

The Hong Kong & China Gas Co. Ltd. (3 HK)

2020 Annual Results

19 March 2021



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.

Group Financials



2020 Operating Profit After Tax



HK\$3,176Mn

HK\$3,682Mn

HK\$398Mn

+ 7%

- 5%

+ 134%

(Gas volume -2.7%
Effective cost savings)

(City-gas volume +5%
Rmb depreciation -0.9%
New Connections delayed)

(Ramp up of new
Biofuel/Biomass projects)

OPAT HK\$7,256Mn +3%

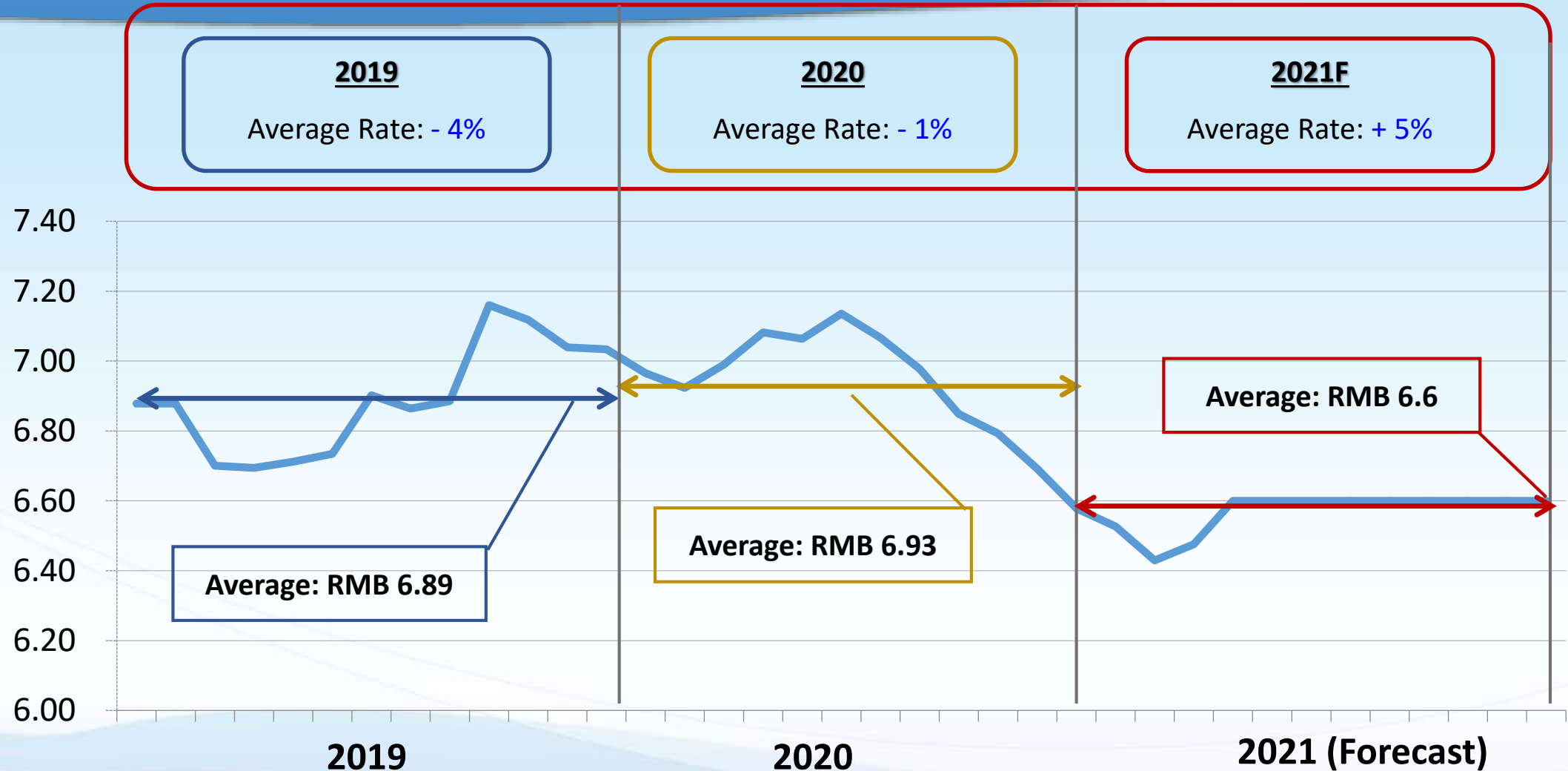
2020 Annual Results

The Hong Kong & China Gas (3 HK)

(HK\$ Mn)	2020	2019	Change
Revenue	40,927	40,628	+1%
Operating Profit	7,256	7,013	+3%
IFC Revaluation Increase/(Decrease)	(477)	200	-
Profit Attributable to Shareholders	6,007	6,966	-14%
Earnings per Share [^]	HK 33.80 cents	HK 39.20 cents	-14%
Full Year Dividends per Share	HK 35 cents	HK 35 cents	-
Bonus Shares	1 for 20	1 for 20	



[^]2019 figures adjusted for the bonus shares issued in 2020

RMB/USD Average Exchange Rate



***Forecast (2021 Mar ~ Dec): RMB 6.60@USD**

Healthy Financial Position

HKCG (3 HK)	31 Dec 2020	31 Dec 2019		18 Mar 2021	31 Dec 2019
	HK\$ Bn	HK\$ Bn			
Total assets	150.3	140.5	P/E Ratio	35.1x	37.0x
Net asset value	79.2	75.4	P/B Ratio	3.2x	4.0x
Cash and Bank	7.6	8.0	Credit Ratings:  A1  A		
Total borrowings	42.1	37.9			
Interest Coverage	9.2x	10.0x			
Net Gearing	30.4%	28.4%			

2020 Annual Results

Towngas China (1083 HK)

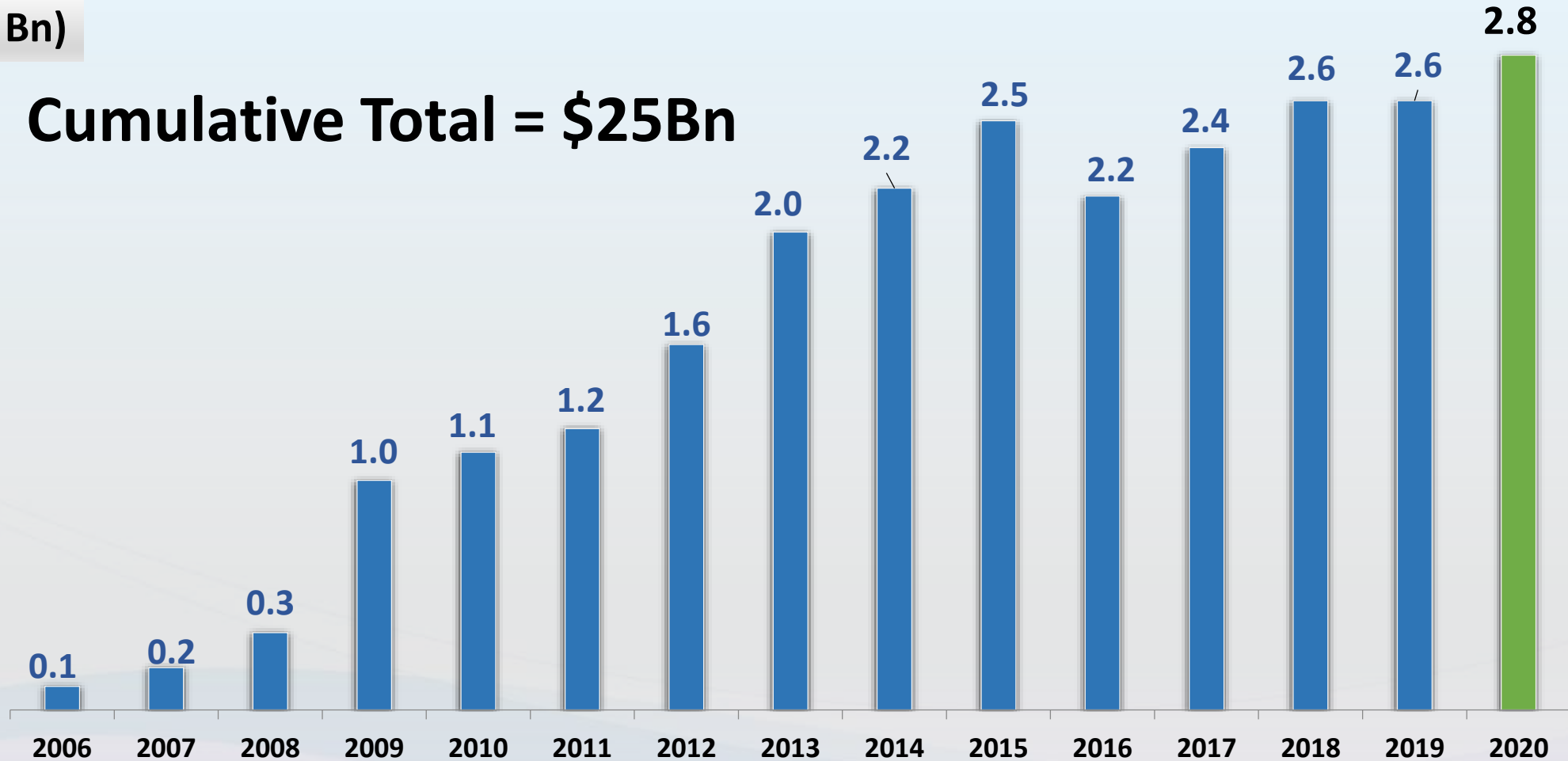
(HK\$ Mn)	2020	2019	Change
Turnover	12,826	12,924	-1%
Operating Profit	1,824	1,756	+4%
Profit Attributable to Shareholders	1,447	1,308	+11%
Earnings per Share	HK 49.56 cents	HK 46.06 cents	+8%
Dividends per Share*	HK 15 cents	HK 15 cents	
Dividend yield	4.3%	2.8%	

*with option of script dividend

Strong Dividend from Joint Ventures

(HK\$ Bn)

Cumulative Total = \$25Bn



Rolling 3-Year Cashflow Projection

Healthy Position

Inflow



HK Operations	14
PRC Dividends	10
Strategic Investors	8

32

Cash on Hand	8
--------------	---

Fund available 40

Outflow



Dividend	20
Investments	20

Dividend and Investment 40

**BRINGING
GOOD VIBES**

Hong Kong Business



Hong Kong Business FY2020

Stable & Resilient Business



Gas Sales **27,947TJ**
(800M m³ NG eqv.)
-2.7%

ESG

The cleanest fuel
(<5% of HK total CO₂ emission)

No fatal gas incident
from customer utilization for
over 20 years

**Operating
Profit After Tax
HK\$3.176Bn**
Strong & Stable



Customers **1.94Mn**
+ 10,175



Household Penetration **74%**



Network Coverage **86%**

More Housing Units

2021-22 HK Government Budget

Supply in coming 5 years

Public

101,400

Private

90,000

191,400 units

+460TJ

Additional Commercial & Industrial Gas Sales

	Target Customer	Additional Annual Gas Volume 2021-2025
Gas Cooling and Heating Applications	Disneyland, Ocean Park, TGT, HK Airport	230 TJ
Diesel Conversion Projects	Hospitals, Food Factories, Laundries	510 TJ
New Projects	Hotel development projects, Hospital extension projects, Crematorium expansion, Maxim's new food factory	390 TJ
Potential Project	Waste Paper Recycle Plant (Tuen Mun)	100 TJ
Indoor Air Quality (Dehumidification)	Hotels, Hospitals and Office Buildings	30 TJ

Environmental Projects

- ***Tai Po Nethersole Hospital CHP 2MW**
- **North District Hospital CHP 4MW**
- **Maxim's Food Factory using waste heat from Tai Po Gas Plant**

***Award winning**

Green Tech Fund

Association of Energy Engineers (AEE) in the United States

Extended Business

- **Appliance sales: 250,000 units**
- **Kitchen cabinet: 4,000 units (30% market share)**
- **TG Fun (e-commerce): 100,000 members**
- **Towngas cooking class
(Disciples Escoffier, 60 graduates/year)**
- **Towngas cooking channel
(5M views, on-line cooking class)**

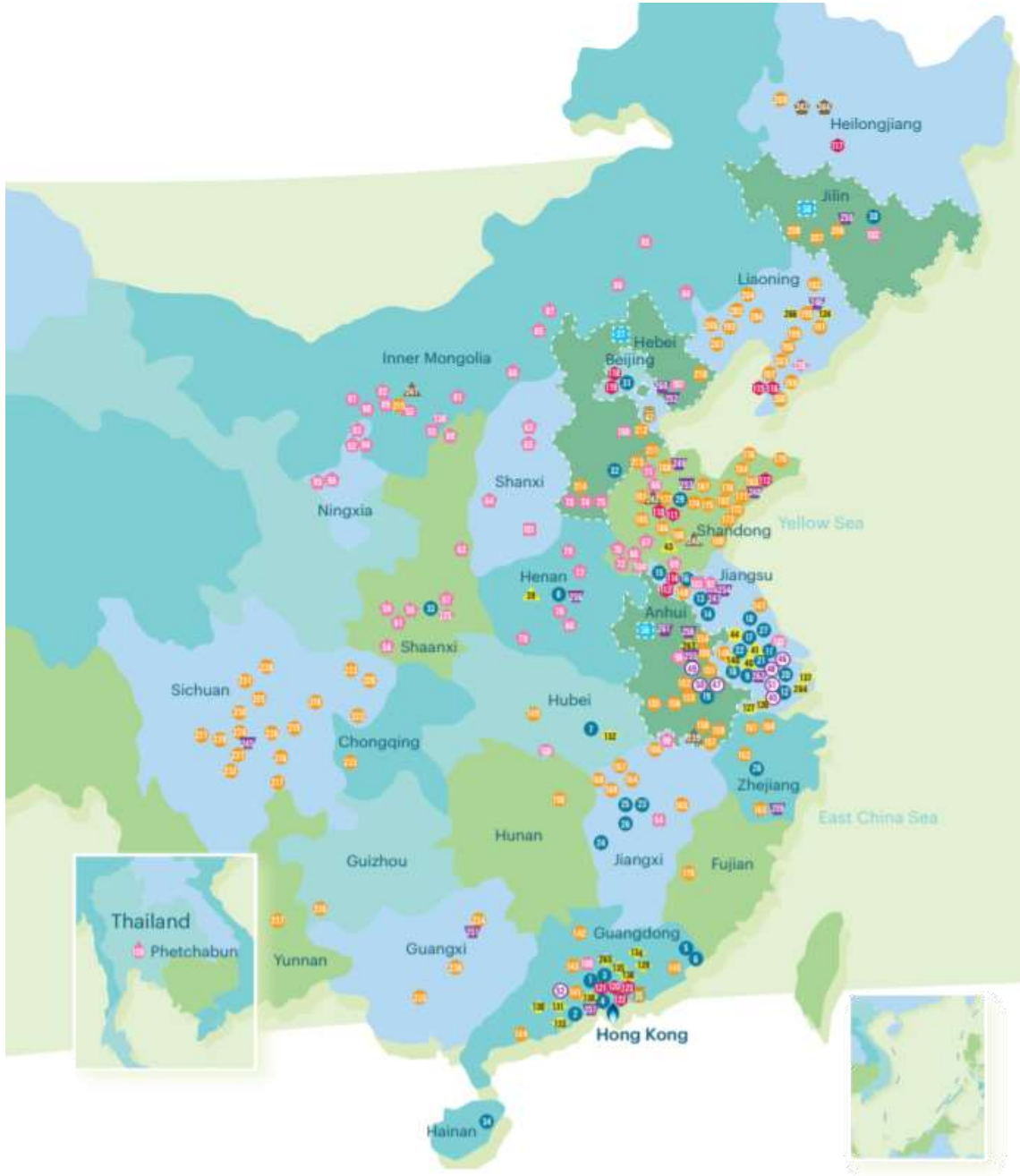
**Total Revenue
\$1.8B**

**CLEAN ENERGY
FOR ALL**

**Mainland
Utility
Businesses**



Wider coverage



365

316 Gas-related Business

- 282 City Gas ★
- 15 Upstream and Midstream
- 19 Engineering and Other Projects

33 Smart Energy

- 21 Distributed Energy
- 9 Photovoltaics
- 3 Energy Storage

11 Water & Environmental

- 7 Municipal Water
- 4 Solid Waste Processing

5 Extended Business

★ All project companies

Well-positioned Key Projects

6

Listed company shareholding

Foran Energy (002911.SZ)	38.67%
Chengdu Gas (603053.SH)	11.70%
Changchun Gas (600333.SH)	28.20%
Shenzhen Gas (601139.SZ)	26.48%
Anhui Natural Gas (603689.SH)	20.61%
CSSD (601512.SH)	9.00%

42

Key cities include:

Guangdong: Foshan, Zhongshan, Chaozhou

Jiangsu: Suzhou, Yixin, Changzhou, Taizhou, Zhangjiagang, Xuzhou

Shandong: Qingdao, Weifang, Weihai

Anhui: Anqing, Maanshan

Sichuan: Mianyang

Heilongjiang: Qiqihaer

...

15

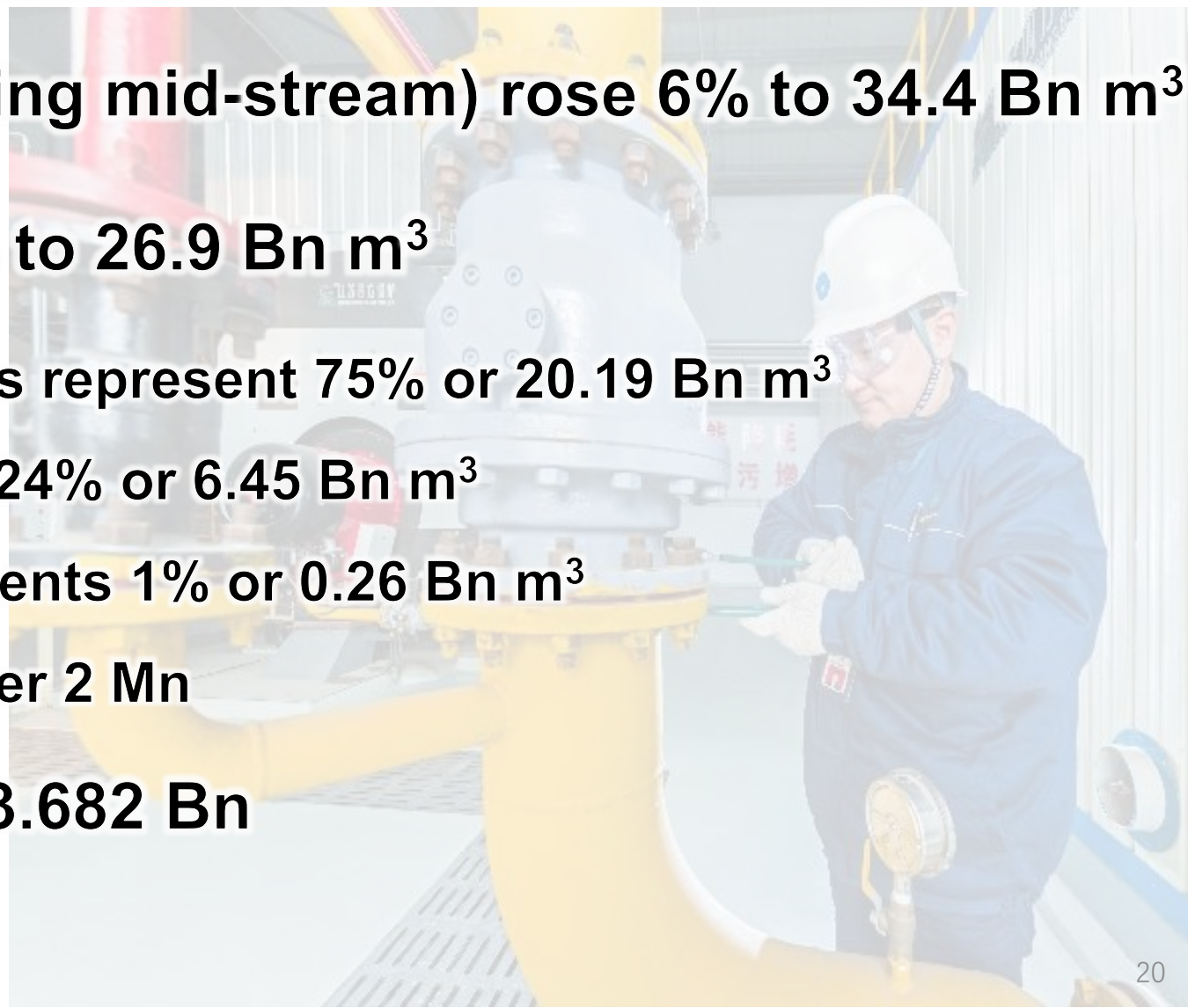
Provincial capitals or equivalent include:

Changchun, Hangzhou, Nanjing, Shenzhen, Wuhan, Xian, Jinan

...

Operating Highlights

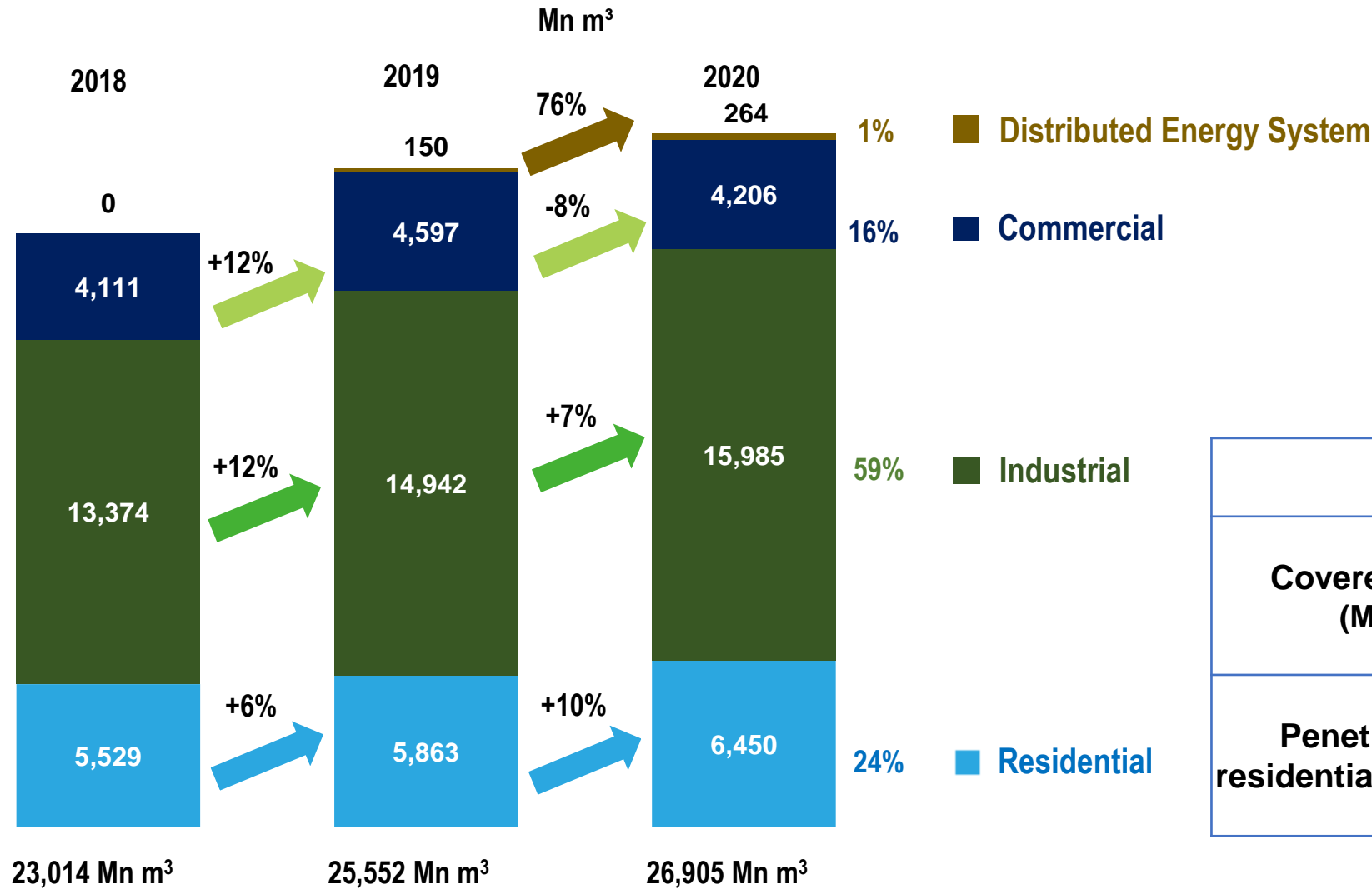
- **Total gas sales volume (including mid-stream) rose 6% to 34.4 Bn m³**
- **City gas sales volume rose 5% to 26.9 Bn m³**
 - **Commercial and industrial sectors represent 75% or 20.19 Bn m³**
 - **Residential customers represent 24% or 6.45 Bn m³**
 - **Distributed energy system represents 1% or 0.26 Bn m³**
 - **Number of customers grew by over 2 Mn**
- **Operating profit after tax: HK\$3.682 Bn**



Steady Customer Growth

	2019 (’000)	2020 (’000)	Change
Residential	29,526.6	31,535.8	+2,009.2 (6.8%)
Industrial	16.1	17.6	+1.5 (9.3%)
Commercial	237.5	262.1	+24.6 (10.3%)
Total	29,780.2	31,815.5	+2,035.3 (6.8%)

City Gas Sales Volume by User Category

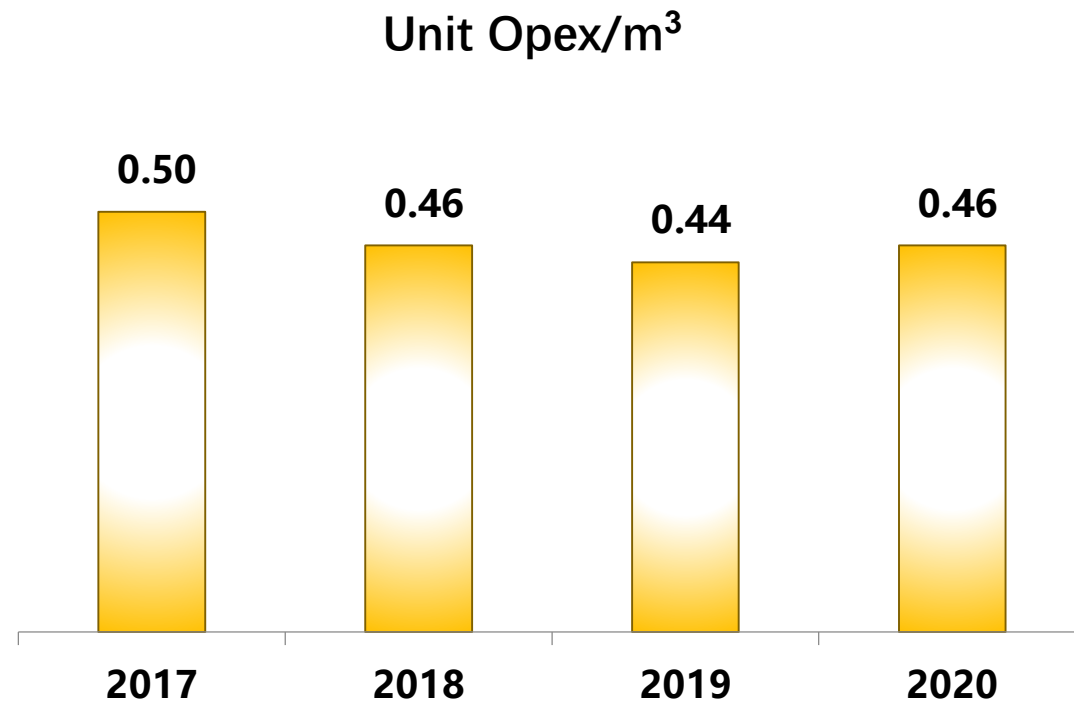


	2018	2019	2020
Covered population (Mn people)	150	158	165
Penetration rate of residential households (%)	55	56	57

Price and Margin

RMB/m³

Selling Price	2018	2019	2020
Residential	2.44	2.59	2.66
Industrial	2.76	2.80	2.51*
Commercial	3.02	3.06	2.71*
Avg Selling Price	2.73	2.82	2.60
Avg Gas Cost	2.13	2.24	2.01*
Unit Gas Margin	0.60	0.58	0.59



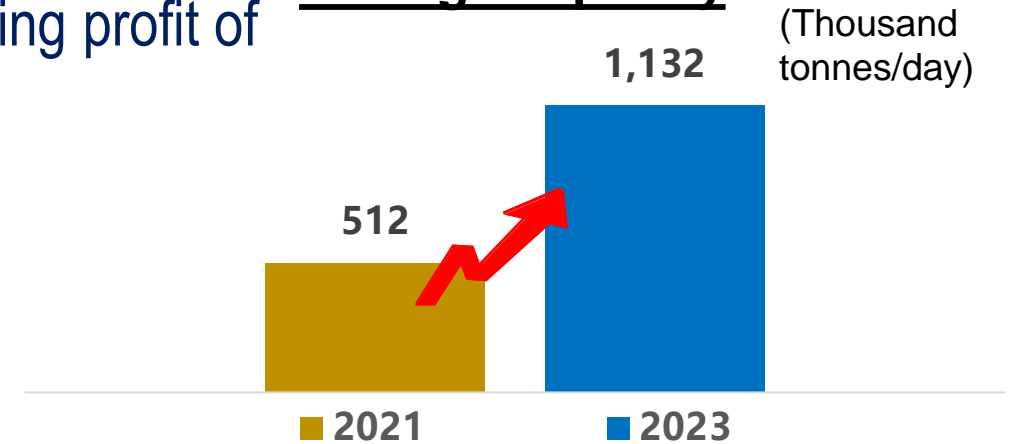
***Due to COVID-19, NDRC reduced natural gas cost to alleviate the burden of C&I customers.**

Water and Environmental Business

- Water sales volume of 917 million tonnes, with an operating profit of HK\$420 million
- Strong development in environmental business, with the addition of:
 - Changzhou food waste processing project
 - Changzhou waste incineration project
 - Tongling food waste processing project
 - PIRR 12%

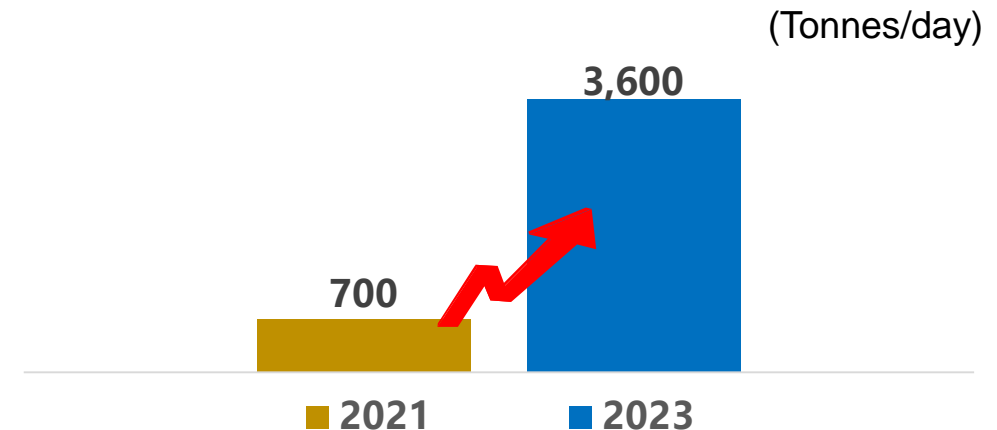
Sewage capacity

(Thousand tonnes/day)

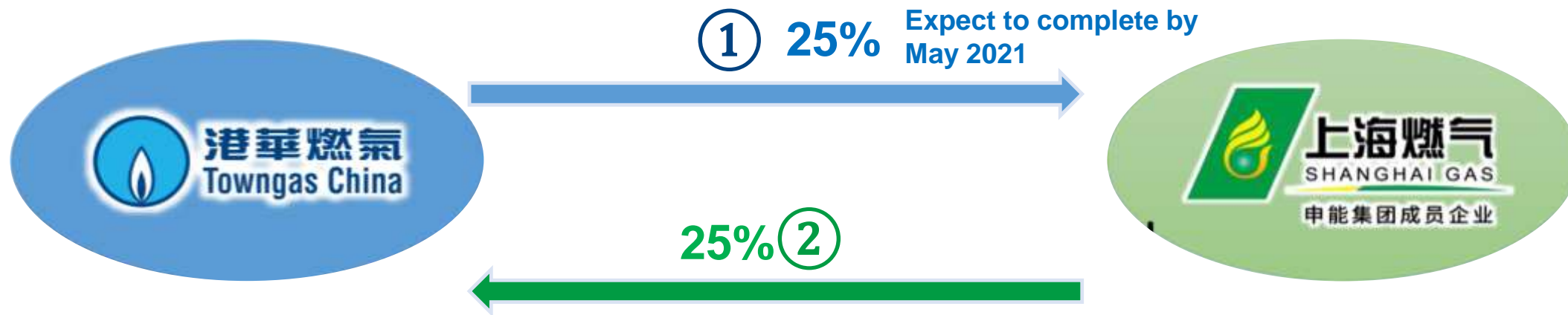


Solid waste capacity

(Tonnes/day)



Strategic cooperation with Shanghai Gas



2020

- Gas sales volume: 8.9 Bn m³
- Customers: 6.4 Mn
- LNG import volume: 4.3 Mn tonnes (~ 6 Bn m³)
- Estimated profit RMB 850 Mn (> 30% growth)
- Expect double digit growth in sales volume & profit in 2021

Upstream Investments



Sichuan Weiyuan Shale Gas Liquefaction Project

- Upstream gas supply of 300 million m³ p.a.
- Liquefaction and storage facilities to be commissioned in 2022



Tangshan Caofeidian LNG Terminal

- 2 x 200,000 m³ LNG storage tanks invested by the Group
- 1 million MT p.a. LNG terminal use right to be commenced in Q4 2022

Upstream Strategy

- 6 LNG terminals plus Weiyuan shale gas liquefaction plant
- PipeChina provides third-party access to facilitate gas trading
- Jintan gas storage fulfils peak-shaving and storage functions
- Group procurement to reduce cost



	2021	2022	2023
Group procurement (billion m ³)	1.5	2	3
Cost savings RMB Mn (RMB/m ³)	100 (0.07)	200 (0.10)	400 (0.13)

Business Strategy & **O**pportunities



Building on Unique Strengths: Lifestyle Management

291 customer centres on top of community centres
Reaching **>100 million** customers every year

>31 million existing customers +
6.4 million customers from Shanghai Gas

Additional services with regular safety inspection home visits

Establishing consumer finance business

Strengths

Platform content & meal-planning solutions focusing on health foods & gourmet

Collaboration with KOLs e.g.



Healthy Living

Expanding to health-focused products: "3 speciality foods per city"

Online & offline nutrition & health services

Comfortable Living

Bauhinia appliances & other new equipment

Mia Cucina high-end kitchen cabinets

Kitchen safety & smart housekeeping (Smart Home)



Extended Business Development Planning

Business surfacing

Business development

Business maturity

Progression

2021

First outlet in 2020:
Home lifestyle centre at Hudong, Suzhou
50 outlets transformed in 2021
25 in east China, 20 in GBA, 5 in other areas

2022-2023

200 outlets during development stage
100 in east China, 70 in GBA,
30 in other areas

2024-2025

500 outlets in maturity stage
250 in east China, 150 in GBA,
100 in other areas

	2021	2022	2023	2024	2025
Home Lifestyle Centres	50	100	200	300	500
Online members (Mn)	15	22	30	40	50
RMB (100 Mn)					
Healthy lifestyle including insurance	1	6	14	33	60
Comfortable lifestyle	17	21	26	32	40
Gas engineering, materials & related income	25	30	36	43	50
Total	43	57	76	108	150

Smart Energy

Upstream renewables

Power grid

Smart energy

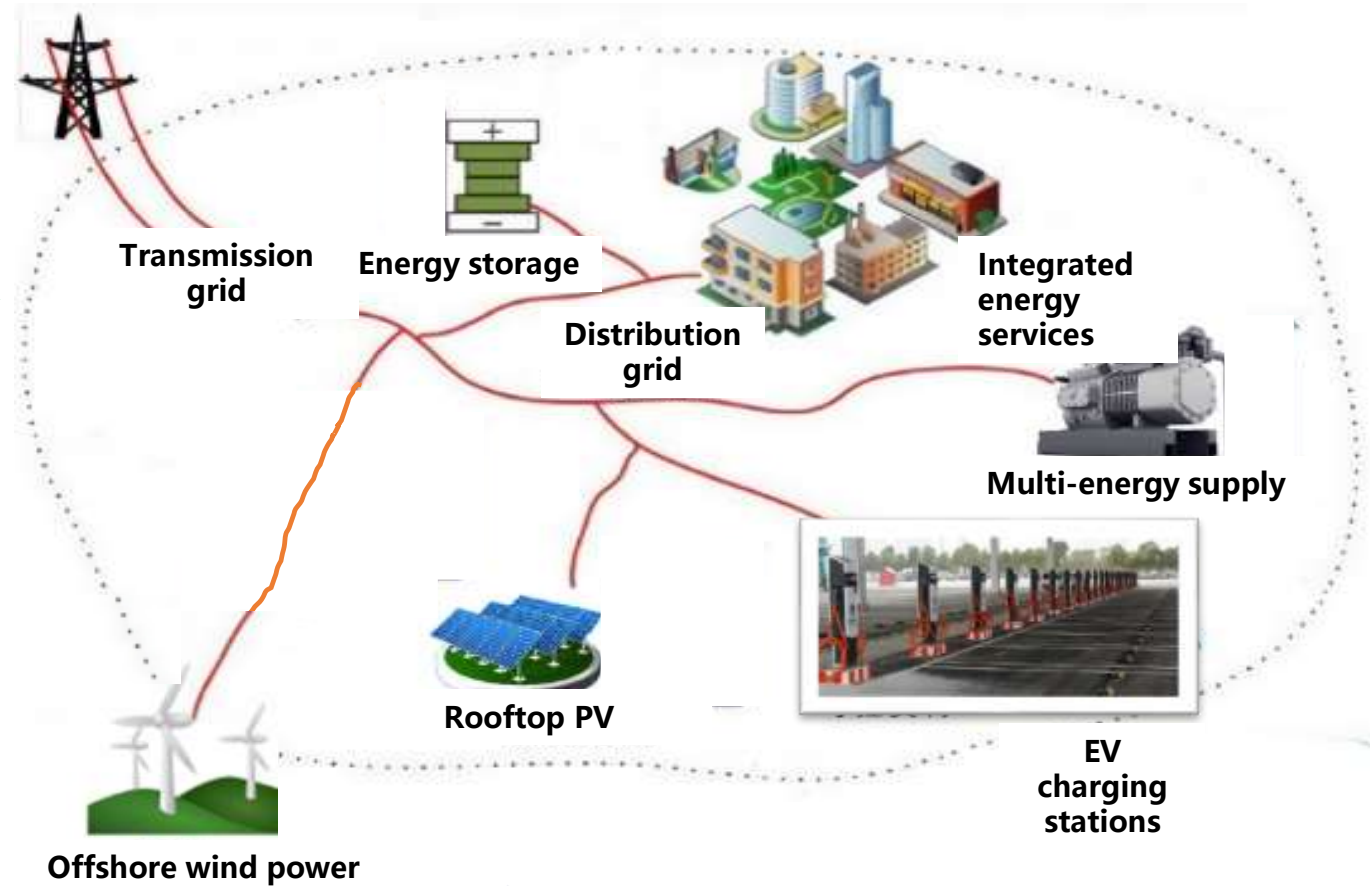
Photovoltaics (PV)



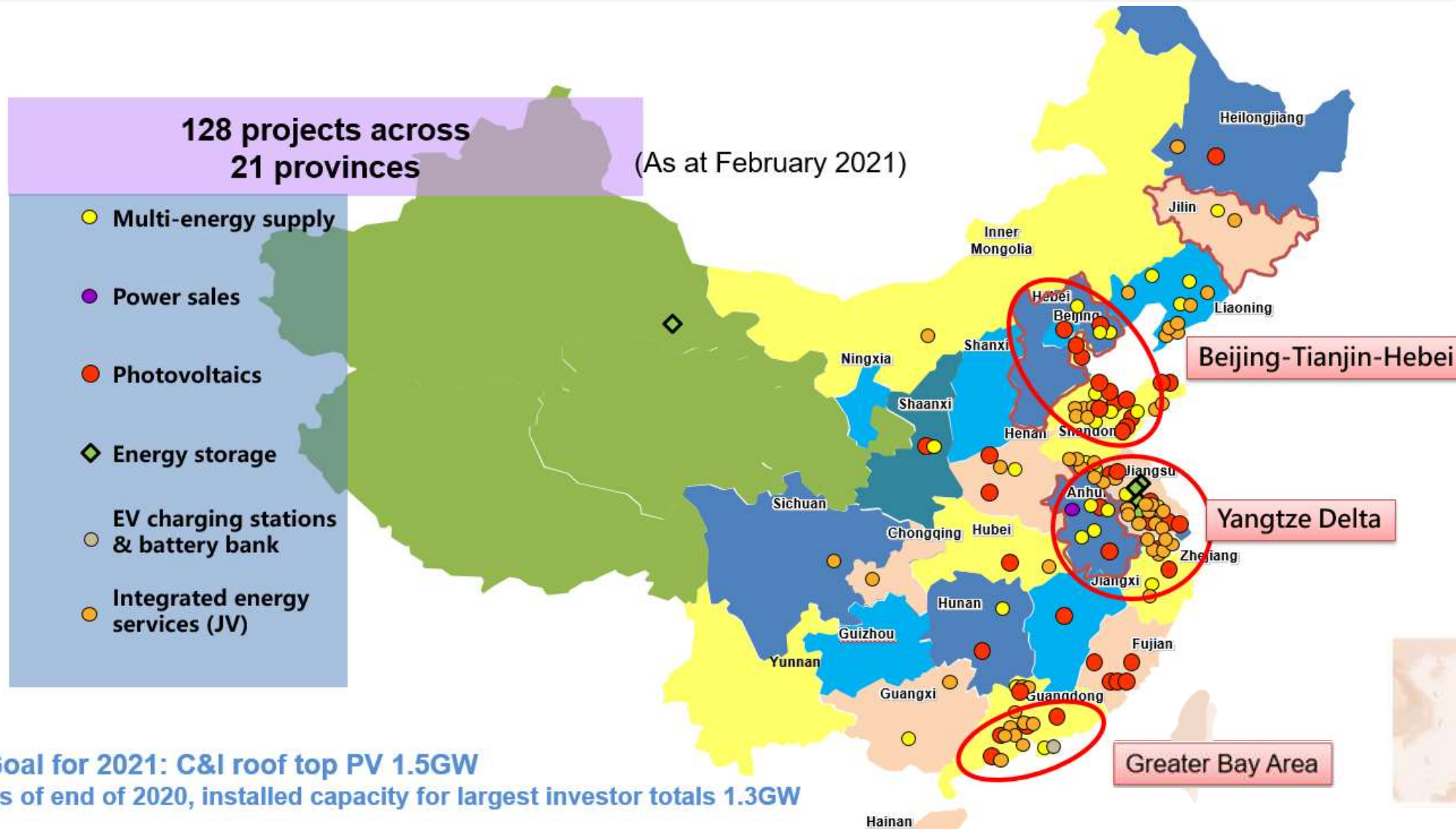
Wind Power



Power Storage



Rapid Development at Towngas Energy



City Smart Energy

Greater Bay Area

Beijing-Tianjin-Hebei

Yangtze Delta



PV

Focused on valued cities >10% market

Power storage

Peak-shaving and trough-filling, battery 2nd life utilization

EV charging stations and power banks

Power banks for EV trucks, V2G (Vehicle to grid)

Multi-energy supply

Natural gas, waste heat  CCHP

Integrated energy services

Energy saving, carbon reduction, IoT (Internet of Things)

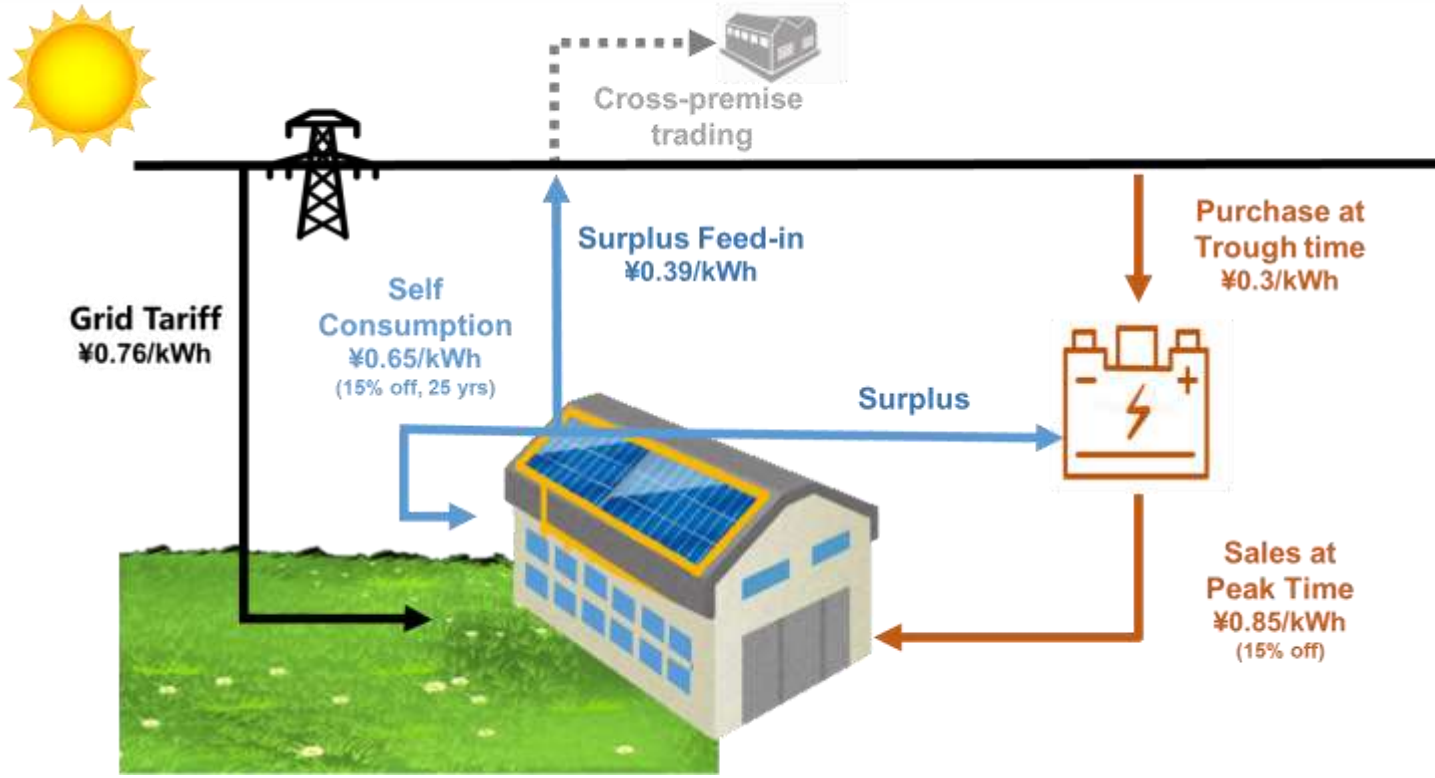
Smart platforms

Aggregation of flexible demand, carbon trading, VPP (Virtual power plant)

Strategic Partners



Strategy for Rooftop PV

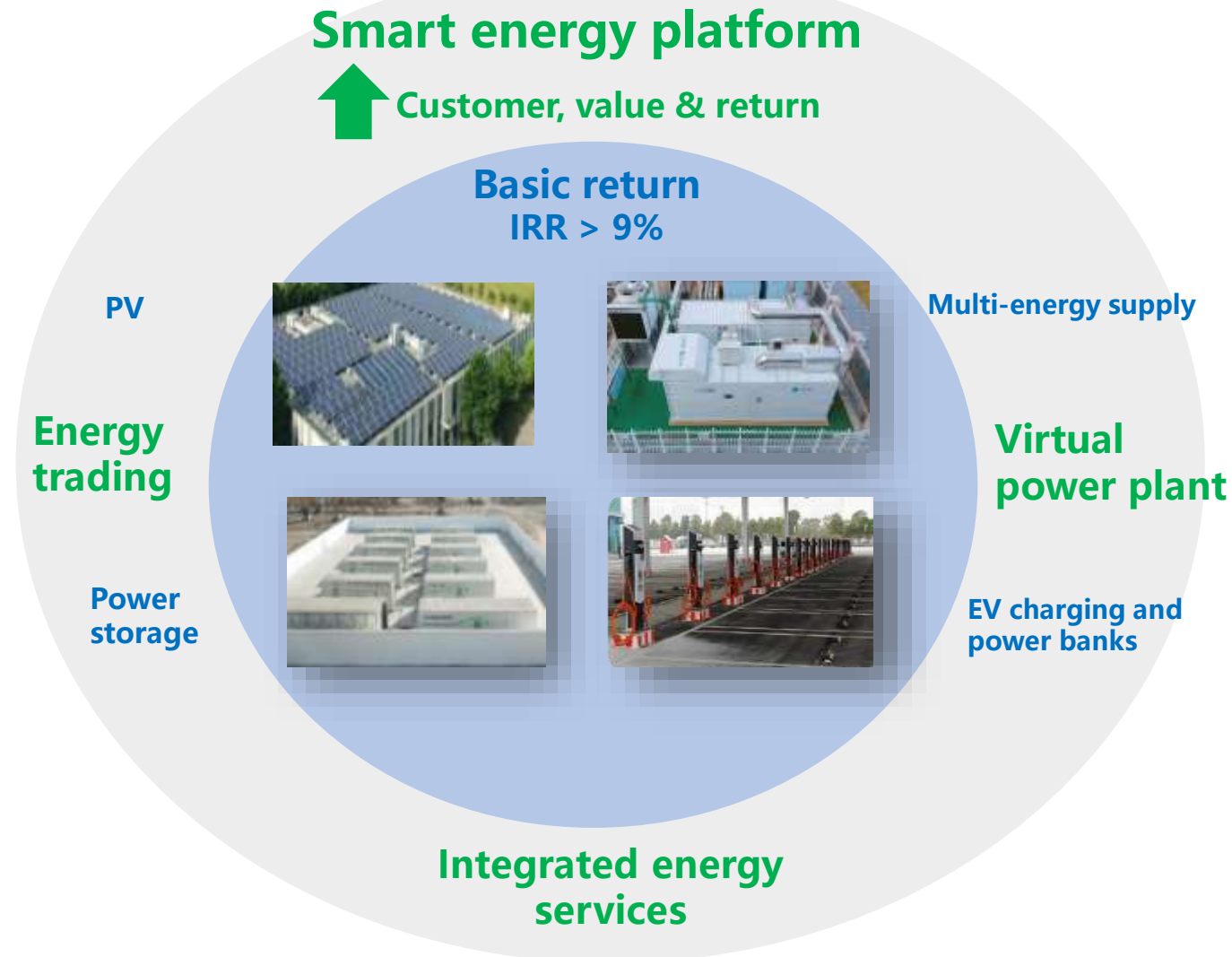


Key factors

- IRR > 9%
- Subsidy-free grid parity
- Continued cost reduction < RMB3.5/W
- Focus on valued cities (industrial)
- Large-scale rooftops (cross-premise power trading)
- > 400MW in half year

Unit: GW	2019	2025
Solar capacity (cumulative)	200	560
• Terrestrial PV	140	370
• Rooftop PV (C&I)	60 (29)	190 (90)

Technology and Platform: Key to Greater Return



Key Success Factors

Companies	Policy support	Capital (cost)	C&I customers	Valued cities	Power technology	Smart energy platform	Multi-energy supply
Power generation	✓	✓	▲	▲	✓	▲	▲
Power grid	✓	✓	▲	✓	✓	▲	▲
Oil & gas		✓		✓			
Equipment					✓		
	▲	✓	✓	✓	▲	▲	✓

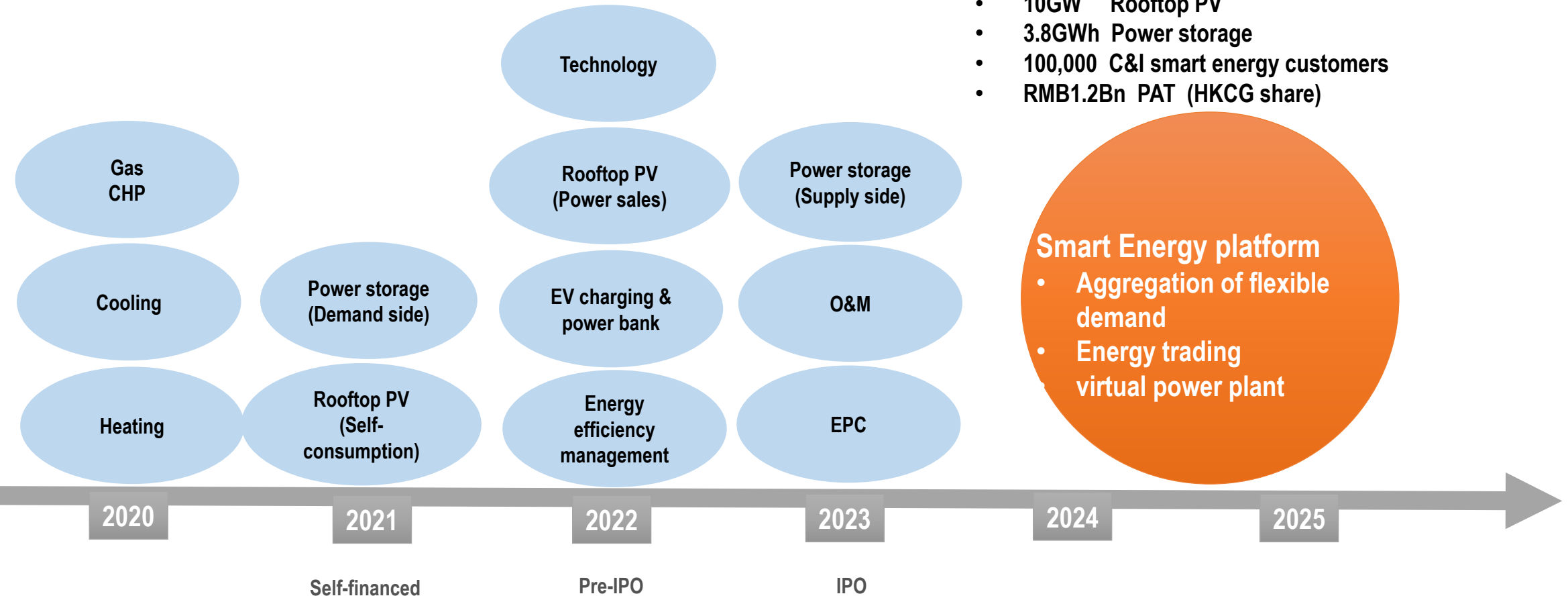


Synergy and strategic partnership

Five-year Development Plan

Five-year target

- 50 Smart energy cities
- 10GW Rooftop PV
- 3.8GWh Power storage
- 100,000 C&I smart energy customers
- RMB1.2Bn PAT (HKCG share)



Smart Energy platform

- Aggregation of flexible demand
- Energy trading virtual power plant

Total Investment: RMB50 Bn



New Energy **Towards Carbon Neutrality**

Climate Change

A Global Drive for Green-House Gas Reduction

2015 Paris Agreement

- Limiting global warming to **below 2°C**
- Pursuing efforts to **limit it to 1.5°C**

China's GHG Reduction Commitment

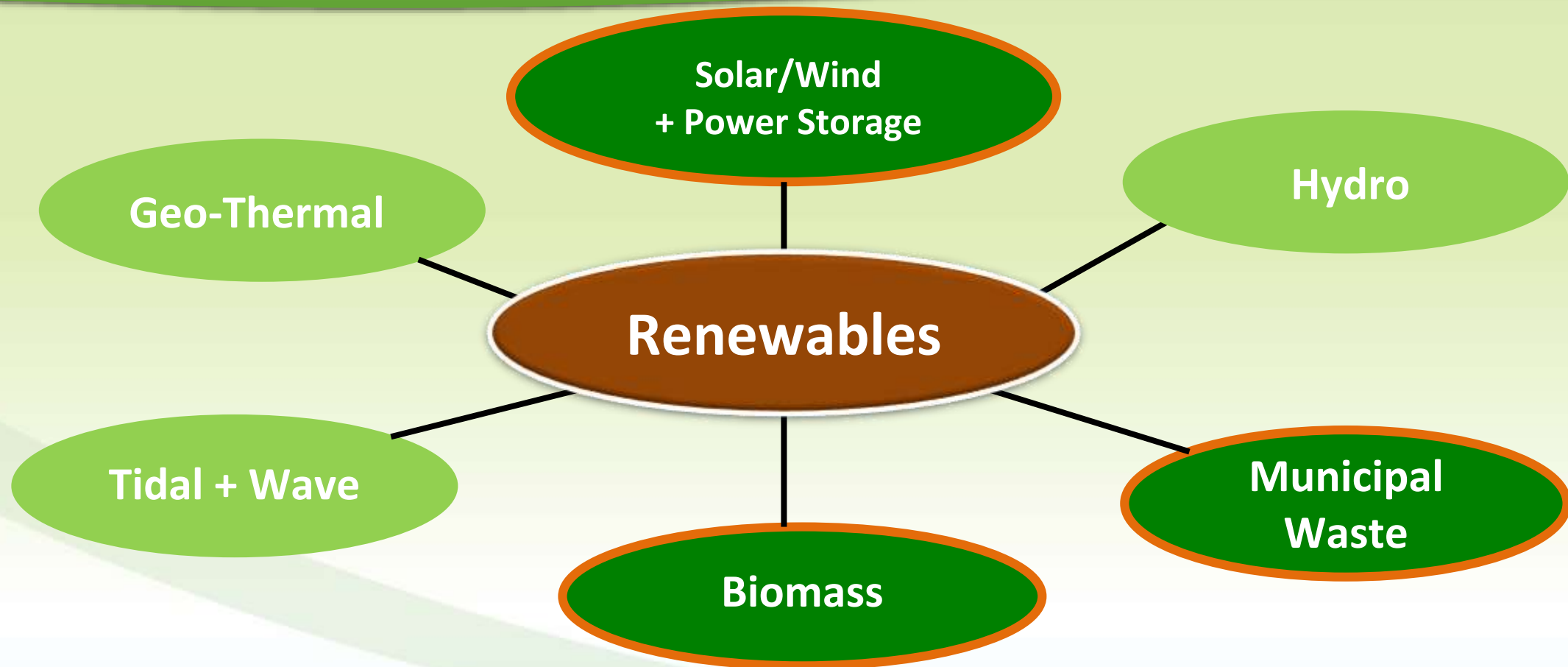


2030: CO₂ Peak

2060: Carbon Neutrality



Renewables Will be at the Centre Stage



Hydrogen Economy

Sustainable with Biomass

20th Century

Use of fossil fuels

Diesel, Gasoline,
Jet Fuel,
Petrochemicals etc.



**Consumer society
(Carbon economy)**



21st Century

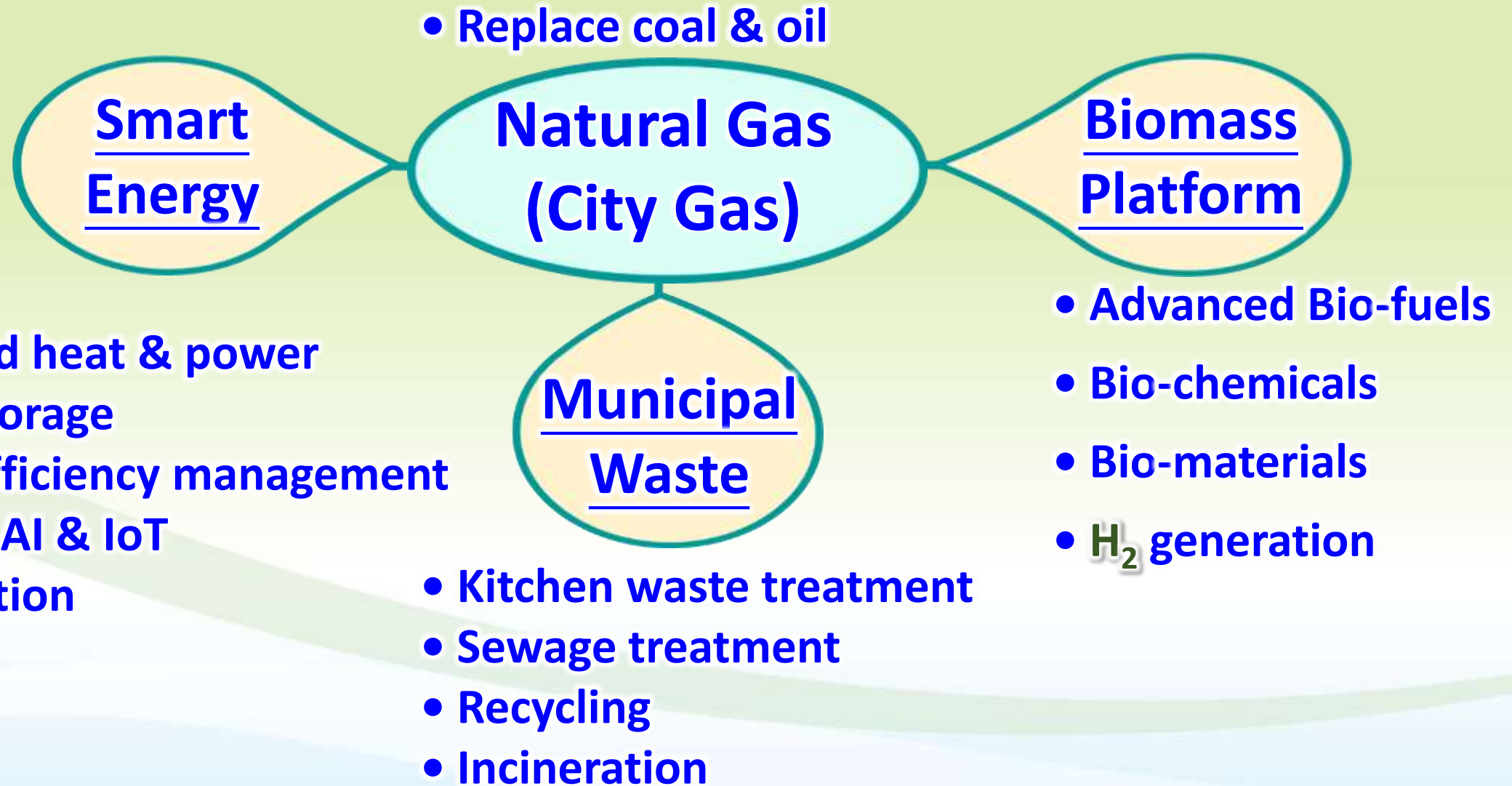
Use of biomass & Waste to energy

Biofuels,
Eco-friendly,
Chemicals and Materials



**Sustainable society
(Carbon neutrality)**

Towngas Sustainability Businesses



Towngas Biomass Platform



Towngas Biomass Platform



Biomass Platform

Bio-grease Utilization

Agricultural Waste Utilization

Bio-Fuels

- HVO
- SAF
- Cellulosic Ethanol
- Green Hydrogen

Bio-Chemicals

- Furfural
- Levulinic Acid #
- FDCA #

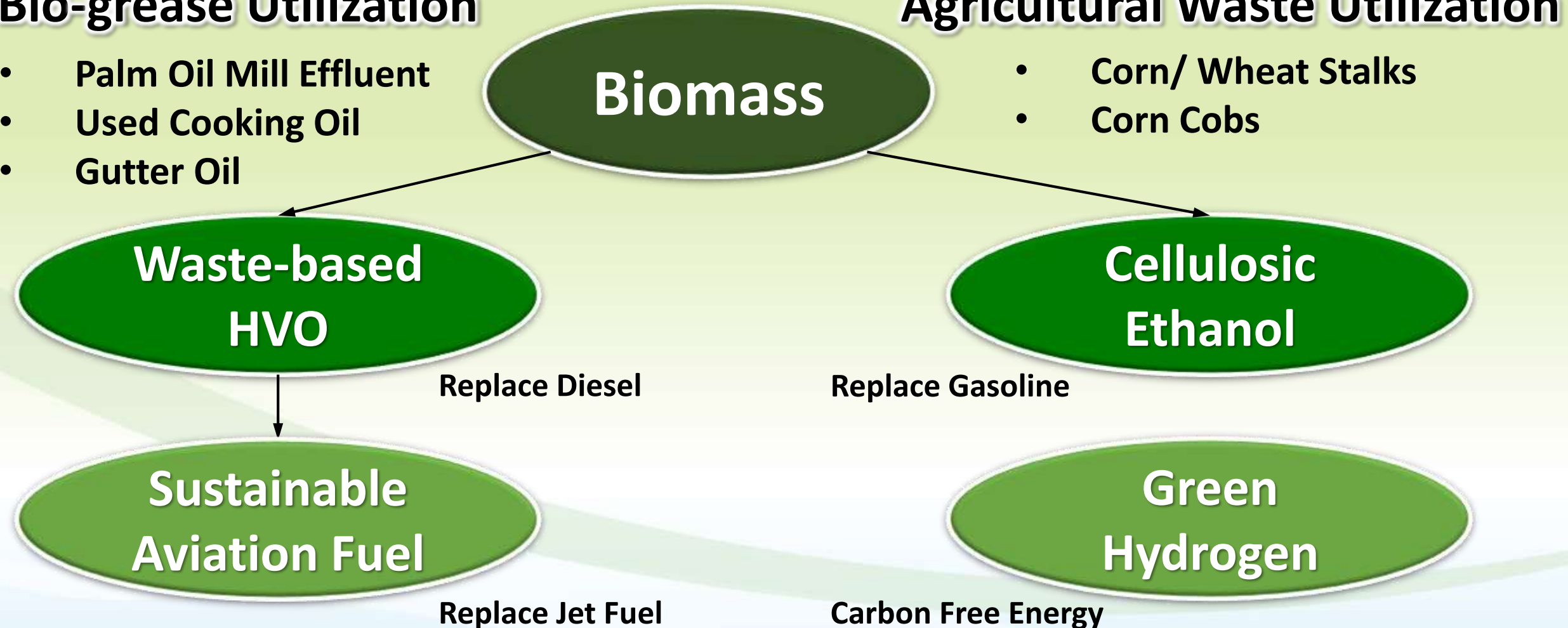
Bio-Materials

- Paper Pulp
- Lyocell

Biofuel Initiatives

Bio-grease Utilization

- Palm Oil Mill Effluent
- Used Cooking Oil
- Gutter Oil



Bio-Grease Utilization

Advanced Biofuel : Hydrotreated Vegetable Oil (HVO) : Sustainable Aviation Fuel (SAF)



- Proprietary technologies
- Feedstock: POME, UCO
- 2021 Capacity: 250K ton HVO p.a.
- Revenue: USD 380 Mn
- 2022 Capacity: 350k ton HVO p.a.
- Markets: Europe, Japan, Canada
- Production of 50K ton SAF p.a. in 2022

What's Next?

A white commercial airplane is shown in flight, viewed from a low angle. The plane is white with a blue stripe along the fuselage. It is flying against a clear blue sky with some light, wispy clouds. The plane is positioned in the lower half of the slide, below the IATA logo.

Sustainable Aviation Fuel

50k ton/year production line will be ready by 2022

Agricultural Waste Utilization



Advanced Biofuel: Cellulosic Ethanol
Bio-chemical: Furfural
Bio-material: Paper Pulp

Luanzhou, Hebei	Cangzhou, Hebei
<p>Corn Cob/ Stalks → Furfural (25K ton p.a.) → Paper Pulp (110K ton p.a.)</p>	<p>Corn Cob → Furfural (25K ton p.a.) → Cellulosic Ethanol (25K ton p.a.)</p>
<p>Revenue: RMB 370 Mn p.a. Market: Local Production: 2021</p>	<p>Revenue: RMB 400 Mn p.a. Market: Local, Europe Production: 2022</p>

What's Next?



Green Hydrogen
Produced from Agricultural Waste

Produce Green Hydrogen from Agricultural Waste (Corn/ Wheat Stalks)

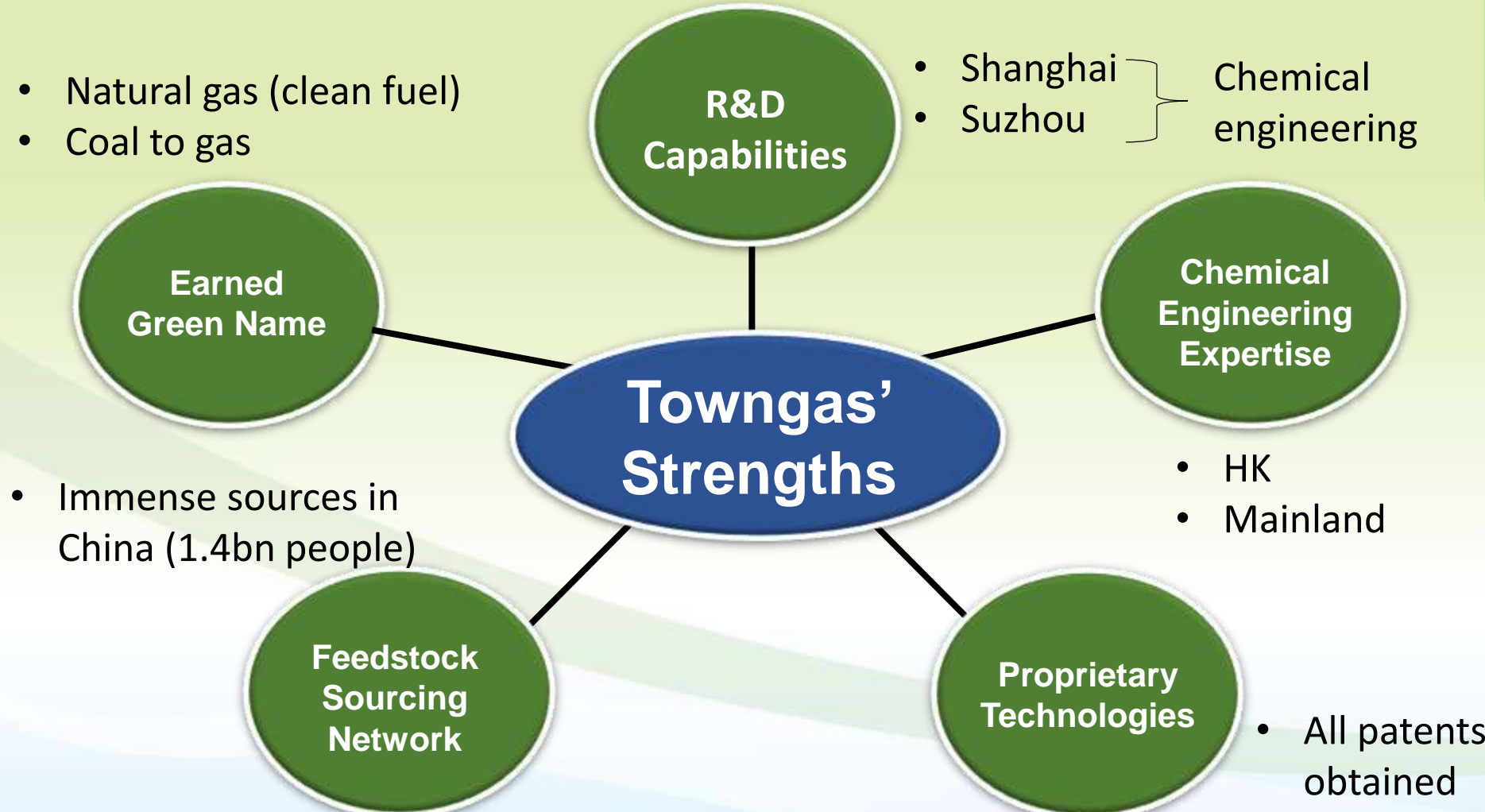
- In-house research
- Patented
- Commercially feasible
- Abundant feedstock resources

* Pilot Project under Planning



Mid-Scale Gasification Unit

Competitive Edge in Advanced Biofuels



Outlook



2021 Outlook

Hong Kong

- Vaccines available
- Restaurant business recovering
- Hospitality business improving
- Tourism coming back
- New hospitals
- Aggressive housing plan

Mainland China

- High GDP growth
- Infrastructure projects
- Commodity price ↑
- Housing industry warming up
- Stronger RMB
- Towards carbon neutrality
- Strategic partnership with Shanghai Gas

Growing Mainland China Utilities Businesses

- **Gas demand continues to grow**
- **Vaccines taking effect, economy rebound**
- **14th Five-Year Plan encourages gas to replace coal & oil**
- **Pipeline reform – access to upstream sources**
- **LNG infrastructure + gas storage capacities**
- **Strategic alliance with Shanghai Gas brings a promising growth**

Strategic Value of Shanghai Gas Deal

- **Access to a large city-gas market**
- **The Group now has a much stronger positioning in Eastern China**
- **Market value-added products/services to an addition of 6.4 million households**
- **Gained access to Shanghai Gas' LNG importation facilities**
- **Probable IPO of the Shanghai Gas JV**

Broader Future of Sustainability Businesses

- **Capitalizing on R&D achievements (High return rates)**
- **World's only company having in-house technologies to produce 3 waste-based bio-fuels**
 - **HVO**
 - **SAF**
 - **Cellulosic Ethanol**
- **Plans devised to expand capacities in China & SE Asia**
- **Will seek strategic investors shortly**
- **Pilot plant for Green H₂ from Biomass under planning**

Broader Future of Sustainability Businesses (Cont.)

- **Rapid growth in Smart Energy investments**
 - **Solar + Power Storage**
 - **Distributed Energy Systems**
 - **Energy Management Platform**
 - **Big Data, AI, IoT**
- **Municipal waste treatment**

Conclusion

Resilient Utility Businesses

+

Towards Carbon Neutrality

Opportunities

Environmental Social Governance Update





Environmental

- Greenhouse Gas Emissions
- Indoor Air Quality
- Energy & Fuel Management
- Water & Wastewater Management
- Renewables
- Municipal Waste Treatment



Social

- Community Relationship
- Customer Benefit
- Human Right
- Data Security & Privacy
- Employee Relationship
- Fair Labor Policy
- Employee Health
- Diversity & Inclusion
- Salary & Benefit
- Employee Development



Governance

- Business Ethics
- Diversity
- Auditing Policy
- Systematic Risk Management
- Safety Management
- Motivation Strategies
- Competitive Behaviors
- Transparency of Information
- Data Security & Privacy

Awards and Recognitions



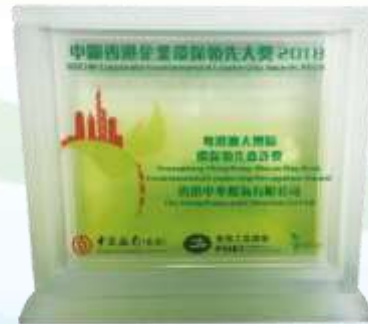
Global 2000 - World's Best Employers 2019 by Forbes



Members of Hang Seng Corporate Sustainability Index



Ranked 1st in both Hong Kong BSI and Greater Bay Area BSI by CUHK



Average Over 50 ESG awards in each of the past 5 years

A vibrant green field of crops under a bright blue sky with flying dandelions and birds. The scene is bright and sunny, with a clear horizon line. The text is centered in the upper half of the image.

**Aspire to be the Greenest
Hong Kong based Company**



Thank you