NOMURA

China water and environment

EQUITY: WATER & ENVIRONMENT

Only half-way through

Enforcement and new business may exceed expectations

Action: Continue to favour WWT plays; shift focus from quantity to *quality*

In addition to our capacity estimate of a steady c.17% CAGR during 2013-15F pursuant to the 12th FYP, in line with consensus, we see further upside for the wastewater treatment (WWT) sector. This should be aided by: 1) a decided shift in central government policy and tougher enforcement by the central government on the local governments post the National People's Congress (NPC); and 2) profitability enhancements through current project renovations and new businesses arising from existing WWT projects. We forecast an average tariff hike of as much as 60% by 2017F and a dollar margin improvement of c.CNY0.20-0.25/m3. In all, they may provide further upside to our current EPS CAGR estimate of c. 30% in 2013-15F for our two Buy-rated stocks, BEW and CEI.

Catalysts: More favourable policies with detailed action plans and enforcement mechanisms from government

We see four key catalysts: 1) A social and political consensus forcing the government to improve the environment with more action plans forthcoming post the NPC; 2) the Action Plan for Water Pollution Control, once implemented, should trigger an investment wave in WWT projects that is c.50% higher than the annual investment during 12th FYP; 3) local governments' enforcement will be key for the implementation of any long-term plan; and 4) we also expect the 2nd plenary session of the 12th NPC scheduled in March to clarify certain enforcement mechanisms.

Top picks: BEW (Buy) and CEI (Buy); Reduce on GDI

Beijing Enterprises Water (BEW) is our top pick within the water and environmental sector, given its: 1) largest WWT capacity in China; 2) strong capability to grow via M&As; and 3) strong earnings profile with a 2013-15F EPS CAGR of 35%. China Everbright (CEI), in addition to upside potential from its WWT business, should start to benefit from its WTE projects' commissioning in the next two years with a 2013-15F EPS CAGR of 32%, with potential upside from the external sales of environmental equipment and services. However, CEI's potential acquisition of HanKore (BIOT SP, Not rated) with terms as yet to be finalised, adds uncertainty to its earnings profile. We estimate that Guangdong Investment's (GDI) recurring earnings will see flattish growth in FY14-16F given that in the short term its water business is unlikely to achieve significant revenue growth and M&A opportunities appear limited. Its valuation seems to have peaked and the stock may underperform its peers.

Fig. 1: China water and environment: Coverage and rating summaries

Company	Ticker	Rating	TP (HKD)	Close (HKD)	Upside/(Downside)
BEW	371 HK	Buy	6.50	5.55	17.1%
CEI	257 HK	Buy	13.10	11.40	14.9%
GDI	270 HK	Reduce	7.00	7.99	-12.4%

Source: Bloomberg, Nomura research. Note: Share prices are as of 3 March 2014.

Global Markets Research

5 March 2014

Anchor themes

In addition to rapid structural industry growth pursuant to the 12th FYP, we see government support persisting beyond 2015F. We expect business expansion along the value chain, eg, sludge treatment, to offer additional growth for WWT plays.

Nomura vs consensus

We are more positive given further upside potential through value chain expansion. The WWT tariff hike should be as high as 60% by 2017F vs. 2013, in our view.

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Executive summary

We are inspired by:

- *To build a "Beautiful China" is an essential part of our "Chinese Dream" – President Xi Jinping, 2011;*

…while being aware of the realities:

- *"Drought and water shortages are severe restrictions on the country's social and economic development" – Premier Li Keqiang 2012;*
- *"Two-thirds of the cities in China are facing the issue of 'garbage surrounding cities', with half of them currently finding it extremely hard to locate additional landfill sites" – Ministry of Housing and Urban-Rural Development, 2013*

We are positive on the China water and environmental sector in the next couple of years, given:

– Strong structural industry top-line growth;

– A marked shift in government policy priority;

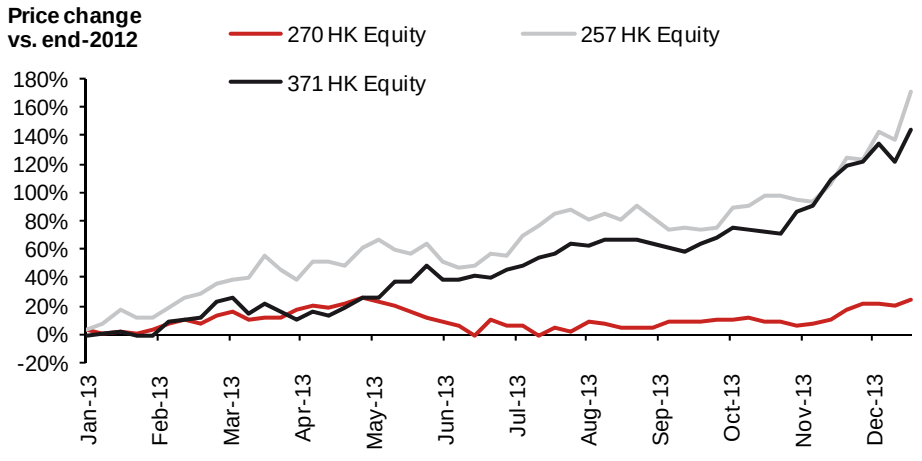
– New business expansion along the value chain; and

– Attractive valuation with PEG at c.0.8 for our favoured stocks.

Only half-way through

Rapid structural growth pursuant to the 12th FYP is well known…
Due to the lagging development progress in the first-half of the 12th Five Year Period, we, as well as the market, believe that the WWT and WTE industries will speed up to meet their targets (for details, please check our in-depth analysis of the future structural growth of the industry from page 10). Thus, the sector's stock prices rallied in 2013, with CEI and BEW surging 171% and 145%, respectively. Currently, BEW and CEI, our preferred stocks, trade at FY14F P/E of 28x and 26x (EPS: HKD0.20/HKD0.44), respectively, which is relatively high vs the historical average (see Appendix I for P/E bands).

Fig. 2: China water: Share price performance of our covered stocks in 2013



Source: Bloomberg, Nomura research

…then why should investors continue to accumulate?
Our answer is: although current share prices may have factored in the capacity growth story in tune with the 12th FYP, we believe the central government's support will be reinforced beyond 2015F, given environmental pollution has become both a social and political issue to be addressed in priority. Furthermore, we also believe that the time is

ripe to shift focus to *quality* than pure *quantity*, which means WWT players will have profitability enhancement in addition to their rapid capacity growth. Thus, in our opinion, prices have not yet reached their peak, and we are only half-way through. Further, leading players, eg, BEW and CEI are likely to have relatively higher capacity growth through M&As than small-scale peers given the market's ongoing consolidation.

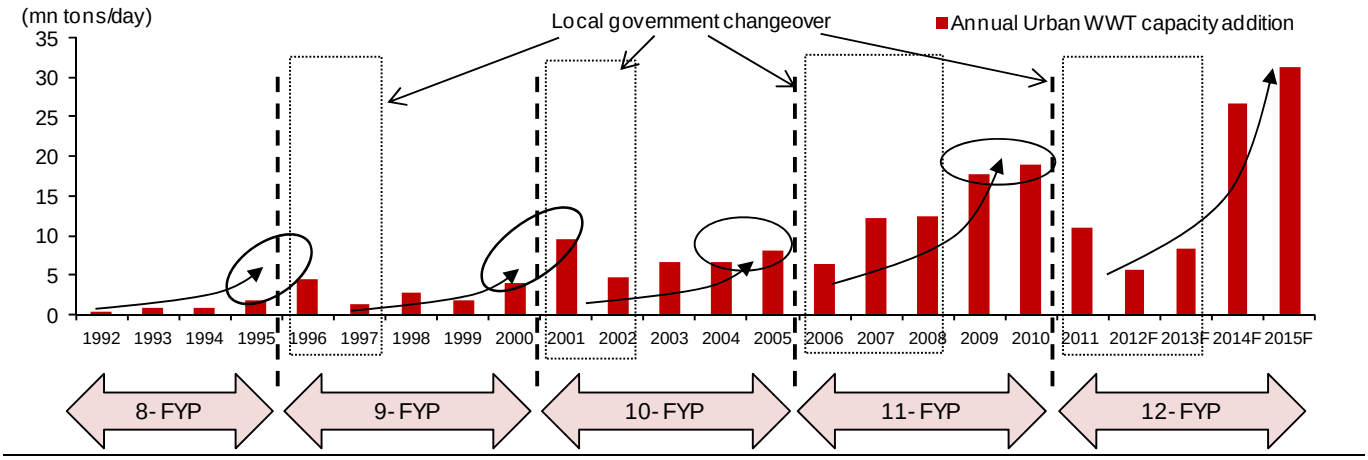
Where are the future upsides from now?

Government support will persist and even be strengthened beyond 2015F

12th FYP set the industry growth at c.17% for the next two years…

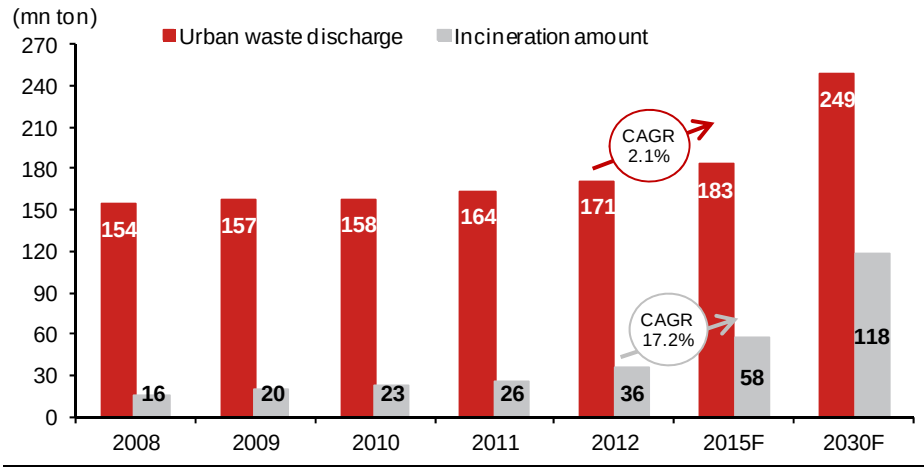
In our previous anchor report (China water and environment: Unclogging the pipe; dated 22 January 2013), we noted that the progress of WWT/WTE capacity construction in the past three years severely lagged the target set by the 12th FYP. Thus, we believe investment, and in turn, development of the water and environment sector, will be largely promoted by the central government in the final two years of the 12th Five-Year Period. We estimate WWT's and WTE's capacity CAGR in 2013-15F at c.17%.

Fig. 3: China water: WWT capacity to rapidly increase in the last two years of the 12th Five Year Period



Source: State Council, Ministry of Environmental Protection, Nomura estimates

Fig. 4: China WTE: Waste incineration amount to increase steadily in 2014-15F



Source: NDRC, National Bureau of Statistics, Nomura estimates

…while we expect more growth given the likely CNY2tn of investments in the next 5 years

However, we believe 12th FYP is just a start, with more investments and efforts to come, as water pollution control is not a short-term project but a long-term strategy. MEP has already completed the draft version of The Action Plan for Water Pollution Control and has submitted a final review and approval to the State Council, as stated by the deputy

minister of MEP, Mr Zhai Qing, on 11 February 2014. He believes the plan will be published by 1H14, with more than CNY2tn to be invested in the water pollution control industry during the next five years vs. a total of ~CNY550bn planned in the 12th FYP.

Fig. 5: China water: Summary of the Action Plan for Water Pollution control (draft)

Policy	Publish date	Key target
The Action Plan of Water Pollution Control	1H14	- To largely reduce the discharge of industrial water pollutants - To continuously manage the residential wastewater discharge - To better control the pollution discharged into the rivers in rural areas

Source: MEP, Nomura research

The action plan is very likely to be approved and published soon, given such a policy with significant amount of investment will be necessary not only to control environmental pollution, but also for the macroeconomic growth of China. Together with a similar policy – The Action Plan for Air Pollution Control with total planned investment of CNY1.7tn during 2013-17F – published in 2013, the total environmental investment announced by the central government in the next five years will reach c.CNY3.7tn. Recalling the famous CNY4tn of stimulation plan announced in 2008, we believe the investment in air and water pollution control will help China maintain its GDP growth in a healthier and more sustainable way.

To avoid the over-reliance on drafted policies, our current assumptions of the industry investment and, in turn, our covered companies' capacity growth are based on the 12th FYP and a steady development trend beyond, while the official publication of the Action Plan will boost the investment and, in turn, the growth by c.50-100%, in our view.

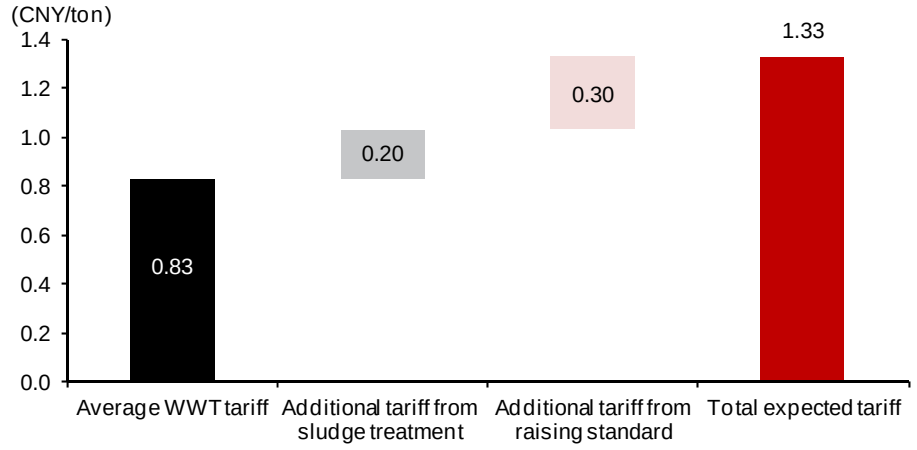
Local governments' enforcement likely to be secured going forward

Given the central government's shift in focus towards environmental protection, the enforcement of related action plans has become a key indicator in local government officials' performance matrix, which ensures their execution capability. In addition, as previously mentioned, investment in environmental protection is an effective solution to support the GDP growth, which should also add weight to the prompt launch of WWT and WTE projects.

New business expansion may bring WWT tariff hike of as much as 60% by 2017F

Besides traditional WWT projects, downstream businesses along the value chain, eg, water recycling and sludge treatment, could provide additional value to WWT players. In addition, the current trend to require higher WWT discharge standards is also likely to help WWT players in their negotiations for tariff hikes with local governments.

Fig. 6: China water: Assumed tariff increase from sludge treatment and discharge standard enhancement by 2017



Note: Average WWT tariff is the average of 36 major cities in China

Source: CEIC, CRAES, Nomura research

Sludge treatment, together with WWT discharge standard increase, will lead to dollar margin expansion of c.CNY0.25/ton with potential 12% earnings lift

On our estimates, the launch of additional sludge treatment capacity for an existing WWT project will increase the dollar margin by c.CNY0.10/ton. Further, if the WWT discharge standard increases from National 1B to 1A, the average dollar margin will increase by CNY0.10-0.15/ton. Thus, the IRR (Internal Rate of Return) for a WWT project with sludge treatment facility and 1A standard will be 14.3% vs. 13.4% for a normal 1B WWT project, in our view.

Fig. 7: China water: IRR comparison of different kinds of WWT projects

	WWT 1B	WWT 1A	WWT 1B + sludge treatment	WWT 1A + sludge treatment
CAPEX (CNY/ton per day)	1,500	1,800	1,650	1,950
Comprehensive tariff (CNY/ton)	1.00	1.30	1.20	1.50
Operating cost (CNY/ton)	0.32	0.45	0.42	0.53
IRR	**13.4%**	**13.7%**	**13.8%**	**14.3%**
ROE @ 50% debt-to-capital	**14.4%**	**16.1%**	**16.3%**	**16.9%**

Note: Capex, tariff and cost assumption are based on a typical WWT project of listed WWT players

Source: CEIC, company data, Nomura estimates

Even if the BVPS (Book Value Per Share) remains steady (i.e. flattish capacity growth), a 2.5ppts increase or 17.4% increase in ROE represents EPS upside potential at the same magnitude. Applying a 30% discount, as we only expect 70% of the projects will receive such renovation by 2015F, new quality projects still offer a c.12% additional upside potential to earnings. For a WWT dominant player (eg, BEW), earnings growth could directly link with upside potential in the share price, assuming an unchanged P/E level.

We assumed 5% WWT tariff growth annually in 2014-15F

We currently factor in a c.5% WWT tariff growth in 2014-15F together with an additional tariff contribution from the sludge treatment 6installation at the companies' existing WWT projects in our model. We assume the sludge treatment rate will reach c.70% by 2017F, which is relatively conservative compared to the government's 2015 target of 70%.

Fig. 8: China water: Sensitivity analysis regarding WWT tariff change

	2014F earnings			2015F earnings		
	Original	New	*% Change*	Original	New	*% Change*
5% increase in WWT tariff						
BEW (HKD mn)	1,710	1,792	*4.8%*	2,313	2,425	*4.8%*
CEI (HKD mn)	1,984	2,005	*1.1%*	2,471	2,493	*0.9%*

Source: Nomura estimates

Stocks for action: BEW (Buy) is our top pick, followed by CEI (Buy); Reduce on GDI

Beijing Enterprises Water (371 HK; Buy, TP: HKD6.50) – Buying spree

We like BEW for its strong M&A growth, leading position in China's WWT industry and ambitious plan to expand business along the value chain: With its leading position in China's WWT space and strong parent group, we believe BEW will continue its rapid capacity growth through M&As, doubling up by 2015F vs. end-2012. As well, the existing WWT business is well positioned for rapid development of sludge treatment and discharge standard enhancement, leading to potential profitability improvement, with dollar margin improvement of CNY0.08/m3 ton per year during 2014-16F.Together with its solid BT project pipeline, we expect BEW to post an impressive EPS CAGR of 35.0% for FY13-15F. BEW is our top Buy with a DCF-based TP of HKD6.50.

China Everbright Int'l (257 HK; Buy, TP: HKD13.10) – Waste on fire

CEI seems well-positioned in both China's WTE and WWT industries, with FY14/15F to be the peak season: We see CEI as well-positioned in both China's WTE and WWT sectors, making it a multifaceted provider of environmental improvement solutions. Based on our expectation of increasing contributions from its high-margin

operating business in FY14/15F as more WTE projects come online, as well as its robust construction project pipeline, we look for FY13-15F EPS CAGR of 31.7%. We believe the external sales of its environmental equipment/service, as well as the emerging industrial/medical hazardous waste treatment projects will be additional catalysts; we rate the shares as Buy with a DCF-based TP of HKD13.10.

Guangdong Investment (270 HK; Reduce, TP: HKD7.00) – M&A targets are elusive Although GDI's balance sheet is significantly healthy and cash inflows remain stable, we see limited growth ahead: In our opinion, its reliance on the contribution from its water distribution business, especially the water supply to Hong Kong, secures GDI's stable cash inflows but also restricts its growth to single digit. As we see: 1) few short-term M&A opportunities; 2) the Hong Kong government is unlikely to make significant tariff growth for the next water supply contract; and 3) new projects are unlikely to commence operation in 2014-16F, we see flattish earnings growth for GDI vs. its peers' c. 30% CAGR (based on our estimates). We have a Reduce rating and DCF-based TP of HKD7.00.

Valuation comparison

Fig. 9: China water and environment: Valuation comparison (1/3)

			Price target	Price	Market cap	Free float	Rept'g	Fiscal	Net profit (Local $ m)			Net earnings growth (%)		
Company	Ticker	Rating	L. Curr.	L. Curr.	(USDmn)	(%)	curr.	Y/E	12A	13F	14F	12A	13F	14F
ASIA														
WATER														
Water utilities operators														
Guangdong Investment	270 HK	Reduce	7.00	7.99	6,360	39	HKD	Dec	2,768	3,174	3,205	10	15	1
Beijing Enterprises Water	371 HK	Buy	6.50	5.55	6,131	46	HKD	Dec	750	1,152	1,710	25	54	48
Sound Global Ltd.	967 HK	Not rated	n.a.	8.27	1,395	30	CNY	Dec	437	515	605	2	18	18
China Water Affairs*	855 HK	Not rated	n.a.	2.51	448	47	HKD	Mar	304	314	n.a.	6	3	n.a.
Hyflux Limited	HYF SP	Not rated	n.a.	1.22	817	94	SGD	Dec	42	53	49	(4)	26	(8)
Tianjin Capital	1065 HK	Not rated	n.a.	4.13	1,818	89	CNY	Dec	278	290	308	3	4	6
Beijing Capital Company	600008 CH	Not rated	n.a.	7.16	2,486	39	CNY	Dec	590	709	837	1	20	18
Shanghai Chengtou Holdings	600649 CH	Not rated	n.a.	7.07	3,391	44	CNY	Dec	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Average												6	20	14
SOLID WASTE														
Waste-to-energy and solid waste treatment operators														
China Everbright Intl	257 HK	Buy	13.10	11.40	6,467	51	HKD	Dec	914	1,325	1,984	14	45	50
C&G Environmental Protection	CNGI SP	Not rated	n.a.	0.28	218	20	HKD	Dec	93	161	n.a.	n.a.	73	n.a.
Nanhai Development Co	600323 CH	Not rated	n.a.	12.14	1,129	53	CNY	Dec	239	337	455	25	41	35
New Environmental Energy	3989 HK	Not rated	n.a.	0.72	432	37	HKD	Dec	244	75	n.a.	n.a.	(69)	n.a.
Shenzhen Energy	000027 CH	Not rated	n.a.	5.53	2,346	27	CNY	Dec	1,294	1,217	1,150	34	(6)	(6)
China Power New Energy	735 HK	Not rated	n.a.	0.71	1,052	32	CNY	Dec	328	454	1,181	70	38	160
Sound Environmental	000826 CH	Not rated	n.a.	31.14	3,231	63	CNY	Dec	596	822	1,106	39	38	35
Average												28	23	55

Note: Pricing as of 3 March 2014 close; * China Water Affairs has Mar FY end and 12A implies FY ended 31 Mar 2012

Source: Company data, Bloomberg consensus forecasts for not-rated stocks, Nomura estimates

Fig. 10: China water and environment: Valuation comparison (2/3)

		EPS (Local $)			EPS growth (%)			P/E (x)			PEG	P/B (x)			Yield (%)		
Company	Ticker	12A	13F	14F	12A	13F	14F	12F	13F	14F	13-15F	12F	13F	14F	12F	13F	14F
ASIA																	
WATER																	
Water utilities operators																	
Guangdong Investment	270 HK	0.44	0.51	0.51	10	15	1	18.0	15.7	15.6	2.2	2.1	1.9	1.7	2.1	2.6	2.1
Beijing Enterprises Water	371 HK	0.11	0.15	0.20	21	38	33	51.1	37.0	27.7	0.8	4.5	3.6	3.2	0.8	0.9	1.2
Sound Global Ltd.	967 HK	0.31	0.36	0.42	(7)	17	17	21.7	17.5	15.0	2.1	2.7	2.2	1.9	0.3	1.0	1.1
China Water Affairs*	855 HK	0.24	0.26	n.a.	22	8	n.a.	10.5	9.7	n.a.	n.a	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hyflux Limited	HYF SP	0.04	0.06	0.06	61	41	4	31.2	22.1	21.3	0.7	1.3	1.2	1.2	1.9	2.4	2.5
Tianjin Capital	1065 HK	0.20	0.21	0.22	4	6	3	16.8	15.8	15.3	3.5	1.2	1.1	1.1	1.6	1.7	1.8
Beijing Capital Company	600008 CH	0.29	0.34	0.41	8	19	21	25.1	21.1	17.5	1.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Shanghai Chengtou Holdings	600649 CH	0.58	0.77	n.a.	29	33	n.a.	12.2	9.2	n.a.	n.a	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Average					19	22	13	23.3	18.5	18.7	1.8	2.4	2.0	1.8	1.3	1.7	1.7
SOLID WASTE																	
Waste-to-energy and solid waste treatment operators																	
China Everbright Intl	257 HK	0.24	0.33	0.44	10	35	36	47.3	35.0	25.8	0.8	5.5	3.8	3.4	0.5	0.7	1.1
C&G Environmental Protection	CNGI SP	0.10	0.17	n.a.	n.a.	79	n.a.	18.3	10.2	n.a.	n.a	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nanhai Development Co	600323 CH	0.41	0.48	0.57	10	18	18	29.8	25.3	21.4	1.4	2.9	1.8	2.1	n.a.	n.a.	n.a.
New Environmental Energy	3989 HK	0.17	0.05	0.07	n.a.	(71)	40	4.2	14.4	10.3	n.a.	1.1	1.0	n.a.	n.a.	n.a.	n.a.
Shenzhen Energy	000027 CH	0.57	0.45	0.43	55	(21)	(4)	9.8	12.3	12.9	n.a.	0.9	0.9	0.8	2.4	2.2	2.2
China Power New Energy	735 HK	0.03	0.04	0.08	47	25	129	20.4	16.3	7.1	0.2	0.9	0.8	0.7	n.a.	0.5	1.4
Sound Environmental	000826 CH	0.93	1.26	1.68	8	35	33	33.4	24.7	18.5	0.7	4.3	4.0	3.5	0.4	0.5	0.3
Average					26	14	42	23.3	19.7	16.0	0.8	2.6	2.0	2.1	1.1	1.0	1.2

Note: Pricing as of 3 March 2014 close; China Water Affairs has Mar FY end and 12A implies FY ended 31 Mar 2012

Source: Company data, Bloomberg consensus forecasts for not-rated stocks, Nomura estimates

Fig. 11: China water and environment: Valuation comparison (3/3)

		Net debt/equity (%)			RoE (%)			RoA (%)			EV/EBITDA (x)		
Company	Ticker	12F	13F	14F	12F	13F	14F	12F	13F	14F	12F	13F	14F
ASIA													
WATER													
Water utilities operators													
Guangdong Investment	270 HK	net cash	net cash	net cash	14.9	16.7	11.5	10.6	12.5	8.9	10.7	10.1	9.7
Beijing Enterprises Water	371 HK	106.1	68.8	89.6	9.1	10.8	12.4	3.0	3.8	4.5	52.8	35.9	26.6
Sound Global Ltd.	967 HK	net cash	net cash	net cash	15.3	15.1	15.0	6.0	6.2	6.6	n.a.	n.a.	n.a.
China Water Affairs*	855 HK	n.a.	n.a.	n.a.	7.5	7.8	n.a.	2.0	2.3	2.6	n.a.	n.a.	n.a.
Hyflux Limited	HYF SP	129.6	141.6	112.3	6.1	6.6	4.1	1.4	n.a.	n.a.	16.2	13.6	15.2
Tianjin Capital	1065 HK	412.2	383.3	368.5	6.6	6.6	6.5	2.5	2.6	2.6	19.6	19.0	18.3
Beijing Capital Company	600008 CH	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Shanghai Chengtou Holdings	600649 CH	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Average		215.9	197.9	190.1	9.9	10.6	9.9	4.2	5.5	5.0	24.8	19.6	17.4
SOLID WASTE													
Waste-to-energy and solid waste treatment operators													
China Everbright Intl	257 HK	38.4	8.3	25.6	15.5	12.2	14.0	7.5	8.7	8.4	35.2	24.0	17.9
C&G Environmental Protection	CNGI SP	n.a.	n.a.	n.a.	5.1	8.1	n.a.	1.7	2.7	n.a.	n.a.	n.a.	n.a.
Nanhai Development Co	600323 CH	n.a.	n.a.	n.a.	9.4	8.6	10.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Environmental Energy	3989 HK	28.8	22.6	n.a.	28.6	7.4	9.1	9.4	2.5	n.a.	11.1	32.8	n.a.
Shenzhen Energy	000027 CH	32.3	18.5	6.5	8.4	7.3	6.6	n.a.	n.a.	n.a.	4.9	5.1	5.2
China Power New Energy	735 HK	n.a.	n.a.	n.a.	4.5	5.4	10.7	1.8	1.7	2.8	n.a.	n.a.	n.a.
Sound Environmental	000826 CH	net cash	net cash	net cash	13.9	16.5	17.9	8.9	10.7	10.0	21.8	17.1	14.3
Average		33.2	16.5	16.1	12.2	9.4	11.4	5.9	5.3	7.1	18.3	19.7	12.5

Note: Pricing as of 3 March 2014 close; * China Water Affairs has Mar FY end and 12A implies FY ended 31 Mar 2012

Source: Bloomberg consensus forecasts for not-rated stocks, Nomura estimates

Key investment thesis

Central government priority has decidedly shifted to environmental protection – 12th FYP is not the ceiling

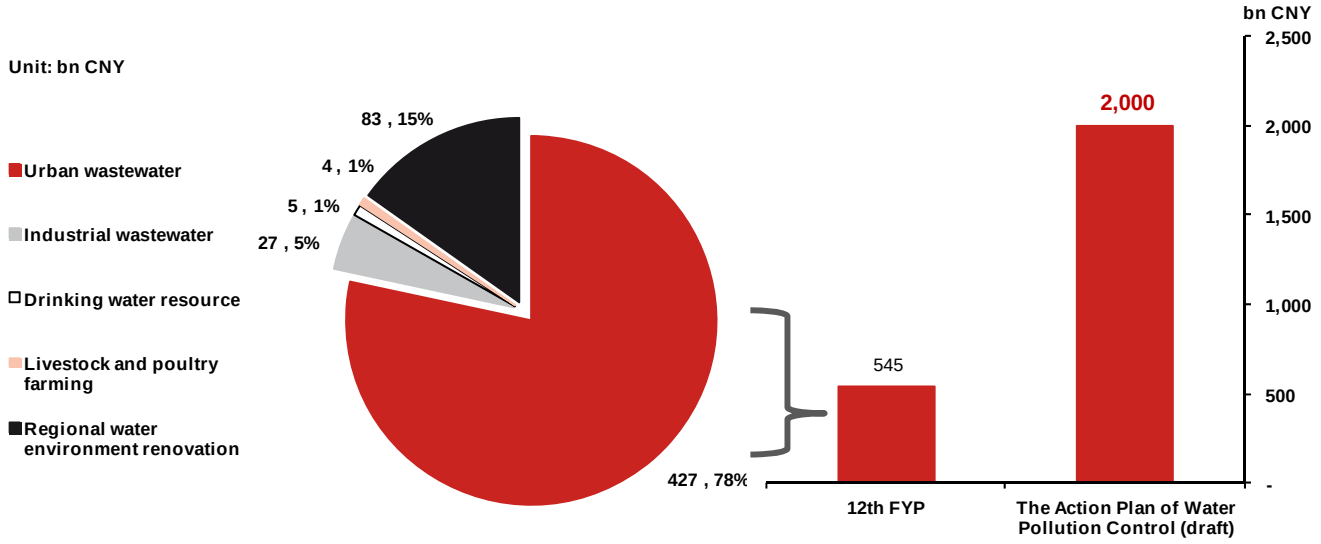
With the growth in economic and living standards, the environmental awareness of Chinese nationals has been awakened, leading them to demand increased standards of environmental protection. In addition to meeting the people's needs, the central government is also aware of the importance of sustainable development over environment-exhausted growth.

The inherent requirement for a liveable environment – water as a critical part
Unlike decades ago, today's Chinese nationals, with the increase in material wealth, are now demanding higher living standards, especially pertaining to environment quality. Mobile applications, media reports, water/air quality measurement equipment and the social network platforms have all expanded Chinese nationals' awareness of real-time environment conditions. Hence, the demand for a better quality living of environment has become the priority for the Chinese government. In our view, water pollution control is a rather difficult task that is unlikely to be completed successfully through a five-year plan, and more of a long-term effort, in order to maintain the sustainable development of China. Given China's current water quality issue is still severe, we expect governmental support, such as favourable policies and government-driven investment, will continue beyond the 12th FYP.

Central government's emphasis shifting towards sustainable development
On various occasions, the central government has conceded that the country's rapid economic growth in the past three decades post the "Reform and Opening-up" has come at a heavy environmental cost. The new generation of government led by President Xi Jinping explicitly raised the importance of ecological civilization development in the first administrative programme. The central government has also persistently promoted the development of the environmental protection industry since the 11th FYP. Thus, we expect government support to continue, at least throughout President Xi's term of office.

The Action Plan for Water Pollution Control - intensive government-driven investment likely to persist and exceed the magnitude of the 12th FYP
According to the 12th FYP of urban wastewater treatment and key river-basin pollution control, total investment in the 12th Five-Year Period will amount to CNY545bn (excl. the duplicated part), with a majority of the investment in the urban wastewater sector.

Fig. 12: China water: Investment plan driven by the central government and the breakdown



Source: State Council, MEP, Nomura research

However, we expect investments, especially those driven by the central government, will persist beyond 2015F and the magnitude would exceed that mentioned in the 12th FYP in which the MEP has already completed the draft version of The Action Plan for Water Pollution Control and submitted to the State Council for final review and approval, as per the deputy minister of MEP, Mr Zhai Qing on 11 Feb 2014. He expects the plan to be published by 1H14, with more than CNY2tn to be invested in water pollution control during the next five years vs. a total of ~CNY500bn planned in the 12th FYP.

Fig. 13: China water: Summary of the Action Plan for Water Pollution Control (draft)

Policy	Publish date	Key target
The Action Plan of Water Pollution Control	1H14	- To largely reduce the discharge of industrial w ater pollutants - To continuously manage the residential w astew ater discharge - To better control the pollution discharged into the rivers in rural areas

Source: MEP, Nomura research

Though no detailed breakdown for this CNY2tn investment is available, we expect the majority of the investment will still be put towards the urban wastewater treatment sector, as the same case of the 12th FYP. As previously discussed, in addition to the continuous capacity increase to meet the increasing demand due to urbanization/population growth/higher living standard, the central government is also likely to pay more attention on the investment on discharge standard lift-up, sludge treatment and water recycling. However, we also see increasing investment to be directed towards spending on agricultural WWT and integrated water-basin environment renovations (as we discuss in further detail in the 13th FYP outlook below).

13th FYP outlook: Integrated water quality enhancement solution, as well as the agricultural WWT.

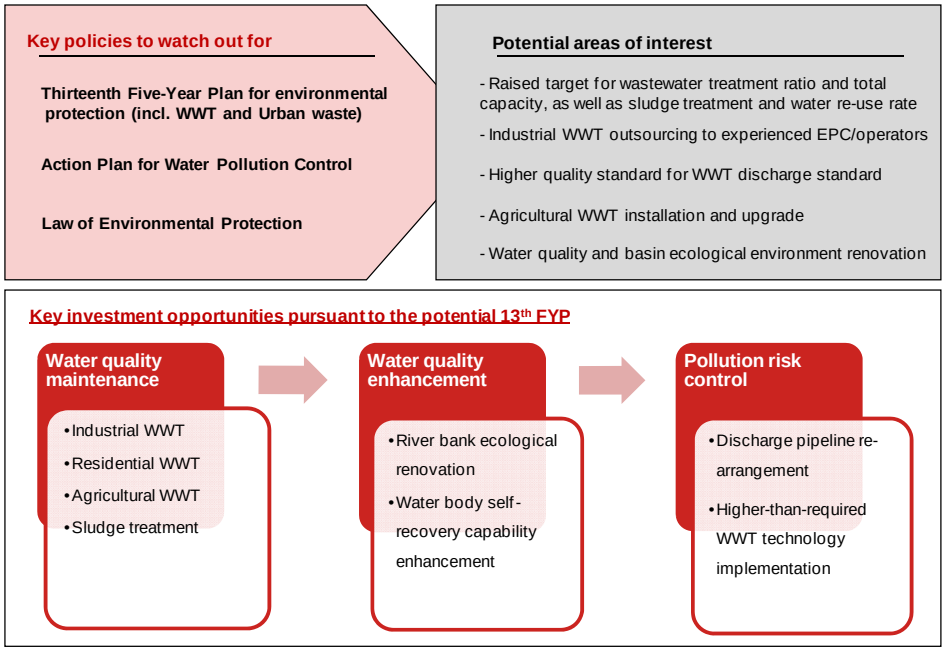
Integrated water quality enhancement solution, with higher technology and capital threshold, will benefit sizable players the most

After combing through the preliminary research themes of 13th FYP (2016-20) disclosed by the MEP, we see the water pollution control topic will remain as an essential part but in a more integrated solution instead of sub-segment development. MEP has required that the 13th FYP of water pollution control will cover three key contents as an integrated solution:

- Water quality maintenance
- Water quality improvement
- Potential pollution risk control

The current 12th FYP of water pollution control only focuses on water quality maintenance. However, overall domestic water quality still remained as “slightly polluted” by end-2013 after rapid development of wastewater treatment capacity in the past decade. The current pollution status of the water body in China has already destroyed the self-recovery capability of the natural environment. Consequently, to enhance the water environment – one step further than the current pollution control – will be the next target for the central government during the 13th Five-Year Period (2016-20), in our view, which creates future development opportunities for WWT players.

Fig. 14: China water: Potential policy upside during the 13th Five-Year Period



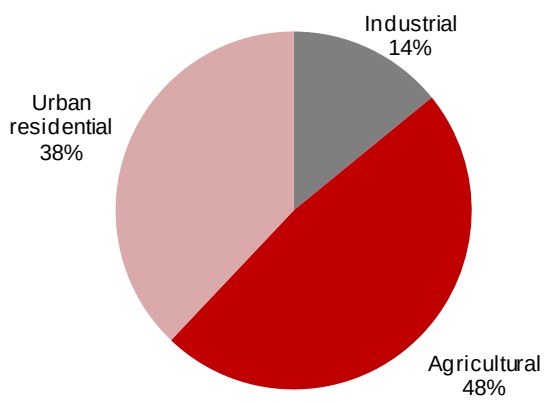
Source: MEP, Industry paper, Nomura research

Given the higher technology and capital requirements for such top-level designs and integrated solutions, we think sizable players such as BEW and CEI are likely to have a competitive advantage over small-scale peers in receiving more business exposure in related projects. Indeed, BEW has already started some Build-Transfer (BT) projects in the river and river bank renovation sector, which has established its first-mover advantage.

Agricultural WWT, a "have-to-solve" conundrum

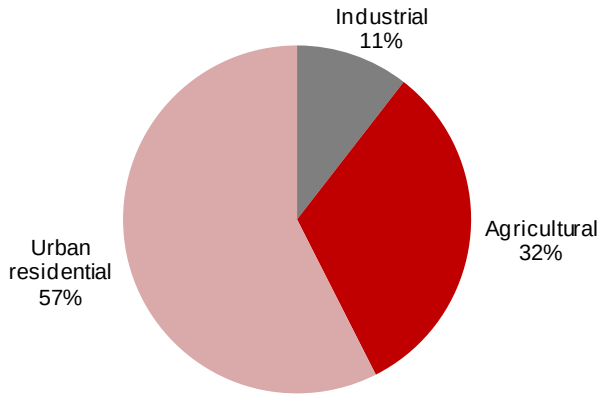
In the 11th FYP and 12th FYP, agricultural WWTs or WWTs located in rural areas were seldom mentioned. Does that imply that agricultural pollution in those areas is low enough to be ignored? No, because the agricultural sector emits more water pollutants than the industrial and urban residential sectors, according to the statistics from MEP.

Fig. 15: China water: COD pollution source breakdown -2012



Source: MEP, Nomura research

Fig. 16: China water: Ammonia-N source breakdown -2012



Source: MEP, Nomura research

The key issue is the scattered distribution of agricultural pollution sources, especially the livestock and poultry farms (accounting for more than 95%/75% of the COD/Ammonia-N emission, according to MEP. In our opinion, the solution to entirely control such pollution sources is either to install WWT facilities for individual farms or to construct a large scale of pipelines to transmit wastewater to centralized WWT plants in the region. Currently, neither solution has been well adopted, given the low environmental awareness in the

rural areas, as well as the deficiency of applicable laws. According to Ministry of Housing and Urban-Rural Development, the WWT rate in rural areas was only 7%, vs. 85%/70% for cities and counties.

Fig. 17: China water: Water pollution in Huai River due to poultry farming

Source: WHO, Nomura research

Fig. 18: China water: Dead pigs polluting Shanghai Huangpu River

Source: Xinhuanet, Nomura research

It is often quite difficult for WWT players to build massive pipelines to collect wastewater from existing scattered farms, but central and local governments require future farms to be located pursuant to long-term layout planning, which allows centralized WWT plants to efficiently treat both the agricultural wastewater and nearby villages' residential wastewater. Currently, BEW and Sound Global (967 HK, Not rated) have already taken some steps towards WWT projects in small counties/towns, which enables them to potential seize large market opportunities in the agricultural WWT sector.

Local governments' execution ability to be improved

As mentioned above, given the central government's shift of focus, local GDP growth will not be the most important indicator in which to evaluate the local government's performance. Instead, environmental protection achievement is likely to turn out to be the bottom line for a qualified government leader. In recent policies such as "The Urban Drainage and Sewage Disposal Regulations" and "Action Plan of Air Pollution Control" we have seen that certain pollution control and treatment targets have been added to the matrix of local governments' performance measurements. Hence, we think local governments' execution abilities regarding WWT/WTE projects will be largely enhanced given their self-driven motivation to achieve better political performance. Consistent with our view, feedbacks that we obtained from WWT/WTE players also suggest that local governments are keen on project development and environmental standard enhancements, which puts these players in better positions while negotiating the subsidies or tariffs with them.

Will payment be a problem for local governments?

Since 2H13, tight liquidity as well as the heavy burden of local governments' debt in China has become a hot topic. Investors may have concerns regarding local governments' ability to pay. We see no major default risks to the sector given:

- **WWT projects are not government-subsidized:** In most cases, tariffs received by WWT players are well covered by water tariffs charged from end-users. Especially in the developed cities, where water consumption from industrial/ commercial/special industries (the average tariff is significantly higher than residential) are relatively high, some local governments may even make profit from the water projects.
- **WTE projects only receive moderate subsidies:** Similar to WWT projects, most tier-1 cities have already implemented urban solid waste treatment tariffs, which can cover waste processing fees paid to WTE companies. As well, only one-third of revenues come from waste process fees for typical WTE projects, with the remaining two-thirds of revenues derived from on-grid tariffs paid by grid companies. Thus, we see limited default risk for WTE projects.

Back to GDP growth – Better stimulated by environmental investment

According to our economist, Zhang Zhiwei, China will need to implement additional stimulation measures if it is to achieve its reported 7.5% growth target for 2014. In our opinion, the recently published environmental investment plan is the solution to such a stimulation plan. We noticed that total planned investment announced in the Action Plan for Air Pollution Control published in Sep 2013 was CNY1.7tn during 2013-17F. Together with the total CNY2.0tn investment plan mentioned in the drafted "Action Plan for Water Pollution Control", the total environmental investment announced for the next 5 years will amount to CNY3.7tn, which would provide a new and growing force to support China's GDP growth, and, in our view, will end up with a better result vs. the previous CNY4tn stimulation plan implemented in 2008.

New value-added businesses to add to top-line growth

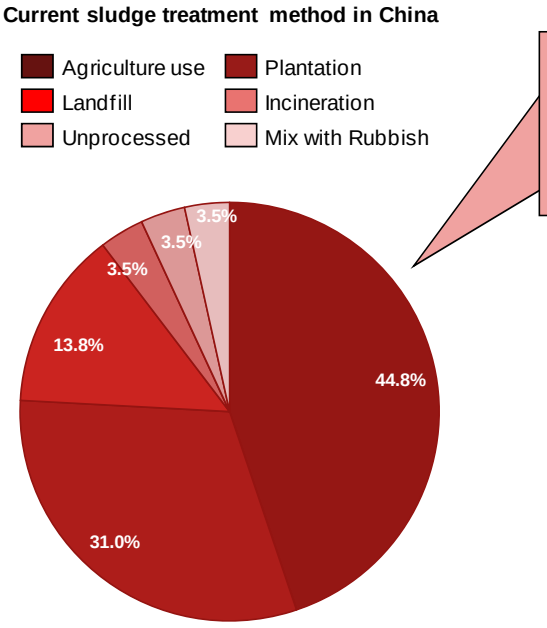
Given the strong synergy between WWT projects and sludge treatment/water recycling projects, in most cases such a value-added business would be directly assigned to the current operators of local WWT plants. WWT players therefore can charge a higher tariff for the sludge treatment service provided and earn additional income from the sale of recycled water. Thus, we view this kind of expansion as the new top-line growth channel of WWT companies, and sizable players such as BEW and CEI in the industry are likely to reap the most of the benefits.

Sludge treatment rate to rise from <20% by 2013 to c.70% by 2015F

The sludge treatment industry should see significant growth in the next 2-3 years

Sludge, the solid or fluid-like by-product from sewage treatment, typically contains 80% water, and is produced during the sediment process during wastewater treatment. Sludge mainly consists of organic ingredients and other complex mixtures that would most likely cause severe harm to the environment if not treated properly. By 2013, only 20% of sludge produced domestically was well treated with more than 70% being treated by improper landfill, according to the Ministry of Housing and Urban-Rural Development (MOHURD).

Fig. 19: Proper sludge treatment has yet to be implemented (as of 2012)



Agriculture and plantation use are actually simple landfill without proper treatment, which is harmful to environment

Increasing use of incineration will better fit China's high economy growth profile

Treatment methods	Restriction and applicable areas
Fertilization	Small to mid scale cities preferred
Farm and land application	Restricted to water conservation areas
Landfill	Small to mid scale cities with low level of economic development
Incineration	Mega cities and developed mid to big cities

Source: Ministry of Housing and Urban –Rural Development, Nomura research

Given: 1) normally 500 tons of sludge would be produced during the treatment of every 1mn tons of wastewater; 2) we estimate that the sludge treatment rate in 2013F and 2015F should be 20% and 70%, respectively; and 3) we estimate residential wastewater treatment amount at 50,000mn tons and 55,200mn tons for 2013F and 2015F,

respectively, the sludge treatment capacity would record significant growth from 5.0mn tons pa in 2013F to 19.3mn tons pa by 2015F, based on our estimates.

Further push in addition to 12th FYP from the central government

However, the sludge treatment industry remains underdeveloped - the treatment rate was still at a low level (~20%) by 2013 vs. 12th FYP's target of 70%. According to h2o-China's 2013 report, only 50 sludge treatment projects were completed in 2013 vs. 500 WWT projects completed in 2013). The central government has also noticed the situation and has made further push since 2013.

Fig. 20: China water: Sludge treatment-related policies published recently

Law and policy	Publish date	Key related content
The Notice to Accelerate the Development of Urban Infrastructures	16-Sep-13	Sludge treatment rate to reach 70% by 2015
The Urban Drainage and Sewage Disposal Regulations	2-Oct-13	WWT project should also properly treat sludge to meet the national standard
The Action Plan of Water Pollution Control (drafted version)	Reported in Feb-14, publish date TBD	1. Sludge treatment should match the WWT development 2. To Expand the pilot program nationwide to add sludge treatment fee in the WWT tariff

Source: State Council, Xinhuanet, Nomura research

Sludge treatment fees to be secured per the government's requirement

As mentioned in Fig. 20, inclusion of the sludge treatment fee in WWT tariff will be implemented in more regions soon. Currently, some cities in coastal regions such as Jiangsu, Zhejiang and Guangdong have already launched such pilot programmes with the fees ranging from CNY0.04/ton to CNY0.25/ton. According to the current situation in developed countries (such as the US, the UK and Japan) and guidance from MEP, the sludge treatment fee should account for 20-30% of the WWT tariff. Consequently, we expect the average sludge treatment fee at CNY0.20/ton at the current stage and the payment will be secured given it will be included in the WWT tariff and in turn the tap water tariff. The cost of the sludge treatment varies depending on the adopted treatment methods. Based on our rough estimate, the all-in sludge treatment cost would be CNY0.10 per ton wastewater treated, which leaves a c.CNY0.10/ton dollar margin.

Fig. 21: China water: Sludge treatment cost analysis by method

Treatment method	Capex (CNY per ton/day)	Operating cost (CNY/ton)
Landfill	200,000	75
Farm and land application	400,000	150
Incineration	700,000	250
Average	433,333	158
Equivalent to cost per ton wastewater	0.02	0.08
All-in sludge treatment cost (CNY/ton)	**0.10**	

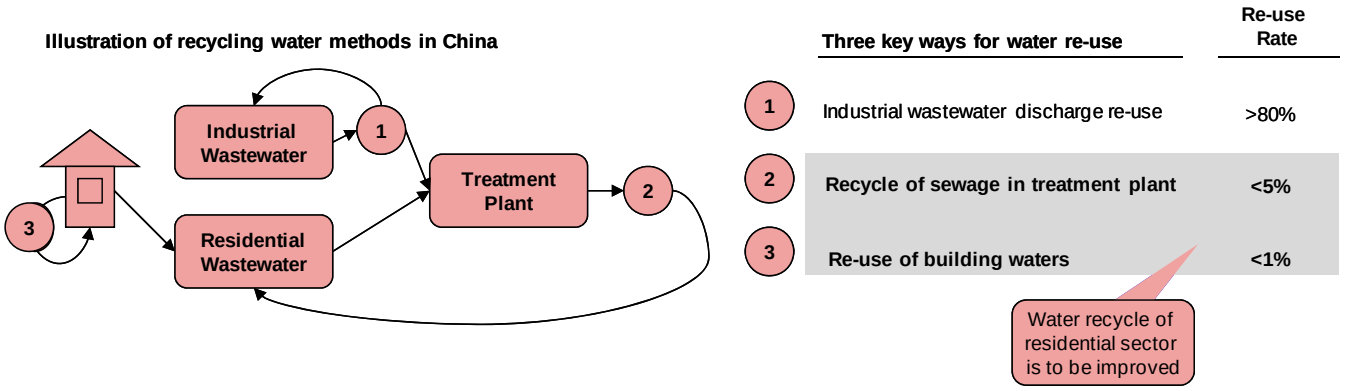
Source: Chinese Academy for Environmental Planning, Nomura research

Water recycling rate to reach 20% by 2015F vs. current <5%

Water recycling to be the long-term solution for water resource scarcity

Recycled water is an effective water source for cities with limited natural water resources and high water utilization. Not only does the "No.1 Document" clearly call for the implementation of very strict water resource management, but the 12th FYP also targets recycled water usage rates from domestic wastewater treatment plants to reach 15% by 2015. In our opinion, this implies that water recycling is officially in the government's spotlight. In addition, the State Council published a notice on 16 September 2013 to further increase the recycling rate target to 20%.

Fig. 22: China water: Typical urban water recycling process



Source: Ministry of Housing and Urban –Rural Development, Nomura research

Current tariff attractive; pipeline construction is the bottleneck

Recycled water is relatively cheap compared to normal tap water, and tariff hikes for industrial and commercial water use have been accelerating, while recycled water prices have not increased since 2009. Currently recycled water is offered at a deep discount compared to industrial and commercial water. As of Sep 2013, recycled water was priced at RMB0.9-1.5/m3 (excluding Tianjin), while industrial water tariffs were at RMB1.8-6.7/m3 in cities with recycled water.

Fig. 23: China water: Recycled water tariff vs. others in major cities of China

CNY/m3	Recycled	Residential	Industrial	Admin	Business
Beijing	1.00	2.96	4.44	4.12	4.66
Tianjin	5.70	4.00	6.65	6.65	6.65
Shanghai	0.90	1.63	2.00	2.00	2.00
Shijiazhuang	1.50	2.50	3.50	4.00	4.00
Xi'an	1.10	2.25	2.55	2.95	3.40
Harbin	0.90	2.40	4.30	4.30	4.30
Xiamen	1.20	1.80	1.80	1.80	1.80

Source: h2o-China, Nomura research

The major obstacle hindering the development of recycled water is the pipeline. According to related laws, recycled water has to be transmitted through its own pipeline rather than existing tap water pipelines. Given the required 20% recycled rate required by the government, we believe construction of these pipelines will be accelerated. As such, we expect rising demand for recycled water, given its relative cost efficiency vs. other water sources.

Decent dollar margin offers future catalyst for WWT players

According to our discussions with Prof. Fu Tao from the School of Environment, Tsinghua University, and management of BEW, the 1A standard is very close to the recycled water's quality requirement and only c.CNY0.40/m3 additional operating cost to generate recycled water from 1A standard wastewater. Considering capex of a water recycling plant is c.CNY4,000/m3 (incl. the pipeline construction), the all-in cost is c.CNY0.75/m3 vs. average tariff of CNY1.2/m3. Hence, we believe the expansion for WWT players to downstream water recycling business will be the future catalyst as the recycle rate in developed countries is c.50-70%, according to h2o-China.

Wastewater discharge standard to rise, so tariff may rise by CNY0.30/m3

Wastewater discharge is required to meet higher standards

With ongoing economic development and improving living standards, environmental protection is becoming increasingly important. As such, local environmental protection agencies (EPA) have raised sewage treatment standards. Currently, large cities and municipalities in China (incl. Beijing, Shanghai, Guangdong, Zhejiang, Jiangsu, Shandong and etc.) require sewage treatment plants to reach Grade 1A wastewater treatment standards, while plants in lower-tier regions require plants to be upgraded to Grade 1B standards.

Fig. 24: China water: Wastewater discharge standard comparisons

Fundamental control items		Grade I	
Indicator	Unit	1A	1B
COD	mg/L	50	60
BOD5	mg/L	10	20
Animal and vegetable oils	mg/L	10	20
Crude oil	mg/L	1	3
Anionic surfactant	mg/L	1	3
TN	mg/L	0.5	1
Ammonia	mg/L	15	20
TP	mg/L	0.5	1
Color	dilution factor	30	30
pH		6-9	6-9
Fecal coliform	number	10	10

Source: MEP, Nomura research

However, by 2013, less than 30% of urban wastewater plants were qualified as Grade 1A standard. This leaves a lot of room for construction of new modern wastewater treatment plants or renovation of current plants. Given the central government's long-term goal – reusing a majority of the wastewater in urban areas – we expect more than 70% of the urban wastewater treatment plants to quality to qualify as Grade 1A standard by 2017.

A CNY0.30/m3 tariff hike is expected for the "1B to 1A" renovation

According to Chinese Academy for Environmental Planning, the WWT tariff was increased by on average CNY0.81/m3 and CNY1.09/m3 for "level 2 to 1B" and "level 2 to 1A" renovation, respectively, implying CNY0.28/m3 renovation for "1B to 1A" renovation. Such a conclusion is also in line with our channel checks with several WWT plants in Shanghai, Wuxi Jiangsu and Ningbo Zhejiang. In terms of costs, a large-scale 1A standard WWT plant's operating cost is c.CNY0.48/m3 vs. CNY0.33/m3 for 1B WWT plants. Since the renovation will not incur a large scale of fixed asset investments, we see the additional CNY0.15/m3 dollar margin as quite attractive for WWT players.

Industry overview

China water industry: Breaking through the bottleneck for sustainable domestic economic growth

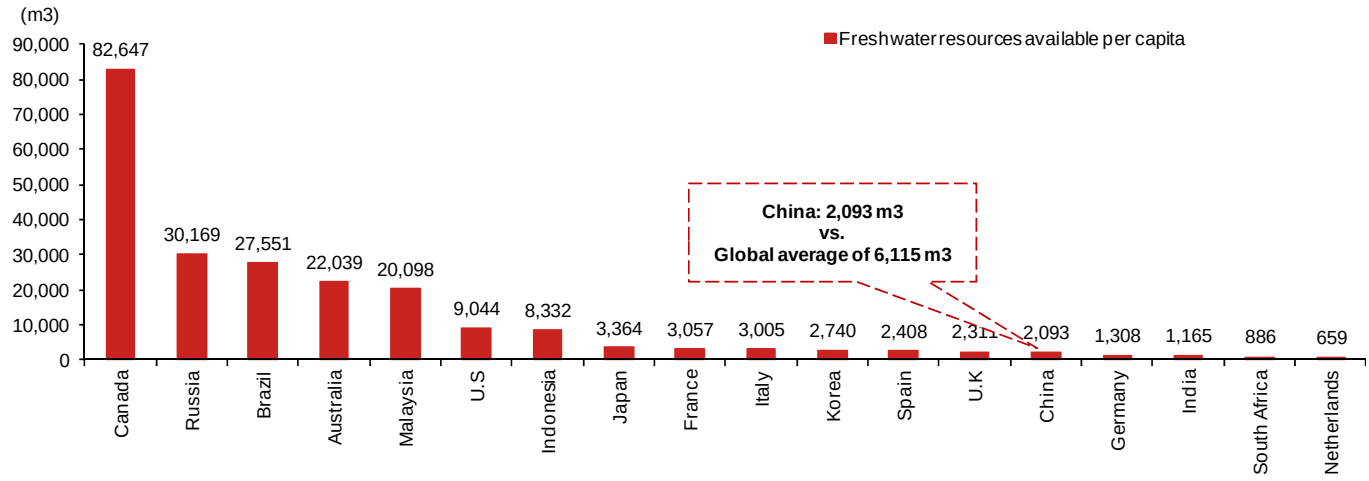
On the road towards a "Beautiful China", water supply and wastewater treatments are essential parts of the puzzle. Hence, we expect the water industry, with the dilemma of natural scarcity of water resources vs. increasing demand, will remain hot, backed by the central government's support in the next couple of years.

China water supply and demand overview

China – Thirsty remains due to insufficient resources…

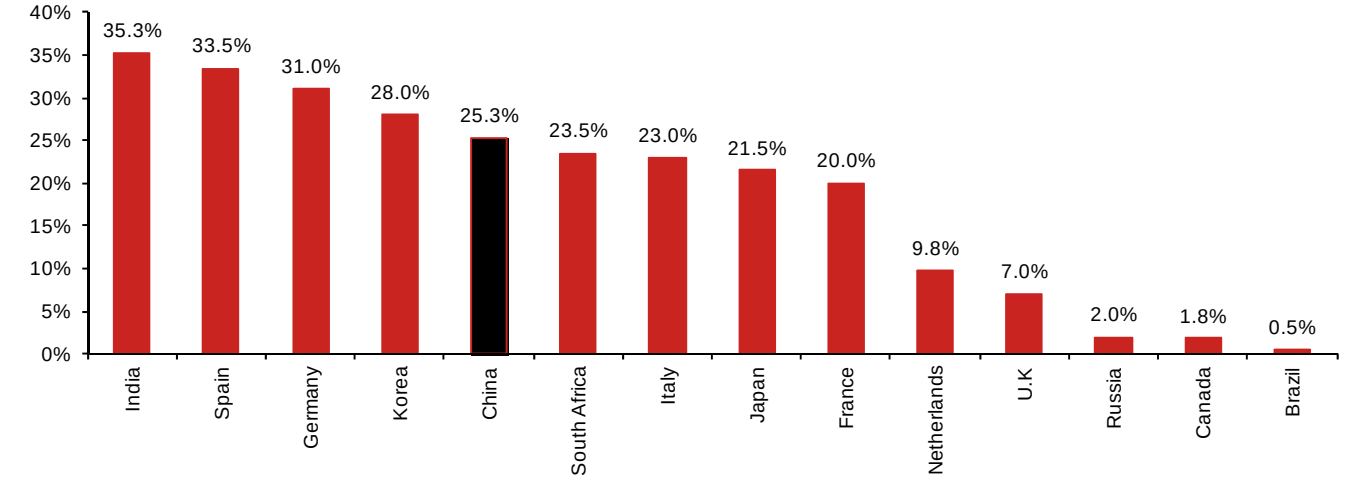
According to recent Wind & World Development Indicators' statistics, China's per capita water availability is only one-third of the global average as of 2013. In normal years, China has a total water resource shortage of around 40bn tons.

Fig. 25: China water: Freshwater resources available per capita – global comparison



Source: 2013 World Development Indicators; Nomura research

Fig. 26: China: Water resource usage rate global comparison



Source: China Institute of Water Resources & Hydropower Research, Nomura research

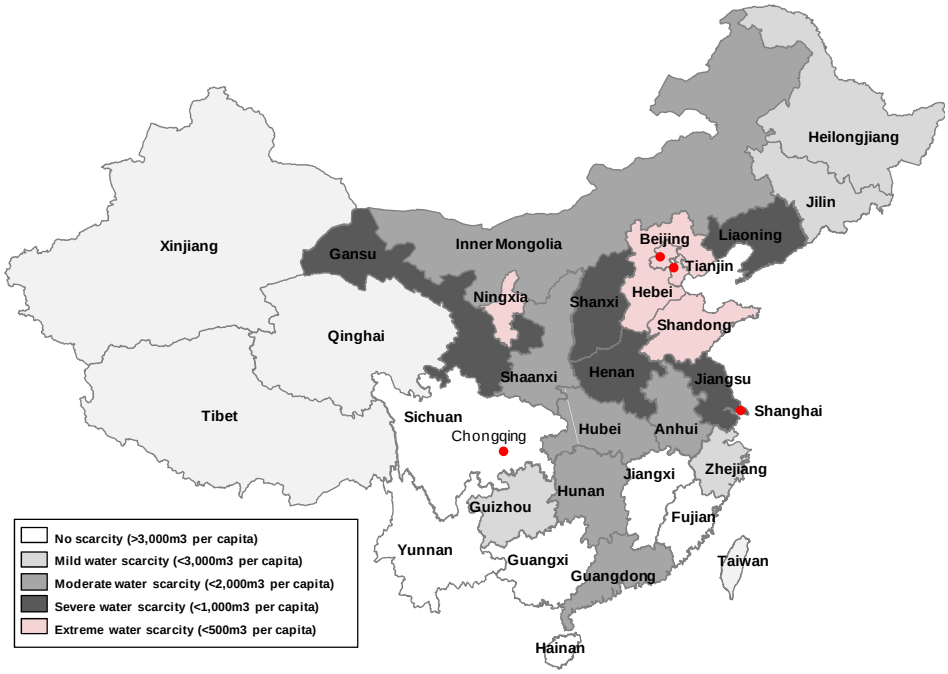
According to the latest water resources census conducted in 2010, qualified water resources to supply to tap water plants only accounted for 29.5%, while water falling into the "polluted" category comprises 44%. In 2012, development and usage rates of China's total water resources reached 25.3% - a relatively high level globally. In addition,

five level-1 water resource areas are in overdeveloped status (their development and usage rates exceed 40% of the total amount).

… And more droughts from uneven distribution geographically

According to a National Bureau of Statistics report from 1993 (the latest available), water resources in northern China (north of the Yangtze River) only accounted for 19.1% of the country's total water resources, while those in southern China comprised the remaining 80.9%.

Fig. 27: China water: Water resources distribution by geography

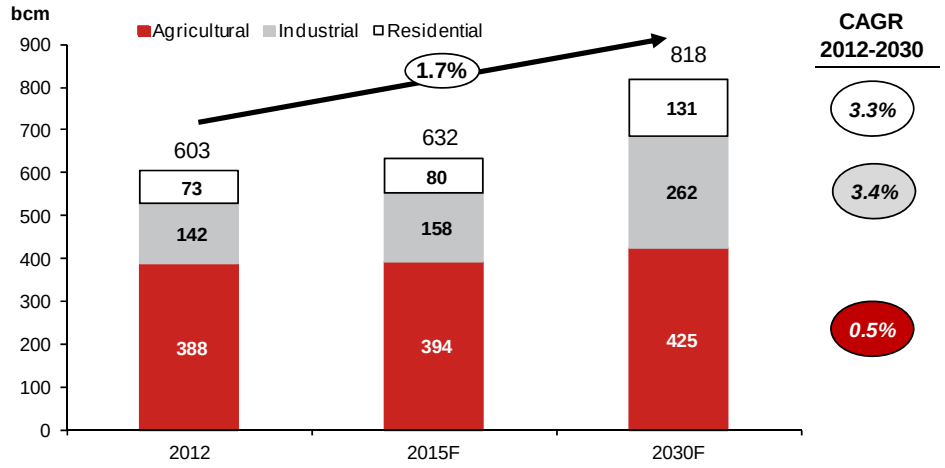


Source: China Statistical Yearbook, Water Resource Group, Nomura research

Rapid water demand growth in China

Water demand in China (including urban and rural areas) saw a 1.3% CAGR from 2004-12, according to the National Bureau of Statistics, with industrial and residential demand growth outpaced at 1.9%/1.4%, respectively. Moreover, if excluding 2012 when the GDP growth slowed to 7.8%, the CAGR from 2004-11 for industrial / residential water demand was actually 2.5%/2.8%, respectively. According to the Water Resources Group, growth will be even faster (rising to 1.7%) from 2012-30, with industrial/residential demand growth being 3.4%/3.3%, respectively. We believe major demand pressure will come from three sources: 1) a steadily increasing population; 2) industrial development from a growing GDP; and 3) unrelenting urbanization.

Fig. 28: China water: Water consumption forecast until 2013F



Source: Water Resources Group, Nomura research

Coping with the insufficient resources and rising demand

In addition to water-saving methods and the rationalization development of high water consumption industries such as coal mining, China needs to generate new water resources and protect existing water resources (ie, water recycling and wastewater treatment) to meet rapidly rising demand.

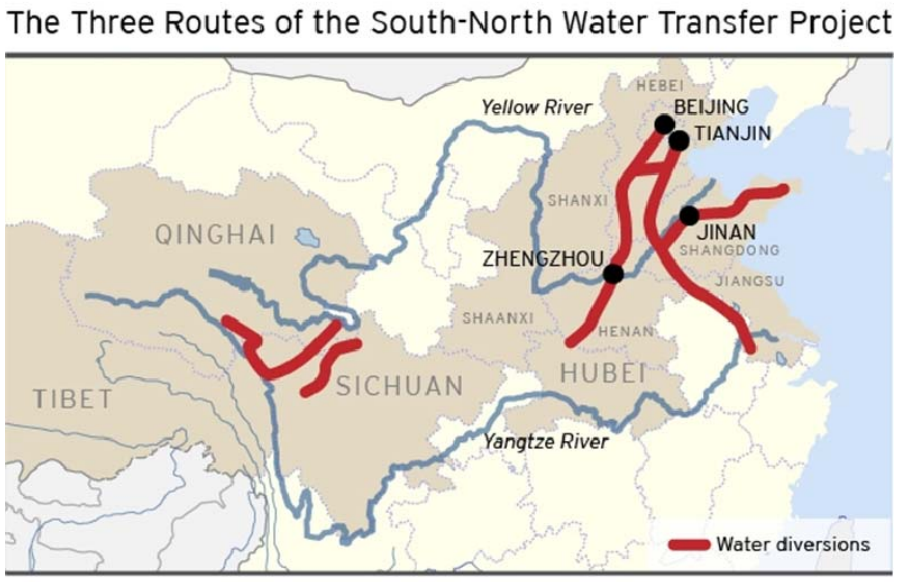
Controlling water usage and management

The "Decision of the CPC Central Committee and the State Council on Accelerating the Development of Water Reform" published on Jan 29, 2011 calls for the implementation of three very strict water resource management regulations and establishment of the "Three Redlines" accordingly: 1) overall water usage control; 2) Water use efficiency control; and 3) Wastewater discharge control in water resource districts.

New sustainable water sources

- **Water transfer:** The South-North Water Diversion Project, once complete, will be the world's largest hydraulic engineering scheme in terms of transferred volume. It targets to transfer water from the Yangtze River to the Yellow River and Beijing. Phase I of the project commenced operation in Dec 2013 with annual designed transferred capacity of 8.8bcm to cover a population of 100mn.

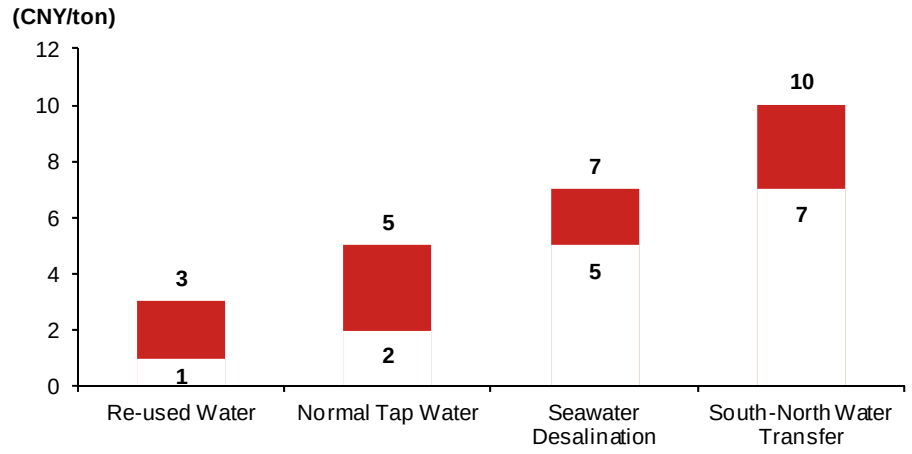
Fig. 29: China water: Overview of ongoing South-North water transfer project



Source: Central government, Nomura research

- **Seawater desalination**: Even though desalination is a more expensive method of generating usable water, we believe there will be growth for such plants in coastal areas where water is scarce. According to the "Seawater Utilization Plan" issued by the NDRC on Aug 18, 2005, there is a capacity target of 3mn m3/day by 2020, representing a CAGR of 11.6% between 2010 and 2020.
- **Recycled water:** As we project China will continue its urbanization trend, water recycling is a new, sustainable and vital source for cities experiencing water scarcity. Before being recycled, a proper WWT process needs to be implemented. State Council published a notice on 16 Sep 2013, which further increased the target to 20%. Indeed, the development of recycled water is already successful in Beijing. By the end-2013, Beijing achieved a water-recycling rate of 70% and targets to reach 75% by 2015.

Fig. 30: China water: Per ton generation cost comparisons (cost range in terms of CNY/ton)



Source: Ministry of Water Resources; Nomura research

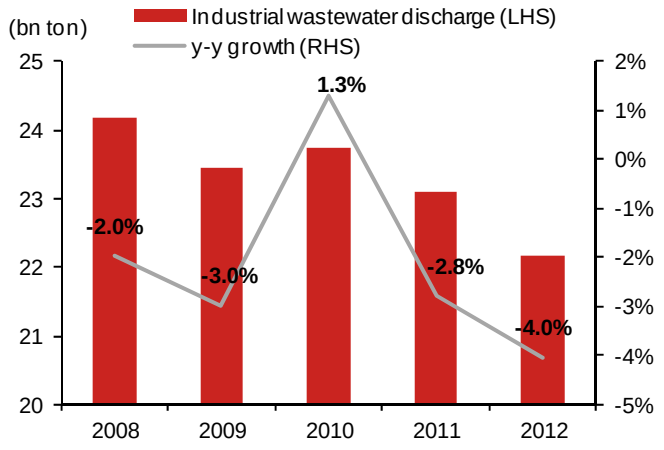
In sum, given: 1) water consumption growth is inevitable due to the domestic economic growth and urbanization progress even if strict control methods are implemented; and 2) water transfer project and seawater desalination would incur relative higher cost to produce qualified water, we believe wastewater treatment is the most efficient way in the near term, as it can 1) help protect the precious water resources from industrial and residential pollution; and 2) directly generate recycled water for various kinds of usage.

China wastewater treatment sector – residential wastewater discharge leads the growth

We expect the rapid growth to continue in the next two years to achieve the 12th FYP target, with higher wastewater standards required and sludge treatment development to be the new hot spots.

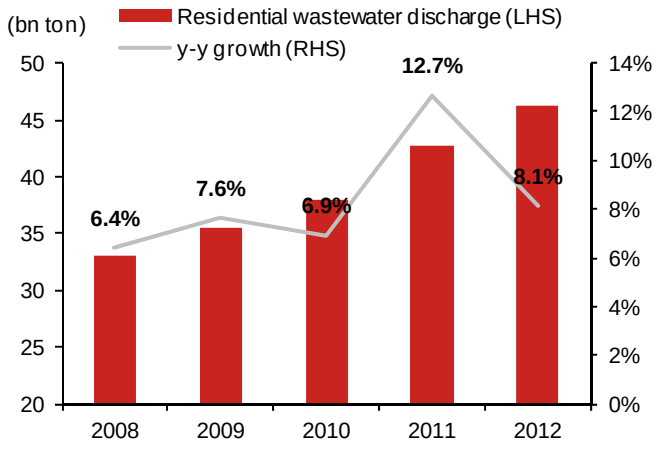
We expect residential wastewater to lead discharge volume growth in China
Wastewater treatment can break down into two categories: residential and industrial. China has made great strides in dealing with industrial pollution as a result of increased governmental financing support. Consequently, industrial wastewater discharge levels have dropped in the past few years. In contrast, residential wastewater discharge levels have seen an uptrend over the same period, which we believe is the result of accelerating urbanization and rising living standards in China. In 2012, residential wastewater discharge levels reached 46.3bn tons (+ 8.1% y-y), accounting for 68% of the total domestic wastewater discharge.

Fig. 31: China water: Industrial wastewater discharge



Source: National Bureau of Statistics, Nomura research

Fig. 32: China water: Residential wastewater discharge



Source: National Bureau of Statistics, Nomura research

We forecast residential and industrial discharge volume will reach 53.8bn tons and 22.5bn tons, respectively, by 2015F, based on per-capita wastewater discharge, population increases and urbanization rate trends. Our key assumptions are: 1) an estimated total residential water consumption growth rate of 3.3%; 2) an annual population growth rate of 0.5% during 2012-2030; 3) an annual urbanization rate growth of 1ppt during 2012-30; and 4) an industrial wastewater discharge growth rate of 0.5% per year.

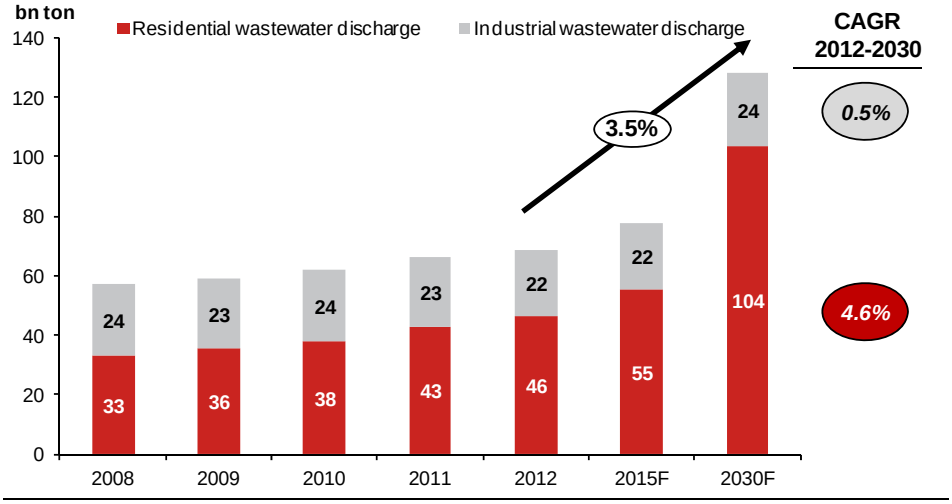
Based on these assumptions, we expect total wastewater generation to reach approximately 77.6/127.8bn tons by 2015F/30F, respectively, and wastewater discharge to increase at a CAGR of 4.3% for 2012-15F and 3.5% CAGR for 2012-30F.

Fig. 33: China water: Nomura estimates for wastewater discharge – breakdown by residential and industrial

	Unit	2008	2009	2010	2011	2012	2015F	2030F	*2012-30 CAGR*	*2012-15 CAGR*
Residential water consumption	bn ton	72.9	74.8	76.6	79.0	72.9	80.4	131.0	*3.3%*	
Residential wastewater discharge	bn ton	33.0	35.5	38.0	42.8	46.3	**55.2**	**103.6**	*4.6%*	*6.0%*
Total population	mn	1,328.0	1,334.5	1,340.9	1,347.4	1,354.0	1,374.5	1,481.2	*0.5%*	
Urban population	mn	624.0	645.1	669.8	690.8	711.8				
Urbanization rate	%	47.0%	48.3%	49.9%	51.3%	52.6%	55%	70%	*1.0%*	
Industrial wastewater discharge	bn ton	24.2	23.5	23.8	23.1	22.2	**22.5**	**24.2**	*0.5%*	*0.5%*
y-y growth	%		-3.0%	1.3%	-2.8%	-4.0%				
Total wastewater discharge	**bn ton**	**57.2**	**59.0**	**61.7**	**65.9**	**68.4**	**77.6**	**127.8**	***3.5%***	***4.3%***

Source: National Bureau of Statistics, 12th FYP of China Urban-rural development, Nomura estimates

Fig. 34: China water: Wastewater discharge projections



Source: National Bureau of Statistics, 12th FYP of China Urban-rural development, Nomura estimates

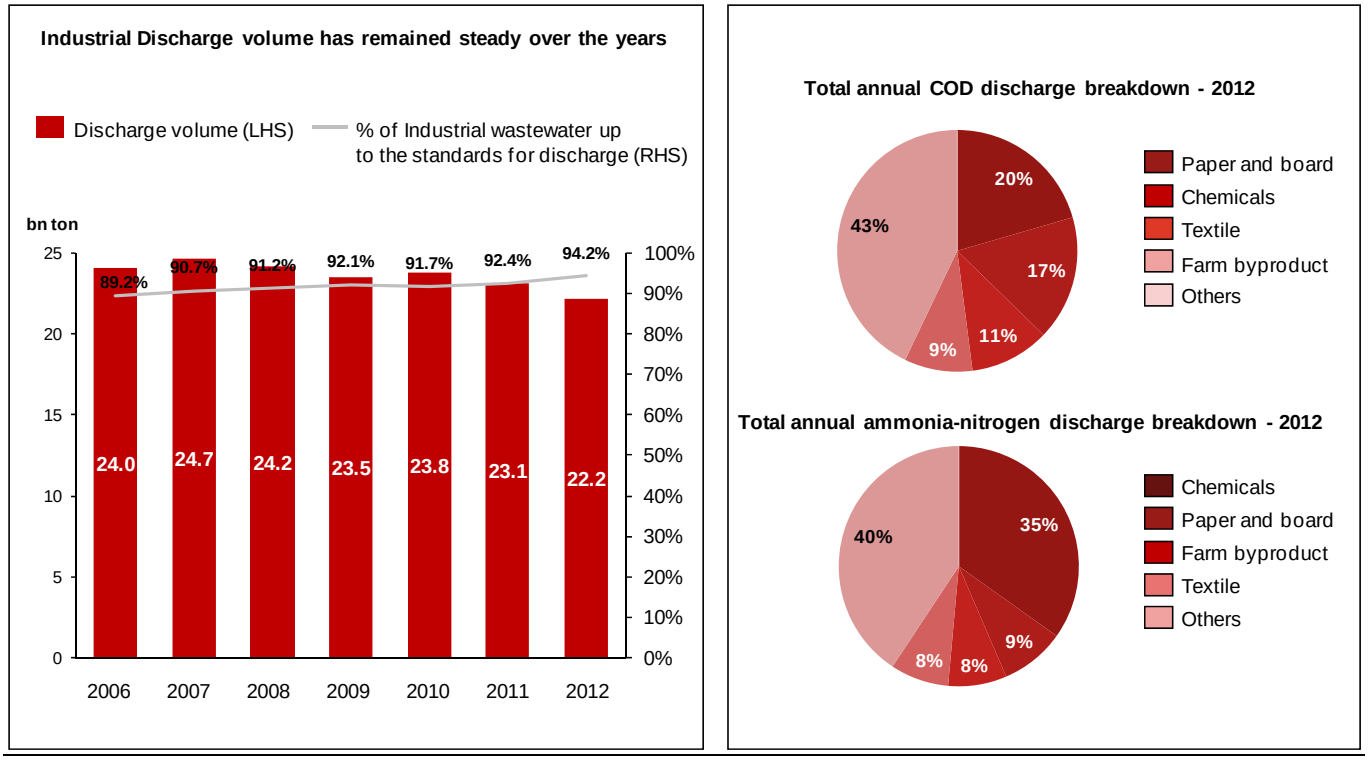
Residential wastewater accounts for the majority of total wastewater treated, with cities still comprising the largest portion of China's treatment capacity

Chinese residents consume only 15-20 litres of fresh water per day, much lower than the average consumption of residents in developing and developed countries, which are 20-100 litres and 150-300 litres per day, respectively, according to UNESCO. However, with accelerating modernization and urbanization in China, we expect greater demand for water in the long run, driven by the following two factors: 1) rural populations moving into urban areas and 2) newly built infrastructures to support the increase in water usage capacity. In particular, we believe the trend of urbanization should gradually promote higher per capita water consumption, eg, a conventional toilet flush consumes 10-15 litres, while a shower consumes 15-35 litres per minute and a full bath 150 litres – all of which may not be accessible to rural populations.

Industrial wastewater discharge will remain relatively stable

As the Chinese government continues its attempt to shift China from its high energy consuming, heavily polluting development route to a more environmentally friendly and sustainable path, we expect industrial wastewater discharge levels to remain relatively stable going forward. The Central government has made a declaration that it will phase out inefficient production capacity in the metals, cement and chemicals industries so as to control pollution emissions. In fact, industrial wastewater discharge levels have remained stable or even on a downward trend over the last ten years, according to the National Bureau of Statistics. However, certain emerging industries that rely on intensive water consumption (eg, coal-chemical/shale-gas) are likely to be the next growing points of industrial wastewater discharge, if promoted.

Fig. 35: China water: Industrial wastewater discharge overview - 2012



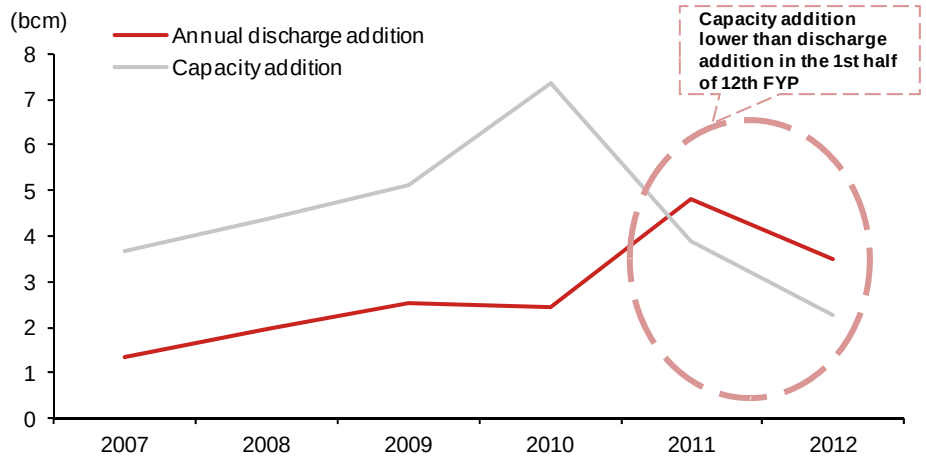
Source: National Bureau of Statistics, CEIC, Nomura research

Urban wastewater treatment capacity addition to accelerate in the 2H of 12th FYP

In comparison with annual wastewater generation, treatment capacities lag far behind volume demand. In recent years, China has seen significant improvement in its water and wastewater infrastructures. Reasonably, the annual capacity addition should outpace the annual wastewater discharge addition given the current utilization is still around 90%, similar as the situation during 2006-10 (the 11th Five-year Period). However, we see an annual capacity shortage – capacity addition less than discharge addition in the first half of the 12th Five-year Period (2011-15). According to the 12th

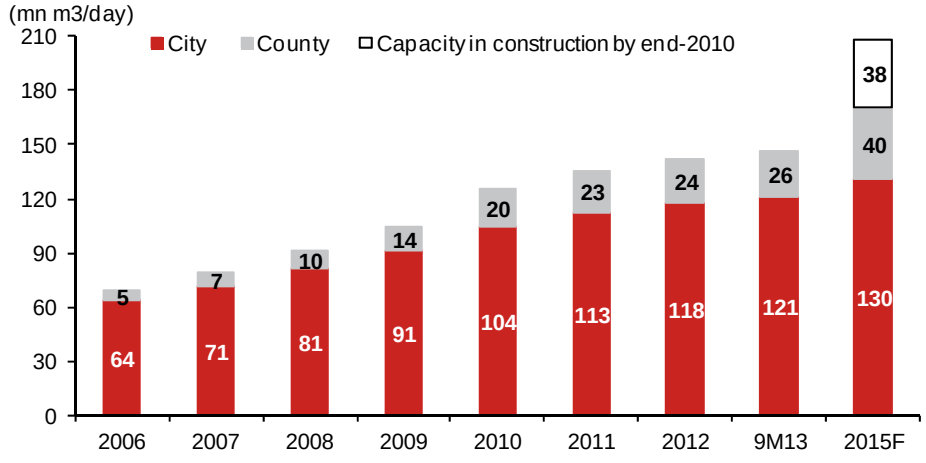
FYP of urban wastewater treatment, daily wastewater treatment capacity should reach 208.1mn m3 by end-2015 (incl. the capacity under construction of 37.6mn m3 by end-2010), while the daily capacity by 9M13 was only 146.6mn m3 (9M13 addition: 5.4mn m3). Hence, we believe the capacity addition will be in a rush during the 2H of the 12th FYP, with more than 60mn m3 to complete in two years, similar as the tail-heavy capacity addition cycle in the 11th Five-Year-Period.

Fig. 36: China water: Annual discharge / capacity addition comparisons



Source: National Bureau of Statistics, Nomura research

Fig. 37: China water: Residential wastewater treatment capacity (incl. 12th FYP target)



Source: National Bureau of Statistics, 12th FYP of Urban-rural Wastewater Treatment Development, Nomura research

Wastewater project IRR in China

We project an IRR of 13.4% from a common wastewater treatment project with a designed annual wastewater treatment capacity of 36.5mn tons vs. CEI and BEW's guidance of 10-13%. Key underlining assumptions include a utilization rate of 75%, loan interest rate of 5% and wastewater disposal tariff of CNY1.0/ton in the project timeline of 30 operating years.

Fig. 38: China water: IRR analysis of a typical wastewater treatment project as of 2014 YTD

Major assumptions			
Daily wastewater treatment capacity (m3)	100,000	Debt percentage	50.0%
Annual wastewater treatment capacity (mn ton)	36.5	Loan interest rate	5.0%
Utilization rate	75%	Total capex (in mn CNY)	150.0
Waste water disposal CNY/ton	1.00	Annual depreciation (in mn CNY)	5.0
Project life time (yrs)	30		
Variable management expense as % of revenue	5.0%	Income tax rate:	
Fixed operating expense as % of depreciation	10.0%	Yr. 1-3	0.0%
Working capital as % of revenue	8.0%	Yr. 2-6	12.5%
Variable operating expense as % of revenue	17.0%	Yr. 6-25	25.0%
Wastewater treatment Project IRR			**13.4%**

Source: Nomura estimates

Fig. 39: China water: Sensitivity analysis of wastewater project's IRR

Sensitivity Analysis of Wastewater Treatment project								
	Wastewater treatment tariff in CNY per cubic meters							
		0.7	0.8	0.9	1.0	1.1	1.2	1.3
Utilization Rate	55%	4.6%	6.0%	7.3%	8.6%	10.0%	11.3%	12.6%
	60%	5.5%	6.9%	8.4%	9.8%	11.3%	12.7%	14.2%
	65%	6.3%	7.9%	9.5%	11.0%	12.6%	14.2%	15.7%
	70%	7.2%	8.9%	10.6%	12.2%	13.9%	15.6%	17.3%
	75%	8.0%	9.8%	11.6%	**13.4%**	15.2%	17.0%	18.8%
	80%	8.9%	10.8%	12.7%	14.6%	16.5%	18.5%	20.4%
	85%	9.7%	11.8%	13.8%	15.8%	17.9%	19.9%	21.9%
	90%	10.6%	12.7%	14.9%	17.0%	19.2%	21.3%	23.5%
	95%	11.4%	13.7%	15.9%	18.2%	20.5%	22.8%	25.0%
	100%	12.2%	14.6%	17.0%	19.4%	21.8%	24.2%	26.6%

Source: Nomura estimates

Favourable policies give strong support

Primary guideline – 12th FYP

"The 12th FYP of Wastewater Treatment and Recycling" published on Apr 2012 clearly noted the 2015F target for the development of wastewater industry, with a total investment of CNY430bn. We recap the highlights as follows:

Fig. 40: China water: The 12th FYP of Wastewater Treatment and Recycling

Indicator		2010	2015F	Addition
Wastewater treatment ratio (%)	City	77.5%	85.0%	7.5%
	County	60.1%	70.0%	9.9%
	Town	<20.0%	30.0%	>10.0%
Sludge treatment ratio (%)	City	<20.0%	70.0%	>50.0%
	County		30.0%	>10.0%
	Town		30.0%	>10.0%
Water recycling ratio (%)		<10.0%	15.0%	>5.0%
Pipeline scale (000' km)		166.0	325.0	159.0
Wastewater treatment capacity (mn m3 per day)		124.8	208.1*	45.7
Upgrade and renovation capacity (mn m3 per day)				26.1
Sludge treatment capacity (mn ton pa.)				5.2
Water recycling capacity (mn m3 per day)		12.1	38.9	26.8

*The 208.1mn m3 per day target includes the construction in progress capacity of 37.6mn m3 per day by end-2010

Source: State Council, Nomura research

State Council also issued a notice – "The State Council's Opinion to Accelerate the Development of the Energy Saving and Environmental Protection Industry" in Aug 2013 to reiterate the importance to meeting the 12th FYP target. As stated previously, the progress in the 1H of the 12th Five-Year Period lagged behind due to central/local government re-elections, implying an acceleration of development in the 2H to meet the 2015F target.

"The Action Plan for Water Pollution Control" with total CNY2tn investment is on the way

However, we believe 12th FYP is just a start with more investments and efforts to come as water pollution control is not a short-term project, but a long-term strategy. MEP has already completed the draft version of the action plan and submitted to the State Council for the final review and approval, according to deputy minister of MEP, Mr Zhai Qing on 11 Feb 2014. He expects the plan to be published by 1H14, with more than CNY2tn to invest in water pollution control during the next five years (2014-18F) vs. total ~CNY1tn planned in the 12th FYP

Release of first official regulation shows the government's dedication to ensure the development of wastewater treatment industry

On 2 Oct 2013, Premier Li Keqiang signed the release of "The Urban Drainage and Sewage Disposal Regulations", effective since 1 Jan 2014, which shows the central government's dedication in promoting the development of the wastewater treatment industry. We believe the government is putting increasing emphasis on the following four factors: 1) higher wastewater treatment rates; 2) improving wastewater discharge standards; 3) increasing recycled water usage; and 4) higher utilization rates of wastewater treatment equipment. Points 1) and 4) indicate higher wastewater treatment capacity, which is the Quantity need; while 2) and 3) will raise requirements for wastewater treatment techniques, or the Quality.

- **From the Quantity aspect**, we discuss the gap between wastewater discharge and treatment, considering urbanization and economic growth. Newly published policies imply the gap will increase, suggesting an even greater need for capacity expansion. We believe all wastewater treatment operators, pipeline manufacturers and other supporting facility manufacturers will benefit from the ramp-up in capacity.
- **From the Quality aspect,** higher discharge standards and recycle water usage require technical improvements for all current wastewater treatment plants, gradually transforming from traditional techniques (oxidation ditch, A2/O, SBR) to bio-membrane techniques (MBR, CMF).

In addition, such regulations also clarify the local government's obligation and the punishment methods, which will enhance the enforcement of the 12th FYP.

Land disposal to fund water-related capex

The Ministry of Finance announced on July 8, 2011 that local governments have to allocate 10% of proceeds from land disposals (after deducting all the related expenses) to future investments in construction of agricultural land and water resources starting from July 1, 2011. This is consistent with the "No. 1 Document", which framed China's water policies for the next decade, to double water conservancy investments to CNY400bn p.a., or a total of CNY4tn over the next ten years. The document also called for: 1) higher water tariffs; 2) government funding to help pay for projects; and 3) officials to be held liable for water quality.

Potential upside from tariff hikes

We believe tariff hikes in water and wastewater treatments are major revenue/project IRR drivers for the water resource protection industry. China has experienced numerous hikes in industrial and residential water tariffs, as well as wastewater treatment tariffs in the past ten years. Average wastewater treatment tariffs in China increased from CNY0.3/ton in 2001 to CNY0.83/ton by Oct 2013 for the 36 biggest cities, representing an ~10% CAGR over this period.

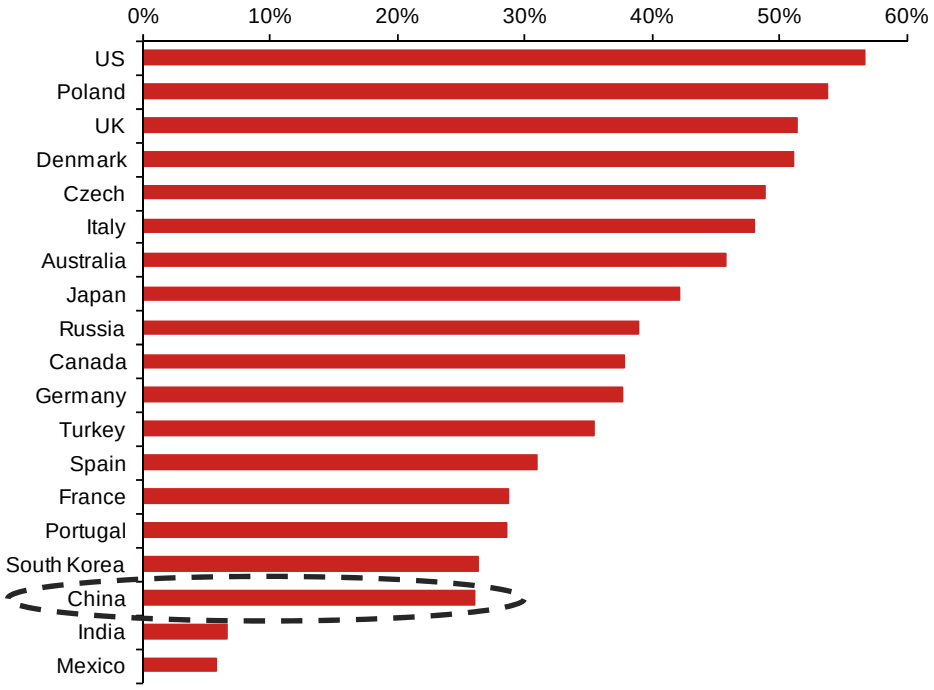
We estimate wastewater treatment tariffs will continue to raise rapidly during the 12th Five-year Plan based on:

- State Council "issued a comprehensive energy reduction program of work notice" in 2007 targeting a wastewater treatment tariff of no less than CNY0.8/ton, which has yet to be achieved for many tier 2-3 cities;
- The average cost for wastewater treatment is c.CNY1.1/ton (excluding cost of pipeline construction and sludge disposal) or CNY1.7/ton (including pipeline construction and sludge disposal costs), based on the national grade 1B discharge standard;

- China's wastewater tariff as a percentage of total water tariff is still low compared to global peers; and
- China's water tariff expenses as a percentage of household disposal income compared to other global peers is still low (China <1% vs. developed countries of 3-5%), despite of recent years' hikes.

We believe this leaves ample room for further government subsidization and tariff hikes.

Fig. 41: China water: Wastewater tariff proportion in total water tariffs

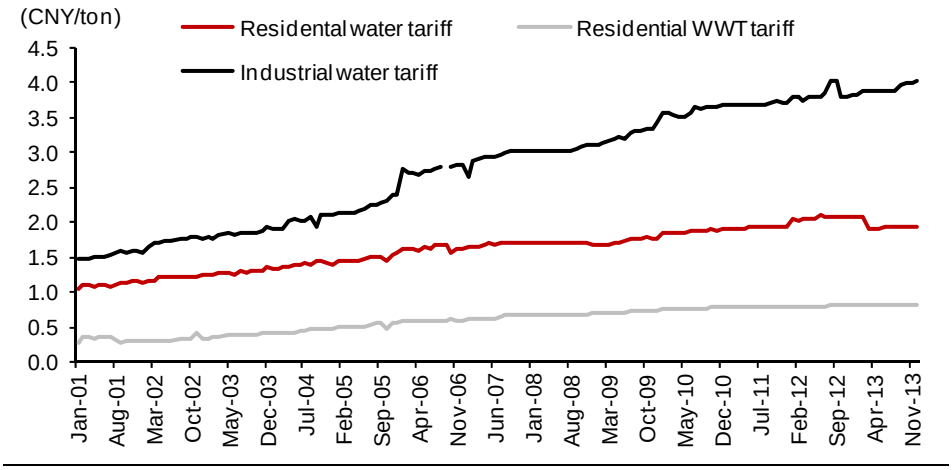


Source: World Bank, Nomura research

We have seen recent hikes in water tariffs (incl. WWT tariff)

Water/wastewater tariff hikes continued during 2012-13 in many cities, eg, Beijing, Nanjing, Guilin, Dongguan, Foshan, etc., which is a positive sign for the water industry. According to h2o-China, there were a total 51 regions implementing tap water tariff hikes, with 27 having wastewater tariffs increased. Currently, besides these big cities, this trend is gradually occurring in tier 2-3 cities and we expect more small cities/counties to follow in the next few years.

Fig. 42: China water: Water tariff keeps its upward trend in the past decade



Source: CEIC, Nomura research

China waste-to-energy sector – In pursuit of the clean and efficient solid waste treatment

Given the scarcity of land resources and higher environmental requirements, China's WTE industry, along with the rapid urbanization of a modern China, will act as the veins of the cities, collecting, processing and recycling the increasing urban solid wastes.

China's investment in solid waste treatment

The Chinese government sped up its efforts in the 11th Five-Year Plan to improve the regulatory framework for modern waste management and such determination continues in the 12th FYP. A series of laws were passed over the last decade that introduced more detailed regulations on various types of waste such as hazardous, electronic, and medical waste. The 12th Five-Year Plan emphasized the concept of the "3 Rs" (Reduce, Recycle, Reutilize "减量化，资源化，无害化"); most cities have followed the central government's direction and implemented projects to increase recycling and re-utilization of waste. During the 12th Five-Year Plan, China will focus on improving pollution treatment technology. Chinese companies have also been encouraged to increase R&D, with a focus on developing more eco-friendly technologies.

Total CNY800bn is estimated to invest in solid waste treatment in 12th Five-Year Period

Approximately CNY210bn was invested by China's government in solid waste treatment and management in the 11th Five-Year Period. The Chinese Academy for Environmental Planning expects that CNY800bn will be allocated to solid waste treatments and management in the 12th Five-Year Plan, representing a nearly four-fold increase and a 31% CAGR during the 12th Five-Year period. Alongside rapid growth in waste treatment investment, we believe waste-to-energy (WTE) will outshine other waste treatment methods in terms of capacity growth, since it has higher environmental standards and energy efficiency but accounts for less than 20% of China's current residential waste treatment, vs. 80% being processed by landfill sites. Thus we expect waste-to-energy incineration to enter into a high growth period under the strong policy support of the central government.

Fig. 43: China WTE: Comparison of investments in waste treatments during the Five-Year Periods

CNY bn	9th FYP	10th FYP	11th FYP	12th FYP
Total environmental protection investment	345	839	1,375	3,400
Solid w aste investment	50	90	210	800
Urban solid w aste investment	10	20	56	264
Solid waste as a % of total EP investment	*14.5%*	*10.7%*	*15.3%*	*23.5%*
USW as a % of solid waste investment	*20.0%*	*22.0%*	*26.7%*	*33.0%*

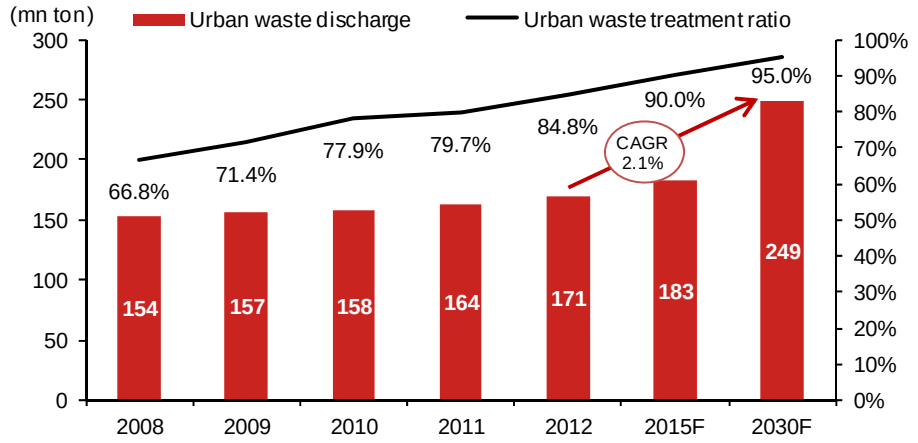
Source: State Council, Nomura research

From above, we see that urban solid waste (USW)'s proportion in the solid waste investment or total environmental protection investment is increasing, so as to cope with the rising capacity construction demand required by the 12th FYP.

Annual municipal solid waste (USW) generation to grow at a 2.1% CAGR for 2012-30F, while WTE/incineration growth stands out to be significant

Similar as the previous estimation of wastewater discharge, given the assumption of 1) the annual population growth is at 0.5% between 2012-30; 2) the urbanization rate to reach 55% by 2015 and 70% by 2030, we estimate that the USW discharge to be 183.0/248.8mn ton by 2015/30F, respectively, implying a 2012-30F CAGR of 2.1%.

Fig. 44: China waste: Annual urban waste discharge projections



Source: National Bureau of Statistics, Nomura research

Although total USW discharge growth seems mild, we believe the incineration treatment capacity/amount will far outpace traditional landfill treatments, given the competitive advantage among all treatment methods and China's current status.

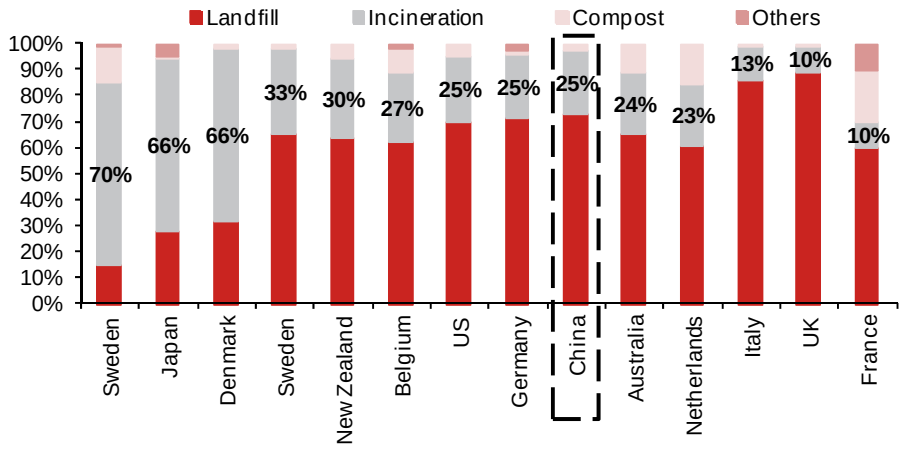
Fig. 45: China waste: Comparison of different kinds of waste treatment methods

	Incineration	Landfill	Compose
Strengths	-Low transportation cost - Proximity to waste areas - Less space needed - Optimizing usage through power and heat output	-Slightly lower operation cost - Low technology site	- Optimizing usage by outputting compost
Weakness	- High initial investment - High operation cost - Dioxin emission - High caloric value waste required	-Odor pollution - Facility replacement - Leachate treatment - Potential water and soil contamination - Long recycling cycle	- Heavy-weight organic ingredients required
Applicable areas	-Limited space - Dense population	-Vast area - Small population	- Areas with secure compost demand

Source: Nomura research

Among the developed countries, Japan, Sweden, and Denmark rely heavily on incinerators to manage their waste. Waste combustion is particularly popular in Japan where land is scarce. Denmark and Sweden have been leaders in using energy generated from incinerators in localized combined heat and power facilities, which have supported their district-heating schemes for over a century.

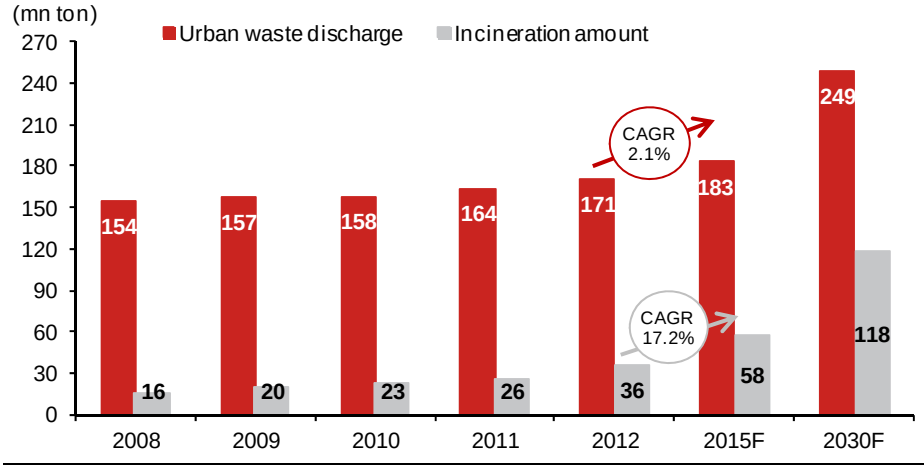
Fig. 46: China waste: Incineration treatment proportion comparison – 2012



Source: State Council, OECD, United Nation, Nomura research

Given China's land resources scarcity due to the high population, we think China is likely to follow the USW treatment development route of Japan. Such estimates are in line with the 12th FYP's target of 35% of USW to be treated by incineration by 2015F vs. 25% by 2012 per National Bureau of Statistics (if, according to another source - the 2012 Environmental Statistics Yearbook published by MEP, total amount treated by incineration was only 18mn tons among total 197mn ton treated in 2012, only accounting for ~9%). With our estimate that total incineration rate will be around 50% by 2030F (given 12th FYP has already required incineration rate to be 48% for eastern region), we forecast that incineration treatment amount will grow at a CAGR of 17.2% and 4.9% for 2012-15F and 2015-30F, respectively.

Fig. 47: China waste: Incineration treatment amount growth between 2012-30F

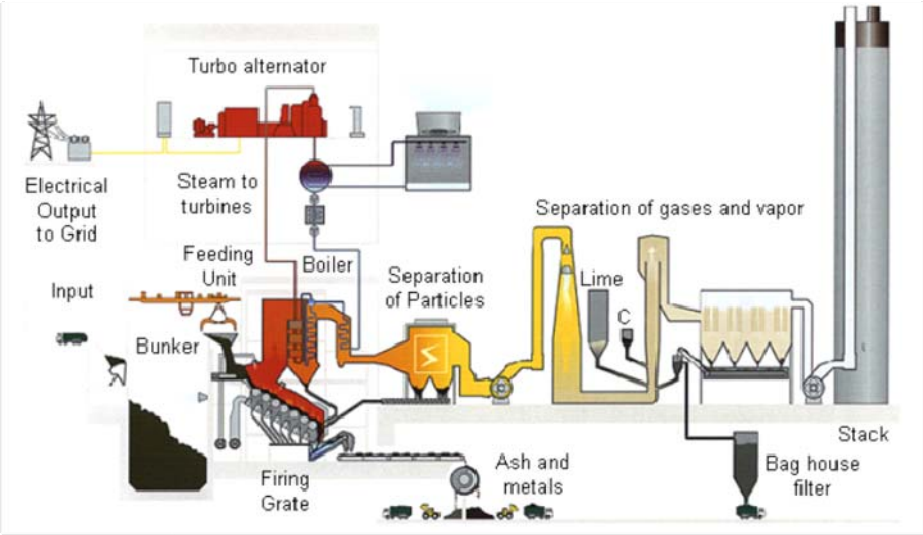


Source: National Bureau of Statistics, Nomura estimates

Waste incineration plant schematic

A typical waste incineration plant is composed of several units that have specific functions, and together they recover the energetic content of USW (WTE project).

Fig. 48: China waste: Demonstration of a typical WTE project



Source: WtERT, Nomura research

Waste-to-energy project IRR

We performed an IRR analysis of a typical waste-to-energy project in China and found that it generated an IRR of 15.5% (vs. CEI's guidance of 12-15%). The main assumptions are a feed-in-tariff (FIT) of CNY0.65/kWh, a waste disposal fee of CNY95/ton, utilization of 75% and a debt percentage of 40%.

Fig. 49: China waste: IRR analysis of a typical WTE project as of 2014 YTD

Major assumptions			
Power generation capacity (MW)	18.0	Debt percentage	40.0%
Daily waste treatment capacity (ton)	1,000	Loan interest rate	5.0%
Utilization rate	75%	Total capex (mn CNY)	550.0
On-grid tariff (CNY/kWh)	0.65	Annual depreciation (mn CNY)	25.0
Waste treatment fee (CNY/ton)	95.0		
Project life time (yrs)	25		
		Income tax rate:	
		Yr. 1-3	0.0%
Variable management expense as % of revenue	10.0%	Yr. 2-6	12.5%
		Yr. 6-25	25.0%
WTE Project IRR			**15.5%**

Source: Nomura estimates

Fig. 50: China waste: Sensitivity analysis of WTE project's IRR

WTE Project IRR Sensitivity Analysis							
		Waste disposal fees in CNY per tonne					
Electricity tariff in CNY per kWh		110	105	100	95	90	85
	0.69	17.6%	17.2%	16.8%	16.5%	16.1%	15.8%
	0.67	17.1%	16.7%	16.4%	16.0%	15.7%	15.3%
	0.65	16.6%	16.3%	15.9%	**15.5%**	15.2%	14.8%
	0.63	16.2%	15.8%	15.4%	15.1%	14.7%	14.4%
	0.61	15.7%	15.3%	15.0%	14.6%	14.3%	13.9%
	0.59	15.2%	14.9%	14.5%	14.2%	13.8%	13.5%

Source: Nomura estimates

Rapid growth and stable profitability backed by government policies

To enhance the living standards of Chinese nationals and to improve the country's living environment, the government has published a series of policies to promote the development of the waste treatment industry, especially the incineration/WTE sub-sector.

Governmental subsidies on waste incineration to sustain

Government subsidies on waste incineration plants vary from CNY30/ton to CNY150/ton, which are mainly determined by the cost of incineration equipment.

Fig. 51: China waste: Governmental subsidies guided by the central government

Equipment type	Capex (CNY '000/ton)	Subsidies (CNY/ton)
Furnace incineration plant (imported equipment)	450~500	80-150
Furnace incineration plant (imported technology)	450~500	60-130
Furnace incineration plant (domestically manufactured)	300~350	50-110
Fluidized bed (domestically manufactured)	250~300	30-90

Source: State Council, Nomura research

Riding on "The 12th FYP of the Development of Urban-rural Waste Treatment"

The 12th FYP is the primary guideline of the entire industry, with total investment of CNY263.6bn. We recap the highlights of the 12th FYP as follows:

Fig. 52: China waste: Key target of the 12th FYP of The Development of Urban-rural Waste Treatment

	2010	2015F	Addition
Waste treatment capacity (kilo ton/day)	456.9	871.5	414.6
- City	387.6	653.0	265.4
- County	69.3	218.0	148.7
Waste treatment ratio (%)	63.5%	n.a.	n.a.
- City	77.9%	90.0%	12.1%
- County	27.4%	70.0%	42.6%
Incineration treatment ratio (%)	18.8%	35.0%	16.2%
- Eastern region	n.a.	48.0%	n.a.

Source: State Council, Nomura research

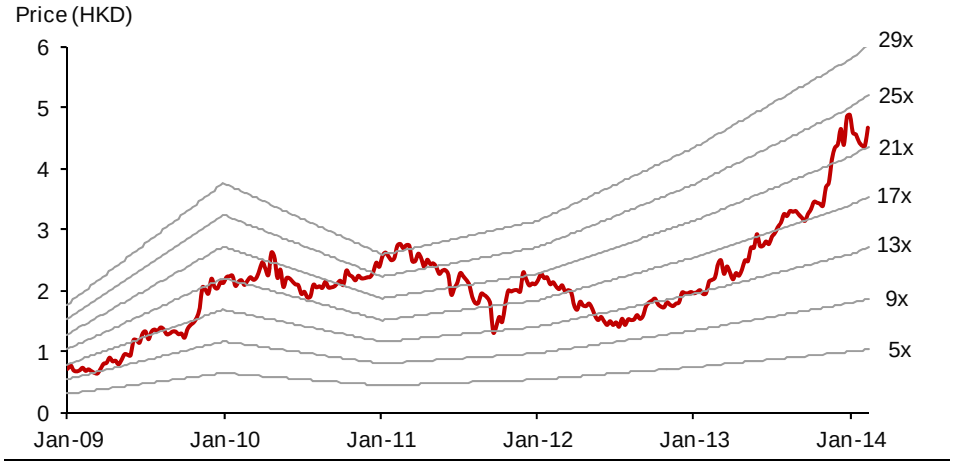
As previously mentioned, in addition to the rapid growth of waste treatment capacity to achieve the ~100% waste treatment rate, we see the incineration treatment target to be the catalyst of WTE industry.

NDRC's notice to set benchmark on-grid tariff for WTE ensure the profitability

On 28 Mar 2012, NDRC published "The Notice of Improving the Pricing Policy for Waste-to-Energy Project" ("关于完善垃圾焚烧发电价格政策的通知") to set the benchmark on-grid tariff of CNY0.65/kWh (incl. VAT) for WTE projects, instead of the previous CNY0.25/kWh subsidy on top of local benchmark coal-fired on-grid tariff. Such benchmark on-grid tariff ensures WTE projects' profitability especially under current situation that coal price remains weak with overhang of the coal-fired on-grid tariff cut.

Appendix I – P/E band charts

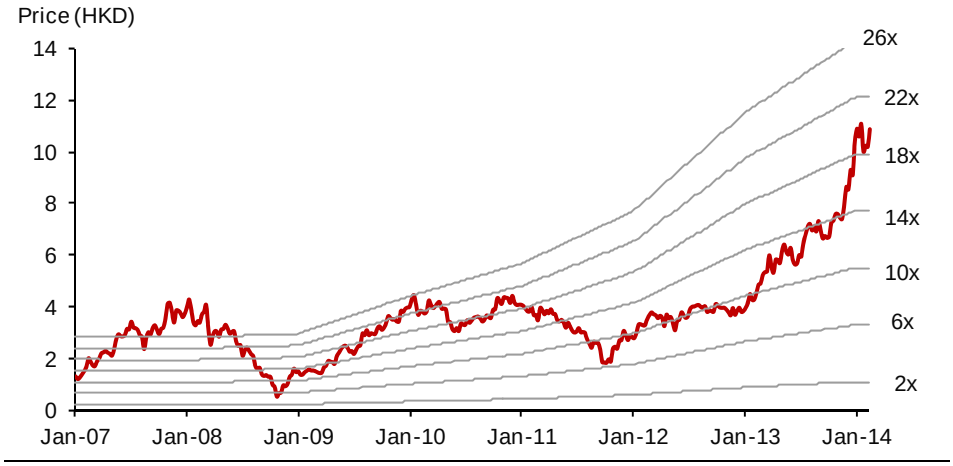
Fig. 53: BEW: 1-year forward P/E band chart



Note: As of 3 Mar 2014 close

Source: Bloomberg, Nomura research

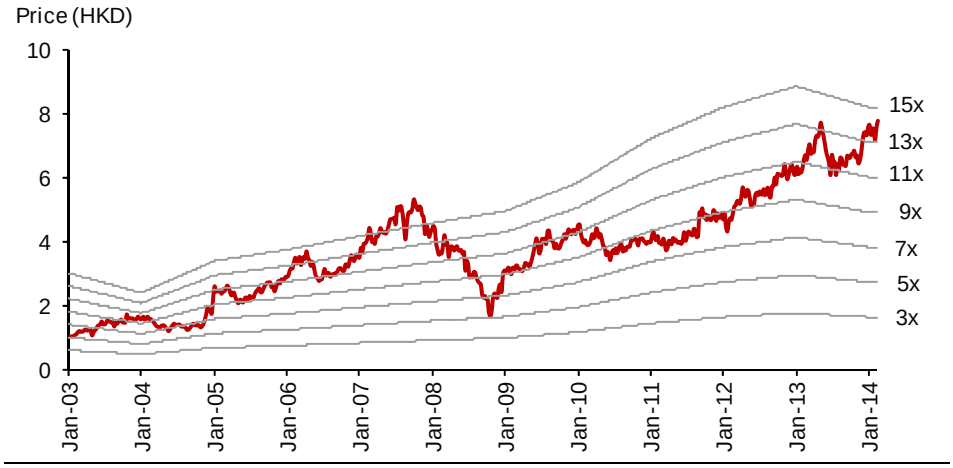
Fig. 54: CEI: 1-year forward P/E band chart



Note: As of 3 Mar 2014 close

Source: Bloomberg, Nomura research

Fig. 55: GDI: 1-year forward P/E band chart



Note: As of 3 Mar 2014 close

Source: Bloomberg, Nomura research

NOMURA

Beijing Enterprises Water

0371.HK 371 HK

EQUITY: POWER & UTILITIES

Buying spree – acquisition-led growth

Move to Buy rating and HKD6.50 TP

Action: Move to Buy rating and HKD6.50 TP

Following a transfer of analyst coverage of Beijing Enterprises Water (BEW), we move from Suspended to a Buy call with a TP of HKD6.50, which implies 17% upside, given:

- We expect BEW's water treatment capacity to double by 2015F from end-2012, mainly attributable to aggressive M&A at reasonable valuations (project IRR >10%) as the market has entered a consolidation period with various potential acquiring targets. The company's position as the largest WWT player should also help to maintain its M&A growth, in our view.
- BEW's organic growth, mainly the business expansion along the value chain, stands to directly benefit from rapid growth in the sludge treatment industry pursuant to the 2015 goals set in the 12th FYP and the rising treatment standards required by the central government.
- We see strong earnings visibility, with an FY13-15F EPS CAGR of 35%, backed by a strong project pipeline and contributions from acquired assets.

Catalysts: Project announcements, water tariff hikes, favourable government policy on sludge treatment and river / riverbank renovation

Valuation: Undemanding considering visible capacity/earnings growth and strong government support under 12th FYP

BEW is trading at 28x FY14F P/E against an FY13-15F EPS CAGR of 35%, based on our estimates. Valuation is undemanding, in our view, considering our expectations for: 1) capacity growth to sustain through M&A; 2) profitability to increase with development of the sludge treatment business and the discharge standard renovation; and 3) future catalyst from non-traditional water resources. Buy with TP of HKD6.50 based on DCF.

Global Markets Research

5 March 2014

Rating From Suspended	**Buy**
Target price From N/A	HKD 6.50
Closing price 3 March 2014	HKD 5.55
Potential upside	+17.1%

Anchor themes

In addition to rapid structural industry growth pursuant to the 12th FYP, we see government support persisting beyond 2015F. We expect business expansion along the value chain, eg, sludge treatment, to offer additional growth for WWT plays.

Nomura vs consensus

Our 2015F earnings estimate is 15% ahead of consensus.

Research analysts

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31 Dec	FY12		FY13F		FY14F		FY15F
Currency (HKD)	Actual	Old	New	Old	New	Old	New
Revenue (mn)	3,727	N/A	6,778	N/A	10,108	N/A	13,900
Reported net profit (mn)	750	N/A	1,152	N/A	1,710	N/A	2,313
Normalised net profit (mn)	750	N/A	1,152	N/A	1,710	N/A	2,313
FD normalised EPS	10.86c	N/A	13.79c	N/A	19.12c	N/A	25.54c
FD norm. EPS growth (%)	21.5	N/A	27.0	N/A	38.6	N/A	33.6
FD normalised P/E (x)	51.1	N/A	40.2	N/A	29.0	N/A	21.7
EV/EBITDA (x)	52.8	N/A	35.9	N/A	26.6	N/A	19.6
Price/book (x)	4.5	N/A	3.6	N/A	3.2	N/A	2.9
Dividend yield (%)	0.8	N/A	0.9	N/A	1.2	N/A	1.7
ROE (%)	9.1	N/A	10.8	N/A	12.4	N/A	14.8
Net debt/equity (%)	106.1	N/A	68.8	N/A	89.6	N/A	88.5

Source: Company data, Nomura estimates

Key company data: See page 2 for company data and detailed price/index chart

Key data on Beijing Enterprises Water

Income statement (HKDmn)

Year-end 31 Dec	FY11	FY12	FY13F	FY14F	FY15F
Revenue	**2,654**	**3,727**	**6,778**	**10,108**	**13,900**
Cost of goods sold	-1,746	-2,290	-4,559	-6,890	-9,467
Gross profit	**908**	**1,437**	**2,219**	**3,218**	**4,432**
SG&A	-301	-440	-668	-910	-1,181
Employee share expense	0	0	0	0	0
Operating profit	**607**	**997**	**1,551**	**2,308**	**3,251**
EBITDA	**655**	**1,067**	**1,600**	**2,355**	**3,295**
Depreciation	-9	-25	-48	-46	-44
Amortisation	-38	-45	0	0	0
EBIT	607	997	1,551	2,308	3,251
Net interest expense	-313	-494	-552	-626	-734
Associates & JCEs	21	55	55	56	57
Other income	546	534	622	751	794
Earnings before tax	**861**	**1,092**	**1,677**	**2,489**	**3,368**
Income tax	-170	-225	-345	-513	-694
Net profit after tax	**691**	**867**	**1,331**	**1,977**	**2,674**
Minority interests	-90	-117	-179	-267	-361
Other items	0	0	0	0	0
Preferred dividends	0	0	0	0	0
Normalised NPAT	**601**	**750**	**1,152**	**1,710**	**2,313**
Extraordinary items	0	0	0	0	0
Reported NPAT	**601**	**750**	**1,152**	**1,710**	**2,313**
Dividends	-207	-290	-403	-599	-810
Transfer to reserves	**393**	**461**	**749**	**1,112**	**1,504**
Valuation and ratio analysis					
Reported P/E (x)	62.1	51.1	37.0	27.7	20.8
Normalised P/E (x)	62.1	51.1	37.0	27.7	20.8
FD normalised P/E (x)	62.1	51.1	40.2	29.0	21.7
FD normalised P/E at price target (x)	72.7	59.8	47.1	34.0	25.4
Dividend yield (%)	0.5	0.8	0.9	1.2	1.7
Price/cashflow (x)	na	91.3	22.9	20.9	12.6
Price/book (x)	4.7	4.5	3.6	3.2	2.9
EV/EBITDA (x)	83.6	52.8	35.9	26.6	19.6
EV/EBIT (x)	90.0	56.4	36.9	27.1	19.9
Gross margin (%)	34.2	38.6	32.7	31.8	31.9
EBITDA margin (%)	24.7	28.6	23.6	23.3	23.7
EBIT margin (%)	22.9	26.8	22.9	22.8	23.4
Net margin (%)	22.6	20.1	17.0	16.9	16.6
Effective tax rate (%)	19.7	20.6	20.6	20.6	20.6
Dividend payout (%)	34.5	38.6	35.0	35.0	35.0
Capex to sales (%)	131.6	43.7	53.7	59.6	30.7
Capex to depreciation (x)	375.6	64.6	75.2	130.0	96.1
ROE (%)	10.0	9.1	10.8	12.4	14.8
ROA (pretax %)	3.3	4.2	5.3	6.2	7.4
Growth (%)					
Revenue	-58.2	40.4	81.8	49.1	37.5
EBITDA	-30.5	63.1	49.9	47.2	39.9
EBIT	-32.7	64.3	55.5	48.8	40.8
Normalised EPS	-16.8	21.5	38.1	33.4	33.5
Normalised FDEPS	-6.0	21.5	27.0	38.6	33.6
Per share					
Reported EPS (HKD)	8.94c	10.86c	15.00c	20.01c	26.72c
Norm EPS (HKD)	8.94c	10.86c	15.00c	20.01c	26.72c
Fully diluted norm EPS (HKD)	8.94c	10.86c	13.79c	19.12c	25.54c
Book value per share (HKD)	1.17	1.23	1.53	1.71	1.91
DPS (HKD)	0.03	0.04	0.05	0.07	0.09

Source: Company data, Nomura estimates

Relative performance chart (one year)

Source: ThomsonReuters, Nomura research

(%)	1M	3M	12M
Absolute (HKD)	26.1	30.0	126.5
Absolute (USD)	26.2	29.8	126.4
Relative to MSCI China	25.0	38.6	131.2
Market cap (USDmn)	6,190.6		
Estimated free float (%)	46.1		
52-week range (HKD)	5.71/2.16		
3-mth avg daily turnover (USDmn)	15.76		
Major shareholders (%)			
Beijing Enterprises Holdings	49.8		
Tenson Investment	8.9		

Source: Thomson Reuters, Nomura research

Notes

Cashflow (HKDmn)

Year-end 31 Dec	FY11	FY12	FY13F	FY14F	FY15F	Notes
EBITDA	655	1,067	1,600	2,355	3,295	
Change in working capital	-568	1,165	-5	-435	167	
Other operating cashflow	-593	-1,812	426	452	517	
Cashflow from operations	**-506**	**420**	**2,021**	**2,372**	**3,980**	
Capital expenditure	-3,493	-1,629	-3,637	-6,026	-4,268	
Free cashflow	**-3,999**	**-1,209**	**-1,615**	**-3,655**	**-288**	
Reduction in investments	-1	-4	0	0	0	
Net acquisitions	0	0	0	0	0	
Reduction in other LT assets	-4,438	-4,088	-5,304	-6,409	-3,617	
Addition in other LT liabilities	369	158	812	1,161	0	
Adjustments	4,376	3,810	4,774	5,533	3,884	
Cashflow after investing acts	**-3,694**	**-1,333**	**-1,333**	**-3,370**	**-22**	
Cash dividends	0	-207	-290	-403	-599	
Equity issue	3,385	0	2,292	0	0	
Debt issue	-2,231	4,096	-75	2,970	758	
Convertible debt issue	0	0	0	0	0	
Others	2,526	-213	-552	-626	-734	
Cashflow from financial acts	**3,680**	**3,676**	**1,376**	**1,941**	**-574**	
Net cashflow	**-14**	**2,343**	**43**	**-1,429**	**-596**	
Beginning cash	1,962	1,948	4,291	4,334	2,904	
Ending cash	1,948	4,291	4,334	2,904	2,308	
Ending net debt	6,812	8,984	8,866	13,265	14,619	

Source: Company data, Nomura estimates

Balance sheet (HKDmn)

As at 31 Dec	FY11	FY12	FY13F	FY14F	FY15F	Notes
Cash & equivalents	1,948	4,291	4,334	2,904	2,308	
Marketable securities	0	0	0	0	0	
Accounts receivable	4,018	2,800	4,001	5,762	6,597	
Inventories	13	30	25	36	50	
Other current assets	5,676	6,558	7,095	6,282	6,736	
Total current assets	**11,654**	**13,679**	**15,454**	**14,985**	**15,691**	
LT investments	3	7	7	7	7	
Fixed assets	233	528	506	484	464	
Goodwill	1,644	1,762	1,762	2,698	2,698	
Other intangible assets	6	17	17	17	17	
Other LT assets	11,209	15,297	20,600	27,010	30,627	
Total assets	**24,750**	**31,290**	**38,347**	**45,202**	**49,505**	
Short-term debt	1,070	2,810	1,551	2,044	2,170	
Accounts payable	2,049	1,919	2,372	3,234	3,753	
Other current liabilities	3,552	4,529	5,803	5,465	6,417	
Total current liabilities	**6,671**	**9,258**	**9,726**	**10,744**	**12,340**	
Long-term debt	5,365	6,593	7,778	10,254	10,886	
Convertible debt	2,326	3,871	3,871	3,871	3,871	
Other LT liabilities	678	836	1,648	2,809	2,809	
Total liabilities	**15,039**	**20,558**	**23,023**	**27,678**	**29,906**	
Minority interest	1,629	2,264	2,444	2,710	3,071	
Preferred stock	0	0	0	0	0	
Common stock	691	691	844	866	866	
Retained earnings	7,184	7,487	11,633	13,349	14,852	
Proposed dividends	207	290	403	599	810	
Other equity and reserves	0	0	0	0	0	
Total shareholders' equity	**8,082**	**8,467**	**12,880**	**14,813**	**16,527**	
Total equity & liabilities	**24,750**	**31,290**	**38,346**	**45,201**	**49,505**	
Liquidity (x)						
Current ratio	1.75	1.48	1.59	1.39	1.27	
Interest cover	1.9	2.0	2.8	3.7	4.4	
Leverage						
Net debt/EBITDA (x)	10.41	8.42	5.54	5.63	4.44	
Net debt/equity (%)	84.3	106.1	68.8	89.6	88.5	
Activity (days)						
Days receivable	612.1	334.7	183.1	176.3	162.3	
Days inventory	2.7	3.5	2.2	1.6	1.6	
Days payable	489.8	317.1	171.8	148.5	134.7	
Cash cycle	125.0	21.1	13.5	29.4	29.2	

Source: Company data, Nomura estimates

Robust growth through acquisition – operating capacity to double in 2013-15F

We expect the M&A wave that started in 2013 at BEW to sustain into 2014-15F, driven by industry consolidation. Together with its solid organic growth, we believe its total operating capacity (including WWT, water supply, recycled-water and desalination) will reach about 15mn tons/day by 2015F, doubling from end-2012.

Aggressive acquisitions push in 2013…

BEW rocked China's water industry in 2013 with its aggressive acquisition of more than 4.5mn tons/day operating capacity and 1.6mn tons/day capacity under development, representing capacity growth of more than 50% through acquisition.

Fig. 56: BEW: Major acquisitions announced in 2013

Project	Announcement date	Total consideration	Capacity in operation	Capacity under development	Total Capacity	Deal status
		CNY mn	ton/day	ton/day	ton/day	
Dongguan water plants	6-Feb-13	515	570,000	0	570,000	Completed
CGEP	21-Mar-13	750	58,000	0	58,000	Completed
Parent injection	24-May-13	1,030	770,000	520,000	1,290,000	Completed
BCEG Environment Development	28-Jun-13	270	937,500	0	937,500	Completed
Standard Water	17-Jul-13	1,250	1,033,000	993,000	2,026,000	Completed
Salcon	12-Sep-13	955	1,145,000	100,000	1,245,000	Est. 1Q2014
Total			**4,513,500**	**1,613,000**	**6,126,500**	
FY2012 capacity			**7,290,000**	**3,200,000**	**10,490,000**	
Growth through acquisition			***61.9%***	***50.4%***	***58.4%***	

Source: Company data, Nomura research

While the balance sheet consolidation will occur in 2014, all acquisitions announced in 2013 will be reflected in BEW's end-2013 capacity (capacity with signed contracts), which will help BEW's 2013 total capacity to exceed 16.0mn tons/day.

…with fair valuation and future upside to lift profitability

Given the newly acquired wastewater treatment (WWT) projects are mostly qualified 1A discharge standard, management expects a higher-than-average tariff and thus a higher IRR, with a hurdle rate of at least >10% for BEW. In general, we view the valuation of these acquisitions as fair based on their FY12 performance. As such, they may offer further upside post acquisition from leveraging on BEW's abundant experience.

Fig. 57: BEW: Replacement cost analysis for two large-scale acquisition

Acquisition analysis	Standard water	Salcon (I+II)
Amount paid (CNY mn)	1,250	955
Liabilities (CNY mn)	920	557
Current assets (CNY mn)	198	262
Enterprise value (CNY mn)	1,973	1,251
Total capacity under operation (mn tons/day)	1.033	1.145
Replacement cost / ton (CNY)	**1,910.0**	**1,092.2**
WWT discharge standard	IA	IB and II
General replacement cost / ton (CNY)	~2,000	~1,400

Source: Company data, Nomura research

M&A opportunities to continue to emerge amid industry consolidation

We do not see the M&A wave as a one-time event for BEW, as we believe the industry is entering a consolidation period:

- **Foreign players to exit:** Previously, largely foreign companies participated in the WWT industry given their leading technology. However, with the development of

domestic water companies, technology is no longer an issue and local governments surely prefer Chinese companies to manage WWT/ water supply plants given that they are utilities in nature. In addition, local players such as BEW can leverage their strong ties with local governments to negotiate better tariffs. Therefore, we expect foreign companies to continue to exit the China market and leave plenty of potential acquisition opportunities (as was the case for BEW's acquisition of SW and Salcon).

- **Small players to be purchased:** Given the central government's requirement for a higher wastewater discharge standard (gradually from 1B to 1A) and the focus on the operating efficiency of the utility sector, we believe small players will be limited by their relatively lower efficiency and outdated technology, plus by diminishing financing resources under the tightening monetary policy of China. This should give BEW its pick of small players to acquire and allow it to seek profitability improvement through efficiency improvements and/or tariff hikes post renovation for discharge standard improvement (as was the case in BEW's acquisition of the Dongguan plants.)

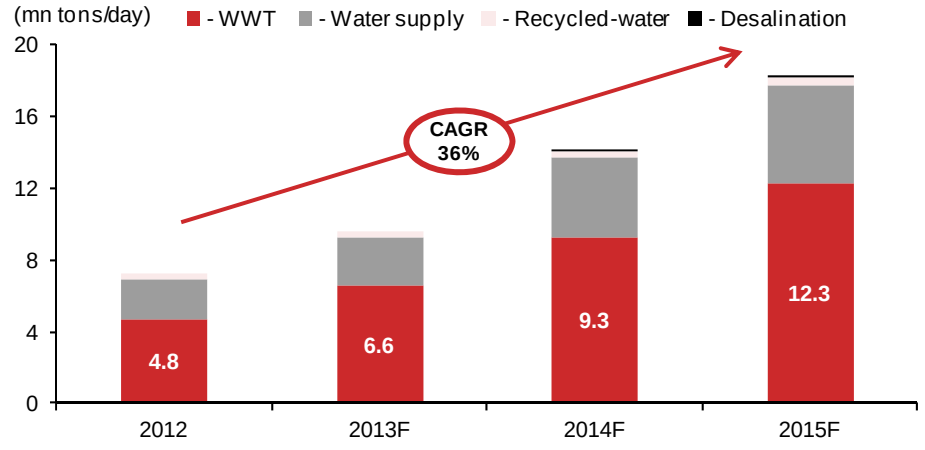
Organic growth to come from business expansion along the value chain

In 1H13, BEW secured total capacity of 0.44mn tons/day through organic growth, representing 4.2% y-y capacity growth or about 8% annualized capacity growth y-y. Although not as impressive as acquisition, BEW has demonstrated its continuous effort to maintain its capability in obtaining projects and to keep its organic growth stable, in our view. In fact, the expansion along the value chain in current WWT projects, such as WWT standard improvement, sludge treatment and water recycling, should also be regarded as organic growth, in our view, given that such projects will be assigned to the current WWT project operators in most cases (we discuss organic growth more later on in this report).

Capacity to double by 2015F, WWT expansion to lead the growth

Overall, based on 1H13's project development status, we estimate BEW will maintain an operating capacity CAGR of 36% over 2012-15F to 18.3mn tons/day, among which 12.3mn tons/day will be WWT capacity, accounting for 67.4% of total operating capacity.

Fig. 58: BEW: Capacity breakdown by business segment, 2012-15F



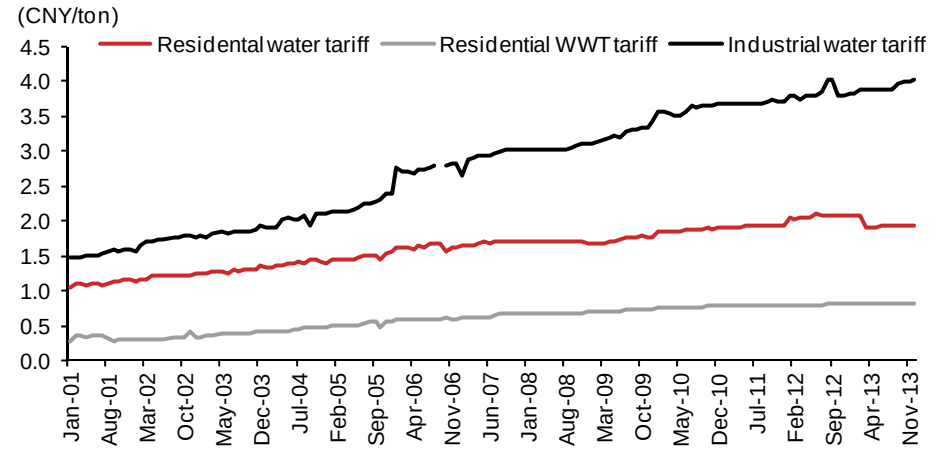
Source: Company data, Nomura estimates

Tariff hikes likely to continue in the next couple of years

Water tariff levels are still low in China

As discussed in our sector report, the average water bill as a % of total household disposable income in China is still low at <1% (vs UN and OECD suggestions for 3-5% as an appropriate range). In addition, WWT fees as a % of total water tariff remain low and cannot fully compensate the average cost if stricter discharge standards are imposed, such as National 1A. We, therefore, see the upward trends for water and WWT tariffs in the past decade (2002-12 CAGR of ~10%) continuing, which is also in line with the central government's guideline to curb natural resource waste by increasing resource prices.

Fig. 59: China: Water tariff trends in the past decade



Source: CEIC, Nomura research

Recently, in a reply letter to the China Environmental Chamber, the NDRC explicitly expressed that the government is obligated to spend tax collected to subsidise and/or invest in urban water supply and other urban utility facilities, and agreed to the Chamber's suggestion to establish a water price subsidising mechanism to compensate for rising water supply and treatment costs. This, in our view, shows the continuous support from the central government to promote the development of water supply and treatment infrastructure.

Discharge standard upgrade and launch of sludge treatment should add weight to tariff re-negotiation

Given the central government's guidance to gradually lift the wastewater discharge standard to at least 1B (1A for eco-parks and large cities) nationwide, BEW stands to leverage on the standard upgrade, as well as the launch of sludge treatment, for tariff adjustment negotiation with local governments.

Together with the recent reiteration of the progressing water tariff mechanism, which generally will lift the average water tariff to increase conservation awareness, we expect BEW to remain a key beneficiary of tariff hikes in the next couple of years. Currently, we assume an average annual tariff hike of 5% during 2014-17F. Moreover, in order to factor in the sludge treatment rate target of 70% by 2015F, we assume an additional WWT tariff contributed by sludge treatment services with 70% of its WWT plants expected to have sludge treatment facilities by 2017F.

Further catalyst from river/riverbank renovation projects

With the world's largest population, China has suffered from its poor average water resource per capita, which is not even one-third of the world average. Any further water body pollution which diminishes existing water resources would add to the pressure.

With the launch of "The Strictest Water Resource Management Regulation" in 2012 and the corresponding assessment methods published in Jan 2013, the protection and friendly use of water resources are being regarded as more important than ever by local officials. We therefore see ample opportunities for BEW's emerging business of integrated river / riverbank renovation projects, which help to rehabilitate water bodies and enhance water quality, to become BEW's future earnings catalyst. Given the higher margin of such projects (net margin of 15-20%) vs traditional BT projects (gross margin of 10-15%) and thanks to their high technical threshold and less competition, we assume an upward BT business margin trend for BEW, from 14% in 2012 to 18% in 2020F.

Valuation – Move to Buy with TP of HKD6.50

Given the rapid capacity growth and positives from tariff hikes and emerging business, we expect BEW to deliver an EPS CAGR of 35% over 2012-15F. We derive our TP of HKD6.50 from a DCF method, assuming terminal growth of 2% and a WACC of 7.8%, implying 17% upside. Currently, the stock is trading at 28x 2014F P/E, and we do not think the valuation is demanding, given: 1) the seemingly high P/E is due to two recent share issuances, while we expect the net proceeds would bring in value-accretive M&A growth; and 2) the 2013-15F PEG remains attractive at 0.79x. With the capital collected to be fully utilized on M&A at fair value and the operating efficiency of acquired projects to be improved, we expect dilution effect to be absorbed in the short term.

Fig. 60: BEW: WACC calculation

WACC Calculation	
Equity Beta	1.1
Risk Free Rate	3.50%
Equity Risk Premium	7.50%
Country Risk Premium	0%
Cost of Equity	11.8%
Cost of Debt	5.0%
Debt/Capital	50%
Tax	25.0%
WACC	**7.8%**
Terminal grow th rate	2%

Source: Company data, Nomura research

Fig. 61: BEW: Our operation forecast

		2012A	2013E	2014F	2015F
Operation indicators					
WWT capacity	mn tons/day	4.78	6.64	9.33	12.35
y-y	%		*38.9%*	*40.6%*	*32.3%*
Water supply capacity	mn tons/day	2.13	2.61	4.37	5.43
y-y	%		*22.5%*	*67.6%*	*24.0%*
Utilization rate	%	77.4%	73.6%	76.3%	80.4%
Processing volume	mn tons	1,351.1	1,782.7	2,598.5	3,621.9
- WWT	mn tons	1,277.9	1,712.9	2,323.2	2,999.0
- Water supply	mn tons	73.2	69.8	275.4	622.9
Tariff - WWT	HKD/ton	1.16	1.21	1.30	1.42
Tariff - Water supply	HKD/ton	1.44	1.34	1.34	1.34
Financial indicators					
Gross profit	HKD mn	1,437.0	2,219.1	3,218.0	4,432.1
- Operation	HKD mn	939.5	1,459.5	2,160.2	3,111.4
- Construction	HKD mn	308.2	563.9	856.3	1,113.1
Operation service GM	%	*61.4%*	*63.3%*	*62.3%*	*61.3%*
Construction service GM	%	*15.6%*	*13.3%*	*13.4%*	*13.0%*
Net profit	HKD mn	750.5	1,152.1	1,710.2	2,313.1
EPS	HKD/share	0.11	0.15	0.20	0.27
Outstanding shares	mn shares	6,909	8,436	8,656	8,656
Dividend payout ratio	%	39%	35%	35%	35%
ROE	%	9%	11%	12%	15%
Net gearing	%	106%	69%	90%	88%

Source: Company data, Nomura estimates

Valuation method and investment risks

Our TP of HKD6.50 is based on a DCF methodology, assuming a WACC of 7.8% and terminal growth of 2%. For our DCF valuation, cash flows are discounted back to 2014F.

Major downside risks:

- **Slower-than-expected capacity growth** – Difficulty in finding acquisition opportunities or slowdown in obtaining projects through tender process would lower the company's capacity growth and therefore earnings growth.
- **Government default** – Any local government default (such as due to the local government bond repayment pressure) would likely harm revenue collection and cause large accounts receivable.
- **Value destructive M&A** – Overly expensive acquisitions or lack of synergy with acquired projects could affect overall profitability

NOMURA

China Everbright International

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EQUITY: POWER & UTILITIES

Waste on fire – fruitful years likely ahead

Move to Buy rating and HKD13.10 TP

Action: Move to Buy rating and TP of HKD13.10

Following a transfer of analyst coverage of China Everbright International (CEI), we move from Suspended to a Buy call with a TP of HKD13.10, representing 15% upside potential, given:

- We expect the WTE business to enter a reaping period, with more than 26 projects set to commence construction and commission in the next two to three years, vs currently 10 operating projects, implying rapid earnings growth potential from both construction and operation. The 2013-15F CAGR of WTE gross profit will be at 49.2%, per our estimate.
- Potential business expansion to inland regions such as Hunan and Anhui, and large cities such as Beijing, Shenzhen, Zhuhai, Ganzhou and Yibin with the signing of cooperation framework agreements implies potential project opportunities outside CEI's current geographic exposure.
- We see continuous project IRR improvement, leveraging on self-manufactured core equipment, as well as the development of higher-margin industrial / medical hazardous waste treatment projects.

Catalysts: HanKore acquisition at fair valuation; robust projects obtained in FY14/15F; high growth of external sales of environmental equipment

Valuation: 26x FY14F P/E vs FY13-15F EPS CAGR of 32%; Buy

CEI currently trades at 25.8x FY14F P/E, with an FY13-15F CAGR of 31.7%. Valuation is attractive, in our view, given: 1) visible rapid earnings growth secured by projects obtained; 2) potential project opportunities in newly developed regions with cooperation framework agreements; and 3) continuous profitability improvement through cost reduction and high-margin business development. Our DCF-derived TP of HKD13.10 implies 15% upside potential.

31 Dec	FY13		FY14F		FY15F		FY16F
Currency (HKD)	Actual	Old	New	Old	New	Old	New
Revenue (mn)	5,320	N/A	9,050	N/A	10,320	N/A	11,358
Reported net profit (mn)	1,325	N/A	1,984	N/A	2,471	N/A	2,605
Normalised net profit (mn)	1,325	N/A	1,984	N/A	2,471	N/A	2,605
FD normalised EPS	32.57c	N/A	44.24c	N/A	55.11c	N/A	58.09c
FD norm. EPS growth (%)	37.0	N/A	35.8	N/A	24.6	N/A	5.4
FD normalised P/E (x)	35.0	N/A	25.8	N/A	20.7	N/A	19.6
EV/EBITDA (x)	24.0	N/A	17.9	N/A	15.3	N/A	14.9
Price/book (x)	3.8	N/A	3.4	N/A	3.0	N/A	2.4
Dividend yield (%)	0.7	N/A	1.1	N/A	1.3	N/A	1.6
ROE (%)	12.2	N/A	14.0	N/A	15.5	N/A	14.6
Net debt/equity (%)	8.3	N/A	25.6	N/A	44.8	N/A	57.4

Source: Company data, Nomura estimates

Key company data: See page 2 for company data and detailed price/index chart

Global Markets Research

5 March 2014

Rating From Suspended	**Buy**
Target price From N/A	HKD 13.10
Closing price 3 March 2014	HKD 11.40
Potential upside	+14.9%

Anchor themes

In addition to rapid structural industry growth pursuant to the 12th FYP, we see government support persisting beyond 2015F. We expect business expansion along the value chain, eg, sludge treatment, to offer additional growth for WWT plays.

Nomura vs consensus

Our FY15F earnings estimates are 20% ahead of consensus.

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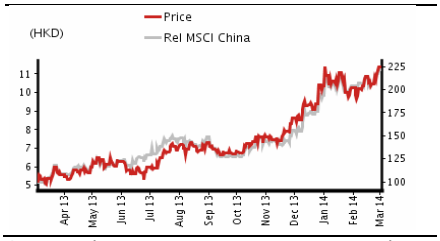
Key data on China Everbright International

Income statement (HKDmn)

Year-end 31 Dec	FY12	FY13	FY14F	FY15F	FY16F
Revenue	**3,410**	**5,320**	**9,050**	**10,320**	**11,358**
Cost of goods sold	-1,644	-2,828	-5,651	-6,149	-6,861
Gross profit	**1,766**	**2,492**	**3,399**	**4,171**	**4,497**
SG&A	-297	-392	-458	-480	-497
Employee share expense	0	0	0	0	0
Operating profit	**1,469**	**2,100**	**2,941**	**3,691**	**4,000**
EBITDA	**1,551**	**2,191**	**3,099**	**3,859**	**4,182**
Depreciation	-53	-70	-96	-107	-120
Amortisation	-30	-21	-62	-62	-62
EBIT	1,469	2,100	2,941	3,691	4,000
Net interest expense	-313	-316	-387	-523	-656
Associates & JCEs	0	0	0	0	0
Other income	68	27	39	46	45
Earnings before tax	**1,224**	**1,812**	**2,592**	**3,213**	**3,388**
Income tax	-280	-447	-570	-707	-745
Net profit after tax	**944**	**1,364**	**2,022**	**2,506**	**2,643**
Minority interests	-31	-40	-38	-35	-38
Other items	0	0	0	0	0
Preferred dividends	0	0	0	0	0
Normalised NPAT	**914**	**1,325**	**1,984**	**2,471**	**2,605**
Extraordinary items	210	0	0	0	0
Reported NPAT	**1,123**	**1,325**	**1,984**	**2,471**	**2,605**
Dividends	-242	-366	-548	-683	-720
Transfer to reserves	**881**	**959**	**1,436**	**1,788**	**1,885**
Valuation and ratio analysis					
Reported P/E (x)	38.4	35.0	25.8	20.7	19.6
Normalised P/E (x)	47.3	35.0	25.8	20.7	19.6
FD normalised P/E (x)	47.9	35.0	25.8	20.7	19.6
FD normalised P/E at price target (x)	55.1	40.2	29.6	23.8	22.5
Dividend yield (%)	0.5	0.7	1.1	1.3	1.6
Price/cashflow (x)	66.8	21.7	15.7	16.8	12.8
Price/book (x)	5.5	3.8	3.4	3.0	2.4
EV/EBITDA (x)	35.2	24.0	17.9	15.3	14.9
EV/EBIT (x)	37.2	25.1	18.8	16.0	15.6
Gross margin (%)	51.8	46.8	37.6	40.4	39.6
EBITDA margin (%)	45.5	41.2	34.2	37.4	36.8
EBIT margin (%)	43.1	39.5	32.5	35.8	35.2
Net margin (%)	32.9	24.9	21.9	23.9	22.9
Effective tax rate (%)	22.9	24.7	22.0	22.0	22.0
Dividend payout (%)	21.5	27.6	27.6	27.6	27.6
Capex to sales (%)	46.1	56.0	57.8	55.4	51.9
Capex to depreciation (x)	30.0	42.5	54.7	53.6	49.0
ROE (%)	15.5	12.2	14.0	15.5	14.6
ROA (pretax %)	11.4	13.4	14.7	14.5	12.7
Growth (%)					
Revenue	-6.9	56.0	70.1	14.0	10.1
EBITDA	8.3	41.2	41.4	24.5	8.4
EBIT	6.9	43.0	40.0	25.5	8.4
Normalised EPS	10.1	35.2	35.7	24.6	5.4
Normalised FDEPS	10.2	37.0	35.8	24.6	5.4
Per share					
Reported EPS (HKD)	29.65c	32.60c	44.24c	55.11c	58.09c
Norm EPS (HKD)	24.11c	32.60c	44.24c	55.11c	58.09c
Fully diluted norm EPS (HKD)	23.78c	32.57c	44.24c	55.11c	58.09c
Book value per share (HKD)	2.07	2.98	3.34	3.77	4.68
DPS (HKD)	0.06	0.08	0.12	0.15	0.18

Source: Company data, Nomura estimates

Relative performance chart (one year)



Source: ThomsonReuters, Nomura research

(%)	1M	3M	12M
Absolute (HKD)	11.3	35.1	118.0
Absolute (USD)	11.4	34.9	117.8
Relative to MSCI China	10.1	43.7	122.6

Market cap (USDmn)	6,586.9
Estimated free float (%)	51.4
52-week range (HKD)	12.12/4.95
3-mth avg daily turnover (USDmn)	31.95
Major shareholders (%)	
China Everbright Holdings	48.6

Source: Thomson Reuters, Nomura research

Notes

Cashflow (HKDmn)

Year-end 31 Dec	FY12	FY13	FY14F	FY15F	FY16F	Notes
EBITDA	1,551	2,191	3,099	3,859	4,182	
Change in working capital	-556	57	538	-481	166	
Other operating cashflow	-340	-113	-386	-327	-357	
Cashflow from operations	**655**	**2,134**	**3,251**	**3,051**	**3,991**	
Capital expenditure	-1,573	-2,980	-5,228	-5,717	-5,897	
Free cashflow	**-918**	**-846**	**-1,977**	**-2,666**	**-1,906**	
Reduction in investments	-12	20	0	0	0	
Net acquisitions	0	0	0	0	0	
Reduction in other LT assets	-15	17	0	0	0	
Addition in other LT liabilities	187	319	0	0	0	
Adjustments	-595	-764	860	466	-13	
Cashflow after investing acts	**-1,353**	**-1,255**	**-1,118**	**-2,200**	**-1,919**	
Cash dividends	-213	-242	-366	-548	-683	
Equity issue	1,245	3,628	0	0	0	
Debt issue	829	408	2,703	3,104	2,559	
Convertible debt issue	0	0	0	0	0	
Others	389	479	-1,247	-989	-643	
Cashflow from financial acts	**2,249**	**4,273**	**1,090**	**1,567**	**1,233**	
Net cashflow	**897**	**3,018**	**-28**	**-633**	**-686**	
Beginning cash	1,900	2,797	5,815	5,787	5,154	
Ending cash	2,797	5,815	5,787	5,154	4,468	
Ending net debt	3,208	1,107	3,837	7,575	10,820	

Source: Company data, Nomura estimates

Balance sheet (HKDmn)

As at 31 Dec	FY12	FY13	FY14F	FY15F	FY16F	Notes
Cash & equivalents	2,797	5,815	5,787	5,154	4,468	
Marketable securities	0	0	0	0	0	
Accounts receivable	532	400	309	515	595	
Inventories	65	76	62	101	129	
Other current assets	1,345	1,954	1,895	2,487	3,012	
Total current assets	**4,739**	**8,244**	**8,053**	**8,257**	**8,203**	
LT investments	197	177	177	177	177	
Fixed assets	1,423	1,374	1,399	1,442	1,483	
Goodwill	21	21	21	21	21	
Other intangible assets	614	1,096	1,034	972	910	
Other LT assets	9,590	12,559	17,522	22,755	28,146	
Total assets	**16,583**	**23,471**	**28,205**	**33,624**	**38,940**	
Short-term debt	1,635	1,780	1,285	2,085	2,342	
Accounts payable	1,191	1,734	2,097	2,406	3,170	
Other current liabilities	58	58	70	117	150	
Total current liabilities	**2,884**	**3,572**	**3,452**	**4,608**	**5,662**	
Long-term debt	4,369	5,141	8,339	10,644	12,946	
Convertible debt	0	0	0	0	0	
Other LT liabilities	659	979	979	979	979	
Total liabilities	**7,913**	**9,692**	**12,770**	**16,230**	**19,586**	
Minority interest	321	405	443	479	517	
Preferred stock	0	0	0	0	0	
Common stock	404	448	448	448	448	
Retained earnings	7,704	12,560	13,995	15,783	17,668	
Proposed dividends	242	366	548	683	720	
Other equity and reserves	0	0	0	0	0	
Total shareholders' equity	**8,350**	**13,374**	**14,992**	**16,915**	**18,837**	
Total equity & liabilities	**16,583**	**23,471**	**28,205**	**33,624**	**38,940**	
Liquidity (x)						
Current ratio	1.64	2.31	2.33	1.79	1.45	
Interest cover	4.7	6.7	7.6	7.1	6.1	
Leverage						
Net debt/EBITDA (x)	2.07	0.51	1.24	1.96	2.59	
Net debt/equity (%)	38.4	8.3	25.6	44.8	57.4	
Activity (days)						
Days receivable	39.1	32.0	14.3	14.6	17.9	
Days inventory	12.1	9.1	4.4	4.8	6.1	
Days payable	291.0	188.8	123.7	133.6	148.8	
Cash cycle	-239.8	-147.7	-105.0	-114.2	-124.7	

Source: Company data, Nomura estimates

Environmental energy projects – keep energetic

2013: A fruitful year for new projects…

By end-Jan 2014, there were a total of 11 operating WTE projects in Jiangsu, Shandong and Zhejiang provinces, with total treatment capacity of 10,650 tons/day (vs 10,250 tons/day at end-2013). Although only one project (Suzhou Phase III) commenced operation in 2013, CEI won six main projects (including two projects won in 2013 and announced in 2014), with total capacity of 5,250tons/day (including affiliated Phase II), accounting for nearly half of its current operating capacities.

Fig. 62: CEI: Projects won in 2013 and YTD 2014

Projects won in 2013 and YTD 2014				
Annoucement date	Project name	Capacity (tons/day)	Provinces	Investment (CNY mn)
WTE projects				
15-Jan-13	Rizhao Phase I	600	Shandong	350
	Rizhao Phase II	300	Shandong	175 *
6-Feb-13	Ninghai Phase I	700	Zhejiang	360
	Ninghai Phase II	350	Zhejiang	180 *
15-Jul-13	Heze Phase I	600	Shandong	350
	Heze Phase II	300	Shandong	175 *
1-Oct-13	Zhenjiang Phase II	400	Jiangsu	200
2-Jan-14	Maanshan Phase I	800	Anhui	450
	Maanshan Phase II	400	Anhui	225 *
28-Jan-14	Yiyang WTE	800	Hunan	372
Total main projects won in 2013 and YTD 2014		**3,900**		
Total projects (incl. affiliated Phase II) won in 2013 and YTD 2014		**5,250**		
Other projects				
26-May-13	Binhai Hazardous Waste	82	Jiangsu	186
29-May-13	Zibo Hazardous Waste	137	Shandong	400
17-Nov-13	Suzukigumi Waste	25 (Industrial) 5 (Medical)	Jiangsu	80 **

Note: * Nomura estimates. ** Acquired projects

Source: Company data, Nomura research

Fig. 63: CEI: Suzhou WTE Phase III - Overview

Source: Nomura research

Fig. 64: CEI: Suzhou WTE Phase III – Control room

Source: Nomura research

… 2014-15F to have more operating projects

According to the current project pipeline and construction arrangement, five projects are scheduled to commence in 2014 (total capacity of 4,900tons/day), with another 10 projects in 2015 (total capacity of 7,200tons/day). If the construction progress goes well (we note that CEI often completes projects ahead of schedule), we see operating capacities doubling up by end-2015, which could signal rapid growth for both the company's construction and operating income.

Fig. 65: CEI: WTE projects to commence operation in 2014-15F

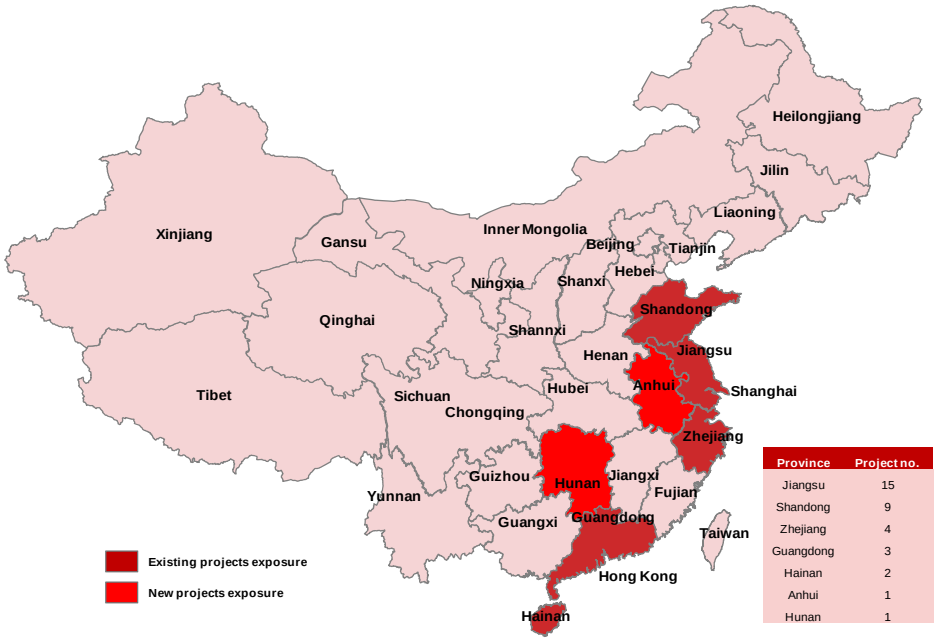
Projects to commence operation in 2014-15F					
Expected COD	Project name	Capacity (tons/day)	Provinces	Type of investment	Investment (CNY mn)
Projects commission in 2014					
Jan-14	Ningbo Beilun Phase I	1,000	Zhejiang	BOT 30 years	560
1H2014	Nanjing WTE	2,000	Jiangsu	BOT 30 years	1030
1H2014	Pizhou Phase I	600	Zhejiang	BOT 30 years	330
2H2014	Sanya Phase I	700	Hainan	BOT 27 years	426
2H2014	Shouguang Phase I	600	Shandong	BOT 26 years	339
	Heze Phase II	300	Shandong		175
Total projects expected to commission in 2014		**5,200**			
Projects commission in 2015					
1H2015	Boluo Phase I	700	Guangdong	BOT 30 years	417
2015	Huidong WTE	600	Guangdong	BOT 29 years	334
1H2015	Yixing Phase II	300	Jiangsu	BOT 28 years	151
2015	Wujiang WTE	1,500	Jiangsu	BOT 30 years	890
1H2015	Weifang Phase I	1,000	Shandong	BOT 30 years	586
2H2015	Ninghai Phase I	700	Zhejiang	BOT 28 years	360
2H2015	Rizhao Phase I	600	Shandong	BOT 25 years	350
2H2015	Heze Phase I	600	Shandong	BOT 30 years	350
2H2015	Zhenjiang Phase II	400	Jiangsu	BOT 30 years	200
2H2015	Maanshan Phase I	800	Anhui	BOT 30 years	450
Total projects expected to commission in 2015		**7,200**			

Source: Company data, Nomura research

Expanding to virgin territory

At end-2013, CEI won two WTE projects total in Anhui Maanshan and Hunan Yiyang, which successfully expanded its business exposure to more inland areas in addition to the company's traditional territory of coastal regions such as Shandong, Jiangsu, Zhejiang and Guangdong. Despite the relatively low waste treatment fees given the lower economic development levels, we expect project IRRs in such regions to remain stable at c.15%, given: 1) the majority of operating income is generated from electricity sales, for which on-grid tariffs are the same nationwide at CNY0.65/kWh; and 2) labour and construction costs are also cheaper in less developed regions. We believe these first steps will open up the door for the company to a broad range of opportunities in the inland market.

Fig. 66: CEI: WTE projects geographic distribution map



Source: Company data, Nomura research

Making cooperation framework agreements work

With the obtaining of the Ningbo Ninghai projects and the commissioning of Ningbo Beilun Phase I in January 2014, we believe CEI has shown strong capability to execute on its cooperation framework agreements – not legally binding to any potential projects – with local governments (the Ningbo agreement was signed in December 2011 vs first project won in May 2012). Given CEI has signed cooperation framework agreements with Shenzhen, Beijing, Yibin, Ganzhou, and Zhuhai, where the company had no project exposure in 2013, we believe such agreements will bring potential projects in the near future.

Fig. 67: CEI: Cooperation framework agreements signed in 2013 without existing project opportunities

Announcement date	City	Province	Intentional project
15-May-13	Shenzhen	Guangdong	Solid waste treatment, Wastewater treatment, Solar, Wind
31-Jul-13	Beijing	Beijing	Solid waste treatment
23-Oct-13	Yibin	Sichuan	Solid waste treatment, Wastewater treatment, Other urban waste treatment, Solar, Wind
6-Nov-13	Ganzhou	Jiangxi	Solid waste treatment, Industrial waste treatment, Renewable energy, EP equipment
29-Dec-13	Zhuhai	Guangdong	Industrial solidwaste and wastewater treatment

Source: Company data, Nomura research

Benefitting from Changzhou Environmental Equipment Manufacturing Centre

Different from other pure WTE project operators, CEI has its own core environmental equipment manufacturing centre in Changzhou, which can supply various scales of grate furnaces (100-750ton/day per unit) and the on-site construction of a flue gas treatment system. According to the company's 1H13 results, ~HKD100mn construction cost savings was recorded thanks to the 30-40% cost saving in furnace procurement (using self-manufactured instead of imported furnaces). We believe CEI will continue to benefit from this unique competitive advantage, and therefore adjust up the overall IRR of the WTE projects from 13.5% to 14.8%, at high-end of management's guidance of 12-15%.

During the site-visit in January, management guided that Phase II of the manufacturing centre will start construction in 1H13, which will focus on leachate treatment upon commissioning in 2015F. Given China's urban solid waste generally contains higher moisture content, we believe the leachate treatment will have a lot of room to develop.

Fig. 68: CEI: Changzhou EP Equipment Manufacturing – Manufacturing plant

Source: Company visit, Nomura research

Fig. 69: CEI: Changzhou EP Equipment Manufacturing – Products flow

Source: Company visit, Nomura research

Previously, the market has focused more on the company's cost savings from using self-produced equipment for its WTE projects, which is still the case. However, we also see likely earnings contributions in the mid to long term from equipment/services sales (including furnaces, flue gas treatment, and leachate treatment) to external customers, which creates a potential catalyst for CEI. According to management, furnace sales have a decent gross margin of c.30-40%, and the company has an ambitious external sales target of CNY500mn (total capacity of ~16,000tons/day).

Waste processing fee adjustment on track

A typical process fee adjustment time windows is 2-3 years, according to the contracts signed with local governments. Generally, with inflation pressures such as raw material and labour cost hikes, the waste processing fee will be adjusted higher. Moreover, CEI's outstanding project operation capability, as well as its higher-than-required emission standards, enables its project to receive more favourable tariff hikes to help improve their profitability. We therefore believe profitability for CEI's projects will at least remain stable under such a processing fee adjustment mechanism.

Fig. 70: CEI: Projects receiving waste processing fee adjustment recently

Project	Daily capacity (tons/day)	Adj. magnitude	Approved date	Effective date
Changzhou WTE	1,000	+5.3%	Feb-14	1-Jan-14
Jiangyin WTE I & II	1,400	+6.4%	Jan-14	1-Sep-14
Yixing WTE	600	+17.7%	Nov-13	1-Jul-14

Source: Company data, Nomura research

Emerging higher-margin business - industrial/medical hazardous waste treatment

With the acquisition of the Suzukigumi Waste project and the acquisition of integrated industrial hazardous waste treatment projects in Shandong, CEI's tentacles spread into brand new subsectors of waste treatment business – medical and industrial hazardous waste treatment. Given the higher technical threshold of hazardous waste treatment and the greater importance to the environment, such projects offer higher IRR (15-18% vs 12-15% for WTE) than traditional WTE projects, with few large and experienced players in the market. We therefore expect that if more industrial/medical hazardous waste treatment projects come through, they would provide upside to our current assumed IRR of 15.0% for solid waste treatment projects.

Fig. 71: CEI: Comparison among three kinds of waste treatment projects

	WTE	Medical Hazardous Treatment	Industrial Hazardous Treatment
Treatment object	Urban residential solid waste	Medical waste such as needles, scissors, and etc.	Industrial waste such as discharges of petrochemical plants
Treatment method	Incineration	Incineration, sterilization, and landfill	Incineration, physicochemical treatment, and landfill
Source of income	Waste disposal fee - (per ton) On-grid tariff - (per kWh)	Waste disposal fee - (per sickbed)	Waste disposal fee - (per ton)
Pricing mechanism	Government guided	Government guided	Government guided
Estimated IRR	12-15%	15%	17-18%

Source: Company data, Nomura research

Environmental water projects – Seeking breakthrough

Most of CEI's environmental water projects are spread within Shandong province, including in cities such as Qingdao, Zibo, Jinan, Binzhou, Jiangyin and Dezhou. By January 2014, there were total 13 wastewater treatment projects with total capacity of 1,725,000ton/ day and three reusable water projects in operation. The company's development in wastewater treatment business has slowed down in recent years, with zero projects commencing operation in 2012 and only two in 2013. Even counting the projects in the current pipeline, we see limited growth in the sector for the next couple of years. Therefore, despite mild organic growth, we believe the next capacity expansion opportunity to come from acquisition during the current period of market consolidation.

External stimulation to evoke the business growth

Despite the slowdown in environmental water project development, the recent announcement of a potential acquisition of Hankore Environment has broken the ice. Given the final deal structure has yet to be decided, and CEI is still conducting due diligence on Hankore, it is too early to conduct a detailed financial evaluation and in turn to determine an accurate impact to the company's P&L. Hence, we have not factored the

acquisition into our current model. However, we note several positives regarding the acquisition if it goes through:

- **Direct capacity boost through acquisition:** Hankore owns 11 wastewater treatment projects in provinces such as Shaanxi, Shandong, Jiangsu, and Henan, plus in Beijing, with total daily capacity of c.1.2mn tons. Although the profitability of these operating projects was unsatisfactory under Hankore management over the past few years, we believe, given the similar geographic exposure as CEI (projects mainly located in Shandong and Jiangsu), profitability could be lifted by leveraging on CEI's past successful operating experience.

Fig. 72: CEI and Hankore wastewater treatment exposure comparison

tons/day	Wastewater treatment capacity	
Province	CEI	Hankore
Jiangsu	190,000	750,000
Shandong	1,535,000	80,000
Shaanxi	NA	200,000
Beijing	NA	80,000
Henan	NA	150,000
Total capacity	**1,725,000**	**1,260,000**

Source: Company data, Nomura research

- **An independent and integrated platform for development of environmental water projects:** The suggested acquisition methods – Hankore to issue shares to CEI for all of its water assets and CEI to own more than 50% of Hankore's issued shares after the transaction – will preserve Hankore's Singapore listed position, which would offer CEI's WWT business an independent platform to develop. Such an arrangement may relieve the wastewater treatment business from likely cannibalisation (WTE development has utilised most of the company's resources) and lead to rapid WWT project wins.
- **More open to future M&A opportunities:** According to management, CEI has evaluated several potential acquisition targets in the past few years, although no large moves were made until the Hankore deal. We believe it shows the company is more willing to accept acquisition as one method of growth, now that the wastewater treatment market has entered a consolidation stage featuring the rationalisation of development and enhancement of discharge standards and operating efficiency.

CEI FY13 annual result recap – a strong prelude to FY14/15F

CEI announced its FY13 annual result on 27 February 2013, with recurring net profit of HKD1,305mn, up 42.9% y-y, in line with the Bloomberg consensus of HKD1,304mn. The strong earnings surge was mainly attributable, in our view, to the significant increase in its WTE business (107.6%/54.6% y-y growth for revenue/EBITDA). Overall EBITDA margin dropped 5.3pp to 42.2%, mainly due to the larger proportion of construction revenue recognized with lower margin. Thanks to the share issuance in December 2013, net gearing remained healthy at only 8.3%. The final dividend was HKD5.0 cents per share. Together with the interim dividend of HKD3.5 cents per share, the total FY13 dividend was HKD8.5 cents per share, implying a payout ratio of 27.6%, vs 21.5% for FY12. The capex budget, as guided by management for FY14, will be CNY3bn vs CNY2bn in each of the previous two years.

Fig. 73: CEI: FY13 revenue and EBITDA breakdown by sector

(HKD mn)	FY13	FY12	y-y
Environmental energy project construction and operation			
Revenue	3,616.2	1,741.9	*107.6%*
EBITDA	1,541.3	996.7	*54.6%*
EBITDA margin %	42.6	57.2	*-14.6 pp*
Environmental water project construction and operation			
Revenue	1,283.6	1,267.4	*1.3%*
EBITDA	660.0	442.9	*49.0%*
EBITDA margin %	51.4	34.9	*16.5 pp*
Alternative energy project construction and operation			
Revenue	415.9	400.1	*3.9%*
EBITDA	146.1	205.2	*-28.8%*
EBITDA margin %	35.1	51.3	*-16.1 pp*
Environmental technology and construction management			
Revenue (inter-segment)	662.3	389.2	*70.2%*
EBITDA	385.8	255.5	*51.0%*
EBITDA margin %	58.3	65.7	*-7.4 pp*

Source: Company data, Nomura research

Fig. 74: FY13 revenue breakdown by sector and source

(HKD mn)	FY13	FY12	y-y
Environmental energy - Construction	2,517.0	933.0	*169.8%*
Environmental water - Construction	449.8	530.2	*-15.2%*
Alternative energy - Construction	150.8	138.8	*8.6%*
Total	**3,117.6**	**1,602.1**	***94.6%***
Environmental energy - Operation	635.4	453.7	*40.1%*
Environmental water - Operation	558.5	502.8	*11.1%*
Alternative energy - Operation	259.9	256.1	*1.5%*
Total	**1,453.8**	**1,212.5**	***19.9%***
Environmental energy - Financial income	463.7	355.3	*30.5%*
Environmental water - Financial income	275.4	234.4	*17.5%*
Alternative energy - Financial income	5.3	5.3	*-0.7%*
Total	**744.4**	**595.0**	***25.1%***

Source: Company data, Nomura research

Fig. 75: CEI: FY13 results review

(HKD mn)	FY13	FY12	y-y	Comments
Turnover (cont. operation)	**5,319.9**	**3,409.9**	***56.0%***	Mainly due to the increase in WTE projects under construction and in operation
Direct costs and operating expenses	(2,944.5)	(1,726.3)	*70.6%*	
	2,375.4	1,683.7	*41.1%*	
Other revenue	144.2	106.9	*34.8%*	Mainly due to the increase in VAT refund resulting from the enlarged operating WTE capacity
Other loss	(0.1)	(10.0)	*-98.7%*	
Administrative expenses	(392.2)	(297.4)	*31.9%*	
Profit from operations	**2,127.2**	**1,483.2**	***43.4%***	
Finance costs	(315.6)	(312.6)	*0.9%*	
Share of results of associates	-	-	*n.a.*	
Profit before taxation	**1,811.7**	**1,170.6**	***54.8%***	
Income tax	(447.5)	(266.6)	*67.9%*	
Profit from continuing operations	**1,364.2**	**904.0**	***50.9%***	
Discontinued operation				
Profit from discontinued operation (net of tax)	-	250.1	*-100.0%*	Disposal of Greenway (CEI's toll road & bridge business) in FY12
Profit for the period	1,364.2	1,154.1	*18.2%*	
From continued operation				
Attributable to:				
Minority interests	39.5	30.8	*28.2%*	
Equity shareholders of the company	**1,324.7**	**873.2**	***51.7%***	
From discontinued operation				
Attributable to:				
Minority interests	-	8.1	*n.a.*	
Equity shareholders of the company	-	242.0	*n.a.*	
Recurring net profits	**1,304.6**	**872.6**	***49.5%***	
Reported EPS (HKD cents)				
- basic	32.6	29.7	*9.9%*	Partly diluted by the share issuance and option exercise
- diluted	32.6	29.5	*10.4%*	
Key financial ratios (%)				
Gross margin	44.7	49.4	*-4.7 pp*	Due to the significantly increase in construction revenue with a relative low margin vs. operation
EBITDA margin	42.2	47.5	*-5.3 pp*	
Effective tax rate	24.7	22.8	*1.9 pp*	
Effective interest rate	4.6	5.2	*-0.6 pp*	Lower borrowing cost with the help of ADB and CDB's loan
	31-Dec-13	**31-Dec-12**		
Net debt to shareholders' equity ratio	8.3	37.5	*-29.2 pp*	Due to the 43mn share issuance in Dec 2013

Source: Company data, Nomura research

Valuation – Move to Buy rating and TP of HKD13.10

Moving to a Buy rating and TP of HKD13.10

We move from Suspended to a Buy rating and a TP of HKD13.10, which is derived from our DCF valuation and implies 15% upside. We remain positive on the company's visible growth in the next couple of years on the back of its current strong project pipeline, as well as the favourable policies and strong support from its parent group.

Revenue overview – Rapid growth goes on …

Following CEI's rapid revenue growth in FY13 at 56% y-y, we see the company continuing its strong momentum, with revenue increasing 70.1% y-y in 2014F and remaining stable at 14.1% in 2015F. We expect the majority of revenue to continue leaning toward the environmental energy sector over the next two years, given 1) more construction income generated with the strong WTE project pipeline; and 2) increasing operating income generated with massive WTE projects to commence in the next couple of years. As such, we forecast the revenue contribution from environmental water projects to decline from 24.1% in 2013, to 14.0% in 2014F and 11.2% in 2015F, while environmental energy business revenue contribution rises from 68.0% in 2013, to 75.0% in 2014F and 73.7% in 2015F. As a note, there could be upside to our current forecasts for CEI's wastewater segment. However, given limited visibility regarding the potential acquisition of Hankore, we err on the side of conservatism by solely projecting its organic growth beyond 2013.

Fig. 76: CEI: Revenue contribution breakdown by segment 2013-15F

HKD mn	2012	2013	2014F	2015F
Revenue - continued operation	**3,410**	**5,320**	**9,050**	**10,320**
Solid waste	*1,742*	*3,616*	*6,791*	*7,606*
Wastewater	*1,267*	*1,284*	*1,271*	*1,154*
Others	*401*	*420*	*988*	*1,560*
Revenue contribution	***100.0%***	***100.0%***	***100.0%***	***100.0%***
Solid waste	*51.1%*	*68.0%*	*75.0%*	*73.7%*
Wastewater	*37.2%*	*24.1%*	*14.0%*	*11.2%*
Others	*11.7%*	*7.9%*	*10.9%*	*15.1%*

Source: Company data, Nomura estimates

… leading to rapid earnings growth despite a seeming margin shrink

As the revenue generation in the construction process has a much lower margin than that in the operating process, the higher the proportion of construction revenue (ie, relatively more projects under construction), the lower the overall margin of the company, as we believe the case will be for CEI in 2013-15F vs 2012. On the other hand, it also indicates a reaping season afterwards once projects enter the operating process. Therefore, together with contribution from recent projects commissioning, we maintain our confidence in the company's earnings growth – a 31.7% 2013-15F EPS CAGR.

Fig. 77: CEI: Revenue and earnings forecast 2013-15F

HKD mn	2012	2013	2014F	2015F
Revenue - continued operation	**3,410**	**5,320**	**9,050**	**10,320**
Growth rate	*-6.9%*	*56.0%*	*70.1%*	*14.0%*
Gross Profit Margin	*49.4%*	*44.7%*	*35.4%*	*38.2%*
Recurring net income	**913**	**1,305**	**1,984**	**2,471**
Growth rate	*13.8%*	*42.9%*	*52.1%*	*24.6%*
Net Profit Margin	*26.8%*	*24.5%*	*21.9%*	*23.9%*

Source: Company data, Nomura estimates

DCF valuation – deriving a TP of HKD13.10

Based on CEI's stable cash flows and long-term visibility, we believe DCF is a suitable valuation method for the stock. The forecast period is from 2014 to 2023, as we believe CEI will enjoy fast earnings growth in the next decade given the substantial growth in demand for the environmental protection business and strong government support. In our forecast model, several assumptions are made based on our expectation of the company's future performance. A perpetual growth rate of 2.0% is applied to determine the terminal value. Assuming equity beta of 1.1, cost of equity of 11.8% and cost of debt of 5.0%, we arrive at a WACC of 7.8%. Other key operating assumptions are listed in the figure below.

Fig. 78: CEI: Key assumption for the earnings forecast 2013-15F

	2013*	2014F	2015F
Waste-water treatment business			
Daily capacity volume by year-end - secured ('000 m3)	1,725	1,804	1,830
Daily capacity volume by year-end - assumed ('000 m3)	-	175	350
Total ('000 m3)	**1,725**	**1,979**	**2,180**
Average utilization - both secured and assumed (%)	94%	95%	96%
Weighted-average tariff (HKD/m3)	1.43	1.45	1.48
Waste-to-energy business			
Power generation capacity - secured (MW)	204	312	453
Power generation capacity - assumed (MW)	-	-	125
Total (MW)	**204**	**312**	**578**
Weighted-average utilization (%)	84%	78%	79%
Weighted-average tariff (HKD/kWh)	0.71	0.71	0.72
Daily waste processing capacity by year-end - secured (tons)	10,250	15,150	22,250
Daily waste processing capacity by year-end - assumed (tons)	-	-	5,000
Total (tons)	**10,250**	**15,150**	**27,250**
Weighted-average procession fee (HKD/ton)	97	102	107
CAPEX (HKD mn)	**2,980**	**5,228**	**5,717**

*2013's actual operating data will be fully disclosed in its annual report; here is our estimation based on the annual result.

Source: Company data, Nomura estimates

Therefore, our TP based on DCF valuation is HKD13.10, implying upside potential of 15%, with 2014/15F EPS of HKD0.44/0.55, respectively. Currently, the stock is trading at 25.8x 2014F EPS, and valuation is not demanding, in our view, given CEI's visible earnings growth over the next 2-3 years (EPS CAGR of 31.7% for 2013-15F) with an attractive 2013-15F PEG of 0.81x.

Valuation methodology and risks

Our TP of HKD13.10 is based on a DCF methodology, assuming a WACC of 7.8% and terminal growth of 2%. For our DCF valuation, the cash flows are discounted back to 2014F.

Risks: Downside risks to our target price include: 1) a delay in project construction, as slower progress could affect revenue generation in both the construction and operation periods; 2) a slowdown in acquiring new projects could interrupt the company's current rapid capacity growth; and 3) any changes in the macro political environment and governmental policies over the water and waste treatment industry could result in key changes in our forecasts and hence our target price.

NOMURA

Guangdong Investment

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EQUITY: POWER & UTILITIES

Fully valued, while M&A targets are elusive

Reduce with TP of HKD7.00

Action: Reduce rating and TP of HKD7.00

We move from Suspended to Reduce rating on Guangdong Investment (GDI), with a TP of HKD7.00, implying 12.4% downside, given:

- The dominant earnings contribution comes from GDI's water distribution business. Despite its high quality, the annual revenue growth from HK water distribution business is fixed at 5.8% for 2012-14F, which is significantly lower than its peers' growth. In addition, we do not see a large opportunity for the new water supply contract from 2015 to offer significant revenue growth given the high implied water tariff at c.HKD5.80/m3.
- Given we see difficulties for GDI in obtaining good M&A opportunities regarding water/property targets in the short term, the company cannot effectively utilize its abundant cash (~HKD10bn) on hand to generate satisfactory earnings growth over our forecast period, in our view.
- The current projects under development, including Zhongshan Power Plant, Panyu CBD and Tianjin Teemall, will commence operations fully from FY17F, and make no contribution during our forecast period of FY14-15F.

Catalysts: Any significant value-accretive M&A or parent asset injection at fair value could be positive catalysts.

Valuation: Looks fully valued at current price; Reduce

GDI currently trades at an FY14F P/E of 15.6x (EPS of HKD0.51), vs its peer average of c.20.0x, while its FY13-15F EPS CAGR of 7.2% is also significantly lower than its peer average of c.30.0%. Thus we think the discounted P/E is reasonable, and our SOTP-derived TP of HKD7.00 also implies 12.4% potential downside. We expect the stock to underperform its peers over 2014-15F; Reduce.

Global Markets Research

5 March 2014

Rating From Suspended	**Reduce**
Target price From N/A	HKD 7.00
Closing price 3 March 2014	HKD 7.99
Potential downside	-12.4%

Anchor themes

In addition to the rapid structural industry growth in the past two years of 12th FYP, given the current lagging development, we expect business expansion along the value chain, such as sludge treatment, will offer additional growth for WWT plays.

Nomura vs consensus

Our FY15F earnings are 3% lower than consensus.

Research analysts

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31 Dec	FY12		FY13F		FY14F		FY15F
Currency (HKD)	Actual	Old	New	Old	New	Old	New
Revenue (mn)	7,736	N/A	8,040	N/A	8,260	N/A	8,483
Reported net profit (mn)	3,414	N/A	4,254	N/A	3,205	N/A	3,288
Normalised net profit (mn)	2,768	N/A	3,174	N/A	3,205	N/A	3,288
FD normalised EPS	44.21c	N/A	50.90c	N/A	51.36c	N/A	54.64c
FD norm. EPS growth (%)	10.4	N/A	15.1	N/A	0.9	N/A	6.4
FD normalised P/E (x)	18.1	N/A	15.7	N/A	15.6	N/A	14.6
EV/EBITDA (x)	10.7	N/A	10.1	N/A	9.7	N/A	9.2
Price/book (x)	2.1	N/A	1.9	N/A	1.7	N/A	1.5
Dividend yield (%)	2.1	N/A	2.6	N/A	2.1	N/A	2.1
ROE (%)	14.9	N/A	16.7	N/A	11.5	N/A	11.0
Net debt/equity (%)	net cash	N/A	net cash	N/A	net cash	N/A	net cash

Source: Company data, Nomura estimates

Key company data: See page 2 for company data and detailed price/index chart

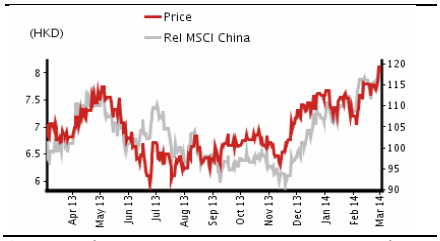
Key data on Guangdong Investment

Income statement (HKDmn)

Year-end 31 Dec	FY11	FY12	FY13F	FY14F	FY15F
Revenue	**7,161**	**7,736**	**8,040**	**8,260**	**8,483**
Cost of goods sold	-2,534	-2,649	-2,814	-2,891	-2,969
Gross profit	**4,628**	**5,087**	**5,226**	**5,369**	**5,514**
SG&A	-991	-1,231	-1,291	-1,224	-1,176
Employee share expense	0	0	0	0	
Operating profit	**3,637**	**3,856**	**3,935**	**4,146**	**4,338**
EBITDA	**4,656**	**4,915**	**4,994**	**5,204**	**5,397**
Depreciation	-1,019	-1,059	-1,059	-1,059	-1,059
Amortisation	0	0	0	0	
EBIT	3,637	3,856	3,935	4,146	4,338
Net interest expense	-84	54	132	122	116
Associates & JCEs	191	152	297	255	268
Other income	15	-1	-1	-1	-1
Earnings before tax	**3,759**	**4,061**	**4,363**	**4,521**	**4,721**
Income tax	-771	-738	-878	-1,003	-1,114
Net profit after tax	**2,988**	**3,322**	**3,485**	**3,518**	**3,607**
Minority interests	-478	-554	-310	-313	-319
Other items	0	0	0	0	0
Preferred dividends	0	0	0	0	0
Normalised NPAT	**2,510**	**2,768**	**3,174**	**3,205**	**3,288**
Extraordinary items	497	646	1,079	0	0
Reported NPAT	**3,007**	**3,414**	**4,254**	**3,205**	**3,288**
Dividends	-1,122	-1,059	-1,320	-995	-1,020
Transfer to reserves	**1,885**	**2,354**	**2,934**	**2,210**	**2,268**
Valuation and ratio analysis					
Reported P/E (x)	16.6	14.6	11.7	15.6	14.6
Normalised P/E (x)	19.8	18.0	15.7	15.6	14.6
FD normalised P/E (x)	20.0	18.1	15.7	15.6	14.6
FD normalised P/E at price target (x)	17.5	15.8	13.8	13.6	12.8
Dividend yield (%)	2.3	2.1	2.6	2.1	2.1
Price/cashflow (x)	10.4	11.0	6.7	11.4	10.8
Price/book (x)	2.3	2.1	1.9	1.7	1.5
EV/EBITDA (x)	11.3	10.7	10.1	9.7	9.2
EV/EBIT (x)	14.3	13.5	12.6	12.0	11.3
Gross margin (%)	64.6	65.8	65.0	65.0	65.0
EBITDA margin (%)	65.0	63.5	62.1	63.0	63.6
EBIT margin (%)	50.8	49.8	48.9	50.2	51.1
Net margin (%)	42.0	44.1	52.9	38.8	38.8
Effective tax rate (%)	20.5	18.2	20.1	22.2	23.6
Dividend payout (%)	37.3	31.0	31.0	31.0	31.0
Capex to sales (%)	40.5	1.6	16.5	26.7	29.2
Capex to depreciation (x)	2.8	0.1	1.2	2.1	2.3
ROE (%)	14.8	14.9	16.7	11.5	11.0
ROA (pretax %)	12.9	12.5	12.4	12.2	12.3
Growth (%)					
Revenue	12.7	8.0	3.9	2.7	2.7
EBITDA	6.4	5.6	1.6	4.2	3.7
EBIT	7.3	6.0	2.1	5.3	4.6
Normalised EPS	11.3	10.3	14.6	0.9	6.4
Normalised FDEPS	11.5	10.4	15.1	0.9	6.4
Per share					
Reported EPS (HKD)	48.25c	54.76c	68.21c	51.36c	54.64c
Norm EPS (HKD)	40.27c	44.41c	50.90c	51.36c	54.64c
Fully diluted norm EPS (HKD)	40.04c	44.21c	50.90c	51.36c	54.64c
Book value per share (HKD)	3.47	3.86	4.30	4.79	5.18
DPS (HKD)	0.18	0.17	0.21	0.17	0.17

Source: Company data, Nomura estimates

Relative performance chart (one year)



Source: ThomsonReuters, Nomura research

(%)	1M	3M	12M
Absolute (HKD)	11.0	9.5	15.8
Absolute (USD)	11.0	9.3	15.7
Relative to MSCI China	9.8	18.0	20.4
Market cap (USDmn)	6,425.1		
Estimated free float (%)	38.9		
52-week range (HKD)	8.13/5.92		
3-mth avg daily turnover (USDmn)	6.80		
Major shareholders (%)			
Guangdong Holdings Limited	61.1		

Source: Thomson Reuters, Nomura research

Notes

Cashflow (HKDmn)

Year-end 31 Dec	FY11	FY12	FY13F	FY14F	FY15F	Notes
EBITDA	4,656	4,915	4,994	5,204	5,397	
Change in working capital	-1,840	-382	2,303	-244	-259	
Other operating cashflow	1,978	17	96	-583	-692	
Cashflow from operations	**4,794**	**4,550**	**7,392**	**4,377**	**4,446**	
Capital expenditure	-2,904	-126	-1,323	-2,205	-2,476	
Free cashflow	**1,891**	**4,424**	**6,069**	**2,172**	**1,970**	
Reduction in investments	59	-367	-5,000	0	-1	
Net acquisitions	-854	-397	1,200	0	0	
Reduction in other LT assets	-551	288	-59	-51	-53	
Addition in other LT liabilities	211	70	0	0	0	
Adjustments	1,431	-139	59	51	54	
Cashflow after investing acts	**2,186**	**3,878**	**2,269**	**2,172**	**1,970**	
Cash dividends	-958	-1,170	-1,247	-1,320	-995	
Equity issue	4	2	15	116	24	
Debt issue	-282	-1,210	1,015	-175	-221	
Convertible debt issue	0	0	0	0	1	
Others	-1,248	-571	0	0	-1	
Cashflow from financial acts	**-2,484**	**-2,948**	**-217**	**-1,380**	**-1,191**	
Net cashflow	**-298**	**929**	**2,052**	**793**	**779**	
Beginning cash	3,841	3,543	4,472	6,524	7,317	
Ending cash	3,543	4,472	6,524	7,317	8,095	
Ending net debt	1,975	-172	-1,112	-1,984	-2,892	

Source: Company data, Nomura estimates

Balance sheet (HKDmn)

As at 31 Dec	FY11	FY12	FY13F	FY14F	FY15F	Notes
Cash & equivalents	3,543	4,472	6,524	7,317	8,095	
Marketable securities	64	432	5,432	5,432	5,432	
Accounts receivable	2,942	3,123	965	1,229	1,506	
Inventories	61	57	69	71	73	
Other current assets	0	0	0	0	0	
Total current assets	**6,610**	**8,084**	**12,989**	**14,048**	**15,106**	
LT investments	0	0	0	0	1	
Fixed assets	10,502	12,656	12,826	14,696	16,798	
Goodwill	266	266	266	266	266	
Other intangible assets	14,933	14,124	13,359	12,635	11,951	
Other LT assets	2,519	2,231	2,291	2,342	2,394	
Total assets	**34,832**	**37,362**	**41,731**	**43,987**	**46,516**	
Short-term debt	2,802	554	796	960	914	
Accounts payable	2,427	2,521	2,678	2,700	2,720	
Other current liabilities	783	484	484	484	484	
Total current liabilities	**6,012**	**3,559**	**3,958**	**4,144**	**4,118**	
Long-term debt	2,716	3,746	4,616	4,373	4,290	
Convertible debt	0	0	0	0	0	
Other LT liabilities	1,602	1,672	1,672	1,672	1,672	
Total liabilities	**10,331**	**8,978**	**10,247**	**10,189**	**10,080**	
Minority interest	2,849	4,346	4,656	4,969	5,289	
Preferred stock	0	0	0	0	0	
Common stock	3,116	3,117	3,120	3,129	3,131	
Retained earnings	17,413	19,674	22,388	24,705	26,995	
Proposed dividends	1,122	1,247	1,320	995	1,020	
Other equity and reserves	0	0	0			
Total shareholders' equity	**21,651**	**24,038**	**26,828**	**28,829**	**31,147**	
Total equity & liabilities	**34,832**	**37,362**	**41,731**	**43,987**	**46,516**	
Liquidity (x)						
Current ratio	1.10	2.27	3.28	3.39	3.67	
Interest cover	43.5	na	na	na	na	
Leverage						
Net debt/EBITDA (x)	0.42	net cash	net cash	net cash	net cash	
Net debt/equity (%)	9.1	net cash	net cash	net cash	net cash	
Activity (days)						
Days receivable	90.2	143.5	92.8	48.5	58.8	
Days inventory	8.7	8.2	8.1	8.8	8.8	
Days payable	307.2	341.8	337.2	339.5	333.2	
Cash cycle	-208.3	-190.2	-236.3	-282.2	-265.5	

Source: Company data, Nomura estimates

Significant earnings growth in FY13 due to assets' disposal

On 14 Jan 2013, GDI published a positive profit alert for FY13, with net profit expected to increase significantly compared to 2012, mainly due to disposal of some non-core assets, as well as the addition of attributable power generation capacity.

Fig. 79: GDI: 2013 PBT contribution mentioned in positive profit alert

Company	Project	PBT contribution (HKDmn)
Disposal		
Xin Yue (BVI) + GAM3	Humen Bridge, Shantou Haiwan Bridge, Panyu Bridge	424.2
Shaoguan D	Shaoguan Yuejiang Power	74.7
Shaoguan D	Disposal of power generation capacity quota	71.7
	One-off profit	**570.7**
Capacity addition		
Jinghai Power	Attributable capacity of 2*1,000*25% = 500MW	195.0
	Major PBT boost contribution	**765.7**
	FY12 reported PBT	**4,921.7**
	Impact to PBT growth (%)	***15.6%***

Source: Company data, Nomura research

In our view, the positive profit alert was well expected by the market, given the company had already announced these disposals previously, and mentioned commencement of the 2x1,000MW power generation units in its interim report.

Recurring net growth to remain flattish in 2014-15F

Stripping out one-off items, we forecast FY13F recurring net profit to increase 14.7% y-y and 1.0%/2.8% for FY14/15F, respectively. The relatively low earnings growth is mainly due to: 1) the 5.8% fixed annual y-y growth water supply contract signed with Hong Kong government for 2013-15F; 2) no contribution from toll bridge projects due to the disposal; 3) Ying Keng Road not charging a toll fee since 31 Jul 2013 given the road's poor condition; and 4) new projects (eg, the new Zhongshan Power Plant, Pan Yu CPD and Tianjin Teemall) are expected to be commissioned in end-FY16F, and will only have material earnings contributions from 2017F.

Fig. 80: GDI: Revenue and earnings growth in FY13-15F

HKD mn	2012	2013F	2014F	2015F
Revenue	7,736.1	8,040.5	8,260.1	8,482.9
y-y growth		*3.9%*	*2.7%*	*2.7%*
Net income - reporting	3,413.8	4,253.8	3,204.8	3,288.0
y-y growth		*24.6%*	*-24.7%*	*2.6%*
Net income - recurring	2,768.2	3,174.5	3,204.8	3,288.0
y-y growth		*14.7%*	*1.0%*	*2.6%*

Source: Company data, Nomura estimates

Fist set back to punch hard, while no meaningful target in short term

According to management, disposal of non-core assets (toll bridges and obsolete power generation capacity) helps the company focus more on its key development area with ample capital in its pocket. By 1H13, GDI had nearly HKD10bn cash on hand and, with no immediate investment plan, had to allocate HKD5bn to invest in available-for-sell financial assets via Chinese banks.

When discussing the future development of GDI other than projects currently in the pipeline (Zhongshan Power Plant, Tianjin Teemall and Pan Yu CBD), management guided that it will utilize current ample capital to invest in water and/or commercial

property projects if project IRRs are to its satisfaction, either greenfield projects or M&A opportunities. However, we believe that such business expansion will not emerge significantly in the near term as:

- **Water business:** China's traditional water distribution business is currently a relatively saturated market with less possibility to develop greenfield projects. Given the decent margin and defensive utility nature, it is also difficult to have M&A opportunities at fair price, we think. For the WWT business, which has more project opportunities, GDI does not have a competitive advantage during the tender process and M&A negotiations given its lack of experience in WWT projects, especially facing experienced competitors who also have strong exposure in Guangdong province (such as Dongjiang Environmental [895 HK, NR] and CT Environmental [1363 HK, NR]).

  During the past few years, we note that GDI managed to only acquire two WWT projects in Dongguan and Meizhou in late 2013 with total capacity amounting to only c.100,000ton/day, which will contribute less than 1% to the bottom line.

- **Commercial properties:** Compared to residential properties which have concerns on account of governmental control, commercial properties seem to be more promising in China. However, given the 3-5 year construction horizon for a typical commercial property project, we believe that any material impact from this business segment will come only in the mid-to-long term.

Fig. 81: GDI: Current real property projects under development

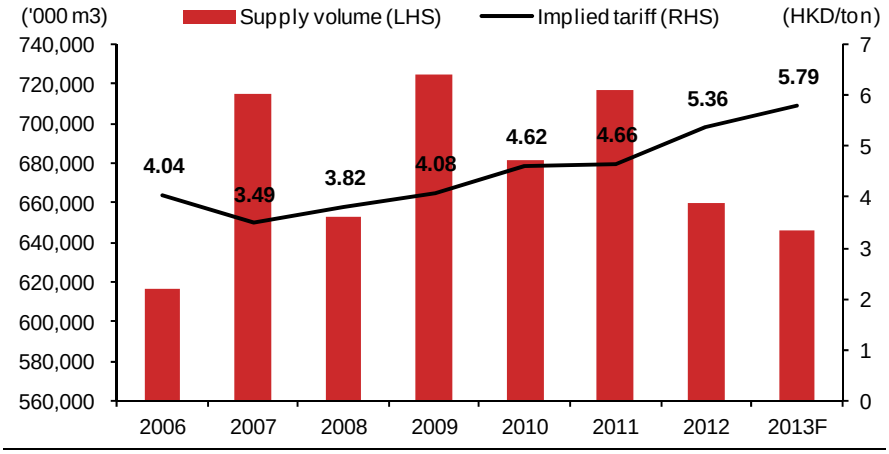
Project	Location	Equity holding	Expected COD	Total investment (mn CNY)	Gross area (000' m2)	Lettable area (000' m2)
Panyu Wanbo CBD	Guangzhou	31.04%	end-2016	19,440	260	208
Tianjin Teemall	Tianjin	76.09%	end-2016	23,000	193	117

Source: Company data, Nomura research

HK water supply contract for 2015-17F unlikely to show significant revenue growth

The water supply volume to HK by GDI has continuously decreased since 2011. Given the fixed growth payment contract, the implied water tariff reached HKD5.36/m3 in 2012 and we expect the actual realized tariff to reach HKD5.79/m3 in 2013F.

Fig. 82: GDI: Water supply volume to HK and implied tariff – 2006-13F



Source: Company data, Nomura estimates

Fig. 83: Hong Kong: Current water tariff

HKD/m3	Water tariff
Residential	
- first tier	Free
- second tier	4.16
- third tier	6.45
- fourth tier	9.05
Commercial	4.58
Construction	7.11
For non ocean-going shipping	4.58
For ocean-going shipping	10.93

Source: Water Supplies Department, Nomura research

Compared to the HK water tariff as shown in the above figure, we note that the HKD5.79/m3 level is above the tariffs for second tier residential, commercial and non-ocean-going shipping segments. In addition, given the slowdown of Hong Kong's economic growth, it is unlikely that the government would announce a water tariff hike (the tariff has remained unchanged since 1995) which would likely add further pressure to the populace. Thus we expect limited upside for further revenue growth in the next

water supply contract signed between GDI and the HK government for 2015-17F. Recently, the HK government announced its financial budget plan with allocated capital and land for seawater desalination plants, in order to boost the local freshwater supply. Though the first desalination plant is expected to commission in 2020F, we believe the dependency on inland freshwater supply, and in turn the bargaining power of GDI, will gradually reduce in the long term.

Valuation: flattish growth with no visible catalyst; Reduce

We move from Suspended to Reduce rating on GDI with a TP of HKD7.00, implying a downside of 12.4%. The stock is currently trading at a P/E of 15.6x 2014F EPS of HKD0.51. Although GDI's P/E is relatively low compared to peers, its 2013-15F EPS CAGR is only 7.2%, according to our estimates, significantly lower than its water segment peers' ~30%, due to: 1) its mediocre earnings growth given the core business of water distribution has been restricted to single-digit growth under the service contract with the Hong Kong government; 2) lack of project development opportunities which can have a material impact in the near term; and 3) less visibility in future M&A opportunities. With a potential downside of 12.4% to our TP, we believe GDI is fully valued at current levels and, thus, believe it will underperform its peers and the benchmark index over 2014-15F. We will closely monitor any potential M&A activity at the company, which could be a trigger for a re-rating.

Fig. 84: GDI: Operation forecast by business segment 2013-15F

mn HKD	2013F	2014F	2015F
Revenue	**8,040**	**8,260**	**8,483**
Water distribution	4,953	5,193	5,416
Power generation	546	522	522
Toll roads and bridges	9	-	-
Property investment	1,067	1,079	1,079
Department stores	848	848	848
Hotel operations and management	617	617	617
EBITDA	**5,346**	**5,538**	**5,718**
Water distribution	3,824	4,023	4,203
Power generation	137	126	126
Toll roads and bridges	5	-	-
Property investment	824	833	833
Department stores	313	313	313
Hotel operations and management	242	242	242
EBITDA margin (%)	***66.5%***	***67.0%***	***67.4%***
Water distribution	*77.2%*	*77.5%*	*77.6%*
Power generation	*25.1%*	*24.1%*	*24.1%*
Toll roads and bridges	*53.9%*	*n.a.*	*n.a.*
Property investment	*77.2%*	*77.2%*	*77.2%*
Department stores	*37.0%*	*37.0%*	*37.0%*
Hotel operations and management	*39.3%*	*39.3%*	*39.3%*

Source: Company data, Nomura estimates

Valuation methods and risks

Our TP of HKD7.00 is based on SOTP methodology, with separate valuations for its water distribution, property investment, power generation, department store, hotel operations and management businesses given their different business models: 1) Water distribution, power generation, and department stores – we value these three segments using a DCF model, assuming WACCs of 11.6%/10.4%/14.3% (Water and power business are utilities, which have lower WACC vs. department stores), respectively; 2) property investment and hotel management: we value these two segments using an NAV

method by applying a discount of 45% to its latest reported NAV, in-line with our China Property Team's assumption for Guangzhou R&F Properties (2777 HK, Buy); and 3) Net cash – we value the company's net cash on hand using a P/B method with a discount P/B of 0.80, as we believe GDI cannot utilize its net cash (incl. available-for-sale investments) on hand effectively in the short term.

Fig. 85: GDI: SOTP valuation

Y/E 31 DEC	Valuation			2014F (HKD)	Portion (%)
Water distribution	DCF	@	11.6%	4.6	66.1%
Property investment (incl. malls, office buildings, and hotels)	NAV+discount	@	45.0%	0.8	12.1%
Power generation	DCF	@	10.4%	0.3	4.7%
Department store	DCF	@	14.3%	0.2	3.4%
Corporate value - operating business				**6.0**	**86.3%**
Net cash / (debt)	P/B	@	0.80x	1.0	**14.2%**
Equity value				**7.0**	**100.0%**
Target price				**7.0**	

Source: Company data, Nomura estimates

Upside risks:

- Value accretive M&A – any significant value accretive M&A happening in the short-term would have a material impact on the company's earnings growth;
- Water/power tariff hike – Any unexpected rapid growth in the water/power tariff would lift the company's profitability.

Appendix A-1

Analyst Certification

I, Thomas Tang, hereby certify (1) that the views expressed in this Research report accurately reflect my personal views about any or all of the subject securities or issuers referred to in this Research report, (2) no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this Research report and (3) no part of my compensation is tied to any specific investment banking transactions performed by Nomura Securities International, Inc., Nomura International plc or any other Nomura Group company.

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Issuer	Ticker	Price	Price date	Stock rating	Sector rating	Disclosures
China Everbright International	257 HK	HKD 11.40	03-Mar-2014	Buy	N/A	A1,A2,A3,A4,A6,A11
Guangdong Investment	270 HK	HKD 7.99	03-Mar-2014	Reduce	N/A	
Beijing Enterprises Water	371 HK	HKD 5.55	03-Mar-2014	Buy	N/A	A10,A11

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A2 The Nomura Group had a non-investment banking securities related services client relationship with the issuer during the past 12 months.

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A4 The Nomura Group had an investment banking services client relationship with the issuer during the past 12 months.

A6 The Nomura Group expects to receive or intends to seek compensation for investment banking services from the issuer in the next three months.

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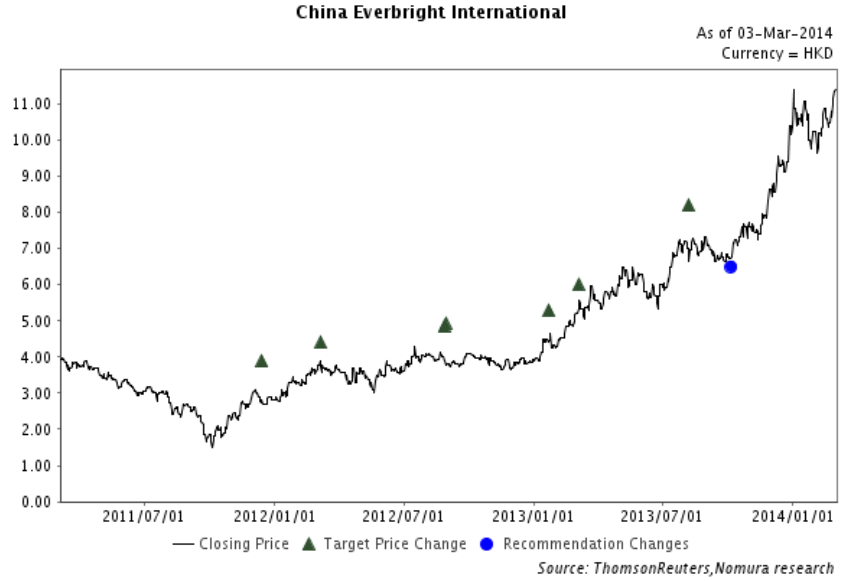
A11 The Nomura Group holds 1% or more of any class of common equity securities of the issuer.

China Everbright International (257 HK) **HKD 11.40 (03-Mar-2014)** Buy (Sector rating: N/A)

Rating and target price chart (three year history)



Date	Rating	Target price	Closing price
28-Sep-13	Suspended		6.67
07-Aug-13		8.20	7.02
05-Mar-13		6.00	5.32
22-Jan-13		5.30	4.45
29-Aug-12		4.93	3.76
27-Aug-12		4.86	3.89
06-Mar-12		4.40	3.75
14-Dec-11		3.90	2.80

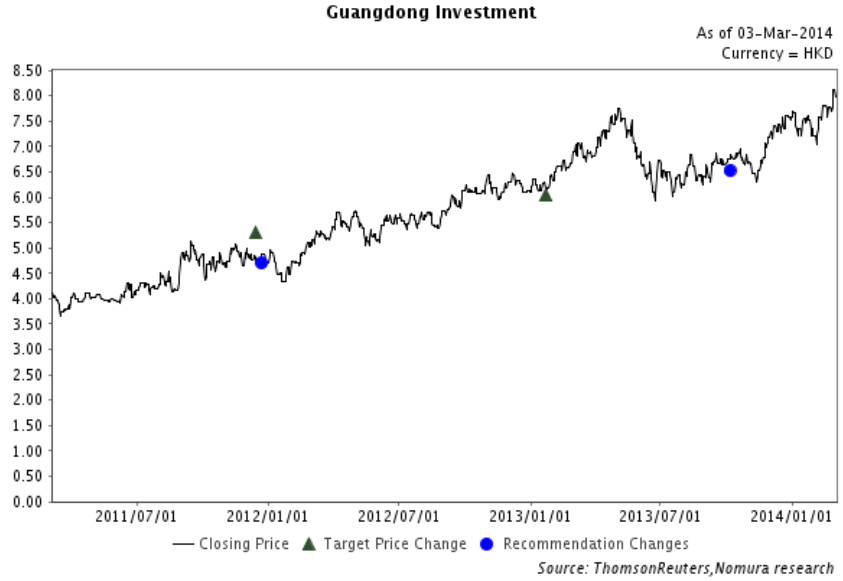
For explanation of ratings refer to the stock rating keys located after chart(s)

Valuation Methodology Our TP of HKD13.10 is based on a DCF methodology, assuming a WACC of 7.8% and terminal growth of 2%. For our DCF valuation, the cash flows are discounted back to 2014F. The benchmark index for this stock is MSCI China.

Risks that may impede the achievement of the target price Downside risks to our target price include: 1) a delay in project construction, as slower progress could affect revenue generation in both the construction and operation periods; 2) a slowdown in acquiring new projects could interrupt the company's current rapid capacity growth; and 3) any changes in the macro political environment and governmental policies over the water and waste treatment industry could result in key changes in our forecasts and hence our target price.

Guangdong Investment (270 HK) **HKD 7.99 (03-Mar-2014)** Reduce (Sector rating: N/A)

Rating and target price chart (three year history)



Date	Rating	Target price	Closing price
28-Sep-13	Suspended		6.64
22-Jan-13		6.05	6.20
14-Dec-11	Neutral		4.82
14-Dec-11		5.30	4.82

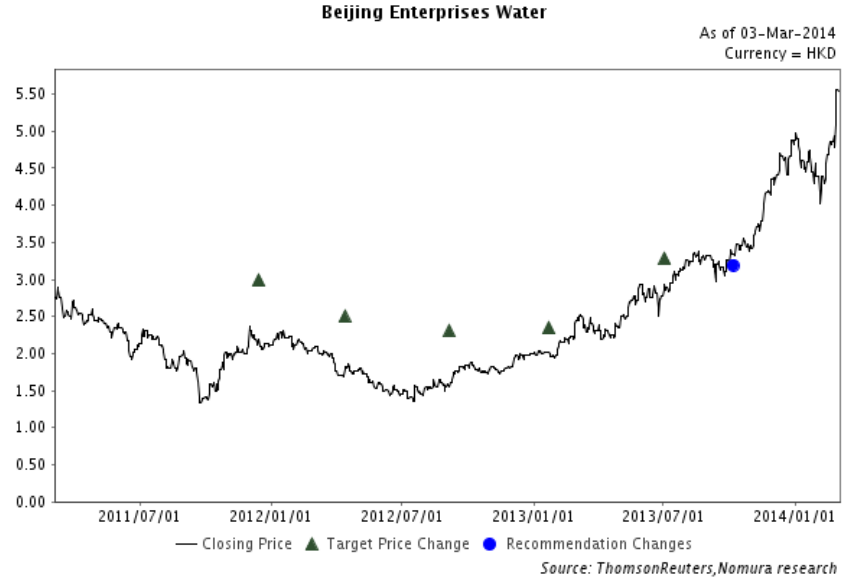
For explanation of ratings refer to the stock rating keys located after chart(s)

Valuation Methodology Our TP of HKD7.00 is based on SOTP methodology, with separate valuations for its water distribution, property investment, power generation, department store, hotel operations and management businesses given their different business models: 1) Water distribution, power generation, and department stores – we value these three segments using a DCF model, assuming WACCs of 11.6%/10.4%/14.3% (Water and power business are utilities, which have lower WACC vs. department stores), respectively; 2) property investment and hotel management: we value these two segments using an NAV method by applying a discount of 45% to its latest reported NAV, in-line with our China Property Team's assumption for Guangzhou R&F Properties (2777 HK, Buy); and 3) Net cash – we value the company's net cash on hand using a P/B method with a discount P/B of 0.80, as we believe GDI cannot utilize its net cash (incl. available-for-sale investments) on hand effectively in the short term.

Risks that may impede the achievement of the target price Upside risks include • Value accretive M&A – any significant value accretive M&A happening in the short-term will have a material impact on the company's earnings growth; • Water/power tariff hike – any unexpected rapid growth in the water/power tariff will lift the company's profitability.

Beijing Enterprises Water (371 HK) **HKD 5.55 (03-Mar-2014)** Buy (Sector rating: N/A)

Rating and target price chart (three year history)



Date	Rating	Target price	Closing price
28-Sep-13	Suspended		3.27
03-Jul-13		3.29	2.94
22-Jan-13		2.35	2.01
05-Sep-12		2.30	1.56
12-Apr-12		2.50	1.79
14-Dec-11		3.00	2.20

For explanation of ratings refer to the stock rating keys located after chart(s)

Valuation Methodology Our TP of HKD6.50 is based on a DCF methodology, assuming a WACC of 7.8% and terminal growth of 2%. For our DCF valuation, cash flows are discounted back to 2014F. Our benchmark index is MSCI China.

Risks that may impede the achievement of the target price Major downside risks: 1) slower-than-expected capacity growth; 2) government default; and 3) value destructive M&A.

Rating and target price changes

Issuer	Ticker	Old stock rating	New stock rating	Old target price	New target price
China Everbright International	257 HK	Suspended	Buy	N/A	HKD 13.10
Guangdong Investment	270 HK	Suspended	Reduce	N/A	HKD 7.00
Beijing Enterprises Water	371 HK	Suspended	Buy	N/A	HKD 6.50

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Explanation of Nomura's equity research rating system in Japan and Asia ex-Japan prior to 21 October 2013

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