

## Company Report

### Yunnan Water (6839 HK)

#### Growing beyond the boundary of Yunnan

- Yunnan Water has a unique PPP shareholding structure that helps it securing more new projects in the future
- Demonstrated strong capability to expand beyond Yunnan
- Traditional tech. still dominating the WWT market, but MBR tech. is catching up with discharge standard becoming stricter
- Initiate with BUY rating and DCF-based target price of HK\$5.2/share, representing 12.5x 2017E P/E

#### Strong SOE background and adv. tech. secure future capacity growth

Yunnan Water has an operating wastewater treatment (WWT) capacity of 0.9mn tonnes/day as at the end of 1H16 and we expect it to reach 2.8mn tonnes/day in 2018E (2015-18E 54% CAGR) - while the strong SOE background of being a subsidiary of Yunnan SASAC offers it a substantial advantage in obtaining new projects, the advanced membrane technology obtained from Beijing OriginWater also allows it to meet the stricter wastewater discharge standard in China.

#### Expanding environmental business nationwide

Yunnan Water is actively expanding its business beyond Yunnan – Currently 46% and 40% of its water supply and wastewater treatment capacity are located beyond Yunnan. The company also has acquired solid waste treatment projects in Thailand and Indonesia, with total processing capacity of 0.6mn tonnes/year. We believe it has demonstrated strong capability to obtain new projects not only in Yunnan, but also in other areas. The company possesses the MBR and CMF technology that can live up to the stricter discharge standard in China. We estimate Yunnan Water's net profit to grow at a 2015-2018E CAGR of 28%, mainly driven by increase of WWT capacity.

#### Current 2017E P/E of 10.5x attractive

While Yunnan Water is comparable with Kangda Environmental (6136 HK, 8.2x 2017E P/E) in terms of mkt size and profitability, we believe the counter deserves a much higher valuation with its SOE background. On the other hand, a valuation discount to BEW (371 HK 13.9x 2017E P/E) is justified considering the latter as a market leader with much higher wastewater treatment capacity and higher ROE. Our TP for Yunnan Water, i.e., HK\$5.2/share, represents 2017E PE of 12.5x, which is close to the average level of the HK-listed counterparts.

#### Financials

RMB mn	FY14	FY15	FY16E	FY17E	FY18E
Revenue	1,101	1,558	1,962	2,452	3,230
Growth (%)	60%	42%	26%	25%	32%
Net profit	166	286	347	433	595
Growth (%)	-14%	72%	21%	25%	37%
EPS (RMB cents)	21	27	29	36	50
P/E (x)	18.6	14.2	13.2	10.5	7.7
P/B (x)	1.3	1.0	1.1	1.0	0.9
ROE (%)	7.5%	8.9%	8.3%	9.6%	12.1%
ROA (%)	4%	4%	3%	4%	4%

Sources: Company data, CMS (HK) estimates

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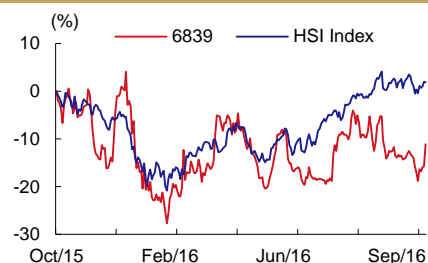
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#### Initiation

### BUY

Price	HK\$4.4
12-month Target Price (Potential up/downside)	HK\$5.2 (+18%)

#### Price Performance



Source: Bigdata

%	1m	6m	12m
6839 HK	0.7	(6.8)	(11.5)
HSI	(0.5)	10.6	1.8

#### Environmental Protection

Hang Seng Index	23565
HSCEI	9804

#### Key Data

52-week range (HK\$)	3.55-5.25
Market cap (HK\$ mn)	5250
Avg. daily volume (mn)	0.78
BVPS (HK\$)	4.4

#### Shareholding Structure

Yunnan Province Water	30.03%
Beijing Origin Water	24.02%
Other domestic shares	15.4%
No. of shares outstanding (mn)	364
Free float	30.5%

## Investment thesis

### A fast-growing boutique wastewater treatment player in Yunnan

Yunnan Water is a wastewater treatment (WWT) operator based in Yunnan Province, with designed WWT capacity of 1.2mn tonnes/day as at the end of 1H16. We like Yunnan Water because: i) the company has an unique public private partnership (“PPP”) shareholding structure that gives it an advantage when obtaining new projects; ii) the company is utilizing a MBR (for wastewater treatment) and CMF technology (for water supply) that can meet tough water discharge standard in China; iii) the company demonstrated strong capacity to obtain projects not only in Yunnan province, but also in other areas. We estimate Yunnan Water’s net profit to grow at a 2015-2018E CAGR of 28%, mainly driven by increase in WWT capacity from 0.8mn tonnes/day in 2015 to 2.8mn tonnes/day in 2018E.

### Core competitiveness - unique PPP shareholding structure

Yunnan Water has a unique shareholding structure that makes it a PPP itself – on the one hand, Yunnan SASAC, is its largest shareholder, indirectly holding 30.1% of its equity interest. On the other hand, Beijing OriginWater is its 2<sup>nd</sup> largest shareholder holding 24.0% of its equity interest. We believe the PPP model is the core competitiveness of the company – while the strong SOE background of being a subsidiary of Yunnan SASAC offers it a substantial advantage in obtaining new projects, the advanced membrane technology obtained from Beijing OriginWater also adds to its edge. These will lay solid foundation of its future project acquisition in the wastewater treatment industry.

### Actively expanding beyond Yunnan Province

Yunnan Water has been expanding its footprints into other provinces in recent years. As at the end of 1H16, projects located outside Yunnan Province account for 46% and 40% of its water supply and wastewater treatment projects respectively (in terms of designed capacity), including those in Shangdong, Jiangsu, Anhui, etc. This demonstrates its strong capacity to obtain projects not only in Yunnan, but also in other areas. While we expect Yunnan province will add 0.85mn tonnes/day of WWT capacity during 13<sup>th</sup> Five-Year-Plan period, which allows the company to obtain more greenfield projects in the province, we expect more opportunities will arise from M&As beyond the province.

### MBR tech. gaining traction as discharge standard becomes stricter

Yunnan Water possesses the MBR and CMF technology which provides higher treatment efficiency than traditional technology. In particular, MBR technology can live up to the standard of Surface Water Quality Standard Class IV (GB 3838-2002), which is even tougher than the Class I Standard A (GB 18918-2012). Although traditional technology is still dominating the WWT market, we believe there is a trend towards using MBR technology as the Chinese government is likely to gradually raise the discharge standard in the future. With access of the MBR and CMF technology, the company will be in an advantage position to obtain new projects when the standard of wastewater discharge becomes more stringent in the future.

### Initiate with BUY and TP of HK\$5.2/share

Our TP is based on our three-stage DCF model with WACC of 9.3% (derived from a risk free rate of 1.0%, market risk premium of 9.8%, beta of 1.5 and cost of debt of 4.5%), 5.0% annual growth rate for 2020E-2025E, and a terminal growth rate of 3.0% beyond 2025E. Our TP represents a FY17E P/E of 12.5x and P/B of 1.2x respectively, which are close to its average level since listing in 2015 and the average level of the HK-listed counterparts (HK listed WWT operators and WTE operators are on average trading at 12.9x and 11.5x 2017E PE respectively).

**We estimate Yunnan Water’s net profit to grow at a 2015-2018E CAGR of 28%, mainly driven by increase of WWT capacity.**

**Strong SOE background as well as the MBR technology obtained from Beijing OriginWater lays solid foundation for future project acquisition.**

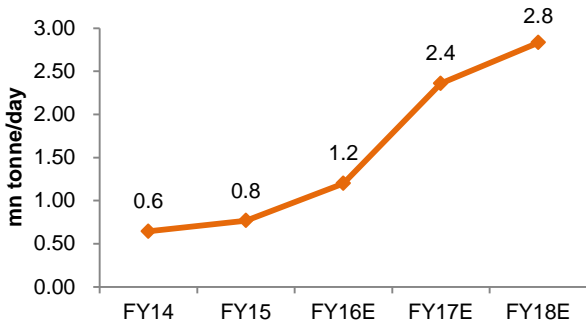
**46% and 40% of the company’s water supply and wastewater treatment capacity are located beyond Yunnan province.**

**The company possesses the MBR and CMF technology that can live up to the stricter discharge standard in China.**

**Initiate with BUY rating and TP of HK\$5.2/share, representing a 2017E PE of 12.5x.**

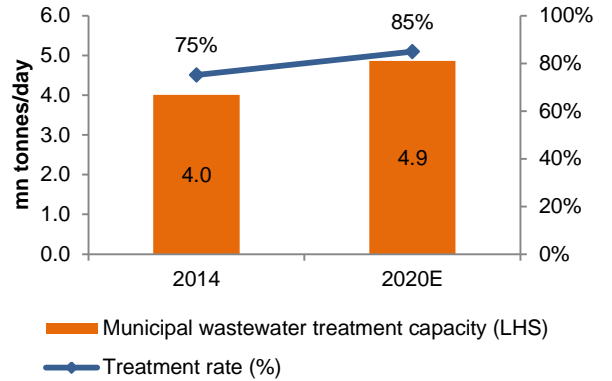
Focus charts

Figure 1: Wastewater treatment capacity expected to reach 2.8mn t/day by 2018E (2015-18E 54% CAGR)



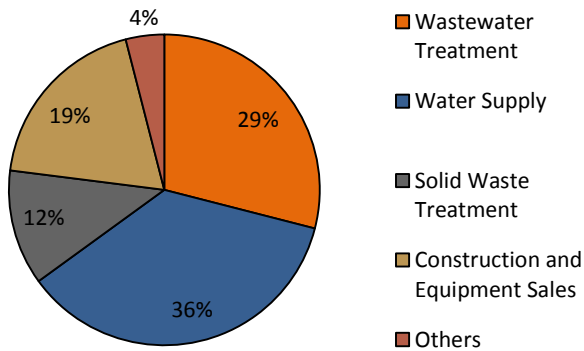
Sources: Company data, CMS (HK) estimates

Figure 2: Municipal wastewater treatment rate in Yunnan province is expected to achieve 85% by 2020E



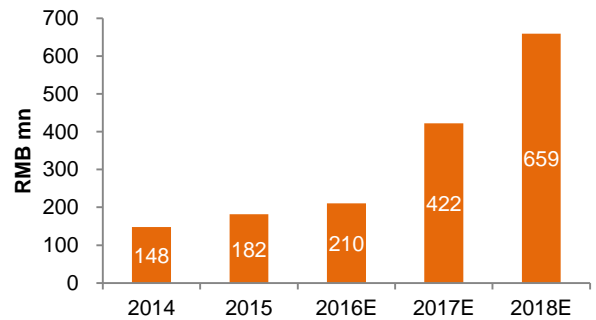
Sources: Company data, CMS (HK) estimates

Figure 3: 65% of Yunnan Water's 1H16 revenue was derived from water sectors



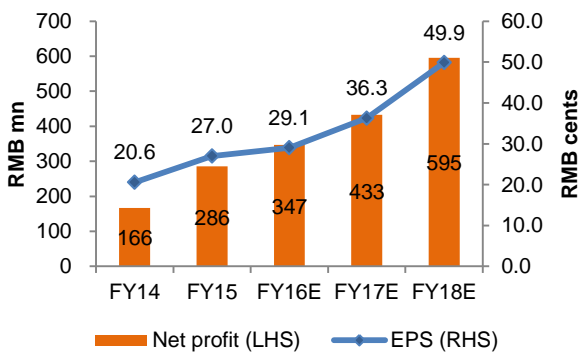
Sources: Company data, CMS (HK)

Figure 4: Operational revenue of its wastewater treatment segment expected to grow at a 2015-18E CAGR of 54%



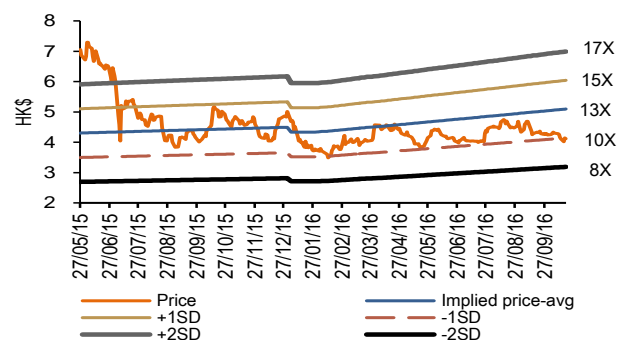
Sources: Company data, CMS (HK)

Figure 5: We forecast Yunnan Water's net profit will increase at a CAGR of 28% from 2015-18E



Sources: Company data, CMS (HK)

Figure 6: Yunnan Water's 1-year forward rolling P/E band



Sources: Bloomberg, CMS (HK)

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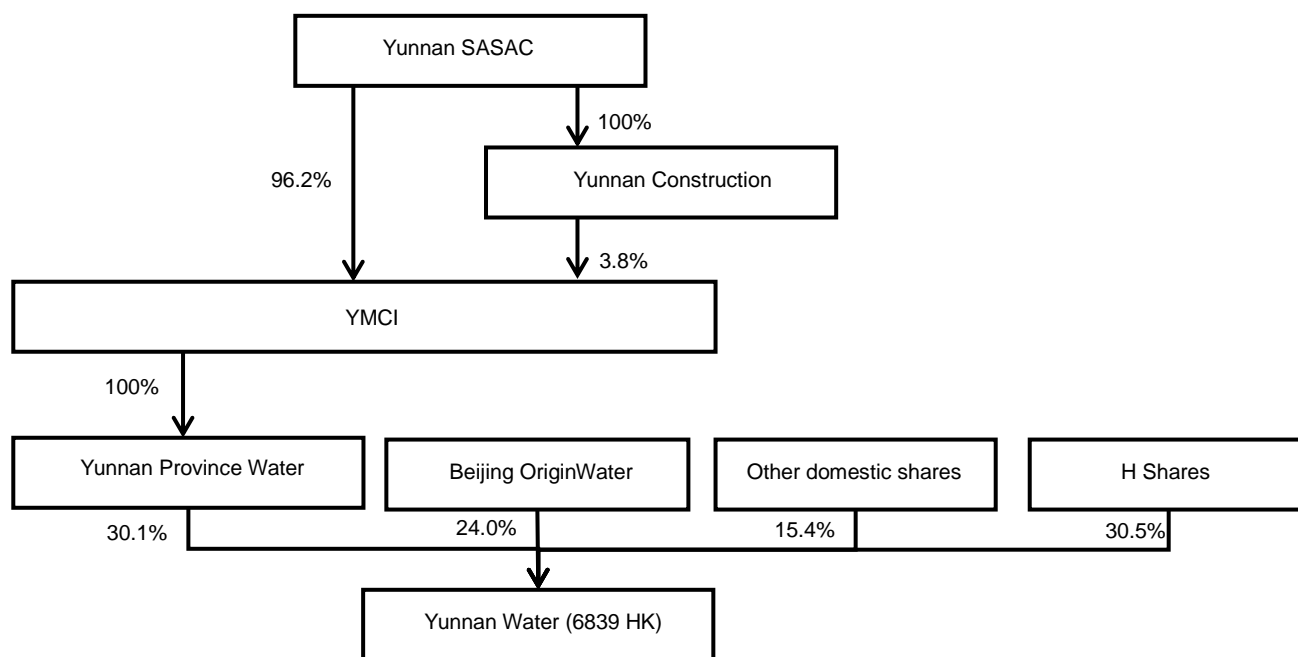
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### Strong PPP model lays foundation for future capacity growth

Yunnan Water has a core competitiveness of having a unique public private partnership (“PPP”) shareholding structure that gives it an advantage when obtaining new projects – YMCI (indirectly wholly owned by Yunnan SASAC) and Beijing OriginWater are respectively holding 30.1% and 24.0% equity interest of the company. We expect Yunnan Water’s operating wastewater treatment capacity to grow from 0.8mn t/day in 2015 to 2.8mn t/day in 2018E, representing a CAGR of 54% during the period. Capacity growth will be driven by: i) the acquisition of 50% of Galaxy New Spring (we assume another 50% will be acquired in mid 2017E); ii) Other greenfield and M&A projects (Yunnan will add 0.85mn t/day of wastewater treatment capacity during 13<sup>th</sup> Five-Year Plan Period).

Yunnan Water has a unique shareholding structure that makes it a PPP itself – on the one hand, Yunnan Province Water, which is a wholly-owned subsidiary of Yunnan Metropolitan Construction Investment (“YMCI”) owned by Yunnan SASAC, is its largest shareholder holding 30.1% of its equity interest. On the other hand, Beijing OriginWater, which is a leading membrane producer in China, with over 70% domestic MBR market shares (as of June 30, 2016), is its 2<sup>nd</sup> largest shareholder holding 24.0% of its equity interest (see figure 7). **We believe the PPP model is the core competitiveness of the company** – while the strong SOE background of being a subsidiary of Yunnan SASAC offers it a substantial advantage in obtaining new projects, the advanced membrane technology obtained from Beijing OriginWater also adds to its edge (discuss more below). These will lay solid foundation for its future project acquisitions in the wastewater treatment industry.

Figure 7: The unique shareholding structure of the company makes it a PPP model



Sources: Company data, CMS (HK)

### Yunnan Water’s wastewater treatment capacity is expected to reach 2.8mnt/day in 2018E

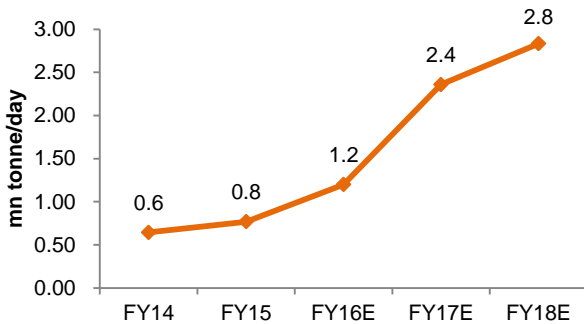
Yunnan Water had a consolidated operating wastewater treatment capacity of 0.9mn t/day as at end-1H16E, of which 0.6mn t/day are located in Yunnan province. We expect its wastewater treatment capacity to achieve 2.8mn t/day in 2018E, representing a 2015-18E CAGR of 54%. The increase in capacity will be driven by:

- The expected acquisition of the remaining 50% equity interest in Galaxy New Spring – Yunnan Water has acquired 50% of the equity interest of the company in 2H2016 (expected to complete before year end), we expect it to acquire the remaining 50% in 2017E. This will raise its equity wastewater treatment capacity by 0.46mn t/day in 2017E;
- Other greenfield and M&A projects are expected to +20% each year – Currently the company has a designed wastewater treatment capacity of 1.2mn t/day (of which 0.9mn t/day are under operation). Apart from the capacity of 0.3mn t/day that is expected to be completed before year end, we expect the company to add 0.5-0.7mn t/day (equivalent to 20% YoY growth) of new projects each year. We believe its strong SOE

background can help it secure more projects (both greenfield projects and M&As) in the future.

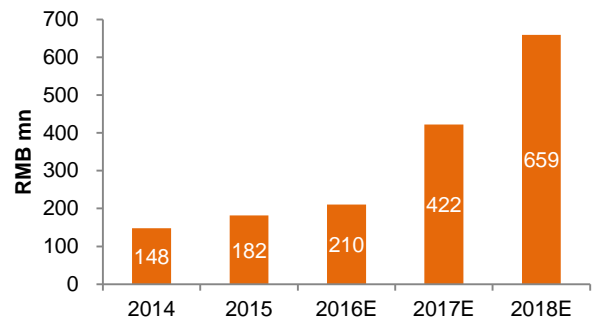
We estimate the increase in wastewater treatment capacity will translate into a 2015-2018E CAGR of 54% on the operational revenue of its wastewater treatment segment, backed by the potential acquisition of Galaxy New Spring and other new projects (excluding non-cash construction revenue and finance income), assuming a utilization rate of 70% and a 3% annual increase in wastewater treatment fee beyond 2016E.

Figure 8: Wastewater treatment capacity expected to reach 2.8mn t/day by 2018E (2015-18E 54% CAGR)



Sources: Company data, CMS (HK) estimates  
 \*0.92mn t/day capacity of Galaxy New Spring is expected to be consolidated after the expected acquisition of the remaining 50% in 2017E

Figure 9: Operational revenue of its wastewater treatment segment expected to grow at a 2015-18E CAGR of 54%

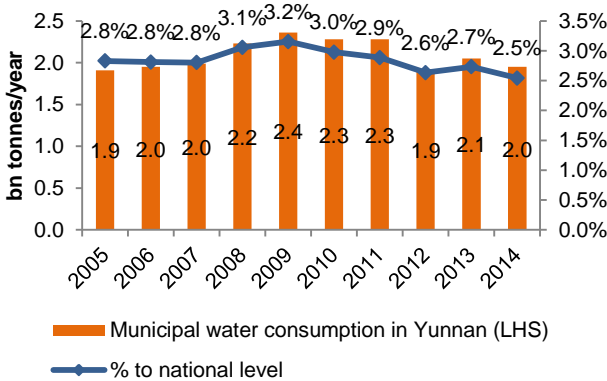


Sources: Company data, CMS (HK) estimates  
 \*Galaxy New Spring will have a full year revenue contribution in 2017E and 2018E. Acquisition of the remaining 50% is expected to take place in 2017E

### Yunnan province will +0.85mn t/day WWT capacity during 13<sup>th</sup> Five-Year-Plan Period

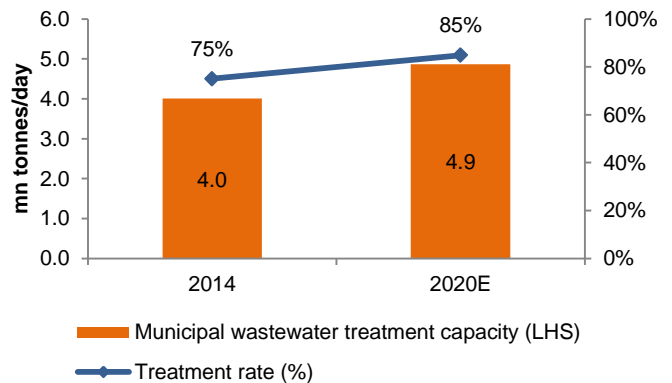
According to the National Statistics, the municipal water consumption in Yunnan was on average ~2.1bn tonnes/year (or 5.7mn t/day) over the past 10 years, accounting for ~2.8% of the national level. As of the end of 2014, Yunnan province had a total municipal wastewater treatment capacity of 4.0mn t/day, representing a treatment rate (or penetration rate) of 75% in the province. As suggested by the provincial 13<sup>th</sup> Five-Year-Period Plan, we expect Yunnan province to add another 0.85mn t/day of wastewater treatment capacity before 2020E (see figure 11) and therefore the municipal wastewater treatment capacity in the province will reach 4.9mn t/day by 2020E, with the treatment rate increasing to 85% accordingly. We believe Yunnan Water will be one of the biggest beneficiaries of the rising wastewater treatment rate in the province as we expect these greenfield projects will mainly be allocated to those with good relationship with the local government and strong execution capability.

Figure 10: Municipal water consumption in Yunnan is ~2bn t/year historically, accounting for 2-3% of the national level



Sources: National Statistics, CMS (HK)

Figure 11: Municipal wastewater treatment rate in Yunnan province is expected to achieve 85% by 2020E



Sources: National Statistics, 13<sup>th</sup> Five-Year-Plan in Yunnan Province, CMS (HK) estimates

Figure 12: Yunnan targets to add 0.85mn tonnes/day of wastewater treatment capacity from 2016E-2020E

City/ Autonomous prefecture	Designed wastewater treatment capacity (mn t/day)	Investment - WWT plant (RMB mn)	Investment - WWT plant (RMB/tonne)
Kunming	0.25	700	2,770
Zhaotong	0.03	91	3,232
Qujing	0.09	292	3,126
Chuxiong	0.05	146	3,031
Yuxi	0.02	65	3,035
Honghe	0.10	296	2,891
Wenshan	0.05	167	3,061
Pu'er	0.02	61	3,389
Xishuangbanna	0.03	78	2,768
Dali	0.09	249	2,785
Baoshan	0.03	86	2,907
Dehong	0.03	71	2,731
Lijiang	0.03	73	2,808
Nujiang	0.002	5	3,500
Diqing	0.003	8	2,633
Lincang	0.03	106	3,298
<b>Total</b>	<b>0.85</b>	<b>2,492</b>	<b>2,919</b>

Sources: 13<sup>th</sup> Five-Year-Plan in Yunnan Province, CMS (HK)

## Expanding footprint beyond Yunnan Province

While maintaining a strong presence in Yunnan Province, Yunnan Water has also been expanding its footprints into other provinces in recent years (See figure 13), with projects located outside Yunnan Province accounting for 46% and 40% of its water supply and municipal wastewater treatment projects respectively as at the end of 1H16 (in terms of designed capacity). We believe this demonstrated its strong capability obtain projects not only in Yunnan, but also in other areas. We believe its strong SOE background as well as the advanced membrane technology obtained from Beijing OriginWater will allow it to obtain more projects in other provinces in the future.

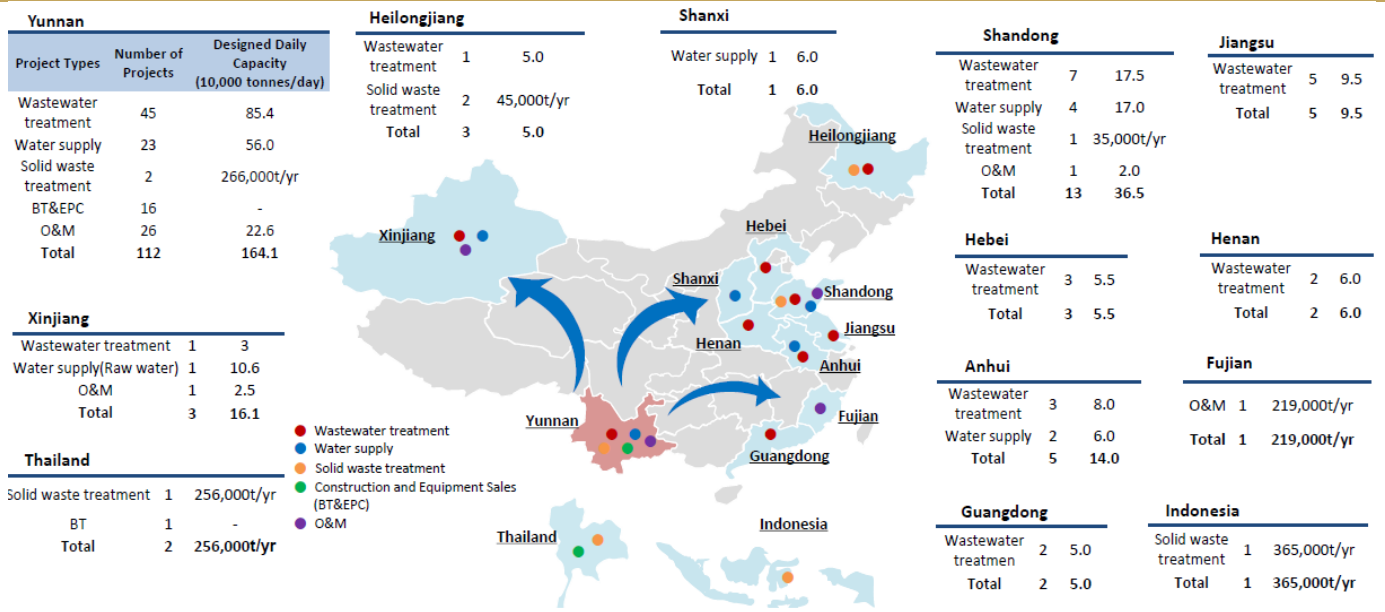
Figure 13: Yunnan Water's project breakdown by province

Water supply*	No. of projects	Designed capacity (tonnes/day)
Yunnan	21	47.0
Xinjiang	1	10.6
Shandong	4	17.0
Anhui	2	6.0
Shanxi	1	6.0
<b>Subtotal</b>	<b>29</b>	<b>86.6</b>
Municipal wastewater treatment*	No. of projects	Designed capacity (tonnes/day)
Yunnan	43	81.4
Shandong	7	17.5
Jiangsu	5	9.5
Xinjiang	1	3.0
Anhui	3	8.0
Guangdong	2	5.0
Henan	2	6.0
Heilongjiang	1	5.0
<b>Subtotal</b>	<b>64</b>	<b>135.4</b>
Solid waste treatment	No. of projects	Designed capacity (mn tonnes/year)
Yunnan	2	0.3
Shandong	1	3.5
Heilongjiang	2	4.5
Tailand	1	25.6
Indonesia	1	36.5
<b>Subtotal</b>	<b>7</b>	<b>70.4</b>

Sources: Company data, CMS (HK)

\* Excluding O&M business

Figure 14: Yunnan Water has been expanding footprint outside Yunnan in recent years



Sources: Company data, CMS (HK)

### MBR gaining traction with stricter standard on water discharge quality

Yunnan Water utilizes a MBR technology (for wastewater treatment) and CMF technology (for water supply) that are self-developed based on the technology obtained from Beijing OriginWater, a leading membrane producer in China with over 70% domestic MBR market shares as of June 30, 2016. Despite higher initial investment cost (~20% higher than traditional technology), these technologies provide higher treatment efficiency (they can block particles as tiny as 0.1 to 0.3µm) and require less land. As shown in figure 15, MBR technology can live up to the standard of Surface Water Quality Standard Class IV (GB 3838-2002), which is even tougher than the Class I Standard A (GB 18918-2012).

Although currently traditional technology still dominates the market (MBR technology only commended market share of 3.5% in China in 2013) as it can satisfy the Class I Standard A, which is applied to most wastewater treatment facilities in China, we believe there is a trend towards using MBR technology in coming years as the Chinese government is likely to gradually raise the standard for water treatment in the future (“Ten-point water plan was announced in 2015, it is expected more policy regarding water standard will be announced in the future). As Yunnan Water possesses the MBR and CMF technology, the company will be in an advantage position to obtain new projects when standard of wastewater discharge becomes more stringent in the future.

Figure 15: Yunnan Water’s MBR technology lives up to Surface Water Quality Class IV Standard

Key wastewater effluent index	Advanced treatment process (MBR technology)	Class I Standard A (GB 18918—2002)	Surface Water Quality Class IV (GB 3838—2002)
COD (mg/L)	15	≤50	≤30
BOD5 (mg/L)	3	≤10	≤6
SS (mg/L)	Not Detected	≤10	Not Detected
NH3-N (mg/L)	1	≤5	≤1.5
TP (mg/L)	0.3	≤0.5	≤0.3
TN (mg/L)	8	≤15	≤1.5

Sources: Company data, CMS (HK)



Figure 16: Yunnan Water's CMF technology lives up to National Drinking Water Standard

Key supplied tap water index	Advanced treatment process (CMF technology)	National Drinking Water Standard (GB5749-2006)
Total coliform (CFU/100ml)	Not Detected	Not Detected
Thermotolerant coliform (CFU/100ml)	Not Detected	Not Detected
Escherichia coliform (CFU/100ml)	Not Detected	Not Detected
Giardia (unit/10L)	Not Detected	<1
Cryptosporidium (unit/10L)	Not Detected	<1
Total aerobic count (CFU/ml)	Not Detected	100
Turbidity (NTU)	<0.1	1
Total hardness (in terms of CaCO <sub>3</sub> )(mg/L)	140	450
Dissolved solids (mg/L)	180	1000

Sources: Company data, CMS (HK)

## Financial Forecast

### Net profit expected to grow at a CAGR of 28% from 2015-18E

We estimate Yunnan Water's net profit will grow at a CAGR of 28% from RMB286mn in 2015 to RMB595mn in 2018E. Net profit growth will be attributable to:

- 35% GACR on revenue from wastewater treatment segment, mainly driven by 54% CAGR on operating daily treatment capacity from 0.8mn tonnes/day in 2015 to 2.8mn tonnes/day in 2018E (we expect 80% via acquisition) and 3% annual increase in wastewater treatment fee.
- 16% CAGR on revenue from water supply segment, supported by 49% CAGR on operating water supply capacity from 0.4mn tonnes/day in 2015 to 1.2mn tonnes/day in 2018E.
- We also expect the other revenue to grow at a CAGR of 30% from RMB684mn in 2015 to RMB1,493mn in 2018E, mainly supported by solid waste treatment segment, which we expect to grow from RMB8mn in 2015 to RMB326mn in 2018E with the gradual ramp up of its waste treatment projects in coming years.

Our forecast on the company's 2016E-18E net profit are 14%/24%/20% below market consensus. We believe the discrepancy is mainly attributable to our conservative assumptions on its future capacity growth.

Figure 17: CMS estimates vs. market consensus

	FY16E			FY17E			FY18E		
	CMS forecast	Market consensus	Difference (%)	CMS forecast	Market consensus	Difference (%)	CMS forecast	Market consensus	Difference (%)
Revenue (RMB mn)	1,962	2,563	-23%	2,452	3,090	-21%	3,230	3,251	-1%
Gross profit (RMB mn)	678	830	-18%	878	1,100	-20%	1,171	1,396	-16%
Operating profit (RMB mn)	555	620	-11%	692	879	-21%	923	1,173	-21%
Net profit (RMB mn)	347	404	-14%	433	571	-24%	595	733	-19%
EPS (RMB cents)	29.1	33.7	-14%	36.3	47.7	-24%	49.9	62.0	-20%

	FY16E			FY17E			FY18E		
	CMS forecast	Market consensus	Difference (ppt)	CMS forecast	Market consensus	Difference (ppt)	CMS forecast	Market consensus	Difference (ppt)
Gross profit margin (%)	35%	32%	2.2	36%	36%	0.2	36%	43%	-6.7
Operating margin (%)	28%	24%	4.1	28%	28%	-0.2	29%	36%	-7.5
Net margin (%)	18%	16%	1.9	18%	18%	-0.8	18%	23%	-4.1
ROE (%)	8%	11%	-2.6	10%	11%	-1.1	12%	13%	-0.6
ROA (%)	3%	4%	-1.0	4%	4%	-0.6	4%	5%	-0.3

Sources: Bloomberg, CMS (HK) estimates

### Revenue

Yunnan Water's revenue is mainly comprised of 4 components: i) wastewater treatment; ii) water supply; iii) solid waste treatment; and iv) construction and equipment sales. Revenue from wastewater treatment and water supply include operating revenue (derived from wastewater treatment fee and charge of water supply) and construction revenue and finance income, both of which are non-cash revenue under the accounting standard of IFRIC 12 "Service concession arrangements" – while the former is recognized during the construction period on a percentage-to-completion basis, the latter is recognized at an internal funding rate of ~5% based on the receivables under concession arrangements during the period.

We forecast the company's revenue will increase from RMB1,558mn in 2015 to RMB3,230mn in 2018E, representing a CAGR of 27%. Increase in revenue will be supported by: i) 35% CAGR on revenue from wastewater treatment business – we estimate its operating wastewater treatment capacity will grow from 0.8mn tonne/day to 2.8mn tonnes/day during the period, mainly via acquisition of new projects; ii) 16% CAGR on revenue from water supply business – we estimate its operating water supply capacity will increase from 0.4mn tonnes/day in 2015 to 1.2mn tonnes/day in 2018E; iii) 241% GACR of solid waste treatment – mainly due to low base effects and the gradual ramp up of its waste treatment projects in coming years (see previous section for more detail).

Figure 18: Revenue breakdown by segment

	2014	2015	2016E	2017E	2018E	15-18 CAGR
	RMB mn	RMB mn	RMB mn	RMB mn	RMB mn	
<b>Wastewater treatment</b>						
Total operating services	148	182	210	422	659	
construction revenue	184	157	239	133	262	
finance income	52	82	93	103	112	
<b>Sub-total</b>	<b>384</b>	<b>420</b>	<b>543</b>	<b>659</b>	<b>1,033</b>	<b>35%</b>
<b>Water supply</b>						
Total operating services	142	170	220	359	523	
construction revenue	70	279	137	174	174	
finance income	4	5	5	5	6	
<b>Sub-total</b>	<b>216</b>	<b>455</b>	<b>362</b>	<b>539</b>	<b>703</b>	<b>16%</b>
<b>Construction and equipment sales</b>	<b>470</b>	<b>597</b>	<b>716</b>	<b>860</b>	<b>1,032</b>	<b>20%</b>
<b>Solid waste treatment</b>	<b>0</b>	<b>8</b>	<b>247</b>	<b>281</b>	<b>326</b>	<b>241%</b>
<b>Others</b>	<b>31</b>	<b>79</b>	<b>94</b>	<b>113</b>	<b>136</b>	<b>20%</b>
<b>Total revenue</b>	<b>1,101</b>	<b>1,558</b>	<b>1,962</b>	<b>2,452</b>	<b>3,230</b>	<b>27%</b>

Sources: Company data, CMS (HK) estimates

Figure 19: Key operational data and assumptions for Yunnan Water's revenue forecast

	2014	2015	2016E	2017E	2018E
<b>Wastewater treatment</b>					
Consolidated operating daily treatment capacity (mn tonne/day)*	0.64	0.77	1.20	2.36	2.83
Average daily treatment capacity (mn tonne/day)	0.58	0.69	1.00	1.78	2.60
Utilization rate (%)	64%	69%	70%	70%	70%
Average wastewater treatment fee (RMB/tonne) - inc. VAT	1.10	1.13	1.20	1.24	1.27
<b>Water supply</b>					
Consolidated operating daily capacity (mn tonne/day)	0.31	0.37	0.60	0.90	1.20
Average daily treatment capacity (mn tonne/day)	0.22	0.30	0.48	0.75	1.05
Utilization rate (%)	77%	65%	65%	65%	65%
Average unit charge of water supply (RMB/tonne) - inc. VAT	2.25	2.35	2.10	2.16	2.23
YoY growth of construction and equipment sales	154%	27%	20%	20%	20%
YoY growth of other revenue	704%	153%	20%	20%	20%

Sources: Company data, CMS (HK) estimates

\* Consolidated operating wastewater treatment capacity in 2017E includes the capacity of Galaxy Spring, i.e., 0.92mn tonnes/day as we expect the company to purchase the remaining 50% of equity interest in the company during the year.

### Gross profit & gross profit margin

Cost of sales of Yunnan Water mainly includes construction and equipment sales costs (70-80% of total COGS), depreciation and amortization, electricity costs, employee costs, raw materials and others. We estimate the company's blended gross profit margin to gradually expand from 33% in 2015 to 36% in 2018E – while we expect gross profit margin in wastewater treatment segment to remain largely constant, we believe the profitability of its water supply business will improve with operating revenue accounting for a higher proportion of its revenue in the segment (construction revenue commands lower profit margin than operating revenue). We also expect the gross profit margin in its waste treatment segment to improve from 15% in 2015 to 30% in 2018E with more construction projects becoming operational.

Figure 20: Gross profit margin breakdown by segment

	2014	2015	2016E	2017E	2018E
<b>Wastewater treatment</b>					
Total operating services	48%	45%	45%	45%	45%
construction revenue	3%	28%	28%	28%	28%
finance income	100%	100%	100%	100%	100%
<b>Sub-total</b>	<b>33%</b>	<b>49%</b>	<b>47%</b>	<b>50%</b>	<b>47%</b>
<b>Water supply</b>					
Total operating services	43%	44%	45%	45%	45%
construction revenue	16%	10%	14%	14%	14%
finance income	100%	100%	100%	100%	100%
<b>Sub-total</b>	<b>35%</b>	<b>24%</b>	<b>34%</b>	<b>36%</b>	<b>38%</b>
<b>Construction and equipment sales</b>	26%	24%	25%	25%	25%
<b>Solid waste treatment</b>	-	15%	30%	30%	30%
<b>Others</b>	31%	58%	50%	50%	50%
<b>Total gross profit</b>	<b>30%</b>	<b>33%</b>	<b>35%</b>	<b>36%</b>	<b>36%</b>

Sources: Company data, CMS (HK) estimates

Figure 21: Gross profit breakdown by segments

	2014	2015	2016E	2017E	2018E
	RMB mn	RMB mn	RMB mn	RMB mn	RMB mn
<b>Wastewater treatment</b>					
Total operating services	71	82	95	190	296
construction revenue	6	44	67	37	73
finance income	52	82	93	103	112
<b>Sub-total</b>	<b>128</b>	<b>208</b>	<b>254</b>	<b>331</b>	<b>482</b>
<b>Water supply</b>					
Total operating services	61	76	99	162	235
construction revenue	11	28	19	24	24
finance income	4	5	5	5	6
<b>Sub-total</b>	<b>76</b>	<b>109</b>	<b>123</b>	<b>191</b>	<b>266</b>
<b>Construction and equipment sales</b>	120	144	179	215	258
<b>Solid waste treatment</b>	0	1	74	84	98
<b>Others</b>	10	46	47	57	68
<b>Total gross profit</b>	<b>334</b>	<b>508</b>	<b>678</b>	<b>878</b>	<b>1,171</b>

Sources: Company data, CMS (HK) estimates

### General and Administrative Expenses

SG&A expenses mainly include employee benefit expenses, depreciation, rental expenses, R&D, travelling expenses, marketing expenses, etc. We estimate the selling exp. and administrative exp. will account for 1.5% and 11.5% of its total revenue in 2016E. The ratios are expected to increase to 2% and 12% in 2017E and 2018E as we believe it would take a few years before Galaxy Spring to turn around into profit after the expected acquisition of remaining 50% of equity interest in 2017E. This will translate into an SG&A of RMB251mn/RMB343mn/RMB452mn in 2016E/2017E/2018E respectively.

Figure 22: SG&A expenses

	2014	2015	2016E	2017E	2018E
Revenue (RMB mn)	1,101	1,558	1,962	2,452	3,230
Selling expenses (RMB mn)	(13)	(17)	(26)	(49)	(65)
Selling expenses to revenue (%)	1.2%	1.1%	1.3%	2.0%	2.0%
Administrative expenses (RMB mn)	(126)	(181)	(226)	(294)	(388)
Administrative expenses to sales (%)	11.4%	11.6%	11.5%	12.0%	12.0%
<b>Total SG&amp;A (RMB mn)</b>	<b>(139)</b>	<b>(198)</b>	<b>(251)</b>	<b>(343)</b>	<b>(452)</b>

Sources: Company data, CMS (HK) estimates

### Capex & interest expenses

Based on Yunnan Water's project pipeline and its M&A schedule, we estimate its 2016E/2017E/2018E capex will be RMB1,853mn/RMB1,503mn/RMB1,294mn respectively. Assuming 80% of its capex will be financed by debt and a RMB500mn borrowing repayment per year, increase in capex will translate into net increase in bank borrowing will be RMB982mn/RMB702mn/RMB535mn. Also with 4.5% average costs of debt and 40% capitalization rate, we forecast its finance expenses will be RMB96mn/RMB119mn/RMB135mn during the same period.

Figure 23: Capex, bank borrowings and interest expenses

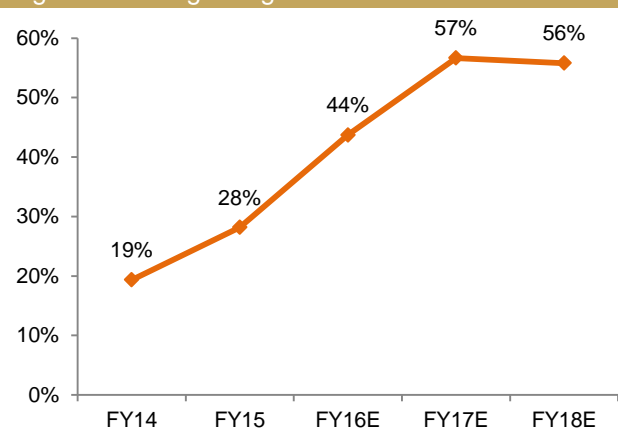
	2014	2015	2016E	2017E	2018E
	RMB mn	RMB mn	RMB mn	RMB mn	RMB mn
<b>Capex</b>					
- w ater treatment	n.a.	n.a.	1,535	1,153	944
-w ater supply	n.a.	n.a.	118	150	150
- increase in PPE	n.a.	n.a.	200	200	200
<b>Total Capex</b>	<b>679</b>	<b>2,000</b>	<b>1,853</b>	<b>1,503</b>	<b>1,294</b>
<b>Bank loans</b>					
Opening balance	656	1,139	3,064	4,046	4,749
Add: new borrow ing during the year (80% of capex financed by debt)	n.a.	n.a.	1,482	1,202	1,035
less: repayment	n.a.	n.a.	500	500	500
net increase in borrow ing	484	1,925	982	702	535
<b>Closing balance</b>	<b>1,139</b>	<b>3,064</b>	<b>4,046</b>	<b>4,749</b>	<b>5,284</b>
Total borrow ing costs @4.5% of average borrow ing from 2016E	55.4	92.6	160.0	197.9	225.7
capitalization	21.1	27.8	64.0	79.2	90.3
% of debt capitalized	38%	30%	40%	40%	40%
Provision	0.8	1.9	0.0	0.0	0.0
Foreign exchange gains	3.6	25.6	0.0	0.0	0.0
<b>Finance expenses</b>	<b>31.5</b>	<b>41.2</b>	<b>96.0</b>	<b>118.7</b>	<b>135.4</b>

Sources: Company data, CMS (HK) estimates

### Net gearing ratio & FCFF

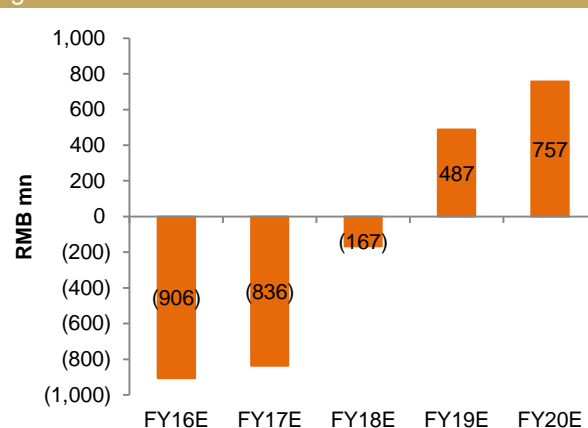
We estimate the Yunnan Water's net gearing ratio will increase from 28% in 2015 to 56% in 2018, as more projects in its pipeline enters construction stage, which requires more bank borrowings to finance its capex (80% of its capex will be financed by debt). That being said, there will be more recurring income with more projects becoming operational in the future. We expect free cash flow to firm (FCFF) to turn positive from 2019E.

Figure 24: Net gearing ratio



Sources: Company data, CMS (HK) estimates

Figure 25: FCFF

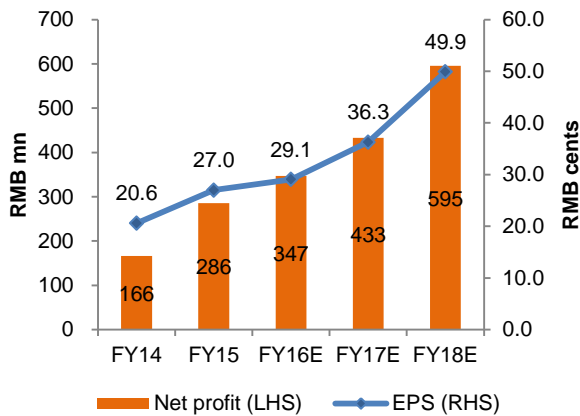


Sources: Company data, CMS (HK) estimates

**Net profit and profitability ratio**

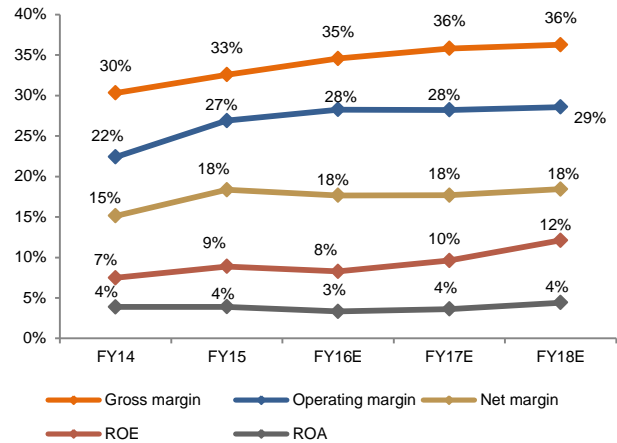
We estimate Yunnan Water's net profit to grow at a CAGR of 28% from RMB286mn in 2015 to RMB595mn in 2018E. While we expect the company's profitability will remain largely constant in coming years, net profit growth will be attributable to a 27% CAGR of revenue on the back of increase in capacity (including wastewater treatment, water supply and waste treatment) with more projects becoming operational in the future. We also estimate its EPS to grow at a CAGR of 23% during the same period – Net profit growth will be faster than EPS growth as the weighted average issued share was lower in 2015 due to the launch of IPO in the middle of the year.

**Figure 26: Net profit and EPS**



Sources: Company data, CMS (HK) estimates

**Figure 27: Profitability ratios**

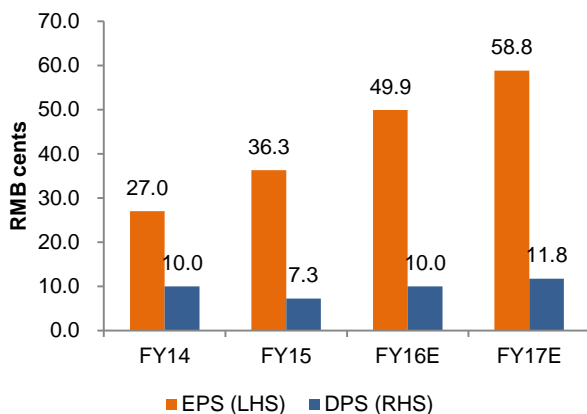


Sources: Company data, CMS (HK) estimates

**Dividend**

The company distributed a final dividend of RMB119mn (or RMB10 cents per share) in 2015, representing a payout ratio of 37%. While management expect payout ratio to be ~30% per annum in the future, we conservatively assume the payout ratio to stay at ~20%, which will translate in to a dividend per share of RMB5.8 cents/RMB7.3 cents/RMB10.0 cents for 2016E/2017E/2018E, with the corresponding dividend yield of 1.6%/2.0%/2.8% at the current market price.

**Figure 28: EPS and DPS**



Sources: Company data, CMS (HK) estimates

Figure 29: Income statement

	FY14	FY15	FY16E	FY17E	FY18E
	HK\$ mn	HK\$ mn	HK\$ mn	HK\$ mn	HK\$ mn
<b>Revenue</b>	<b>1,101</b>	<b>1,558</b>	<b>1,962</b>	<b>2,452</b>	<b>3,230</b>
Cost of Sales	(767)	(1,051)	(1,284)	(1,574)	(2,058)
<b>Gross Profit/loss</b>	<b>334</b>	<b>508</b>	<b>678</b>	<b>878</b>	<b>1,171</b>
Other income	49	98	118	147	194
Other gains - net	3	12	10	10	10
Selling expenses	(13)	(17)	(26)	(49)	(65)
<b>Administrative expenses</b>	<b>(126)</b>	<b>(181)</b>	<b>(226)</b>	<b>(294)</b>	<b>(388)</b>
Operating profit	247	419	555	692	923
Finance costs - net	(31)	(41)	(96)	(119)	(135)
<b>Share of profit/(loss) of investments using equity method</b>	<b>11</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>
PBT	226	383	459	573	787
<b>Taxes</b>	<b>(38)</b>	<b>(65)</b>	<b>(73)</b>	<b>(92)</b>	<b>(126)</b>
Profit for the period	188	317	385	481	661
<b>MI</b>	<b>21</b>	<b>32</b>	<b>39</b>	<b>48</b>	<b>66</b>
<b>Net profit</b>	<b>166</b>	<b>286</b>	<b>347</b>	<b>433</b>	<b>595</b>
EPS (RMB cents)	20.6	27.0	29.1	36.3	49.9
DPS (RMB cents)	0.0	10.0	5.8	7.3	10.0

Sources: Company data, CMS (HK) estimates

Figure 30: Balance sheet

	FY14	FY15	FY16E	FY17E	FY18E
	HK\$ mn	HK\$ mn	HK\$ mn	HK\$ mn	HK\$ mn
<b>Current Assets</b>	<b>1,494</b>	<b>2,924</b>	<b>3,341</b>	<b>3,521</b>	<b>4,412</b>
Cash and cash equivalents	613	1,672	1,748	1,546	1,827
Trade receivable	845	1,197	1,505	1,881	2,477
Receivables under service concession arrangements	10	12	22	24	26
Others	26	44	65	71	82
<b>Non-current assets</b>	<b>3,526</b>	<b>6,678</b>	<b>7,903</b>	<b>9,154</b>	<b>9,904</b>
PPE	1,379	1,617	1,763	1,901	2,034
Receivables under service concession arrangements	1,445	1,942	2,152	2,340	2,595
Amounts due from customers for contract works	194	404	600	600	600
Intangible assets	183	1,711	1,842	3,281	3,390
<b>Others</b>	<b>326</b>	<b>1,003</b>	<b>1,546</b>	<b>1,031</b>	<b>1,285</b>
<b>Total assets</b>	<b>5,020</b>	<b>9,602</b>	<b>11,244</b>	<b>12,675</b>	<b>14,316</b>
<b>Current liabilities</b>	<b>1,218</b>	<b>2,190</b>	<b>2,623</b>	<b>3,137</b>	<b>3,807</b>
Trade and other payables	877	1,074	1,267	1,552	2,030
Borrowings	270	1,038	1,214	1,425	1,585
<b>Others</b>	<b>71</b>	<b>78</b>	<b>143</b>	<b>160</b>	<b>192</b>
<b>Long term Liabilities</b>	<b>1,081</b>	<b>2,469</b>	<b>3,362</b>	<b>3,885</b>	<b>4,313</b>
Borrowings	869	2,026	2,832	3,324	3,699
<b>Trade and other payables</b>	<b>0</b>	<b>55</b>	<b>141</b>	<b>172</b>	<b>226</b>
<b>Others</b>	<b>212</b>	<b>389</b>	<b>389</b>	<b>389</b>	<b>389</b>
Total Liabilities	2,299	4,660	5,985	7,022	8,121
Equity	2,721	4,943	5,259	5,653	6,196
Share capital	863	1,193	1,193	1,193	1,193
Other reserves	1,155	2,264	2,264	2,264	2,264
<b>Retained earnings</b>	<b>367</b>	<b>601</b>	<b>878</b>	<b>1,225</b>	<b>1,701</b>
Non controlling interest	337	884	923	971	1,037
<b>Total equity and liabilities</b>	<b>5,020</b>	<b>9,602</b>	<b>11,244</b>	<b>12,675</b>	<b>14,316</b>

Sources: Company data, CMS (HK) estimates

Figure 31: Cash flow statement

	FY14	FY15	FY16E	FY17E	FY18E
	HK\$ mn	HK\$ mn	HK\$ mn	HK\$ mn	HK\$ mn
<b>CF from OA</b>	<b>(542)</b>	<b>(854)</b>	<b>155</b>	<b>191</b>	<b>251</b>
Profit before tax	226	383	459	573	787
Deprec & Amort.	58	74	114	125	179
Finance costs	27	51	96	119	135
Other non-cash items	(6)	(15)	0	0	0
Change in WC	(739)	(1,175)	(344)	(415)	(589)
Income tax paid	(54)	(80)	(73)	(92)	(126)
Others	(54)	(92)	(96)	(119)	(135)
<b>CF from IA</b>	<b>(304)</b>	<b>(1,332)</b>	<b>(1,061)</b>	<b>(1,027)</b>	<b>(418)</b>
Purchase of PPE	(305)	(152)	(388)	(354)	(418)
<b>Acquisition of subsidiaries</b>	<b>(137)</b>	<b>(662)</b>	<b>(673)</b>	<b>(673)</b>	<b>0</b>
<b>Other investments</b>	<b>139</b>	<b>(517)</b>	<b>0</b>	<b>0</b>	<b>0</b>
CF from FA	701	3,237	982	633	449
Net borrowings	542	1,835	982	702	535
Share Issuance	0	1,514	0	0	0
Dividend paid	(111)	0	0	(69)	(87)
<b>Others</b>	<b>269</b>	<b>(112)</b>	<b>0</b>	<b>0</b>	<b>0</b>
Net cash flow	(145)	1,051	76	(203)	282
Exchange gains/(losses) on cash and cash equivalents	(0)	8	0	0	0
<b>Opening balance of cash flow</b>	<b>758</b>	<b>613</b>	<b>1,672</b>	<b>1,748</b>	<b>1,546</b>
<b>Closing balance of cash flow</b>	<b>613</b>	<b>1,672</b>	<b>1,748</b>	<b>1,546</b>	<b>1,827</b>

Sources: Company data, CMS (HK) estimates



### Valuation and risks

**We initiate coverage of Yunnan Water with BUY rating and a TP of HK\$5.2/share.** Our TP is based on our three-stage DCF model with WACC of 9.3% (derived from a risk free rate of 1.0%, market risk premium of 9.8%, beta of 1.5 and cost of debt of 4.5%), 5.0% annual growth rate beyond 2020E, and a terminal growth rate of 3.0% beyond 2025E. Our TP represents a FY17E P/E of 12.5x and FY17E P/B of 1.2x respectively, which are close to its average level since listing in 2015 (See figure 32 and 33). Our TP also implies a potential return of 18% from current market price.

Figure 32: DCF calculation for Yunnan Water

Major assumptions for DCF model												
E/A		46.8%										
D/A		53.2%										
rf		1.0%										
market premium		9.8%										
beta		1.5										
Cost of equity		15.5%										
Cost of debt		4.5%										
Tax shield		84.0%										
WACC		9.3%										
Growth from FY21E-FY25E		5.0%										
Terminal growth (beyond FY25E)		3.0%										
			2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
WACC@9.3%												
FCFF (RMB mn)			(906)	(836)	(167)	487	757	795	834	876	920	966
Discount Factor			1.0	0.9	0.8	0.8	0.7	0.6	0.6	0.5	0.5	0.5
Discounted FCFF (RMB mn)			(906)	(765)	(140)	373	531	510	490	471	453	435
PV of estimated FCFF (RMB mn)						1,454						
PV of terminal FCFF (RMB mn)						7,156						
Value of Firm (RMB mn)						8,610						
+ Cash and cash equivalent (RMB mn)						1,748						
- Debt (RMB mn)						(4,046)						
- Minority interest (RMB mn)						(923)						
<b>Value of Equity (RMB mn)</b>						<b>5,390</b>						
Total Share outstanding (mn)						1,193						
DCF/share (RMB)						4.5						
<b>DCF/share (HKD)</b>						<b>5.2</b>						

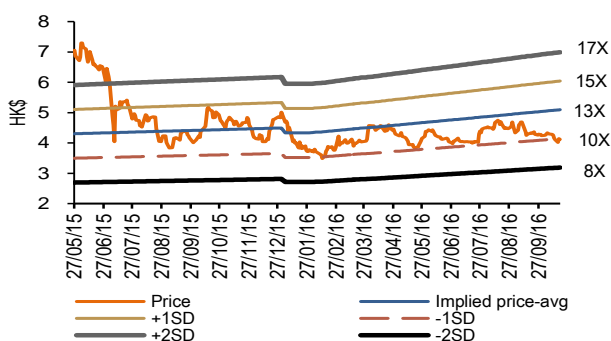
Sources: Bloomberg, Company data, CMS (HK) estimates

Figure 33: Sensitivity test on TP, WACC against terminal growth

		WACC								
		8.9%	9.0%	9.1%	9.2%	9.3%	9.4%	9.5%	9.6%	9.7%
Terminal growth rate	3.4%	6.6	6.3	6.1	5.9	5.7	5.5	5.3	5.1	4.9
	3.3%	6.4	6.2	6.0	5.8	5.6	5.4	5.2	5.0	4.8
	3.2%	6.3	6.0	5.8	5.6	5.4	5.2	5.1	4.9	4.7
	3.1%	6.1	5.9	5.7	5.5	5.3	5.1	4.9	4.8	4.6
	3.0%	6.0	5.8	5.6	5.4	5.2	5.0	4.8	4.7	4.5
	2.9%	5.8	5.6	5.4	5.3	5.1	4.9	4.7	4.6	4.4
	2.8%	5.7	5.5	5.3	5.1	5.0	4.8	4.6	4.5	4.3
	2.7%	5.6	5.4	5.2	5.0	4.9	4.7	4.5	4.4	4.2

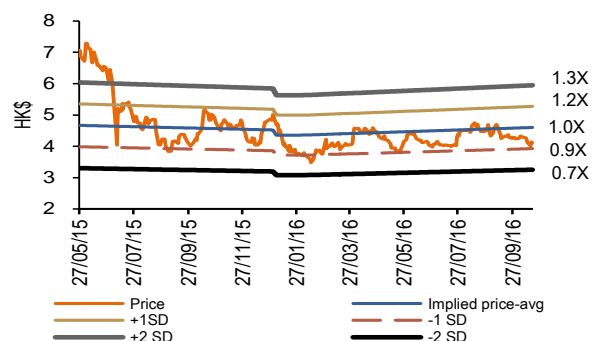
Sources: CMS (HK) estimates

Figure 34: 1-year forward rolling P/E band



Sources: Bloomberg, CMS (HK) estimates

Figure 35: 1-year forward rolling P/B band



Sources: Bloomberg, CMS (HK) estimates

HK listed WWT operators and WTE operators are on average trading at 12.9x and 11.5x 2017E PE respectively. It is worth noting that while Yunnan Water's market size, ROE and dividend yield are comparable with Kangda Environmental (6136 HK), and we believe the former deserves a much higher valuation with its SOE background, which is an advantage to obtain new projects. On the other hand, a valuation discount to BEW (371 HK) is justified considering BEW is a market leader with much higher wastewater treatment capacity (24.9mn tonnes/day of designed water treatment capacity) and higher ROE. Our TP for Yunnan Water, i.e., HK\$5.2/share, represents 2017E PE of 12.5x, which is close to the average level of the HK-listed counterparts.

Figure 36: Peer comparison

Company	Ticker	Price (HK\$)	Market cap (HK\$ m)	P/E (x)		P/B (x)		ROE (%)		Dividend yield (%)	
				FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E
<b>Yunnan Water</b>	<b>6839 HK</b>	<b>4.4</b>	<b>5,250</b>	<b>13.2</b>	<b>10.5</b>	<b>1.1</b>	<b>1.0</b>	<b>8.3</b>	<b>9.6</b>	<b>1.5</b>	<b>1.9</b>
<b>Waste Water Treatment</b>											
Beijing Enterprise Water	371 HK	6.0	52,005	17.1	13.9	2.9	2.5	17.8	18.9	2.1	2.5
CTEG	1363 HK	2.3	14,655	18.3	14.9	3.6	3.0	21.0	21.4	1.1	1.3
Kangda Environmental	6136 HK	2.0	4,135	10.7	8.2	1.0	0.9	10.0	11.9	0.7	1.7
Tianjin Capital	1065 HK	4.7	12,903	15.9	15.0	1.3	1.2	8.7	9.2	1.7	1.7
Guangdong Investment	270 HK	11.8	73,926	16.5	15.0	2.1	2.0	13.5	13.6	3.3	3.6
<b>Average</b>			<b>31,525</b>	<b>15.7</b>	<b>13.4</b>	<b>2.2</b>	<b>1.9</b>	<b>14.2</b>	<b>15.0</b>	<b>1.8</b>	<b>2.2</b>
<b>Waste to Energy</b>											
China Everbright Int'l	257 HK	9.5	42,496	16.3	13.1	2.2	2.0	14.2	16.1	2.3	2.8
Dongjiang Environmental	895 HK	12.4	17,472	18.7	16.3	2.9	2.1	16.5	16.7	1.0	1.3
Dynagreen	1330 HK	4.0	4,180	11.5	8.6	1.4	1.2	12.0	14.0	1.2	1.6
Capital Environmental	3989 HK	0.3	4,003	12.2	7.8	0.8	0.8	7.2	10.1	n.a.	n.a.
Canvest	1381 HK	3.6	7,242	18.6	13.9	2.6	2.2	15.0	17.1	0.6	0.9
<b>Average</b>			<b>15,078</b>	<b>15.5</b>	<b>11.9</b>	<b>2.0</b>	<b>1.7</b>	<b>13.0</b>	<b>14.8</b>	<b>1.3</b>	<b>1.6</b>

Sources: Bloomberg, CMS (HK) estimates

## Risks

### Slower-than-expected capacity expansion

Yunnan Water's revenue is mainly derived from its water business, including wastewater treatment business and water supply business. Our estimates that the revenue in wastewater treatment and water supply segment will increase at a 2015-2018E CAGR of 35% and 16% are based on the assumptions the respective operating capacity will increase at a CAGR of 54% and 49% respectively. Therefore, any delay in project acquisition, which could be a result of intense competition and insufficient source for new projects, will have adverse impact on the company's revenue and earnings.

### Decrease in water treatment fee

We assume the company's average wastewater treatment fee will increase by 3% per annum. Any unexpected decrease in wastewater treatment fee (we believed to be unlikely) would negatively affect the company's earnings. Our sensitivity test suggests for every 10% change in wastewater treatment fee, the company's FY16E revenue and net profit will change by 1.3% and 2.2% respectively (Base case: RMB1.2/tonne).

### Failure to further expand beyond Yunnan province

Currently the company has a designed wastewater treatment capacity of 1.2mn tonnes/day, of which 0.7tonnes/day are located in Yunnan Province. Although the company has strong SOE background in Yunnan province, it may not be easy for it to obtain new projects in other provinces. In case the company fails to further expand its footprints in other provinces in the future, its future growth potential will be limited in Yunnan Province, in which we expect the wastewater treatment capacity will grow at 2014-2018E CAGR of 3%.

### Delay in construction of greenfield projects

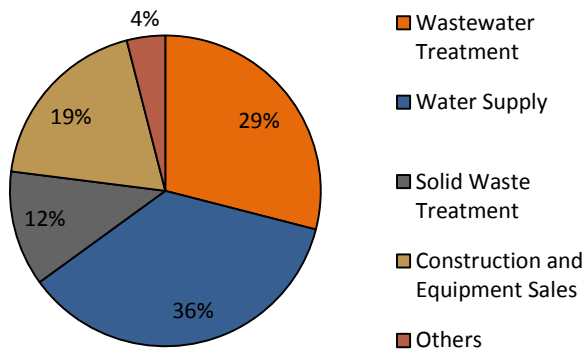
Our forecast on the company's net income growth (FY15-FY18E CAGR: 28%) is mainly based on our assumptions that the company will complete the construction of its greenfield projects as scheduled. Delay in completion of construction of the projects would imply delay of construction revenue and operational revenue, which would negatively affect the company's net profit growth.

## Company Overview

A leading environmental protection service provider based in Yunnan

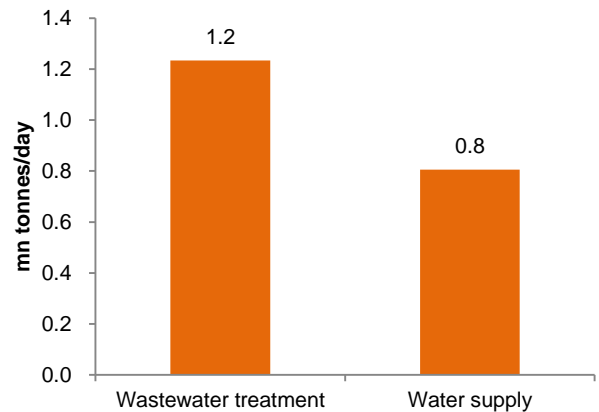
Established in 2009, Yunnan Water started its business in water industry mainly in (1) municipal WWT (2) tap water supply and (3) construction and equipment sales within Yunnan province. Since 2013, it gradually expanded its presence to Xinjiang, Heilongjiang, Shandong, Jiangsu, Guangdong, Anhui, Fujian, Henan and overseas markets, and its industry chain coverage has been extended into waste treatment sector. Currently, the group had 93 projects, including 60 waste water treatment projects, 28 water supply projects and 5 solid waste treatment projects (excluding O&M projects). As of June 30, 2016, WWT and water supply remained its major revenue contributors, which comprised 29% and 36% of its total 1H16 revenue.

Figure 37: 65% of Yunnan Water's 1H16 revenue was derived from water sectors



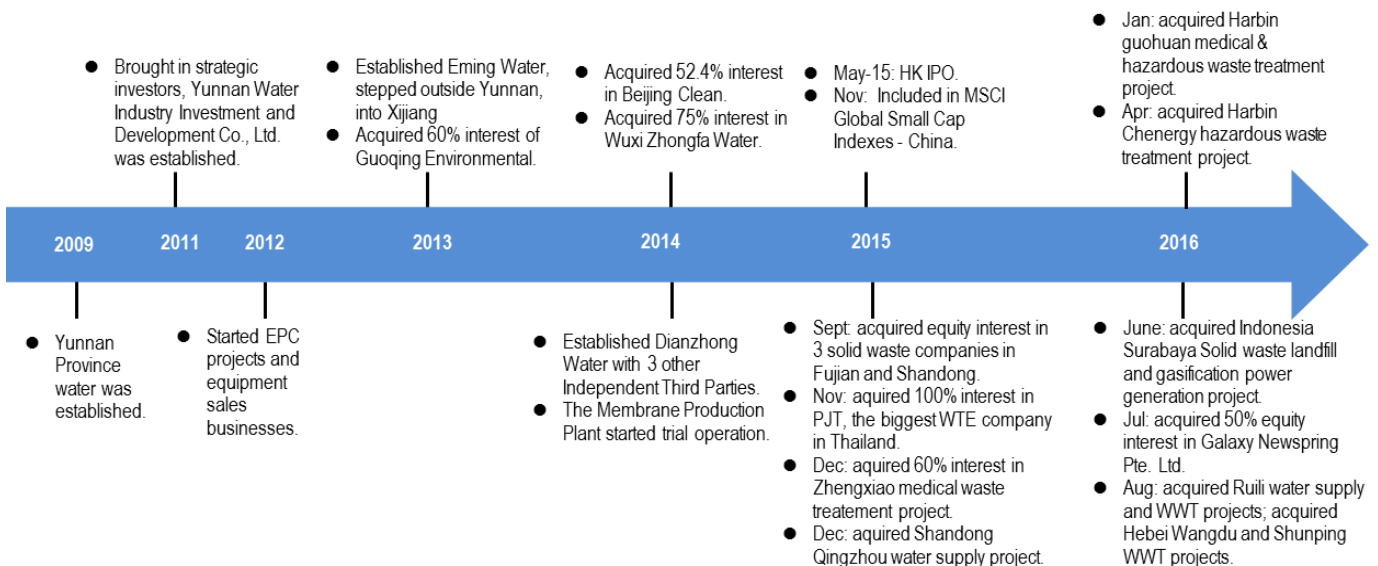
Sources: Company data, CMS (HK) estimates

Figure 38: Yunnan Water's designed daily treatment capacity for wastewater treatment and water treatment



Sources: Company data, CMS (HK) estimates

Figure 39: Company milestones



Sources: Company, CMS (HK)

After listed in HK stock exchange in May 2015, it completed 8 major M&A deals (Figure 40), in areas including WWT, water supply, solid waste and hazardous waste treatment, expanding over Heilongjiang, Shandong, Fujian, Yunnan and Thailand. The company is growing fast in terms of business segments and geographical coverages.

Figure 40: Post IPO M&As

Target name	Date	Location	Business area	Consideration	Equity stake	Target Company business area
1 GALAXY NEWSRING	28/7/2016	Multiple	Water	US\$ 100 mn	50%	Water supply, WWT, reclaimed water
2 Harbin Guo Huan	11/1/2016	Heilongjiang	Medical/hazardous waste	RMB 291 mn	100%	Medical & hazardous wastes in Harbin
3 Huize Water	21/12/2015	Shandong	Water	RMB 293 mn	65%	Tap water supply, EPC, water calibration & maintenance
4 Yunnan Zhengxiao	18/12/2015	Yunnan	Solid waste	RMB 300 mn	60%	Medical waste treatment, EP consultancy
5 PJT Technology	6/11/2015	Thailand	Solid waste	RMB 444mn	100%	WTE business
6 Ningde Zhangwan	21/9/2015	Fujian	Solid waste	RMB 214 mn	100%	WTE, solid waste consultancy
7 Shandong Tengyue	17/9/2015	Shandong	Hazardous waste	RMB 416 mn	51%	Environmental consultancy, facilities and other
8 Fu'an Company	18/9/2015	Fujian	Solid waste	RMB 107 mn	100%	Waste incineration and generation

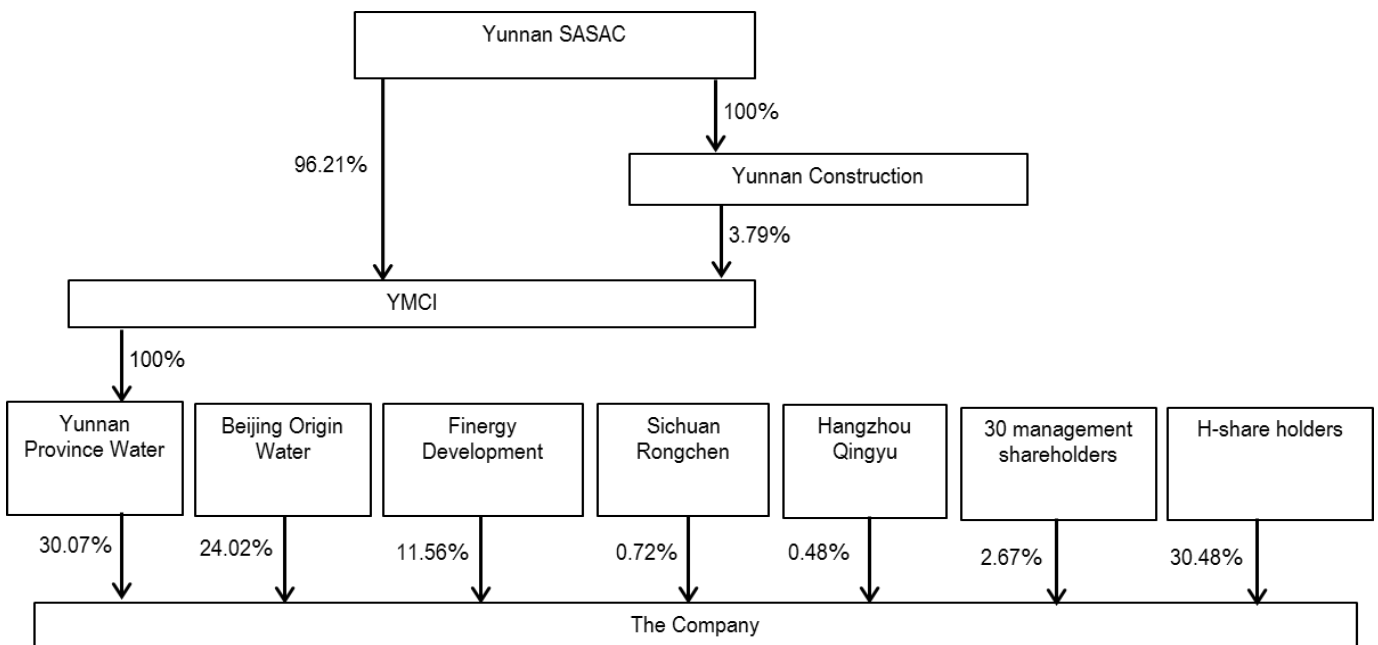
Sources: Company data, CMS (HK)

### Shareholding structure

Yunnan water's No.1 and No.2 largest shareholders are YMCI and Beijing Origin Water, who hold 30.1% and 24.0% of its shares respectively. YMCI is a state-owned company controlled by Yunnan SASAC, who invests in projects in urban development, cultural exhibitions, medicals, water supply & water treatment businesses. Upon the establishment of the company, YMCI injected 29 projects to the firm, and based on its strong relationship with the government, YMCI will continually help the company to win projects in Yunnan.

Beijing Origin Water is a leading membrane producer in China, with over 70% domestic MBR market shares (June 30, 2016). Its MBR technology can be applied to waste water treatment, water desalination, and reclaimed water production. Currently Yunnan water has purchased part of the Beijing Origin Water's MBR technology, and will continue to benefit from the dual-party cooperation.

Figure 41: Shareholding structure (June 30, 2016)



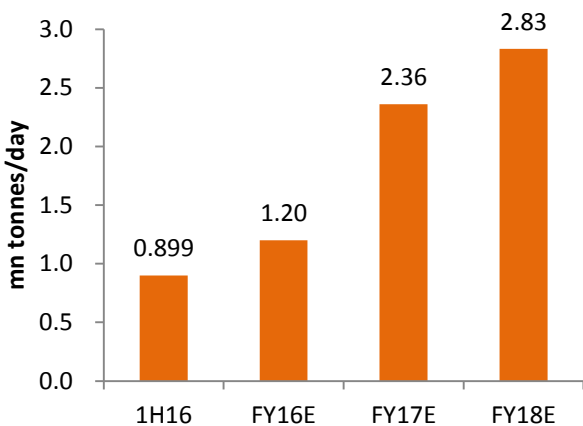
Sources: Company data, CMS (HK)

### Business overview

**Wastewater treatment**

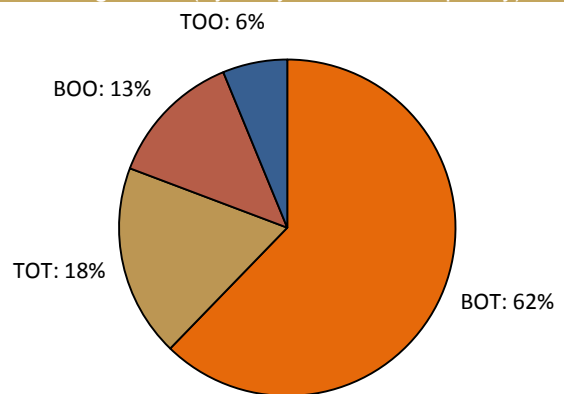
As at 30 June 2016, the Group had a total of 60 wastewater treatment concession projects under construction and in operation, including 5 BOO projects, 42 BOT projects, 2 TOO projects and 11 TOT projects, with a total designed daily wastewater treatment capacity of 1.2mntonnes, representing 20.5% increase as compared with 31 Dec 2015. As at 30 June 2016, wastewater treatment concession projects which commenced commercial operation had the total daily wastewater treatment capacity of 0.9mntonnes, representing an increase of 130,000 tonnes, or an increase of 17% as compared to 31 Dec 2015. We expect its operating consolidated capacity to increase to 2.83mn tonnes/day in 2018E, mainly driven by the potential acquisition of Galaxy New Spring and the acquisition of other new projects.

Figure 42: Operating consolidated WWT capacity expected to reach 2.8mn tonnes/day in 2018E



Sources: Company data, CMS (HK) estimates

Figure 43: WWT projects rolling out majorly through BOT arrangement (by daily treatment capacity)

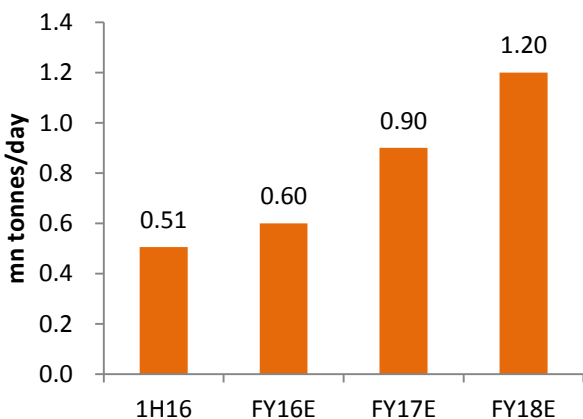


Sources: Company data, CMS (HK)

**Water supply**

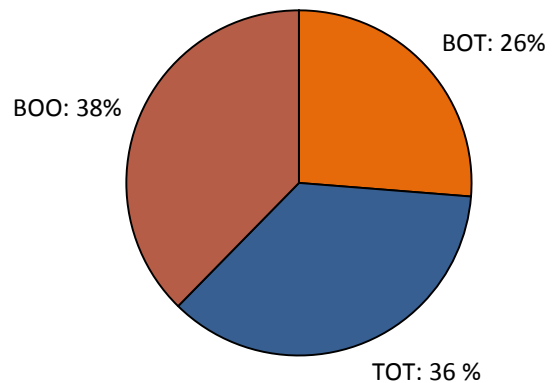
As at 30 June 2016, the Group had 28 water supply concession projects with the total daily capacity of 0.8mntonnes/day, representing an increase in the total daily capacity of 160,000 tonnes as compared with 31 December 2015. As at 30 June 2016, water supply concession projects which commenced commercial operation had a total daily capacity of 0.5mntonnes/day. We expect its operating capacity to reach 1.2mn tonnes/day in 2018E.

Figure 44: Operating consolidated water supply capacity expected to reach 1.2mn tonnes/day in 2018E



Sources: Company data, CMS (HK) estimates

Figure 45: Water supply projects rolling out both by BOT and BOO arrangement (by daily treatment capacity)



Sources: Company data, CMS (HK)

### Solid waste treatment business

As at 30 June 2016, the Group had 5 solid waste treatment projects with an annual treatment capacity of 587,000 tonnes, 4 of which with an annual treatment capacity of 331,000 tonnes had commenced commercial operation and 1 of which with an annual treatment capacity of 256,000 tonnes was pending for operation. As compared to 31 December 2015, 1 additional solid waste treatment project commenced operation and the total annual treatment capacity increased by 30,000 tonnes.

### Construction and Equipment Sales

The Group's construction and equipment sales segment comprises BT projects, EPC projects and equipment sales. As at 30 June 2016, the Group had a total of 11 BT projects, which were either under construction and/or completed, among which income of 8 BT projects were recognized during the Reporting Period, representing an addition of 2 BT projects under construction as compared with 31 December 2015.

As at 30 June 2016, the Group had a total of 6 EPC projects, representing an addition of 1 EPC project as compared with 31 December 2015.

The Group engages in the production, sales and installation of equipment necessary for wastewater treatment, water supply and solid waste treatment facilities. The major water equipment produced by the Group is membrane products. All membrane products are produced by the production plant owned by the Group.

Figure 46: Management Profile

Name	Age Position	Duties	Background
Mr. Xu Lei	49 Chairman Non-executive Director	Business development strategies Making major operational decisions	Chairman of YMCI (云南城投) Mgmt experience in urban development, urban water supply Chairman of Yunnan Metropolitan Real Estate Development Co., Ltd. (Shanghai listed: 600239 CH)
Mr. Jiao Jun	59 Non-executive Director	Business development strategies Providing advice on audit, risk mgmt	Deputy general manager of YMCI since June 2011 Extensive experience in environmental and water works industry
Mr. Yu Long	44 Executive Director, CEO	Overall operation and mgmt  Strategic planning and business development	Served various mgmt positions in Beijing Origin Water (碧水源), Beijing Tsinghua Novel Environmental Protection Company(清华永新环保), etc.  Over 14 years of experience in Water and water works industry  EMBA from Peking University
Mr. He Yuanping	49 Non-executive Director	Formulating business strategy  Providing advice on audit, risk mgmt	Served as director, deputy general manager of Beijing Origin Water Over 10 years of experiences in large-scale enterprises and the water works industry
Mr. Feng Zhuangzhi	40 Non-executive Director	Formulating business strategy  Providing advice on audit, risk mgmt	General manager of Yunnan Finergy Tongda Investment Fund Management Co. Ltd. Director of Finergy Guangda (Tianjin) Capital Partners Over 15 years of experiences in large-scale enterprises and the water works industry
Mr. Liu Xujun	43 Executive Director Deputy CEO	Overall operation and mgmt Strategic planning and business development	Served as engineering staff in Kunming Municipal Sewerage Co. Ltd. Director of World Bank project office in 1995-2005, procurement specialist in World Bank from 2007-2009 Over 19 years of technical experience in the water works industry PHD candidate of Tongji University
Mr. Huang Yunjian	50 Executive Director Deputy CEO	Management, strategic planning and business development	Assistant general manager of Yunnan Province Water in 2010-2011 ED and general manager of Kunming Wastewater Treatment Co. Ltd in 2005-2008 Over 17 years of experiences in operation and mgmt of water works industry

Sources: Company data, CMS (HK)

## Financial Summary

### Balance Sheet

RMB mn	FY14	FY15	FY16E	FY17E	FY18E
<b>Current Assets</b>	<b>1,494</b>	<b>2,924</b>	<b>3,341</b>	<b>3,521</b>	<b>4,412</b>
Cash and cash equivalents	613	1,672	1,748	1,546	1,827
Trade receivable	845	1,197	1,505	1,881	2,477
Receivables under service concession arrangements	10	12	22	24	26
Others	26	44	65	71	82
<b>Non-current assets</b>	<b>3,526</b>	<b>6,678</b>	<b>7,903</b>	<b>9,154</b>	<b>9,904</b>
PPE	1,379	1,617	1,763	1,901	2,034
Receivables under service concession arrangements	1,445	1,942	2,152	2,340	2,595
Amounts due from customers for contract works	194	404	600	600	600
Intangible assets	183	1,711	1,842	3,281	3,390
Others	326	1,003	1,546	1,031	1,285
<b>Total assets</b>	<b>5,020</b>	<b>9,602</b>	<b>11,244</b>	<b>12,675</b>	<b>14,316</b>
<b>Current liabilities</b>	<b>1,218</b>	<b>2,190</b>	<b>2,623</b>	<b>3,137</b>	<b>3,807</b>
Trade and other payables	877	1,074	1,267	1,552	2,030
Borrowings	270	1,038	1,214	1,425	1,585
Others	71	78	143	160	192
<b>Long term Liabilities</b>	<b>1,081</b>	<b>2,469</b>	<b>3,362</b>	<b>3,885</b>	<b>4,313</b>
Borrowings	869	2,026	2,832	3,324	3,699
Trade and other payables	0	55	141	172	226
Others	212	389	389	389	389
<b>Total Liabilities</b>	<b>2,299</b>	<b>4,660</b>	<b>5,985</b>	<b>7,022</b>	<b>8,121</b>
<b>Equity</b>	<b>2,721</b>	<b>4,943</b>	<b>5,259</b>	<b>5,653</b>	<b>6,196</b>
Share capital	863	1,193	1,193	1,193	1,193
Other reserves	1,155	2,264	2,264	2,264	2,264
Retained earnings	367	601	878	1,225	1,701
Non-controlling interest	337	884	923	971	1,037
<b>Total equity and liabilities</b>	<b>5,020</b>	<b>9,602</b>	<b>11,244</b>	<b>12,675</b>	<b>14,316</b>

### Cash flow Statement

RMB mn	FY14	FY15	FY16E	FY17E	FY18E
<b>CF from OA</b>	<b>(542)</b>	<b>(854)</b>	<b>155</b>	<b>191</b>	<b>251</b>
Profit before tax	226	383	459	573	787
Deprec & Amort.	58	74	114	125	179
Finance costs	27	51	96	119	135
Other non-cash items	(6)	(15)	0	0	0
Change in WC	(739)	(1,175)	(344)	(415)	(589)
Income tax paid	(54)	(80)	(73)	(92)	(126)
Others	(54)	(92)	(96)	(119)	(135)
<b>CF from IA</b>	<b>(304)</b>	<b>(1,332)</b>	<b>(1,061)</b>	<b>(1,027)</b>	<b>(418)</b>
Purchase of PPE	(305)	(152)	(388)	(354)	(418)
Acquisition of subsidiaries	(137)	(662)	(673)	(673)	0
Other investments	139	(517)	0	0	0
<b>CF from FA</b>	<b>701</b>	<b>3,237</b>	<b>982</b>	<b>633</b>	<b>449</b>
Net borrowings	542	1,835	982	702	535
Share Issuance	0	1,514	0	0	0
Dividend paid	(111)	0	0	(69)	(87)
Others	269	(112)	0	0	0
<b>Net cash flow</b>	<b>(145)</b>	<b>1,051</b>	<b>76</b>	<b>(203)</b>	<b>282</b>

Sources: Company data, CMS (HK) estimates

### Profit & Loss Statement

RMB mn	FY14	FY15	FY16E	FY17E	FY18
<b>Revenue</b>	<b>1,101</b>	<b>1,558</b>	<b>1,962</b>	<b>2,452</b>	<b>3,230</b>
Cost of Sales	(767)	(1,051)	(1,284)	(1,574)	(2,058)
<b>Gross Profit/loss</b>	<b>334</b>	<b>508</b>	<b>678</b>	<b>878</b>	<b>1,171</b>
Other income	49	98	118	147	194
Other gains - net	3	12	10	10	10
Selling expenses	(13)	(17)	(26)	(49)	(65)
Administrative expenses	(126)	(181)	(226)	(294)	(388)
<b>Operating profit</b>	<b>247</b>	<b>419</b>	<b>555</b>	<b>692</b>	<b>923</b>
Finance costs - net	(31)	(41)	(96)	(119)	(135)
Share of profit/(loss) of investments using equity method	11	5	0	0	0
<b>PBT</b>	<b>226</b>	<b>383</b>	<b>459</b>	<b>573</b>	<b>787</b>
Taxes	(38)	(65)	(73)	(92)	(126)
<b>Profit for the period</b>	<b>188</b>	<b>317</b>	<b>385</b>	<b>481</b>	<b>661</b>
MI	21	32	39	48	66
<b>Net profit</b>	<b>166</b>	<b>286</b>	<b>347</b>	<b>433</b>	<b>595</b>
<b>EPS (RMB cents)</b>	<b>20.6</b>	<b>27.0</b>	<b>29.1</b>	<b>36.3</b>	<b>49.9</b>
<b>DPS (RMB cents)</b>	<b>0.0</b>	<b>10.0</b>	<b>5.8</b>	<b>7.3</b>	<b>10.0</b>

### Financial Ratios

	FY14	FY15	FY16E	FY17E	FY18
<b>YoY growth rate</b>					
Revenue	60%	42%	26%	25%	32%
Operating profit	-8%	70%	32%	25%	33%
Net profit	-14%	72%	21%	25%	37%
<b>Profitability</b>					
Gross margin	30%	33%	35%	36%	36%
Operating margin	22%	27%	28%	28%	29%
NP margin	15%	18%	18%	18%	18%
ROE	7.5%	8.9%	8.3%	9.6%	12.1%
ROA	3.9%	3.9%	3.3%	3.6%	4.4%
ROIC	4.3%	2.1%	3.0%	3.3%	4.1%
<b>Liquidity</b>					
Debt to Asset	23%	32%	36%	37%	37%
Net Debt to Equity	19%	28%	44%	57%	56%
Liquid ratio	1.2	1.3	1.3	1.1	1.2
Quick ratio	1.2	1.3	1.2	1.1	1.1
<b>Operating efficiency</b>					
Asset turnover	0.3	0.2	0.2	0.2	0.2
AR turnover	1.4	1.1	1.0	1.0	1.0
AP turnover	1.2	1.0	1.0	0.8	0.8
<b>Per share ratios (RMB)</b>					
EPS	0.21	0.27	0.29	0.36	0.50
CFPS	0.8	1.6	1.5	1.3	1.5
BVPS	3.0	3.8	3.6	3.9	4.3
<b>Valuation ratios</b>					
P/E	18.6	14.2	13.2	10.5	7.7
P/B	1.3	1.0	1.1	1.0	0.9

## Investment ratings

Industry Rating	Definition
OVERWEIGHT	Expect sector to outperform the market over the next 12 months
NEUTRAL	Expect sector to perform in-line with the market over the next 12 months
UNDERWEIGHT	Expect sector to underperform the market over the next 12 months

Company Rating	Definition
BUY	Expect stock to generate 10%+ return over the next 12 months
NEUTRAL	Expect stock to generate +10% to -10% over the next 12 months
SELL	Expect stock to generate loss of 10%+ over the next 12 months

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