



農銀國際

ABC INTERNATIONAL

ABCI SECURITIES COMPANY LIMITED



China's Environmental Protection Sector

Cleaning Up China : A Billion-Dollar Opportunity

May 22, 2017



China's Environmental Protection Sector Cleaning up China: a billion-dollar opportunity

- Increased urbanization and living standard would spur demand for wastewater and solid waste treatment services
- China targets to expand urban incineration capacity by 19% CAGR during 2015-20E
- An 8% CAGR growth in urban wastewater treatment volume in 2015-20E will create attractive opportunities
- We are positive on China Environmental Protection Sector. Recommend **BUY** for China Everbright Int'l (257 HK) and Beijing Enterprises Water (371 HK)

Increasing urbanization and higher living standard would drive up demand for wastewater and solid waste treatment services. According to estimates by the State Council, total population in China would reach 1.45bn by end-2020, meaning that an additional of 99mn people would move to urban areas over the next few years. As disposal income has been increasing for years, urban residents are likely to demand higher living and hygienic standards, which in turn will offer great opportunities for treatment operators.

China targets to expand urban incineration capacity by 19% CAGR during 2015-20E. Historically, around 70% of residential waste has been disposed of via landfills in China. According to "The Draft of 13th FYP on Urban Residential Waste Treatment" issued by the NDRC on Sep 22, 2016, China targets to raise the proportion of waste incinerated in urban areas from the 34% at end-2015 to 50% by end-2020E. This will make incineration a key solid waste treatment in urban areas. NDRC targets to raise incineration capacity in urban area from 216kt/day by end-2015 to 520kt/day by end-2020, indicating a 141% jump or a 5-year CAGR of 19% in 2015-20. This will benefit incineration operators in urban areas.

An 8% CAGR growth in urban wastewater treatment volume in 2015-20E will create attractive opportunities. With rising urbanization and the government's effort to boost urban wastewater treatment rate, total volume of urban wastewater to be treated would grow strongly in years to come. Assuming an urbanization rate of 60%, a wastewater treatment rate of 95% by end-2020E, and wastewater produced per capita to grow at 4% p.a. during 2015-20E (wastewater produced per capita grew 4% p.a. in 2006-15), total wastewater treatment volume would be 70bn tons, representing a 48% increase from end-2015 (~47bn tons), or a 8% CAGR during 2015-20E. We believe urban wastewater treatment operators would benefit from the rapid development.

OVERWEIGHT sector outlook; maintain BUY for China Everbright Int'l (257 HK) and Beijing Enterprises Water (371 HK). We are positive on wastewater and solid waste treatment sectors as increasing urbanization and rising living standard would spur demand for waste treatment. Our top pick is China Everbright Int'l (257 HK, **BUY**) based on its solid expansion in incineration capacity and existing operating projects in prime regions. We also like Beijing Enterprises Water (371 HK, **BUY**) due to its leading position in wastewater treatment industry. Its increasing capacity in water distribution would also boost earnings growth.

Risks. 1). Air pollution concern may hinder construction of incinerators; 2). High net gearing may compromise balance sheet 3). Balance sheet position may deteriorate on acquisition in poor regions; 4). Rising debts of local governments may slow down the campaign for environmental protection facilities.

Sector Valuation Summary (data as of May 19, 2017)

Company	Ticker	Rating	TP (HK\$)	FY17E P/E(x)	FY18E P/E (x)	FY17E P/B (x)	FY18E P/B (x)	FY17E Yield(%)	FY18E Yield(%)
China Everbright Int'l	257	BUY	13.40	13.2	11.4	2.2	2.0	2.3	2.6
Beijing Enterprises Water	371	BUY	7.60	13.7	11.5	2.4	2.1	2.2	2.6

Source(s): Bloomberg, ABCI Securities estimates

Sector Report May 22, 2017

OVERWEIGHT

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Key Data

Avg.17E P/E (x)	13.4
Avg.17E P/B (x)	2.3
Avg.17E Dividend Yield (%)	2.2

Source(s): Bloomberg, ABCI Securities

Sector Performance

	Absolute	Relative*
1-mth	(1.95%)	(5.25%)
3-mth	4.35%	4.60%
6-mth	5.92%	(4.01%)

*Relative to HSCEI

Source(s): Bloomberg, ABCI Securities

1-Year sector performance (start day as 1)



Source(s): Bloomberg, ABCI Securities



Key positives and future outlook

Increasing urbanization and rising hygienic standard in urban areas are long-term trends in China, spurring demand for urban solid living waste and wastewater treatment services. We expect operators in the wastewater and incineration treatment industries to develop swiftly in the 13th Five-Year-Plan period (13th FYP, 2016-20).

Rising urbanization and living standard spur demand for wastewater and solid waste treatment services

According to National Development and Reform Committee (NDRC) estimate, China's urbanization rate would reach 60% by end-2020, up from 56% at end-2015. The State Council estimates total population would reach at least 1.45bn by end-2020, implying an additional of 99mn people would move to urban areas in years to come. With disposal income has been increasing for years, urban residents are pursuing higher living and hygienic standards. Advanced methods for solid waste and wastewater treatment would be much demanded in major cities. These changes would create attractive opportunities for waste treatment operators in China.

Incineration

China targets to expand urban incineration capacity by 19% CAGR during 2015-20E

Historically, around 70% of residential waste has been disposed of via landfills in China due to its cheap cost and low environmental consciousness. However, the Chinese government has been reducing such use in recent years because of limited land resources and the resultant underground water pollution. According to "The Draft of 13th FYP on Urban Residential Waste Treatment" issued by the NDRC on Sep 22, 2016, China targets to raise the proportion of waste incinerated in urban areas from the 34% at end-2015 to 50% by end-2020E, making incineration a key solid waste treatment in urban areas. NDRC also targets to raise incineration capacity in urban areas from 216kt/day by end-2015 to 520kt/day by end-2020, indicating a 141% jump or 5-year CAGR of 19% during the period. Incineration will be a major waste treatment method, presenting enormous opportunities to operators in urban areas.

Increasing urbanization and promotion of incineration would increase waste incinerated by 16% CAGR during 2015-20E

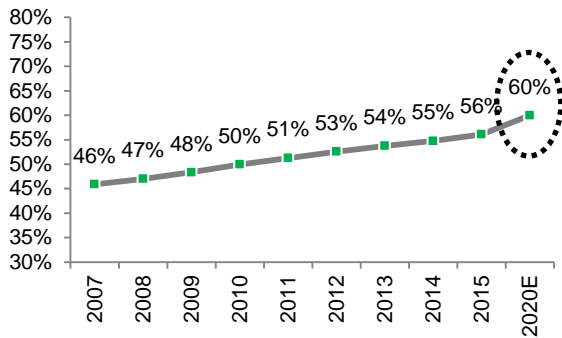
According to the "The Draft of 13th FYP on Urban Residential Waste Treatment", China would raise the proportion of waste incinerated in urban areas from 34% at end-2015 to 50% by end-2020E. If we assume residential waste per capita to increase 3% p.a. during 2015-20, residential waste produced would reach 251mt by end-2020E (2015: 180mt), of which 126mt (2015: 61mt) of solid waste would be treated via incineration, indicating a 106% increase or a 16% CAGR during 2015-20E. Hence, waste treatment operators would benefit for the rising demand.

Ample room for growth

According to CCID data, in 2011, around 23% of China's urban residential solid waste was treated via incineration, compared to the ~51% averaged among the developed countries. As China's disposable income and GDP per capita are approaching to those of the developed countries, incineration would become more widely adopted in China given its higher population density in major cities.

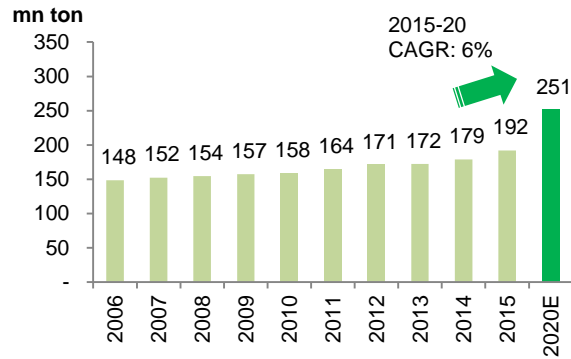


Exhibit 1: China's urbanization rate is likely to reach 60% by end-2020E



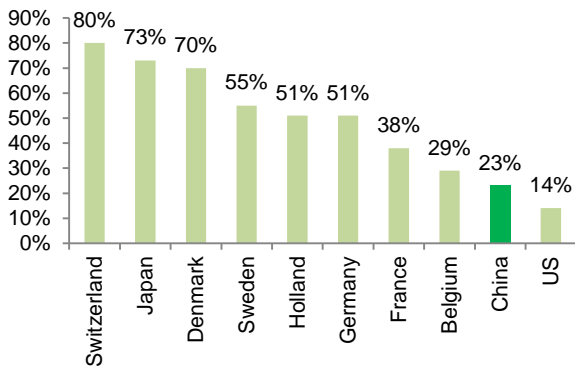
Source(s): NDRC, ABCI Securities estimates

Exhibit 2: Total solid waste produced in urban areas would also grow with increased urbanization



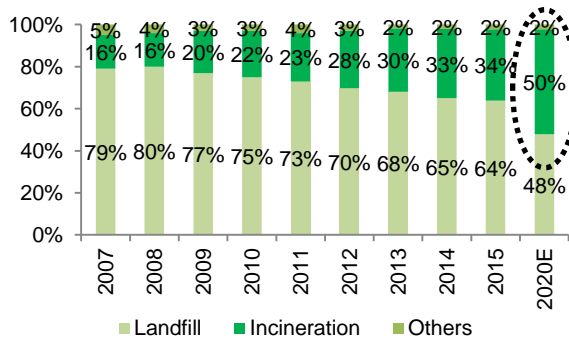
Source(s): NDRC, ABCI Securities estimates

Exhibit 3: Global incineration as a percentage of total solid waste being treated in 2011



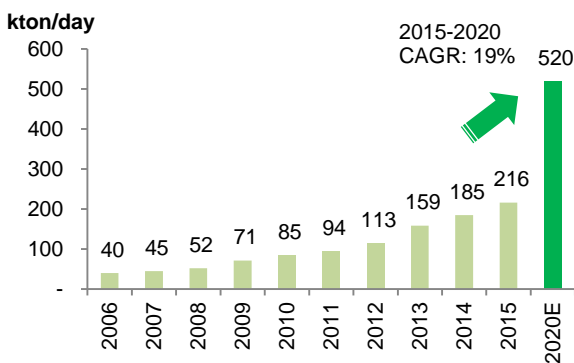
Source(s): CCID, ABCI Securities

Exhibit 4: China targets to increase the proportion of solid waste treated via incineration in urban areas



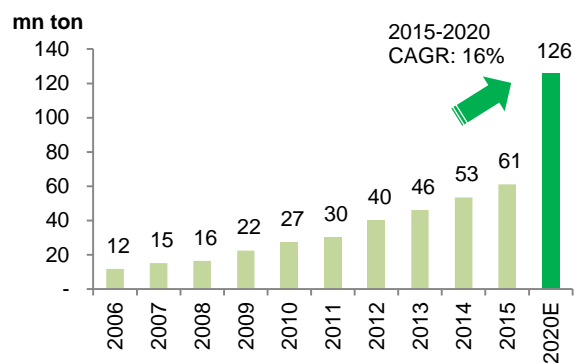
Source(s): NDRC, ABCI Securities estimates

Exhibit 5: China's incineration capacity would grow rapidly in the next few years



Source(s): NDRC, ABCI Securities estimates

Exhibit 6: China's urban solid waste to be treated via incineration would rise



Source(s): NDRC, ABCI Securities estimates



Wastewater

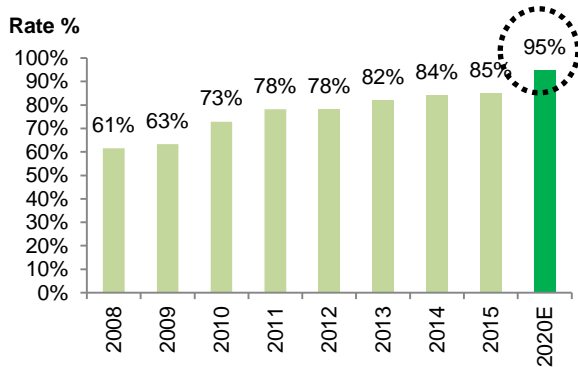
China's urban wastewater treatment rate would reach 95% by end-2020

Besides solid waste, the Chinese government will continue to raise its wastewater treatment rate in urban areas to improve hygienic standard. Urban wastewater treatment rate has been trending up from 61% in 2008 to 85% by end-2015, fulfilling the target set in the "12th FYP on Wastewater Facilities Construction" issued in 2012. In the announcement of "Action Plan for Water Pollution" issued by the State Council on Apr 2, 2015, the end-2020E target for urban wastewater treated is 95%. We believe the current wastewater treatment system would be overloaded and demand for new capacity would increase, providing great opportunities for operators.

An 8% CAGR growth in urban wastewater treatment volume in 2015-20E will create enormous business opportunities

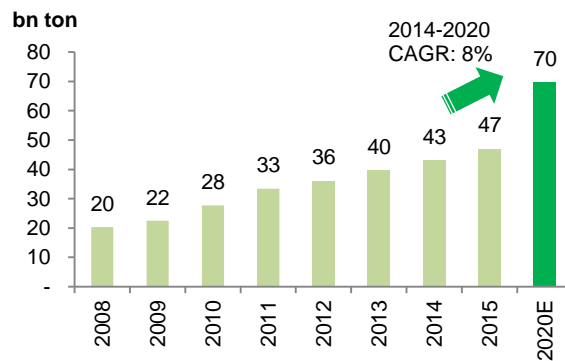
With rising urbanization and the government's effort to raise the urban wastewater treatment rate, total volume of urban wastewater to be treated would grow strongly in years to come. Assuming an urbanization rate of 60% and a wastewater treatment rate of 95% by end-2020E, wastewater produced per capita grow at 4% per year during 2015-2020E (wastewater produced per capita grew 4% p.a. during 2006-2015); total wastewater treatment volume would be 70bn tons, representing a 48% increase on wastewater treatment volume from end-2015 (~47bn tons), or a 8% CAGR during 2015-20E. We believe urban wastewater treatment operators would benefit from the rapid development.

Exhibit 7: China's urban wastewater treatment rate would rise



Source(s): NDRC, ABCI Securities estimates

Exhibit 8: China's urban wastewater treatment volume would expand by 8% CAGR in 2015-20E



Source(s): NDRC, ABCI Securities estimates



Overhangs of environmental protection

Air pollution concern may hinder construction of incinerators

China's worsening air pollution raises public concerns over the use of incinerators, which may release carcinogenic pollutants such as sulfur dioxide, dioxin, furans, etc. Public resistance to incinerator construction can represent a potential challenge for solid waste treatment operators.

High net gearing may compromise balance sheet

Business model of China's wastewater treatment operators relies heavily on operating income to finance acquisitions. As the operators increase M&A activities, operating cash flow is likely to be stretched, driving up the net gearing. Net gearing of most PRC wastewater treatment operators have exceeded 100%. Yet, we believe these operators are likely to continue to increase equity fundraising on rising M&A activities. Hence, their balance sheets and share prices could be negatively affected

Be aware of acquisition in poor regions

Major customers of urban incineration and wastewater treatment operators are urban residents, whose failure of payment will create bad debts for operators. Operating in less-developed inland cities in China may not be profitable for incinerators and wastewater treatment companies. We advise investors to select operators with higher exposure in tier-1/2 cities that have a lower default risk.

Rising debts of local governments

Rising debts of local governments may limit investment in the waste treatment facilities. According to China's National Audit Office, as of June 2013, total government debts were RMB 20.6tn, equivalent to 40% of China's 2012 GDP. For some local governments, debt levels are equivalent to 3 times the annual income. We believe waste treatment investment in heavily indebted regions would reduce. Furthermore, mounting debts of the local governments may increase default risk for waste treatment operators if the former are unable to repay the construction costs upon project completion.



China Everbright Int'l (257 HK) The winner in incineration industry

- Waste-to-energy capacity to expand by 23%/22%YoY in 2017E/2018E
- EPC business revenue would continue to grow strongly by 32%/19%YoY in 2017E/18E
- Net profit growth of 20%/16%YoY in 2017E/18E is the bright spot
- Spin-off of biomass business would reduce net gearing and fund future growth
- Maintain **BUY** with TP of HK\$13.40 implies 18x 2017E P/E and 3.0x 2017E P/B

Company Report

May 22, 2017

Rating: **BUY**

TP: **HK\$ 13.40**

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Share price (HK\$)	9.85
Est. share price return	36.0%
Est. dividend yield	2.3%
Est. total return	38.3%
Previous Rating & TP	BUY
Previous Report Date	Apr 24, 2017

Source(s): Bloomberg, ABCI Securities

Key Data

52Wk H/L(HK\$)	11.1/7.8
Issued shares (mn)	4,483
Market cap (HK\$ mn)	44,020
3-mth avg daily turnover(HK\$ mn)	92
Major shareholder(s) (%)	
China Everbright Hld	41.4%

Source(s): Company, ABCI Securities

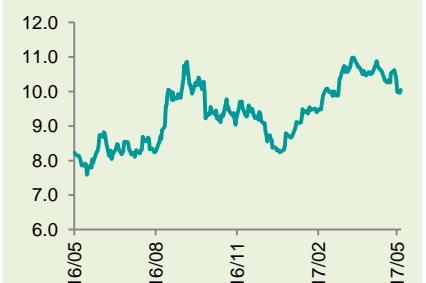
Share price performance (%)

	Absolute	Relative*
1-mth	(6.01)	(8.85)
3-mth	(1.30)	(0.41)
6-mth	2.60	(7.22)

*Relative to HSCEI

Source(s): Bloomberg, ABCI Securities

1-Year sector performance(HK\$)



Source(s): Bloomberg, ABCI Securities

Waste-to-energy capacity to expand by 23%/22% YoY in 2017E/2018E. CEI has 27,150t/day of capacity under the construction or preparation stage, which is equivalent to its existing operating capacity (2016: 28,167t/day). Management guided that total capex for 2017 (for waste-to-energy and wastewater) will not be less than RMB 7.0bn. Capex is likely to remain high given the current unit investment cost for waste-to-energy at ~RMB 0.5mn/t/day. We believe its waste-to-energy capacity is likely to expand robustly by 23%/22% YoY in 2017E/18E.

Net profit growth of 20%/16%YoY in 2017E/18E as the bright spot. Supported by solid waste-to-energy capacity growth and robust EPC revenue growth, CEI's 2017E net profit would expand strongly by 20%YoY. As CEI would continue to boost its environmental business going forward, we estimate its 2018E net profit would increase by 16%YoY.

Spin-off of biomass business would reduce net gearing. CEI has spun off its biomass and renewable energy business, which was listed on HKEx on May 8, 2017 (China Everbright Greentech, 1257 HK). The spin-off would bring in ~HK\$3bn of new capital to CEI. Based on our estimates, CEI's net gearing ratio would fall from 106% to 91% in 2017E, easing the need of equity fundraising.

Maintain BUY with TP of HK\$13.40. The spin-off of biomass business would provide sufficient capital for CEI's expansion. We adjust our balance sheet assumptions to incorporate impacts of the spin-off. Our DCF-derived TP at HK\$13.40 (HK\$13.30 previously) implies 18x 2017E P/E and 3.0x 2017E P/B. Reiterate **BUY**.

Risks. (1) Slower-than-expected capacity growth; (2) Default risk; (3) Policy risks; (4) Surge in maintenance costs; (5) Public resistance to incinerator construction

Results and Valuation

FY ended Dec 31	2015A	2016A	2017E	2018E	2019E
Revenue (HK\$ mn)	8,528	13,971	18,301	21,998	26,093
Chg (% YoY)	34.2	63.8	31.0	20.2	18.6
Net profit (HK\$ mn)	2,085	2,785	3,337	3,878	4,453
Chg (% YoY)	22.4	33.6	19.8	16.2	14.8
EPS (HK\$)	0.47	0.62	0.74	0.86	0.99
Chg (% YoY)	22.4	33.6	19.8	16.2	14.8
BVPS (HK\$)	3.84	3.88	4.40	4.92	5.57
Chg (% YoY)	5.7	1.1	13.4	11.8	13.2
P/E (x)	21.18	15.86	13.24	11.39	9.92
P/B (x)	2.57	2.54	2.24	2.00	1.77
ROE (%)	12.12	16.01	16.92	17.58	17.83
ROA (%)	5.13	5.62	5.70	5.53	5.40
DPS (HK\$)	0.19	0.20	0.22	0.26	0.30
Dividend yield (%)	1.88	2.08	2.27	2.63	3.02
Net gearing (%)	53.2	83.8	91.3	106.6	115.5

Source(s): Bloomberg, ABCI Securities estimates



2017 outlook

EPC business revenue would grow strongly by 32%/19%YoY in 2017E/18E

Supported by the government's increased environmental effort and rising urbanization in China, CEI's EPC business will enjoy a solid growth on rising demand for waste-to-energy and wastewater facilities. Revenue from EPC business surged 83%YoY in 2016. We expect the segment to maintain a robust momentum over the next few years, with revenue expanding by 32%YoY and 19%YoY in 2017E and 2018E.

Waste-to-energy capacity to jump 23%/22% YoY in 2017E/2018E

CEI has 27,150t/day of capacity under construction or preparation stage, which is equivalent to its existing operating capacity (2016: 28,167t/day). Management guided that total capex for 2017 (waste-to-energy and wastewater) will not be less than RMB 7.0bn. Capex is likely to remain high given the current unit investment cost for waste-to-energy at ~RMB0.5mn/t/day. We believe its waste-to-energy capacity is likely to expand robustly by 23%/22% YoY in 2017E/18E.

Wastewater capacity growth may slow to 5%/5%YoY in 2017E/2018E.

CEI has 0.89mn m³/day of capacity under construction or preparation, which is equivalent to ~23% of CEI's existing capacity (2016: 3.9 mn m³/day). Assuming no new acquisitions will take place, CEI's wastewater treatment business capacity would edge up by 5% each year in 2017E /18E.

Bright spot: Net profit growth of 20%/16%YoY in 2017E/2018E.

Supported by solid waste-to-energy capacity growth and robust EPC revenue growth, we estimate CEI's 2017 net profit growth would increase by 20%YoY. With CEI expanding its environmental business, we believe its 2018 net profit growth would be solid at 16%YoY.

Key assets located in wealthier regions suggest lower default risk.

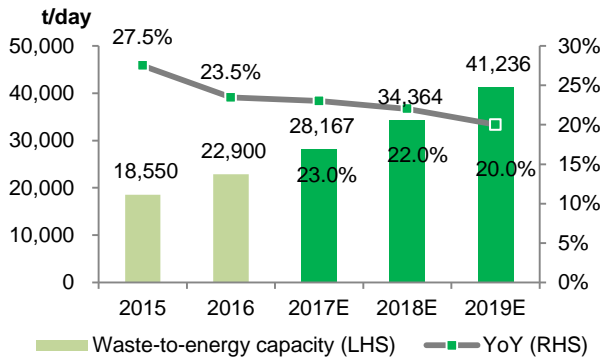
Around 51% of CEI's 2016 waste-to-energy operating capacity is located in tier-1/2 cities. For wastewater capacity, ~46% is located in tier-1/2 or above cities. Since default risk is lower for residents in wealthier cities because of the higher disposable expenditure, CEI's high exposure in wealthier cities would be positive to its cash flow and net profit in the long term.

Spin off of biomass business would reduce net gearing

CEI has spun off its biomass and renewable energy business, which was listed on HKEx on May 8, 2017 (China Everbright Greentech, 1257 HK. CEI sold 28% of shares to public shareholders and now holds a 72% stake). The spin-off would bring in ~HK\$3bn of new capital to CEI. Based on our estimates, CEI's net gearing ratio would fall from 106% to 91% in 2017E, easing the need of equity fundraising.

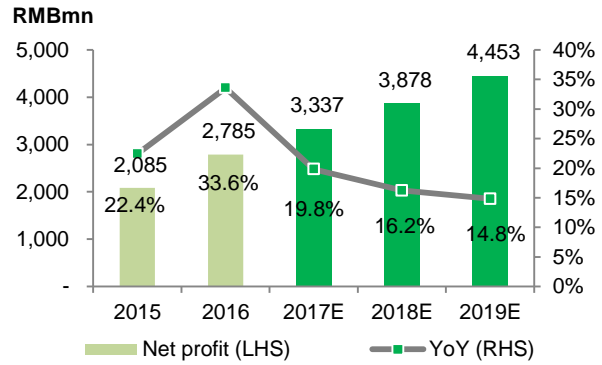


Exhibit 1: CEI's waste-to-energy capacity growth would remain robust in coming years



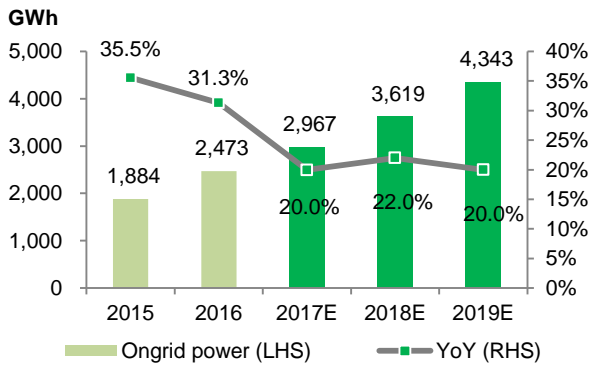
Source(s): Company, ABCI Securities estimates

Exhibit 2: CEI's net profit would undergo mid-teens growth in 2017E/18E



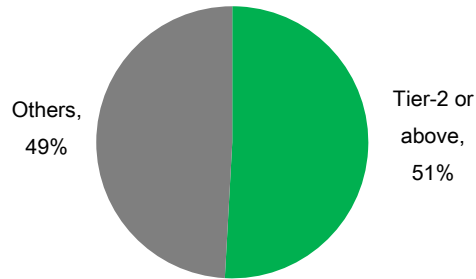
Source(s): Company, ABCI Securities estimates

Exhibit 3: CEI's power output outlook



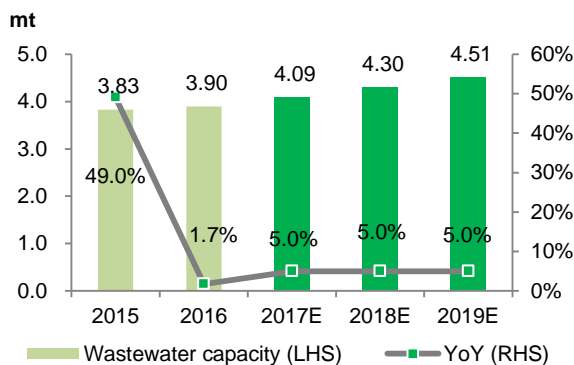
Source(s): Company, ABCI Securities estimates

Exhibit 4: CEI's waste-to-energy capacity located in wealthier regions (2016)



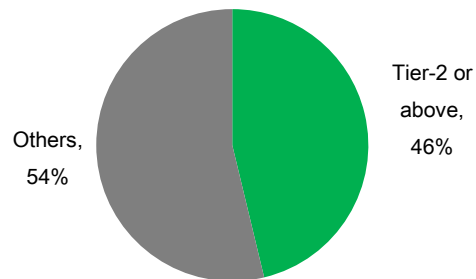
Source(s): Company, ABCI Securities

Exhibit 5: CEI's wastewater capacity would grow moderately over the next few years



Source(s): Company, ABCI Securities estimates

Exhibit 6: CEI's wastewater capacity located in wealthier regions (2016)



Source(s): Company, ABCI Securities



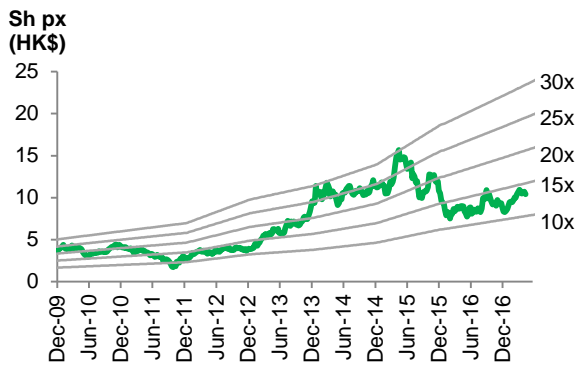
Valuation

TP at HK\$13.40; maintain BUY

In our view, CEI's EPC business would deliver impressive growth. Also, expanding capacity in waste-to-energy and wastewater segments would support bottom line growth. We expect net profit to increase 20%/16%YoY for 2017E/18E

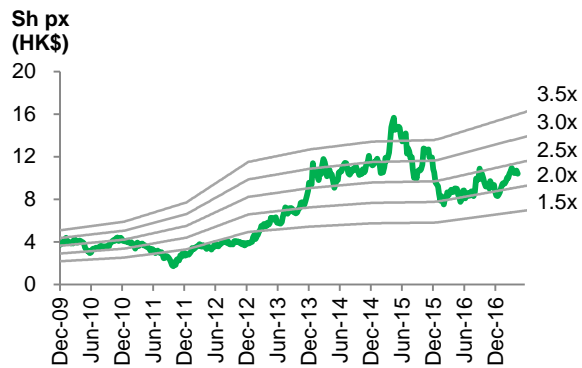
The spin-off of biomass business would provide sufficient capital for CEI to implement its expansion plan. We adjust our balance sheet assumptions to reflect the impacts of the spin-off. Our DCF-derived TP at HK\$13.40 (HK\$13.30 previously) implies 18x 2017E P/E and 3.0x 2017E P/B. Reiterate **BUY**

Exhibit 7: CEI's fwd P/E chart



Source(s): Bloomberg, ABCI Securities estimates

Exhibit 8: CEI's fwd P/B chart



Source(s): Bloomberg, ABCI Securities estimates



Consolidated income statement

FY Ended Dec 31 (HK\$ mn)	2015A	2016A	2017E	2018E	2019E
Revenue	8,528	13,971	18,301	21,998	26,093
Operation income	2,185	2,854	3,387	3,958	4,556
EPC	4,916	8,987	11,891	14,197	16,962
Other	1,428	2,130	3,024	3,842	4,575
Cost of sales	-4,626	-8,662	-11,648	-14,180	-16,945
Gross Profit	3,903	5,310	6,653	7,817	9,148
SG&A expenses	-768	-1,059	-1,373	-1,650	-1,957
Net financial income (cost)	-400	-593	-794	-974	-1,251
Other income/ (expenses)	384	442	512	616	731
Profit before tax	3,119	4,099	4,999	5,810	6,671
Tax	-783	-1,062	-1,250	-1,452	-1,668
Net profit	2,336	3,037	3,749	4,357	5,003
Profit attributable to:					
Minority interest	251	252	412	479	550
Equity shareholders of the Company	2,085	2,785	3,337	3,878	4,453
Basic EPS	0.465	0.621	0.744	0.865	0.993
DPS	0.185	0.205	0.223	0.259	0.298

Source(s): Company, ABCI Securities estimates

Consolidated balance sheet

As of Dec 31 (HK\$ mn)	2015A	2016A	2017E	2018E	2019E
Current assets	11,488	12,307	15,446	18,775	22,322
Cash	5,953	6,341	8,450	10,357	12,332
Pledged and restricted bank deposits	720	697	0	0	0
Trade and bill receivables	3,060	3,337	4,262	5,123	6,076
Other receivables and prepayments	1,547	1,569	2,256	2,712	3,217
Inventories	202	362	479	583	696
Other current assets	5	2	0	0	0
Non-current assets	29,135	37,225	43,056	51,333	60,094
Property, plant & equipment	2,350	3,029	3,732	4,575	5,496
Investment properties	151	152	152	152	152
Intangible assets	4,419	7,250	10,595	14,657	19,133
Investment in JV and associates	448	573	573	573	573
Deferred tax assets	5,697	6,494	7,521	9,040	10,723
Other non-current assets	16,069	19,726	20,483	22,336	24,016
Total Assets	40,623	49,532	58,503	70,108	82,416
Current Liabilities	6,323	9,314	12,995	16,235	19,581
Trade and bill payables	2,794	4,804	6,382	7,770	9,285
Other payables	119	97	0	0	0
Short term borrowings	3,410	4,412	6,613	8,465	10,296
Other current assets	0	0	0	0	0
Non-current liabilities	14,879	20,373	22,914	28,470	33,964
Deferred tax liabilities	2,425	3,076	3,076	3,076	3,076
Long-term borrowings	12,411	17,203	19,838	25,394	30,888
Other non-current assets	43	94	0	0	0
Total Liabilities	21,203	29,687	35,909	44,705	53,545
Minority interests	2,224	2,456	2,868	3,348	3,898
Shareholders' equities	17,196	17,389	19,725	22,056	24,973

Source(s): Company, ABCI Securities estimates



Consolidated cash flow statement

FY ended Dec 31 (HK\$ mn)	2015A	2016A	2017E	2018E	2019E
Profit before tax	3,119	4,099	4,999	5,810	6,671
Change in depreciation and amortization	184	313	513	703	918
Change in Working Capital	-4,839	-4,330	-3,769	-3,096	-2,654
Net financial cost (income)	400	593	-70	-84	-104
Income tax paid	-217	-335	-1,062	-1,250	-1,452
Net interest received	52	46	70	84	104
Others	-236	-166	0	0	0
Operating cash flow	-1,538	221	681	2,167	3,483
Capex	-661	-520	-925	-1,122	-1,263
Increase in intangible assets	-421	-2,637	-3,699	-4,486	-5,053
Others	-1,594	-1,079	0	0	0
Investing cash flow	-2,676	-4,236	-4,624	-5,608	-6,316
Net Capital raise	660	-8	3,000	0	0
Net debt financing	6,793	6,220	4,836	7,407	7,325
Dividend payout	-565	-906	-919	-1,001	-1,163
Interest paid	-458	-646	-865	-1,058	-1,354
Others	-226	53	0	0	0
Financing cash flow	6,204	4,713	6,052	5,348	4,808
Net change in cash	1,989	698	2,109	1,908	1,975
Cash at the beginning	4,094	5,953	6,341	8,450	10,357
Adjustment (Time deposit & FX effect)	-130	-311	0	0	0
Cash at the end	5,953	6,341	8,450	10,357	12,332

Source(s): Company, ABCI Securities estimates

Key ratio

FY ended Dec 31 (HK\$ mn)	2015A	2016A	2017E	2018E	2019E
Sales mixed (%)					
Operation income	25.62	20.43	18.51	17.99	17.46
EPC	57.64	64.33	64.97	64.54	65.01
Other	16.74	15.24	16.52	17.46	17.53
Total	100	100	100	100	100
Profit & loss ratios (%)					
Gross margin	45.76	38.00	36.35	35.54	35.06
Operating profit margin	41.33	33.13	31.65	30.84	30.36
Pre-tax margin	36.57	29.34	27.31	26.41	25.57
Net profit margin	27.39	21.73	20.49	19.81	19.18
Selling & administrative expenses/revenue	9.01	7.58	7.50	7.50	7.50
Effective tax rate	25.11	25.91	25.00	25.00	25.00
Growth (%)					
Revenue	34.20	63.82	30.99	20.20	18.62
Gross profit	31.47	36.05	25.31	17.49	17.03
Operating profit	34.62	31.34	25.15	17.09	16.78
Net profit	32.32	30.02	23.47	16.22	14.82
Balance sheet ratios					
Current ratio (x)	1.82	1.32	1.19	1.16	1.14
Quick ratio (x)	1.54	1.11	0.98	0.95	0.94
Cash ratio (x)	1.06	0.76	0.65	0.64	0.63
Trade and bill receivables days	130.98	87.19	85.00	85.00	85.00
Trade and bill payables turnover days	220.50	202.45	200.00	200.00	200.00
Inventory turnover days	15.96	15.24	15.00	15.00	15.00
Total debt / equity ratio (%)	92.00	124.30	134.10	153.51	164.91
Net debt / equity ratio (%)	53.19	83.83	91.26	106.55	115.53
Returns (%)					
ROAA	5.8	6.2	6.2	6.0	5.8
ROAE	12.5	16.1	18.0	18.6	18.9
Payout ratio	39.79	33.00	30.00	30.00	30.00

Source(s): Company, ABCI Securities estimates



Beijing Enterprises Water (371 HK) Strong capacity growth to boost earnings

- Beijing Enterprises Water (BEW) reported a 28% YoY growth in adjusted net profit in FY16, which is 2% below our estimate
- Benefiting from the Public-Private Partnership (PPP) business model much promoted by the Chinese government, we see BEW's EPC revenue would increase by 44%/30%YoY for 2017E/18E
- BEW's strong pipeline would boost growth in operation capacity. For 2017E/18E, we estimate wastewater capacity would expand by 18%/14%YoY while water distribution capacity would grow by 20%/15%YoY
- Maintain BUY** with TP of HK\$7.60, implying 17x 2017E P/E and 3.1x 2017E P/B

EPC business revenue would continue to grow by 44%/30%YoY in 2017E/18E. We believe BEW would benefit from the PPP business model much promoted by the Chinese government. We estimate EPC revenue would increase by 44%/30%YoY in 2017E/18E.

Wastewater capacity to expand by 18%/14% YoY in 2017E/18E. Given BEW currently has a wastewater capacity of 5.2mt/day under construction, equivalent to 49% of its existing operating capacity. Management said it would add 3mt/day of new capacity (wastewater and water distribution) in 2017. Based on these information, we estimate wastewater capacity would increase by 1.9mt/day in 2017E, representing an 18% YoY growth. Going forward, BEW would continue to expand its wastewater capacity and we expect a 14%YoY growth for 2018E.

Water distribution capacity to expand by 20%/15% YoY in 2017E/18E. For its water distribution operation business, we estimate BEW's capacity would expand by 1.1mt/day in 2017E (+20%YoY). With the rising demand for urban water distribution service driven by urbanization, we expect a 15%YoY capacity growth for 2018E.

TP at HK\$7.60; maintain BUY. We revise our assumptions for the EPC segment on increased optimism and fine-tune our projections for wastewater and water distribution based on the latest data. Our DCF-derived TP at HK\$7.60 (HK\$7.00 previously) implies 17x 2017E P/E and 3.1x 2017E P/B. With a promising 3-year EPS CAGR in 2016-19E at 24%, our TP that implies a PEG of 0.7 is realistically achievable in our view. **Maintain BUY.**

Risks. (1) Slower-than-expected capacity growth; (2) Default risk; (3) Policy risk; (4) High net gearing ratio; (5) Negative cash flow.

Results and Valuation

FY ended Dec 31	2015A	2016A	2017E	2018E	2019E
Revenue (HK\$ mn)	13,503	17,355	23,963	30,173	35,932
Chg (% YoY)	51.3	28.5	38.1	25.9	19.1
Adj. net profit (HK\$ mn)	2,202	2,817	3,823	4,588	5,367
Chg (% YoY)	22.7	27.9	35.7	20.0	17.0
EPS (HK\$)	0.253	0.323	0.438	0.525	0.614
Chg (% YoY)	21.7	28.0	35.3	20.0	17.0
BVPS (HK\$)	1.857	1.894	2.467	2.834	3.264
Chg (% YoY)	1.7	2.0	30.2	14.9	15.2
P/E (x)	23.79	18.59	13.74	11.45	9.78
P/B (x)	3.24	3.17	2.44	2.12	1.84
ROE (%)	15.17	19.56	17.74	18.53	18.82
ROA (%)	3.81	3.98	3.87	3.89	3.91
DPS (HK\$)	0.095	0.119	0.131	0.158	0.184
Dividend yield (%)	1.58	1.98	2.18	2.62	3.07
Net gearing (%)	131.0	133.8	159.8	180.6	190.4

Source(s): Bloomberg, ABCI Securities estimates

Company Report

May 22, 2017

Rating: **BUY**
TP: **HK\$ 7.60**

Analyst : **Kelvin Ng**

Tel: **(852) 2147 8869**

Email: **kelvinn@abci.com.hk**

Share price (HK\$)	6.01
Est. share price return	26.5%
Est. dividend yield	2.2%
Est. total return	28.6%
Previous Rating & TP	BUY
Previous Report Date	Feb 27, 2017

Source(s): Bloomberg, ABCI Securities

Key Data

52Wk H/L(HK\$)	6.4/4.2
Issued shares (mn)	8,738
Market cap (HK\$ mn)	53,387
3-mth avg daily turnover(HK\$ mn)	105
Major shareholder(s) (%):	
Beijing Enterprises Hld	43.9%

Source(s): Company, ABCI Securities

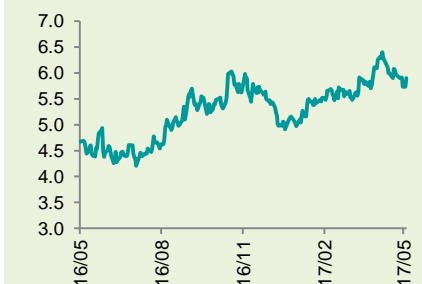
Share price performance

	Absolute	Relative*
1-mth	2.18	(1.13)
3-mth	10.71	10.96
6-mth	8.73	(1.19)

*Relative to HSCEI

Source(s): Bloomberg, ABCI Securities

1-Year sector performance(HK\$)



Source(s): Bloomberg, ABCI Securities



2016 results highlight

FY16 earnings missed consensus

Beijing Enterprises Water (BEW) has announced its FY16 results on Mar 30, 2017. Net profit was HK\$3.2bn (+31%YoY). Excluding fair value change of derivative instruments, net profit was HK\$2.8bn (+28%YoY), 8%/2% lower than Bloomberg consensus/our estimates. Installed wastewater capacity grew 19%YoY; wastewater treatment volume also increased 19%YoY; installed water distribution capacity soared 44%YoY and supply volume jumped 60%YoY.

19%YoY growth in wastewater capacity in 2016

BEW's wastewater capacity was 10.7mt/day in 2016, representing a 19%YoY increase over the 9mt/day at end-2015. Hence, wastewater treatment volume was up 19% YoY in 2016.

Water distribution capacity jumped 44%YoY, boosting volume of water supply

BEW recorded a water distribution capacity of 5.7mt/day in 2016, 44%YoY higher than 4mt/day capacity by end-2015. Such strong capacity growth contributed to the higher water supply volume that rose 60%YoY in 2016.

13%/3%YoY decline in wastewater/water supply tariffs drag earnings.

BEW's average wastewater and water supply tariffs were HK\$ 1.16/t (ex. VAT) and HK\$ 1.3/t (ex. VAT), 13%YoY and 3%YoY lower than those of 2015. The decline was mainly due to increased exposure in lower-tier cities that usually have lower tariffs, dragging down the overall earnings.

Net gearing ratio high at 134% prompts fundraising concern.

Net gearing ratio improved from 163% in 1H16 to 134% in 2016. The high gearing level will continue prompt fundraising concerns. More M&A can be expected since BEW would seek to expand its wastewater and water distribution BOT businesses. Hence, future net gearing ratio is likely to stay at ~100%.



Results summary		2015	2016	YoY
Income Statement				
Revenue	HK\$m	13,503	17,355	29%
Operation income	HK\$m	8,331	11,309	36%
EPC	HK\$m	4,396	5,025	14%
Others	HK\$m	776	1,021	32%
Op. profit	HK\$m	3,948	5,058	28%
Net profit	HK\$m	2,455	3,227	31%
Adj. Net profit	HK\$m	2,202	2,817	28%
Basic EPS	HK\$	0.28	0.37	31%
Adj. EPS	HK\$	0.25	0.32	28%
Ratios				
Op. margin	%	29.2%	29.1%	-0.1ppt
Net margin	%	16.3%	16.2%	-0.1ppt
ROE	%	13.6%	17.1%	3.5ppt
ROA	%	3.4%	3.5%	0.1ppt
Net gearing/(Net cash)	%	131%	134%	2.8ppt
Wastewater				
Installed capacity	mt/day	9.0	10.7	19%
Treatment volume	mt	2,640	3,150	19%
Tariff	HK\$/t, ex VAT	1.33	1.16	-13%
Water distribution				
Installed capacity	mt/day	4.0	5.7	44%
Supply volume	mt	659.0	1,054.1	60%
Tariff	HK\$/t, ex VAT	1.34	1.30	-3%

Source(s): Company data



2017 outlook

EPC business revenue would continue to increase by 44%/30%YoY in 2017E/18E

China's increased effort in improving urban wastewater treatment would support BEW. The promotion of Public-Private Partnership (PPP) business model signals that the government will fully utilize private capital to finance the construction of environmental protection facilities, and the increase in in PPP projects will benefit BEW. During the FY16 results briefing, management guided that the EPC revenue would increase by 45%YoY for 2017. With more private capital entering the environmental protection business, BEW's EPC business would record strong growth with the segment's revenue increasing by 44%/30%YoY in 2017E/18E.

Wastewater capacity to expand by 18%/14% YoY in 2017E/18E

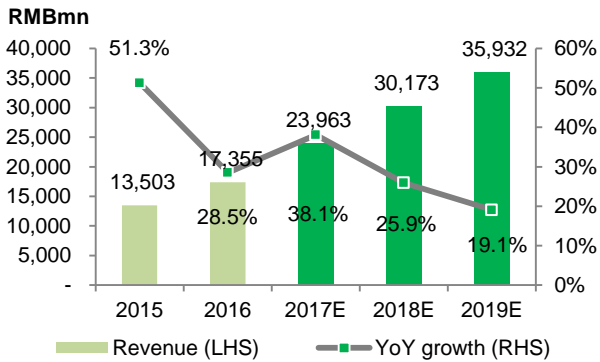
We expect BEW's wastewater capacity to record a double-digit growth in coming years. With 5.2mt/day of wastewater capacity under construction (equivalent to 49% of its existing operating capacity) and 3mt/day of new capacity (wastewater and water distribution) to be added in 2017, as guided by the management, we estimate wastewater capacity would expand by 1.9mt/day in 2017E, representing an 18% YoY capacity growth. Going forward, BEW would continue to expand its wastewater capacity and we expect a 14%YoY growth for 2018E.

Water distribution capacity to expand by 20%/15% YoY in 2017E/2018E

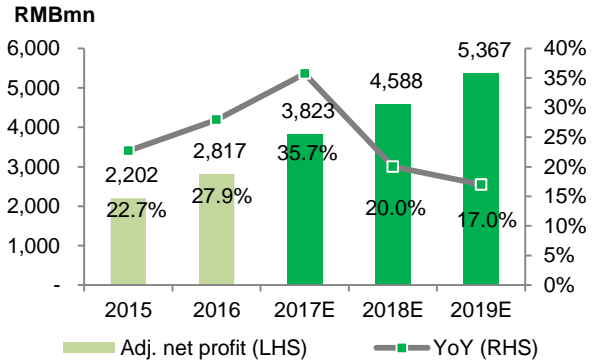
For the water distribution operation business, the Group currently has a capacity of 5.5mt/day under construction, equivalent to 95% of its existing operating capacity. We estimate the Group's capacity would increase by 1.1mt/day in 2017E (+20% YoY). With the rising demand for urban water distribution service driven by urbanization, we expect a 15%YoY capacity growth for 2018E.

Net gearing ratio would trend up

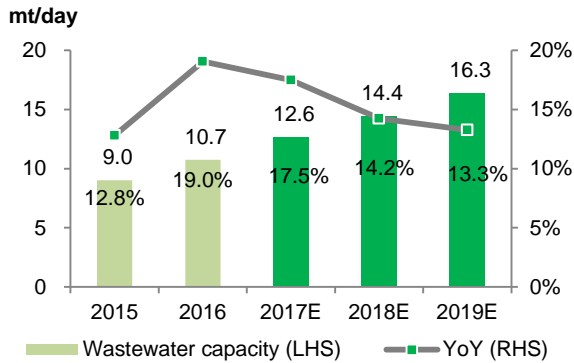
Supported by China's increased tackling of environmental issues, BEW would continue to expand its wastewater, water distribution and EPC businesses in the coming decade. With the aggressive expansion plans, we estimate net gearing ratio would be ~160% in 2017E and continue to trend up over the next few years. Fundraising activities may occur in the near term.

Exhibit 1: BEW would show strong revenue growth on more EPC projects and increasing scale of operation


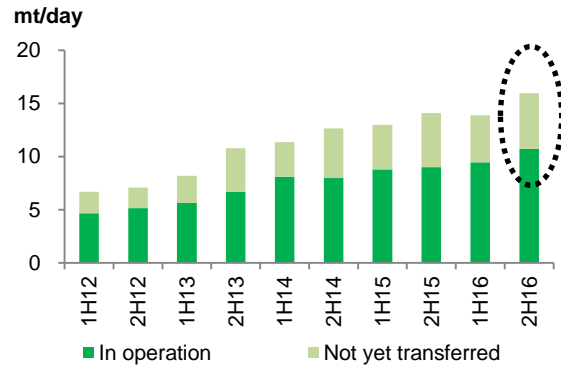
Source(s): Company, ABCI Securities estimates

Exhibit 2: BEW's net profit would show impressive growth in 2017E and 2018E


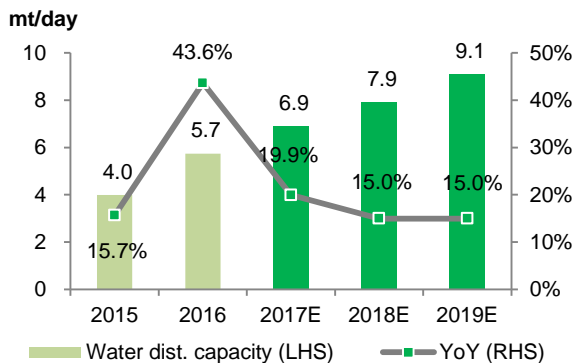
Source(s): Company, ABCI Securities estimates

Exhibit 3: BEW's wastewater treatment capacity would expand at mid-teens levels in coming years


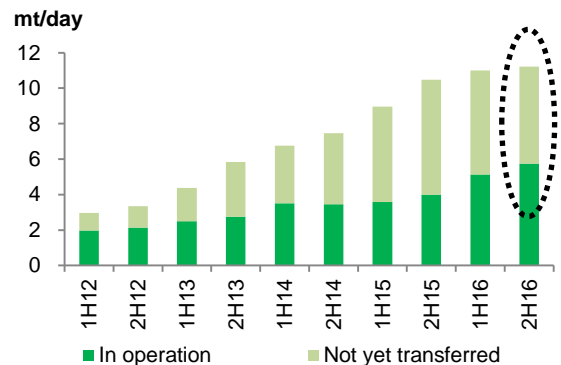
Source(s): Company, ABCI Securities estimates

Exhibit 4: BEW has numerous wastewater treatment projects in the pipeline


Source(s): Company, ABCI Securities

Exhibit 5: BEW's water distribution capacity would continue to grow strongly


Source(s): Company, ABCI Securities estimates

Exhibit 6: Numerous water distribution projects on hand suggests robust capacity growth ahead


Source(s): Company, ABCI Securities



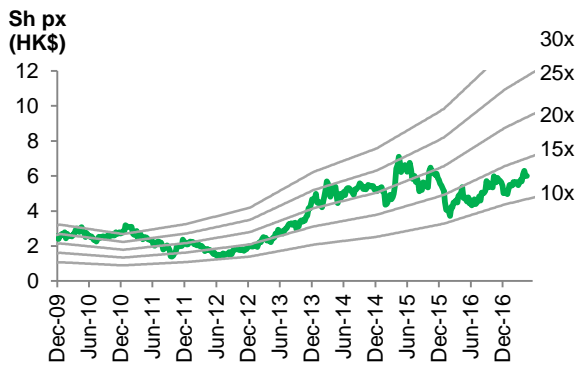
Valuation

TP at HK\$7.60; maintain BUY

BEW's 2016 results fell slightly below our forecasts. With the Group's aggressive expansion plan and numerous projects in the pipeline, we estimate its wastewater/water distribution capacities would expand by 18%/20%YoY for 2017E. Supported by the government's promotion of the PPP business model nationwide, we estimate EPC revenue is likely to jump 44%YoY in 2017E. Adjusted net profit for 2017E/18E would increase by 36%/20%YoY for 2017E/18E.

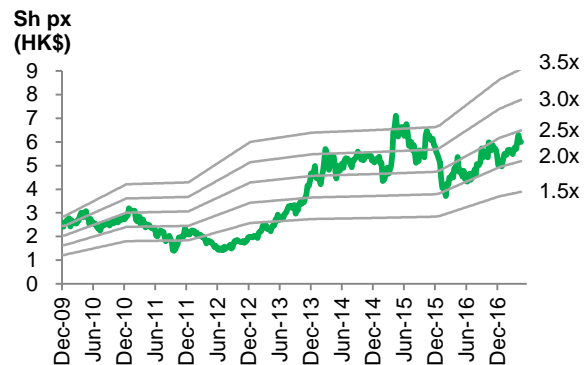
We revise our assumptions for the EPC segment on increased optimism and fine-tune our projections for wastewater and water distribution segments based on the latest data. Our DCF-derived TP at HK\$7.60 (HK\$7.00 previously) implies 17x 2017E P/E and 3.1x 2017E P/B. With a promising 3-year EPS CAGR in 2016-19E at 24%, our TP that implies a PEG of 0.7 is attractive. Maintain BUY.

Exhibit 7: BEW's fwd P/E chart



Source(s): Bloomberg, ABCI Securities estimates

Exhibit 8: BEW's fwd P/B chart



Source(s): Bloomberg, ABCI Securities estimates



Consolidated income statement

FY Ended Dec 31 (HK\$ mn)	2015A	2016A	2017E	2018E	2019E
Revenue	13,503	17,355	23,963	30,173	35,932
EPC	8,331	11,309	16,293	21,181	25,418
Operation income	4,396	5,025	5,833	6,787	7,868
Other	776	1,021	1,838	2,205	2,646
Cost of sales	-8,536	-11,570	-16,278	-20,754	-24,772
Gross Profit	4,967	5,785	7,685	9,419	11,160
SG&A expenses	-1,226	-1,538	-2,157	-2,716	-3,234
Net financial income (cost)	-831	-1,198	-1,265	-1,657	-2,053
Other income/ (expenses)	635	1,595	1,174	1,478	1,761
Profit before tax	3,546	4,644	5,437	6,525	7,633
Tax	-778	-971	-1,142	-1,370	-1,603
Net profit	2,768	3,673	4,296	5,155	6,030
Profit attributable to:					
Minority interest	-312	-389	-473	-567	-663
Equity shareholders of the Company	2,455	3,227	3,823	4,588	5,367
Adj. Equity shareholders of the Company	2,202	2,817	3,823	4,588	5,367
Basic EPS (HK\$)	0.282	0.370	0.438	0.525	0.614
Adj. EPS (HK\$)	0.253	0.323	0.438	0.525	0.614
DPS (HK\$)	0.095	0.119	0.131	0.158	0.184

Source(s): Company, ABCI Securities estimates

Consolidated balance sheet

As of Dec 31 (HK\$ mn)	2015A	2016A	2017E	2018E	2019E
Current assets	18,153	21,975	22,471	25,295	28,481
Cash	6,374	10,921	7,438	6,567	6,329
Pledged and restricted bank deposits	269	135	0	0	0
Trade and bill receivables	2,959	3,024	4,596	5,787	6,891
Other receivables and prepayments	6,746	6,348	9,191	11,573	13,782
Inventories	99	91	446	569	679
Other current assets	1,705	1,456	800	800	800
Non-current assets	46,339	59,072	76,275	92,724	108,739
Property, plant & equipment	1,380	2,831	4,100	5,200	6,504
Investment properties	0	0	0	0	0
Intangible assets	3,005	3,374	4,007	4,599	5,304
Investment in JV and associates	4,466	5,685	6,274	6,919	7,690
Other receivables and deposits	23,253	26,032	34,174	42,680	50,568
Other non-current assets	14,235	21,150	27,719	33,326	38,672
Total Assets	64,492	81,047	98,746	118,019	137,220
Current Liabilities	17,773	20,615	27,516	35,376	43,619
Trade and bill payables	5,786	9,843	11,150	14,215	16,967
Other payables	5,309	5,907	7,340	9,179	10,830
Short term borrowings	6,615	4,812	9,026	11,982	15,822
Other current assets	63	52	0	0	0
Non-current liabilities	26,428	33,665	38,938	46,572	53,110
Deferred tax liabilities	1,321	1,691	1,500	1,500	1,500
Long-term borrowings	21,226	28,326	32,851	39,321	44,812
Other non-current assets	3,881	3,648	4,587	5,752	6,797
Total Liabilities	44,201	54,280	66,454	81,949	96,729
Minority interests	4,107	3,961	4,434	5,001	5,664
Perpetual capital instruments	0	6,305	6,305	6,305	6,305
Shareholders' equities	16,184	16,501	21,553	24,765	28,522

Source(s): Company, ABCI Securities estimates



FY ended Dec 31 (HK\$ mn)	2015A	2016A	2017E	2018E	2019E
Profit before tax	3,546	4,644	5,437	6,525	7,633
Change in depreciation and amortization	207	302	443	541	658
Change in Working Capital	-6,859	-7,879	-11,987	-11,236	-10,595
Net financial cost (income)	893	1,309	1,265	1,657	2,053
Income tax paid	-253	-329	-971	-1,142	-1,370
Net interest received	0	0	0	0	0
Others	-160	-546	-407	-513	-611
Operating cash flow	-2,627	-2,500	-6,219	-4,168	-2,232
Capex	-2,475	-588	-1,812	-1,695	-2,042
Increase in intangible assets	-195	-649	-604	-565	-681
Others	-1,085	-792	-645	-608	-726
Investing cash flow	-3,755	-2,029	-3,062	-2,868	-3,450
Net Capital raise	0	6,463	0	0	0
Net debt financing	9,062	5,595	8,739	9,425	9,331
Dividend payout	-18	-102	-1,147	-1,376	-1,610
Interest paid	-1,189	-1,483	-1,401	-1,491	-1,884
Others	-791	-1,004	0	0	0
Financing cash flow	7,065	9,469	6,191	6,558	5,837
Net change in cash	683	4,940	-3,090	-478	155
Cash at the beginning	6,091	6,374	10,921	7,438	6,567
Adjustment (Time deposit & FX effect)	-400	-392	-393	-393	-393
Cash at the end	6,374	10,921	7,438	6,567	6,329

Source(s): Company, ABCI Securities estimates

Key ratio

FY ended Dec 31 (HK\$ mn)	2015A	2016A	2017E	2018E	2019E
Sales mixed (%)					
EPC	61.70	65.16	67.99	70.20	70.74
Operation income	32.56	28.96	24.34	22.49	21.90
Other	5.75	5.88	7.67	7.31	7.36
Total	100	100	100	100	100
Profit & loss ratios (%)					
Gross margin	36.78	33.33	32.07	31.22	31.06
Operating profit margin	29.24	29.14	26.27	25.42	25.26
Pre-tax margin	26.26	26.76	22.69	21.63	21.24
Net profit margin	20.50	21.16	17.93	17.08	16.78
Selling & administrative expenses/revenue	9.08	8.86	9.00	9.00	9.00
Effective tax rate	21.94	20.90	21.00	21.00	21.00
Growth (%)					
Revenue	51.28	28.53	38.08	25.91	19.08
Gross profit	42.08	16.47	32.85	22.57	18.48
Operating profit	30.39	28.11	24.47	21.83	18.34
Net profit	33.50	32.70	16.95	20.01	16.98
Balance sheet ratios					
Current ratio (x)	1.02	1.07	0.82	0.72	0.65
Quick ratio (x)	0.54	0.68	0.44	0.35	0.30
Cash ratio (x)	0.37	0.54	0.27	0.19	0.15
Trade and bill receivables days	79.99	63.60	70.00	70.00	70.00
Trade and bill payables turnover days	247.42	310.51	250.00	250.00	250.00
Inventory turnover days	4.24	2.87	10.00	10.00	10.00
Total debt / equity ratio (%)	172.03	200.82	194.30	207.16	212.59
Net debt / equity ratio (%)	130.98	133.82	159.79	180.64	190.40
Returns (%)					
ROAA	4.2	4.4	4.3	4.2	4.2
ROAE	15.4	19.7	20.1	19.8	20.1
Payout ratio	33.70	32.18	30.00	30.00	30.00

Source(s): Company, ABCI Securities estimates



Disclosures

Analyst Certification

I, Ng King Chuen Kelvin, being the person primarily responsible for the content of this research report, in whole or in part, hereby certify that all of the views expressed in this report accurately reflect my personal view about the subject company or companies and its or their securities. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this report. I and/or my associates have no financial interests in relation to the listed company (ies) covered in this report, and I and/or my associates do not serve as officer(s) of the listed company (ies) covered in this report.

Disclosures of Interests

ABCI Securities Company Limited and/or its affiliates may pursue financial interests to the companies mentioned in the report.

Definition of equity rating

Rating	Definition
Buy	Stock return \geq Market return rate
Hold	Market return $- 6\% \leq$ Stock return $<$ Market return rate
Sell	Stock return $<$ Market return $- 6\%$

Stock return is defined as the expected % change of share price plus gross dividend yield over the next 12 months

Market return: 5-year average market return rate

Time horizon of share price target: 12-month

Definition of share price risk

Rating	Definition
Very high	$2.6 \leq$ 180 day volatility/180 day benchmark index volatility
High	$1.5 \leq$ 180 day volatility/180 day benchmark index volatility $<$ 2.6
Medium	$1.0 \leq$ 180 day volatility/180 day benchmark index volatility $<$ 1.5
Low	180 day volatility/180 day benchmark index volatility $<$ 1.0

We measure share price risk by its volatility relative to volatility of benchmark index. Benchmark index: Hang Seng Index.

Volatility is calculated from the standard deviation of day to day logarithmic historic price change. The 180-day price volatility equals the annualized standard deviation of the relative price change for the 180 most recent trading days closing price.

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