



煤氣
Towngas

100TH
ANNIVERSARY

2022 Interim Results

19 August 2022

Geopolitical Tensions



Increasing Importance of Energy Self-sufficiency

Fluctuation in Fuel Prices



Mitigate The Impact of Price Fluctuation

Smart Energy




Carbon Neutrality Driving The Development of Smart Energy Platform

2022 Interim Business Highlights




Hong Kong Gas Business

Total Gas Sales Volume

 **1%**

Customers

 **10,000**


Tariff increase 4.4%
on 1 Aug

Stable & Resilient




Mainland Utility Business


Total Gas Sales Volume

20.7 billion m³  **2%** yoy

City Gas

16.1 billion m³  **1%** yoy

City Gas Projects

309  **5** projects 1H 2022

Customers

36 million  **960,000** 1H 2022

Dollar Margin Under Pressure



Renewable Business

Accumulative

47 Zero Carbon Industrial Parks

0.78 GW Contracted

0.38 GW Under construction & Grid-connected

From Zero to One



Extended Businesses

Bauhinia of Gas Appliances (Mainland)

 **24%**

Insurance (Mainland)

 **23%**

Revenue (HKD)


Mainland: **2.4** billion
Hong Kong: **0.9** billion

Restructuring

From City-gas to Integrated Energy

 **Mainland**
Residential+C&I
36 million customers



 **Hong Kong**
Residential+C&I
2 million customers

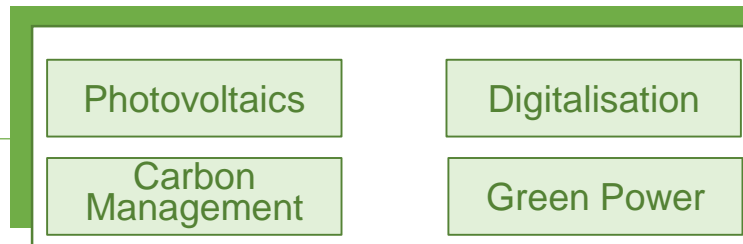


38 million customers

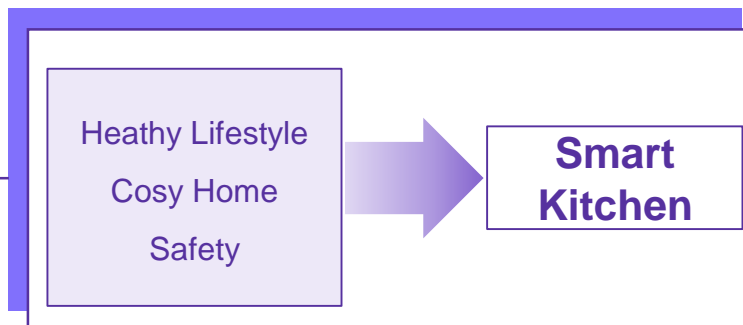
**“Gas+”
Heating**



**Renewable
Energy**



**Extended
Business**



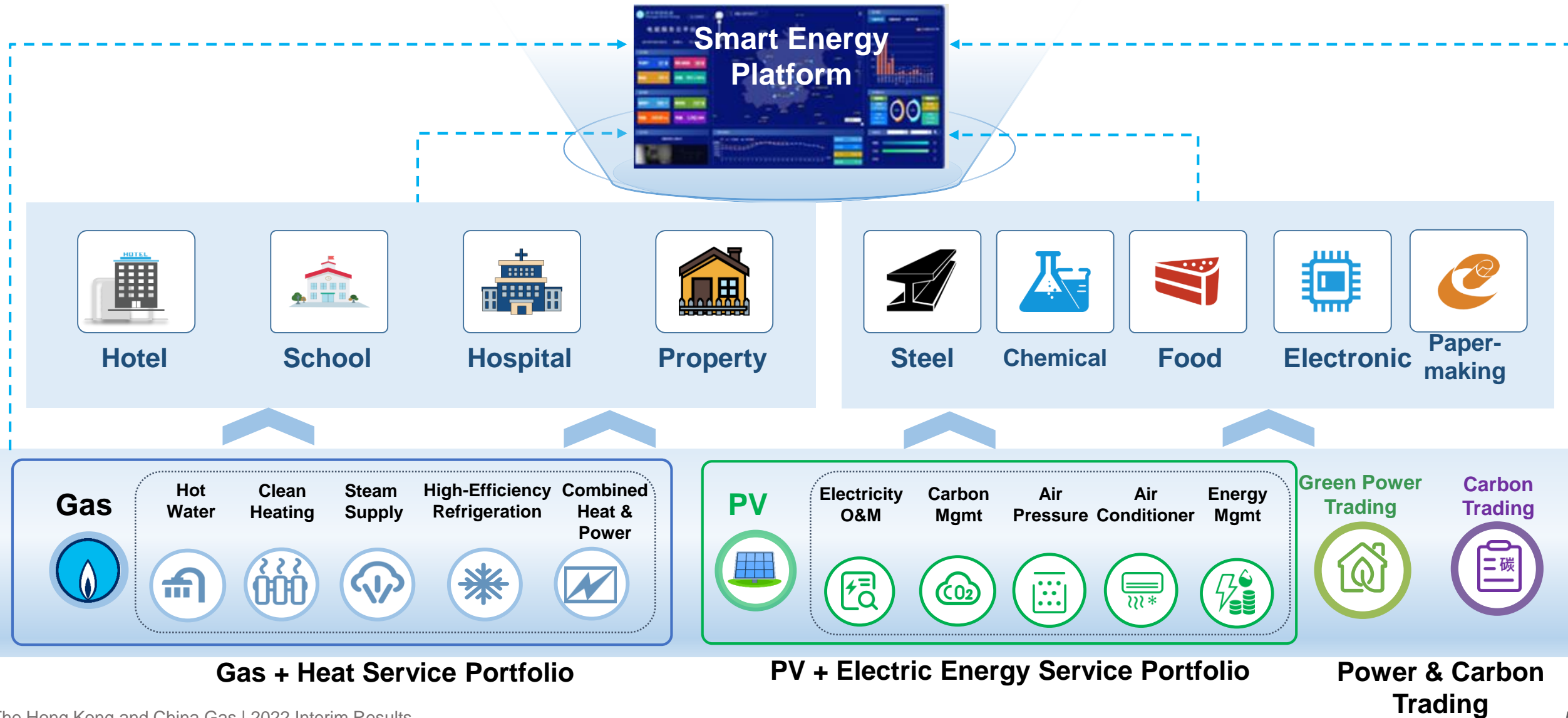
**Smart
Energy**

**Extended
Business**

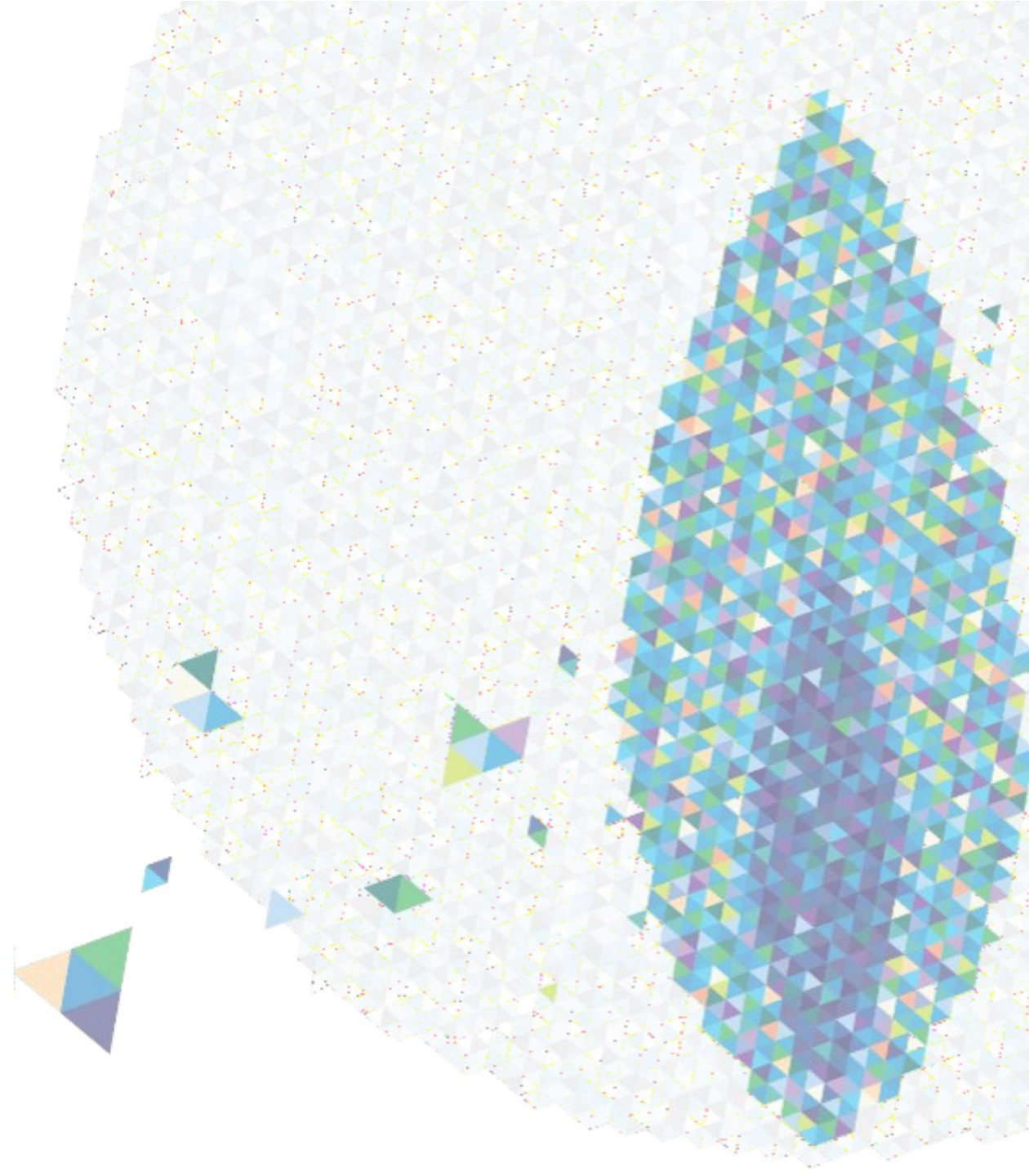
ENERGY EVOLUTION

Customer-centric Solutions For All Commercial & Industrial Scenarios

Over 400,000 Demands from C&I Customers



ESG



Enhance Performance and Management



Create value for stakeholders by **enhancing its sustainability strategy**



Committed to become **carbon neutral by 2050**, and progressively reduce GHG emission from 1.5 M tonnes (2021)



F->B

S&P Global

34->**51**
(Upgraded)



2022 Newly Joined International Organizations / Initiatives



MGP Signatory



TCFD Supporter

Major Awards and Recognitions



“**Excellence in Practice Award**”
Association for Talent Development



“**GHG Emissions Verification**”
(according to ISO 14064-1:2018)
British Standards Institution



“**Commitment to Net-Zero Certificate**”
Hong Kong Quality Assurance Agency

AGENDA

Financial Highlights

P.9

Business Review

▪ Utility Businesses

- Hong Kong Gas Business
- Mainland Gas Business
- Water and Environmental Business

P.16

P.22

P.29

▪ Smart Energy

- “Gas+” Heating
- Renewable Energy

P.31

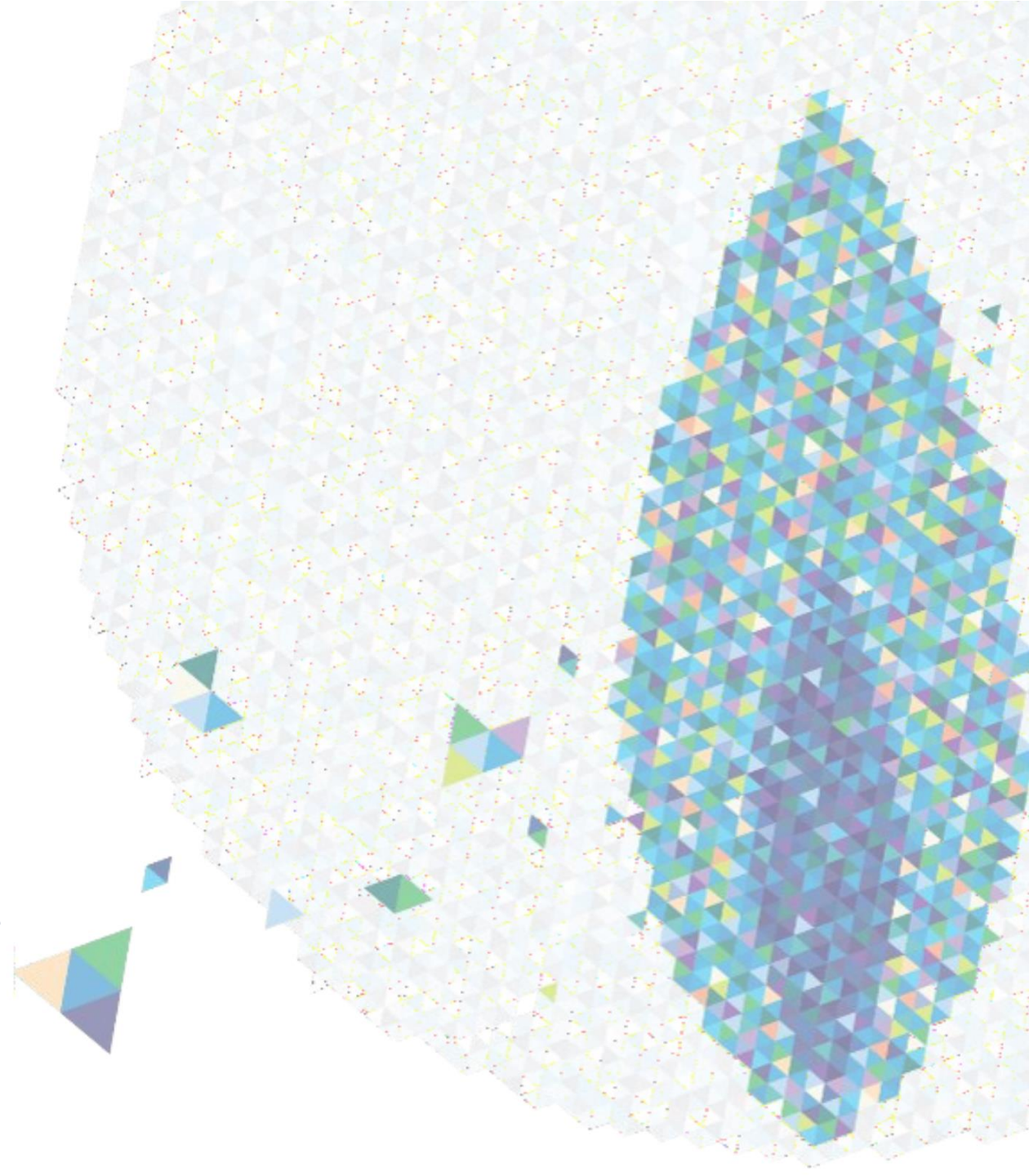
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▪ Extended Businesses

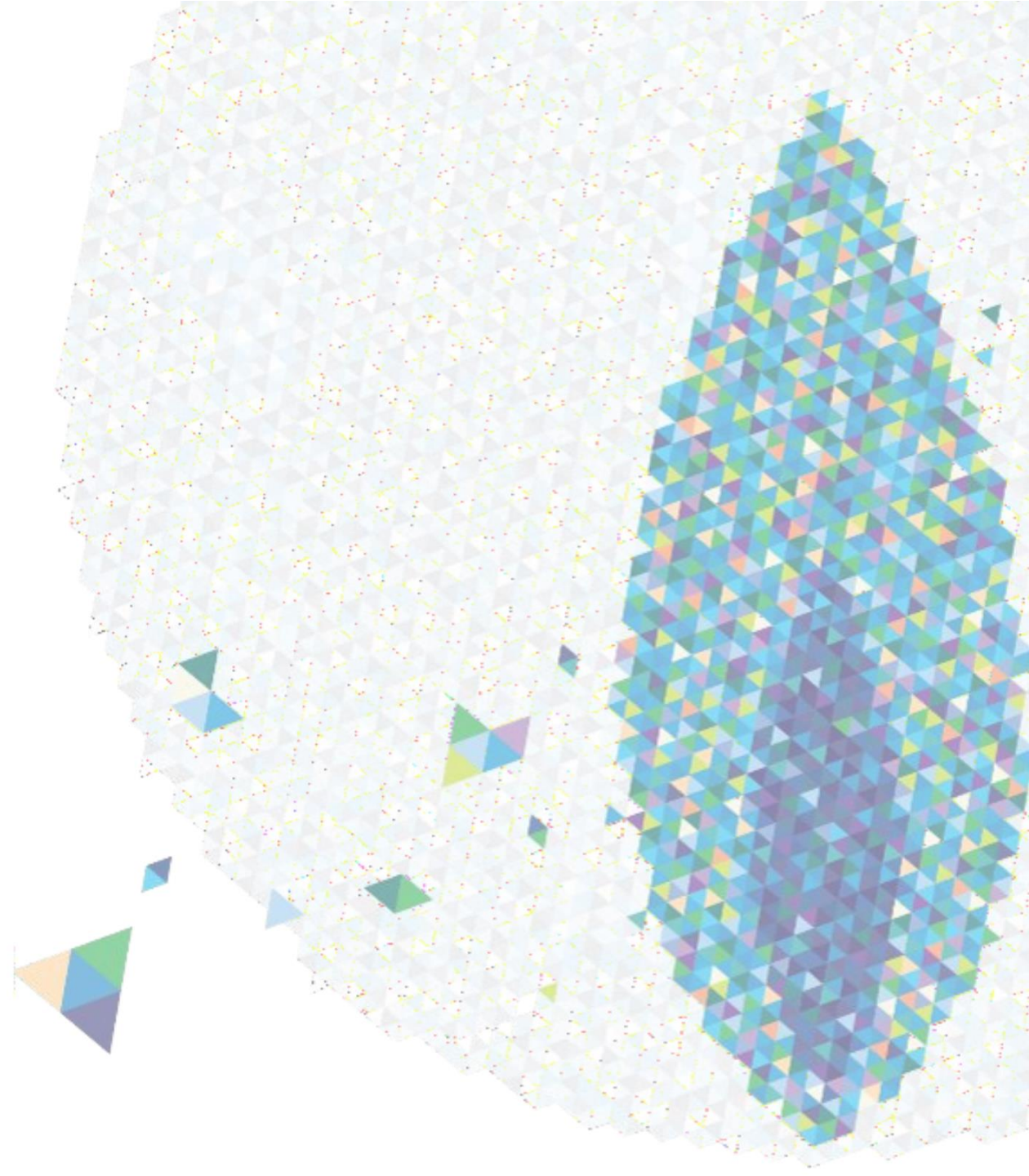
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Business Guidance

P.48



Financial Highlights



Financial Highlights – Operating Profit After Tax



HK\$ 1.82 billion

↓ 1%

Decreasing appliance sales
due to Covid 19



HK\$ 1.49 billion

↓ 38%

Tightened gas margin due to hike
in gas cost



HK\$ 87 million

↓ 44%

Coal-chemical sales margin
dropped significantly due to high
feedstock cost

Operating Profit After Tax: HK\$3.4 billion ↓ 23%

Operating Profit after Tax

(Unit: HK\$ million)		1H 2022	1H 2021	Changes
Hong Kong Gas Business		1,819	1,836	↓ 1%
Mainland Utility Business		1,489	2,403	↓ 38%
	0003.HK	941	1,738	↓ 46%
	1083.HK	548	665	↓ 18%
Other Business		87	154	↓ 44%
Operating Profit after Tax		3,395	4,393	↓ 23%

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



(Unit: HK\$ million)	1H 2022	1H 2021	Changes
Revenue	29,721	24,728	↑ 20%
Operating Profit after Tax	3,395	4,393	↓ 23%
Net Corporate Financial Expenses	(334)	(58)	-
Fair Value Changes	316	-	-
One-off Impairment	-	(135)	-
IFC Revaluation Change	(62)	-	-
Profit Attributable to Shareholders	3,315	4,200	↓ 21%
Basic Earnings Per Share (HK Cents)	17.8	22.5	↓ 21%
Dividends Per Share (HK Cents)	12	12	-
Interest Coverage Ratio	8.8x	11.8x	-

FY2022 Interim Results – Towngas Smart Energy (1083.HK)



(Unit: HK\$ million)	1H 2022	1H 2021	Changes
Revenue			
▪ Piped Gas & Energy Sales	8,637	6,514	↑ 33%
▪ Connection Fees	1,194	904	↑ 32%
▪ Extended Businesses	329	355	↓ 7%
	10,160	7,773	↑ 31%
Operating Profit after Tax	832	975	↓ 15%
Net Corporate Financial Expenses	(312)	(197)	↑ 58%
Fair Value Changes	522	-	-
Profit Attributable to Shareholders	1,042	778	↑ 34%
Basic Earnings Per Share (HK Cents)	33.04	26.21	↑ 26%
Interest Coverage Ratio	6.1x	7.8x	-

(Unit: HK\$ billion)	30 Jun 2022	31 Dec 2021
Total Assets	165.0	168.1
Net Assets	78.1	81.8
Cash & Bank Balances	10.2	10.6
Total Borrowings	57.7	55.1
Net Gearing Ratio	37.8%	35.2%

Credit Rating:

MOODY'S : **A1**

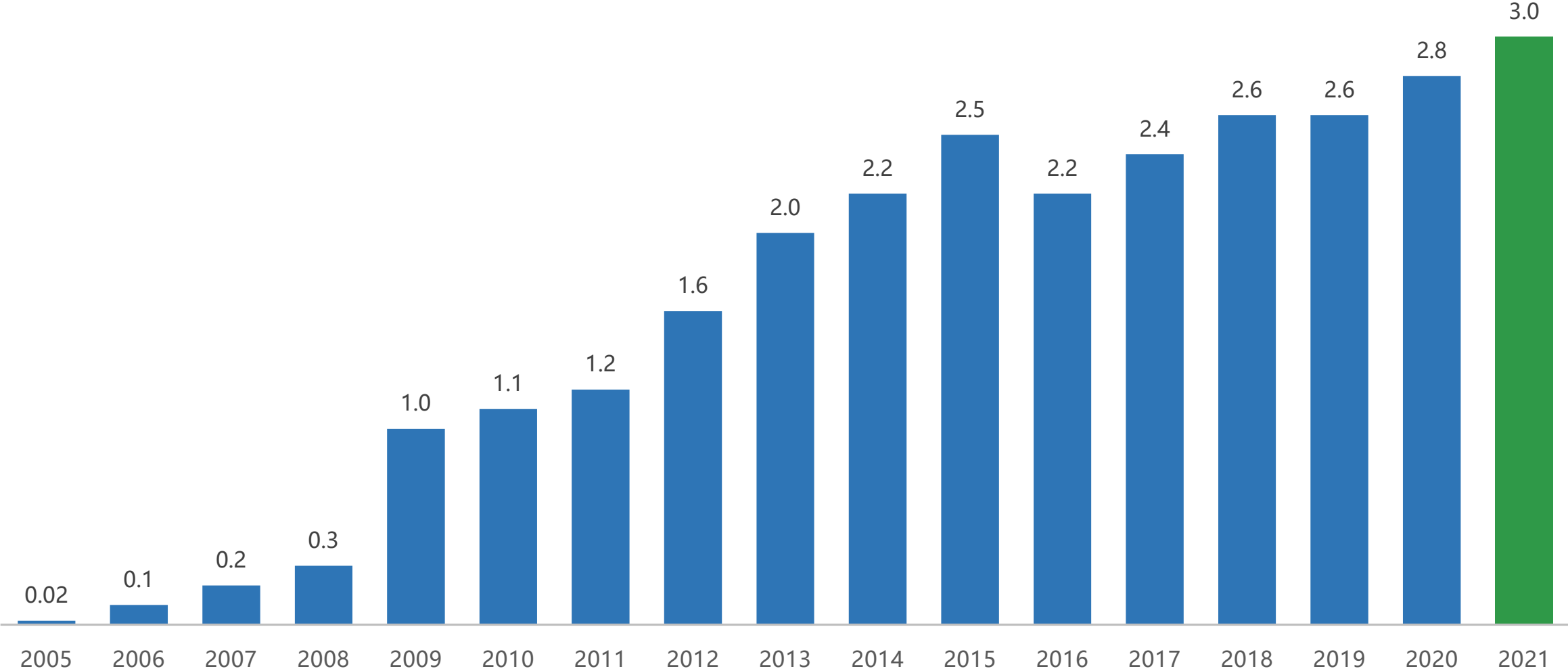
S&P Global
Ratings : **A-**

Remarkable Joint Venture Dividend

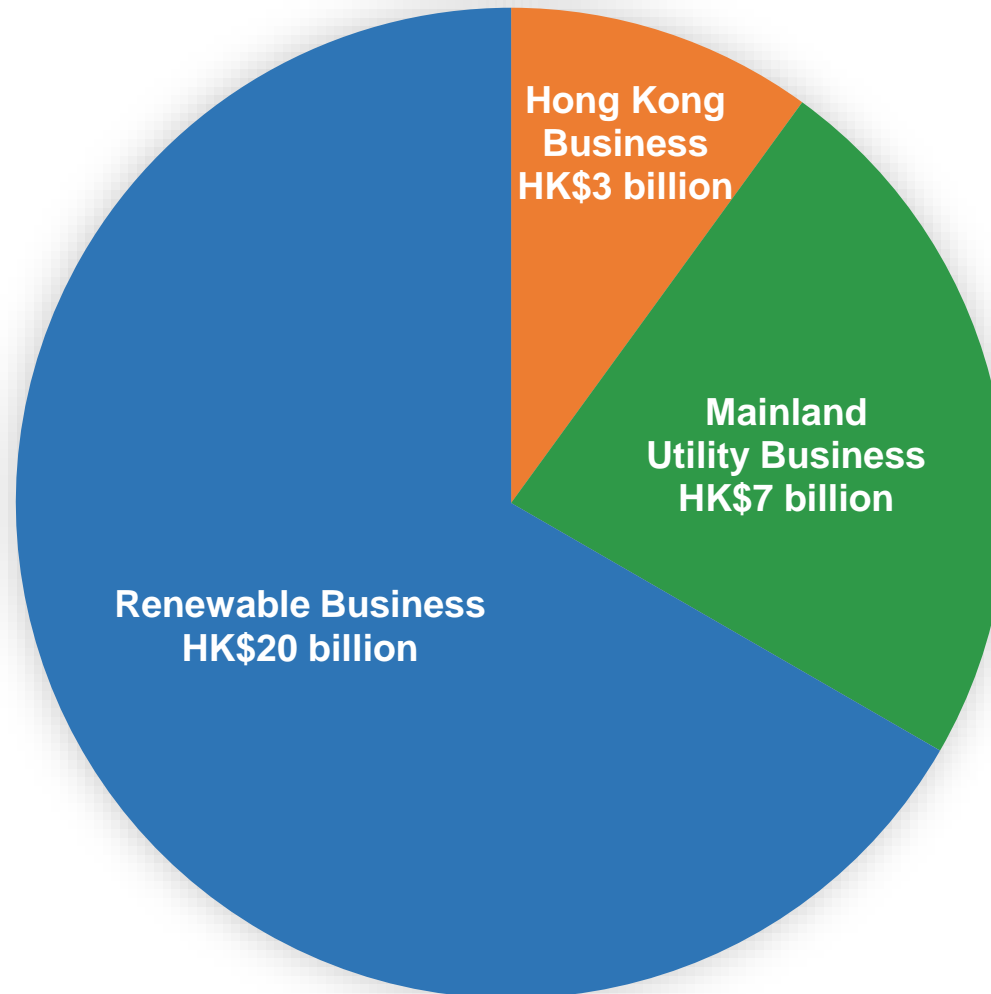


Cumulative Total=HK\$28billion

(Unit: HK\$ billion)

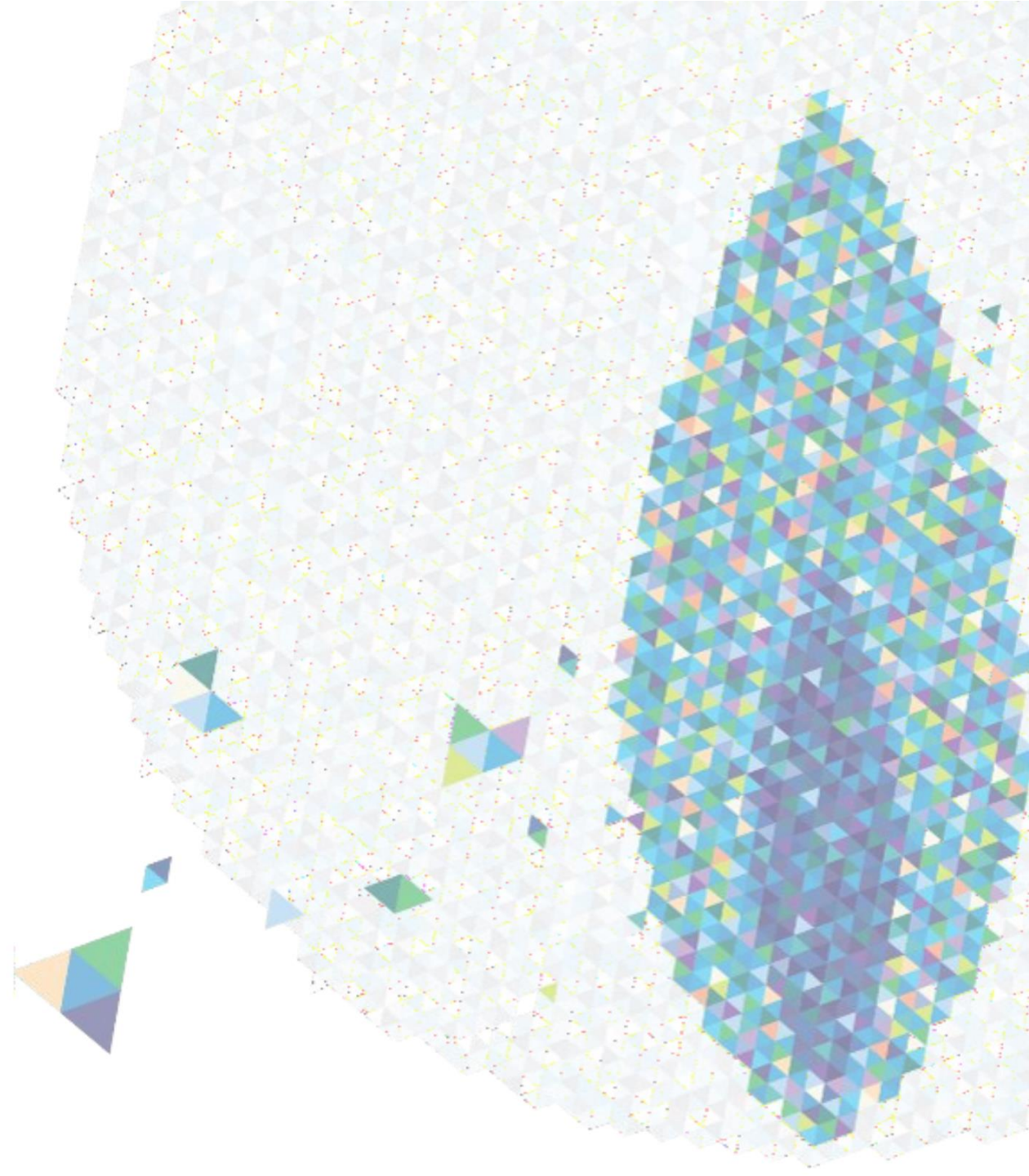


Project Investment* In The Next Three Years= HK\$30 billion



*Note: Including Hong Kong and China Gas and Towngas Smart Energy
The Hong Kong and China Gas | 2022 Interim Results

HONG KONG GAS BUSINESS





Gas Volume
+1%
14,900TJ
(425M m³ NG eqv.)



Gas Supply Reliability
99.99%



Pipeline Network Coverage
86%



Customers
+10,200
Up to 1.97mn



Household Penetration Rate
74%



ESG
The Cleanest Fossil Fuel

(<5% of Hong Kong's total CO2 emission)



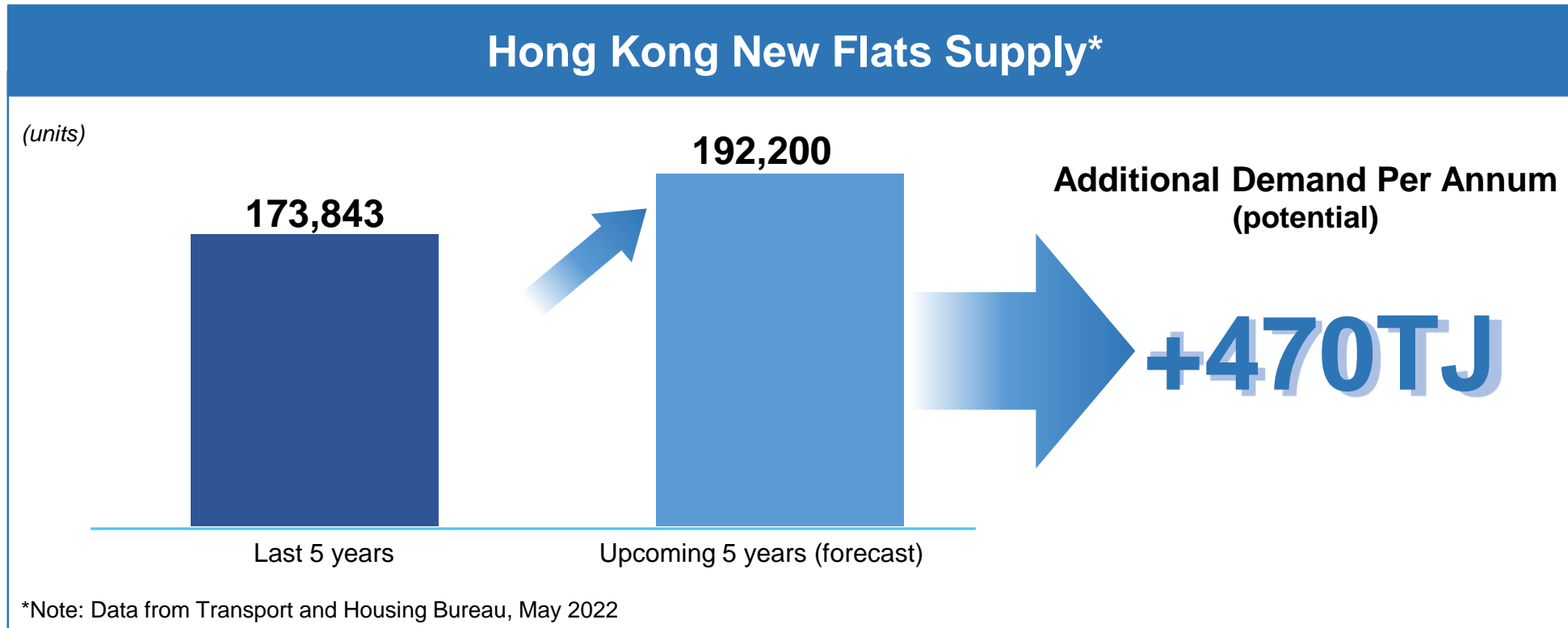


- Effective from **1st August 2022**
- Raise its basic tariff by **1.15 cents per MJ, increase 4.4%**
- Annual revenue **increase of HK\$320 million**



- Around **50,000 beneficiaries** of Towngas' various concession schemes will continue to enjoy the discount.

- **New government determined to increase housing supply**



Commercial & Industrial Gas Sales Growth



Target Users		1H 2022	After 2026 Increase per annum
Gas Cooling/ Heating Applications	Ocean Park, Towngas Telecom, airport and North District Hospital	140TJ	300 TJ
Diesel Replacement Projects	Hospital, food production plant and laundry	10TJ	450 TJ
New Projects	Hotel, hospital, crematorium and Maxim's new food processing plant	30TJ	440 TJ
Hydrogen Energy Projects	Franchised bus companies	-	120 TJ
Indoor Air Quality (Dehumidification)	Hotels, hospitals and office	5TJ	50 TJ
Total		185TJ	1,360TJ ↑



H Zentre

- A new version of desiccant dehumidification system equipped with solar collectors has been in use
- Provides a saving of 7-10% in cooling energy
- An additional 5% saving through the utilisation of solar energy
- Received the “Innovative Energy Project of the Year” award from the Association of Energy Engineers in the United States



Water World Ocean Park

- Hot water, dehumidification and cooling systems to maintain a comfortable indoor environment



Nethersole Hospital

- Landfill gas 1MW CHP* system
- Received the “Regional Energy Project of the Year” award from the Association of Energy Engineers in the United States



North District Hospital

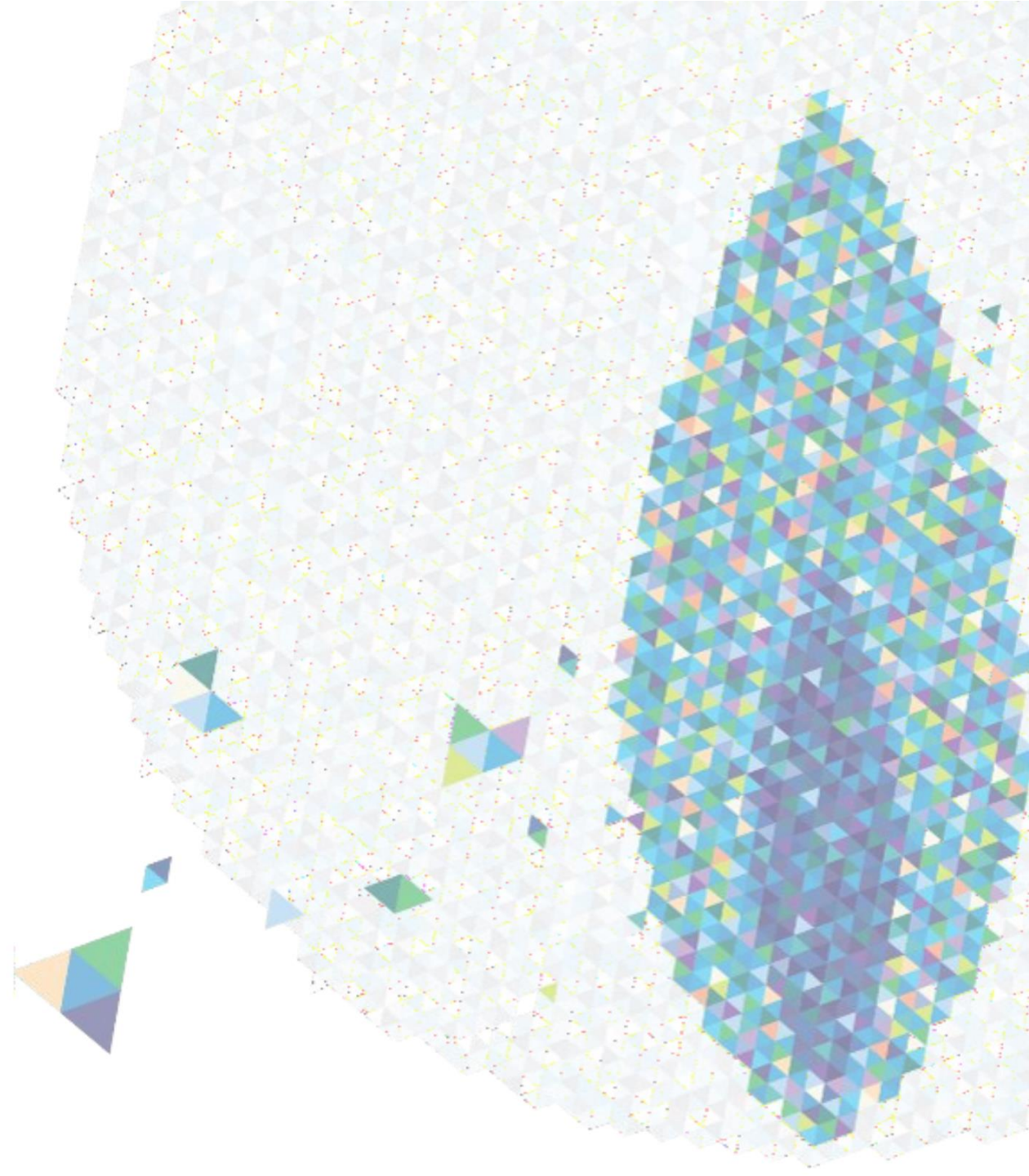
- Landfill gas 1.5 MW CHP* system
- Planned to go into service in 2026

Maxim's Food Factory

- Energy from waste heat at Tai Po Gas Plant
- Dehumidification in food production



MAINLAND GAS BUSINESS




Steady Growth in Operating Results Amid Pandemic




Total Volume of Gas Sales*

Total:

20.7 billion m³  **2%**
vs 1H 2021

City-gas:

16.1 billion m³  **1%**
vs 1H 2021

City-gas Projects

309 projects

 **5** projects
1H 2022

Customers

36 million

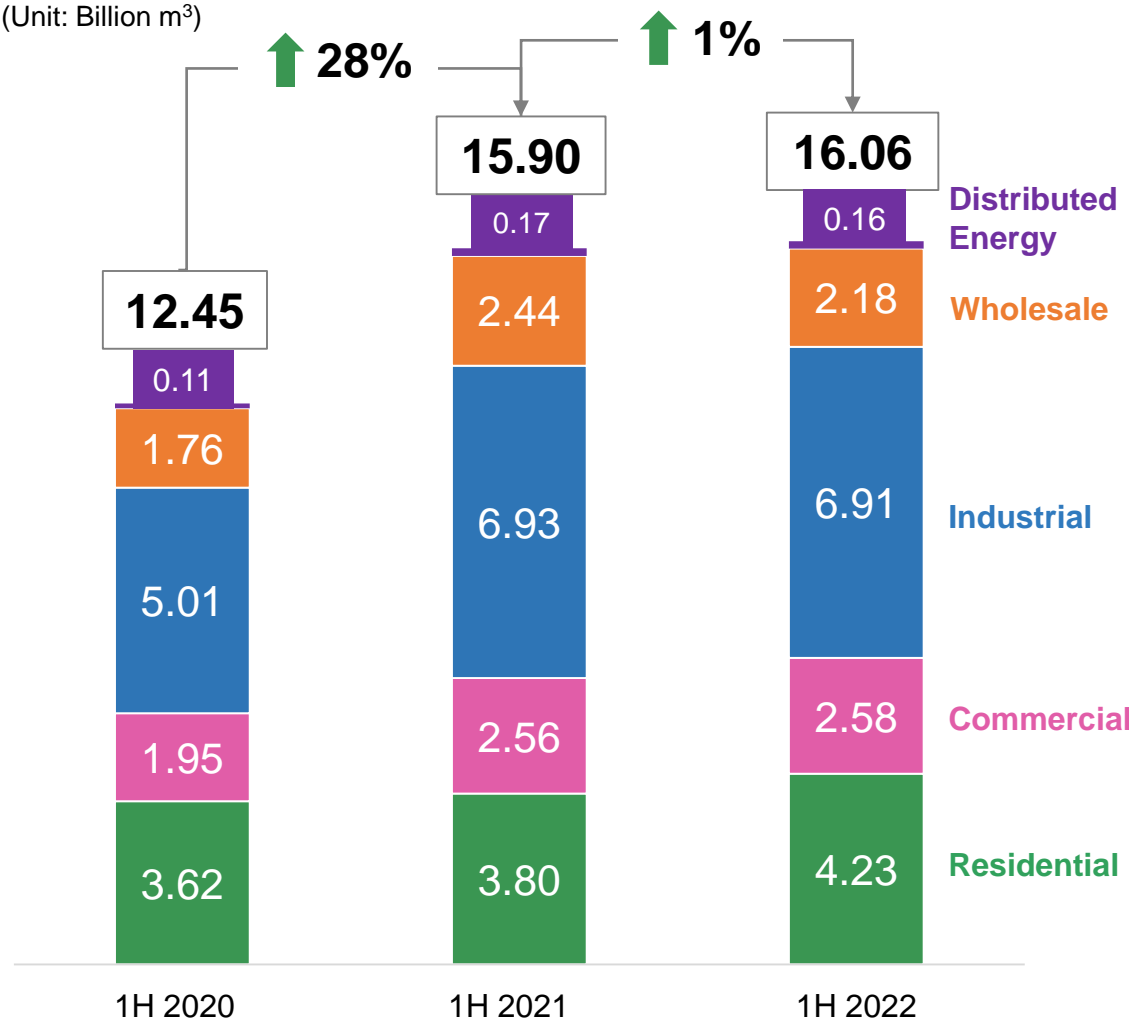
 **960,000**
1H 2022

Note: * Excluding Shanghai Gas

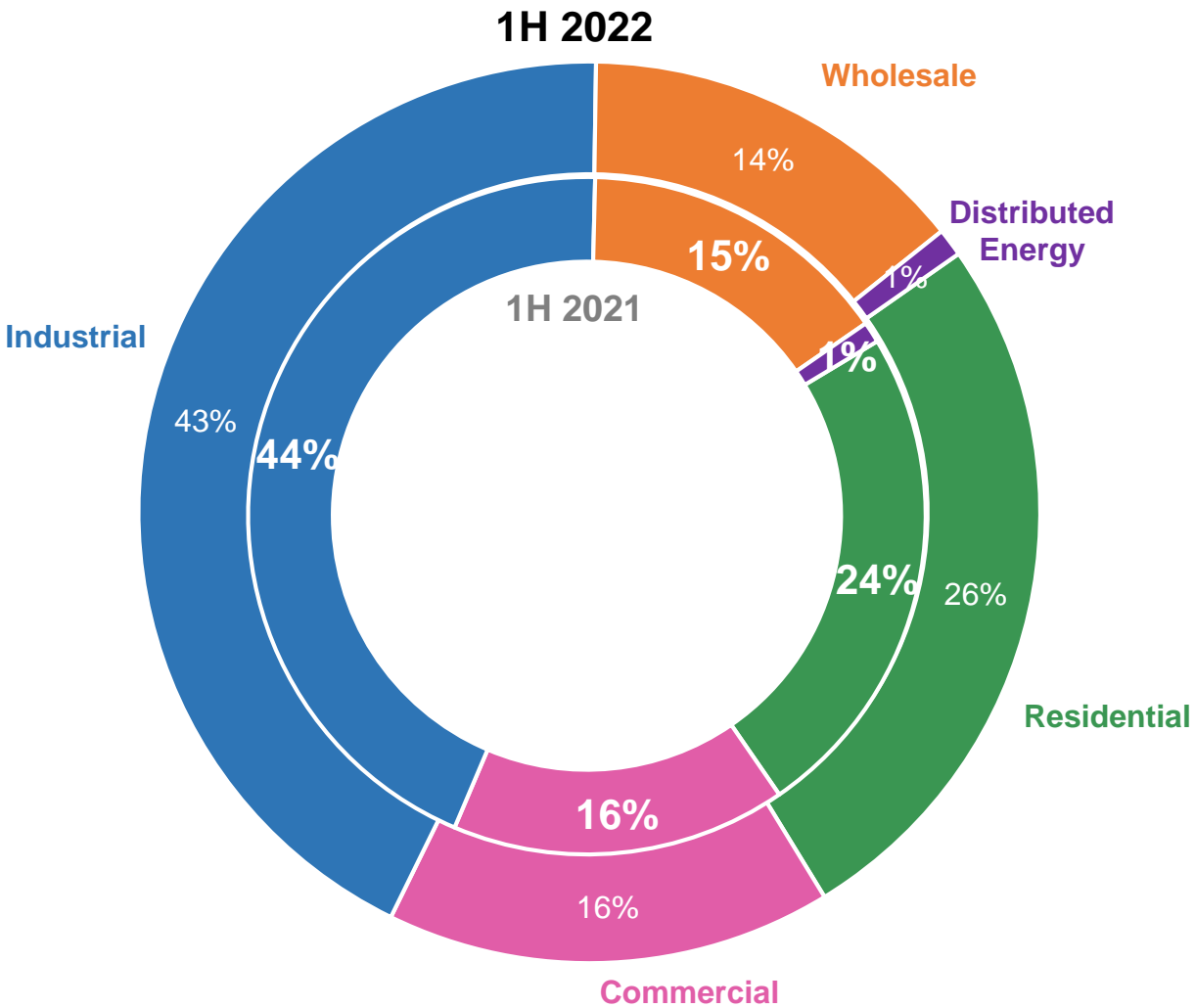
Steady Growth in Operating Results Amid Pandemic



Gas Sales Volume



Gas Sales Mix



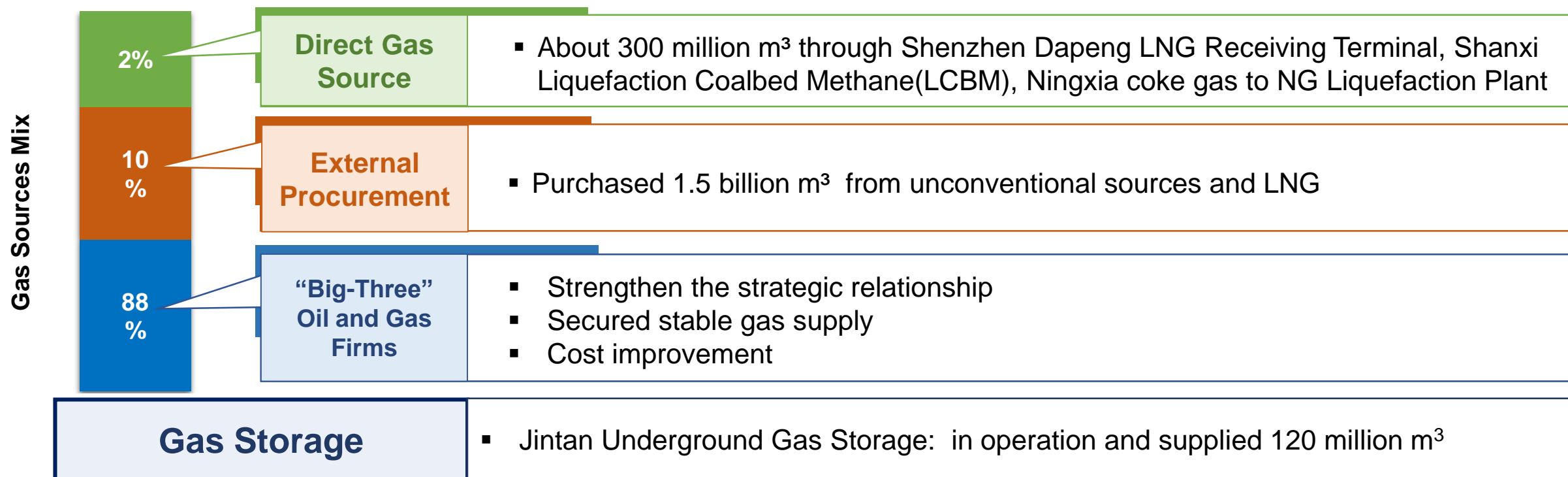
Selling Price, Cost and Unit Margin

(Unit: RMB/m ³)		1H 2022	1H 2021	Changes (%)
Selling Price	Residential	2.66	2.64	0.02(↑0.7%)
	Commercial	3.47	2.87	0.60(↑21%)
	Industrial	3.73	2.80	0.93(↑33%)
	Wholesale	3.18	2.28	0.90(↑39%)
Average Selling Price		3.38	2.71	0.67(↑25%)
Average Gas Cost		2.98	2.16	0.82(↑38%)
Unit Margin		0.40	0.55	-0.15(↓27%)

- Dollar margin under pressure in high residential-mix cities amid gas price surge
- For C&I, cost pass through or winter price extend into summer months
- For residential, working on tariff increase and government subsidy
- Gas cost improvement by sourcing third-party LNG gas supply outside the “Big-Three” oil and gas firms.

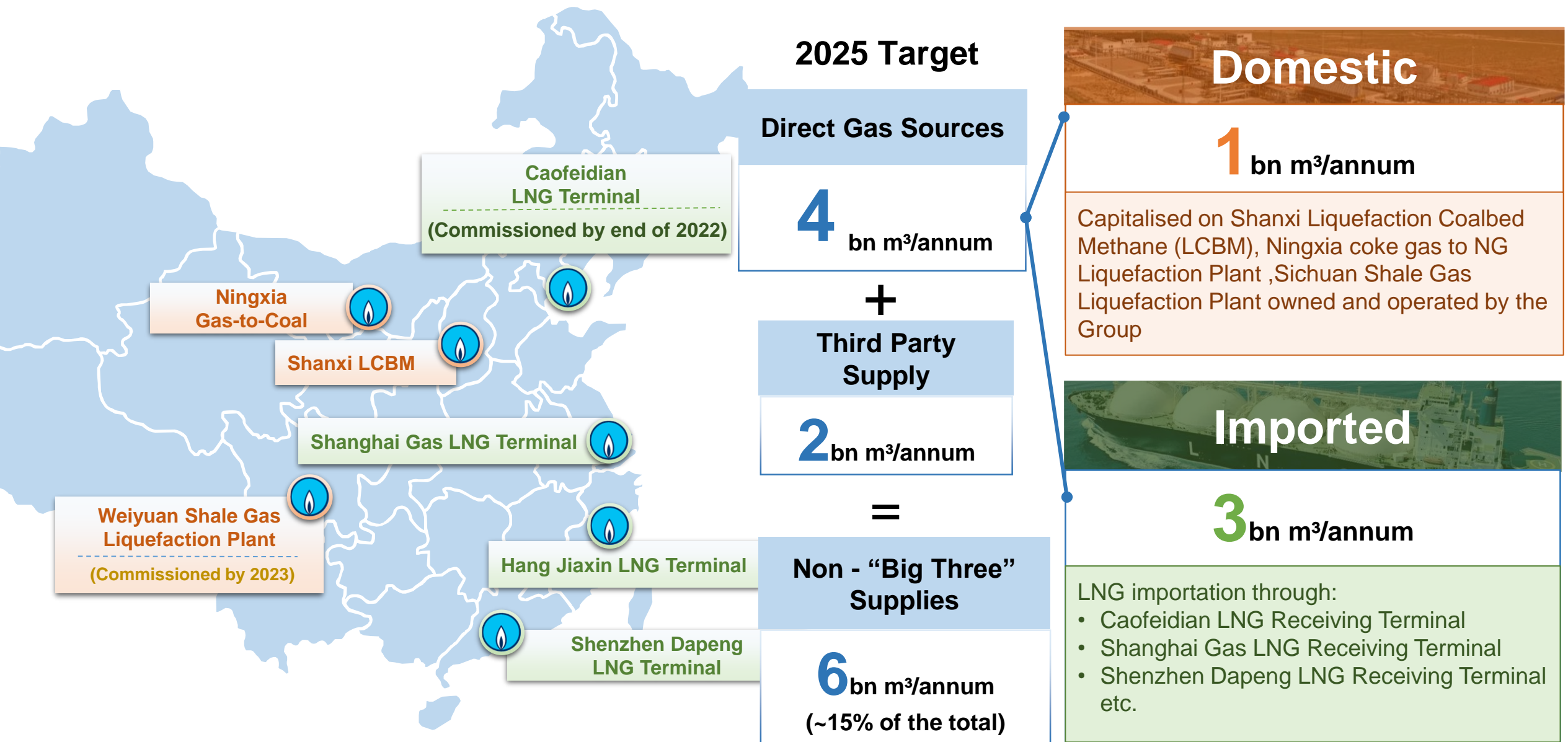
- Cost saving of RMB600 million resulted from non-“Big-Three” supply collaborated with HKCG Group on upstream development
- Enhance strategic cooperation to ensure stable gas supply and improve cost structure

In 1H 2022, HKCG Group:



- In 2H 2022, cooperation with Shanghai Gas on direct LNG import and LNG importation through Caofeidian LNG Receiving Terminal.

Upstream Strategy: Direct Gas Sources



- 1 ▪ Lockdown from COVID-19 severely affect the economy
- 2 ▪ Shanghai Gas 1H 2022 results fully consolidated by Shenergy
- 3 ▪ “Step 2” target to be completed by 2022 year end
- 4 ▪ Cooperation on direct LNG import via business partner Hangzhou Gas’ LNG Receiving Terminal
- 5 ▪ Strategic cooperation agreement with Shenergy been signed on full cooperation of natural gas supply and smart energy

First LNG shipment from Shanghai Gas unloaded at Hang Jiaxin LNG Terminal in July 2022

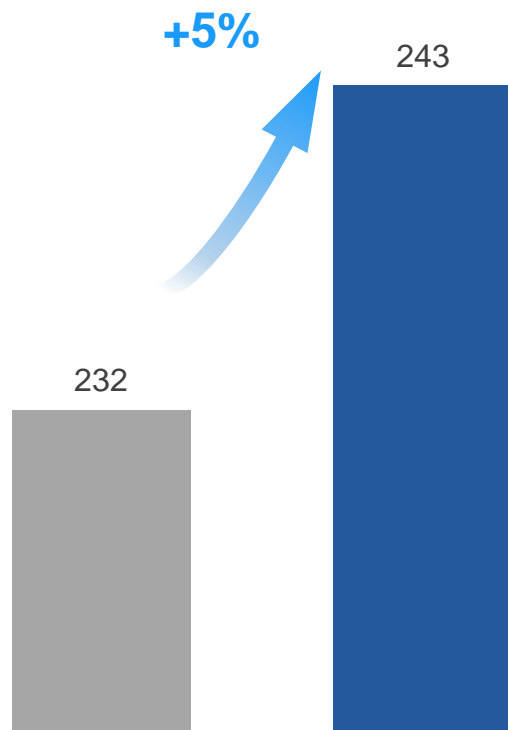


MAINLAND WATER & ENVIRONMENT



Net Profit in 1H 2022

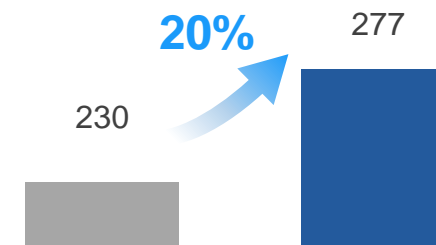
(Unit: HKD Million)



Business Volume in 1H 2022

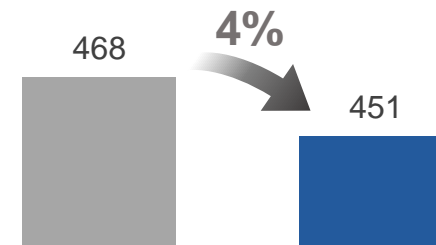
Wastewater Treatment

(Million Tonnes)



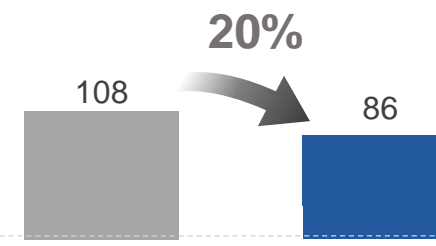
Water Sales

(Million Tonnes)



Food Waste Treatment

(Thousand Tonnes)



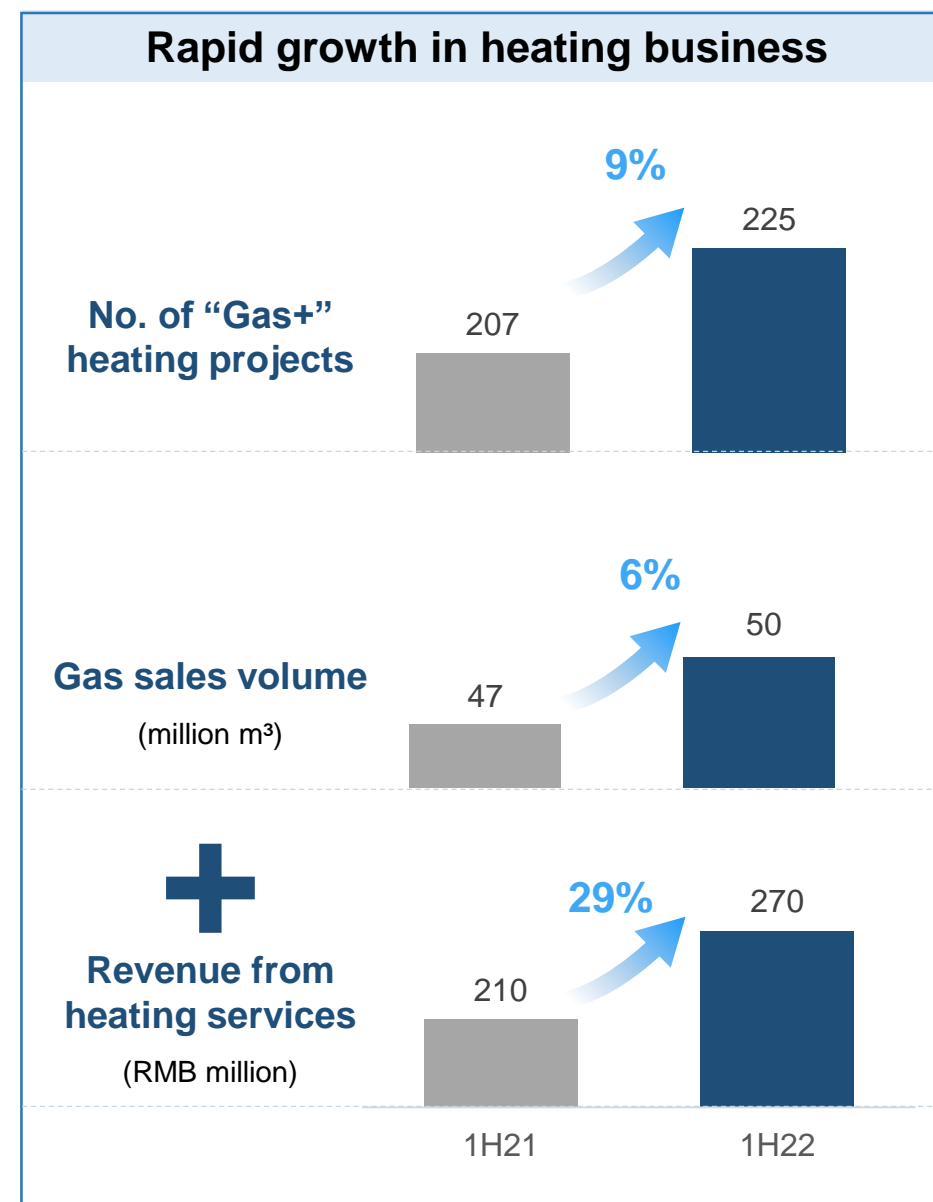
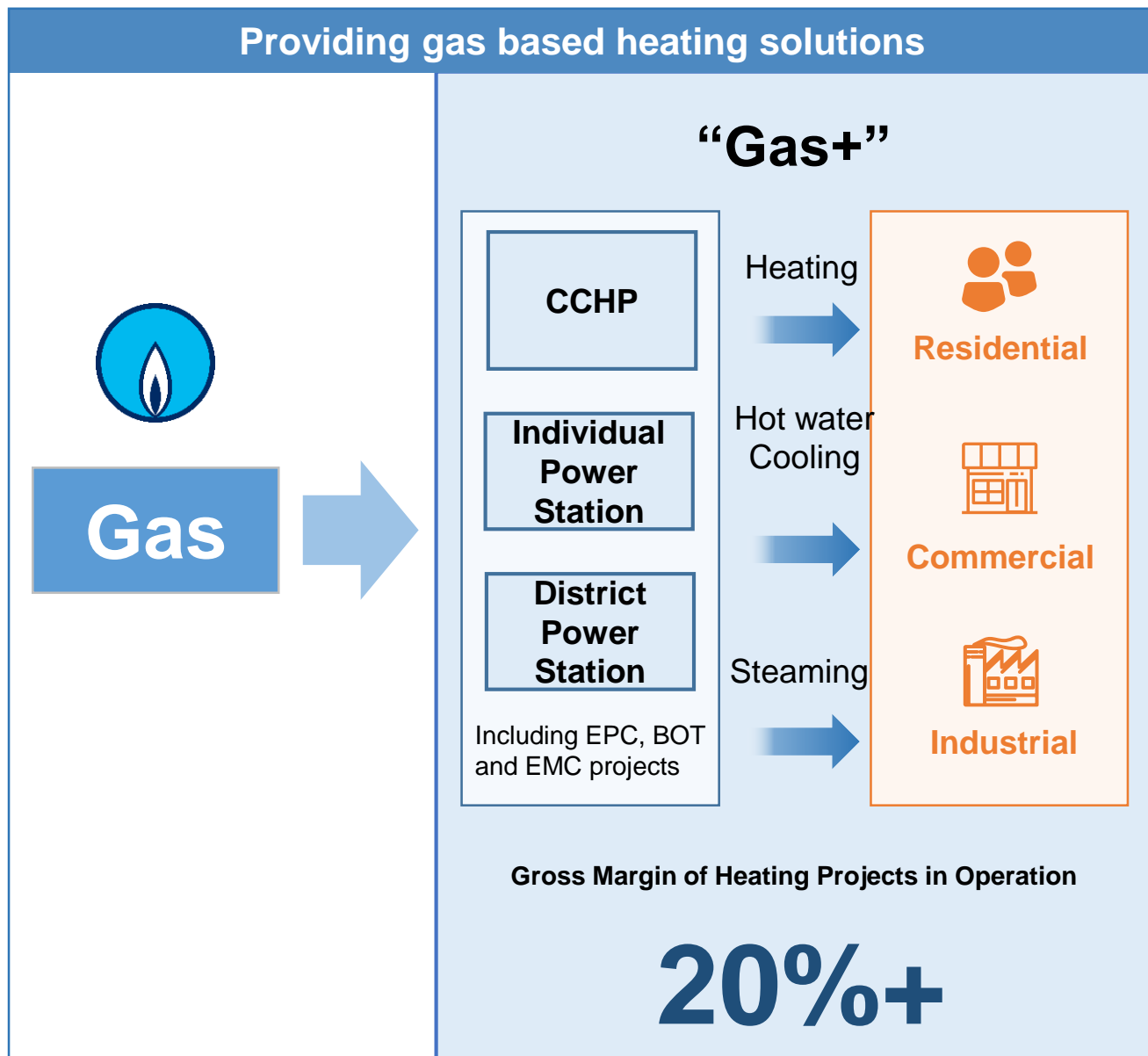
- Total 14 projects, including 4 projects under construction
- Foshan Water to be listed as an A-Shares by 4Q2022

SMART ENERGY

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



Promising Market for Heating Business



Industrial Parks – District Heating

Providing **safe, reliable, low-carbon and clean** energy infrastructure investment, construction and operation for the government and customers in industrial parks.

Integrated Energy Project in Jinan

- **Solution:** Gas Hot Water Boiler + Gas Direct-fired System + Chiller Plant System
- **Scale of Gas Volume:** 1mn m³/annum
- **Gross Profit:**
 - Gas: RMB 0.6mn/annum
 - Heating: RMB 2.76mn/annum



Commercial & Industrial – Integrated Energy Supply

Applying **various heating technologies** to provide **cooling, heating, steam and hot water** to commercial and industrial customers.

Integrated Commercial Project in Tsingtao

- **Solution:** Gas Boiler + Smart Control System
- **Scale of gas volume:** 0.5mn m³/annum
- **Gross Profit:**
 - Gas: RMB 0.3mn/annum
 - Heat: RMB 0.45mn/annum



Residential – Household Heating

Providing **one-stop heating service** for the needs of its residents.

Household Heating Project in Dalian

- **Solution:** Gas Air-sourcing Heat Pump + Gas Pot
- **Gas volume capacity:** 0.9mn m³/annum
- **Gross Profit:**
 - Gas: RMB 0.26mn/annum
 - Energy Service: RMB 2.11mn/annum



- Taking advantage of the favourable layout of regional integrated energy to develop PV + energy & carbon service business based on local conditions and the adoption of a balanced energy mix

Xuzhou Industrial Park

High Energy Consumption Chemical Industrial Park



- The annual supply of regional steam is about 1.3 million tonnes
- Over 50 industrial users in rubber, papermaking, chemical and other industries
- Cooperation with the government expanded to zero-carbon industrial parks
- Revenue: RMB 220 million/annum

Tongling Economic Development Zone

Material Deep Processing Industrial Park



- Cooperation with thermal power plants to provide district steam supply
- Expanded to centralised heating in Yi'an Economic Development Zone
- Cooperation with the government expanded to zero-carbon industrial park
- Revenue: RMB 20 million/annum

Lishui Industrial Park

High Energy Consumption Industrial Park

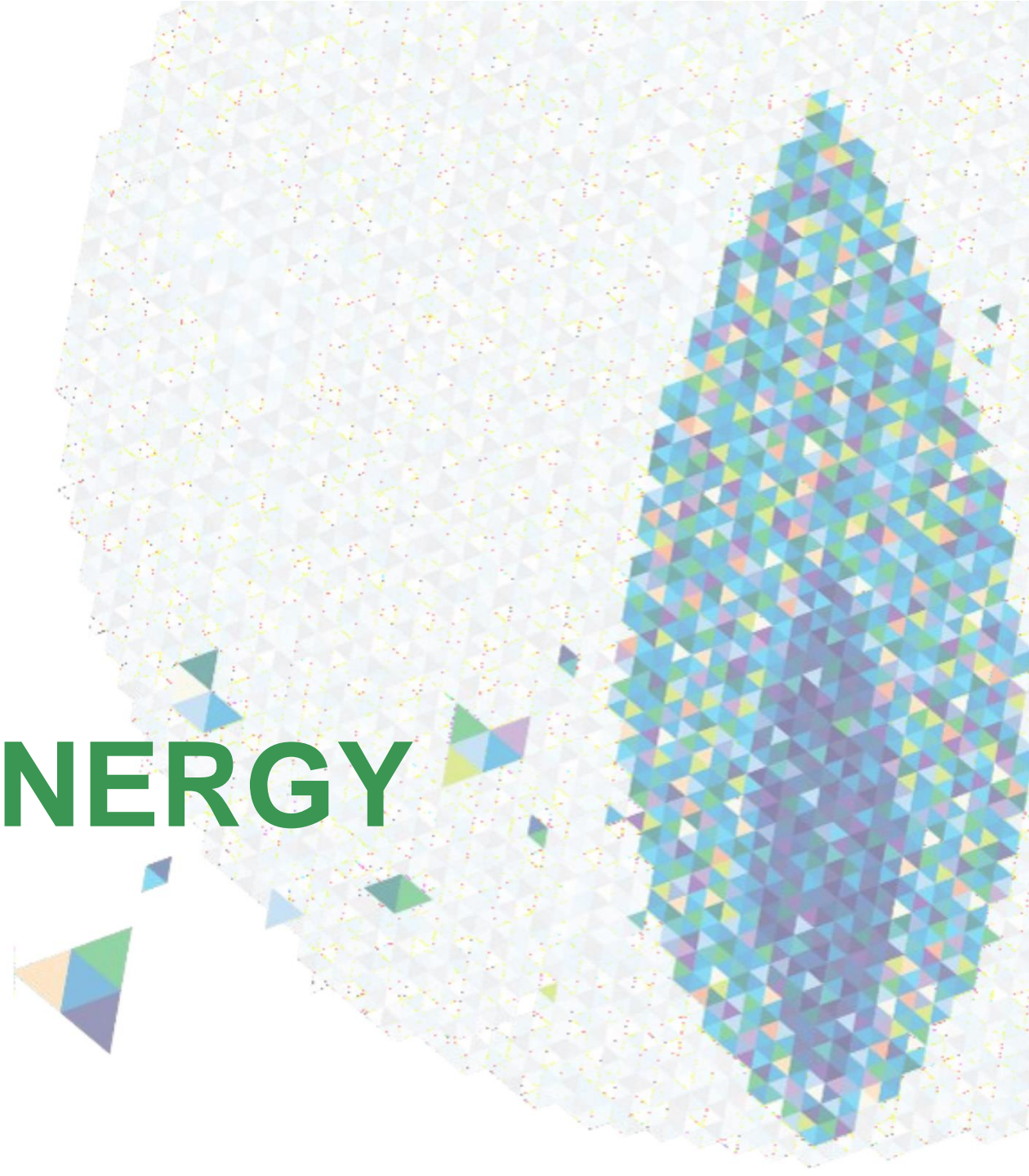


- Natural gas steam boiler with an annual steam supply of about 300,000 tonnes
- Planning to build biomass power generation and 16MW gas turbine
- Revenue: RMB 55 million/annum

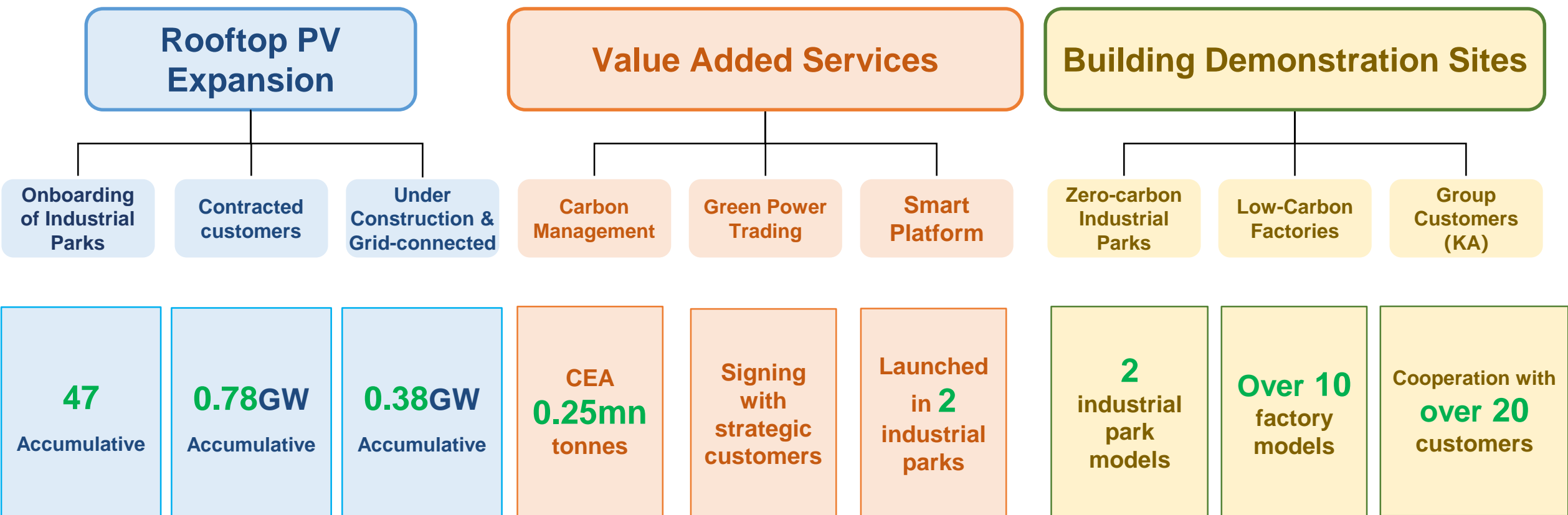
SMART ENERGY

- “GAS+” HEATING

- RENEWABLE ENERGY



- Swift onboarding of industrial parks, quick building of rooftop PV, strengthening the ability to provide energy and carbon services, creating demonstration projects and speedy replication and promotion



- Developing rooftop PV with our “zero-carbon industrial park” strategy has shown great efficiency with higher return, enabling us to catch up industrial leaders quickly



Expanding our business footprints in industrial parks

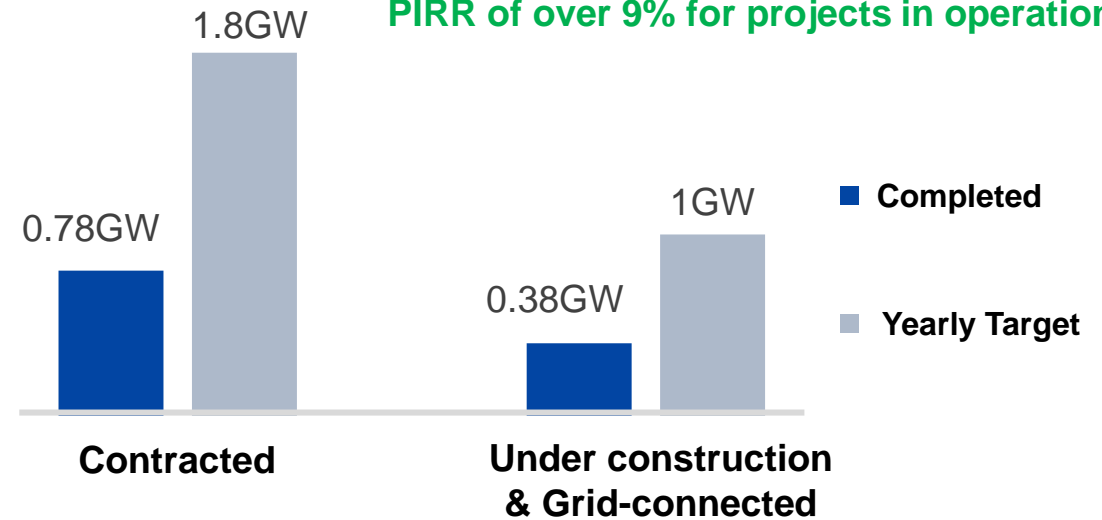
● **47** industrial parks established

● **45** industrial parks under development



Batch development of PV

PIRR of over 9% for projects in operation



Government Support

PV Synergy

Energy & Carbon Services

Demonstration & Replication

Smart Energy Platform Launched

- Operating in demonstration industrial parks and projects, providing digital smart services to meet the huge demands of PV, energy storage, charging, and energy & carbon management

Towngas - Tencent Partnership



Digital Smart Services

PV, Storage And Charging Management

Energy & Carbon (Including Energy-Saving) Management

VPP (Under Development)

Energy & Carbon Supply Chain, Financial Services (Planning)

Year 2025

Market Size
RMB
19 billion*

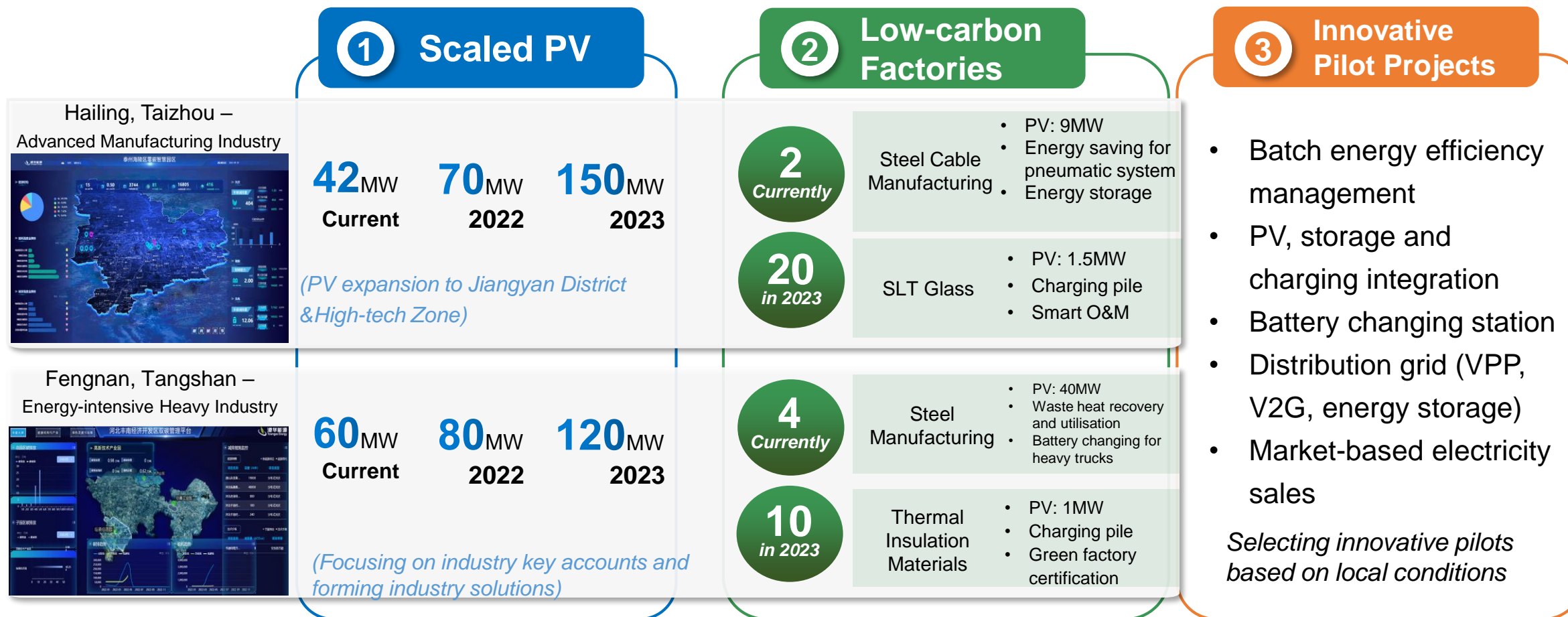
 **Targets**

- 2.5%** of market share
- 10,000** customers

*Industry size forecast for 2025 by a consulting agency

Building Zero-carbon Industrial Park Models

- Focusing on district carbon reduction planning, digital platform and large-scale rooftop PV as phase I, building low-carbon factory model at the same time for quick replication at Phase 2



Creating and Promoting Low-carbon Prototypes

- Building low-carbon prototypes and rapidly promoting them in each industrial park, allowing high returns on PV investment added by energy & carbon services

Guangzhou Xinhao Precision – Low-carbon Factory



Standard Low-carbon Program Replication and Promotion

- Low-carbon Solutions**
 - PV: 2MW+3MW (Phase II)
 - Air conditioning & energy saving for pneumatic system: ↓ 20%
 - Energy storage: 1MW
 - Digitalization & Carbon Management & Green Power Trading
- Carbon Emissions Reduction: 4,600 t/year**
- Revenue: RMB 5.2mn/annum**
- PIRR: 12%+**

Futian District Government – Low-carbon Building



Regional Development of Low-carbon Public Buildings

- Low-carbon Solutions (Single Building)**
 - PV, storage and charging integration
 - Energy saving
 - VPP
- The first near-zero carbon flexible VPP**
- Futian Public Building Complex (129 buildings)**

Changzhou Trina Solar – Smart Microgrid



Microgrid Demonstration Project In Jiangsu Province

- Low-carbon Solutions**
 - PV: 7MW
 - CCHP: Electricity 6.6MW, Cooling 6.4MW, Heating 3.2MW
 - PV storage and charging integration
- Carbon Emissions Reduction: 4,000 t/year**
- Revenue: RMB 30mn/annum**

Danyang Tiangong – Customer-side Energy Storage



Customer-side PV Power Storage Synergy Model

- Low-carbon Solutions**
 - PV: 10MW
 - Energy storage: 7MW
 - Energy Storage Cloud
 - Demand-side response
- Carbon Emissions Reduction: 6,000 t/year**
- Revenue: RMB 16mn/annum**

Professional, Energetic and Goal Oriented



Dr. John Qiu
Executive Director and
COO – Renewable
Business
Founding member of
Smart Energy



Mr. Liu Yanfang
General Manager
of Northern Region



Mr. Wu Gang
General Manager
of Eastern Region



Mr. Du Ye
General Manager of
Southern Region



Mr. Humphrey Ng
Senior Vice President
-Technology



Mr. Jason Zhang
Senior Vice President
-Strategy



Dr. Zhang Jingbai
Senior Vice President
-Investment & Carbon
Management



Mr. Zhao jie
Vice President
-Engineering



Mr. Deng Tao
Vice President
-Finance



Dr. Wallace Hu
Vice President
-Smart Platform



Mr. Feng Zehao
Assistant Vice President
-Human Resources



Mr. Wu Chunguang
Assistant Vice President
-GM Office



Mr. Zhou Jun
Executive Vice
President of
Towngas Energy
Academy

400+

Interprofessional
Talent

PV

Energy Storage

Digitization

Carbon
Management

Power
Trading

Energy
Efficiency
Management

- Providing integrated energy and carbon management services to industry leaders to enhance ESG, showing strong advantages and rapid growth in business

Sharp Increase In Demand

Emissions Control For Eight Sectors

International Initiatives To Reduce Carbon Emissions

Supply Chain Carbon Neutrality

Corporate ESG Ratings

One-stop Service With Nationwide Coverage

Cooperation with Industry Leaders

Provided comprehensive energy and carbon management services to more than 20 leading enterprises in eight major emission control industries, involving a potential PV installation scale of over 1GW and an energy consumption scale of over 10 billion kWh



Petrochemical



Chemical



Building Materials



Steel



Metal Products



Paper-making



Electricity



Aviation

Our Strengths

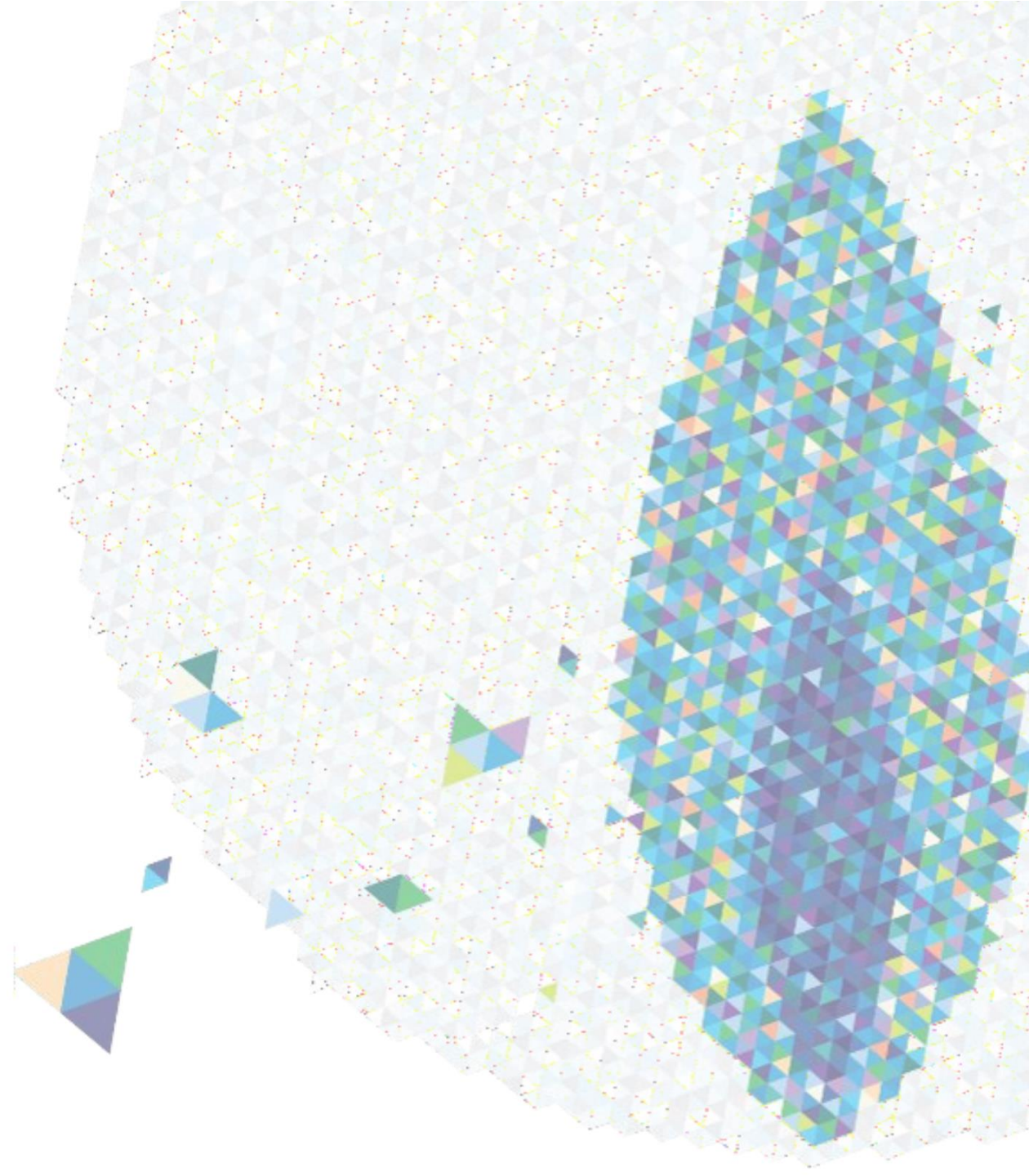
National Service Network



One-Stop Investment & Service Capabilities

- ✓ PV Investment, Construction, Smart O&M
- ✓ Energy & Carbon Monitoring and Platform
- ✓ Integrated Energy Supply
- ✓ Carbon Asset Services and Green Power Trading

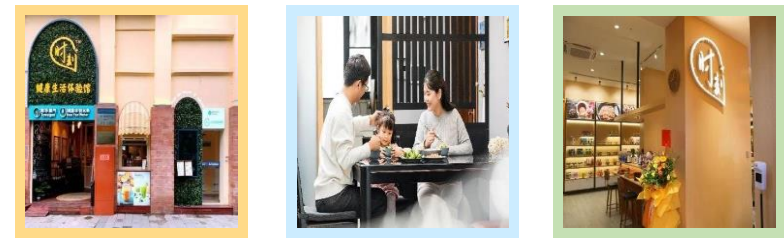
EXTENDED BUSINESS



Total Revenue from Extended Businesses: HKD3.3 billion



Hong Kong: HKD0.9 billion



Mainland: HKD2.4 billion

Extended Business Development Overview



HKD(Billion)	1H 2022	1H 2021	Changes	2022 Target	2021
Total	3.31	3.67	-10%	8.3	8.5
- Hong Kong	0.91	0.97	-6%	2.0	2.0
- Mainland	2.4	2.7	-11%	6.3	6.5
Healthy Lifestyle (including Gas Insurance)	0.2	0.1	100%	0.7	0.5
Cosy Home	0.7	0.6	17%	1.9	1.4
Home Safety (Including Gas Related Engineering)	1.5	2.0	-25%	3.7	4.6

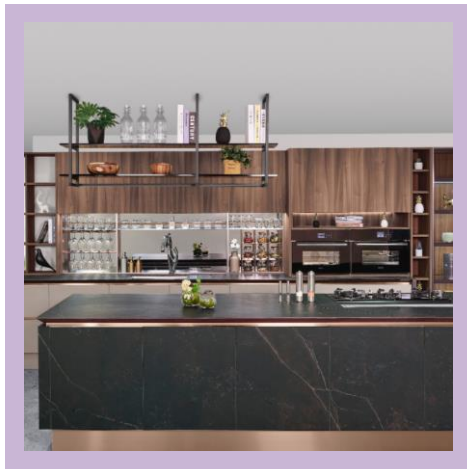
Revenue: HKD **0.9 billion**



**Appliance
Sales**

units

120,000



**Kitchen
Cabinets**

set

2,000



Towngas Fun

members

180,000



**Cooking
Class**

enrolments

2,000



**Cooking
Channel**

million views

14

Focusing on Smart Kitchen

Smart Kitchen

COSY HOME

Kitchen Cabinets,
Gas Appliances,
Heating, Water Purifiers

HOME SAFETY

Gas Safety Products &
Service Including Alarms
And Pipes

HOUSEHOLD INSURANCE

Gas Insurance,
Household Property
Insurance



Appliances + Water
Heater

≈**5,000**RMB/ Household



Kitchen Cabinets

≈**1 0,000**RMB/ Household



Household Heating
≈**20,000** RMB/
Household

HEALTHY LIFESTYLE

Healthy Food
Nutritious Food

Increase Customer Stickiness
Through High-frequency Reach

Deepen User Management Through Online And Offline
Though 50 Shikejia Stores And Door-to-door Services, Cover Community
Scenes

Low frequency

High frequency

BUSINESS GUIDANCE





Hong Kong Gas Business

- Gas Sales Volume:
1.2% growth
- Number of customers increased by **25,000**
- Tariff adjustment brings additional after-tax gain of **HK\$110 million**
- Leading Hong Kong become Hydrogen era



Mainland Utility Business

- Gas Sales Volume:
6-8% growth
(Excluding Shanghai Gas)
- Total Number of new connections: **2 million**
- Dollar Margin:
RMB0.42-0.43/m³



Renewable Energy

- **80** established zero-carbon industrial parks
- Grid-connected industrial distributed PV: **1GW**
(including under construction)
Contracted customers: **1.8GW**
- Significant contribution to net profit growth starting in 2023



Extended Businesses

- Total Revenue: **HK\$8.3 billion**
- **Hong Kong:**
HK\$2 billion
- **Mainland:**
HK\$6.3 billion



煤氣
Towngas



THANK YOU

Disclaimer



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