### Turning water problems into business opportunities

We interacted with the management of VATW during our recent plant visit of 110MLD Nemmeli Desalination plant and 45MLD Koyambedu TTRO plant. Management reiterated its strategy to a) focus on bagging technology projects with limited construction scope, b) concentrate on design-oriented projects that are margin lucrative, c) building up O&M orderbook in order to bring stability in cash flow and enjoy better margins d) concentrate on industrial and overseas projects rather than only municipal projects.

#### Key takeaways from visit

- Diversified orderbook mix: The Company has diversified order-book from both domestic and international projects constituting 69:32 to orderbook. The order wins in O&M segment have increased recently driving the O&M orders to 42%, while the municipal orders continue to dominate the orderbook with 83% share. The company is gradually focusing on increasing its share in O&M segment and has increased from 30% in FY20 to 42% in 1QFY24.
- Robust order intake: VATW is pursuing several projects in domestic and international geographies comprising of desalination plants, recycle, reuse, and water effluent treatments and has been a preferred bidder in several projects and expects the same to be awarded in the next 6-8 weeks. These orders will be funded by multilateral agencies. Moreover, Russia has a strong enquiry pipeline, and the company continues to pursue opportunities however would prefer orders that have an irrevocable letter of credit thereby safeguarding the financial risk.
- Strong Execution: Strong execution ramp-up expected across projects with Amur Gas Chemical Complex LLC, Russia project ramping up the execution in FY24E and would contribute significantly to revenue generation. With foundation laid down on 21<sup>st</sup> Aug, Chennai desalination plant is expected to contribute to revenue from H2FY24E.
- Focus on improving cash flows: The company's focus is to increase the share of EP business and minimize the construction component. This would help improve margins, bottom line as well as cash flows by reducing the construction risk in contracts.
- Various government schemes fueling the long-term growth: Government schemes like AMRUT, Jal Jeevan Nigam and community water programs are focused on conserving and managing water resources. Also, stringent norms on discharge of ground water in industries is leading to vast business opportunities for the sector.
- Nemmeli Desalination plant at Chennai: Tamil Nadu government awarded construction of this plant to VATW in consortium with IDE Technologies. The plant is built under reverse osmosis (RO) method thereby enabling lower construction cost, energy consumption and greater scalability due to the use of modular units. Post commissioning in 2013, VATW is awarded O&M for 10years. The plant processes 265MLD sea water and generates 110MLD of treated water for the government. The cost of desalinated water is ~Rs55per MLD comprising of capital cost of Rs 17/litre and operating cost of Rs38/litre. Power being the major operating cost (65% of operational cost) can be brought down by substituting to renewable energy.
- Koyambedu TTRO plant: This plant was commissioned in 2019 by VATW in partnership with IDE technologies with O&M contract for 15years. With the use of ultra-filtration and reverse osmosis technology, secondary treated water from Koyambedu is processed to achieve high quality water equivalent to drinking water standards. This plant has a capacity of 45MLD expandable to 60MLD thereby reducing industrial requirement of fresh water of 13,000 million litres annually.

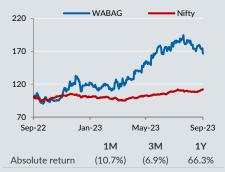


Reco	:	BUY
СМР	:	Rs 463
Target Price	:	Rs 636
Potential Return	:	+37%

#### Stock data (as on Sept 12, 2023)

Nifty	19,993
52 Week h/l (Rs)	545 / 250
Market cap (Rs/USD mn)	30172 / 364
Outstanding Shares (mn)	62
6m Avg t/o (Rs mn):	199
Div yield (%):	-
Bloomberg code:	VATW IN
NSE code:	WABAG

#### Stock performance



Shareholding pattern (As of June'23 end)	
Promoter	19.1%
FII+DII	20.2%

			20.270
Others			60.7%
Financial Summa	ry		
(Rs mn)	FY23	FY24E	FY25E
Revenues	29,605	33,407	39,506
Yoy growth (%)	-0.6	12.8	18.3
OPM (%)	10.7	11.2	11.0
EPS (Rs)	48.3	41.8	48.9
EPS growth	127.3	-13.4	17.2
P/E (x)	9.6	11.1	9.5
EV/EBITDA (x)	8.9	7.5	6.5
Debt/Equity (x)	0.1	0.1	0.1
RoE (%)	19.2	14.9	14.8
RoCE (%)	17.2	13.4	13.4

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### **STORY IN CHARTS**

#### **Exhibit 1: Desalination Process at Nemmeli plant**



#### **Exhibit 2: Reverse Osmosis method**



Source: Company, YES Sec

Source: Company, YES Sec

#### Exhibit 3: TTRO Koyembedu plant



Source: Company, YES Sec



Source: Company, YES Sec

#### **Exhibit 4: Water Parameters**

	œ	
WATER QUAL		RS
Description	Inlet	Outlet
PH	7.0-8.0	6.5-7.5
Turbidity	25 NTU	BDL
BODs at 20°C	20 mg/L	BDL
COD	160 mg/L	BDL
Total Dissolved Solids(TDS)	<1500 mg/L	<70 mg/L

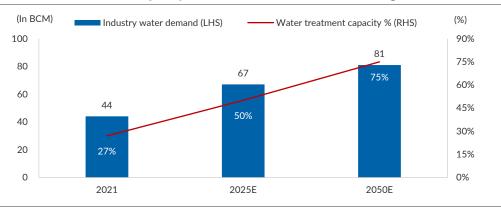
Source: Company, Yes Securities



### **OPPORTUNITIES IN INDIA**

#### Industrial Sewage Treatment

Post agriculture, industries are major consumers of water. With the water demand expected to rise from 44BCM in 2021 to 67BCM in 2025, industries are under pressure to treat water. Given a) rising water scarcity, b) growing demand from the agriculture, residential and industrial sectors and c) ESG compliance, water treatment will be an expanding area in the coming years, and we assume the demand to double by 2025E. As per ESG data, Top 500 companies in India aim to reach to zero discharge by 2030 resulting into wastewater treatment a multi-billion market.



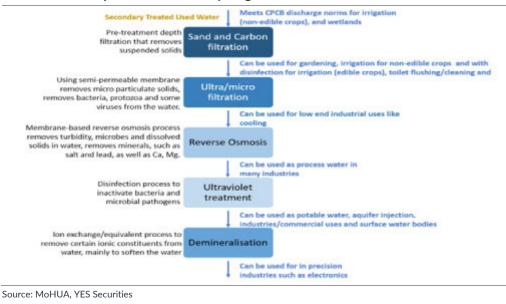
#### Exhibit 5: In 2050, ETP capacity in India is estimated to be 75% of generation

Source: CPCB, YES Securities

#### **Municipal Sewage Treatment**

Apart from industrial, municipal and residential water use is also growing on the back of urbanization. As per CPCB data, only 28% of total generated sewage is treated whereas there is 44% installed capacity. Nevertheless, India has made substantial progress in strengthening its operational treatment capacity, from only 18,883 MLD in 2014 to 31,841 MLD in 2023 and further 4,827MLD to be installed by 2026. But a lot more remains to be done to manage wastewater and address the challenges imposed by water scarcity. The average cost of setting up 100MLD is Rs6bn. With increasing need of water, state spending on water treatment is going to rise and will be great opportunity for the water construction and technology companies

#### Exhibit 6: Municipal wastewater recycling and reuse in India





#### Exhibit 7: State wise sewage generation and treatment capacity of urban centres

	00		,		
State	Sewage generation (In MLD)	Installed Capacity (In MLD)	Proposed Capacity (In MLD)	Number of STPs Installed	Operational Treatment capacity (In MLD)
Andaman and Nicobar	23	-	-	-	-
Andhra Pradesh	2,882	833	20	66	443
Arunachal Pradesh	62	-	-	-	-
Assam	809	-	-	-	-
Bihar	2,276	10	621	1	-
Chandigarh	188	293	-	7	271
Chhattisgarh	1,203	73	-	3	73
Dadra Nagar Haveli	67	24	-	3	24
Goa	176	66	38	11	44
Gujarat	5,013	3,378	-	70	3,358
Haryana	1,816	1,880	-	153	1,880
Himachal Pradesh	116	136	19	78	99
Jammu & Kashmir	665	218	4	24	93
Jharkhand	1,510	22	617	2	22
Karnataka	4,458	2,712	-	140	1,922
Kerala	4,256	120	-	7	114
Lakshadweep	13	-	-	-	-
Madhya Pradesh	3,646	1,839	85	126	684
Maharashtra	9,107	6,890	2,929	154	6,366
Manipur	168	-	-	-	-
Meghalaya	112	-	-	-	-
Mizoram	103	10	-	1	-
Nagaland	135	-	-	-	-
NCT Delhi	3,330	2,896	-	38	2,715
Odisha	1,282	378	-	14	55
Puducherry	161	56	3	3	56
Punjab	1,889	1,781	-	119	1,601
Rajasthan	3,185	1,086	109	114	783
Sikkim	52	20	10	6	18
Tamil Nadu	6,421	1,492	-	63	1,492
Telangana	2,660	901	-	37	842
Tripura	237	8	-	1	8
Uttar Pradesh	8,263	3,374	-	107	3,224
Uttrakhand	627	448	67	71	345
West Bengal	5,457	897	305	50	337
Total	72,368	31,841	4,827	1,469	26,869

Source: CPCB, YES Securities

#### Exhibit 8: Status of sewage infrastructure projects under the National Mission for Clean Ganga as on Mar`23

		0							0		
State	No of projects	Sanctioned Cost (Rs bn)	STP capacit y to be created (In MLD)	Creation of STP capacity through the rehabilita tion of old STP (In MLD)	STP capacity created (In MLD)	STP capacity created through the rehabilit ation of old STP (In MLD)	Sewer network to be laid (km)	Sewer network laid (km)	Total funds release d (Rs bn)	Total expend iture (Rs bn)	No of projects completed
Uttarakhand	41	15.8	223.1	-	164.5	-	196.2	174.9	7.2	7.2	36
Uttar Pradesh	63	131.4	1865.2	320.0	647.5	275.3	1885.6	1797.9	48.3	48.3	34
Bihar	36	60.8	731.6	-	241.5	-	1790.1	1259.6	33.8	33.8	13
Jharkhand	5	13.1	262.5	-	15.5	-	151.4	87.9	2.1	1.8	2
West Bengal	27	47.4	698.2	187.0	242.0	137.0	975.4	848.8	16.5	16.5	11
Haryana	2	2.2	70.0	75.0	70.0	75.0	41.0	51.6	2.2	2.2	2
Delhi	9	19.5	882.0	386.0	318.0	386.0	37.3	35.9	16.4	15.7	6
Himachal Pradesh	1	0.1	1.7	-	1.7	-	-	-	-	-	1
Rajasthan	1	2.6	36.0	-	36.0	-	146.0	122.6	1.9	1.6	0
Madhya Pradesh	1	5.1	195.0	-	-	-	15.3	-	-	-	0
Total	186	298.1	4,965.4	968.0	1,736.8	873.3	5,238.3	4,379.1	128.4	127.1	105

Source: NMCG, YES Securities



#### **Our View**

In our view increasing levels of water treatment will be an expanding area in the coming years given rising water scarcity and growing demand across sectors. There are significant low hanging fruit opportunities around water treatment with less than 30% of water being recycled. Water treatment covers the processes used to make water more acceptable for a desired end-use, such as drinking water, usage or re-usage by industry, in irrigation, or return to the natural environment and this market is barely tapped. The goal needs to be to move to best-practice levels of water reuse of up to 75%.

Given the growing attention of the government towards escalating water shortage crisis and demand from industries for zero liquid discharge requirements, water treatment sector is well poised for long term growth. In our view VATW's robust orderbook thriving on strong market leadership leading to healthy revenue visibility, execution ramp up and operational efficiencies would help it capitalize on the forthcoming opportunities. At CMP, the stock trades at a P/E of 11.1x/ 9.5x on FY24E/25E earnings estimates. We maintain our BUY rating on the stock with a TP of Rs636 based on 13x PE on FY25E earnings.



### **FINANCIAL**

#### **Exhibit 9: Balance sheet (Consolidated)**

Y/e 31 Mar (Rs mn)	FY21	FY22	FY23	FY24E	FY25E
Sources of Funds					
Equity capital	124	124	124	124	124
Reserves	13,973	15,267	15,625	18,173	21,168
Non Minority Controling Int.	-134	-133	-3	-3	-3
Net worth	14,098	15,391	15,749	18,297	21,292
Debt	3,585	4,359	2,191	2,391	2,591
Deferred tax liab (net)	(253)	(329)	(361)	(361)	(361)
Total liabilities	17,295	19,289	17,577	20,325	23,520
Application of Funds					
Gross Block	1,586	1,523	1,299	1,799	2,299
Depreciation	722	723	544	646	777
Fixed Asset	863	800	755	1,152	1,521
CWIP	0	0	0	0	0
Investments	244	376	458	528	612
Net Working Capital	16,188	18,114	16,364	18,644	21,387
Inventories	298	320	411	458	541
Sundry debtors	18,972	20,711	21,940	24,712	28,682
Cash & equivalents	3,713	4,286	2,754	2,949	3,051
Loans & Advances	793	394	932	1,077	1,247
Other Current Asset	15,400	11,920	12,439	14,360	16,617
Sundry creditors	12,094	11,404	12,029	13,271	15,153
Provisions	-254	192	-92	-46	0
Other current liabilities	11,148	7,920	10,174	11,685	13,598
Total Assets	17,295	19,289	17,577	20,325	23,520

Source: Company, YES Securities



#### Exhibit 11: Income statement (Consolidated)

Y/e 31 Mar (Rs mn)	FY21	FY22	FY23	FY24E	FY25E
Revenue	28,345	29,793	29.605	33.407	39,506
	,	· · ·		- /	·
% Change YoY	10.8	5.1	(0.6)	12.8	18.3
Operating profit	2,188	2,370	3,178	3,748	4,331
EBITDA margins	7.7%	8.0%	10.7%	11.2%	11.0%
% Change YoY	0.8	8.3	34.1	17.9	15.6
Depreciation	121	101	88	103	131
EBIT	2,066	2,269	3,090	3,645	4,200
EBIT margins	7.3	7.6	10.4	10.9	10.6
Interest expense	903	877	658	741	803
Other income	82	324	536	568	672
Profit before tax	1,245	1,716	2,968	3,472	4,068
Taxes	295	363	59	874	1,024
Effective tax rate (%)	23.7	21.2	2.0	25.2	25.2
Net profit	951	1,352	2,909	2,598	3,044
Minorities and other	(150)	32	(93)	0	0
Net profit after minorities	1,101	1,321	3,002	2,598	3,044
Exceptional items	0	0	(2,892)	0	0
Net profit	1,101	1,321	109	2,598	3,044
% Change YoY	21.1	19.9	(91.7)	(13.4)	17.2
EPS (Rs)	17.7	21.2	48.3	41.8	48.9

Source: Company, YES Securities

#### Exhibit 12: Cash Flow statement (Consolidated)

FY21 1,303 366 121 851 (968) 319 1,353	FY22 1,684 363 101 972 (2,817) 186	FY23 3,061 287 88 (2,803) 492 275	FY24E 3,472 741 103 - (2,086)	FY25E 4,068 803 131 -
366 121 851 (968) 319 <b>1,353</b>	363 101 972 (2,817) 186	287 88 (2,803) 492	741 103 -	803 131
121 851 (968) 319 <b>1,353</b>	101 972 (2,817) 186	88 (2,803) 492	103	131
851 (968) 319 <b>1,353</b>	972 (2,817) 186	(2,803) 492	-	-
(968) 319 <b>1,353</b>	(2,817)	492	- (2,086)	-
319 <b>1,353</b>	186		(2,086)	
1,353		275		(2,640)
		215	874	1,024
(4.5.0)	116	850	1,356	1,339
(150)	(55)	(52)	(500)	(500)
1,203	61	798	856	839
109	(285)	210	(71)	(83)
(41)	(340)	158	(571)	(583)
1,178	-	-	-	-
(1,737)	826	(2,101)	200	200
(347)	(364)	(281)	(741)	(803)
(13)	2	-	(50)	(50)
60	(18)	(18)	(0)	0
(859)	446	(2,401)	(591)	(653)
453	223	(1,393)	195	103
2,489	2,997	3,210	2,066	2,261
96	(10)	(11)	(260)	(260)
3,038	3,210	1,806	2,000	2,103
	1,178 (1,737) (347) (13) 60 (859) 453 2,489 96	1,178     -       (1,737)     826       (347)     (364)       (13)     2       60     (18)       (859)     446       453     223       2,489     2,997       96     (10)	1,178         -           1,178         -           (1,737)         826         (2,101)           (347)         (364)         (281)           (13)         2         -           60         (18)         (18)           (859)         446         (2,401)           453         223         (1,393)           2,489         2,997         3,210           96         (10)         (11)	1,1781,178(1,737)826(2,101)200(347)(364)(281)(741)(13)2-(50)60(18)(18)(0)60(18)(18)(0)60223(1,393)1954452,9973,2102,06696(10)(11)(260)

Source: Company, YES Securities



#### Exhibit 13: Du-pont analysis

Y/e 31 Mar (Rs mn)	FY21	FY22	FY23	FY24E	FY25E
Tax burden (x)	5.4	4.9	51.3	3.1	3.1
Interest burden (x)	0.1	0.2	0.0	0.2	0.2
EBIT margin (x)	0.1	0.1	0.1	0.1	0.1
Asset turnover (x)	1.6	1.5	1.7	1.6	1.7
Financial leverage (x)	1.2	1.3	1.1	1.1	1.1
RoE (%)	11.2%	11.6%	19.2%	14.9%	14.8%

Source: Company, YES Securities

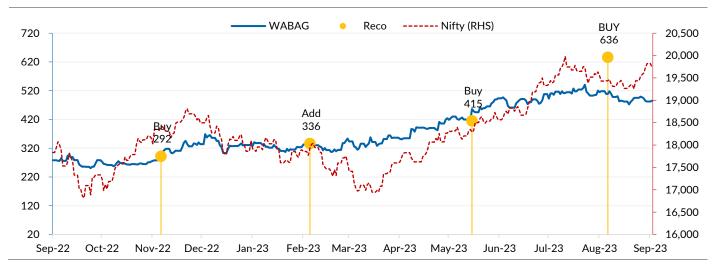
#### Exhibit 14: Ratio analysis

Y/e 31 Mar	FY21	FY22	FY23	FY24E	FY25E
Basic (Rs)					
EPS	17.7	21.2	48.3	41.8	48.9
Dividend per share	0.4	0.8	0.8	0.8	0.8
Cash EPS	19.7	22.9	49.7	43.4	51.1
Book value per share	227	247	253	294	342
Div. payout (%)	3%	4%	296%	2%	2%
Valuation ratios (x)					
P/E	26.1	21.8	9.6	11.1	9.5
P/CEPS	23.5	20.2	9.3	10.7	9.1
P/B	2.0	1.9	1.8	1.6	1.4
EV/EBIDTA	13.1	12.2	8.9	7.5	6.5
Dividend yield (%)	0.1	0.2	0.2	0.2	0.2
Profitability Ratios (%)					
RoIC	9.2	9.3	17.2	13.7	13.6
RoE	11.2	11.6	19.2	14.9	14.8
RoCE	9.1	9.3	17.2	13.4	13.4
Liquidity ratios					
Debtor (days)	244	254	270	270	265
Inventory (days)	4	4	5	5	5
Creditor (days)	156	140	148	145	140
Net working Capital (days)	161	169	168	171	169
Asset Turnover (x)	1.6	1.5	1.7	1.6	1.7

Source: Company, YES Securities



#### **Recommendation Tracker**





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#### DISCLOSURE OF INTEREST

Name of the Research Analyst : Khushbu Gandhi

The analyst hereby certifies that opinion expressed in this research report accurately reflect his or her personal opinion about the subject securities and no part of his or her compensation was, is or will be directly or indirectly related to the specific recommendation and opinion expressed in this research report.

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4	Research Analyst has served as an officer, director or employee of the subject company(ies)	No
5	YSL has received any compensation from the subject company in the past twelve months	No
6	YSL has received any compensation for investment banking or merchant banking or brokerage services from the subject company in the past twelve months	No
7	YSL has received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past twelve months	No
8	YSL has received any compensation or other benefits from the subject company or third party in connection with the research report	No
9	YSL has managed or co-managed public offering of securities for the subject company in the past twelve months	No
10	Research Analyst or YSL has been engaged in market making activity for the subject company(ies)	No

Since YSL and its associates are engaged in various businesses in the financial services industry, they may have financial interest or may have received compensation for investment banking or merchant banking or brokerage services or for any other product or services of whatsoever nature from the subject company(ies) in the past twelve months or associates of YSL may have managed or co-managed public offering of securities in the past twelve months of the subject company(ies) whose securities are discussed herein.

Associates of YSL may have actual/beneficial ownership of 1% or more and/or other material conflict of interest in the securities discussed herein.

### RECOMMENDATION PARAMETERS FOR FUNDAMENTAL REPORTS

Analysts assign ratings to the stocks according to the expected upside/downside relative to the current market price and the estimated target price. Depending on the expected returns, the recommendations are categorized as mentioned below. The performance horizon is 12 to 18 months unless specified and the target price is defined as the analysts' valuation for a stock. No benchmark is applicable to the ratings mentioned in this report.

BUY: Upside greater than 20% over 12 months ADD: Upside between 10% to 20% over 12 months NEUTRAL: Upside between 0% to 10% over 12 months REDUCE: Downside between 0% to -10% over 12 months SELL: Downside greater than -10% over 12 months NOT RATED / UNDER REVIEW

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