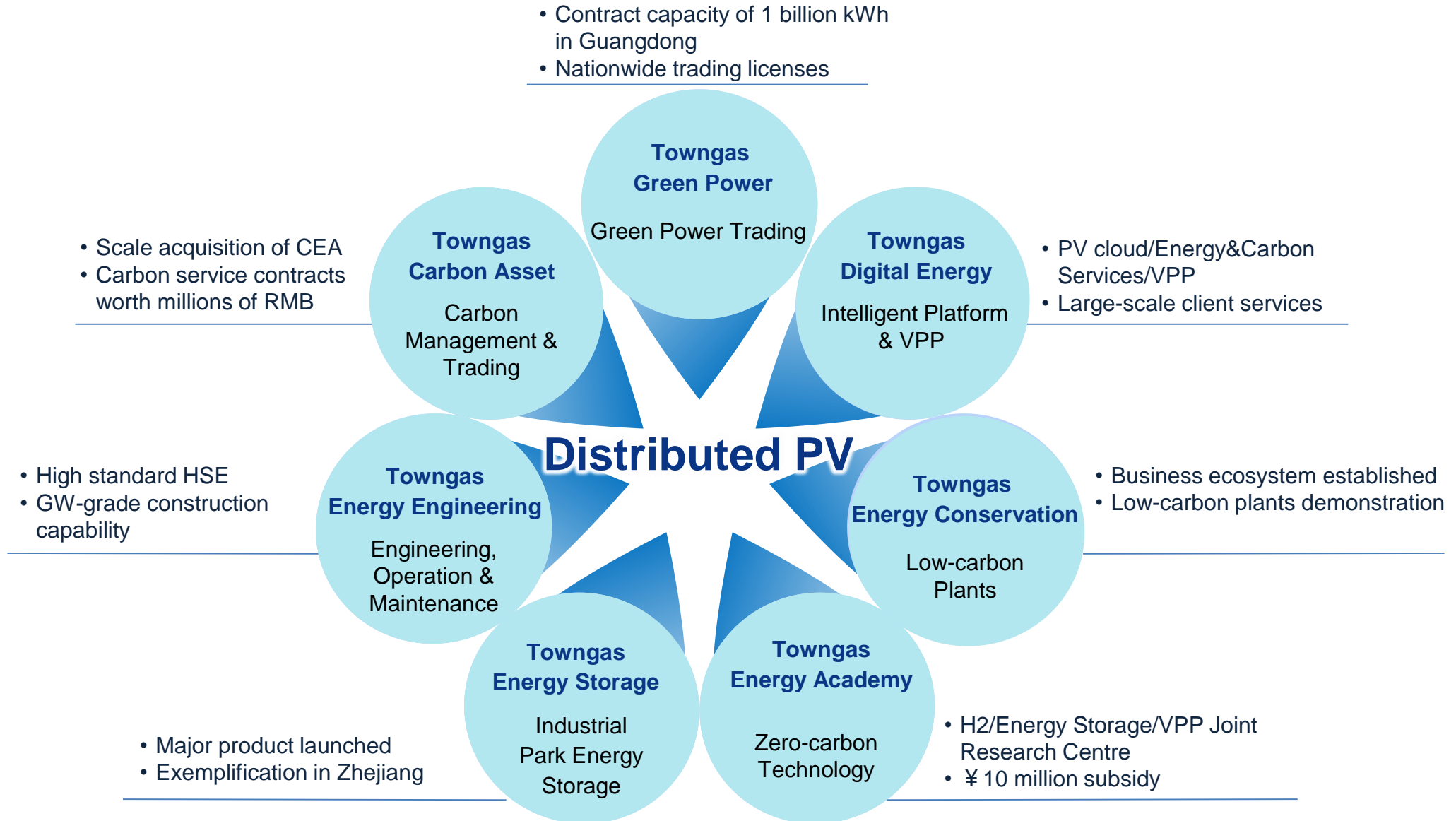
PIRR of Industrial Park Model Outperformed

	TSEL	Market
PV Tariff	✓ High (PV+Service, Strong Bargaining Power)	PV only
Development Cost	✓ Low (Independent Batch Development)	3 rd party Development
Procurement Cost	✓ Low (Joint Procurement)	Individual Project Procurement
Operating and Maintenance Efficiency	✓ High (Industrial Park-centric)	Dispersed

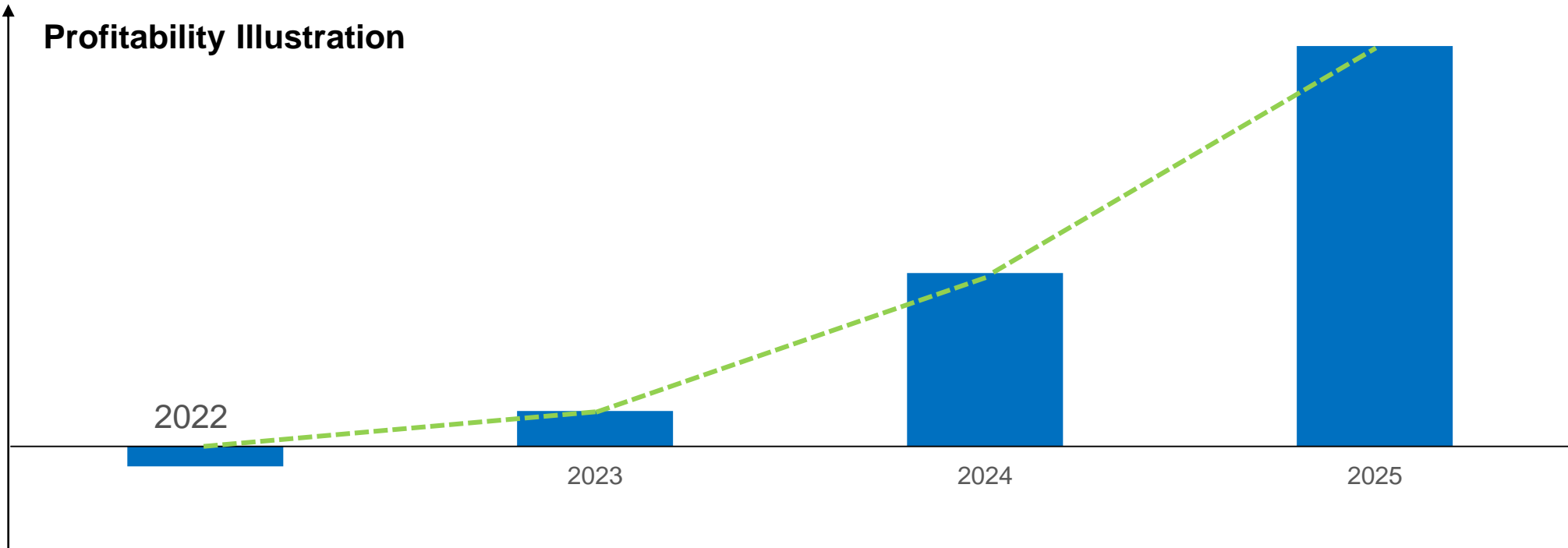
Policy & Market Favor Return of Projects

- PV module prices dropped
- Peak tariff increased
- Distributed power trading
- Time-of-use tariff adjustment in Shandong (short-term impact)

Establish A Leading One-stop Energy Management Enterprise



➤ Consider IPO at an appropriate time



PV Grid-connected *	• Only 0.1GW of annualized effective grid-connected due to pandemic	• >1.2GW of annualized effective grid-connected	• >3.5GW of annualized effective grid-connected	• >6GW of annualized effective grid-connected
Energy/Carbon Services	• Capability building with capital investment	• Generate primary profits by clients accumulation	• Realize profits in scale with expanded client base	• Develop VPP
Personnel Deployment	• Key energy professionals	• Key professionals related to industrial parks	• Professionals in place, productivity enhanced	• Network of 200 zero-carbon industrial parks

*PV Grid-connected : Refers to annualized effective grid-connected, which equals to the scale of PV operated for a full year.

Zero-carbon Industrial Park - Hailing, Taizhou



Low-carbon Development in Top 100 Industrial Districts

- Intelligent energy/carbon management
- *2022 Topics in Focus*

Near-zero Carbon Business - Futian, Shenzhen



Near-zero Carbon Business District in the Greater Bay Area

- VPP demonstration
- Exemplification of near-zero carbon institutions

Low-carbon Plants - IPE Group



Low-carbon Plants Benchmark

- Meeting the pressing need in carbon footprint in exports
- Carbon neutrality certification of Guangzhou Emissions Exchange

Smart Energy Storage - Jiaxing, Zhejiang



User-side Energy Storage

- High-safety energy storage products launched
- Invested by power grid company; a demonstration at the park

SMART ENERGY

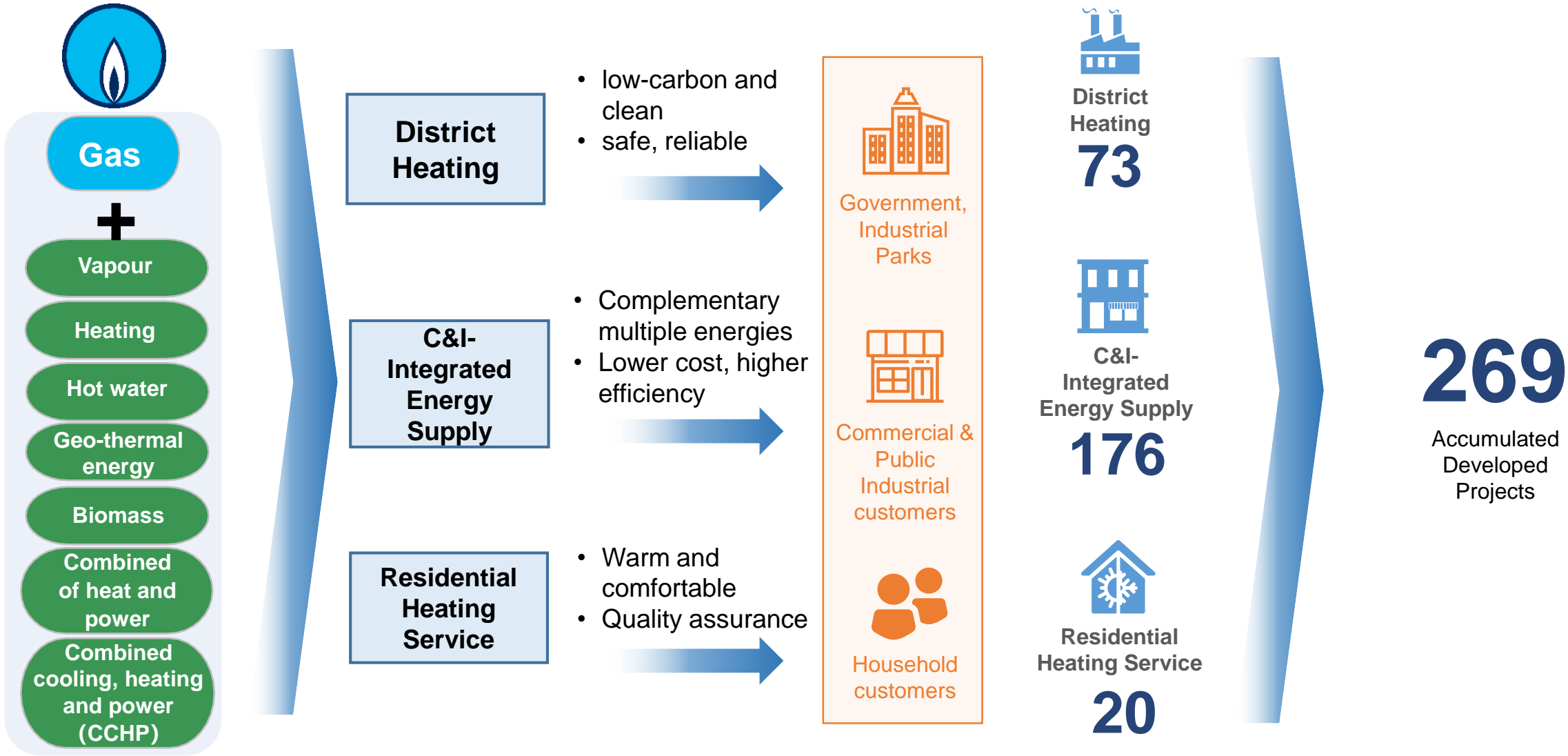
- RENEWABLE ENERGY
- “GAS+” ENERGY

MANAGEMENT



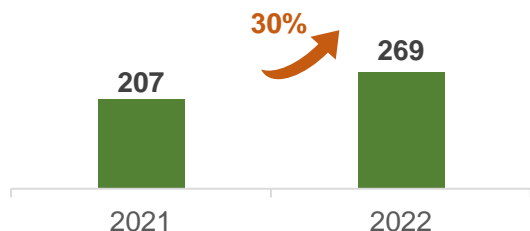
“Gas+” : Intelligent Energy Management to Improve Efficiency and Reduce Costs

Penetrate Energy Service Module

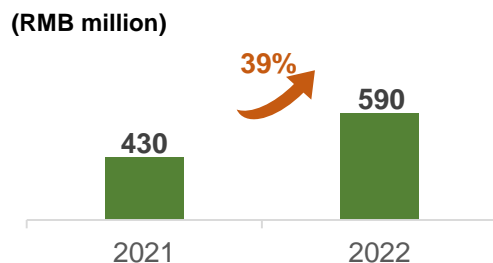


Initial Results Achieved

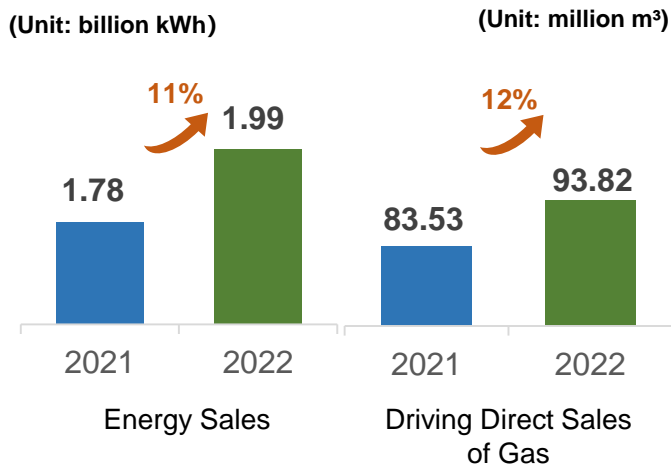
Numbers of New Development Project Increased Rapidly



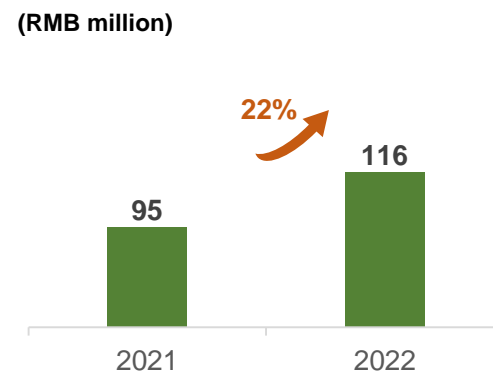
Revenue of Heat Service Increased Greatly



Synergic Increase in Energy and Gas Sales



Remarkable Gross Profit Growth in Heat Service



2 billion m³ gas sales volume will be generated after 5 years

Enlarge the value of city gas assets
Build new growth potential

Comprehensive Green, Low Carbon Energy Service Solutions

➤ National heat market capacity: 5 trillion kW

District Heating

Individual Power Supply

Energy Custody

- Rich project reserve
- Robust operation areas
- 50,000+ key target customers
- Industry-leading partners
- Full process service capability
- High reliability & brand reputation

Key Projects of “Gas+” Energy Management



Well-known pharmaceutical company in Suzhou industrial park

- **Total installation of 41MW**, comprehensive solutions in cooling, heating, steaming and PV

Secondary school in Zhongshan city

- One-stop services in heating, integrated electric energy and operation and maintenance in a **2000-people** boarding school



Commercial office building in Jinan city

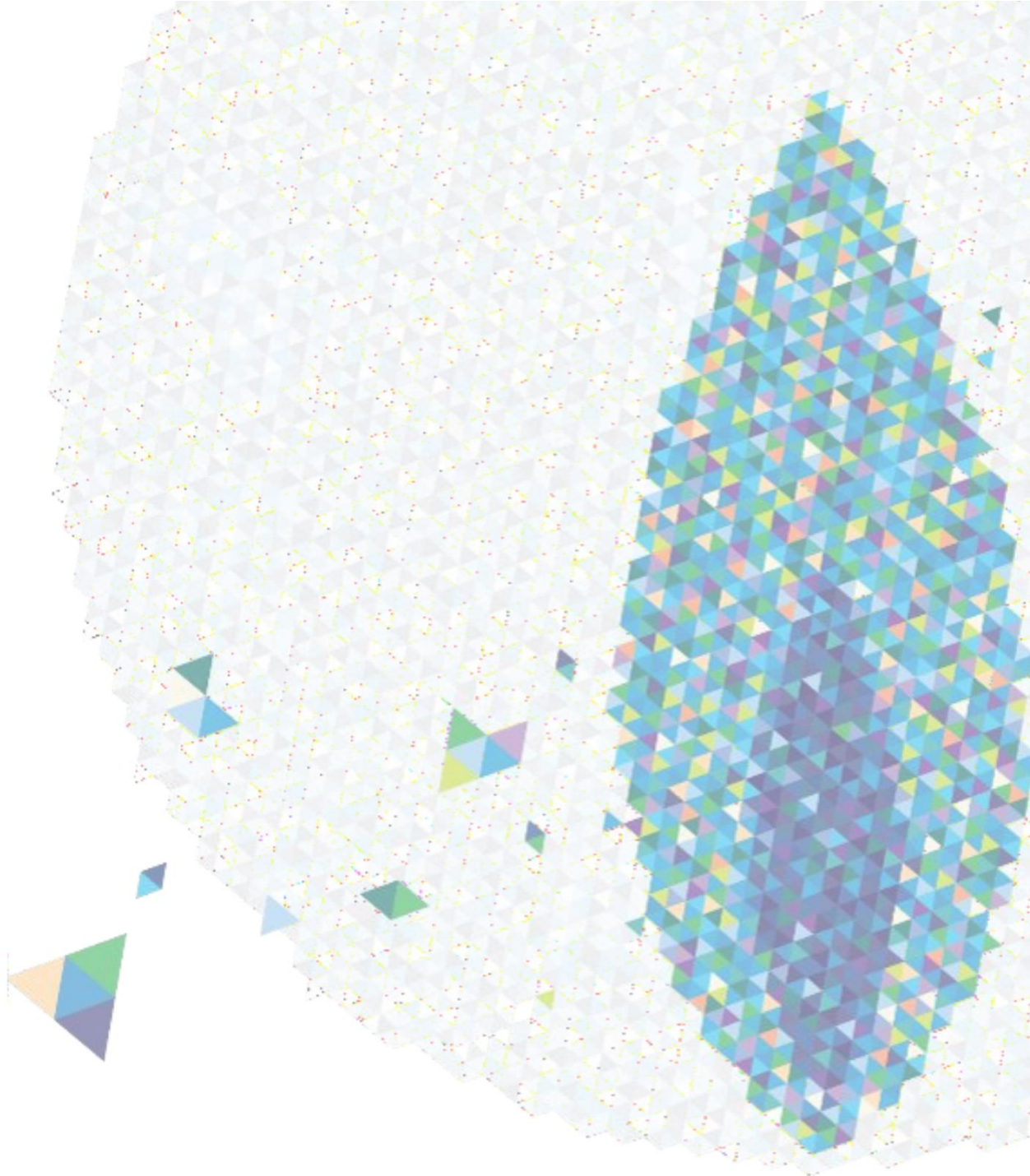
- Provide energy-saving, stable and reliable cooling and heating service, **48,000 m²** in total

Industrial park in Tongling city

- Obtained **concession rights on heating** to supply steaming by residual heat from power plant, a total capacity of 199MW



EXTENDED BUSINESS



Total Revenue from Extended Business: **8.7 billion**



Hong Kong, China:
2.1 billion

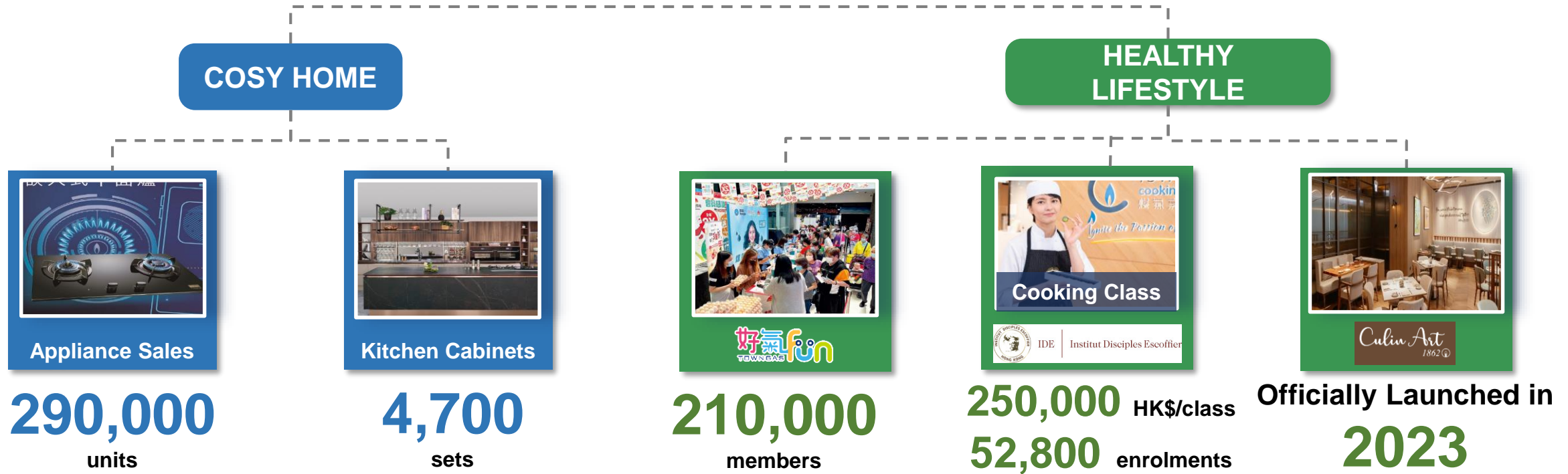


Mainland:
6.6 billion

➤ **Consider IPO at an appropriate time**

(Unit: HK\$)

Revenue: 2.1 billion



Mia Cucina

TGC
家·多點新意

towngas
cooking centre
煤氣烹飪中心

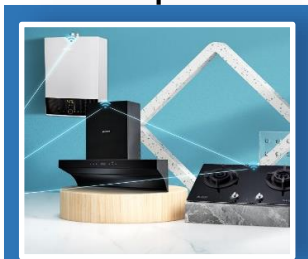
Note: FY2021 revenue of Hong Kong, China (excluding U-TECH) was 2 billion (Unit: HK\$)

Revenue: 6.6 billion

COSY HOME 1.7 billion

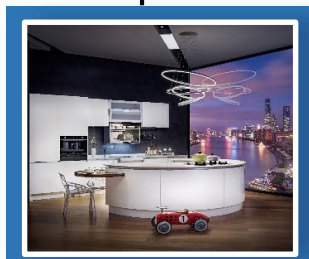
HEALTHY LIFESTYLE 0.6 billion
(Including gas insurance)

SAFETY LIFESTYLE 4.3 billion
(Including gas-related engineering)



Appliance Sales

↑ 19%



Kitchen Cabinets

11,000 sets



Floor Heating

↑ 22%



Insurance Promotion

↑ 20%



Healthy Products and Services

↑ 25%



Home Safety Services

130 million times



Smart
Kitchen

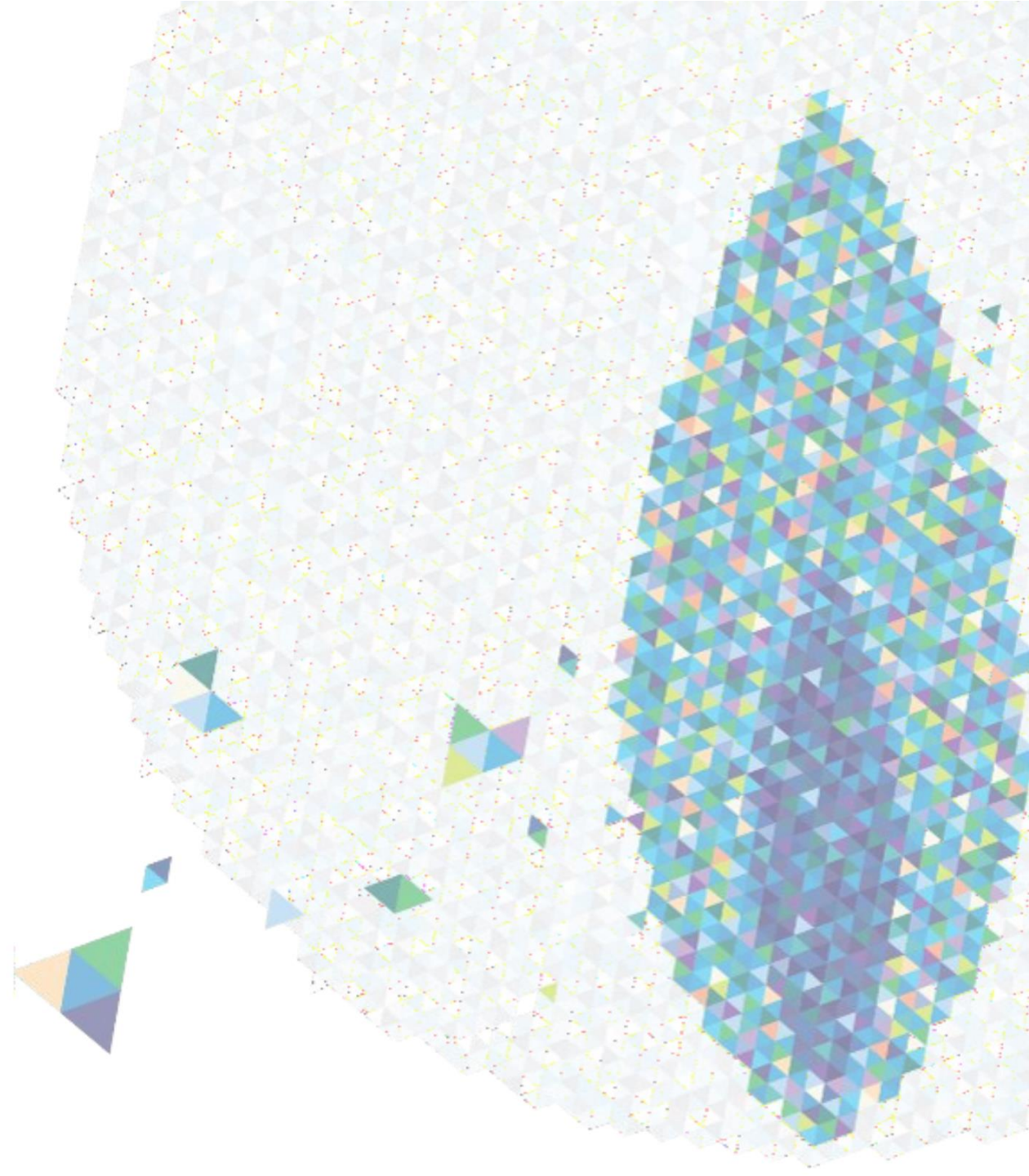
1 Million Active
customers on the Platform

↑ >100%



(Unit: HK\$)

BUSINESS GUIDANCE





Hong Kong, China Gas Business

Gas Sales Volume

↑ 1%

Number of Customers

↑ 25,000

Tariff Adjustment Brings
Annual Revenue of

HK\$ **320** million

Leading Hong Kong,
China to the first year of
Hydrogen Era



Mainland Utility Business

Gas Sales Volume

↑ 10%

Number of Connections

↑ 2.1 million

Dollar Margin

0.45 RMB/m³



Renewable Business

Zero-carbon
Industrial Parks

↑ 40

Accumulated PV
Grid-connected

3 GW



Extended Business

Total Revenue of Extended
Business in 2023:

HK\$ **8.9** billion

Hong Kong, China

HK\$ **2.1** billion

Mainland

HK\$ **6.8** billion

Gross Margin Rate:

Around **30%**



煤氣
Towngas



THANK YOU

This presentation and corresponding discussion may contain certain forward- looking statements, including statements regarding our intent, belief or current expectations with respect to The Hong Kong and China Gas's businesses and operations, market conditions, results of operation and financial condition, capital adequacy, specific provisions and risk management practices. Readers are cautioned not to place undue reliance on these forward looking statements in relation to holding, purchasing or selling securities or other financial products or instruments. The Hong Kong and China Gas does not undertake any obligation to publicly release the result of any revisions to these forward looking statements to reflect events or circumstances after the date hereof or the occurrence of unanticipated events. Past performance cannot be relied on as a guide for future performance.