

# **FY2022 Interim Results**

**16 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**



## City-gas

Gas Sales Volume: **7.54** billion m<sup>3</sup>  
↑ **4%** vs 1H 2021

Total No. of City-gas Project: **178**  
↑ **2** projects 1H 2022

Total Number of Customers: **15.5** million  
↑ **410,000** 1H 2022

**Dollar Margin  
Rebound Steadily**



## Renewable Energy

Accumulative

↑ **47** Zero Carbon Industrial Parks


↑ **0.78** GW Contracted

↑ **0.38** GW Under construction & Grid-connected

**From Zero to One**

# From City-gas to Integrated Energy

## Gas Supply

 **Residential**  
15.32 million customers



 **C&I**  
180,000 customers



**15.5 million customers**

## Smart Energy

**“Gas+” Heating**

Residential    C&I    District

**Renewable Energy**

Photovoltaics    Digitalisation  
Carbon Management    Green Power

**ENERGY EVOLUTION**

# Customer-centric Solutions For All Commercial & Industrial Scenarios

Over 400,000\* Demands from C&I Customers



**Gas**

- Hot Water
- Clean Heating
- Steam Supply
- High-Efficiency Refrigeration
- Combined Heat & Power

**Gas + Heat Service Portfolio**

**PV**

- Electricity O&M
- Carbon Mgmt
- Air Pressure
- Air Conditioner
- Energy Mgmt

**PV + Electric Energy Service Portfolio**

- Green Power Trading
- Carbon Trading

**Power & Carbon Trading**

\*Including Hong Kong and China Gas  
Towngas Smart Energy Limited | FY2022 Interim Results

# ESG

## Significant Improvement for Two Ratings

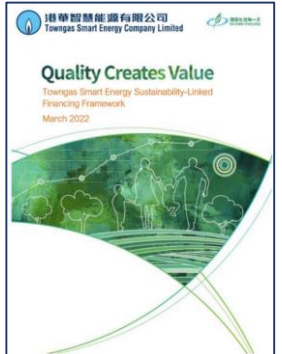
**SUSTAINALYTICS**  
a Morningstar company

36.4 (High Risk) > **29.1 (Medium Risk)**

**S&P Global**  
Ratings

19 > **43**

Rating improved on 10 Aug, became the **first city gas enterprise** who was rated as **medium risk**



**Industry leader** in issuing its **first** Sustainability-Linked Bond:

- Raised Amount: **US\$200 million**;
- Tenor: 5 Years



Reported **physical and transitional risk** with reference to **TCFD** in latest ESG Report

**Improved disclosure in Health and Safety** and the Group's stringent safety management system also covers third-party contractors

**Board Gender Diversified**

**Elevated ESG Committee to Board Level**

Voluntary compliance before law enforcement and participated in industry alliance

香港交易所

中国油气企业甲烷控排联盟  
CHINA OIL AND GAS METHANE ALLIANCE

**Partnered with Professional Organisations to Promote ESG Knowledge**

HKMA Global Centre for ESG Education & Research

**Towngas Smart Energy appointed as Chairman**

**Attained Industry Award and Quoted as Industry Role Model**

中国新闻周刊

**2022 Low-Carbon Role Model**

**Case Study in "Research Report on the Sustainability Trends of Hong Kong Listed Companies"**

# AGENDA

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**Financial Highlights** P. 10

## **Business Review**

- **City Gas** P. 13
- **Smart Energy**
  - “Gas+” Heating P.20
  - Renewable Energy P.24

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# FINANCIAL HIGHLIGHTS

# Stable Performance With Resilient Growth

(Unit: HK\$ million)	1H 2022	1H 2021	Changes
<b>Revenue</b>			
▪ Piped Gas & Energy Sales	8,637	6,514	↑ 33%
▪ Connection Fees	1,194	904	↑ 32%
▪ Extended Businesses	329	355	↓ 7%
	<b>10,160</b>	<b>7,773</b>	<b>↑ 31%</b>
<b>Profit Attributable to Shareholders</b>	<b>1,042</b>	<b>778</b>	<b>↑ 34%</b>
<b>Basic Earnings Per Share (HK Cents)</b>	<b>33.04</b>	<b>26.21</b>	<b>↑ 26%</b>
<b>Interest Coverage Ratio</b>	<b>6.1x</b>	<b>7.8x</b>	<b>-</b>

# Healthy Financial Position

(Unit: HK\$ billion)	30 Jun 2022	31 Dec 2021
<b>Total Assets</b>	<b>52.8</b>	<b>54.2</b>
<b>Net Assets</b>	<b>24.7</b>	<b>25.2</b>
<b>Cash &amp; Bank Balances</b>	<b>3.9</b>	<b>4.1</b>
<b>Total Borrowings</b>	<b>19.0</b>	<b>19.5</b>
<b>Net Gearing</b>	<b>38.0%</b>	<b>37.9%</b>

**S&P Global**  
Ratings  
**“BBB+”**

**MOODY'S**  
**“Baa1”**


# BUSINESS REVIEW

- **Gas Business**
- **Smart Energy**
  - **“Gas+” Heating**
  - **Renewable Energy**

# Steady Growth Amid Lockdown from COVID-19

## Total Volume of Gas Sales\*

**7.54** billion m<sup>3</sup>

 **4%**  
vs 1H 2021

## City-gas Projects

**178** projects

 **2** projects  
1H 2022

## Customers

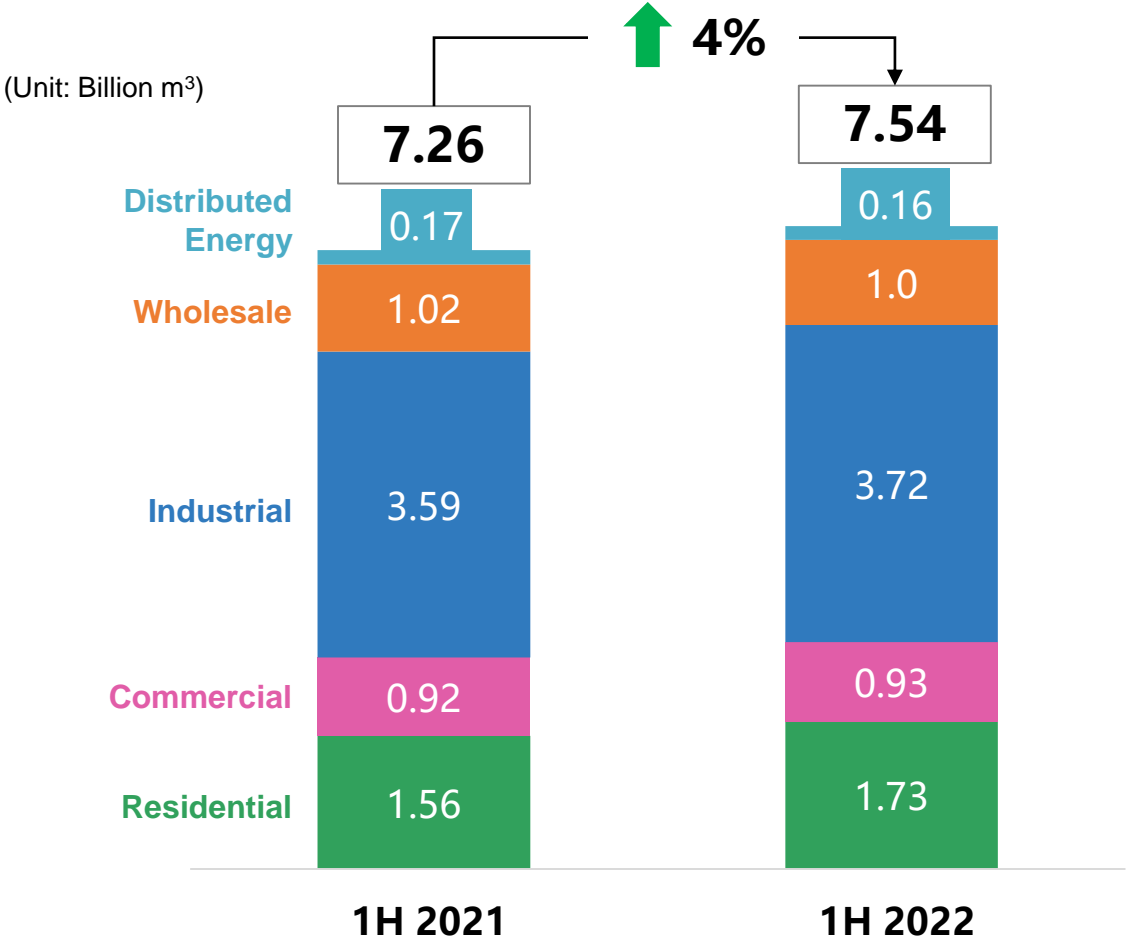
**15.5** million

 **410,000**  
1H 2022

\*Excluding Shanghai Gas

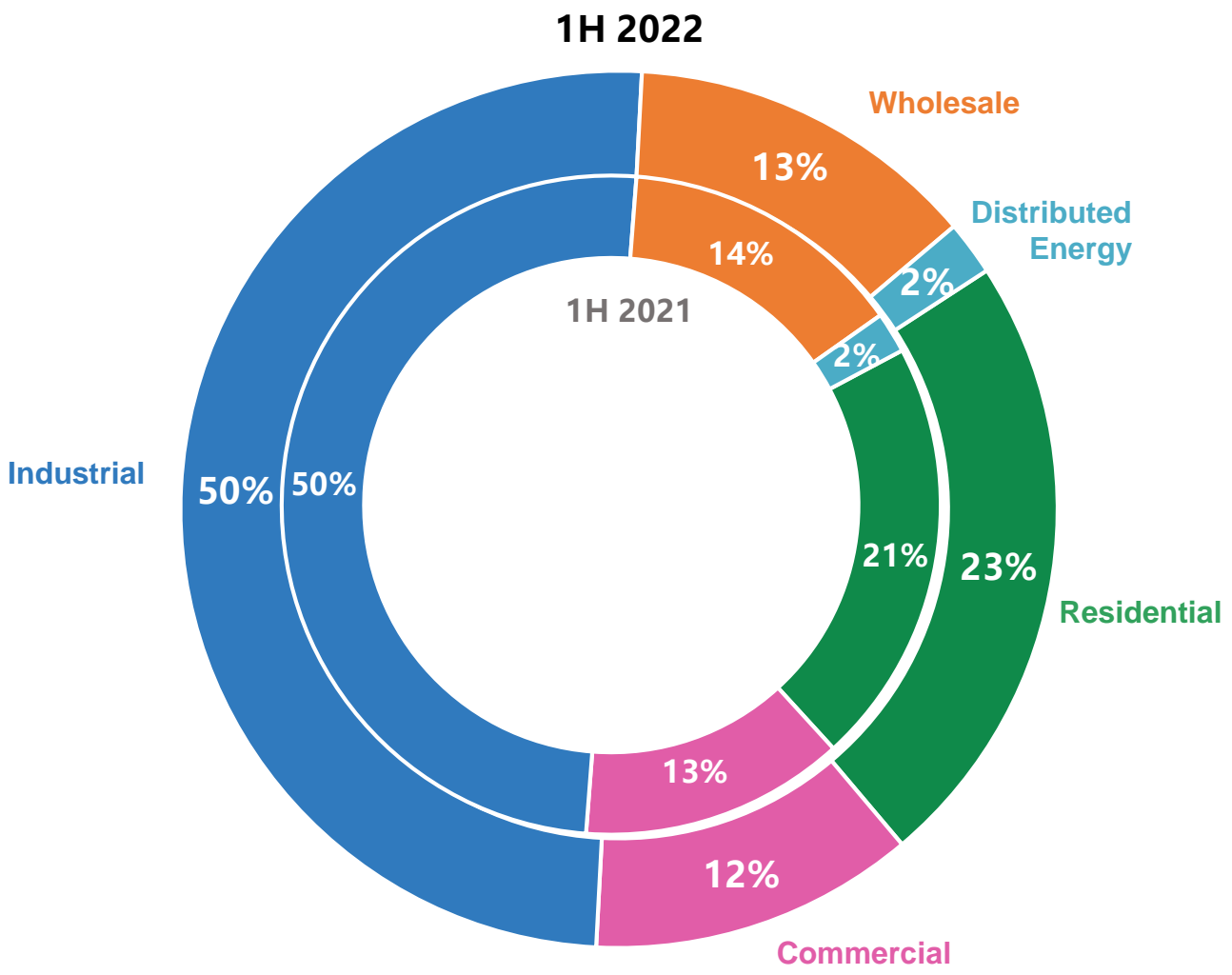
# Gas Sales Volume by Sectors

## Gas Sales Volume

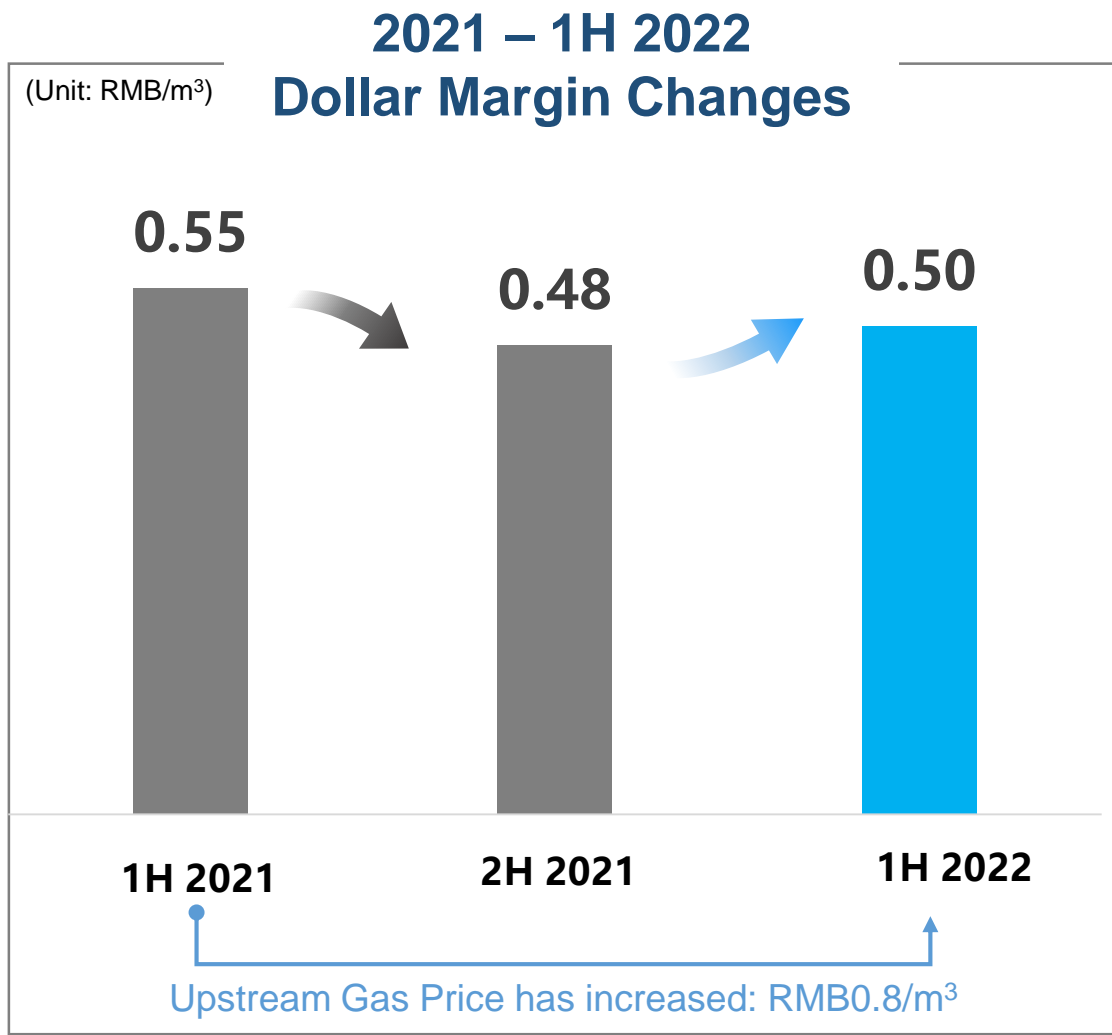


\*National Natural Gas Consumption in 1H 2022 ↓ 1.5%

## Gas Sales Mix



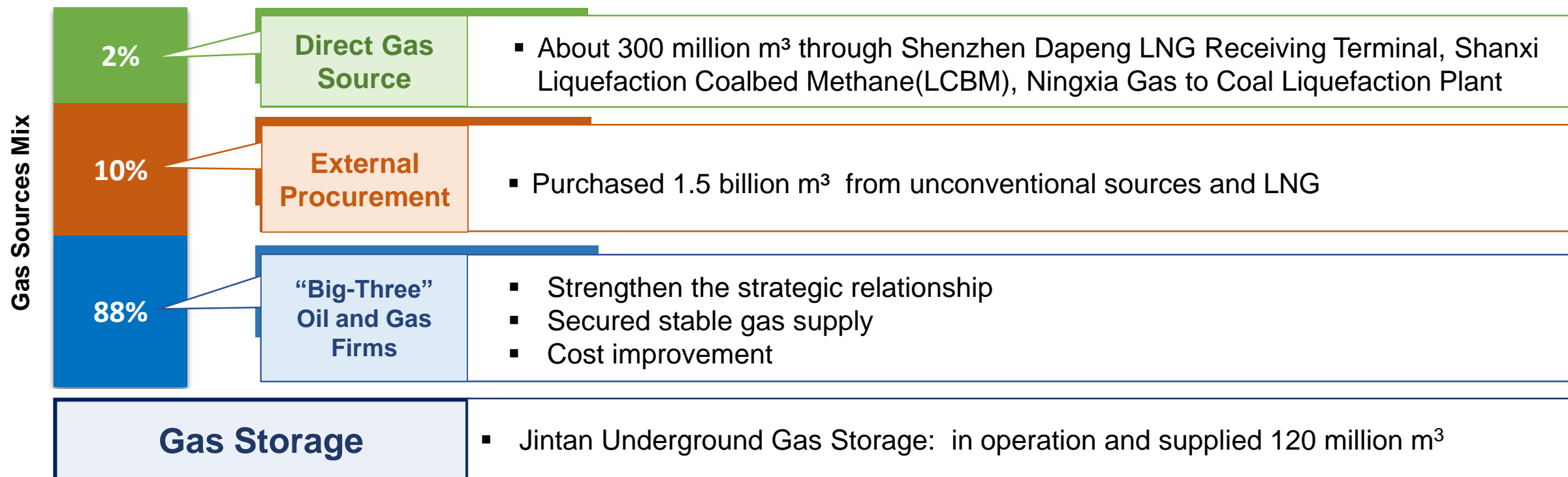
\*Source: Report from National Development and Reform Commission



- 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 RMB200 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

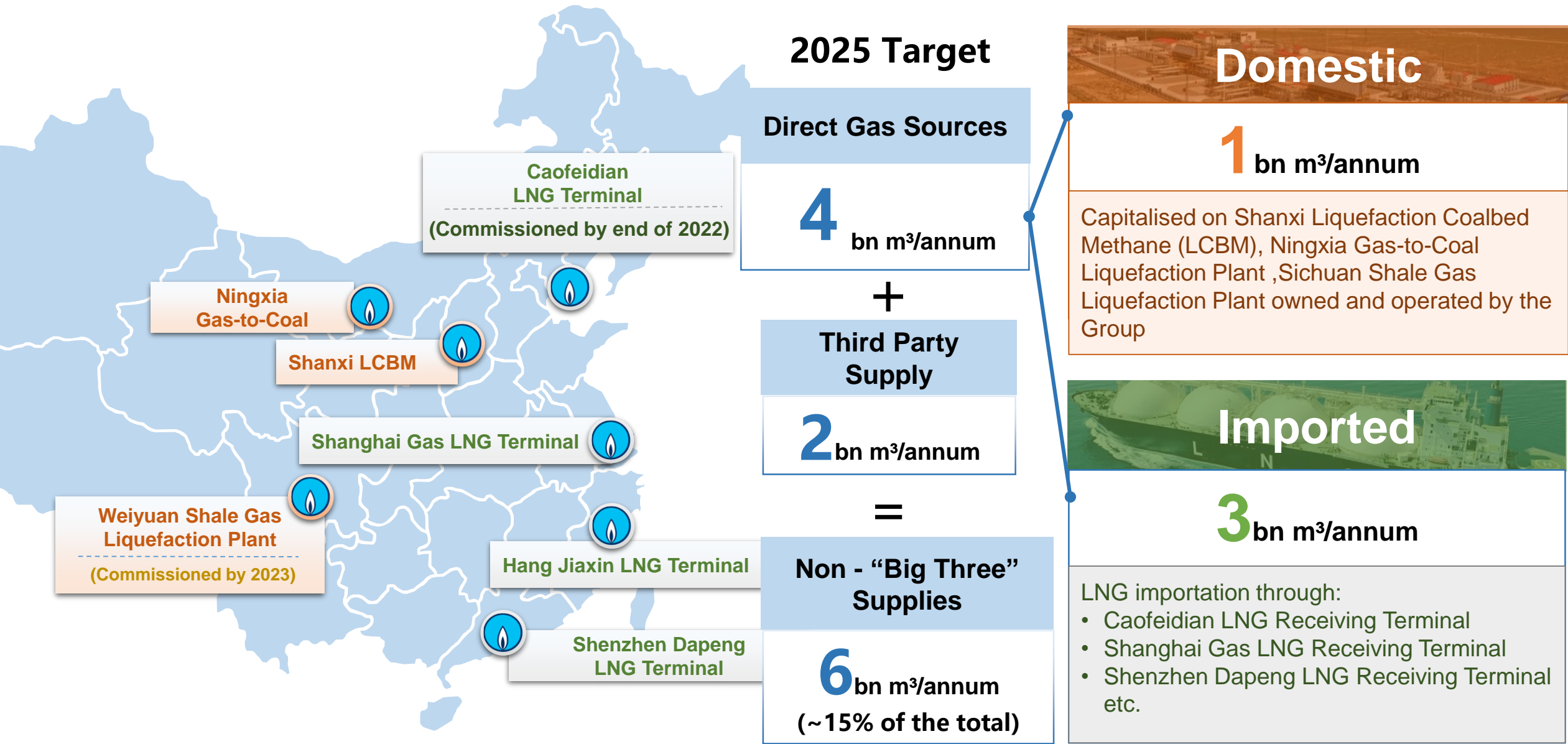
## In 1H 2022, HKCG Group:



- 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

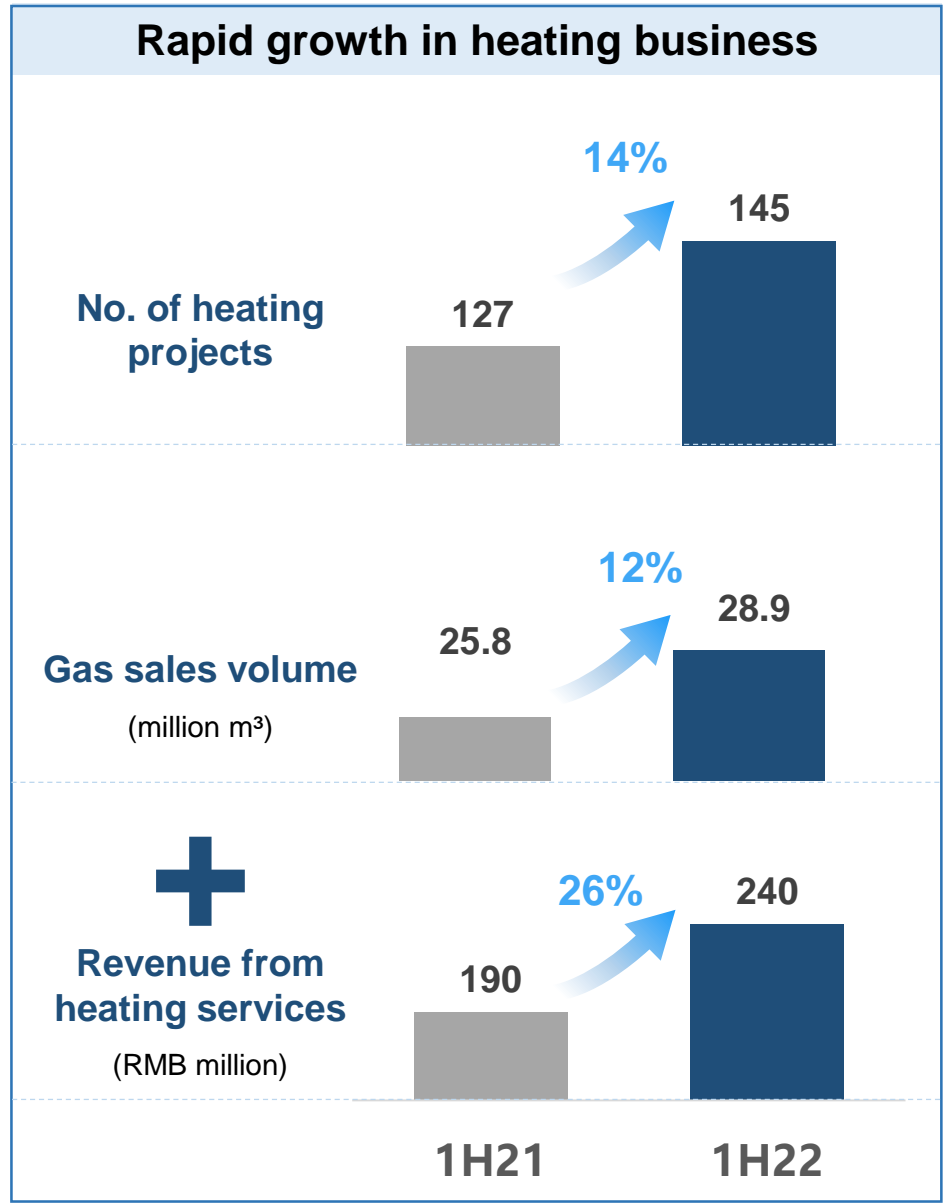
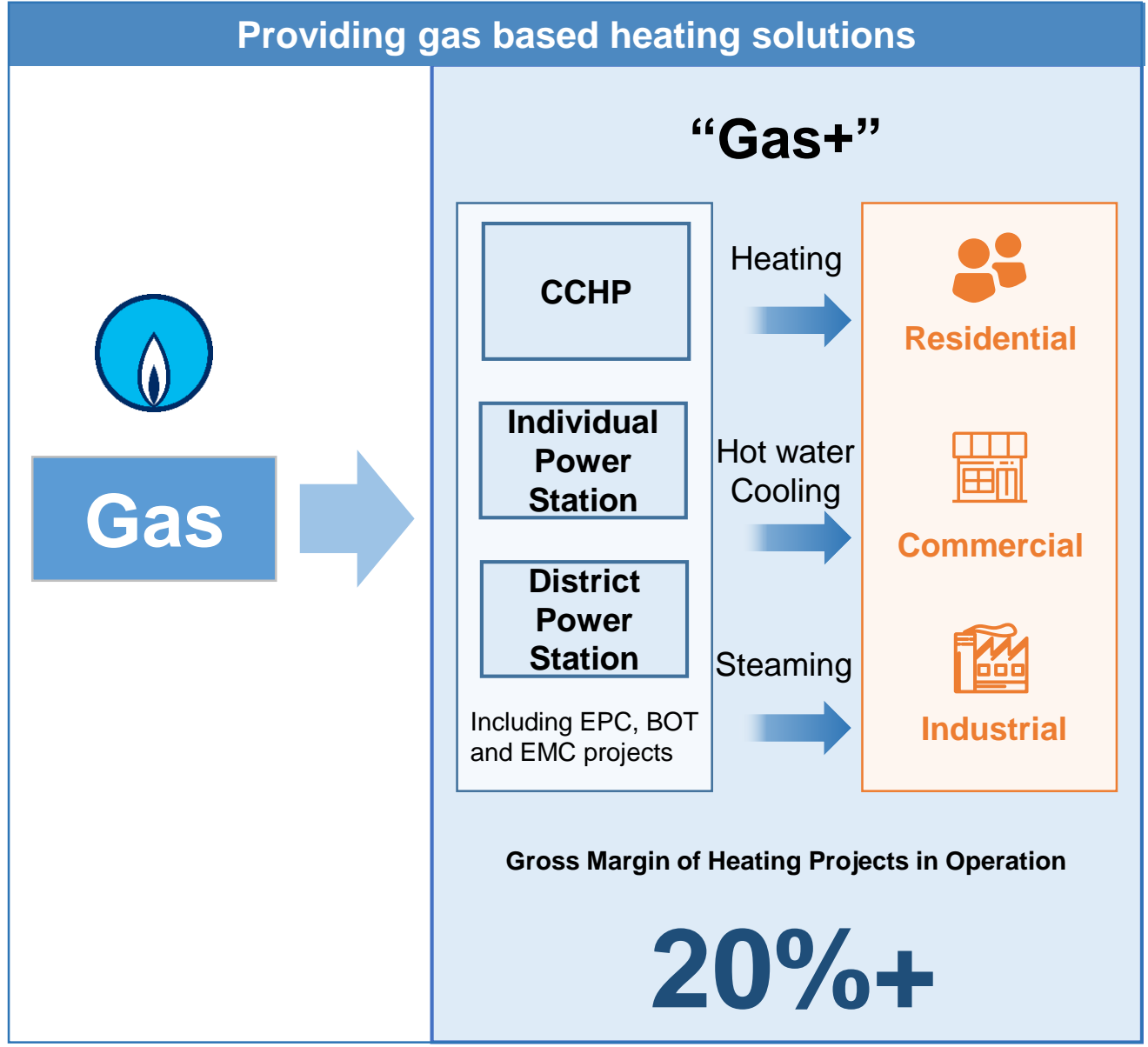
## First LNG shipment from Shanghai Gas unloaded at Hang Jiaxin LNG Terminal in July 2022



# BUSINESS REVIEW

- **Gas Business**
- **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 m<sup>3</sup>/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 m<sup>3</sup>/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 m<sup>3</sup>/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*



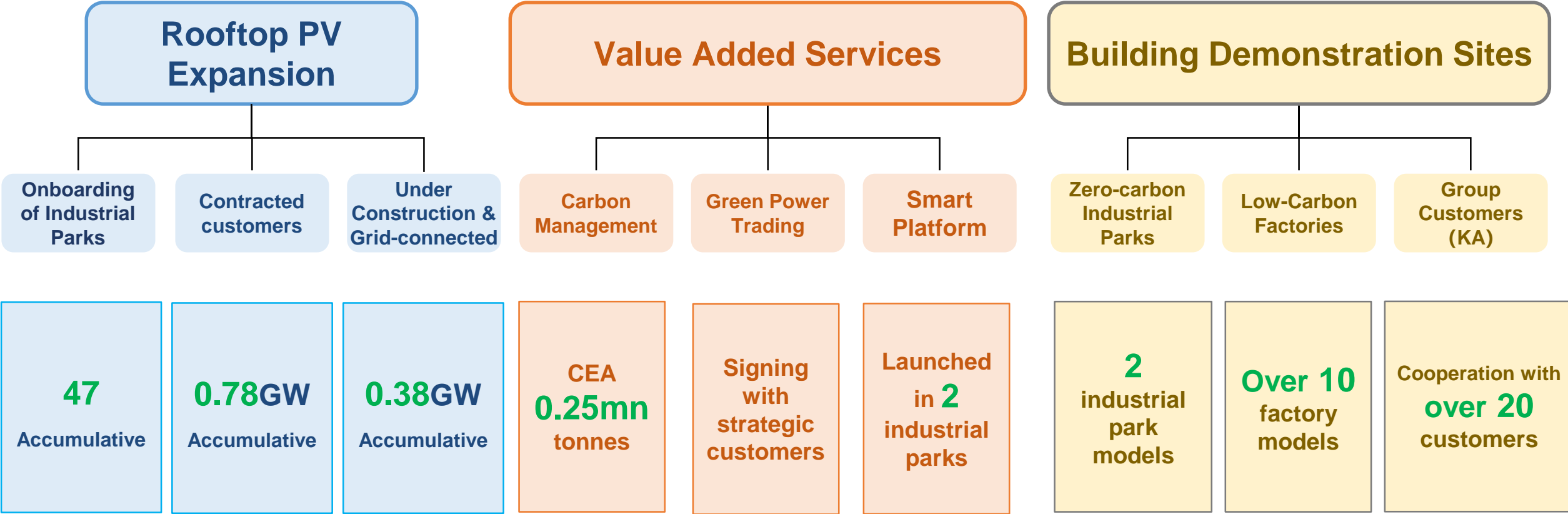
- Natural gas steam boiler with an annual steam supply of about 300,000 tonnes
- Planning to build biomass power generation and 16MW gas turbine
- Revenue: RMB 55 million/annum

# BUSINESS REVIEW

- **Gas Business**
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  - **Renewable Energy**

# Renewable Energy Performance Overview

- 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



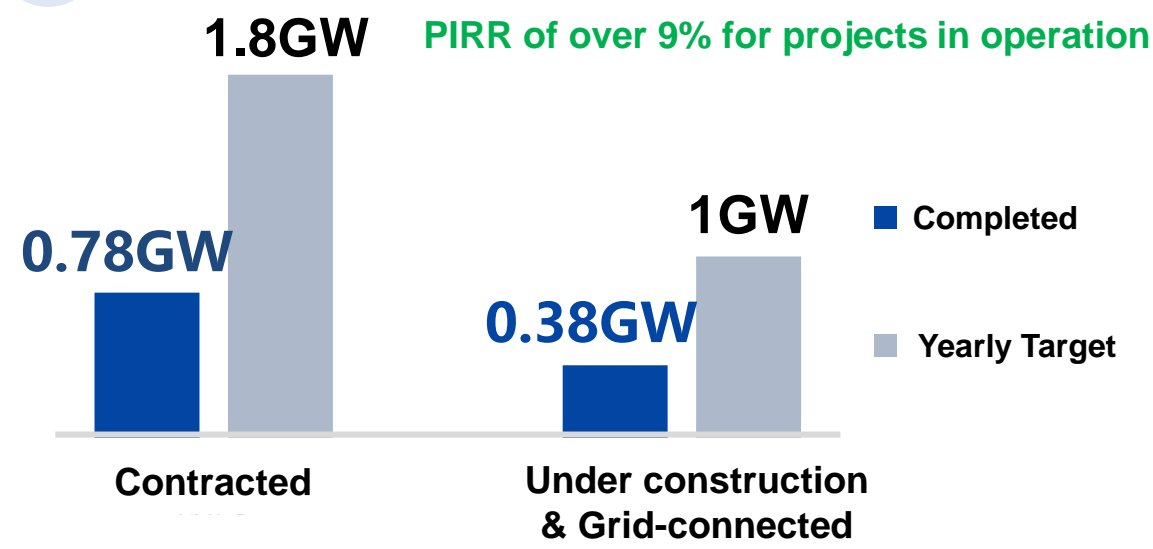
## Expanding our business footprints in industrial parks

● **47** industrial parks established

● **45** industrial parks under development



## Batch development of PV



Government Support

PV Synergy

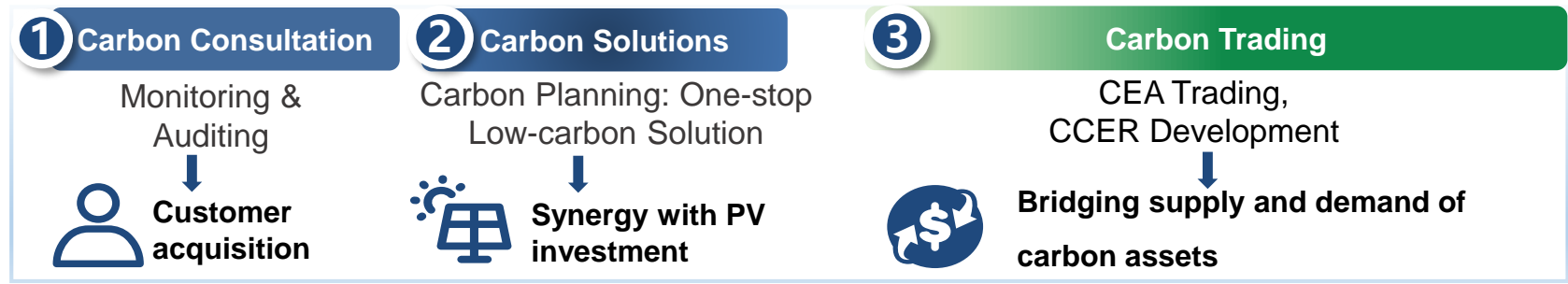
Energy & Carbon Services

Demonstration & Replication

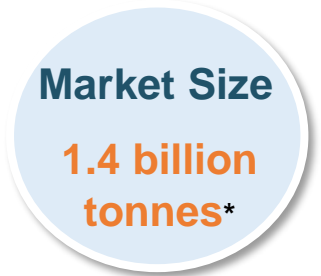
# Strengthening Carbon Management Services

- Developing comprehensive carbon management service capabilities to meet customers' "3060" needs, adding great value to our PV projects, and aiming to improve investment return significantly

## Value Chain



## Year 2025



## Competitive Advantages



**Fengnan Industrial Park**  
 煤氣 Towngas  
 High Precision Metal Parts Manufacturer | Display Device Leader

- Securing 0.25mn Tonnes Of CEA
- Forestry Carbon Sink Development

- Domestic And International Trading Experience
- Platform Aggregation

- Large Corporate Resources
- Financial Institutions

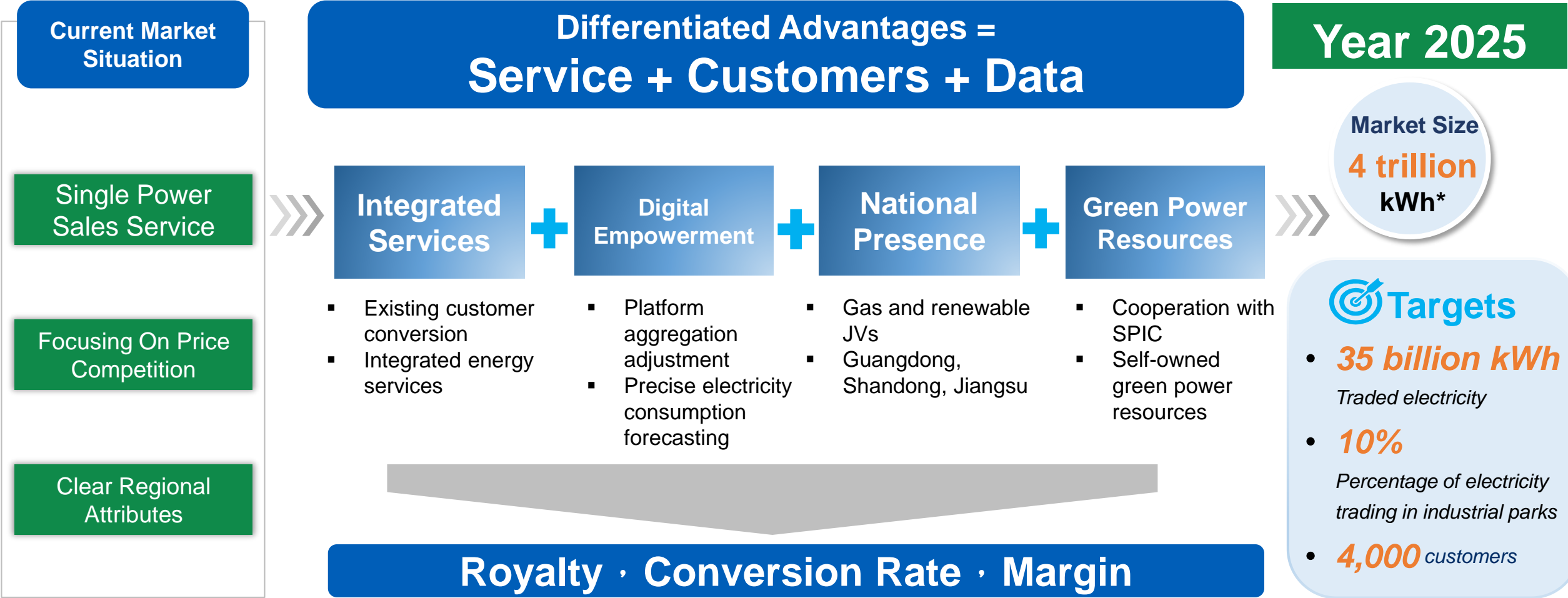
- Exploring Existing Customer Demand
- Platform Digital Intelligence Capability

## Targets

- 7M tonnes**
- 10%** Percentage of carbon trading in industrial parks

\*Prediction of the national carbon allowance tradable volume in 2025 by a research report

- Seizing the opening up of green power trading opportunity, to build up differentiated power sales advantages and to leverage our huge customer base and platform analysing capability to quickly convert customers



\*The whole society will use more than 8 trillion kWh of electricity in 2025, and the proportion of traded electricity will be about 50%.

# 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\***

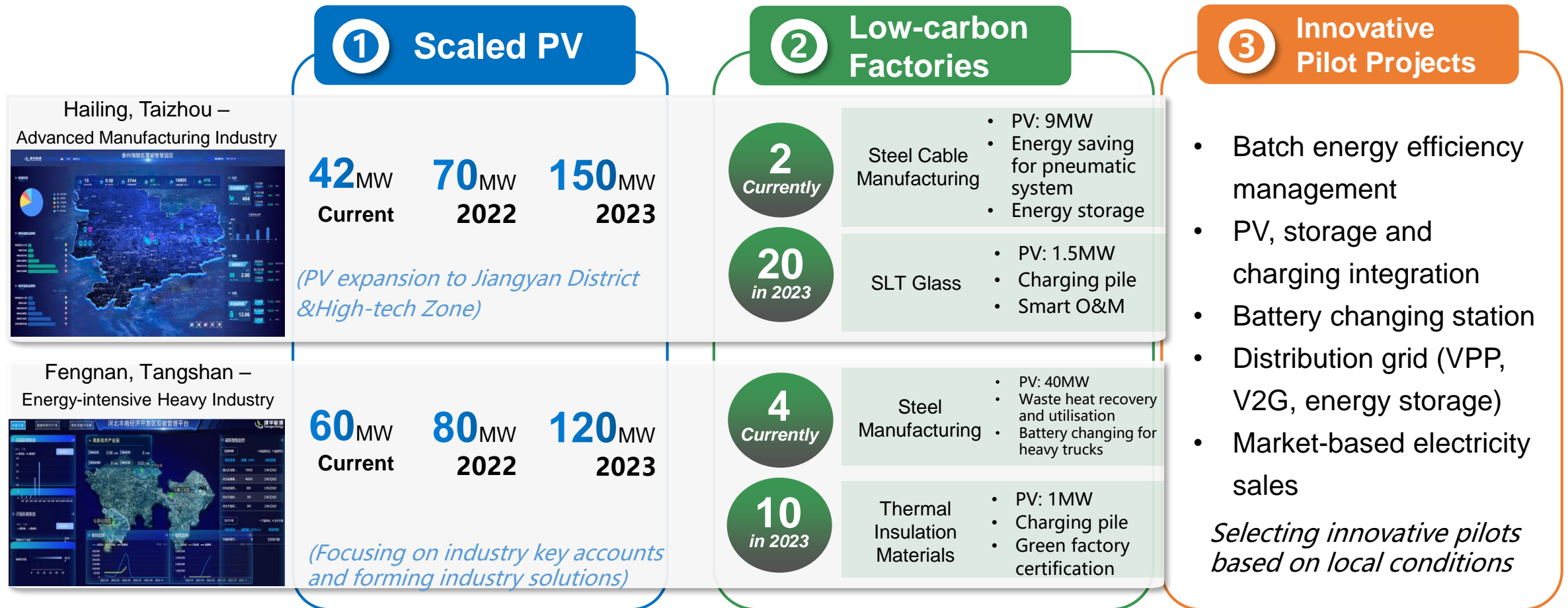
 **Targets**

- 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**

# Serving Group Customers & Setting Industry Benchmarks

- 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



## Cooperation with Industry Leaders



## Our Strengths

Emissions Control For Eight Sectors









International Initiatives To Reduce Carbon Emissions

Supply Chain Carbon Neutrality

Corporate ESG Ratings

One-stop Service With Nationwide Coverage

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

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

# Business Guidance





- Gas Sales Volume: **8-10%** growth  
(Excluding Shanghai Gas)
- Dollar Margin: RMB **0.51-0.52**/m<sup>3</sup>
- Total Number of new connections:  
**1 million**



- **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

**THANK YOU**

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