

The Hong Kong and China Gas Company Limited (3 HK)

2021 Interim Results

20 August 2021

Financial Highlights



1H 2021 Results

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

	2020	2021	
Category	Unit: HK\$ million		Change
Revenue	18,235	24,728	+36%
Operating Profit	3,517	4,259	+21%
IFC Revaluation Change	(303)	-	-
Profit Attributable to Shareholders	2,667	4,200	+58%
Earnings Per Share [^]	14.3 HK Cents	22.5 HK Cents	+58%
Dividend Per Share	12 HK Cents	12 HK Cents	-

[^]2020 figure adjusted based on bonus shares distributed in 2021

Operating Profit After Tax for 1H 2021



HK\$1.68 billion

- 1%

Gas Sales -2.8%
Effective Cost Savings



HK\$2.28 billion

+ 30%

City Gas Sales +28%
Recovery in connection fees



HK\$300 million

+ >300%

HVO Contribution
Favourable commodities prices

Operating Profit After Tax (OPAT) HK\$4.26 billion **+21%**

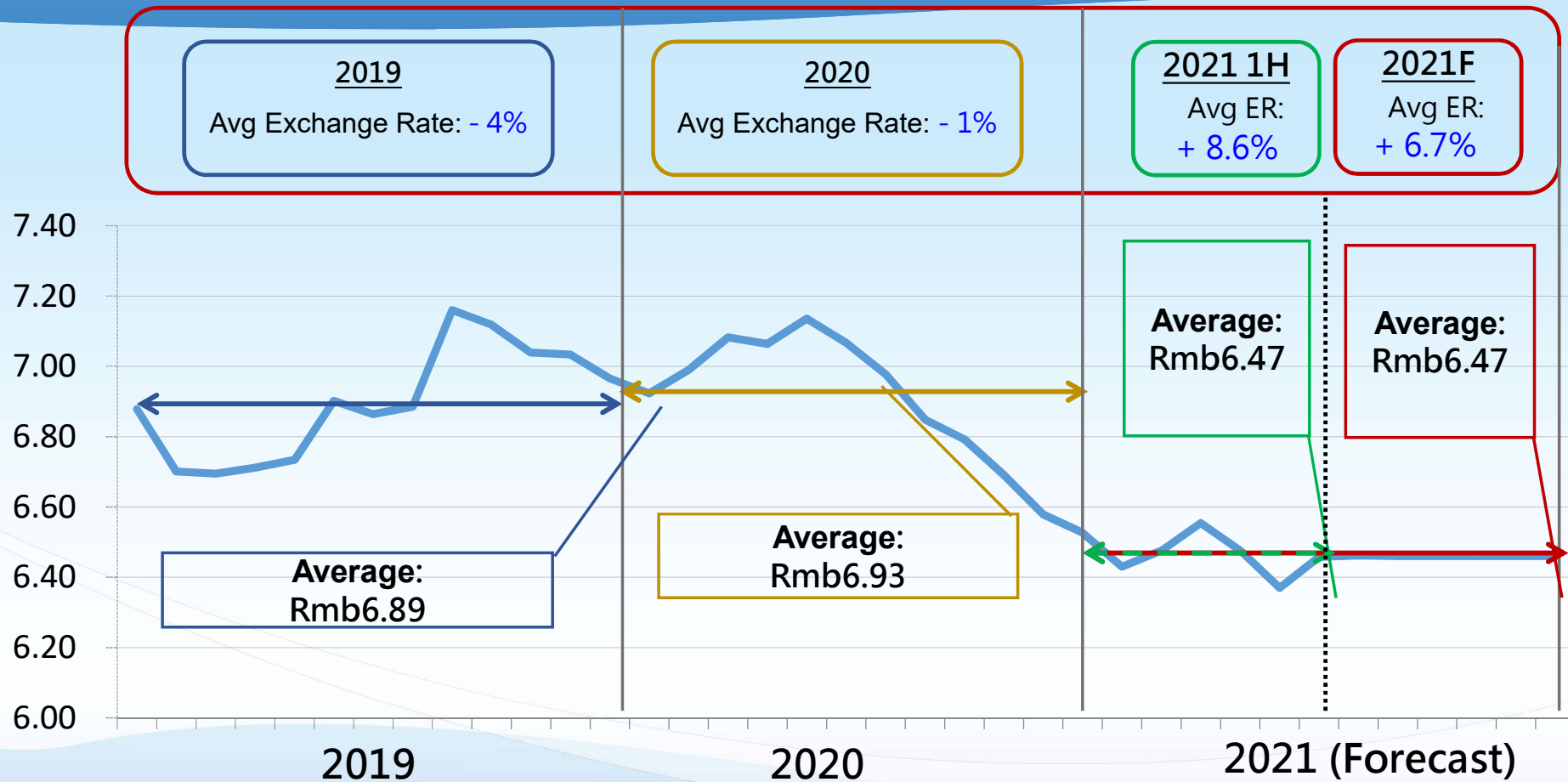
1H 2021 Results

Towngas China (1083 HK)



	2020	2021	
Category	Unit: HK\$ million		Change
Revenue	5,563	7,773	+40%
Profit Attributable to Shareholders	581	778	+34%
Earnings Per Share	20.2 HK cents	26.2 HK cents	+30%

RMB/USD Average Exchange Rate



The Hong Kong and China Gas Company Limited

Healthy Financials

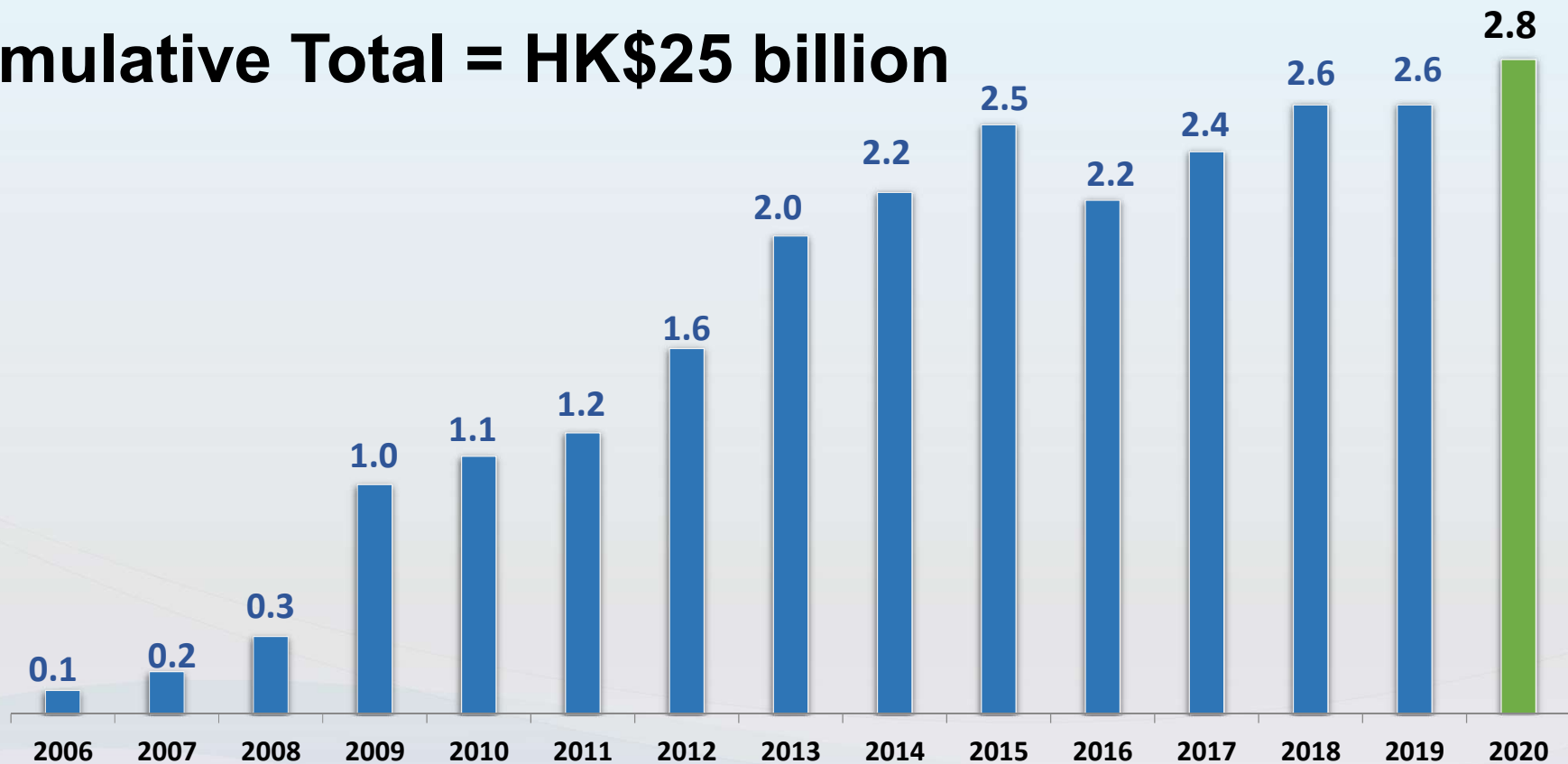


The Hong Kong and China Gas Company Limited (0003 HK)	31 Dec 2020	30 Jun 2021		31 Dec 2020	30 Jun 2021
	HK\$ billion	HK\$ billion			
Total Assets	150.3	160.0	Interest Coverage	9.2x	11.6x
Net Assets	79.2	79.9	Net Gearing	30.4%	34.8%
Cash & Bank Balances	7.6	8.5	Credit Rating: Moody's A1 S&P Global A- Ratings		
Total Borrowings	42.1	51.1			

Remarkable Joint Venture Dividend

(Unit: HK\$ billion)

Cumulative Total = HK\$25 billion



Rolling 3-Year Cashflow Projection

Healthy Position



Inflow		(HK\$ billion)
	HK Operations	14
	PRC Dividends	10
	Strategic Investors	8
		32
	Cash on Hand	8
	Fund Available	40
Outflow		
	Dividend & Investment	40

*Spreading
Good Vibes*

Hong
Kong



1H 2021 Hong Kong Local Business

Stable & Resilient



Commercial & Industrial Gas Sales Rebound

	2020	2021	
Period	Unit: TJ		% Change
Q1	3,299	2,697	-18%
Q2	2,629	2,936	+12% ↑
H1	5,928	5,633	-5%

*Catering industry gas sales benefitting from relaxation of social distancing measures

Increased Residential Flat Supply

New Residential Property Supply

(Number of Flats)	Upcoming 3 Years	Upcoming 5 Years
Public	56,600	101,400
Private	54,000	90,000
	110,600	191,400

+266TJ

+460TJ

Commercial & Industrial Gas Sales Increase

Category	Target User	Gas Increase (Annual) 2022	Gas Increase (Annual) 2021-2025
Gas Cooling/Heating Applications	Disneyland, Ocean Park, Towngas Telecom, airport	140 TJ	230 TJ
Diesel Replacement Projects	Hospital, food production plant, laundry	160 TJ	510 TJ
New Projects	Hotel, hospital, crematorium, food production plant	100 TJ	390 TJ
Potential Projects	Waste paper recycling plant (Tuen Mun)	-	100 TJ
Indoor Air Quality (Dehumidification)	Hotels, hospitals, offices	3 TJ	30 TJ

Environmental Projects

- **Integrated Indoor Dehumidification Fresh Air Ventilation System at H Zentre***
- **North District Hospital Combined Heat and Power (CHP) Generating System 2MW**
- **Maxim's Food Processing Plant utilising waste heat from Tai Po Gas Plant as energy source**

**2021 Innovative Energy
Project of The Year**

***Awarded by
Association of Energy Engineers (AEE)
of the US**

**Green Technology
Fund**

Environmental Projects

- Built 11 photovoltaic projects at gas facilities (300,000 kWh)
- Joint venture with China Power to develop renewable energy project in Hong Kong & Greater Bay Area



Tai Po Gas Production Plant

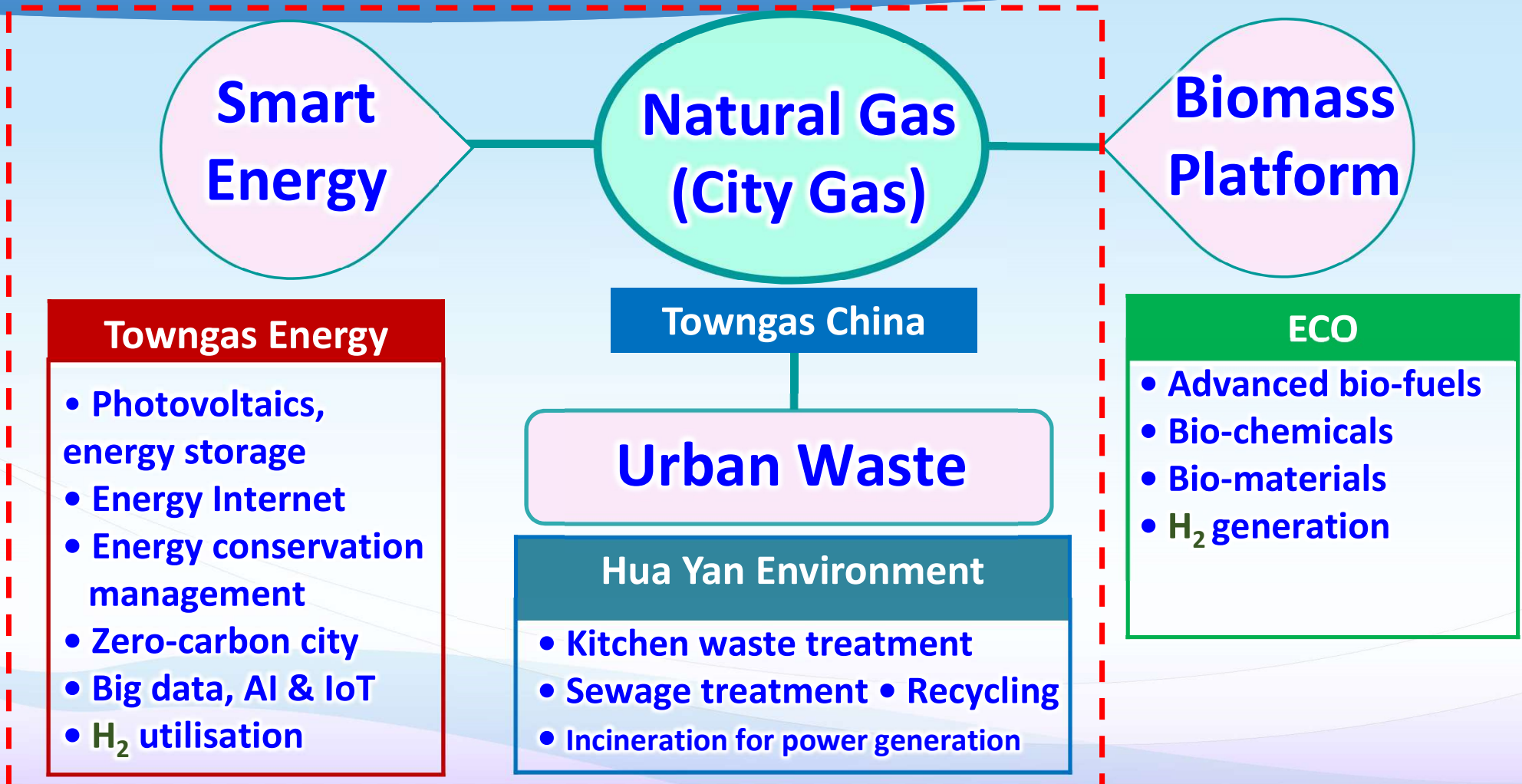


Clean Energy

Mainland Utilities Business



Towngas Sustainability Businesses

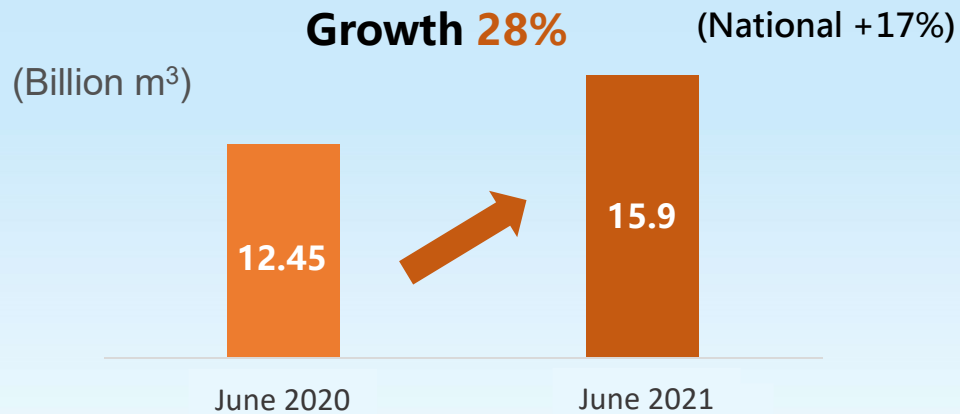


Operations Overview

2021 Guidances

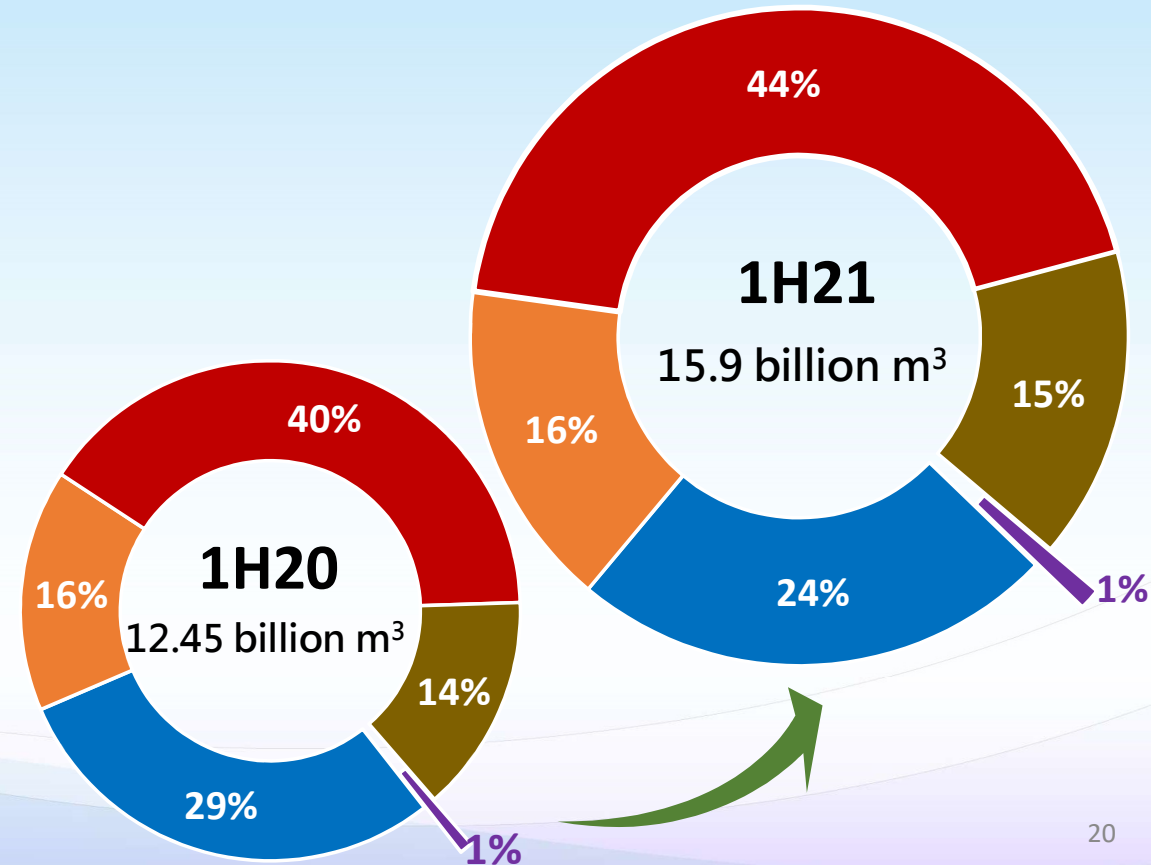
- Total gas sales vol (w/ midstream) **20.2 billion m³** , up **25%** ↑ **>20%**
- City-gas sales volume at **15.9 billion m³**, up **28%** ↑ **>20%**
- **5** new city-gas projects ↑ **>10**
- **> 1.2 million** new customers to **33.02 million** ↑ **>2.1 million**
40 million including Shanghai Gas
- Operating profit after tax **HK\$2.28 billion**, up **30%** ↑

City Gas Sales Volume by User Category



Non-residential of 80% favor cost pass-thru

Towngas Group		1H2020	1H2021	'21 vs '20
Gas Volume by Category		Billion m ³		Change
Industrial		5.01	6.93	+38% ↑
Commercial		1.95	2.56	+31% ↑
Residential		3.62	3.80	+5% ↑
Wholesale/Power Plant		1.76	2.44	+38% ↑
Distributed Energy		0.11	0.17	+60% ↑
		12.45	15.90	+28%

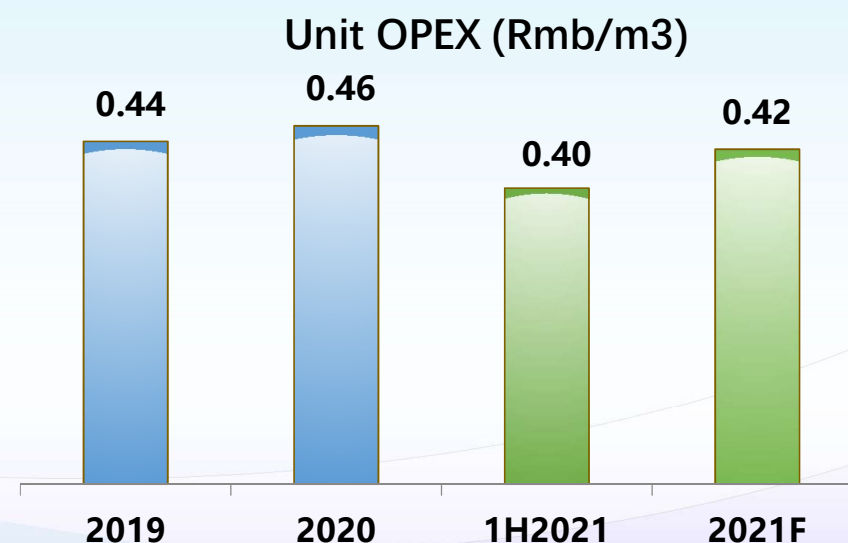


Coal-to-gas as Driver of Lower-margin Industrial Gas Sales



Selling Price (Rmb/m3)	1H20	2020	1H21
Residential	2.59	2.62	2.64
Industrial	2.62	2.56	2.8
Wholesale	2.17	2.18	2.28
Commercial	2.91	2.8	2.87
Average Selling Price	2.64	2.6	2.71
Average Procurement Cost	2.04	2.01	2.16
Margin	0.6	0.58	0.55

- **Sourcing low-cost LNG & piped gas**
- **Cost savings to reduce Opex**



Shanghai Gas Deal Completed

- Senior executives to join Shanghai Gas Board of Directors, Supervisory Board & Management
- Shenergy Group & Shanghai Gas senior management team discussing with Towngas China on joint management, gas source, extended business & more

Huang Dinan,
Chairman of Shenergy Group

Dr Lee Ka-kit,
Chairman of Towngas Group



Ni Bin, President of Shenergy Group and Zang Liang, President of Shanghai Gas, visiting Towngas China's Jintan gas storage



Strong Synergies with Shanghai Gas



6.4M accounts + 31.8M accounts

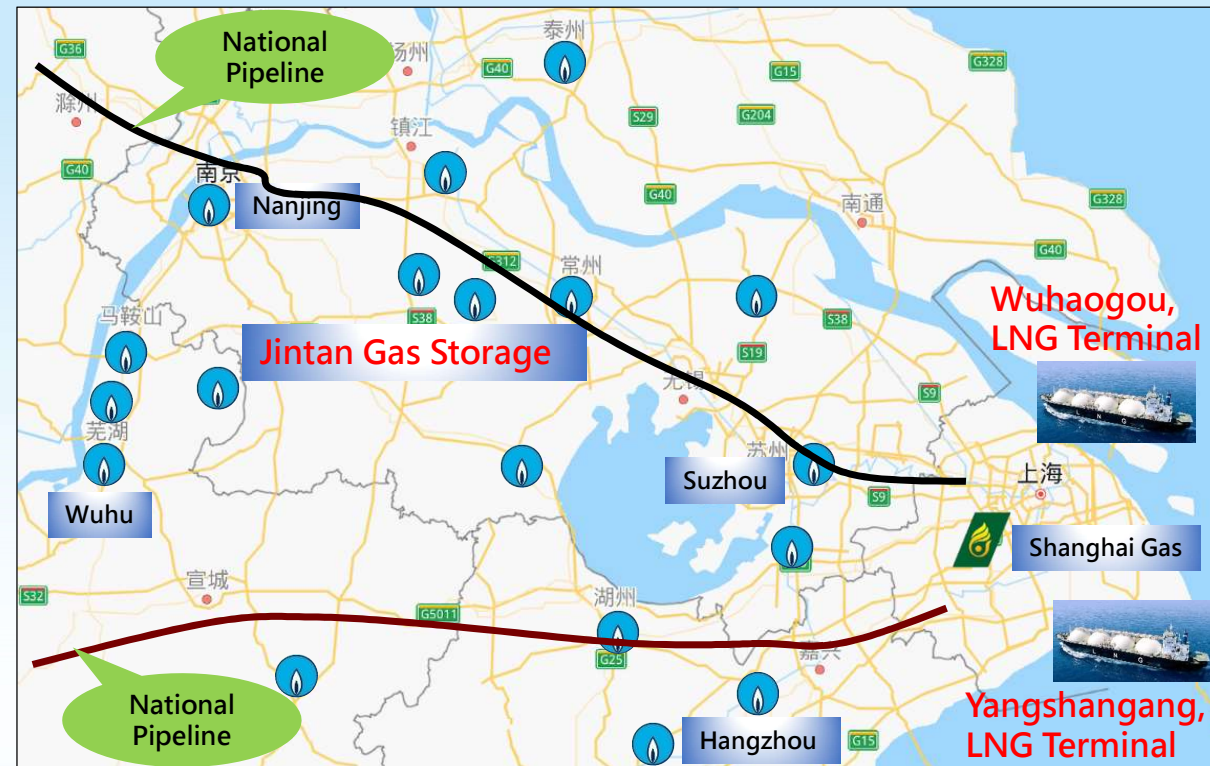
Space Heating



Kitchen cabinets
& appliances



- Expected volume growth 15% and profit growth 10%



Upstream Strategy: Long Term Gas Supply

- Shale gas project in Sichuan to supply 200,000 tonnes of LNG annually
- Towngas Group, Foran Energy, Shenzhen Gas jointly procuring 420,000 tonnes of LNG per annum
- Towngas Group negotiating LNG long-term contract of 2M tonnes

Gas Volume (m³)

300M

600M

2,800M



Shale Gas Liquefaction Project in Weiyuan, Sichuan



LNG receiving station tanks in Caofeidian, Tangshan

Steam & Hot Water Market

- Contributing gas sales of 500 M m³ in 1H, expected 1.4 billion m³ for full year, unit margin Rmb 0.5/m³
- Scope: District and individual household heating, steam and hot water supply for C&I customers
- Expand beyond city gas supply area; combine with other energies to provide high efficiency solutions
- Target to gain gas sales of 7 billion m³ in 3-5 years

Water & Environmental Businesses

- 1H water sales **470M tonnes +14%**, operating profit **HK\$233M +41%**
- **New** municipal waste treatment projects in Tongling & Changzhou to commission in 2023 to increase processing capacity from 700 tonnes/day to 3800 tonnes/day
- Target to develop 2 new environmental projects per year
- Carbon emission reduction of 400k tonnes p.a. from environmental projects leading to carbon trading opportunities

Suzhou Food Waste Treatment Project



30·60 Policies & Opportunities

Carbon Peaking by 2030, Carbon Neutrality by 2060

Reducing dependence on external energy, enhancing China's energy & economic safety

Policy

2021.02

Accelerate the development of a green & low-carbon circular economic development system

2021.03

Build a power system with new energy as the mainstay

2021.06

County-wide promotion of distributed photovoltaics

Targets

Decarbonisation

Smart
Systemisation

Comprehensive
Implementation

Counter
Measures

Zero-carbon Smart Industrial Park

Forming Robust Smart Energy Partnerships



Energy Supply Side

Power Generation



- Renewable & smart energy projects

Photovoltaics



- Create zero-carbon smart industrial parks

Power Grid

Power Grid



- Establish integrated gas-electric zero-carbon smart energy demonstration industrial park

Energy Demand Side

Energy Storage



- Create integrated smart energy storage system

Frontier Research

Smart Energy Ecology Platform



- Collaborate on integrated energy management platform and other new technology applications



腾讯云

- Cooperate on smart energy ecology platform to facilitate energy digitisation

Zero-carbon Planning

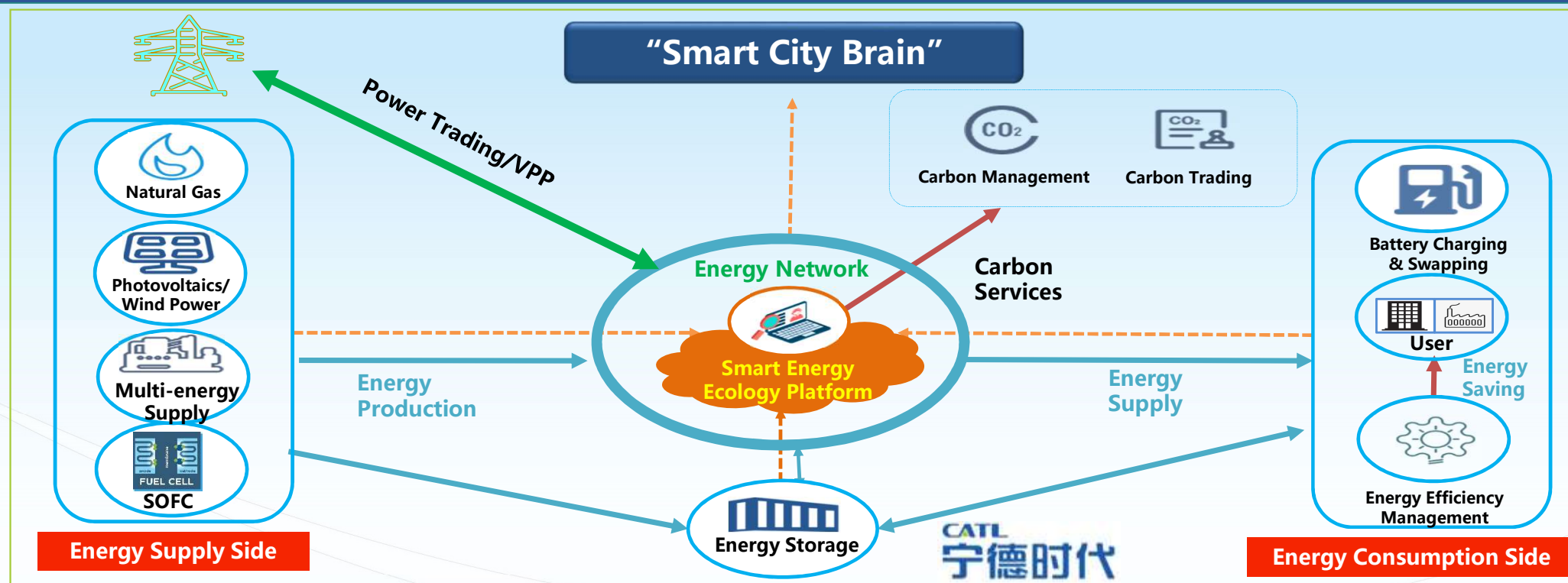


(Rocky Mountain Institute)

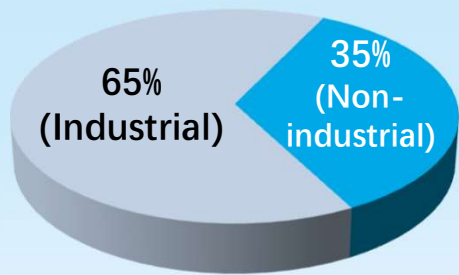
- Zero-carbon planning for industrial parks

Zero-Carbon Smart Industrial Park: Business Model

Integrated Smart Energy

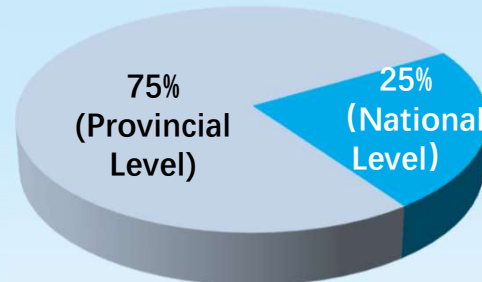


Zero-carbon Smart Industrial Park: Enormous Business Opportunities



National power consumption

7.5T kWh



Parks at provincial level or above
launched country-wide

2600+

Average Per Industrial Park

<u>C&I Clients</u>	<u>Power Consumption</u>	<u>Carbon Emission</u>
400	1.9B kWh/Yr	2.5M Tonnes/Yr

Targets

<u>Installed Capacity</u>	<u>Power Generation</u>	<u>Investment</u>
100 MW	100M kWh/Yr	250M Rmb

Average IRR: 9%

Our Edge

- **288** city-gas projects
- **Centralised operations & maintenance** management – highly efficient & economical

30 (End of 2021)

60 (End of 2022)

Discovering Smart Energy Innovation Solutions Worldwide

TERA AWARD

On 18 June, the first TERA-Award smart energy innovation competition was launched in Beijing & Hong Kong

- In search of innovative technology for “zero-carbon smart industrial park”, including integrated energy management, advanced energy storage, virtual power plant, smart energy platform, blockchain and more
- Discovering top zero-carbon technology start-up teams from around the world
- Providing application scenarios and funding for zero-carbon technology



USD1,000,000
Top Prize

Zero-carbon Smart Industrial Park: Five-year Development Plan

2021

2022

 2025

30

2

Establishing Key Capabilities

Park Establishment & Client Development

Photovoltaics Investment, Construction & Operation

Energy Storage System Integration

Key Technology Investment

60

4

Building Own Model

Create 3 Source-Grid-Load-Storage System Demonstration Parks

Commission Smart Energy Ecology Platform

Launch Carbon Asset Management

-  No. of Parks
-  Expected Photovoltaic Installed Capacity (GW)
-  Potential Investment Scale (Rmb billion)
-  Expected Revenue (Rmb billion)

Rapid Replication

Becoming Industry Leader

200

15

58

8.3

No. of Customers 80,000

Power Consumption 400B kWh

Carbon Emission 500M tonnes

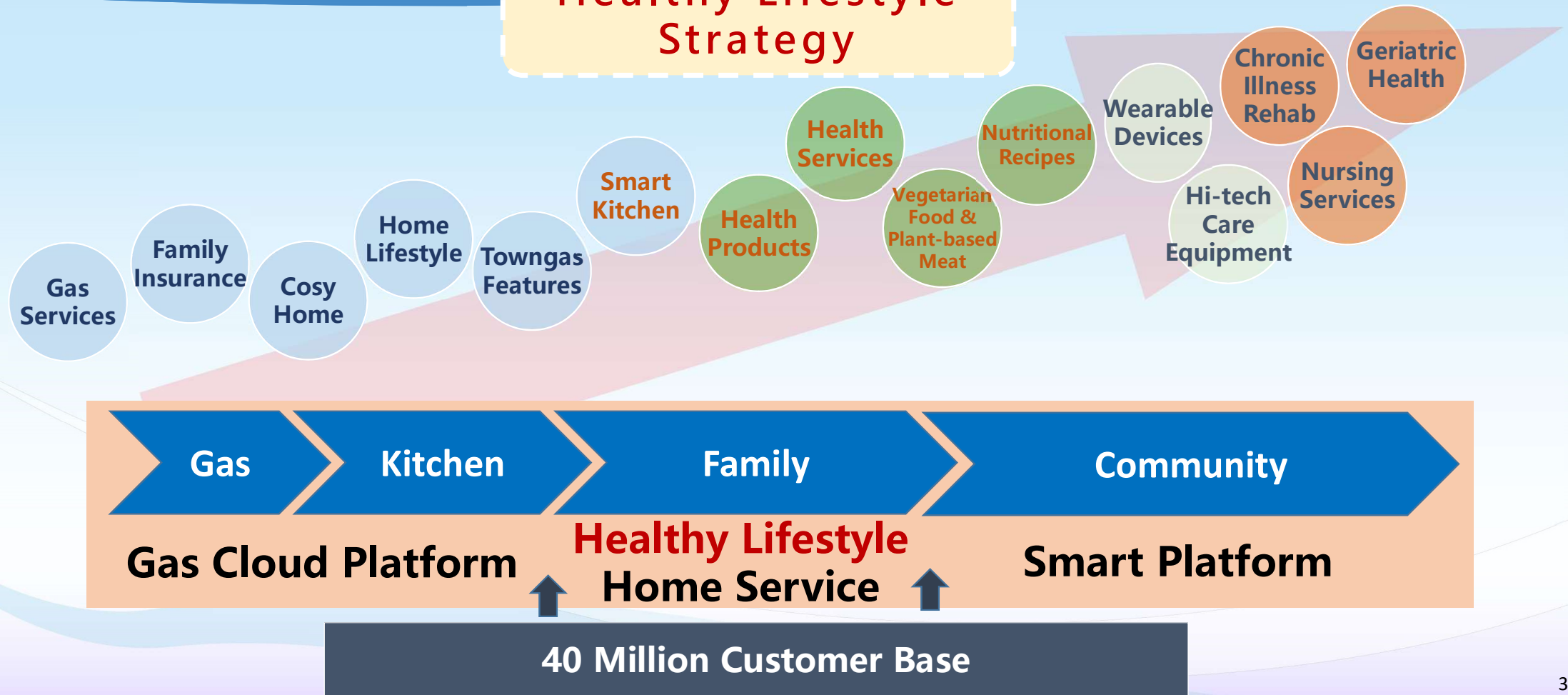
Power Trading & VPP

Carbon Asset Management & Trading

Ecology Platform Service

Extended Business Operating Direction

Healthy Lifestyle Strategy



Extended Business: Launching the Health Business Model

Policy Direction

Promoting urban
15-minute
community-life
circle



Encouraging
better medical &
health services



New monopoly regulations
on internet platform
companies giving us
business opportunities

Our Extended Business



Launching the Health Business Model

Becoming a reliable **family health
lifestyle service provider**

Fusing on- and offline development
for integrated health services



**Moment+ Community Health
Lifestyle Experience Centre**
Establishing community network
& home services



Launching **Moment+** app
Establishing health
database for customers

Extended Business – Launching the Health Business Model

Partnership with renowned brands



Health Content

Nutritional health solutions for specific dietary needs



Health Services

On- & offline consultation, from health checks to dietitians



Products

Nutrition & health products & home services for special dietary requirements



Creating hip vegetarian products to enrich brand collaboration



DAYDAYCOOK



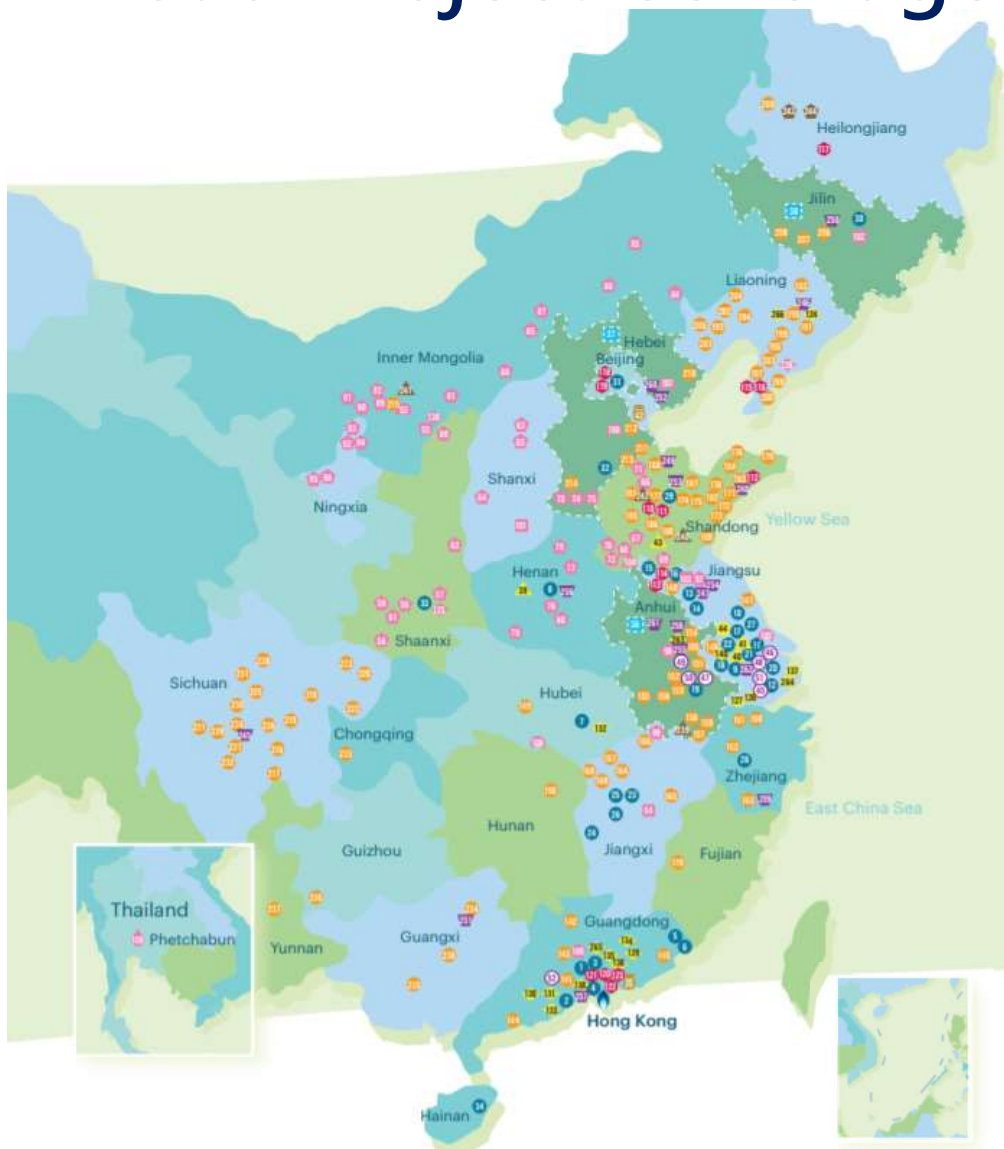
Extended Business: Latest Progress

- Flagship store: **Moment+ Community Health Lifestyle Experience Centre** in operation at Suzhou & Qingdao
- 50 centres to be launched this year at key project companies
- Partnering with an insurance agency in Q4 to offer comprehensive scope of insurance service

	1H 2021	2021
Users (Million)	11	15
Rmb (Million)		
Healthy lifestyle including gas insurance	100	200
Cosy home	500	1,700
Gas engineering related income	1,700	2,500
Total	2,300	4,400



Broad Project Coverage



324 Gas Related Business

288 City Gas★

15 Upstream & Midstream

21 Engineering & Other Projects



440

99 Smart Energy

12 Water & Environmental Services

8 Urban Water Services

4 Food & Green Waste Treatment

5 Extended Business

★ All Project Companies

Public Utility Business Outlook

- Hong Kong business: Stable with resilience in C&I segments, upcoming gas tariff adjustment
- Mainland city gas : C&I segments continue to grow with resilience. Gas sales volume >20% per annum in coming 2-3 years and connection fees to rebound from 2020 low
- Extended business: Quality service & products for 40M loyal household customers (population of >120M)
- Smart energy: to support China's 30 · 60 goals while providing highly efficient & economical energy for over 400K C&I clients
- **Group presence in over 288 cities & regions, demonstrating strong, stable business with growth & expected profit**

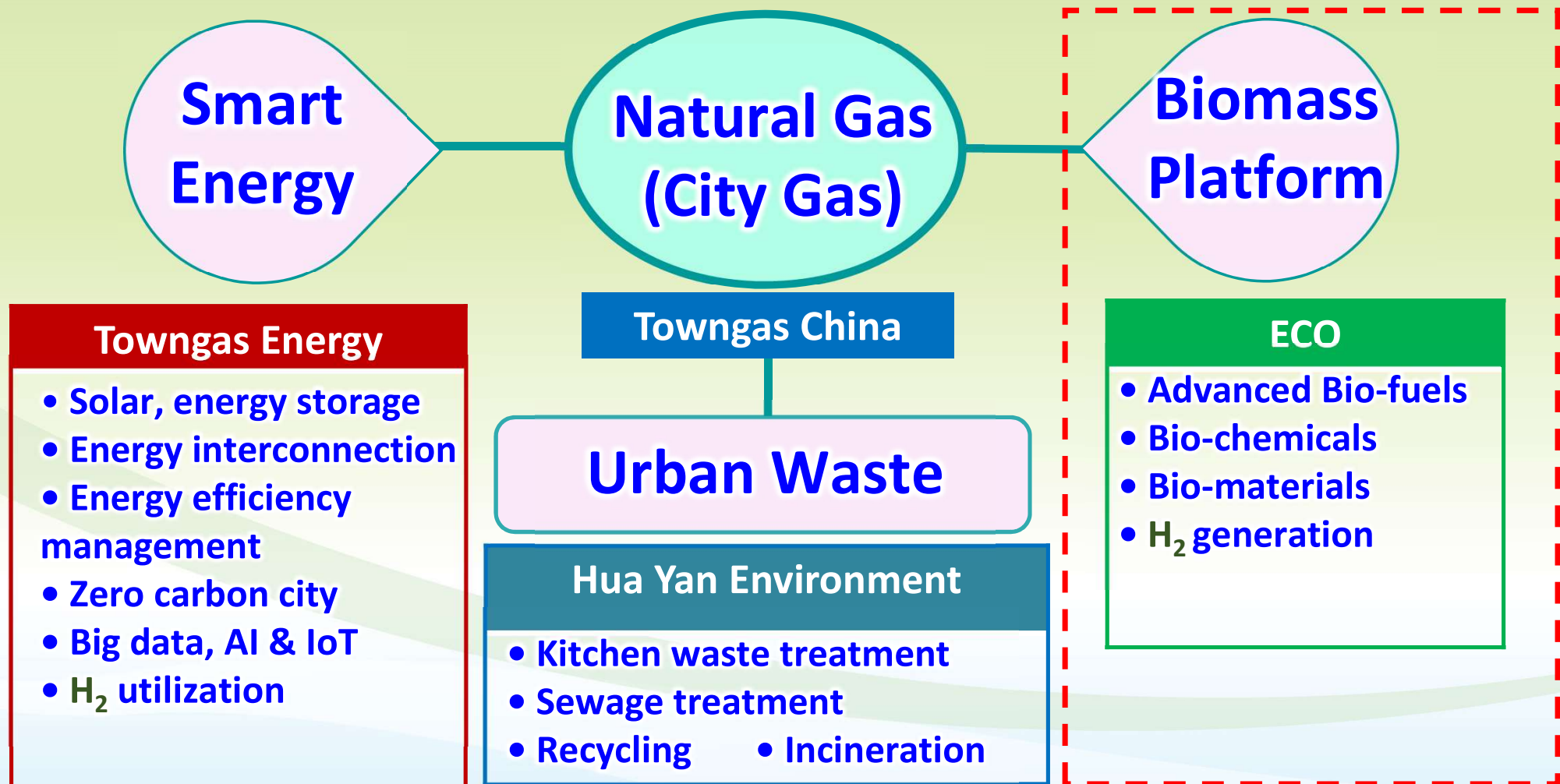
New Energy & Outlook

Towards Carbon Neutrality
(Sustainability + Innovation)

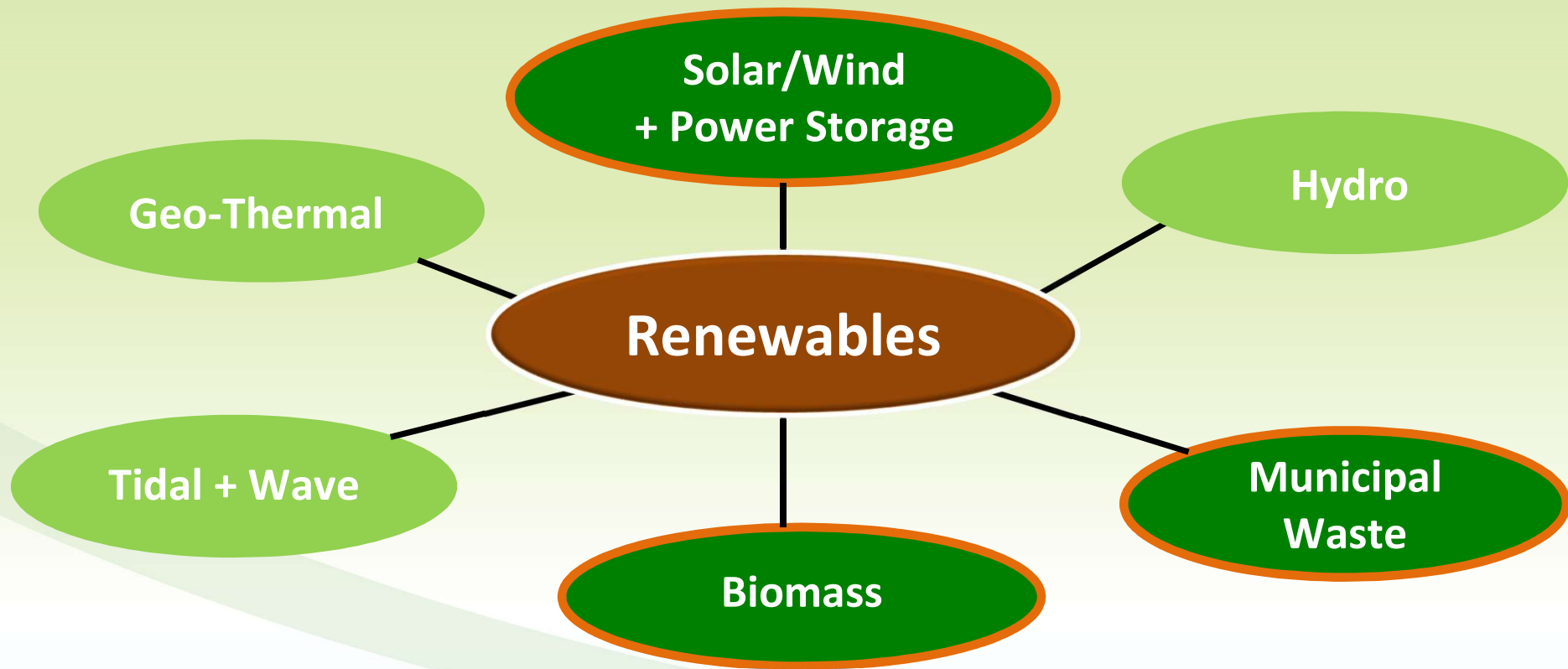


Photo Source: Environmental Defense Fund

Towngas Sustainability Businesses



Renewables Will be at the Centre Stage



Hydrogen Economy

ZJG Hydrotreated Vegetable Oil (HVO) Plant



Investment: HKD 1.25Bn
Payback: 2.5years

- **Current Capacity: 250k tons/year**
- **Major sales market in Europe**
- **2021 Q4:**
 - **Expand 40% to 350k tons/year**
(Reduce >1M tons of CO₂/year, eqv. to 1.5GW Solar PV system)
 - **Trial production of SAF***
 - **Fundraising for business expansion**

SAF*: Sustainable Aviation Fuel

Sustainable Aviation Fuel (SAF)

- The International Air Transport Association (IATA) actively promotes SAF
- Reduce 80% CO₂ emission
- Over 45 international airlines have SAF pilot run
- Higher unit profit margin than HVO



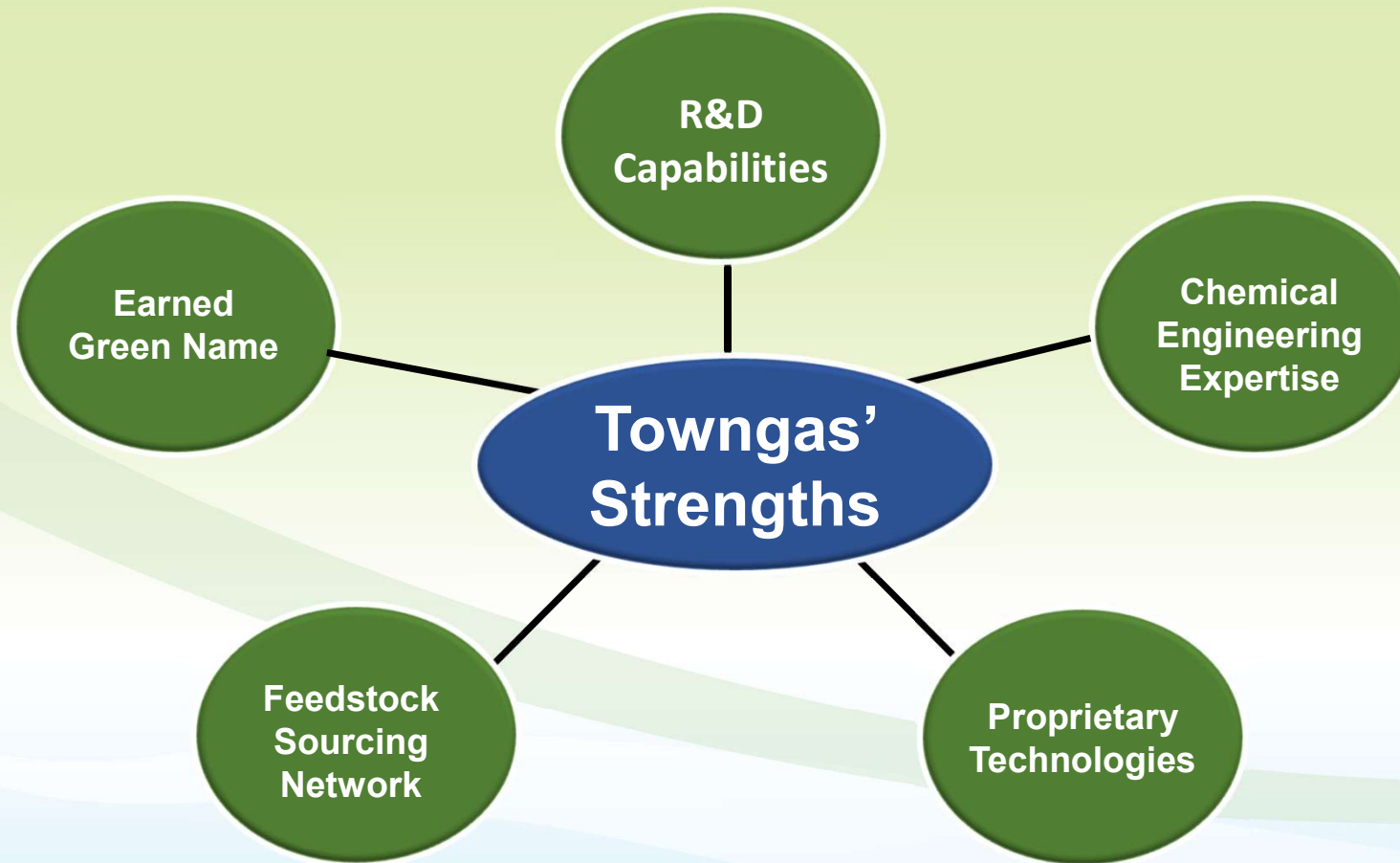
Agricultural Waste Utilization



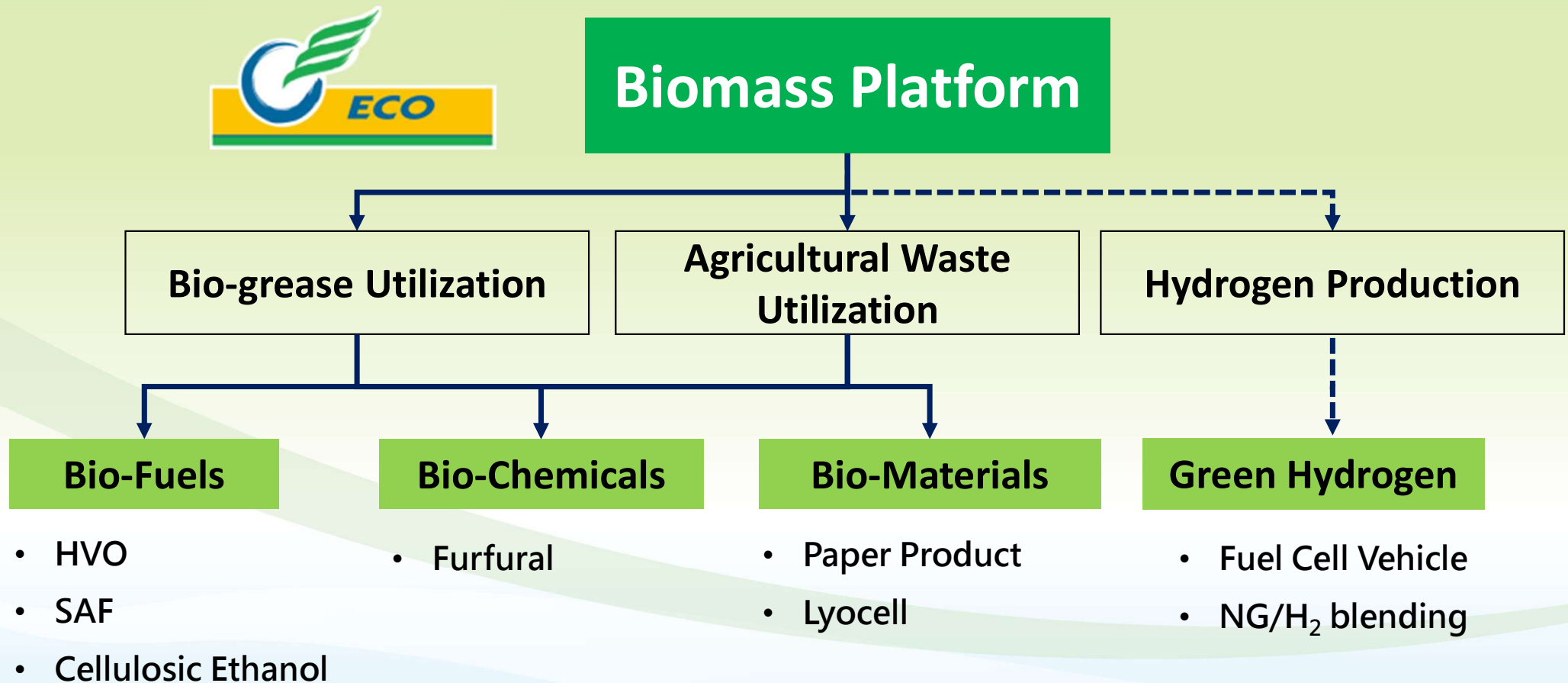
Advanced Biofuel: Cellulosic Ethanol
Bio-chemical: Furfural
Bio-material: Paper Product, Lyocell

Luanzhou, Hebei	Cangzhou, Hebei
Corn Cob/ Stalks → Furfural (28K ton p.a.) → Paper Product (110K ton p.a.) Production: 2021 Q4 Investment: HKD 470M Payback: 3.5 years	Corn Cob → Furfural (30K ton p.a.) → Cellulosic Ethanol (25K ton p.a.) Production: 2022 Q2 Investment: HKD 550M Payback: 3.5 years

Competitive Edge in Advanced Biofuels



Green Business : Biomass



ECO Biomass Platform

(Timeline of Fundraising and IPO)

Purpose

- Expand production capacity of HVO/SAF by 100%
- Expand agricultural waste utilization capacity by 100%
- Develop downstream value-added products and associated technologies

Timeline

- | | |
|---------------------------------------|-------------|
| • 2 Rounds Fundraising (Series A & B) | 2021 - 2022 |
| • IPO | 2024 |



ESG Update & Outlook

ESG Performance : Environmental



ESG Performance: Social



ESG Performance: Governance



乐在阳光
下
诚信

Integrity Promotion



Recognitions in ESG Contribution

High ESG rating



Hang Seng Corporate
Sustainability Index Series

AA



Hydrogen Pilot Project

Clean Air Plan for Hong Kong 2035

(June 2021)

- “Actively assessing the feasibility of using H_2 fuel cell buses in Hong Kong”
- The main composition (50%) of town gas is H_2
- Working on H_2 extraction pilot project



Hydrogen bus (Liverpool city)

Outlook: 2021 and Beyond

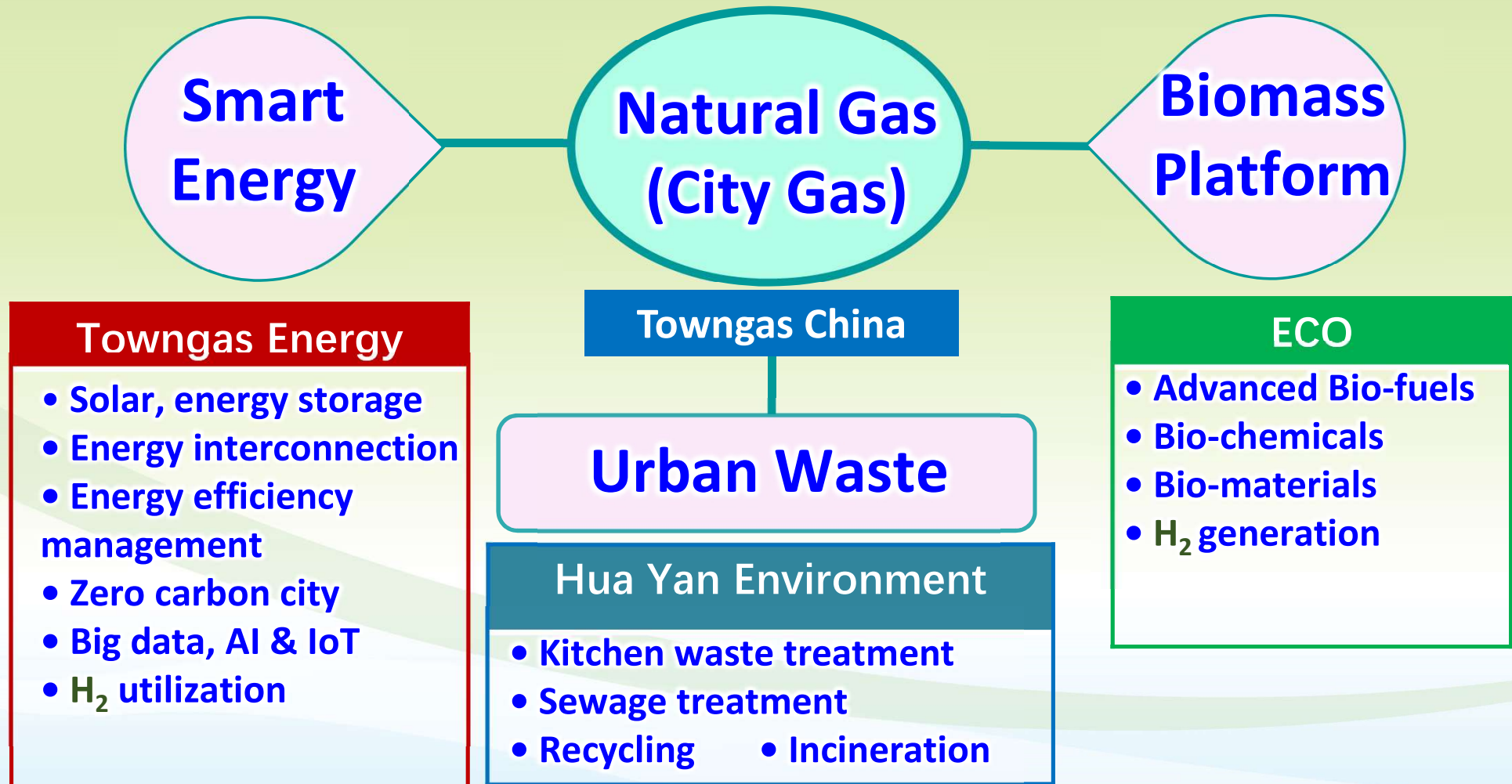
Hong Kong

- **Effective pandemic containment**
- **Economy recovery**
- **Tourism not likely this year**
- **Housing development ↑**
- **Town gas tariff:
maintain same level (2021)**

Mainland China

- **30/60 opportunities**
 - **High NG consumption**
 - **Smart energy**
 - **Biomass utilization**
- **GDP growth on track**
- **Commodity prices rebound**
- **Strong RMB ex-rate**
- **Extended businesses: Beyond gas**

Towngas Sustainability Businesses



The background of the slide is a composite image. The bottom half shows a lush green field of crops, possibly corn, under bright sunlight that creates a lens flare effect. The top half shows a clear blue sky with several dandelions in various stages of blowing their seeds, and a few white birds in flight. The text is overlaid on a semi-transparent white band across the middle of the image.

Towards Carbon Neutrality

Embracing the New Energy Era

Disclaimer

This presentation and subsequent discussion may contain certain forward-looking statements. These forward-looking statements reflect the company's view on some future events and involve known and unknown risks and uncertainties and other factors which may cause actual performance and development differ materially. Past performance cannot be relied on as a guide for future performance.



Thank You