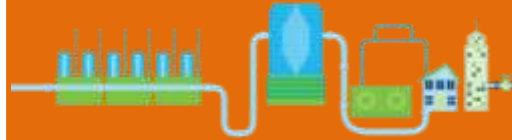


The Hong Kong & China Gas Co. Ltd. (3 HK)  
*incorporated*  
Towngas China Co. Ltd. (1083 HK)

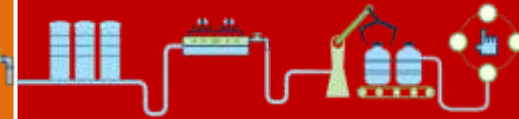
# 2016 Annual Results Presentation



**Hong Kong  
Core**



**Mainland  
Utilities**



**Corporate**



**New Energy  
& Telecom**

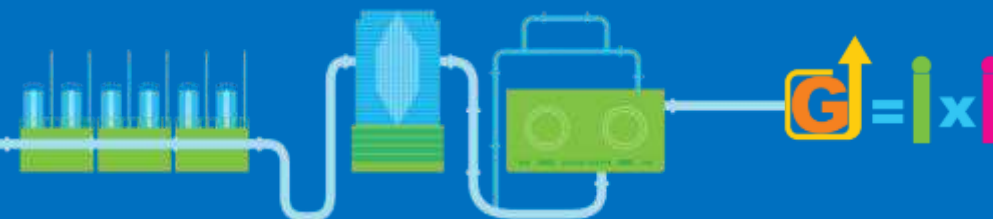


A vibrant landscape featuring a bright sun in a blue sky with scattered white clouds. Below the sky is a lush green field with a line of trees in the distance.

# *Opportunities Ahead*



# 2016 FINAL RESULTS OVERVIEW











# 2016 Results at a Glance



	<u>2016</u>	<u>2015</u>
• Revenue:	HK\$28.6Bn	HK\$29.6Bn
• Profit Attributable to Shareholders:	HK\$7.34Bn	HK\$7.30Bn
• Operation:	HK\$6.15Bn	HK\$6.13Bn
• IFC Revaluation:	HK\$1.19Bn	HK\$1.17Bn
• Earnings Per Share:	HK 57.7 cents	HK 57.4 cents
• Dividends:	HK 35 cents	HK 35 cents
• Bonus Shares:	1 for 10	1 for 10

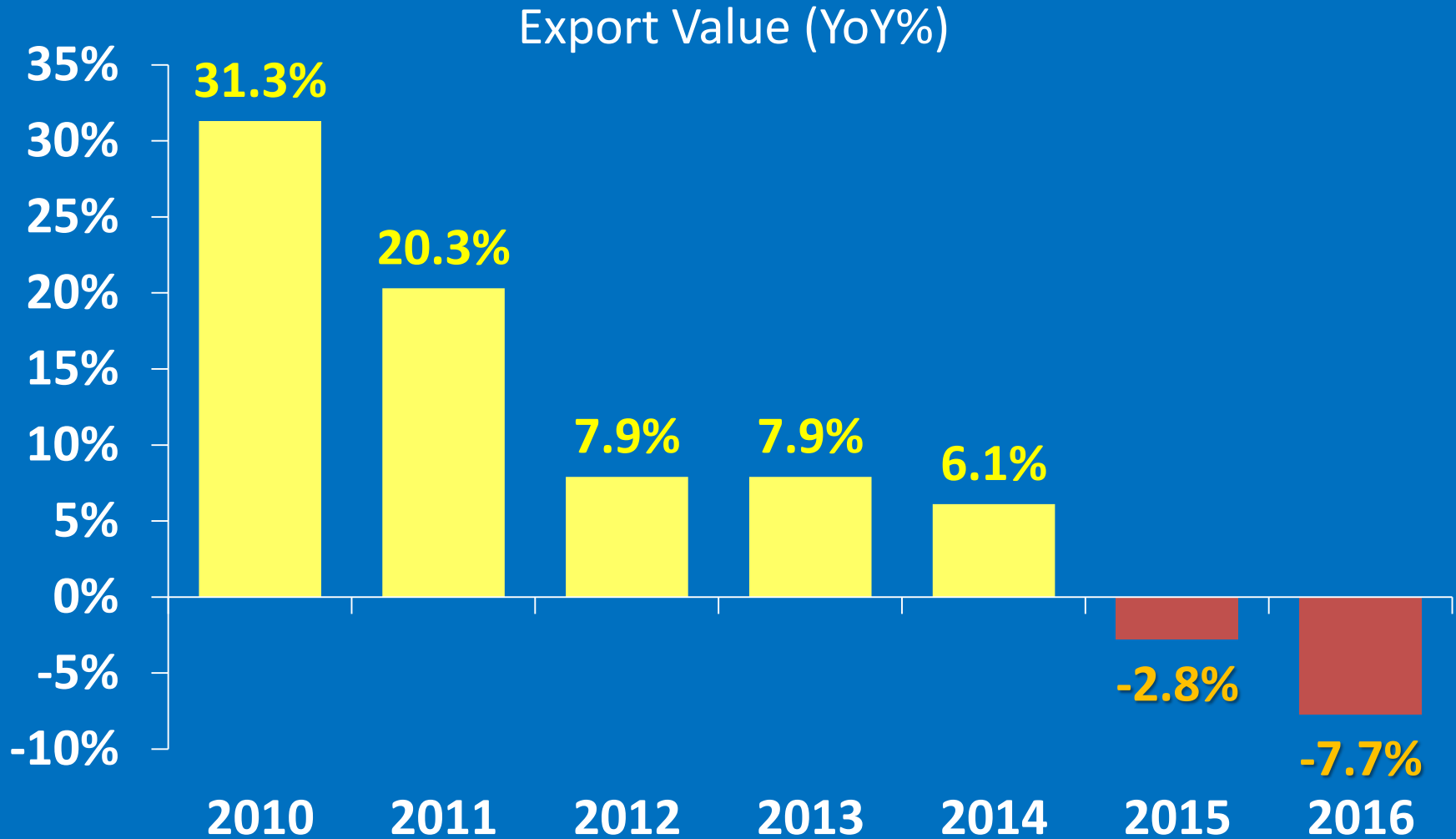
## Hong Kong

- Visitors from the Mainland declined 
- Hotel occupancy dropped 
- Restaurants business held steady 
- Extreme low oil price affected industrial gas sales in 1Q 
- Average ambient temperature slightly favorable 
- Inflation stayed low 
- Employment rate remained high 
- Housing supply increasing 

## Mainland China

- Weak export & industrial output 
- Low oil and LNG prices  
- Sluggish high end consumption market 
- Continuous RMB depreciation   
- PNG city-gate price reduction   
- Favourable clean energy policies   
- Energy & commodities demand recovering  
- New housing construction picking up  
- Inflation stayed low 
- Economic growth stabilizing at a mild rate 

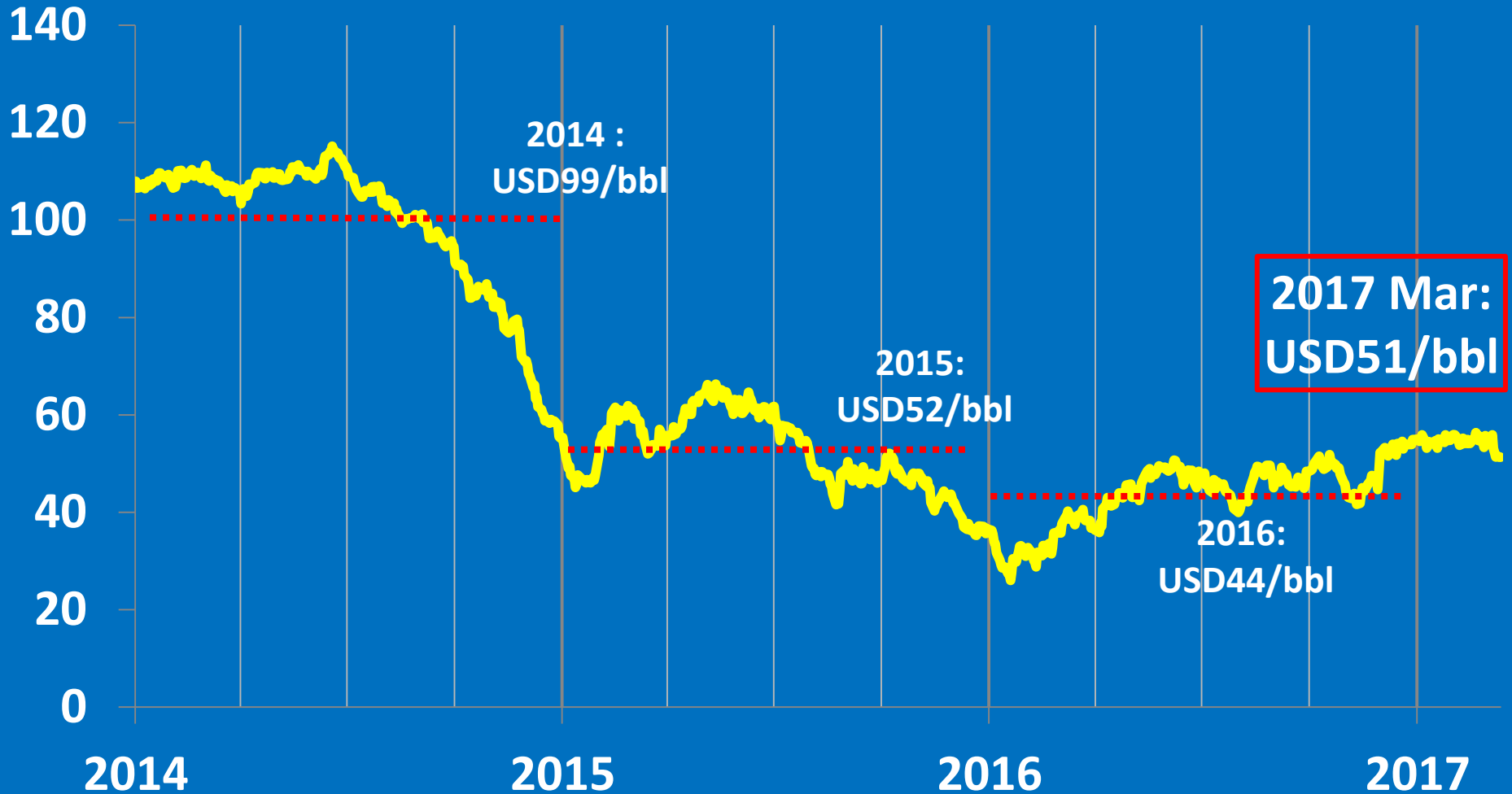
# Weak Export in China



# Oil Price Rebounds to US\$50 Level

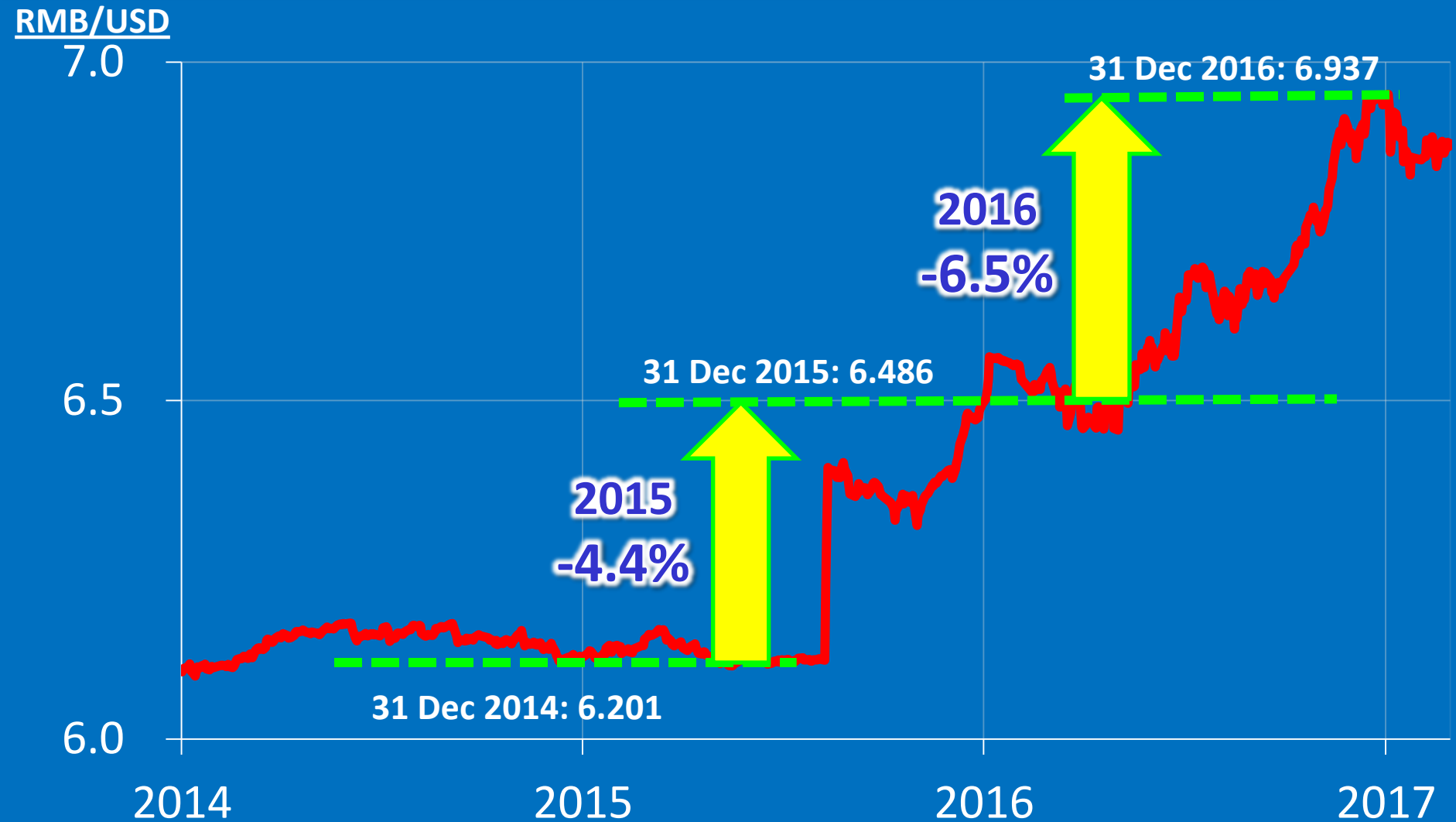
USD/Barrel

Brent Spot Price FOB



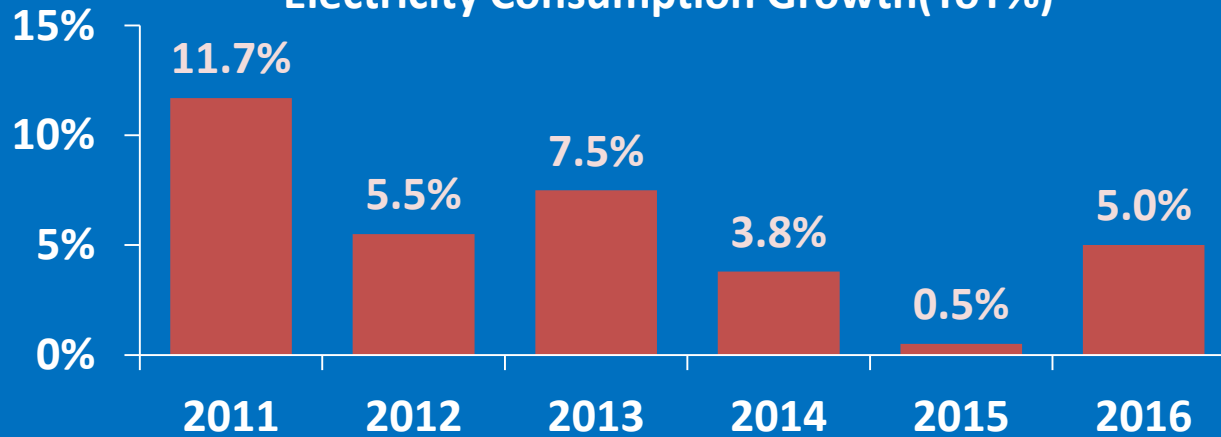


# Depreciation of RMB

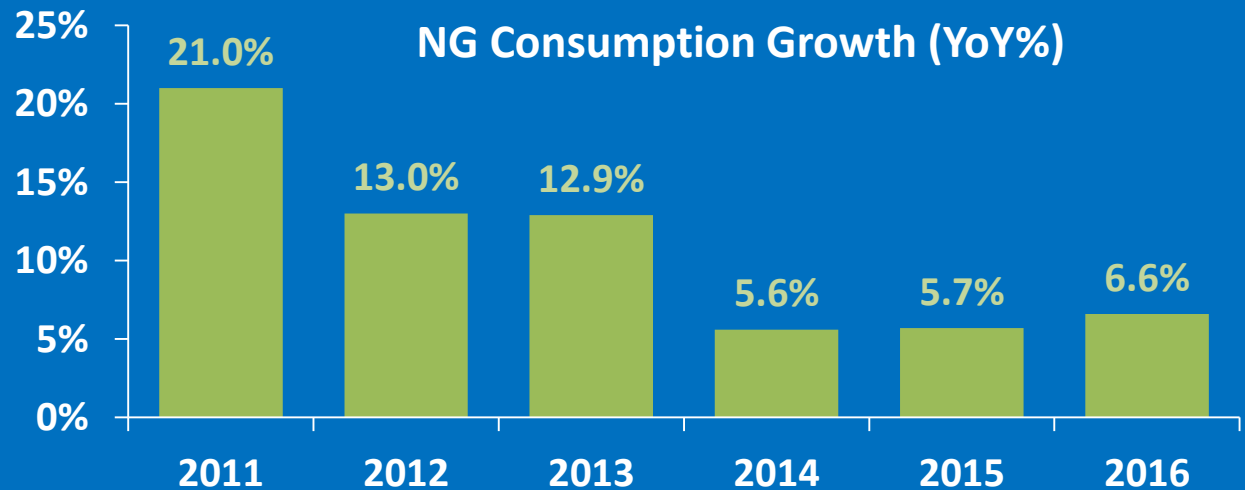


# China Energy demand Recovery

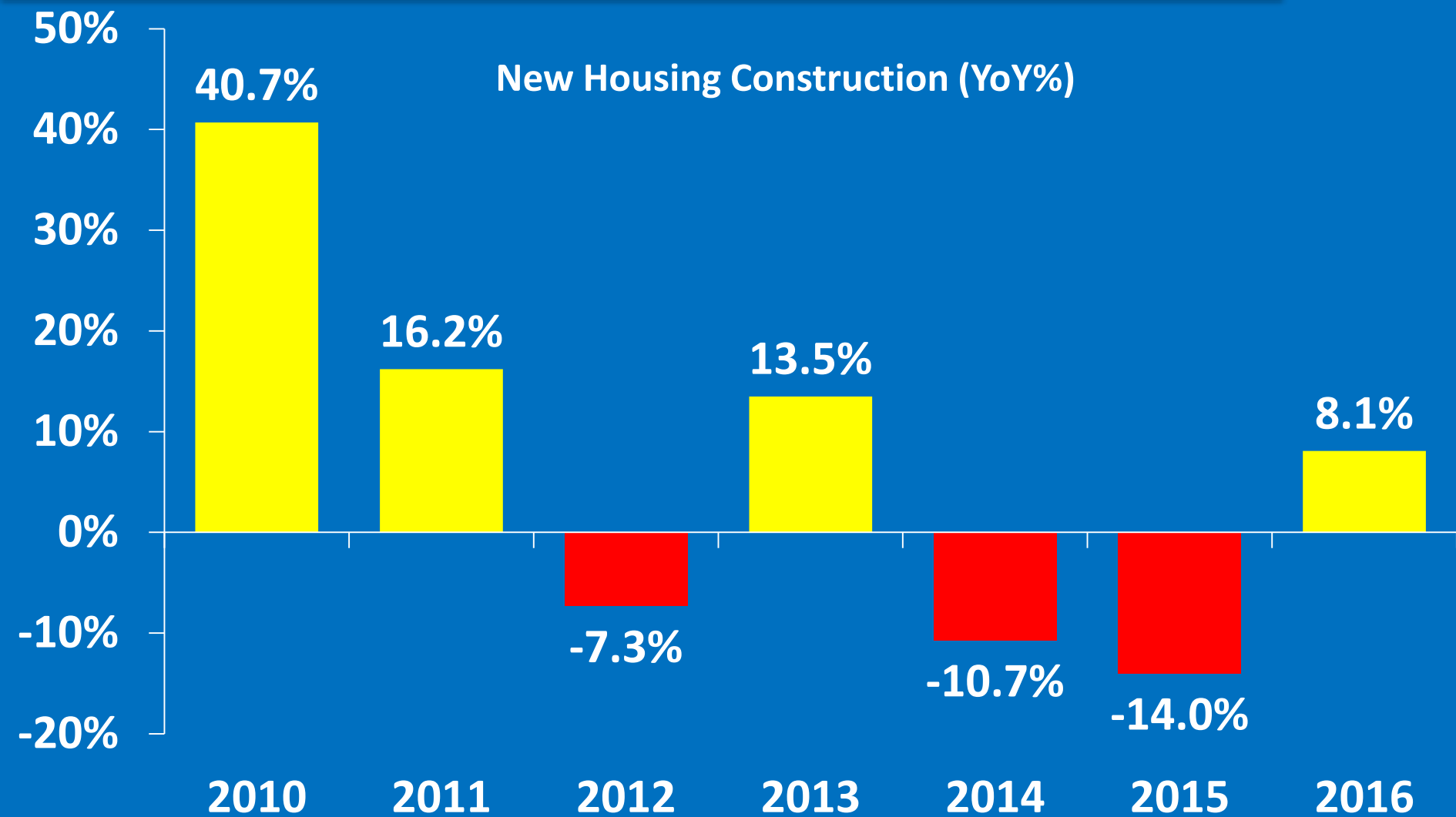
## Electricity Consumption Growth(YoY%)



## NG Consumption Growth (YoY%)

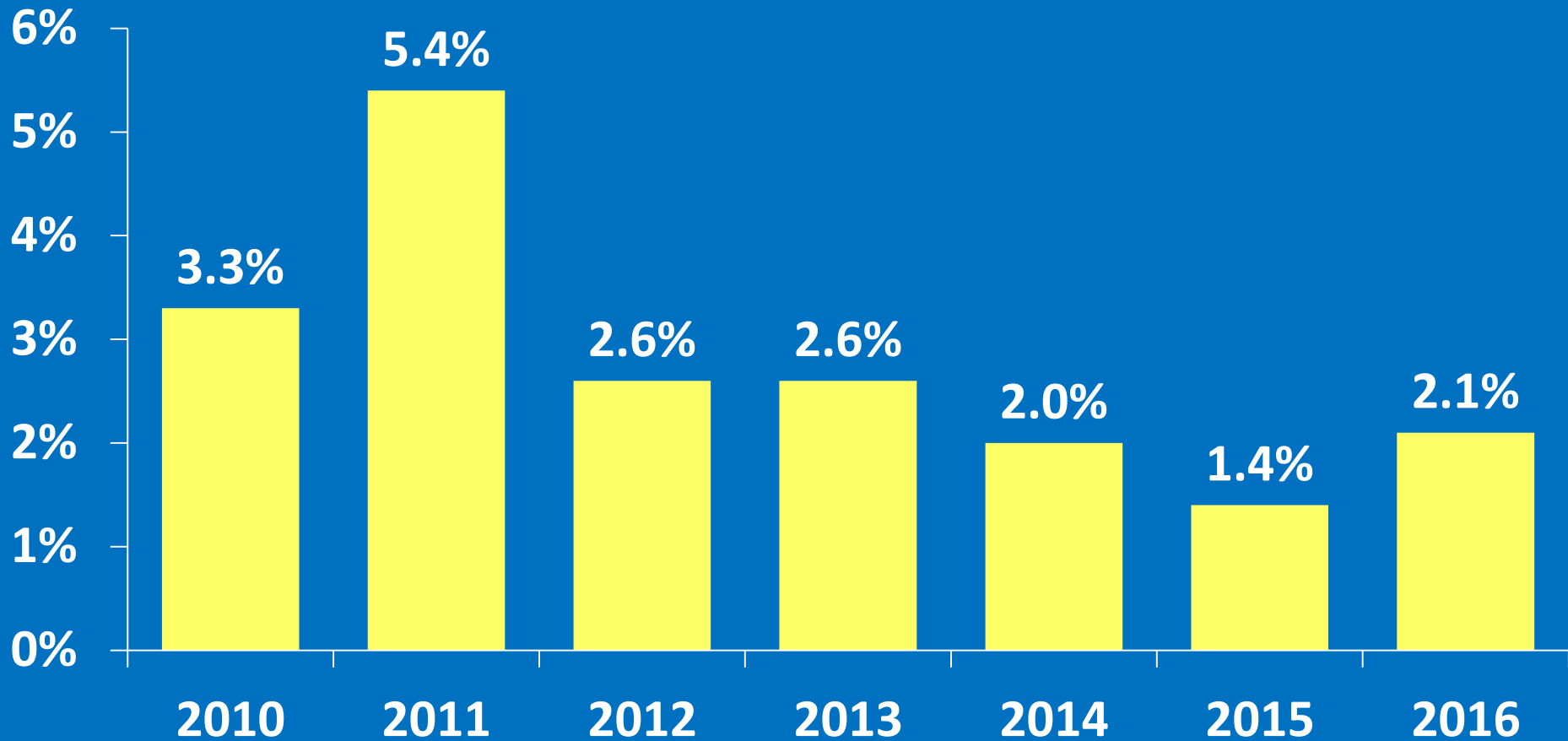


# New Housing Construction Picking Up

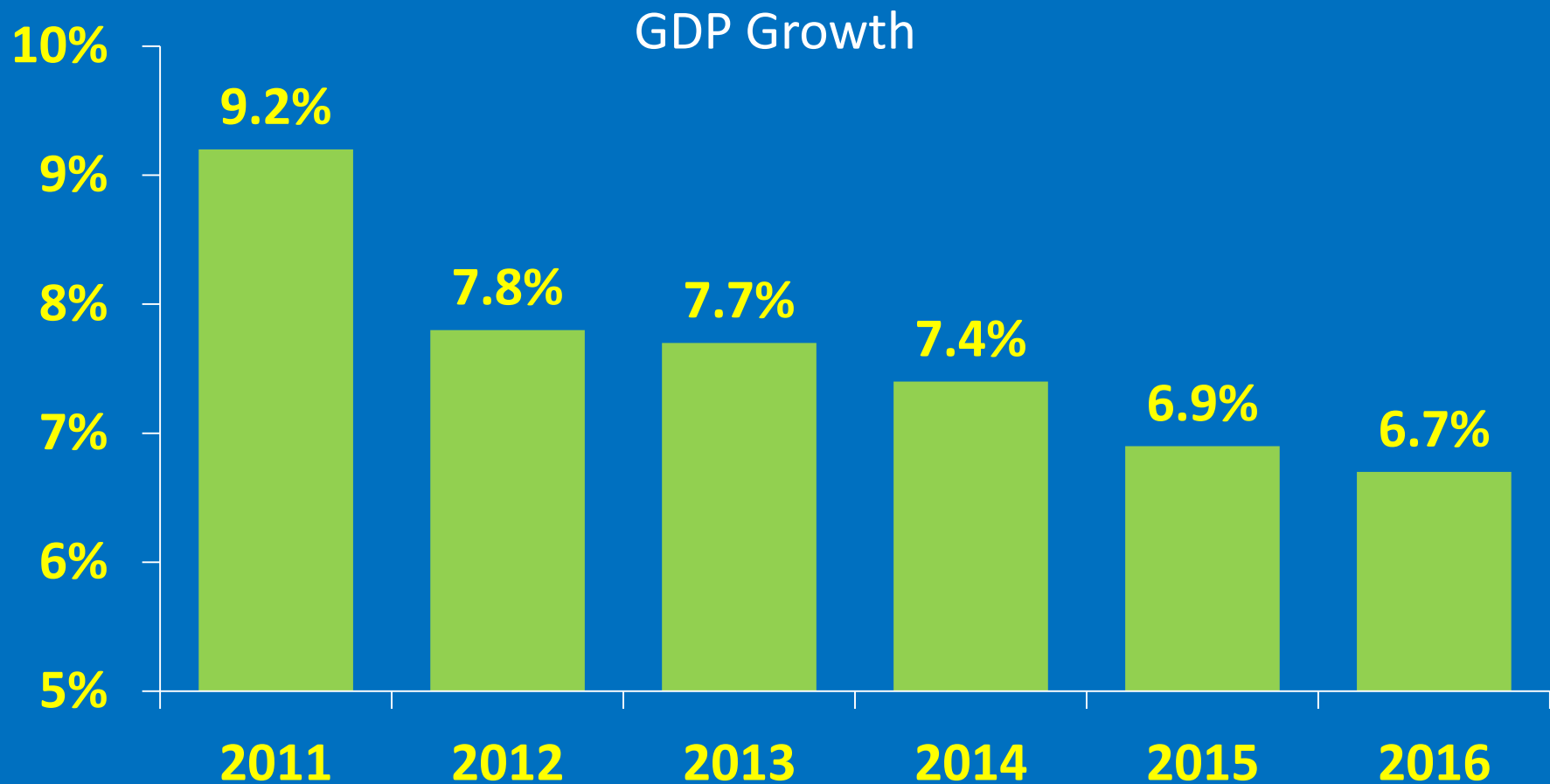


# Mild Inflation

## Consumer Price Index



# China GDP Growth Within Target



# Three Business Drivers

## HK Core (HC)



- City-gas



- Bandwidth + Data Centre

## Mainland Utilities (MU)



- City-gas  
(0003.hk + 1083.hk)
- Mid Stream
- Gas Storage
- Clean Transportation Fuels



- Water Supply/Sewage/  
Bio-waste Treatment

## New Energy (NE)

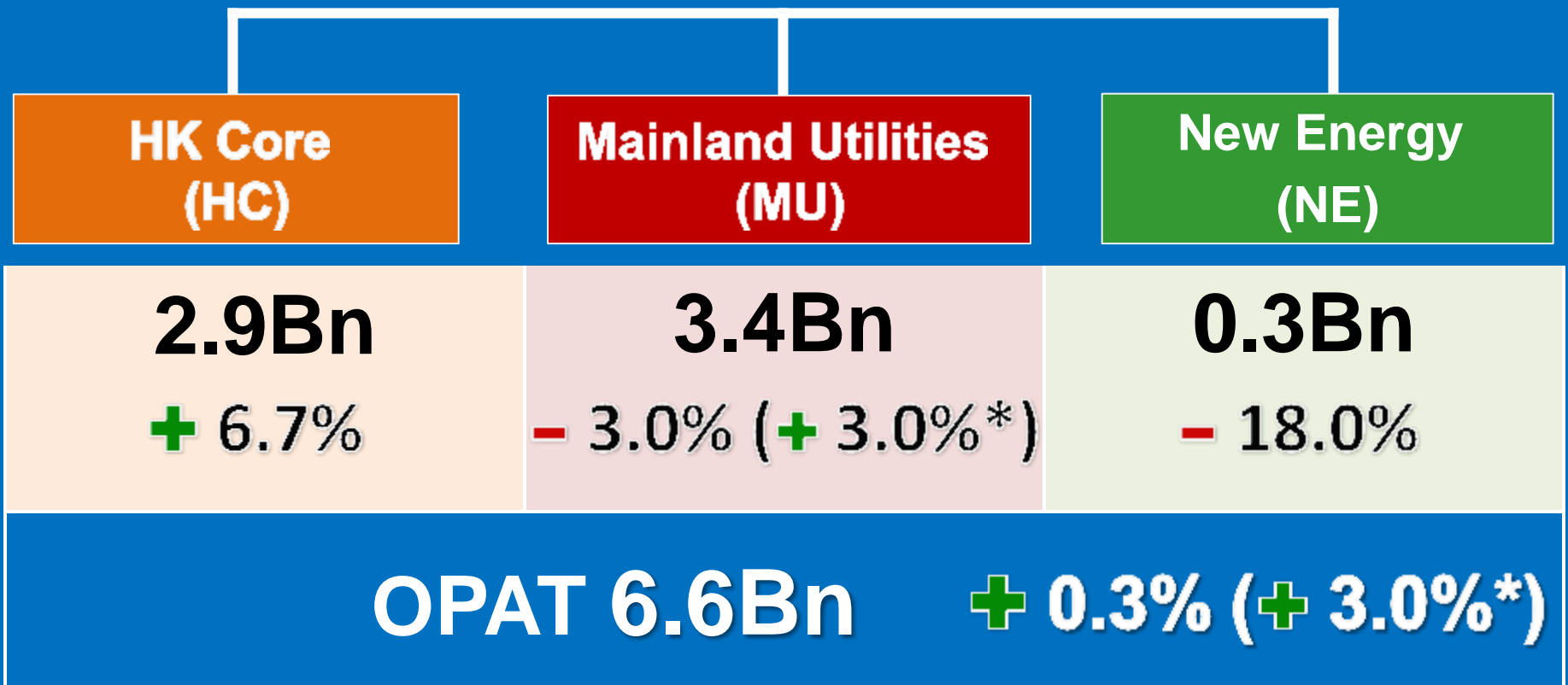


- Energy Infrastructure
- Renewables/Recycling
- Unconventional Fuels
- Clean Transportation Fuels

# 0003.HK Hong Kong & China Gas



## (HKD) FY2016 Operating Profit After Tax By Businesses



\* In Original Currency (Rmb)

## Opportunities and Challenges

---

- ❖ New project availability limited
- ❖ Retain large industrial users
- ❖ Deepen gas market penetration
  - Space heating
  - Clothes drying
  - Distributed energy centres (CHP)
- ❖ Ensure winter-load can be met




















## Opportunities and Challenges (Con't)

---

- ❖ Innovate product/services expansion
  - Appliances
  - Kitchen solution
  - Insurance policy
- ❖ Ensure gas safety
- ❖ Improve service quality
- ❖ Raise productivity; contain costs

# Diversified Business Profile

Total **242** projects in PRC  
**26** provincial regions

City-gas	 
Midstream	  
Water, Sewage & Waste Treatment	
Refilling Stations	 
Gas-based	
Coal-based	 
Biomass	
Oil E&P	
Telecommunications	
Others	  



Up to 28 Feb 2017

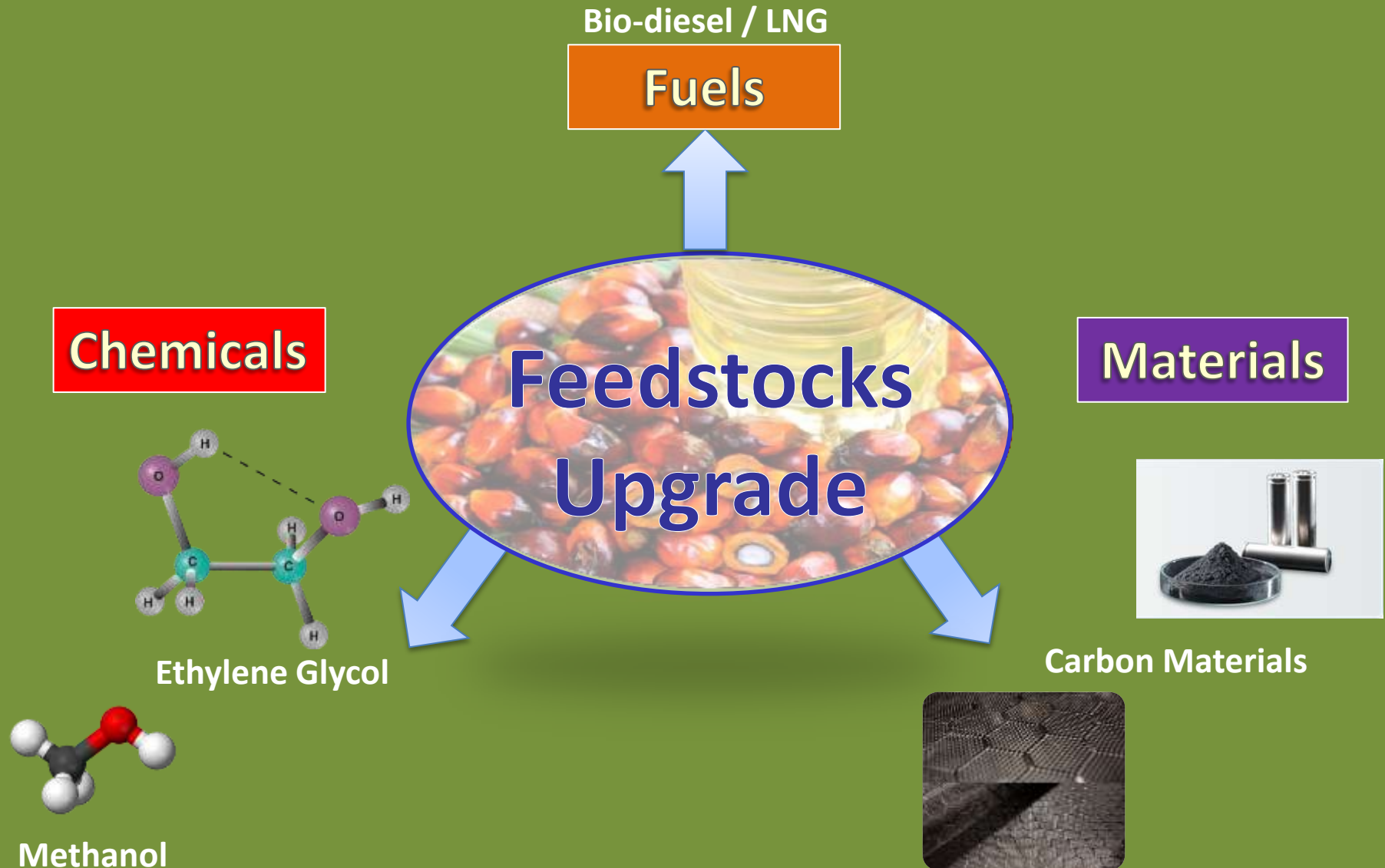


# NEW ENERGY & TELECOM



$$G = i \times I$$

# Green Technologies



# Technologies to be Commercialized (NE)

---

- Biomass → Chemicals
- Coal Tar Oil → Carbon Materials
- Methanol → Ethanol
- Powder Coal → Tar oil / Semi-coke
- Syngas → Chemicals

Presented on  
22 Aug 2016

# Projects in Progress

(NE)



**COG to LNG, XuZhou**  
**Capacity: 80K tons LNG**



**Biomass to Chemicals, ZhangJiaGang**  
**Capacity: 200K tons Chemicals**



**Biomass to Chemicals, TangShan**  
**Capacity: 20K tons Chemicals**



**Sync gas to Ethylene Glycol, IM**  
**Capacity: 120k tons EG**

# New Energy Highlights (con't)

(NE)

- Focus on in-house technology development
- Innovation / R&D Centres for technology development
- Successfully swing away from crude price sensitive products

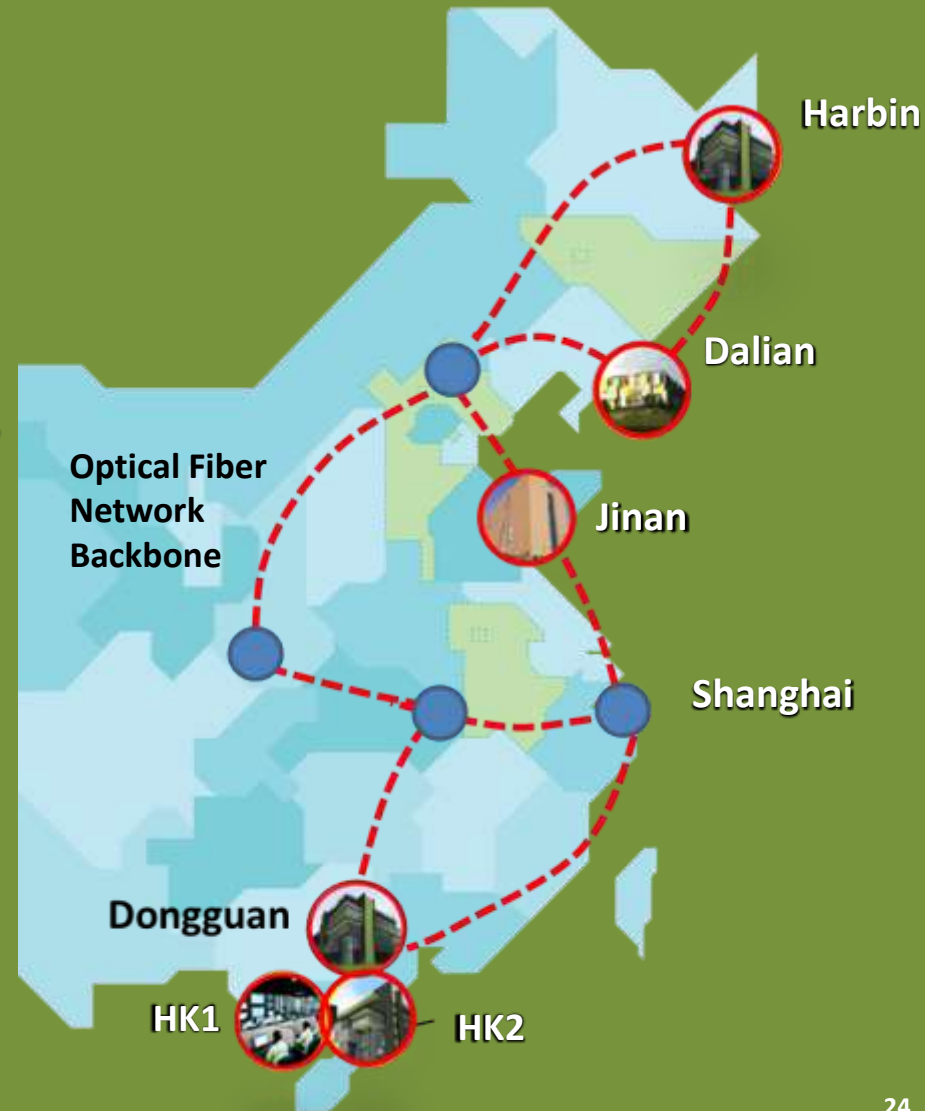


# Telecommunication Business

(HC)

- **Internet Plus (Big Data Era)**

- ❖ To be a major HK/Mainland networked data centre service provider
- ❖ Six data centres as a country-wide backbone established
- ❖ Well positioned to capture secured data storage, processing and transmission markets
- ❖ Foundation laid; Ready to expand





# Telecommunication Business<sup>(con't)</sup> (HC)

Ultimate Capacity

**14,350 racks**

Installed Capacity

**~5,000 racks**

Occupancy Rate

**~60%**



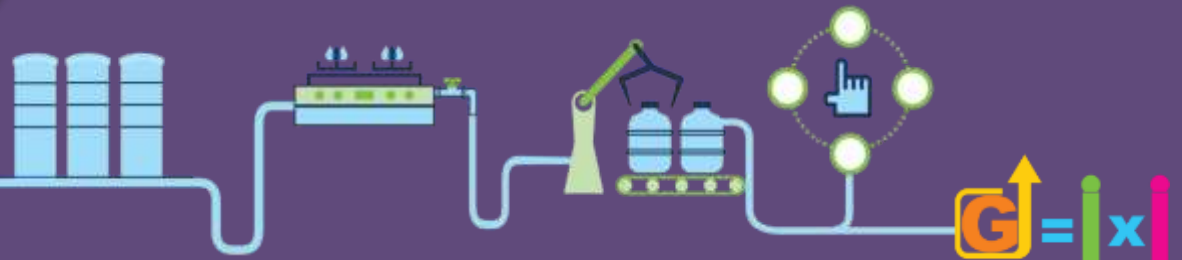
PAT

**HK\$77Mn**



# Utilities

Hong Kong &  
Mainland China





**Profit  
After Tax**

**HK\$2.9Bn + 6.7%**

**Town Gas  
Sales**

**28,814TJ**

**+ 1.4%**

**Total  
Customers**

**1.86Mn**

**+ 20,153**

**Household  
Penetration**

**74%**

**Coverage**

**86%**

- Fuel cost variation fully pass through**

# Hong Kong Operation Updates

(HC)



## Nethersole Hospital CHP System

- Commissioned in Dec 2016
- First kind in Hong Kong
- Thermal efficiency: 80%+
- Carbon emission: -20%



## SENT Landfill Gas Facilities

- To be commissioned in Jun 2017
- Town gas feedstock sharing: 3%

# Future Additional Gas Sales

(HC)

- **Absorption chiller applications (250TJ)**
  - Disneyland, Ocean Park, data centers
- **Diesel to gas conversion projects (60TJ)**
  - Hospitals, hotels, food processing factories
- **New projects (200TJ)**
  - HKJC, children hospital, laundry plants, West Kowloon Cultural District



<b>Revenue</b>	HK\$7.2Bn	-7%
<b>Profit from project Companies</b>	Rmb1.2Bn	+9%*
<b>Profit Attributable to Shareholders</b>	HK\$0.97Bn	+21%
<b>Dividend per Share</b>	HK 12 cents	+20%

\* in Original Currency (Rmb)

	2016	Change
Gas volume	7.1Bn m <sup>3</sup>	+ 8.5%
Total customers	10.9Mn	+ 0.9Mn
New connections	1.1Mn	+ 5%
Refilling station volume	231Mn m <sup>3</sup>	+ 6.6%
Number of city-gas projects	97	


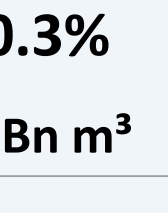
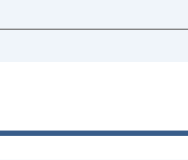
# Mainland Utilities FY2016

(TCCL inclusive)

(MU)

## Operating Profit After Tax

**HKCG Group**  
HK\$3.4Bn **- 3.0%** (+ 3.0%\*)

	 City-gas	 Water	 Midstream
Volume:	+ 10.3% 17.1Bn m <sup>3</sup>	+ 5.0% 455Mn ton	+ 3.7% 3.2Bn m <sup>3</sup>
Total projects:	131	7	8


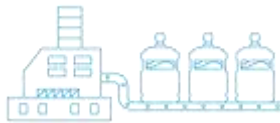
\* in Original Currency (RMB)



# Mainland Utilities FY2016

(MU)

(TCCL inclusive)

	 City-gas HKCG Group	 Water HKCG Group
Total Customers:	+ 2.2Mn 23.1Mn	+ 74,395 1.2Mn
New Connections:	+ 3% 2.1Mn	
Refilling Station Volume:	+ 1% 321Mn m <sup>3</sup>	
Number of Refilling Stations:	109	

# Natural Gas Price Reform

(MU)

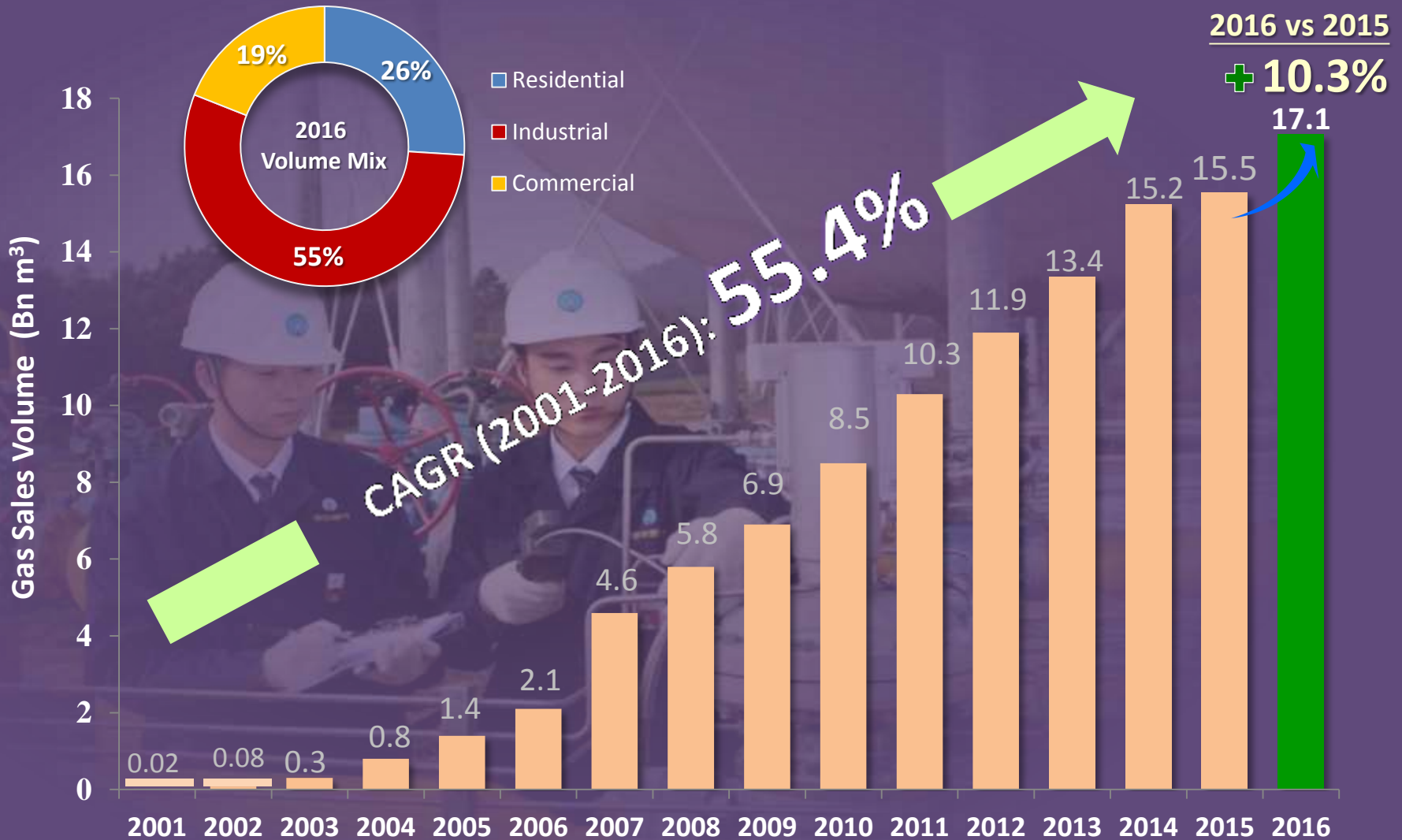


- ▶ **Towards a more structured & market oriented industry**
- ▶ **Open up upstream & downstream (price flexibility); regulate midstream**
- ▶ **Seasonal gas pricing**
  - Back to pre-November 2016 in mid-March 2017
  - Possible reduction in summer

# City-gas Business

(MU)

## Growing Gas Sales Volume



# Market Development

(MU)

## 5-Year-Plan (2016 to 2020) for Social & Environmental

---

- ▶ Energy mix targets by 2020
  - Target to lower coal to 58% (from 64% in 2015)
  - Natural gas target reaching 10% (from 6% in 2015)
- ▶ Promote clean space heating in the northern region
  - Replacement of using coal: >3 million households
  - Shut down all small coal-fired boilers at prefectural-level cities
- ▶ Further promote urbanization
  - New urban residents: 13 million in 2017
  - Development of small & medium cities and towns
  - Urbanization rate: +1% p.a.

# Market Development

(MU)



Industrial Sector Coal-to-Gas Conversion	2015	2016
JVs with government subsidies & supporting policy	54	<b>94</b>
Converted Customer	1,010	<b>1,380</b>
Capacity (Steam tons)	4,460	<b>8,073</b>
Annualised NG Demand (Mn m <sup>3</sup> /p.a.)	580	<b>1,050</b>

Commercial Sector	2015	2016
Newly Acquired Customer	10,000	<b>12,000</b>
Annualised NG Demand (Mn m <sup>3</sup> /p.a.)	250	<b>300</b>

# Market Development

(MU)



## ▶ 20 CHP potential projects

- NG consumption: 500Mn m<sup>3</sup> p.a.

## ▶ Domestic space heating system

- Market potential: >100,000 units p.a.
- 10X gas consumption
- 100Mn m<sup>3</sup> p.a.



## ▶ Gas Clothes Dryer

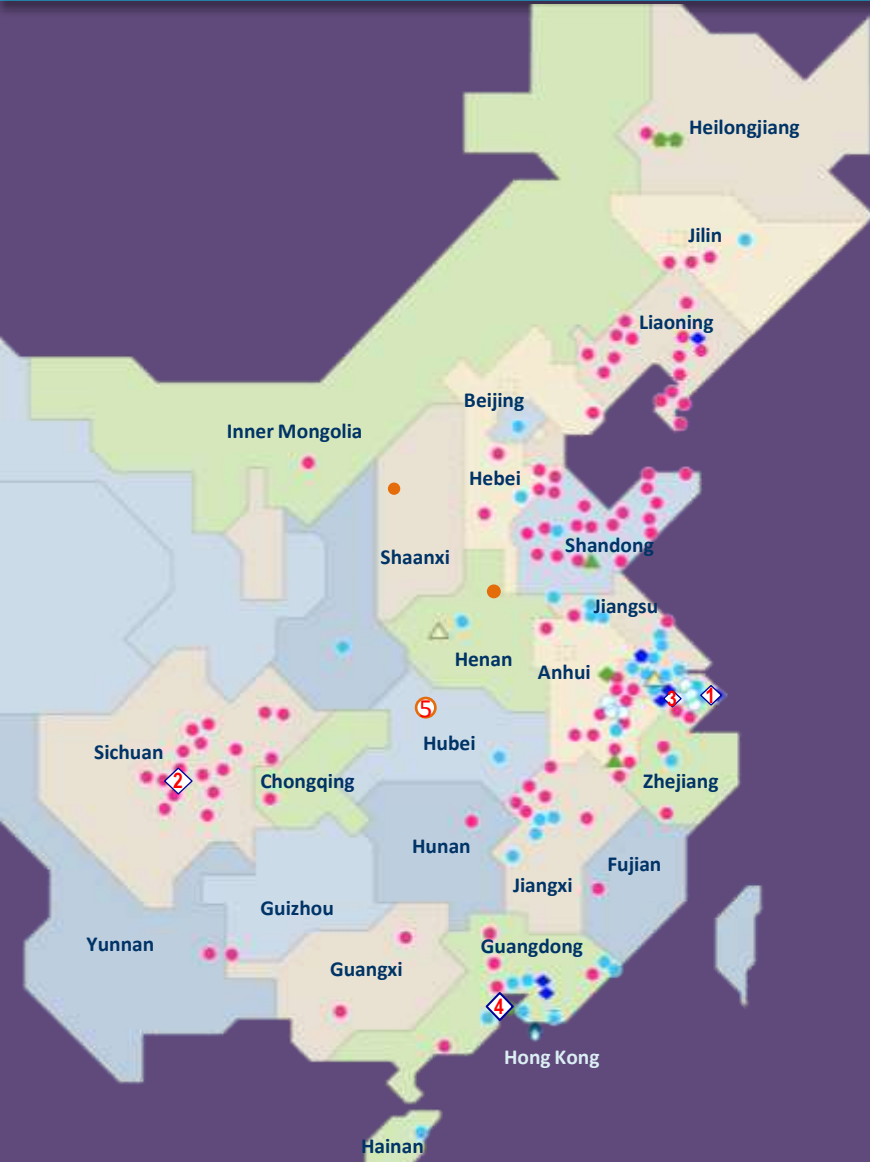
- Market potential: >20,000 units p.a.
- +30 to 50% gas consumption

## Water Business – Food Waste Treatment

- ▶ Suzhou Industrial Park
- ▶ Capacity: 500tons/day
- ▶ By-products:
  - ❖ Natural Gas
  - ❖ Bio fuel
- ▶ Total investment: Rmb220Mn
- ▶ Target commissioning date: (2Q2018)
- ▶ Target IRR: ~15%
- ▶ Two potential projects under negotiation



# Territorial Coverage



**5** projects added, total **159** projects  
in **24** provincial regions

## New Projects

- |          |   |  |
|----------|---|--|
| Other    | ◇ | 1. Shanghai Petroleum and Natural Gas Exchange         |
|          |   | 2. Sichuan Distributed Energy System                   |
|          |   | 3. Hua Yan Environmental Industry Development (Suzhou) |
|          |   | 4. Towngas Energy (Qianhai)                            |
| City-gas | ○ | 5. Zhongxian, Hubei                                    |

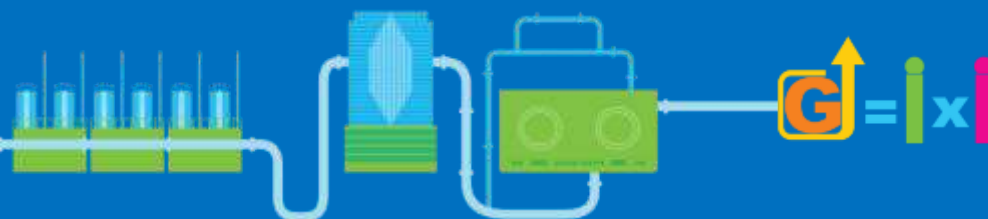
## Utilities: Number of projects

City-gas	132 (HKCG: 34 ● + TCCL: 98 ●)
Midstream	8 △ HKCG ▲ TCCL
Water, Sewage & Waste Treatment	7 ○
Refilling stations	3 ● HKCG ● TCCL
Others	9 ◆ HKCG ◆ TCCL







# 2016 FINANCIAL OVERVIEW



# HKCG Financial Position as at 31 Dec 2016





HKCG (003 HK)	FY16		FY16
	HK\$ Bn		
<b>Total assets</b>	<b>116.7</b>	<b>Current ratio</b>	<b>108%</b>
<b>Net asset value</b>	<b>62.9</b>	<b>Interest coverage</b>	<b>9.4x</b>
<b>Cash and Bank</b>	<b>11.5</b>	<b>Return on Equity</b>	<b>14%</b>
<b>Total borrowings</b>	<b>33.2</b>	<b>Gearing (net)</b>	<b>27.9%</b>
<b>Market cap</b>	<b>190.0</b>	<b>Credit Ratings</b>	<b>A+</b>
		 	<b>A1</b>

# HKCG Group EBITDA Return on Revenue

	HK Core		Mainland Utilities		New Energy	
	2016	2015	2016	2015	2016	2015
Revenue (HK\$Bn)	9.0	8.8	16.7	18.0	2.1	2.1
EBITDA (HK\$Bn)	4.5	4.3	4.6	4.5	0.6	0.7
$\frac{\text{EBITDA}}{\text{Revenue}}$ (%)	49.9%	48.1%	27.7%	25.1%	30.7%	33.1%

# TCCL Financial Position as at 31 Dec 2016



TCCL (1083 HK)	FY16		FY16
	HK\$ Bn		HK\$ Bn
Total assets	28.0	P/B	0.9x
Net asset value	14.7	P/E	12.7x
Market cap	12.0	Gearing (net)	31.7%
Cash & bank	1.6	Credit Ratings	 
Total borrowings	7.8		
			Baa1

# RMB Impact

<b>RMB rates</b>	<b>2016</b>	<b>2015</b>
<b>Closing rate</b>	<b>-6.5%</b>	<b>-4.4%</b>
<b>Average rate</b>	<b>-5.5%</b>	<b>-1.9%</b>
<b>HKCG (HK\$M)</b>		
<b>Operating Profit</b>	<b>(195)</b>	<b>(70)</b>
<b>Foreign currencies net debts</b>	<b>(88)</b>	<b>(385)</b>
<b>TCCL (HK\$M)</b>		
<b>Operating Profit</b>	<b>(80)</b>	<b>(27)</b>
<b>Foreign currencies net debts</b>	<b>(90)</b>	<b>(301)</b>

# CNY/USD FX Rate Forecast



	<u>2017 Yr End</u> 10 Feb 2017	<u>2016 Yr End</u>
Citibank	7.05	
Standard Chartered	7.06	
ANZ	7.10	
JP Morgan	7.10	
Nomura	7.15	
Mizuho	7.17	
HSBC	7.20	
Morgan Stanley	7.30	
Credit Suisse	7.32	
Barclays	7.35	
Rabobank	7.75	
<b>Average</b>	<b>7.23</b>	<b>6.945</b>

**2017 Forecast  
Depreciate  
~4%**

## CNY / USD



# TCCL Debt Re-financing

(HKD Mn)	<u>After</u> <u>Re-financing</u>	<u>Maintain</u> <u>Off-shore Debts</u>	<u>+/-</u>
Off-shore interest expenses	237	153	+84
Average interest cost	3%	2%	
Exchange Loss	90	518	-428
<b>Total</b>	<b>327</b>	<b>671</b>	<b>-344</b>

**Saving**

# Interest Cost - CNH

CNH Deposits  
(in RMB Bn)

1,200

1,000

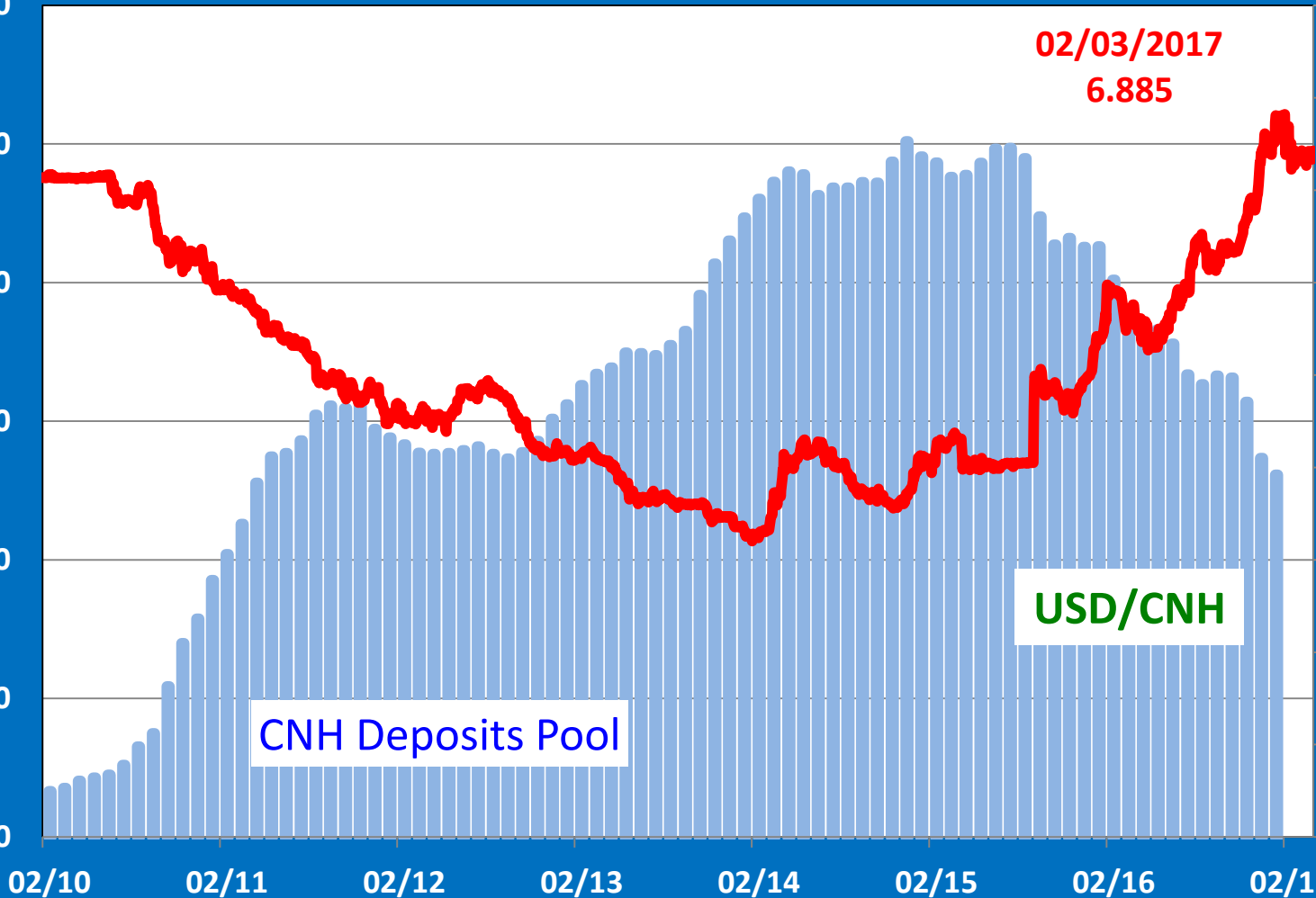
800

600

400

200

0



USD/CNH

7.2

7

6.8

6.6

6.4

6.2

6

5.8

5.6

5.4

02/03/2017

6.885

USD/CNH

CNH Deposits Pool



# Interest Cost - CNH

CNH Deposits  
(in RMB Bn)

1,200

1,000

800

600

400

200

02/10

02/11

02/12

02/13

02/14

02/15

02/16

02/17

02/03/2017  
6.885

USD/CNH

7.2

7

6.8

6.6

6.4

6.2

6

5.8

5.6

5.4

5.5%

2.0%

CNH 1Y HIBOR

CNH Deposits Pool

USD/CNH

# TCCL RMB Funding Cost

## Off-shore Debt Funding Cost

2016: 3%

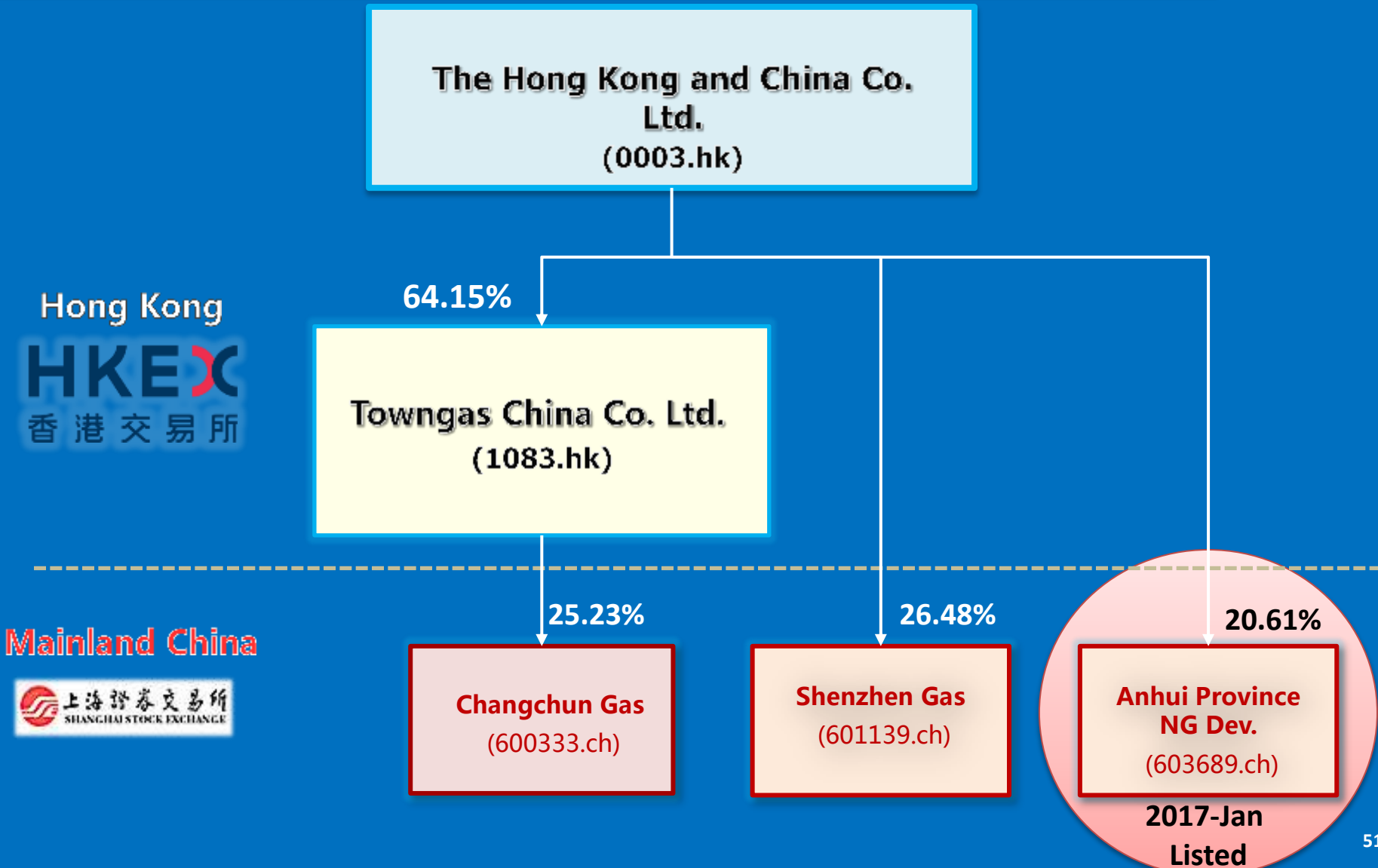
2017: ~ 4-5%

## CNH HIBOR

Tenor	Fixing Rate
ON	2.76532
1W	5.62050
2W	5.59050
1M	5.23167
2M	5.20067
3M	5.18617
6M	5.26200
1Y	5.41033

Historic data (22 Feb 2017)

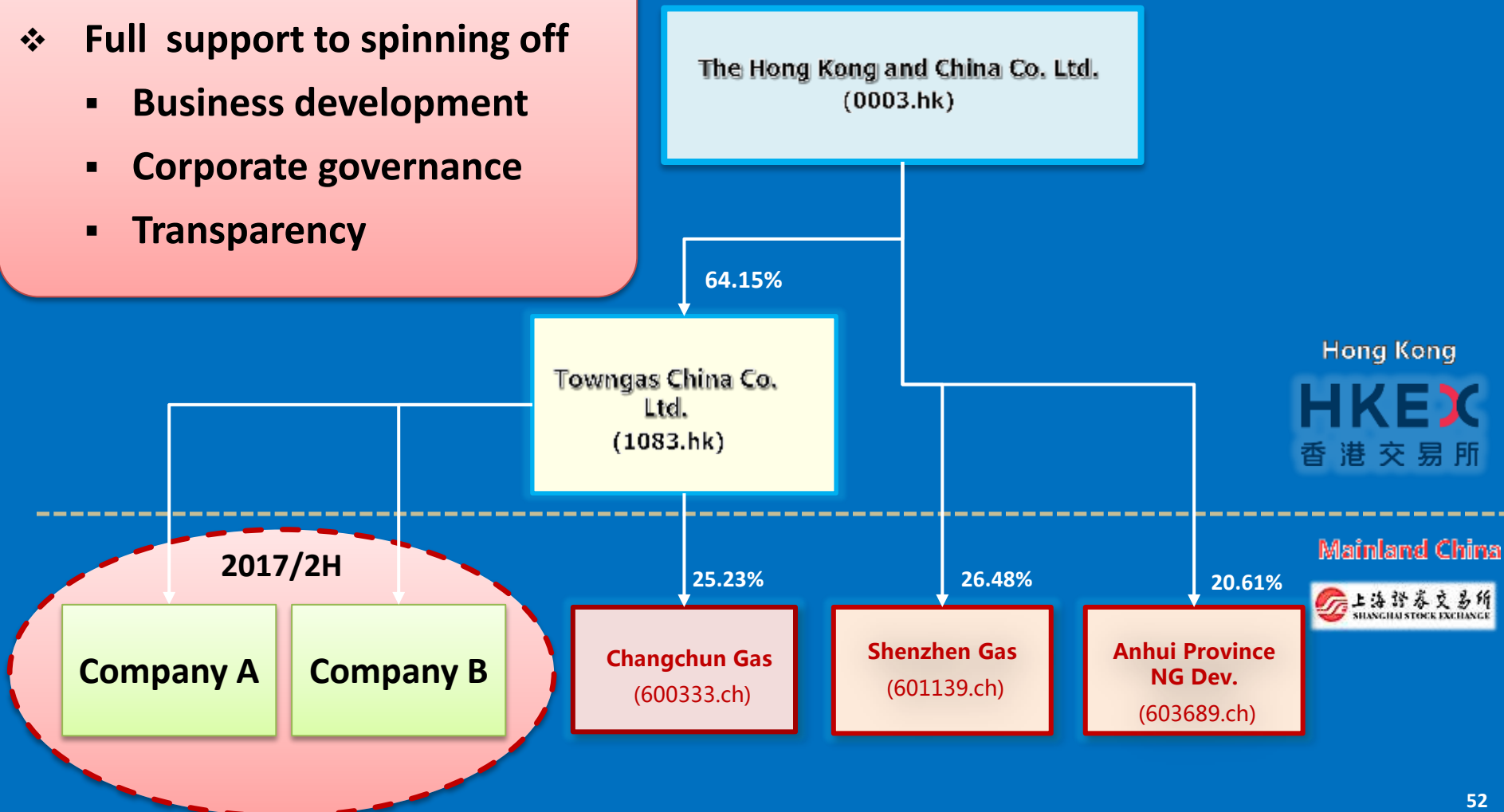
# Mainland Utilities Spinning Off



# Mainland Utilities Spinning Off

## Strategies

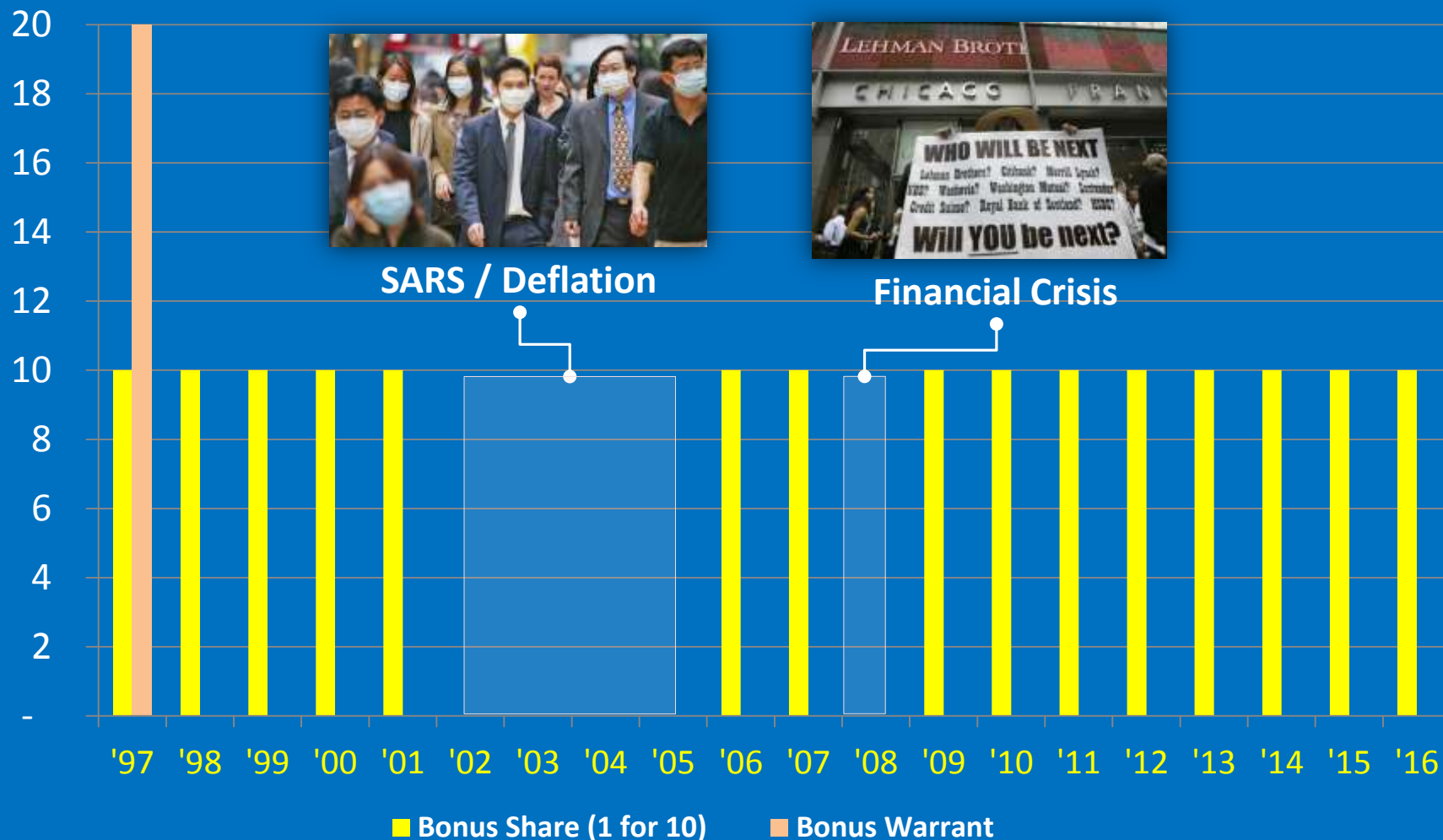
- ❖ Full support to spinning off
  - Business development
  - Corporate governance
  - Transparency



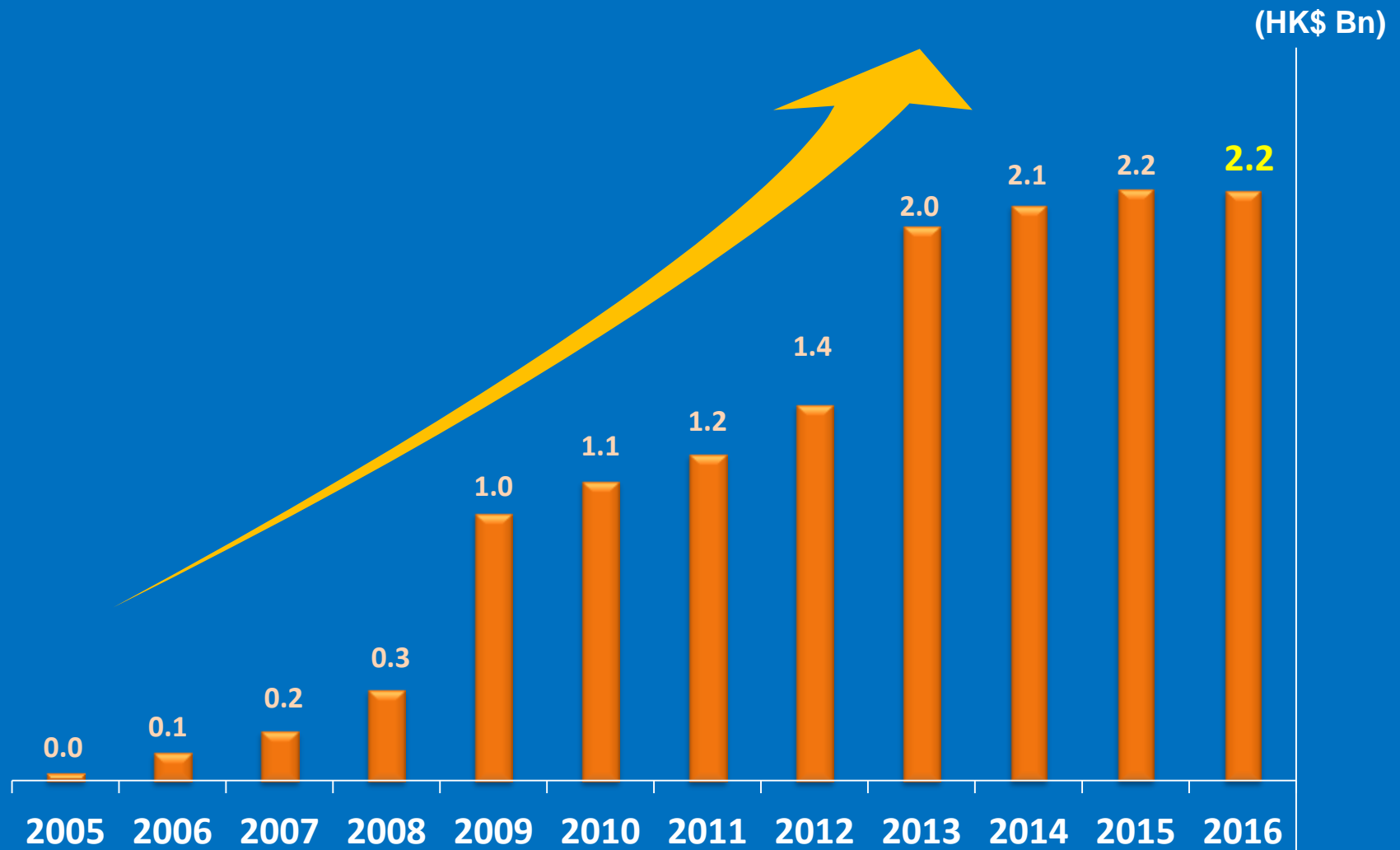
# Dividend

	HKCG (0003 HK)	TCCL (1083 HK)
<b>Dividend (HK cents)</b>	<b>35.00</b>	<b>12.00</b>
<b>EPS (HK cents)</b>	<b>57.72</b>	<b>36.26</b>
<b>Pay-out Ratio</b>	<b>60 %</b>	<b>33 %</b>
<b>Bonus Issue</b>	<b>1 for 10</b>	<b>-</b>

# Bonus Shares Issue



# Strong Dividend from Mainland Utilities



# Rolling 3-Year Cashflow Projection

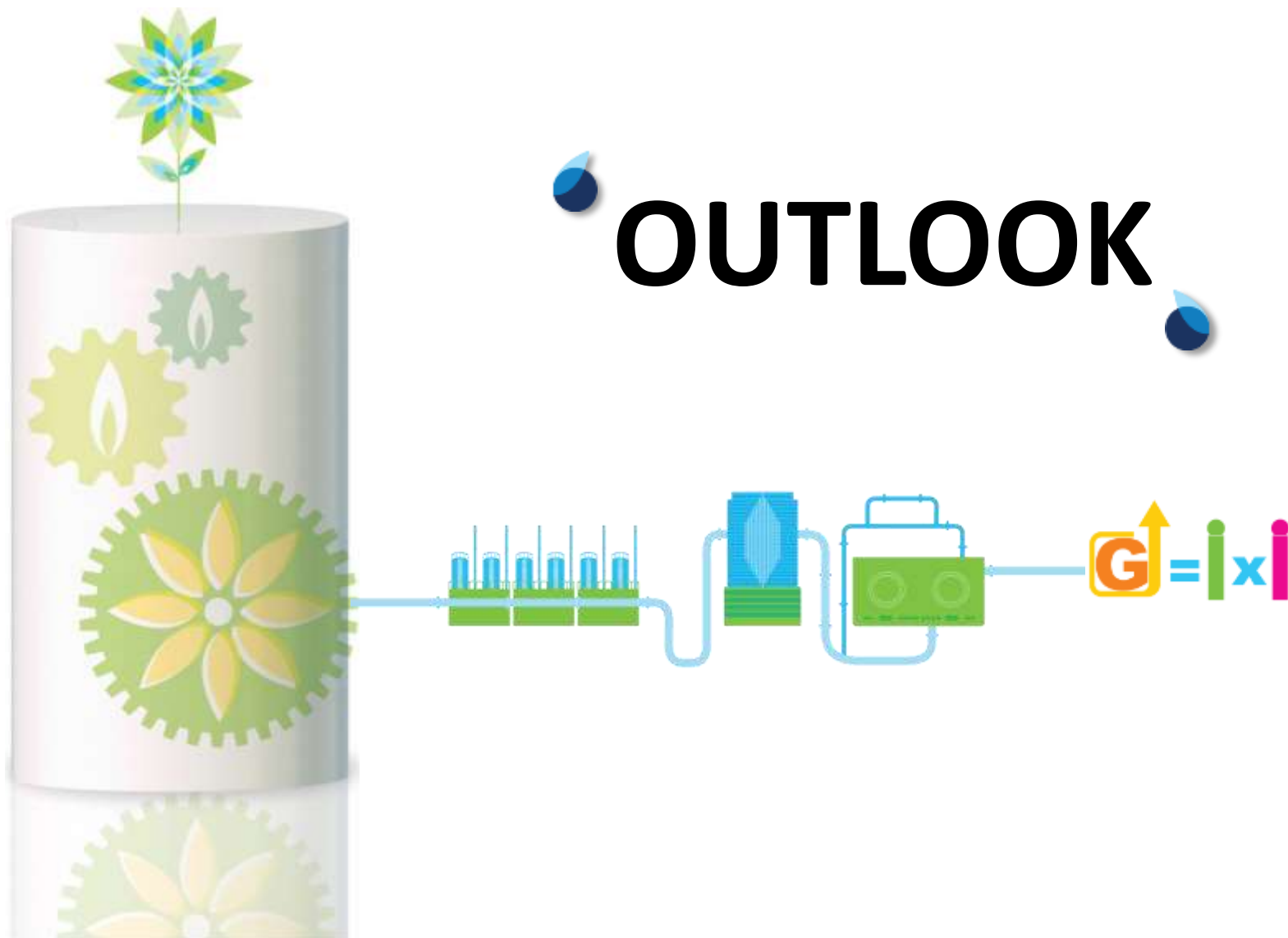
## Healthy Cashflow



	(HKD Bn)
Group Operation	13
PRC Dividends Distribution	7
	<b>20</b>
Cash on Hand	12
	<b>32</b>
Dividend	14
HK Capex	3
PRC Investments	10
	<b>27</b>
<b>Cash Balance</b>	<b><u>5</u></b>



# OUTLOOK



## Full of Opportunities

### ❖ China's Commitments on Carbon Emission Intensity Reduction

- 2020:  $\searrow$  40 ~ 45%
- 2030:  $\searrow$  60 ~ 65% (Emission amount capped)

### ❖ Smog Issue Accelerates the Use of Cleaner Fuels

### ❖ 13-5 Plan: Natural Gas Share

- |                          |        |              |
|--------------------------|--------|--------------|
| ▪ 2015: 6%               | 193bcm | } CAGR: 6.3% |
| ▪ 2020: 10%              | 360bcm |              |
| ▪ 2030: 15% (projection) | 480bcm |              |

## Full of Opportunities

### ❖ 13-5 Plan Natural Gas Key Consumption Growth

	<u>bcm p.a.</u>
▪ Coal-to-gas conversion (boilers, furnaces)	+45
▪ Distributed energy centres (CHP)	+60
▪ Urbanization	+27
▪ Transportation fuel (land & marine)	+25
	<hr/>
	<b>+157</b>

### ❖ Abundant Supply; Sufficient Infrastructures

- Indigenous PNG
- Imported PNG
- Imported LNG

## Full of Opportunities

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### ❖ Utilities Opportunities

- 4 to 6 new city-gas projects p.a.
- Gas sales volume growth at mid-teen rate

### ❖ Market Regulatory Regime

- Open up up-stream
- Regulate mid-stream
- More market oriented down-stream

### ❖ Sufficient Storage and Peak-Shaving Capacities

- LNG, U/G caverns, hi-pressure pipelines
- Facilitate capture of winter load markets

## Full of Opportunities

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- ❖ **Clean Utilization of Biomass and Waste become a Trend**
  - Food waste
  - Coke oven gas
  - Tar oil
  - Agricultural waste
  - Powder coal
- ❖ **Capitalizing on the 23Mn Strong Customer-base**
  - Extended products/services

# Looking Forward

## HC

Remains as a stable, low-growth cash generating business

## MU

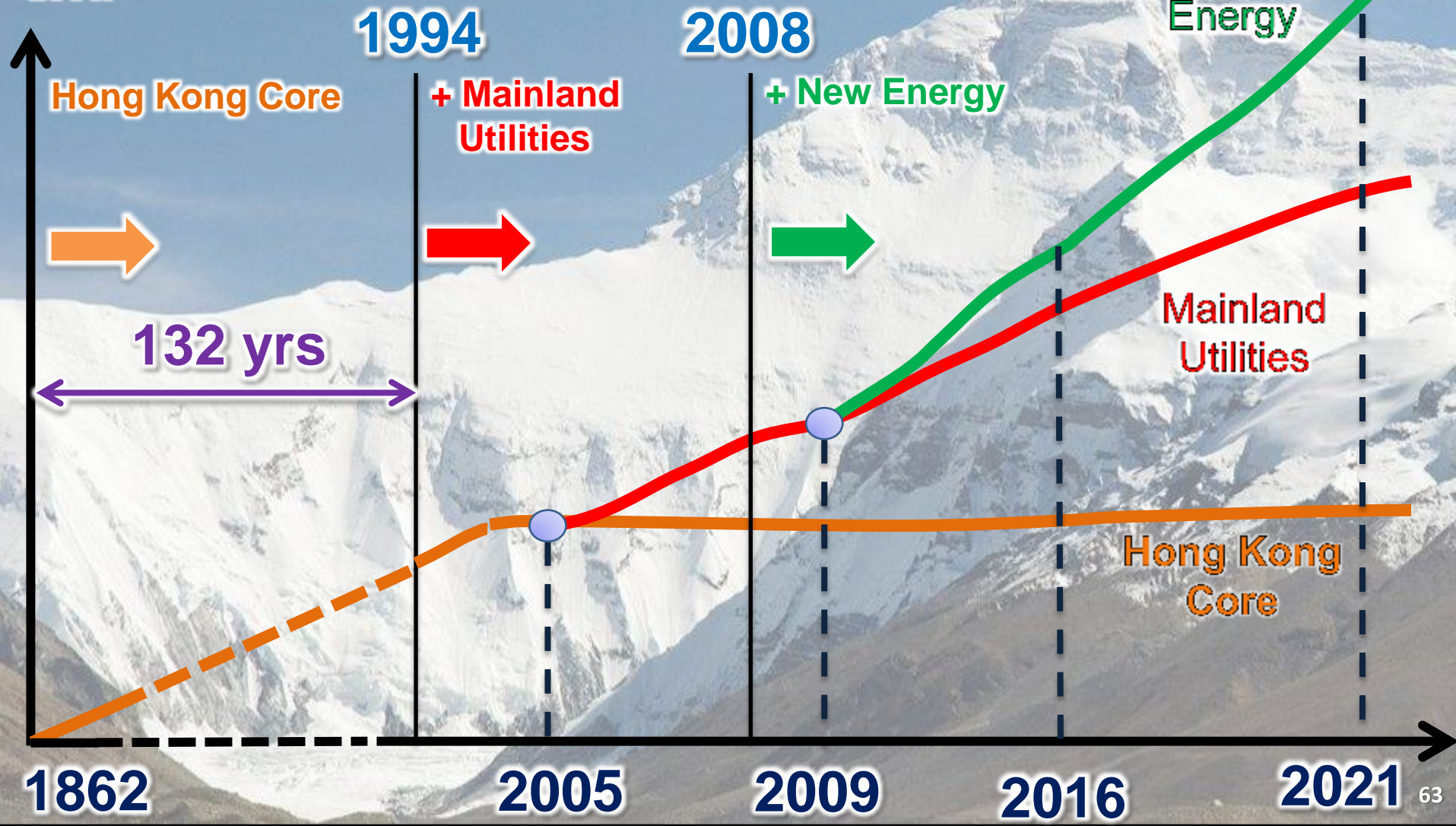
Continues to be a mid-growth locomotive having market share & organic volume expansion while capturing the environmental & urbanization opportunities

## NE

Positioned to be a high-growth driver focusing on renewable/recycling & clean fuels, while developing proprietary technologies, at the same time establishing energy infrastructures

# Sustaining Growth

Not to scale  
*OPAT*





# Thank You



EXPANDING  
NEW HORIZONS



# 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.