CANVEST ENV (1381.HK)

China's Leading WTE Enterprise, Strong Growth in Production Capacity

August 20, 2019

Hong Kong | Environmental Protection | Company Report

Investment Summary

China's leading waste-to-energy enterprise, manager and operator, has a strong growth in waste treatment capacity

The company which was listed on the Main Board of HKSE in December 2014, is a leading waste-to-energy (WTE) enterprise in China. The main business of the company focuses include build, design and operate WTE plants, and it also acquire and upgrade WTE projects to achieve optimal performance. As of August 2019, the company is managing 25 WTE projects, including 12 projects in operation and 13 projects under construction and planning. As at 31 December 2018, the operating, secured, announced and under management agreement daily MSW processing capacity of the 19 projects was 29,040 tonnes, from 6,900 tons/day in 2014 to a compound annual growth rate of 33.3% in 2018, the company's goal for the next few years is to maintain a contract capacity growth rate of more than 30% per year.

China's waste incineration power generation market has great potential for development

From 2002 to 2017, the volume of MSW in China had grown at a CAGR of 3.7%, MSW volume reached to 210.34 million tons in 2018. From 2002 to 2017, the volume of MSW in Guangdong had grown at a CAGR of 4.07%, which was higher than the national average. In 2017, the total volume of MSW in Guangdong reached to 26.44 million tons, or 12.57% of China's total MSW volume. In 2015, the total volume of MSW in China reached 758,300 tons per day. It is estimated that by 2020, the total volume will reach 1,104,900 tons per day. In 2015, MSW to be treated by incineration reached 235,200 tons per day, accounting for 31% of the total MSW treatment methods. It is estimated that the incineration capacity will be 591,400 tons per day by 2020, and the incineration treatment rate is expected to reach 54%.

Self-built projects improve quality, extension projects boost development

The company currently has 12 projects in operation, 10 of which generating a total of 2.05 million MWh of electricity, selling a total of 1.8 million MWh of power, accounted for average of 88% of power sales; a total designed processing capacity was 4.16 million tons, actual disposal of MSW was 5.02 million tons, and the utilization rate reached 109%. The average waste treatment fee for 11 operating projects (excluding Xinfeng WTE plant) is RMB 97.7/tons, while the average waste treatment fee in Guangdong Province is RMB 110/ton, which is better than the average level in the industry. Moreover, the current average daily MSW treated capacity of the company's projects is about 1,500 tons/day, which is higher than the industry average. We believe that higher waste treatment fees and project scales ensure the high quality of the company's projects and also ensure the steady growth of the company's future operating income.

TP of HKD 5.08 and investment rating of "BUY"

Based on our residual income valuation model, assuming the cost of equity is 6.82% and resistance factor is 0.20, we give a TP of HKD 5.08 with investment rating of "BUY", corresponding to FY19/FY20/FY21 13.94x/12.11x/10.23x PE with a 43.53% potential upside compared with CP of HKD 3.54 as of August 16, 2019.

BUY

CMP HKD 3.54
(Closing price at 16 August 2019)
TARGET HKD 5.08 (+43.53%)

COMPANY DATA

O/S SHARES (MN)	2,455.2
MARKET CAP (HKDMN)	8,691
52 - WK HI/LO (HKD):	3.46/4.39

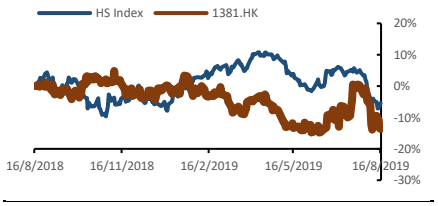
SHARE HOLDING PATTERN

Best Approach Developments Limited	54.4%
True Victor Holdings Limited	17.5%

PRICE PERFORMANCE

	1M	3M	1Y
CANVEST ENV	-9.46%	-0.64%	-13.65%
HSI	-10.00%	-7.92%	-5.44%

RETURN & HSI



Source: Phillip Securities (HK) Research

KEY FINANCIALS

mn HKD	FY17 A	FY18 A	FY19 E	FY20 E	FY21 E
Revenue	2,398	3,326	4,040	4,723	5,580
NP for Owners	564	754	895	1,030	1,219
EPS HKD	0.24	0.31	0.36	0.42	0.50
P/E	14.75	11.52	9.71	8.44	7.13
BVPS HKD	2.08	2.16	2.47	2.82	3.24
P/B	1.70	1.64	1.44	1.25	1.09
ROE	14.82 %	14.82 %	15.77 %	15.87 %	16.36 %

Source: Company reports, Phillip Securities Est.

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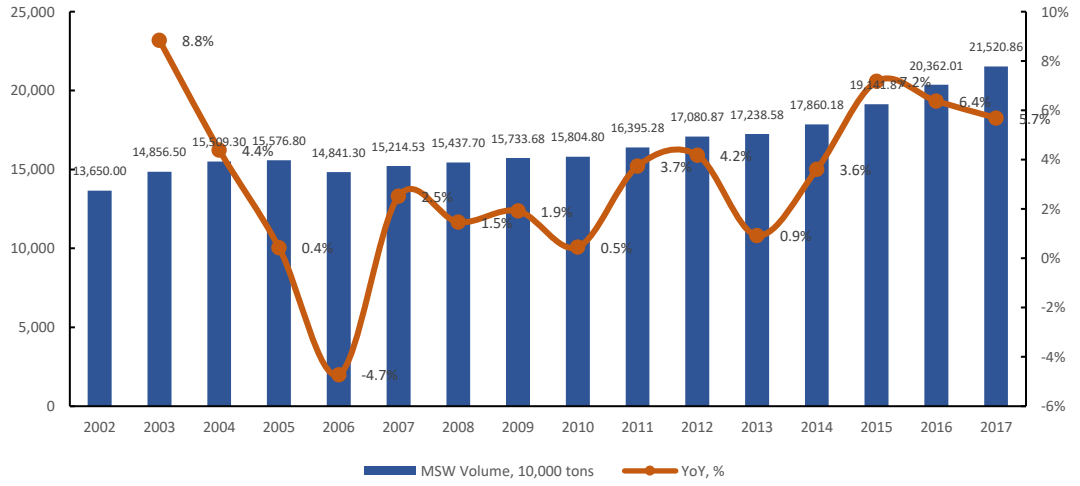
Industry Analysis

Overview of MSW in China and Guangdong Province

Municipal solid waste (MSW) is a waste type consisting of daily solid items that are produced from urban residents' daily life activities and services, as well as other solid waste deemed by the authorities as municipal waste, including household waste, commercial waste, waste from trading markets, streets and other public places, as well as non-industrial waste from institutions, schools, factories, etc. China's large population inherently results in the generation of massive amount of MSW. Factors such as increasing rate of urbanization, robust growth in GDP and increasing affluence and consumer spending, result in an increase in the generation of MSW.

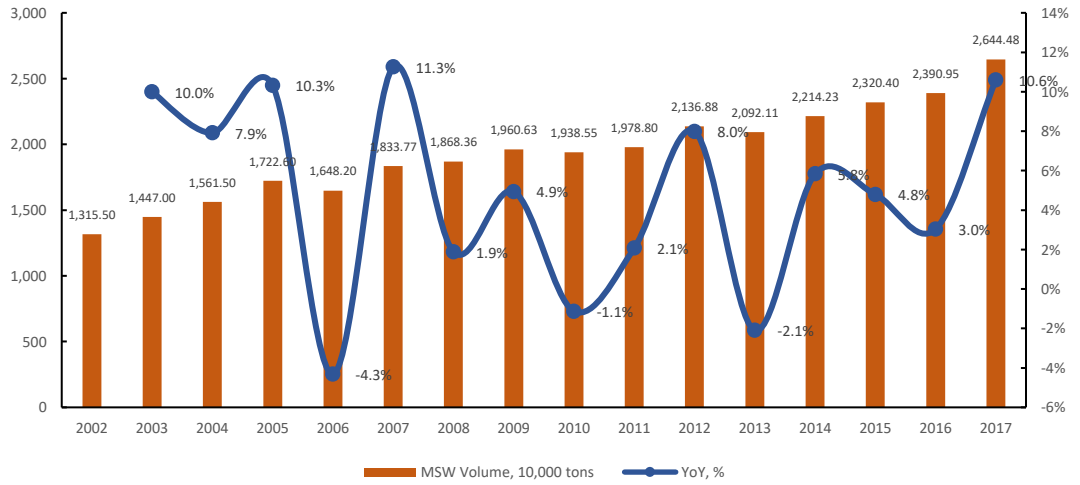
From 2002 to 2017, the volume of MSW in China had grown at a CAGR of 3.7%, MSW volume reached to 210.34 million tons in 2018. Among this, Guangdong has the largest GDP and population in China by province and maintains its rapid growth in urbanization. From 2002 to 2017, the volume of MSW in Guangdong had grown at a CAGR of 4.07%, which was higher than the national average. In 2017, the total volume of MSW in Guangdong reached to 26.44 million tons, or 12.57% of China's total MSW volume.

Figure-1: 2012-2017 Annual MSW volume in China (in 10 thousand tonnes)



Source: Phillip Securities (HK), National Bureau of Statistics of China

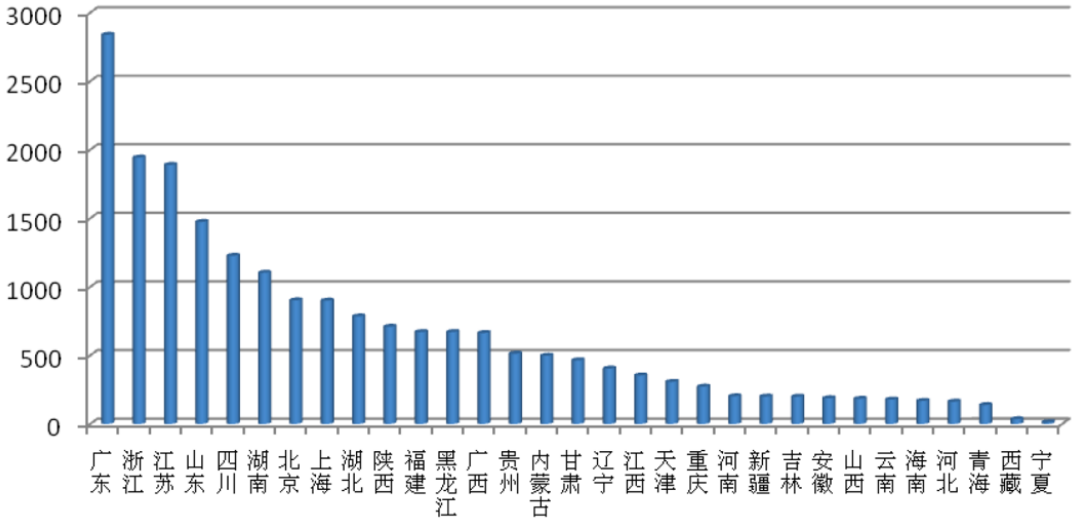
Figure-2: 2012-2017 Annual MSW volume in Guangdong (in 10 thousand tonnes)



Source: Phillip Securities (HK), National Bureau of Statistics of China

According to Ministry of Ecology and Environment, in 2017, 202 large and medium-sized cities produced 201.094 million tons of garbage, with a disposal volume of 200.843 million tons and disposal rate of 99.5%. In 202 large and medium-sized cities, the largest amount of MSW generated is Beijing, with production volume was 9.018 million tons, followed by Shanghai, Guangzhou, Shenzhen and Chengdu, with production volume was 8.995 million tons, 7.377 million tons, 6.04 million tons and 5.413 million tons, respectively. And the largest amount of MSW generation province is Guangdong. The total amount of MSW generated by top 10 cities was 56.858 million tons, accounting for 28.2% of 202 cities.

Figure-3: 2017 Production of MSW in large and medium cities (in 10 thousand tons)



Source: Phillip Securities (HK), Ministry of Ecology and Environment of China

The main mode of MSW innocuous treatment

The innocuous treatment of MSW is to dispose of municipal solid waste using advanced waste management technologies and methods to reduce negative environmental impact, and at the same time facilitate material recycling and reuse. Primary methods of this process include landfilling, composting and incineration.

- **Landfilling:** is to dispose of waste in a landfill involves burying the waste in a designated lot of land with post-treatment methods such as anti-leaking, leveling and compaction. A modern landfill usually has designs to treat gas, liquid leachate and vermin and prevent polluting underground water.
- **Composting:** is to stack waste into a pile and let it ferment at constant 70°C. Microbes inside the pile would decompose the organic matter into mulch or compost. After composting, waste would be turned into hygienic, odorless humus. This method is not only the solution to waste disposal, but also a way of resource recovery. However, a large compost pile would cause damages to the soil and underground water in the long term, so an ideal compost pile should not be too large.
- **Incineration:** is to combust organic matter in waste and reduce the volume of waste. Incineration and other high-temperature waste treatment systems are described as thermal treatment methods. Incinerators convert combustible waste materials into ash, steam and gas. Ash produced by incineration is mostly inorganic matter in the forms of solid residue or fine particles. Incineration plants need to remove gaseous pollutants and particulates from flue gas produced before emitting it to the atmosphere, while the rest of residual product can be used for other means such as building materials or can be disposed of in a landfill. The heat produced in the process of incineration can be used to generate electricity.

Within the primary waste disposal methods, incineration has the following advantages:

- **Innocuous Treatment:** incineration can greatly decompose all hazardous substances in waste through high-temperature combustion. Meanwhile, incineration can reduce the impact of final disposal on the environment, such as liquid leachate and greenhouse gas generated by landfilling and composting.
- **Reduce the Volume of Waste:** the incineration process can reduce the volume of waste by 95% and the weight by 75%-85%.
- **Resource Recovery:** The heat from the incineration of waste can be used to generate electricity or supply heating. The process can be operated continuously without interference by the weather.
- **Occupy smaller area of land:** a waste incineration plant covers a relatively small area of land and therefore can be built near the urban area. With increasingly limited new land supply, particularly in China's eastern and coastal regions and metropolitan areas where land prices are soaring, a waste incineration project has clear advantages in terms of land cost.

At present, domestic incinerators mainly include moving grate furnaces and fluidized bed technologies. On 16 May 2014, the Ministry of Environmental Protection and the General Administration of Quality Supervision, Inspection and Quarantine of China jointly issued the new "Standard for Pollution Control on the Municipal Solid Waste Incineration" (GB18485-2014) which requires new WTE plants constructed on or after 1 July 2014 and existing WTE plants to comply with the new standard by 1 July 2014 and 1 January 2016, respectively. Guangdong province suggested that waste incineration should adopt a well-developed technology with moving grates as the foundation. It is also encouraged to choose incinerators carefully, for the uses of incinerators below standard are straightly prohibited.

Tabel-1: The comparison between moving grate and fluidized bed technologies

	Moving Grate (Note 1)	Fluidised Bed
The process	• Waste is introduced by a waste crane through the "throat" at one end of the grate, from where it moves down the descending grate (sectioned as drying, combustion and complete combustion) to the ash pit on the other end	• The furnace is filled with a bed of quartz sand that is heated to over 600℃. A strong airflow heated to over 200℃ is supplied through the bottom of the furnace, separating the sand particles to let the air through, and then the waste is introduced. The waste and sand will then be mixed and churned to combust the waste
The Technology	• From Germany	• From China
Heating Value of Waste	• 1,200 kcal/kg (5,040 kJ/kg) and above	• 800 kcal/kg (3,360 kJ/kg) and above
Auxiliary Fuel	• Nil (diesel to ignite incinerator)	• Coal (diesel to ignite incinerator)
Environmental Factors	• Less fly ash production (1.5%-2%) • Less flue-gas emission (meet EU standard)	• More fly ash production (8%-10%) • More flue-gas emission (hard to meet new China standard) (Note 2)
Maintenance	• Less frequent maintenance, every 6 months	• More frequent maintenance, every 1.5 to 2 months
Operating Hours	• 8,000 hours	• 6,000 hours
Pre-treatment process	• No, lower requirements of waste composition and solid mass	• Yes, higher requirement on waste pre-treatment, thus more workers are required
Initial Investment	• ~RMB500-600K / tonnes	• ~RMB300K / tonnes
Gross Profit	• Higher gross profit margin • >50%	• Lower gross profit margin • ~20%-30%

Note 1: Guangdong province suggested that waste incineration should adopt a well-developed technology with moving grates as the foundation. It is also encouraged to choose incinerators carefully, for the uses of incinerators below standard are straightly prohibited.

Note 2: On 16 May 2014, the Ministry of Environmental Protection and the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China jointly issued the new "Standard for Pollution Control on the Municipal Solid Waste Incineration" (生活垃圾焚烧污染控制标准(GB18485-2014)) which requires new WTE plants constructed on or after 1 July 2014 and existing WTE plants to comply with the new standard by 1 July 2014 and 1 January 2016, respectively

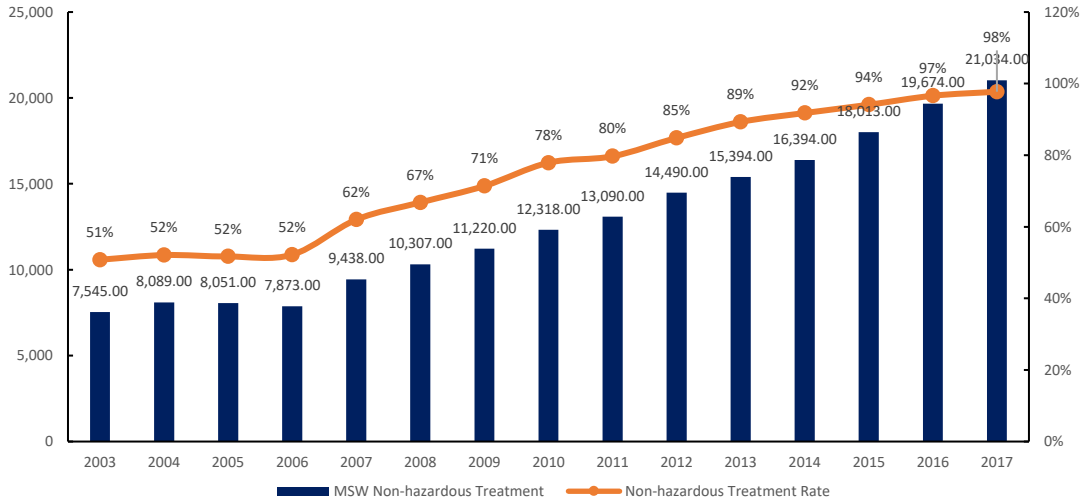
Source: Phillip Securities (HK), Company report

Development of MSW treatment in China and Guangdong Province

Driven by the "Plan on Urban Household Waste Treatment Facilities Construction for the 13th Five Year Plan Period" ("13th Five Year Plan"), the non-hazardous MSW treatment has maintained a strong growth momentum. According to the National Bureau of Statistics of China, the innocuous treatment rate in China and Guangdong Province has increased year by year. In 2017, the total MSW non-hazardous treatment amount in China was 210.34 million tons,

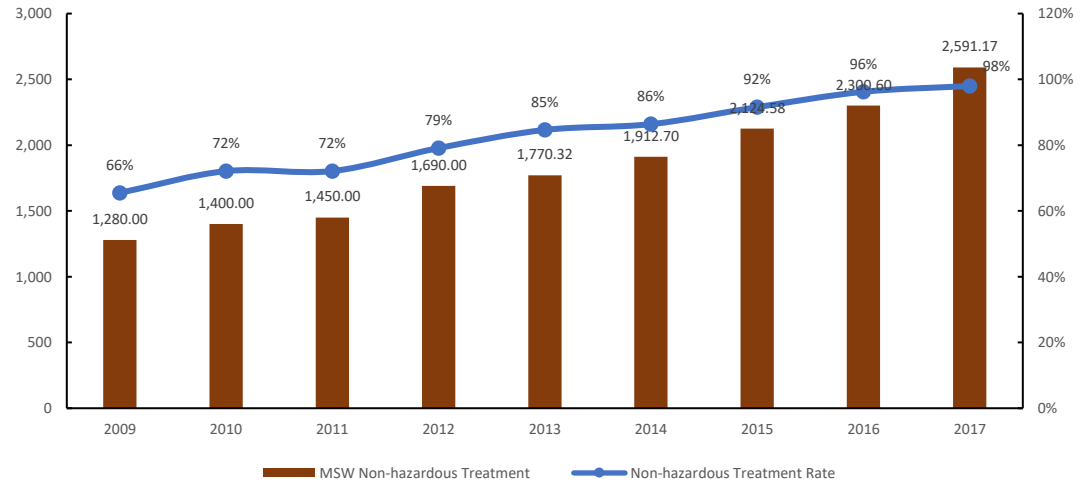
achieving an innocuous treatment rate of 97.74%; the total MSW non-hazardous treatment amount in Guangdong was 25.91 million tons, with a non-hazardous treatment rate of 97.98%.

Figure-4: 2003-2017 Annual MSW Non-hazardous Treatment and the Non-hazardous Treatment Rate in China



Source: Phillip Securities (HK) Research, Ministry of Housing and Urban-Rural Development of China

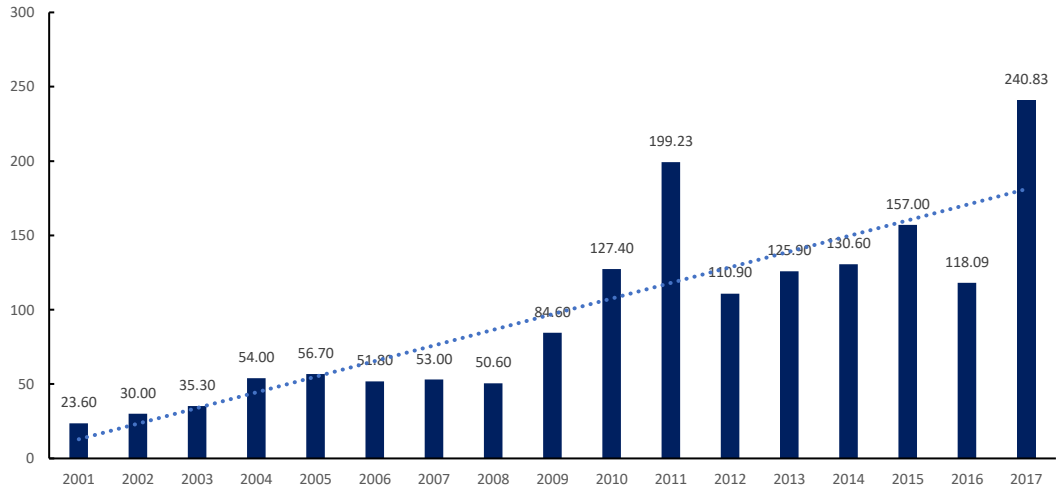
Figure-5: 2009-2017 Annual MSW Non-hazardous Treatment and the Non-hazardous Treatment Rate in Guangdong



Source: Phillip Securities (HK) Research, Ministry of Housing and Urban-Rural Development of China

According to the Ministry of Housing and Urban-Rural Development of China, China is committed to the construction of municipal facilities for waste disposal, and the investment in urban MSW construction has increased year by year. From 2001 to 2017, the CAGR was 15.6%. By 2017, the investment completion amount reached RMB 24.083 billion.

Figure-6: 2001-2017 investment completion amount of MSW construction in China (in RMB 100 million)



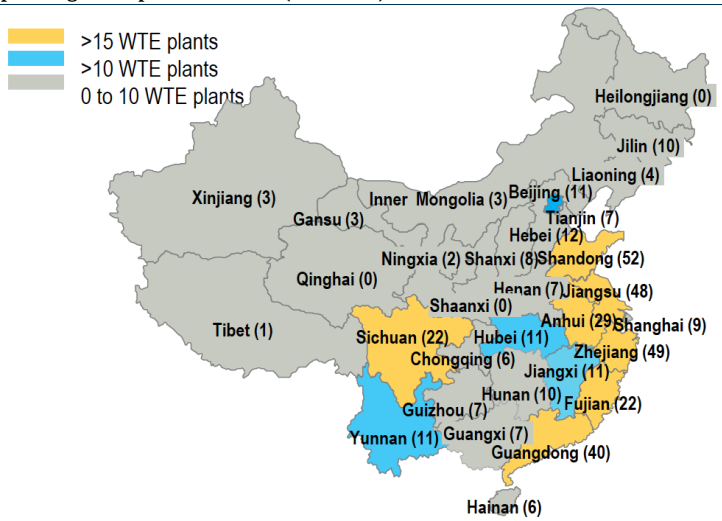
Source: Phillip Securities (HK) Research, Ministry of Housing and Urban-Rural Development of China

Market overview of WTE plants in China

In 2015, the total volume of MSW in China reached 758,300 tons per day. It is estimated that by 2020, the total volume will reach 1,104,900 tons per day. In 2015, MSW to be treated by incineration reached 235,200 tons per day, accounting for 31% of the total MSW treatment methods. It is estimated that the incineration capacity will be 591,400 tons per day by 2020, and the incineration treatment rate is expected to reach 54%.

China's average WTE treatment fee is higher in coastal cities. The company's average treatment fee is about RMB 90/ton, which is higher than the market average. As of March 2019, China's operating WTE plants are also concentrated in coastal areas such as Guangdong, Fujian, Zhejiang, Shanghai and Jiangsu.

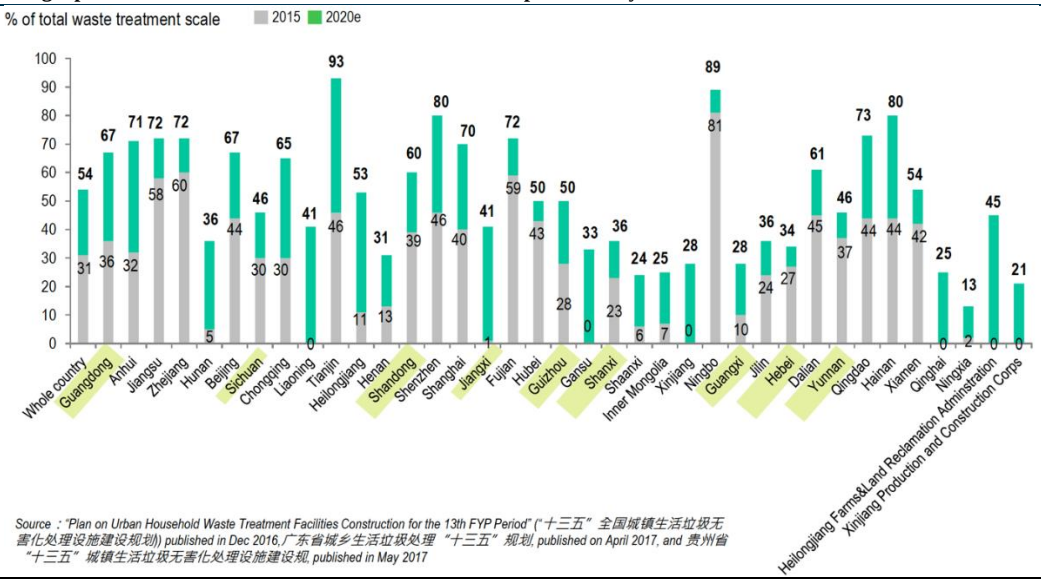
Figure-7: Distribution of operating WTE plants in China (Mar 2019)



Source: Phillip Securities (HK) Research, Ranking of the enterprises of biomass power generation in 2016

According to the 13th Five Year Plan, the penetration rate of incineration method in various provinces in China has increased significantly by 2020. Among them, Guangdong has ample room to grow, and the penetration rate of incineration method is expected to reach 67% by 2020.

Figure-8: Target penetration rate of incineration method in all the provinces by 2020



Source: Phillip Securities (HK) Research, “Plan on Urban Household Waste Treatment Facilities Construction for the 13th FYP Period”

High barrier to entry in the Chinese WTE industry

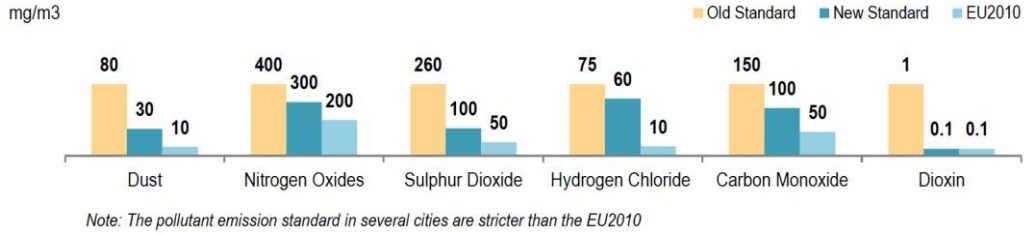
According to the Euromonitor Report, the barriers to entry into the Chinese WTE industry are mainly the following two parts:

- **High investment costs:** the investment for a BOT WTE plant is estimated to be in the range of RMB 3.5 million to RMB 4.0 million per ton, excluding costs for land use rights and other preliminary expenses for land preparation and environmental impact evaluation. A WTE plant with a daily handling capacity of 1,000 tonnes requires more than RMB 300 million investment, and about 50% of which is for equipment. For a BOT WTE plant, paid-up capital is normally 20% to 30% of its total investment, while the remainder can be funded through project financing in the form of term loan.
- **Proven track record:** The operation of WTE project requires project management expertise and adequate project operation experience, such as the transportation and collection of MSW to WTE plants, generation of electricity and adherence to environmental standard. As such, it is difficult fora new entrant without adequate project experience and management expertise to enter into this market.

Government policies supporting WTE industry

According to “13th Five Year Plan” and “Opinion on Enhancement of Urban Household Waste-to-Energy Work”, China government has increased investment in MSW treatment. In 2018, the MSW treatment fee was RMB 251.8 billion, construction of MSW treatment plants was RMB 169.9 billion; meanwhile, China has constructed high-standard non-polluted incineration plants, selected better site of incineration plants, well-coordinated to project development, managed and enhanced monitoring of WTE projects, forcing technological upgraded for unqualified WTE plants, and tightened pollutant emission standard.

Figure-9: Comparison of pollutant emission standard



Source: Phillip Securities (HK) Research, “Plan on Urban Household Waste Treatment Facilities Construction for the 13th FYP Period”, 2010/75/EU Industrial Emissions (integrated pollution prevention and control)

Additionally, MSW incineration has further penetration of WTE in developed regions, by 2020, national target ratio of urban household waste treatment via incineration will be 53.5%, WTE treatment target set for Guangdong province will be 67% (89,590 tons/day). Meanwhile, expanding the coverage of harmless MSW treatment, by 2020, targeted harmless MSW treatment capacity will be over 1.1 million tons per day, stricter harmless household waste treatment ratio in 13th FYP were also set: municipalities will be 100%, counties will be 80%, towns will >70%, household waste landfill rate in municipals will be 0%; for household waste incineration rate, cities will be >50%, cities in central and eastern regions will be >60%, household waste recycle rate in municipals will be >35%.

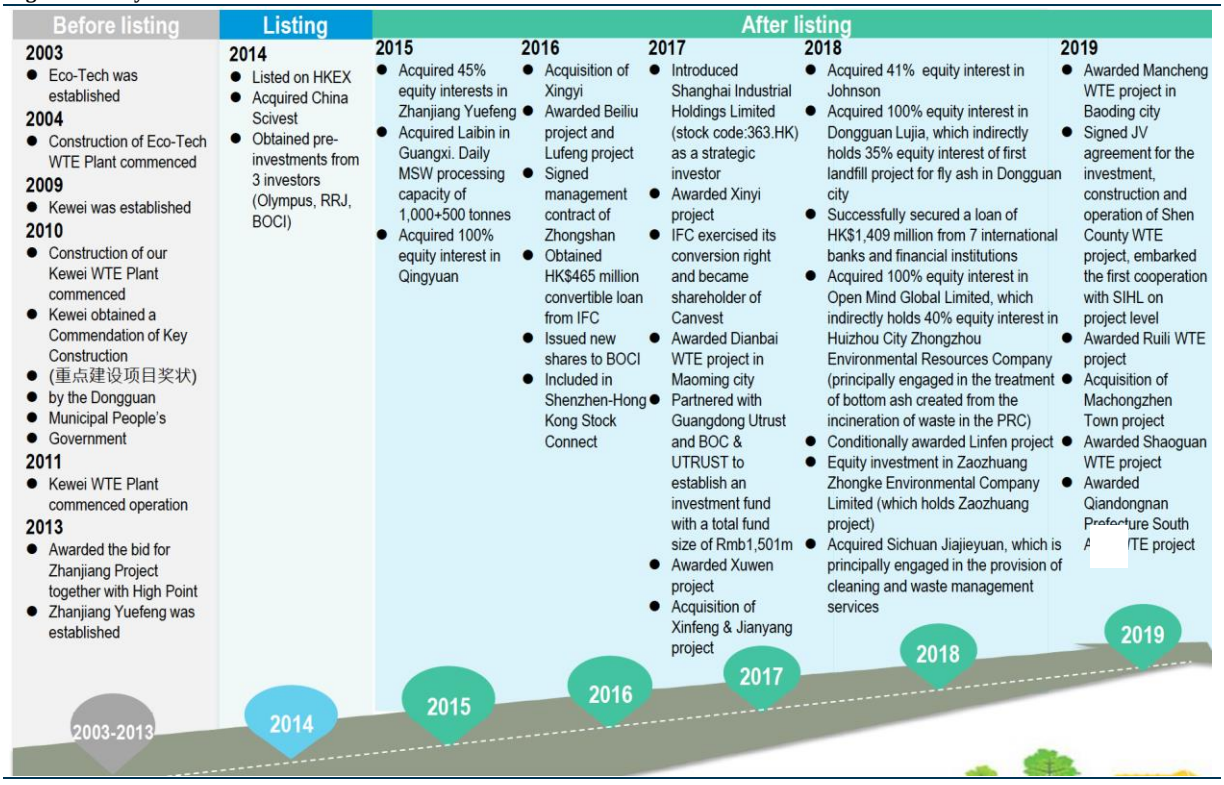
Company Analysis

Company Profile

The company which was listed on the Main Board of Hong Kong Stock Exchange in December 2014 (Stock Code: 1381), is a leading waste-to-energy (WTE) enterprise in China with market capitalization over HK$10 billion. The main business of the company focuses include build, design and operate WTE plants, and it also acquire and upgrade WTE projects to achieve optimal performance. As of August 2019, the company is managing 25 WTE projects, with presence in Guangdong Province, Guangxi Zhuang Autonomous Region, Guizhou Province, Jiangxi Province, Sichuan Province, Shandong Province, Shanxi Province and Hebei Province, and the daily MSW processing capacity of total operating, secured and announced projects has reached 36,590 tonnes. Since January 2015, the company has been a constituent of Hang Seng Infrastructure Index, Hang Seng Global Composite Index, Hang Seng Composite Index, Hang Seng Composite Industry Index – Utilities and Hang Seng Composite SmallCap Index. Since December 2016, the company has been one of the eligible stocks for Southbound trading through Shenzhen-Hong Kong Stock Connect. The company was also named one of "China's Most Promising Listed Companies" by Forbes China in 2017.

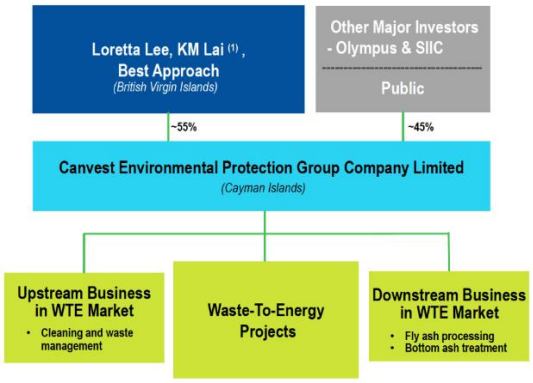
In 2018, the company successfully expanded the business along the value chain. The company acquired 41% equity interest in Johnson Cleaning Services Company Limited, a well-established cleaning and waste management service company in Hong Kong, acquired 100% equity interest in Dongguan Lujia Environmental Resources Investment Company Limited, which indirectly holds 35% of the right to the first fly ash landfill project in Dongguan and also acquired 100% equity interest in Open Mind Global Limited, which indirectly holds 40% equity interest in Huizhou Zhongzhou Environmental Resources Company (principally engaged in the treatment of bottom ash created from the incineration of waste in China).

Figure-10: Key Milestones



Source: Phillip Securities (HK) Research, Company Report

Figure-11: Shareholding Structure of Company



Source: Phillip Securities (HK) Research, Company Report

Key Business Introduction

The company is a leading WTE provider focusing on the development, management and operation of WTE projects. The main businesses of the company include WTE business and environmental hygiene and related services.

1. **Waste-to-energy (WTE) business**
   As of August 2019, the company is managing 25 WTE projects, including 12 projects in operation and 13 projects under construction and planning. The operating, secured, announced and under management agreement daily MSW processing capacity of the 25 projects was 36,590 tonnes, the operating daily MSW processing capacity of 12 projects (including the project under management) reached 16,790 tonnes.

Table-2: The operating projects of the company

Province	Project	Location	Daily MSW processing capacity	Installed power generation capacity	Concession period	Waste treatment fee
Guangdong	科偉垃圾焚燒發電廠一期 Eco-Tech I WTE plant	Dongguan	1,800 tonnes	36MW	Concession period is not applicable to BOO project	RMB110/tonne
	科偉垃圾焚燒發電廠二期 Eco-Tech II WTE plant	Dongguan	1,500 tonnes	50MW	Concession period is not applicable to BOO project	RMB110/tonne
	科維垃圾焚燒發電廠 Kewei WTE plant	Dongguan	1,800 tonnes	30MW	Concession period is not applicable to BOO project	RMB110/tonne
	東莞粵豐垃圾焚燒發電廠一期 China Scivest I WTE plant	Dongguan	1,800 tonnes	42MW	BOT-24 years (from 10 December 2004 to 30 November 2028)	RMB110/tonne
	東莞粵豐垃圾焚燒發電廠二期 China Scivest II WTE plant	Dongguan	1,200 tonnes	36MW	BOT-Under negotiation	RMB110/tonne
	湛江垃圾焚燒發電廠 Zhanjiang WTE plant	Zhanjiang	1,500 tonnes	30MW	BOT-28 years (from 18 April 2013 to 17 April 2041)	RMB81.8/tonne
	中山垃圾焚燒發電廠 Zhongshan WTE plant	Zhongshan	1,040 tonnes	24MW	Construction and Operation under Management Agreement	
	陸豐垃圾焚燒發電廠 Lufeng WTE plant	Lufeng	Phase 1: 1,200 tonnes Phase 2: 400 tonnes	Phase 1: 30MW Phase 2: 12MW	BOT-30 years (from October 2016 to October 2046)	RMB91.5/tonne
Guangxi	來賓垃圾焚燒發電廠 Laibin WTE plant	Laibin	Phase 1: 1,000 tonnes Phase 2: 500 tonnes	Phase 1: 24MW Phase 2: Planning	BOT-27 years (until April 2042)	RMB95/tonne
	北流垃圾焚燒發電廠 Beiliu WTE plant	Beiliu	Phase 1: 700 tonnes Phase 2: 350 tonnes	24MW	BOT-30 years commencing from the date of commencement of operation	RMB83/tonne (Calculated on weighted average basis)
Guizhou	興義垃圾焚燒發電廠 Xingyi WTE plant	Xingyi	Phase 1: 700 tonnes Phase 2: 500 tonnes	12MW	BOT-30 years commencing from the date of commencement of operation	RMB80/tonne
Jiangxi	信豐垃圾焚燒發電廠 Xinfeng WTE plant	Xinfeng	Phase 1: 400 tonnes Phase 2: 400 tonnes	12MW	BOT-30 years commencing from the date of formal receipt of waste treatment fees	RMB45/tonne

Source: Phillip Securities (HK) Research, Company Report

Table-3: The constructing and planning projects of the company

Province	Project	Location	Daily MSW processing capacity	Installed power generation capacity	Concession period	Waste treatment fee
Guangdong	清遠垃圾焚燒發電廠 Qingyuan WTE plant	Qingyuan	Phase 1: 1,500 tonnes Phase 2: 1,000 tonnes	Planning	BOT-30 years after passing the environmental impact assessment	RMB50/tonne (Under negotiation)
	信宜垃圾焚燒發電廠 Xinyi WTE plant	Xinyi	Phase 1: 500 tonnes Phase 2: 250 tonnes	Phase 1: 12MW Phase 2: 6MW	BOT-30 years	RMB79/tonne
	徐聞垃圾焚燒發電廠 Xuwen WTE plant	Xuwen	Phase 1: 500 tonnes Phase 2: 250 tonnes	Phase 1: 12MW Phase 2: 6MW	BOT-27 years commencing from the date of construction	RMB80.5/tonne
	電白垃圾焚燒發電廠 Dianbai WTE plant	Maoming	Phase 1: 1,500 tonnes Phase 2: 750 tonnes	Phase 1: 25MW Phase 2: Planning	BOT-338 months commencing from the date of commencement of operations	RMB89.5/tonne
	東莞麻涌垃圾焚燒發電廠 Machongzhen Town WTE plant	Dongguan	2,250 tonnes	-	Not less than 25 years of operation	RMB110/tonne
	韶關垃圾焚燒發電廠 Shaoguan WTE plant	Shaoguan	Phase 1: 700 tonnes Phase 2: 350 tonnes	-	PPP 30 years commencing from the date of construction	RMB88.88/tonne
Guizhou	黔東南區垃圾焚燒發電廠 Qiandongnan Prefecture South Area	Qiandongnan	Phase 1: 700 tonnes Phase 2: 350 tonnes	-	BOT-30 years	RMB66.8/tonne
Yunnan	瑞麗垃圾焚燒發電廠 Ruili WTE plant	Ruili	Phase 1: 600 tonnes Phase 2: 400 tonnes	-	PPP 30 years commencing from the date of construction	RMB75/tonne
Hebei	滿城垃圾焚燒發電廠 Mancheng WTE plant	Mancheng	Phase 1: 500 tonnes Phase 2: 500 tonnes	Planning	BOT-30 years commencing from the date of construction	RMB76.8/tonne
Shanxi	臨汾垃圾焚燒發電廠 Linfen WTE plant	Linfen	Phase 1: 800 tonnes Phase 2: 400 tonnes	Planning	BOT-30 years commencing from the date of construction	RMB30/tonne
Shandong	棗莊垃圾焚燒發電廠 Zaozhuang WTE plant	Zaozhuang	Phase 1: 1,000 tonnes Phase 2: 800 tonnes	Phase 1: 15MW Phase 2: 15MW	BOT-30 years commencing from the date of commencement of operations	RMB49/tonne
	莘縣垃圾焚燒發電廠 Shen County WTE plant	Shen County, Liaocheng City	Phase 1: 700 tonnes Phase 2: 500 tonnes	Planning	BOT-30 years commencing from the date of commencement of operations	RMB70/tonne
Sichuan	簡陽垃圾焚燒發電廠 Jianyang WTE plant	Jianyang	Phase 1: 1,500 tonnes Phase 2: 1,500 tonnes	Phase 1: 18MW Phase 2: 18MW	BOT-30 years commencing from the date of commencement of operations	RMB65.95/tonne

Source: Phillip Securities (HK) Research, Company Report

2. Environmental hygiene and related services

To perfect the business model and in response to the demand from stakeholders, the company further extended its business portfolio to the treatment of fly ash, bottom ash and environmental hygiene business. The company acquired 100% equity interest in Dongguan Lujia in March 2018, it holds a 35% equity interest in Dongguan Xindongyue, which currently owns the first landfill project for fly ash in Dongguan; in 2018, Dongguan Xindongyue processed 130,903 tonnes solidified fly ash. In March 2018, the company acquired 41% equity interest in Johnson, a leading environmental hygiene service provider in Hong Kong. The company entered into an agreement in relation to the acquisition of 100% equity interest in Open Mind in November 2018, it ultimately holds 40% equity interest in Zhongzhou Environmental, which is principally engaged in the treatment of bottom ash created from the incineration of waste in China. Construction of the project was completed and its trial operation commenced in first half of 2019. On 13 December 2018, Yuezhan Intelligent Environmental entered into the sale and purchase agreement of share with independent third parties, pursuant to which Yuezhan Intelligent Environmental acquired 100% equity interest of Sichuan Jiajieyuan at a consideration of RMB 80.0 million (equivalent to HKD 91.3 million); Sichuan Jiajieyuan is principally engaged in the provision of environmental hygiene and related services in China.

In 2018, the revenue of the company was HKD 3.33 billion, with a YoY increase of 38.7%; gross profit was HKD 1.10 billion, with an increase of 34.0% YoY; net profit contributed to owners was HKD 754 million, an increase of 33.7% YoY. By service type, power sales and waste

treatment fees segment revenue was HKD 1.56 billion, with a YoY increase of 44.90%, segment gross profit was HKD 749 million, a YoY increase of 34.8%; construction revenue arising from BOT arrangement segment revenue was HKD 1.70 billion, a YoY increase of 34.0%, segment gross profit was HKD 283 million, a YoY increase of 34.0%; finance income from BOT arrangement segment revenue was HKD 65.79 million, a YoY of 25.3%, segment gross profit was HKD 65.79 million, a YoY increase of 25.3%.

Figure-12: Revenue of power sales and waste treatment fees

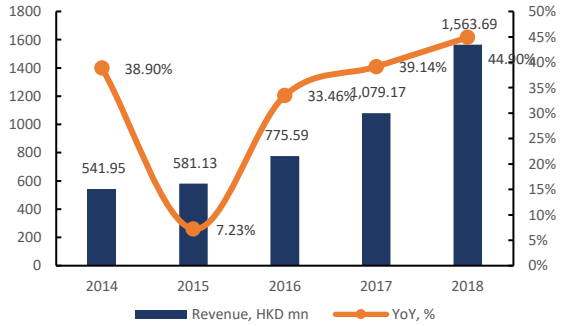
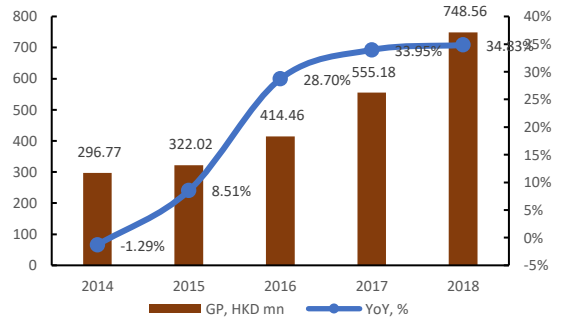


Figure-13: Gross profit of power sales and waste treatment fees



Source: Phillip Securities (HK) Research, Company Report

Figure-14: Revenue of construction revenue from BOT arrangement

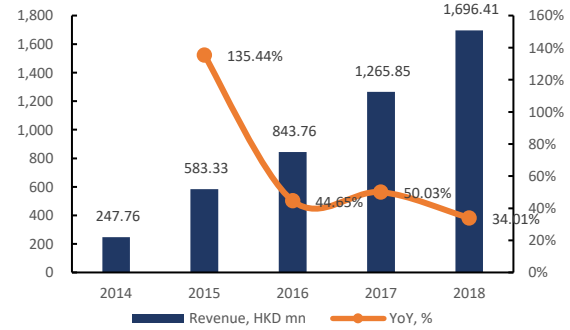
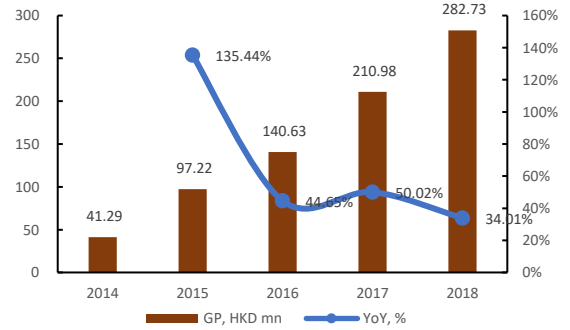


Figure-15: GP of construction revenue from BOT arrangement



Source: Phillip Securities (HK) Research, Company Report

Figure-16: Revenue of finance income from BOT arrangement

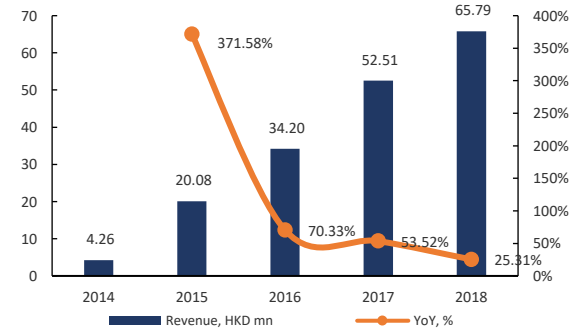
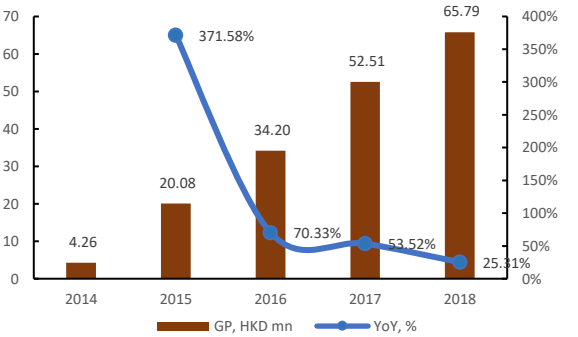


Figure-17: Gross profit of finance income from BOT arrangement



Source: Phillip Securities (HK) Research, Company Report

Key Business Mode

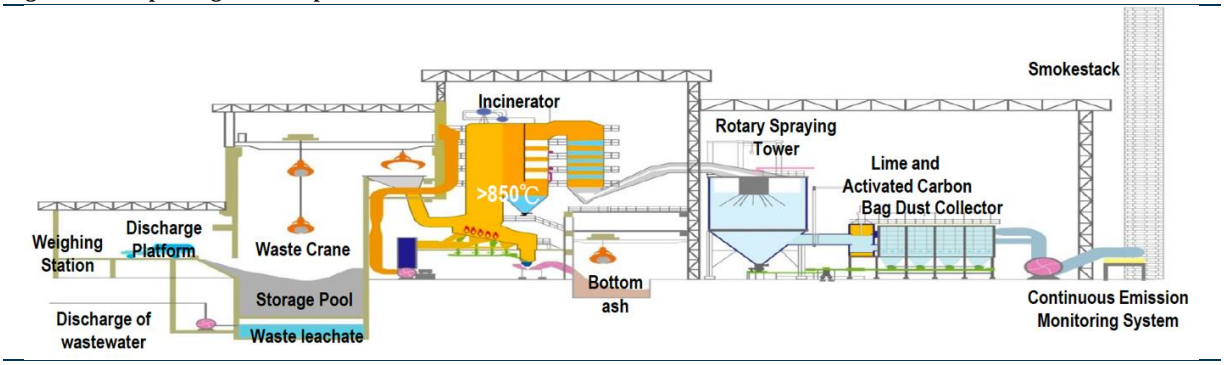
Before listed, the company was mainly operated two BOO projects (Eco-Tech and Kewei WTE plants), but the operating mode of post-listing construction and M&A projects are mainly BOT projects. The power generation process of the WTE plants of the company are as below:

- **Waste reception and feeding:** MSW is brought in by waste collection vehicles and weighed at WTE plants, and then transported by waste collection vehicles to the

discharge platform, where it is discharged into the storage pool for fermentation. Waste in the storage pool is then transferred by a crane into the feeding system for incineration.

- **Incineration:** During the incineration process, waste passes through a downward inclined moving grate as it is being incinerated and is continuously turned during incineration to maximize its contact with air to achieve full combustion.
- **Heat exchange and power generation:** The heat recovery steam generator recovers the heat produced during the incineration process and generates high temperature steam. The high temperature steam drives the steam turbines which in turn drive the generators to produce power.
- **Wastewater/flue gases/bottom ash/fly ash treatment:** Comprehensive wastewater treatment systems are installed to process leachate and other wastewater produced, according to the national standard. Gases and fly ash generated in the process of incineration will undergo a comprehensive flue gas treatment process before being released through the smokestack.

Figure-18: The power generation process of MSW incineration



Source: Phillip Securities (HK) Research, Company Report

Currently, the BOO projects of the company include Eco-Tech WTE Plant I & II and Kewei WTE Plant, BOT projects include China Scivest WTE Plant, Zhanjiang WTE Plant, Laibin WTE Plant, Qingyuan WTE Plant, Xingyi WTE Plant, Beiliu WTE Plant, Lufeng WTE Plant, Xinyi WTE plant, Xinfeng WTE Plant, Jianyang WTE Plant and Xuwen WTE Plant. BOT basis is currently the mainstream model in the WTE industry in China.

Table-4: The comparison between projects modes

	BOO Projects	BOT Projects
WTE plant and the ancillary production facilities	• Own and operate their facilities and assets • No obligation to transfer ownership of the relevant WTE plant and the ancillary production facilities to any specified parties at any specified time	• Upon the expiry of the respective concession periods, project companies will be required to transfer the ownership of their respective WTE plants and the ancillary facilities to the relevant government authority • The transfer will be without compensation
Waste supply agreements	• There is no undertaking from the government authorities in favour of any of the project companies to maintain any minimum supply of MSW • Liaise and enter into waste supply agreements with various MSW providers directly	• The relevant government authority has undertaken to the respective project companies to guarantee a minimum supply volume of MSW during the concession period (the minimum guarantee amount will create a financial asset called Amount due from Contract Work on the balance sheet) • The relevant government authority will compensate the respective project companies if there is any shortfall
Operational rights	• The operational rights of the WTE plants were not granted through open tender processes • By way of the local government's approvals of their applications for the operation of the respective WTE plants	• The development and operational rights of our plants under the BOT projects were granted through concessions from government authorities to the project companies
Accounting treatment	• Only recognise revenue when they generate waste treatment fees and on-grid tariffs • Unlike BOT projects, construction revenue/cost and finance income may not be recognised	• In addition to recognising revenue when the relevant WTE plants generate waste treatment fees and on-grid tariffs, BOT project companies may further recognise construction revenue based on construction cost, and will create an intangible asset and financial asset (based on minimum MSW guarantee amount) on the balance sheet • May further recognise finance income during the concession period based on the financial asset value

Source: Phillip Securities (HK) Research, Company Report

Investing Highlights

China's leading waste-to-energy enterprise, manager and operator, has a strong growth in waste treatment capacity

The company which was listed on the Main Board of Hong Kong Stock Exchange in December 2014, is a leading waste-to-energy (WTE) enterprise in China with market capitalization over HKD 10 billion. The main business of the company focuses include build, design and operate WTE plants, and it also acquire and upgrade WTE projects to achieve optimal performance. Since January 2015, the company has been a constituent of Hang Seng Infrastructure Index, Hang Seng Global Composite Index, Hang Seng Composite Index, Hang Seng Composite Industry Index – Utilities and Hang Seng Composite SmallCap Index. Since December 2016, the company has been one of the eligible stocks for Southbound trading through Shenzhen-Hong Kong Stock Connect. The company was also named one of "China's Most Promising Listed Companies" by Forbes China in 2017.

The company's performance has maintained steady growth in recent years. In 2018, the company recorded revenue of HKD 3.33 billion, an increase of 38.7% YoY. In 2018, the revenue of four major business segments, namely power sales, waste treatment fees, construction revenue arising from BOT arrangement and finance income from BOT arrangement, accounted for 33.9%, 13.1%, 51% and 2% of the total revenue, respectively. From 2013 to 2018, the company's revenue maintained rapid growth at a compound annual growth rate of 53.51%, and remained at around 40% in recent years. In 2018, the company achieved a gross profit of HKD 1.10 billion, a YoY increase of 34.0%. The overall gross profit margin was 33.0%, a decrease of 1.16% YoY. The slight decrease was mainly due to the lower gross profit margin during the trial operation stage for new plants commencing operation. From 2013 to 2018, the company's compound annual growth rate of gross profit was 40.19%, slightly lower than the growth rate of income. We believe that the company's rapid growth has benefited from the strong support of relevant national industry policies, the company's high-quality projects and the significant increase of company's waste disposal capacity.

Figure-19: Revenue of business segments (mn HKD)

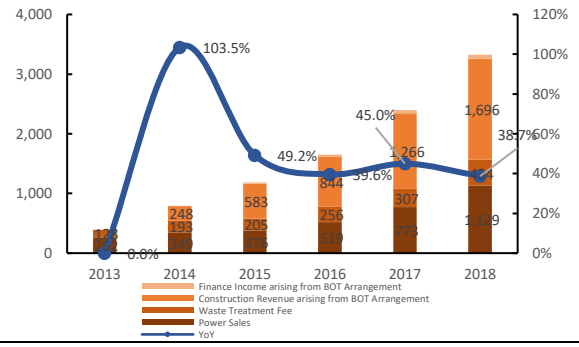
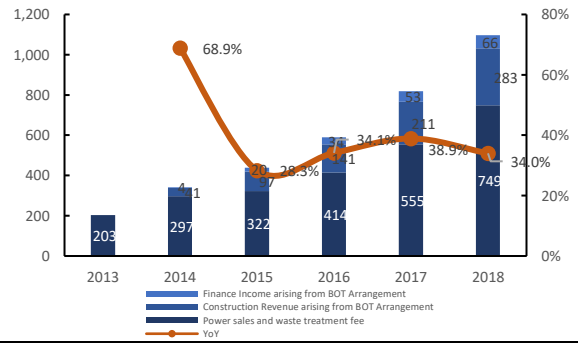


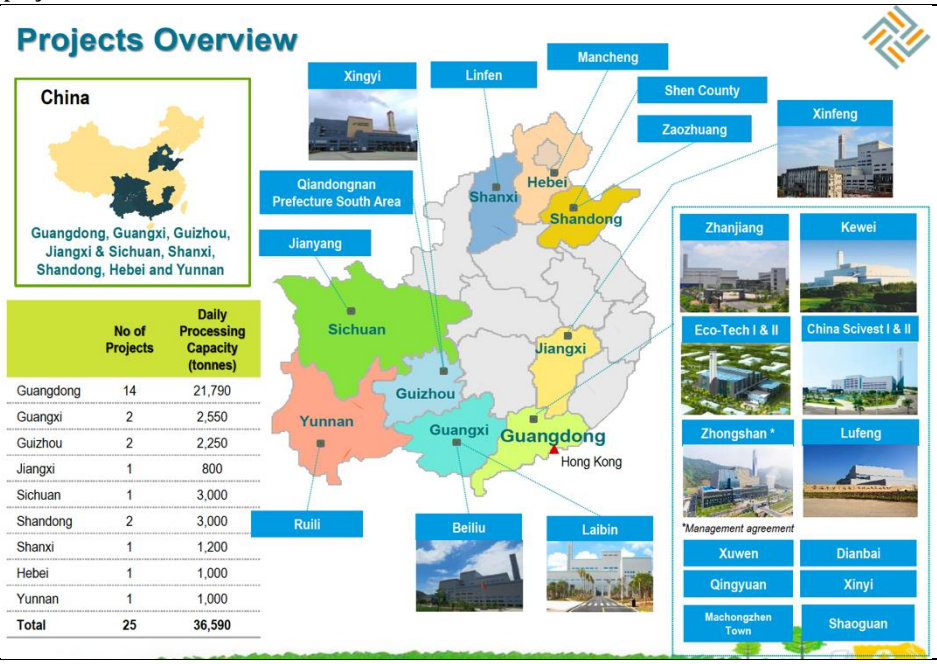
Figure-20: Gross profit of business segments (mn HKD)



Source: Phillip Securities (HK) Research, Company Report

Under the 13th Five Year Plan, the Central government promoted the philosophy of "Lucid Waters and Lush Mountains are Invaluable Assets" and committed to build a "beautiful China". The national target ratio of urban household waste treatment via incineration was raised from 31% in 2015 to 54% by 2020. With this favorable national policy, the company has expanded its WTE business rapidly since listing. Currently, the company has 25 WTE projects, with presence in Guangdong Province, Guangxi Zhuang Autonomous Region, Guizhou Province, Jiangxi Province, Sichuan Province, Shandong Province, Shanxi Province and Hebei Province, and the daily MSW processing capacity of all the operating, secured and announced projects has reached 36,590 tonnes.

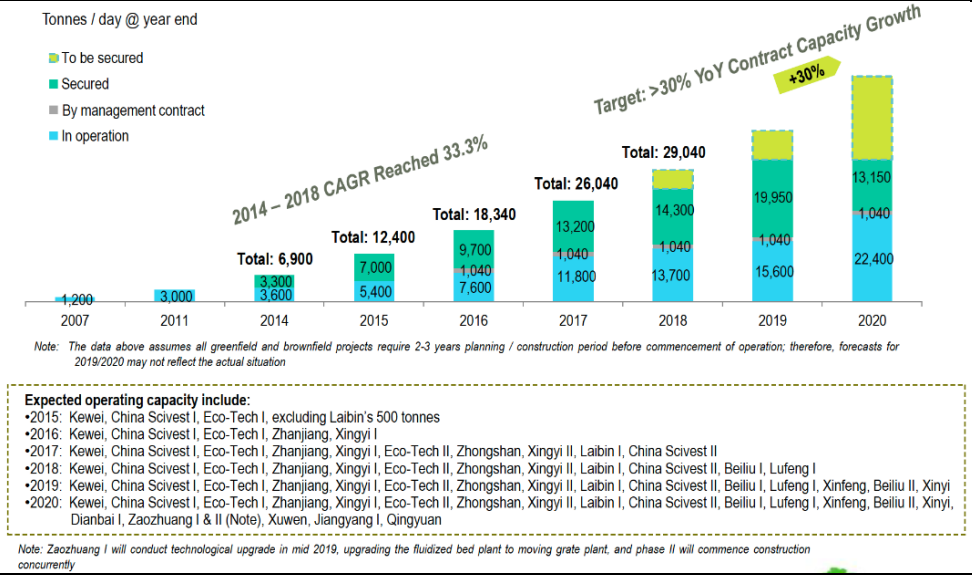
Figure-21: The projects overview



Source: Phillip Securities (HK) Research, Company Report

As of August 2019, the company is managing 25 WTE projects, including 12 projects in operation and 13 projects under construction and planning. As at 31 December 2018, the operating, secured, announced and under management agreement daily MSW processing capacity of the 19 projects was 29,040 tonnes, from 6,900 tons/day in 2014 to a compound annual growth rate of 33.3% in 2018, the company's goal for the next few years is to maintain a contract capacity growth rate of more than 30% per year.

Figure-22: The changes of waste treatment capacity in recent years



Source: Phillip Securities (HK) Research, Company Report

Self-built projects improve quality, extension projects boost development

The company currently has 12 projects in operation, 10 of which generating a total of 2.05 million MWh of electricity, selling a total of 1.8 million MWh of power, accounted for average of 88% of power sales; a total designed processing capacity was 4.16 million tons, actual disposal of MSW was 5.02 million tons, and the utilization rate reached 109%. In addition, Zhongshan WTE plant began trial operation in the first quarter of 2017, and converted into commercial operation

as a custody agreement project in December 2017. Xinfeng WTE plant started trial operation in January 2019 with a designed daily processing capacity of 800 tons.

Table-5: The part of operating projects of the company

Projects	Character istic	Current status	Power sales			Waste treatment		
			Power generated (MWh)	Power sold (MWh)	Sales to generation ratio	Designed processing capacity (tonnes)	Processed MSW (tonnes)	Utilization rate
Eco-Tech I (Guangdong)	Greenfield BOO	Technological upgrade in April 2014, resumed trial operation in August 2015	295,969	263,848	89%	657,000	642,937	98%
Eco-Tech II (Guangdong)	Greenfield BOO	Obtained in January 2015, commenced trial operation in 2017Q2	345,491	310,946	90%	547,500	680,069	124%
Kewei (Guangdong)	Greenfield BOO	Established in 2009, operating in 2011	247,685	218,018	88%	657,000	576,305	88%
China Scivest I (Guangdong)	M&A BOT	Technological upgrade in 2012, operating since 2013	295,896	261,232	88%	657,000	755,315	115%
China Scivest II (Guangdong)	Greenfield BOT	Obtained in January 2016, commenced preliminary trial operation in late 2017	263,236	232,116	88%	438,000	528,133	121%
Laibin Phase I (Guangxi)	M&A BOT	Project acquisition in May 2015, commenced trial operation in 2017Q3	147,951	124,712	84%	365,000	461,024	126%
Zhanjiang (Guangdong)	Greenfield BOT	Awarded of BOT concession right in April 2013, operating since 2016Q2	215,572	188,197	87%	547,500	666,408	122%
Xingyi (Guizhou)	M&A BOT	Project acquisition in Januray 2016, Phase 1 commenced trail operation in 2015, Phase II commenced trial operation in 2017Q2	124,823	103,265	83%	438,000	384,902	88%
Beiliu Phase I (Guangxi)	Greenfield BOT	Awarded of BOT concession right in March 2016, Phase 1 commenced trail operation in 1H2018, Phase II commenced construction in 2H2018	92,104	77,383	84%	211,050	263,948	125%
Lufeng Phase I (Guangdong)	Greenfield BOT	Awarded of BOT concession right in October 2016, commenced trail operation in 2H2018	24,803	20,469	83%	92,500	74,657	81%
Total			2,053,530	1,800,186	88%	4,610,550	5,033,698	109%

Source: Phillip Securities (HK) Research, Company Report

The company's project is mainly established in the southern region of China, which temperature is relatively high and conducive to the pretreatment of "wet garbage"; winter in the northern area is cold, moisture freezing in the garbage will not be conducive to the separation of moisture and garbage. The higher moisture content, the lower corresponding waste calorific value. In addition, according to the research from Key Laboratory of Clean Energy Utilization of Zhejiang University, the waste calorific value in developed areas is higher, while the content of textiles from the waste is relatively high in Guangdong, which leads to the high value of waste calorific value.

Table-6: Comparison of waste calorific value in different regions

Cities	Calorific value kJ/kg	Plastic rubber %	Paper %	Textiles %	Bamboo %	Kitchen waste %	Metal %	Glass %	Lime %	Moisture %
Dongguan	8839	19.28	6.44	16.06	7.83	22.23	6.1	3.37	10	31.33
Beijing	8230	15.8	19.2	5.3	2.9	35.4	1.4	3.79	14.2	39.31
Shenzhen	7741	13.3	14.24	6.72	7.16	50.62	0	0	7.96	49.91
Shanghai	5756	13.48	8.77	1.9	1.27	67.33	0.73	5.15	1.37	58.87
Jinhua	5581	15.7	12.15	5.06	6.33	43.07	3.8	2.03	11.86	51.56
Ningbo	5430	13.8	5.1	4.5	1	55.9	0.5	3.2	15.6	51.91
Shenyang	5016	11	7.6	1.7	1.5	67.5	0.5	2.8	2.3	58.07
Dong-e	4218	10.5	5	2.5	1	42.5	1.5	2	25	41.17
Qingdao	4205	11.2	4	3.2	0	42.2	1.1	2.2	36.1	42.36
Wuhan	4009	9.51	5.06	1.15	0.9	57.44	3.18	3.02	19.72	51.37
Panjin	3219	5.8	4.1	1.5	1.3	64.5	0.5	2.3	20	55.54
Shaoxing	3089	5.1	4.1	2.8	1.5	50	0.68	7.8	25.39	45.1
Wuhu	2857	1.7	4	0.6	0	67.6	1	2	19.5	56.07
Xinmin	2454	13.3	14.24	6.72	7.16	50.62	0	0	7.96	49.91

Source: Phillip Securities (HK) Research, "The study on prediction of lower heat value of MSW"

Most of the projects have relatively high waste treatment fees, and the average waste treatment fee for all projects is RMB 90/ton. The average waste treatment fee for 11 operating projects (excluding Xinfeng WTE plant) is RMB 97.7/tons, while the average waste treatment fee in Guangdong Province is RMB 110/ton, which is better than the average level in the industry. Moreover, the current average daily MSW treated capacity of the company's projects is about 1,500 tons per day, which is higher than the industry average. We believe that higher waste treatment fees and project scales ensure the high quality of the company's projects and also ensure the steady growth of the company's future operating income.

Figure-23: Average city WTE treatment fee (RMB)

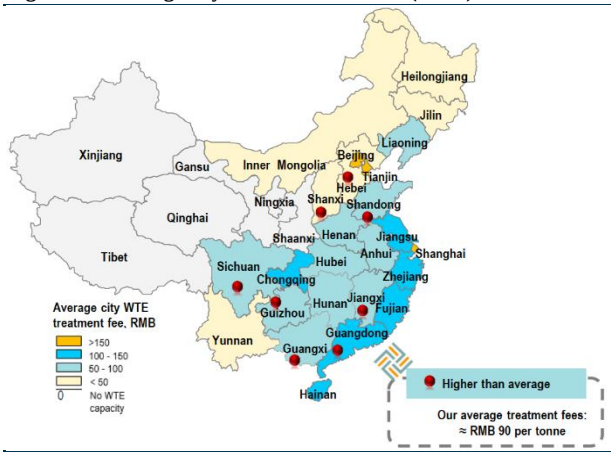


Figure 24: Revenue sources of the company

1 Power sales revenue

On-grid tariffs (VAT inclusive)

- RMB0.65 per kWh for the first 280 kWh
- Any additional power output will base on the rate similar to coal-fired power plant in the neighborhood
- RMB 0.4530 per kWh in Guangdong
- RMB 0.4207 per kWh in Guangxi
- RMB 0.3515 per kWh in Guizhou
- RMB 0.4143 per kWh in Jiangxi
- RMB 0.4012 per kWh in Sichuan
- RMB 0.3320 per kWh in Shanxi
- RMB 0.3949 per kWh in Shandong
- RMB 0.3644 per kWh in Hebei
- RMB 0.3358 per kWh in Yunnan

2 Waste treatment revenue

Waste treatment fee

Determined by local government

- **Dongguan:** RMB110 / tonne
- **Zhanjiang:** RMB81.8 / tonne
- **Laibin:** RMB95 / tonne
- **Qingyuan:** Target RMB90 – 110 / tonne (guidance price in Guangdong province)
- **Xingyi:** RMB80 / tonne
- **Beiliu:** RMB83 / tonne
- **Lufeng:** RMB91.5 / tonne
- **Xinyi:** RMB79 / tonne
- **Dianbai:** RMB89.5 / tonne
- **Xuwen:** RMB80.5 / tonne
- **Xinfeng:** Under negotiation
- **Jianyang:** RMB65.95 / tonne
- **Linfen:** RMB73.00 / tonne
- **Zaozhuang :** RMB49.00 / tonne (price adjustment after technological upgrade)
- **Mancheng:** RMB76.8 / tonne
- **Shen County:** RMB70.00/ tonne
- **Ruili:** RMB75/ tonne
- **Shaoguan**: RMB88.88/ tonne
- **Qiandongnan Prefecture South Area**: RMB66.8/ tonne

3 Management Fee Income

Management Fee

- Zhongshan

Source: Phillip Securities (HK) Research, Company Report, 'Plan on Urban Household Waste Treatment Facilities Construction for the 13th FYP Period"

In 2018, the company through (i)acquired 41% equity interest in Johnson, a well-established cleaning and waste management services company in Hong Kong; (ii)acquired 100% equity interest in Dongguan Lujia, which held 35% equity interest in the first fly ash landfill project in Dongguan; (iii)acquired 100% equity interest in Open Mind Global Limited, which held 40% equity interest in Zhongzhou Environmental Resources Company, successfully expanded its business. These successful acquisitions enable the company to step into the upstream waste collection business and downstream waste disposal business, helping the company to gain knowledge and experience in the relevant industries of the core waste incineration power generation business. In addition, the company has conditionally awarded Linfen WTE plant concession project and gained foothold in Shanxi Province; equity investment in Zaozhuang Zhongke Environmental Company Limited by way of capital increase, obtained Zaozhuang project and gained foothold in Shandong Province; awarded Mancheng WTE plant PPP project and gained foothold in Hebei Province; awarded Ruili WTE plant PPP project and gained foothold in Yunnan Province. The company has also invested in Shen County WTE plant project of SIHL and officially commenced project level cooperation with SIHL. In the future, the company will develop at a rapid speed through continually acquisitions of high-quality projects.

Figure-25: Growth and development strategies of the company

Greenfield projects

Develop Greenfield Projects to Expand Capacity

Strategic Goals
- Capture the growth opportunities in the WTE market
- Execution capability and technical know-hows being recognised by the market
- Continue its strong track record

Examples
- Won the Xinyi project in March 2017
- Awarded Dianbai in November & and Xuwen project in December 2017
- Won the Linfen project in December 2018
- Zhanjiang project was awarded "Grade AAA Innocuous Waste Incineration Plant" by the Department of Housing and Urban-Rural Development of Guangdong Province in 2018
- Won the Mancheng project in January 2019
- Won the Ruili project in May 2019
- Won the Shaoguan project in July 2019
- Won the Qiandongnan Prefecture South Area project in August 2019

Expansion Targets
- Continue to bid for quality projects in Guangdong, Guangxi, Northern China and other provinces

Brownfield projects

Acquire Brownfield Projects and Conduct Technological Upgrade to Enhance Margin

Strategic Goals
- Achieve higher operational efficiency by upgrading existing fluidised bed projects or inefficient moving grate plants
- Enjoy shorter payback period
- Seek for brownfield and joint venture projects with real waste treatment demands and higher tipping fees
- Seek for brownfield and joint venture projects with real waste treatment demands and higher tipping fees

Examples
- Completed technological upgrade of Laibin project in Q3 2017
- Acquired Xinfeng project and Jianyang project in December 2017
- Completed the equity investment in Zaozhuang project by way of capital increase in December 2018. Became the major shareholder and phase I (in operation) conducted technological upgrade

Expansion Targets
- Acquire more poorly managed or fluidised bed projects, then carry out technological upgrade to capture higher return

JV Projects

Cooperate with Strategic Partners and Create Synergies

Strategic Goals
- Strategic cooperation with strategic partners to create synergies and further expand project portfolio
- Co-develop ecosystems to explore more new market opportunities

Examples
- Signed management agreement with Zhongshan City Guangye Longcheng Environmental Company Limited in August 2016, to assist in the construction and operation of Zhongshan WTE Plant
- Invested in Shen County project in March 2019 and commenced project level cooperation with SIHL

Expansion Targets
- Cooperate with strategic partners to explore new projects in different provinces

Source: Phillip Securities (HK) Research, Company Report

Financial Forecast and Valuation

Financial Performance

In 2018, the company recorded income of HKD 3.33 billion, representing an increase of 38.72% YoY; realized gross profit of HKD 1.10 billion, increasing by 34.0% YoY; realized gross profit margin of 32.99%, decreasing by 1.16% YoY; realized net profit attributable to owners of HKD 754 million, increasing by 33.69% YoY. From the historical data, the company's overall profit level has generally declined, but it has remained relatively stable in recent years. The gross profit margin has declined from 34.15% in 2017 to 32.99% in 2018. The slight decrease was mainly due to the lower gross profit margin during the trial operation stage for new plants commencing operation.

Figure-26: Remain stable of profitability level

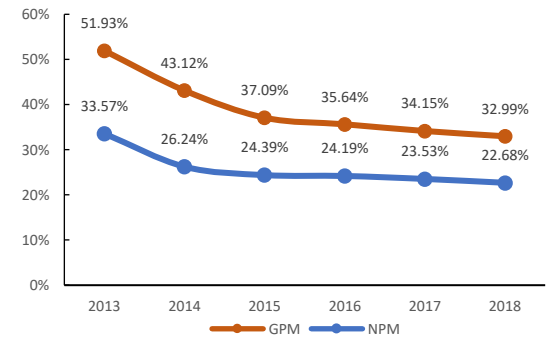
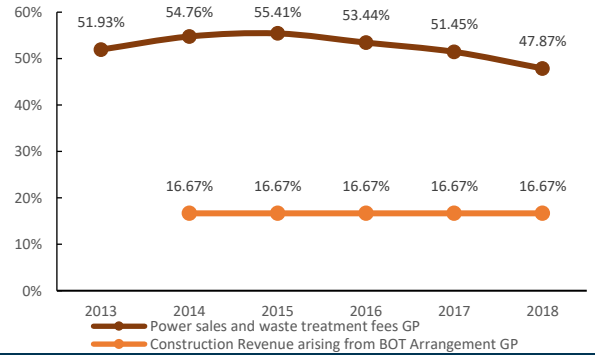


Figure-27: GPM of segments



Source: Phillip Securities (HK) Research, Company Report

After the company went public in 2015, the liability-to-asset ratio fell to 52.25%. In recent years, it has been a dynamic trend, and the average overall liability-to-asset ratio has remained at 51.50%. In terms of expense rate, the company's overall expense rate has decreased from 12.18 in 2014 to 6.86% in 2018, which we believe that it was beneficial from the company's effective internal cost control, overall expense has declined gradually year by years.

Figure-28: Liability-to-asset ratio

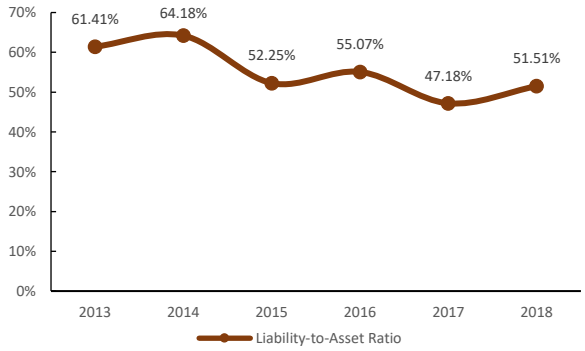
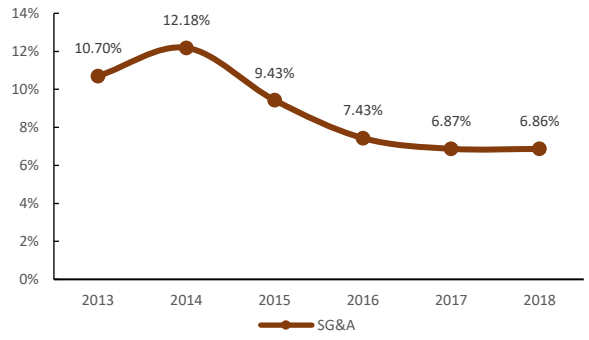


Figure-29: Expense rates



Source: Phillip Securities (HK) Research, Company Report

Table-7: Financial performance of last five years

HKD in million		FY2014	FY2015	FY2016	FY2017	FY2018
Power Sales	Revenue	349.15	376.21	519.39	772.61	1,129.33
	YoY	33.40%	7.75%	38.06%	48.75%	46.17%
Waste Treatment Fee	Revenue	192.80	204.92	256.20	306.56	434.37
	YoY	50.11%	6.29%	25.03%	19.66%	41.69%
Sub-total	Revenue	541.95	581.13	775.59	1,079.17	1,563.69
	YoY	38.90%	7.23%	33.46%	39.14%	44.90%
	GP	296.77	322.02	414.46	555.18	748.56
	GPM	54.76%	55.41%	53.44%	51.45%	47.87%
Construction Revenue arising from BOT Arrangement	Revenue	247.76	583.33	843.76	1,265.85	1,696.41
	YoY		135.44%	44.65%	50.03%	34.01%
	GP	41.29	97.22	140.63	210.98	282.73
	GPM	16.67%	16.67%	16.67%	16.67%	16.67%
	Revenue	4.26	20.08	34.20	52.51	65.79

Finance Income arising from BOT Arrangement	*YoY*		371.58%	70.33%	53.52%	25.31%
	BOT Fin/BOT Cons	1.72%	3.44%	4.05%	4.15%	3.88%
	GP	4.26	20.08	34.20	52.51	65.79
	GPM	100.00%	100.00%	100.00%	100.00%	100.00%
Total	Revenue	793.97	1,184.54	1,653.55	2,397.53	3,325.89
	YoY	103.49%	49.19%	39.59%	44.99%	38.72%
	GP	342.32	439.32	589.29	818.66	1,097.09
	GPM	43.12%	37.09%	35.64%	34.15%	32.99%

Source: Phillip Securities (HK) Research, Company Report

Financial Forecast

It is estimated that the company's revenue in FY19/FY20/FY21 will be HKD 4.04/4.72/5.58 billion, representing increases of 21.48%/16.91%/18.13% YoY; gross profit will be HKD 1.33/1.56/1.87 billion, representing increases of 21.01%/17.22%/19.96% YoY; net profit attributable to shareholders will be HKD 0.89/1.03/1.22 billion, representing increases of 18.63%/15.13%/18.31% YoY; corresponding EPSs are HKD 0.364/0.42/0.496. As a leading WTE enterprise in China, has table growth in production capacity. We believe that with the company's mature project experience and successful acquisition of quality projects, the company's future performance will continue to grow.

Table-8: Financial Forecast

HKD in million	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019E	FY2020E	FY2021E
Revenue	793.97	1,184.54	1,653.55	2,397.53	3,325.89	4,040.20	4,723.44	5,579.79
COS	(451.65)	(745.21)	(1,064.26)	(1,578.87)	(2,228.80)	(2,712.56)	(3,167.24)	(3,713.01)
GP	342.32	439.32	589.29	818.66	1,097.09	1,327.64	1,556.20	1,866.78
Operating Profit	245.60	327.68	466.39	653.96	868.79	1,050.31	1,231.96	1,483.76
EBIT	297.45	381.16	547.35	749.15	1,022.26	1,237.16	1,452.18	1,744.39
EBT	235.64	329.79	462.87	643.58	852.27	1,019.05	1,173.20	1,387.99
NP	208.36	288.90	400.02	564.25	754.36	894.92	1,030.29	1,218.92
NP attributable to shareholders	191.04	272.00	400.02	564.25	754.36	894.93	1,030.30	1,218.93
YoY	45.87%	42.38%	47.06%	41.06%	33.69%	18.63%	15.13%	18.31%
EPS (Basic)	0.127	0.136	0.198	0.240	0.307	0.364	0.420	0.496

Source: Phillip Securities (HK) Research, Company Report

Valuation

Based on our residual income valuation model, assuming the cost of equity is 6.82% and resistance factor is 0.20, we give a TP of HKD 5.08, corresponding to FY19/FY20/FY21 13.94x/12.11x/10.23x PE with a 43.53% potential upside compared with CP of HKD 3.54 as of August 16, 2019, we recommend "BUY" investment rating.

Table-9: Residual Income Valuation Model

HKD	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
EPS	0.36	0.42	0.50	0.55	0.62	0.71	0.82	0.93	1.07	1.22
DPR	14.97%	14.97%	14.97%	14.97%	14.97%	14.97%	14.97%	14.97%	14.97%	14.97%
DPS	0.05	0.06	0.07	0.08	0.09	0.11	0.12	0.14	0.16	0.18
Add R/E PS	0.31	0.36	0.42	0.46	0.53	0.61	0.69	0.79	0.91	1.04
BPSt	2.47	2.82	3.24	3.71	4.24	4.85	5.54	6.34	7.24	8.28
BPS0	2.16	2.47	2.82	3.24	3.71	4.24	4.85	5.54	6.34	7.24
ROE0	16.91%	17.02%	17.59%	16.84%	16.84%	16.84%	16.84%	16.84%	16.84%	16.84%
Re	6.82%	6.82%	6.82%	6.82%	6.82%	6.82%	6.82%	6.82%	6.82%	6.82%
RI	0.22	0.25	0.30	0.33	0.37	0.43	0.49	0.56	0.64	0.73
PV	0.20	0.22	0.25	0.25	0.27	0.29	0.31	0.33	0.35	0.46
Terminal Value	0.17									
BPS0	2.16									
TP	5.08									

Source: Phillip Securities (HK) Research

Risk

1. Fail expectations of project progress
2. Policy risk of electricity price allowance

Financials

Table-10: Financial data

FYE DEC	FY17A	FY18A	FY19E	FY20E	FY21E
Valuation Ratios					
P/E	14.75	11.52	9.71	8.44	7.13
P/B	1.70	1.64	1.44	1.25	1.09
Dividend Yield	0.93%	1.30%	1.54%	1.77%	2.10%
Per Share Data in HKD					
EPS	0.24	0.31	0.36	0.42	0.50
DPS	0.03	0.05	0.05	0.06	0.07
BVPS	2.08	2.16	2.47	2.82	3.24
Growth & Margins (%)					
Growth					
Revenue	44.99%	38.72%	21.48%	16.91%	18.13%
Operating Profit	40.22%	32.85%	20.89%	17.30%	20.44%
Net Profit	41.06%	33.69%	18.63%	15.13%	18.31%
Margins					
Gross Margin	34.15%	32.99%	32.86%	32.95%	33.46%
Operating Profit Margin	27.28%	26.12%	26.00%	26.08%	26.59%
Net Profit Margin	23.53%	22.68%	22.15%	21.81%	21.85%
Key Ratios					
ROA	7.37%	7.48%	7.24%	6.74%	6.54%
ROE	14.82%	14.82%	15.77%	15.87%	16.36%
Income Statement in mn HKD					
Revenue	2,397.53	3,325.89	4,040.20	4,723.44	5,579.79
Gross Profit	818.66	1,097.09	1,327.64	1,556.20	1,866.78
EBIT	749.15	1,022.26	1,237.16	1,452.18	1,744.39
EBT	643.58	852.27	1,019.05	1,173.20	1,387.99
Net Profit	564.25	754.36	894.92	1,030.29	1,218.92
Net Profit for Owners	564.25	754.36	894.93	1,030.30	1,218.93

Source: Company, Phillip Securities (HK) Research
(Financial data as of August 16)

PHILLIP RESEARCH STOCK SELECTION SYSTEMS

Total Return	Recommendation	Rating	Remarks
>+20%	Buy	1	>20% upside from the current price
+5% to +20%	Accumulate	2	+5% to +20%upside from the current price
-5% to +5%	Neutral	3	Trade within ± 5% from the current price
-5% to -20%	Reduce	4	-5% to -20% downside from the current price
<-20%	Sell	5	>20%downside from the current price

We do not base our recommendations entirely on the above quantitative return bands. We consider qualitative factors like (but not limited to) a stock's risk reward profile, market sentiment, recent rate of share price appreciation, presence or absence of stock price catalysts, and speculative undertones surrounding the stock, before making our final recommendation

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