## China/Hong Kong Industry Focus

# **China Environmental Sector**

Refer to important disclosures at the end of this report.

DBS Group Research . Equity

## 5 Aug 2021

HSI: 26,427

## Beneficiary of carbon trading

- Stronger growth in construction revenue and treatment volume for WTE players in 1H21
- Slight margin pressure from higher commodity prices
- Benefit from carbon trading in the long run
- Prefer <u>Canvest (1381 HK)</u> for stronger growth outlook

Expect rebound in turnover but with lower gross margin in 1HFY21. With fading impact from COVID, construction progress of most environmental protection companies has resumed to normal. In particular, construction of most of the waste-to-energy (WTE) projects in the order backlog will be completed in these two years; hence, there has been higher turnover from construction revenue in 1HFY21. Their treatment volume should have also enjoyed robust growth of >20% in 1HFY21. This will bring total turnover growth to low to mid-teens. However, higher commodity prices are expected to erode part of the margin, leading to low-teen growth in earnings. Canvest is an exception where both construction revenue and treatment volume are expected to register robust growth to give a >20% increase to the bottom line in 1HFY21.

Extra income from carbon trading. After the debut of national carbon trading on 16 July 2021, we believe registration for Chinese Certified Emission Reductions (CCER) will resume soon to facilitate carbon trading. As CCER units from renewable energy projects, including biomass power and WTE projects, can be used to meet up to 5% of emission reduction obligation, many environmental service companies will benefit from an extra income from sales of CCER units. Trading volume of emission allocation is still thin currently, but we believe demand from emission allocation, as well as CCER, will climb as the number of participants increases and amount of allocation for each participant will decline.

Prefer Canvest. Amongst environmental service plays under our coverage, we prefer WTE player, Canvest (1381 HK), because it has the strongest earnings growth with minimum impact from margin squeeze. In addition, it is well prepared to participate in carbon trading, in both the domestic and international markets. We have lowered FY21/22 earnings estimates of China Everbright Greentech due to a more conservative margin outlook and treatment tariff trend for hazardous waste. The TP is also cut to HK\$3.50.

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#### **Recommendation & valuation**

Company	Price Local\$	Mkt Cap US\$m	Target Price Local\$	Recom	PE 21F
Beijing Ent Water (371 HK)	2.9	3,740	3.60	BUY	6.1
<u>Canvest</u> (1381 HK)	4.11	1,290	4.95	BUY	7.3
China Everbright Environment (257 HK)	4.49	3,549	6.60	BUY	4.0
China Everbright Greentech (1257 HK)	2.77	736	3.50	BUY	4.1
China Everbright Water (1857 HK)	1.39	512	2.00	BUY	3.4

Source: Thomson Reuters, DBS Bank (Hong Kong) Limited ("DBS HK")





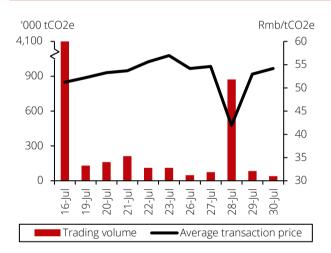
#### **China Environmental Sector**



#### Debut of carbon trading at Rmb51.23/tCO2e

As a key step in encouraging enterprises to reduce carbon emission, China's national carbon market, the world's largest carbon emission trading system, kick started on 16 July 2021 with a turnover of Rmb210m or Rmb51.2/tCO<sub>2</sub>e (tons of carbon dioxide equivalent) on debut. The average transaction price (including bidding transactions and large volume transactions) ranged between Rmb40 and RmbRmb57/ tCO<sub>2</sub>e in the following two weeks. The prices were also within the range of other pilot trading centres (in Beijing, Fujian, Guangdong, Hubei, Shanghai, Shenzhen, Tianjin, and Chongqing). However, transaction volume dropped significantly after the first day trading.

#### **Trading of carbon emission allocation**



Source: Shanghai Environment and Energy Exchange, DBS Bank

The thin turnover could be due to various reasons. First, trading participants currently are limited to <2,500 power generation companies but financial institutions and other carbon asset management companies are not allowed to participate yet. On a positive note, carbon trading will subsequently be extended to other high-carbon emission industries, such as metal and cement. This should improve trading volume.

Second, emission rights for 2021 have yet to be fully allocated; thus, demand is relatively weak. However, we believe allocation will be completed in September and demand will grow stronger, particularly from less efficient operators. In addition, we expect the amount of emission rights being allocated will be reduced each year and subsequently be replaced by paid quota. These will drive stronger demand in the carbon trading market in the long run.

#### Beneficiary of carbon trading

Apart from carbon emission trading, power operators can also use voluntary CCER to meet up to 5% of emission reduction obligation each year. CCER units come from renewable projects, including biomass power and WTE projects. Registration for CCER is temporarily closed currently, but we believe it will resume later this year or early next year to facility carbon trading. Nevertheless, accreditation of CCER will take at least 6-12 months. The amount of emission reduction being certified will vary from project to project. In particular, for WTE projects, the composite of waste and plant efficiency are the key determining factors. In addition, there are over 1,000 projects in the pipeline for accreditation when the registration resumes again. Thus, biomass power and WTE projects will not benefit from the extra revenue coming from trading of CCER immediately but will do so in the long run.

Within our coverage in environmental services, China Everbright Environment (CEE), China Everbright Greentech, and Canvest have projects qualified for CCER trading and have <10 projects in the pipeline for CCER accreditation. In addition, CEE and Canvest have a large number of WTE projects with total treatment capacity of at least 46K tons/day and 28K tons/day to be completed after 2020, respectively. These projects can also be accredited for carbon trading in the international markets. Assuming carbon offset of 0.5tCO<sub>2</sub>e per each ton of waste treated, CEE and Canvest could have 8m tCO<sub>2</sub>e and 5m tCO<sub>2</sub>e for trading in the international market respectively, bringing in extra revenue of Rmb400m and Rmb250m. In fact, Canvest has commissioned China Carbon Neutral Development (1372 HK) to provide a carbon asset development consulting service that is recognised by the domestic and international carbon trading market.



#### 1HFY21 results preview

HK\$m 13,001

HK\$m 20.787

	DBS 1HFY2		
	YoY	Net	YoY
Crncy	Sales growth	profit g	rowth

#### Beijing Enterprises Water\* (371 HK, BUY)

2,445

Despite a continuous decline in construction revenue for comprehensive innovation projects, construction revenue of BOT projects is expected to climb a single digit. Coupled with rising treatment volume of waste water and water supply, we estimate turnover to climb by 4%. We expect some margin pressure in construction, which should be partly offset by reduction in general administration costs (due to recovery from COVID). It will continue to secure 1-2m tons of daily capacity of BOT projects to grow its project portfolio to >40m tons/day. More business opportunities will come from recycling of waste water and upgrade of treatment standard with higher treatment tariff.

Canvest	(1381	HK, BUY)			
					Robust earnings growth in 1HFY21 is driven by an increase in operating capacity from 18,340 tons/day in
			$1 \ \ 1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$		
RMBm 2.481	23.7%	558	23.5%	tons. We also expect strong growth of 20% in construction revenue as Canvest targets to push operating	
KWDIII	2,401	23.770	330	25.570	capacity to >30,000 tons by the end of the year. We estimate the overall gross margin to be relatively stable
					at 33% (1HFY21: 33.8%). As capex will peak this year, we expect the net debt-equity ratio to climb above
					100% (FY20: 99%) but should gradually decline in FY22.

#### China Everbright Environment (257 HK, BUY)

3412

12 7%

727 -11.5%

With >40 waste-to-energy (WTE) projects to be completed this year, we estimate an 8% growth in construction revenue. Despite a single-digit growth in operating WTE capacity to 71K tons per day, we estimate treatment volume to climb 20% as new projects ramp up. Stronger growth in operating capacity is expected in 2H upon completion of more projects. With an asset-light development strategy, CEE has won a few waste-sorting and waste transfer projects with total investment of c.Rmb110m and total service fee of Rmb1bn during the service period. The current penetration rate of waste-sorting project is still very low and increasing the number of waste-sorting projects will give good recurring income.

## China Everbright Greentech (1257 HK, BUY)

13 1%

Upon completion of construction of most of biomass projects, we estimate overall construction revenue to decline by >25% in 1HFY21. The shortfall will be partly offset by a jump in higher steam revenue from the biomass project, leading to a 3% drop in turnover in 1HFY21. Although rebound in industrial activities has improved hazardous waste treatment volume, the decline in the treatment tariff has put pressure on the margin. In addition, a reduction in stalk supply has increased cost per kWh of electricity from Rmb0.37 to c.Rmb0.40, leading to a lower gross margin for biomass operation. Coupled with higher interest expense and construction costs, we estimate the overall gross margin to drop 3ppt with net profit declining >11% in

Looking into 2H, we expect downward pressure on the margin of the biomass operation to be alleviated with an increase in stalk supply. Recent issuance of a carbon-neutral bond with a coupon rate of 3.5% will also help reduce interest expense. Nevertheless, we have turned more conservative in the margin outlook and treatment tariff trend for hazardous waste. Thus, we have lowered our FY21/22 earnings estimates by 20-25%. The TP is also lowered to HK\$3.50, based on a lower adjusted PE of 7x (down from 8x) to reflect the challenging outlook in the profit margin.

### China Everbright Water (1857 HK, BUY)

15.3%

458

13.2%

With resumption of construction progress, construction revenue is expected to exhibit robust growth of 25%, driving total revenue to climb 15.3%. Operational revenue growth is estimated at 9%, underpinned by 5-6% growth in water treatment volume and 3-4% growth in tariff. Total portfolio has around 6.7m tons of daily capacity of which around 5m and 1.15m tons are operational and under construction, respectively. During 1H, the company made the first attempt in SOE mixed-ownership reform through the acquisition of 65% of a sewage treatment plant in Tianjin. In addition, it secured two new projects with total investment of Rmb403m.

Source: Companies, DBS HK

2.445

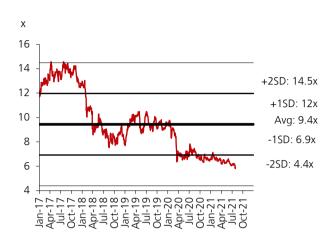
HK\$m

4.124



## **Beijing Enterprises Water PE chart (371 HK)**

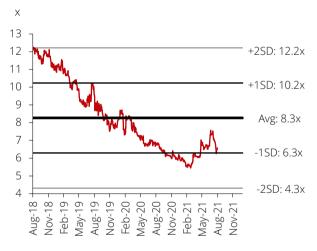
#### **Beijing Enterprises Water PB chart (371 HK)**

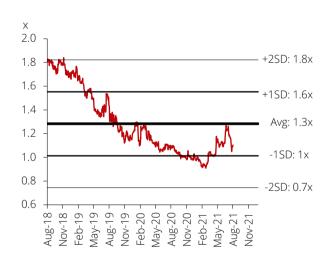




### Canvest Env. PE chart (1381 HK)

Canvest Env. PB chart (1381 HK)





## **China Everbright Environment PE chart (257 HK)**

**China Everbright Environment PB chart (257 HK)** 





### **China Environmental Sector**



Source: Thomson Reuters

## China Everbright Greentech PE chart (1257 HK)

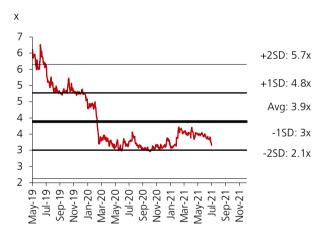
### China Everbright Greentech PB chart (1257 HK)

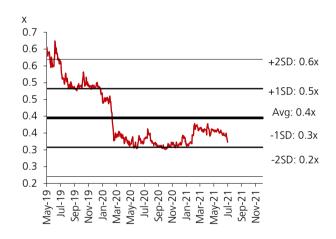




### China Everbright Water PE chart (1857 HK)

**China Everbright Water PB chart (1857 HK)** 





Source: Thomson Reuters

## **Valuation table**

																		21F
			Target		Shares	Mkt		PE	PE	Yield	Yield	P/Bk	P/Bk	EV/EB	ITDA	ROE	ROE	Net
		Price	Price	Recom	out	Сар	Fiscal	21F	22F	21F	22F	21F	22F	21F	22F	21F	22F	gearing
Company Name	Code	Local\$	Local\$		m shs	Local\$m	Yr	Х	Х	%	%	X	Х	Х	Х	96	%	%
Environmental - Hong Kong																		
Beijing Enterprises Water Group*	371 HK	2.9	3.60	BUY	10,024	29,069	Dec	6.1	5.9	6.0	6.2	0.7	0.7	11.1	10.8	12.5	12.0	108.1
Canvest Env.Protc.Group*	1381 HK	4.11	4.95	BUY	2,440	10,027	Dec	7.3	6.1	2.1	2.4	1.2	1.0	7.7	7.2	17.9	18.2	108.4
China Everbright Environment Group	257 HK	4.49	6.60	BUY	6,143	27,582	Dec	4.0	3.6	7.5	8.4	0.5	0.5	8.2	8.2	14.3	14.3	129.2
China Everbright Greentech*	1257 HK	2.77	3.50	BUY	2,066	5,723	Dec	4.1	3.8	4.9	5.3	0.4	0.4	7.8	7.8	10.7	10.7	125.0
China Everbright Water*	1857 HK	1.39	2.00	BUY	2,861	3,977	Dec	3.4	3.1	5.9	6.5	0.3	0.3	7.1	6.9	10.6	10.8	85.9
Dynagreen Env.Protc.Gp. 'H'	1330 HK	3.49	11.70	HOLD	2,034	11,702	Dec	6.8	6.1	4.1	4.6	0.7	0.6	4.4	3.9	10.5	10.9	146.6
Dongjiang Environmental 'H'	895 HK	4.19	n.a.	NR	879	6,532	Dec	6.2	5.5	5.0	5.7	0.6	0.6	7.4	6.6	10.2	10.7	24.7
Guangdong Investment	270 HK	11.08	n.a.	NR	6,538	72,439	Dec	13.7	12.7	5.6	5.9	1.6	1.5	8.0	7.4	11.8	12.3	Cash
Siic Environment (Hkg) Holdings	807 HK	1.12	1.66	HOLD	2,576	2,885	Dec	3.4	3.2	6.0	6.6	0.3	0.2	7.5	7.0	7.7	7.6	802.7
								6.1	5.5	5.2	5.7	0.7	0.7	7.7	7.3	11.8	11.9	191.3

Source: Thomson Reuters, \*DBS HK

#### **China Environmental Sector**



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HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)

**FULLY VALUED** (negative total return, i.e., > -10% over the next 12 months)

SELL (negative total return of > -20% over the next 3 months, with identifiable share price catalysts within this time frame)

\*Share price appreciation + dividends

Completed Date: 5 Aug 2021 09:29:38 (HKT)
Dissemination Date: 5 Aug 2021 14:07:36 (HKT)

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### **China Environmental Sector**



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