



Duong Dinh
 Senior Manager
duong.dinh@vcsc.com.vn
 +84 28 3914 3588 ext. 140

Residential segment to support volume growth

Volume continues to grow, supporting BWE and TDM's 2023 profit. This growth will be led by strong residential water demand. We lower our projected 2023 volume growth for BWE from 12% YoY to 7% YoY, which is driven by 9% YoY residential water volume growth and 5% YoY industrial water volume growth. For TDM, we raise our projected 2023 volume to 79 million cbm (+13% YoY) following its 2022 results that beat our expectations. We attribute the stronger volume growth for TDM vs BWE in 2022-2023 to 1) TDM being impacted more severely compared to BWE in 2020-2021, and 2) TDM's major water plants being in the most populated industrial hub of Binh Duong Province (Di An District), which faces less risk of an economic slowdown compared to other districts.

BWE to acquire a 20%-100% stake in four water companies in Long An Province and one water company in Quang Binh Province, providing potential upside to our valuation. On February 8, BWE announced a BOD resolution to acquire a 20%-100% stake of DNP Long An Water Infrastructure JSC (Long An Water), which possesses the Nhi Thanh water processing plant (capacity of 60,000 cbm/day) and has secured land bank to double its capacity to 120,000 cbm/day — ~15% of BWE's capacity. According to BWE, Long An Water has a ~50%-60% market share. The price and timeline for this acquisition have not been specified. On February 10, BWE announced it would acquire 50%-100% stakes in four additional water companies in order to consolidate revenue and profit when these deals are successful. These companies include three in Long An Province (Chau Thanh Urban Construction JSC, Can Giuoc Urban Construction JSC and Bang Tam Water & Environment JSC) and one in Quang Binh Province (DNP Quang Binh Water Infra JSC). Additional details about these acquisitions were not disclosed. The acquisitions are in line with BWE's strategy to expand its water business beyond southeastern Vietnam to the southwestern and central regions. According to BWE, Long An's water industry has bright prospects from rapid urbanization and population growth, increasing frequency of drought and saltwater intrusion leading to strong demand for clean water, and a projected 2020-2030F CAGR of 5%. In addition, BWE expects that industrial water demand could double over the next 10 years.

We lower our target price for BWE by 2% to VND50,700/share and downgrade our rating from BUY to OUTPERFORM as the company's share price has increased 35% over the past three months. Our lower TP is due to a 4% decrease in our aggregate earnings forecast in 2023-2027F following our lower water volume assumption.

We raise target price for TDM by 1% to VND44,600/share and maintain BUY rating. Our higher TP is due to a 2% increase in 2023-2027F aggregate NPAT forecast given higher projected volume.

Figure 1: Water companies – Key data

| Code | Rating | Market Cap USD mn | State O'ship % | Foreign Limit % | Foreign Avail USD mn | ADTV 30D USD mn | Share price VND ps | Target price, VND ps | Target price, updated | Upside % | Div yield % | 12M TSR % |
|------|--------|-------------------|----------------|-----------------|----------------------|-----------------|--------------------|----------------------|-----------------------|----------|-------------|-----------|
| BWE | O-PF | 384 | 19% | 50% | 128 | 0.3 | 46,500 | 50,700 | 2/14/2023 | 9.0% | 2.6% | 11.6% |
| TDM | BUY | 155 | 0% | 50% | 53 | 0.2 | 36,500 | 44,600 | 2/14/2023 | 22.2% | 3.3% | 25.5% |

Figure 2: Water companies – Summary valuations, based on reported NPAT

| Code | Share price, VND ps | EPS g 2022 % | EPS g 2023F % | EPS g 2024F % | P/E TTM (x) | P/E 2022 (x) | P/E 2023F (x) | P/E 2024F (x) | EV/ EBITDA 2023F (x) | ROE 2023F % | P/B LQ (x) | Net D/E LQ % |
|------|---------------------|--------------|---------------|---------------|-------------|--------------|---------------|---------------|----------------------|-------------|------------|--------------|
| BWE | 46,500 | -0.8% | 14.7% | 50.3% | 13.4x | 13.4x | 12.7x | 8.4x | 7.3x | 17.9% | 1.6 | 63.3% |
| TDM | 36,500 | -32.9% | 39.3% | 25.9% | 18.0x | 18.0x | 12.9x | 10.3x | 7.2x | 15.4% | 1.7 | 12.9% |

Source: Bloomberg, VCSC (data as of February 13, 2023)

Industry Update

Binh Duong Province set its 2023 GRDP target slightly higher than that of 2022

Binh Duong's 2022 GRDP increased 8.3% YoY as all three main sectors of the economy performed strongly. Specifically, the agricultural sector rose 3.1% YoY, the industrial-construction sector rose 8.2% YoY and the services sector rose 9.5% YoY.

Provincial leaders set 2023 targets for GRDP to increase 8.5%-8.7% YoY and the Index of Industrial Production (IIP) to rise 8.9% YoY. Core tasks in 2023 include progressing with a modern provincial road transport infrastructure network and facilitating interregional connections. The focus is on the Ring Road No. 3 project, the HCMC – Thu Dau Mot - Chon Thanh – Binh Phuoc Expressway, the Bau Bang – Cai Mep (Vung Tau) railway and the Song Than Intersection.

An all-time high amount of high public investment in 2023 will accelerate key infrastructure projects. According to the provincial People's Committee's statement on February 7, Binh Duong Province has been assigned to disburse nearly VND21.8tn (USD909million) of public investment capital in 2023. In January 2023, the public investment index jumped 63.6% YoY to VND545bn to boost investment in major transport projects.

According to the General Statistics Office of Vietnam, Binh Duong's socioeconomic indicators were weak in January 2023 as IIP slumped 11.2% YoY, which was mainly due to a lower amount of industrial activities during the Tet Holiday. Meanwhile, the total retail sales of good & services in January 2023 increased 14.1% YoY to VND25tn, which was driven by higher consumption demand. Furthermore, 86% of laborers returned to work in Binh Duong Province after Tet as 87% of enterprises commenced reoperation. However, the employment index declined by 0.5% YoY primarily due to fewer workers in the State-owned business sector (-15.5% YoY); non-state businesses fell by 3.9% and FDI enterprises rose by 0.7%.

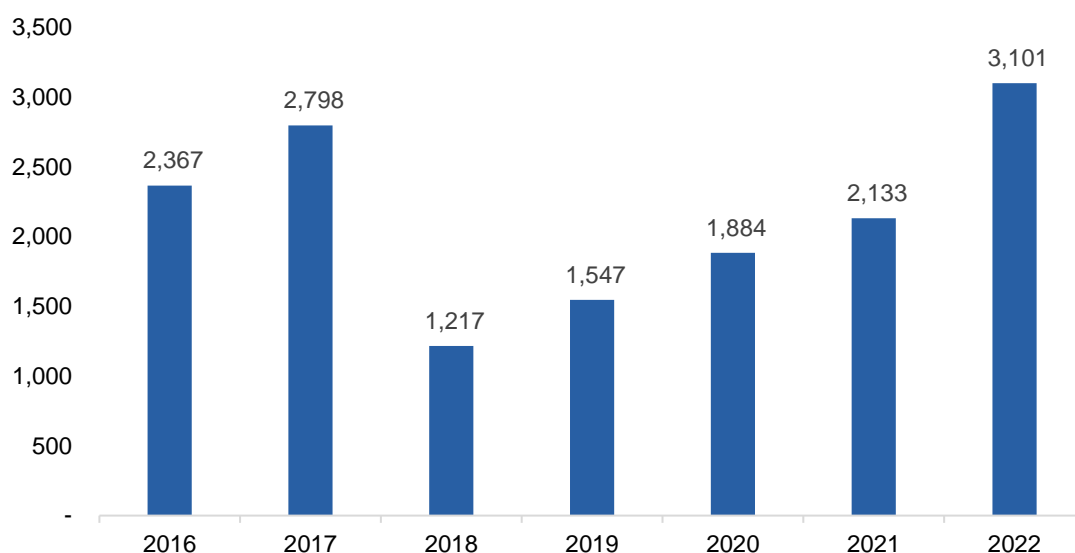
Binh Duong is among Vietnam's top five provinces for attracting new FDI registrations over the past five years and has one of the largest industrial zones in Vietnam.

Binh Duong ranked second among provinces in FDI attraction nationwide with 2022 FDI inflows of USD3.1bn (+48.8% YoY) thanks to large-scale investment projects of LEGO (total capital of USD1.3bn) and Pandora Group (capital expenditure of more than USD100mn).

In the long term, we expect Binh Duong's industrial water demand will improve due to the rapid expansion of industrial production as new industrial parks come into operation in 2022-2025F, including the Vietnam Singapore Industrial Park (VSIP) III (1,000 ha) in Tan Uyen District and Cay Truong Industrial Park (1,000 ha) in Bau Bang District.

We expect population growth and migration will increase Binh Duong's residential water demand, particularly in HCMC's suburbs like Di An Ward. In June 2022, the National Congress issued an investment approval for the 76-km Ring Road No. 3 project that will connect HCMC with Dong Nai, Long An and Binh Duong province. Binh Duong Province targets to commence construction by April 30, 2023, to ensure the progress of the project.

Figure 3: Registered FDI in Binh Duong Province (USD mn)



Source: Ministry of Planning and Investment (MoPI), VCSC

Furthermore, we believe residential and industrial water demand in Long Thanh Ward, Dong Nai Province will increase significantly when Long Thanh International Airport is put into operation, indicating that BWE and TDM's Long Thanh Highway water project should be approved by 2023 in order to meet the escalating demand. According to the Airports Corporation of Vietnam (ACV), although the land clearance progress for the construction site had been 98% completed as of November 2022, the project has fallen behind schedule due to not having a contractor for the passenger terminal package. As a result, ACV is reviewing the project's requirements to reopen the bidding procedures so that the airport's first phase would be put into operation by 2025 as scheduled.

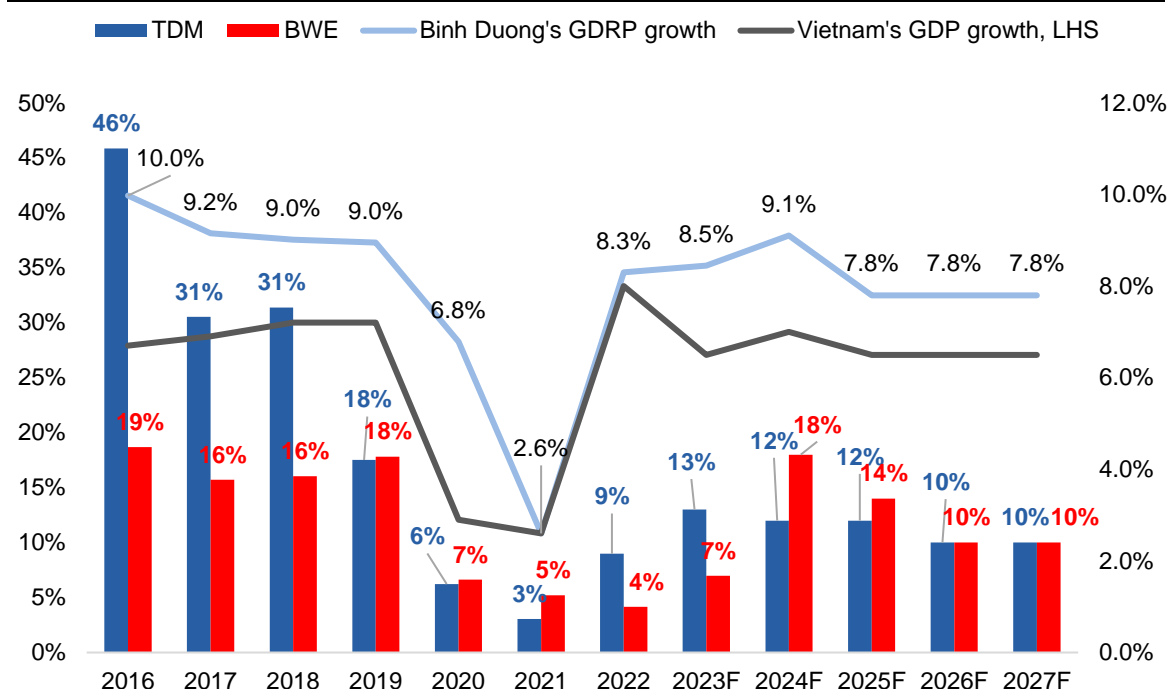
We believe these infrastructure projects will support industrial development and facilitate intracity mobility over the long term. These factors should in turn establish a new driving force for socioeconomic growth and further increase population migration to Binh Duong and Dong Nai provinces — where BWE and its associates operate.

Binh Duong Province water demand outlook

Although we expect double-digit volume growth in 2024-2027F thanks to the potential acceleration of population migration and industrial development in Binh Duong Province, we lower our projected 2023 volume growth for BWE from 12% YoY to 7% YoY. This assumption is driven by strong residential water volume growth of 9% YoY and industrial water volume growth of 5% YoY. In our view, industrial water demand will weaken in H1 2023 but then recover in H2 2023 thanks to the recovery of water-consuming sectors like the wood processing and textile industries — in addition to a new contribution from industrial clients in the Minh Hung Industrial Park. In 2022, BWE's water volume grew only 4% YoY (vs our previous estimate of 8% YoY) as industrial water demand in 2022 was weak (+0.1% YoY), implying a slowdown in manufacturing activities; meanwhile, residential water demand increased 8.6% YoY in 2022.

For TDM, we raise our projected 2023 volume to 79 million cbm (+13% YoY) after its 2022 results beat our expectations. We attribute the stronger volume growth for TDM vs BWE in 2022-2023 to 1) TDM being impacted more severely compared to BWE in 2021, and 2) TDM's major water plants being in the most populated industrial hub of Binh Duong Province (Di An Province), which faces less risk of an economic slowdown compared to other districts.

Figure 4: Binh Duong water demand vs GRDP



Source: TDM, BWE, Binh Duong provincial authorities, VCSC

BWE plans M&A with DNP Long An Water JSC

On February 8, BWE announced a BOD resolution to acquire a 20%-100% stake of DNP Long An Water Infrastructure JSC (Long An Water), which possesses the Nhi Thanh water processing plant (capacity of 60,000 cbm per day) that provides water for industrial parks in Long An Province. Long An Water has also secured enough land bank to double its capacity to 120,000 cbm/day — ~15% of BWE's capacity. According to BWE, Long An Water has a ~50%-60% market share. The price and timeline of this acquisition have not been specified.

On February 10, BWE announced it would acquire 50%-100% stakes in four other water companies in order to consolidate revenue and profit when these deals are successful. These companies include three in Long An Province (Chau Thanh Urban Construction JSC, Can Giuoc Urban Construction JSC and Bang Tam Water & Environment JSC) and one in Quang Binh Province (DNP Quang Binh Water Infra JSC). Further details were yet disclosed.

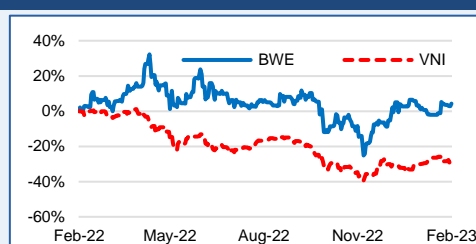
These acquisitions are in line with BWE's strategy to expand its water business beyond southeastern Vietnam to southwestern and central Vietnam.

Potential of water industry in Long An Province: Long An is among Vietnam's top five provinces for attracting FDI registrations over the past five years. In 9M 2022, the province had 43 projects with a total capital registered of more than USD307mn, demonstrating that it is a promising investment hub in southern Vietnam. The province currently has 16 industrial parks and 22 industrial clusters — the industrial parks have a total area of 2,905 ha and roughly 92% occupancy rate. With the geographical competitive advantage of being a gateway linking HCMC to the Mekong Delta region, the province has attracted a significant amount of investment — especially in the food processing, textile and garment industries and most recently in green energy projects.

Solid water consumption demand — especially for industrial parks in 2020-2030F. The water industry in Long An Province possesses positive prospects from rapid urbanization and population growth, increasing frequency of drought and saltwater intrusion leading to high demand for clean water, and a projected 2020-2030F CAGR of 5% (per BWE's guidance). Moreover, the expansion of industrial zones in the province over the next 10 years will be linked with escalating water demand — especially as high water-consuming industries account for a majority of businesses in Long An Province. It is estimated that industrial water demand could double over the next 10 years.


BIWASE (BWE) [OUTPERFORM +11.6%]
Update Report

| | | | | | | |
|---------------------|--------------------------|---------------|-------------|--------------|--------------|--------------|
| Industry: | Utilities | | 2022 | 2023F | 2024F | 2025F |
| Report Date: | February 14, 2023 | | | | | |
| Current Price: | VND46,500 | Rev YoY | 11.7% | 4.9% | 14.9% | 13.2% |
| Target Price: | VND50,700 | EPS YoY | -0.8% | 14.7% | 50.3% | 30.9% |
| Last Target Price: | VND51,800 | Core EPS YoY* | 13.5% | 6.9% | 50.3% | 30.9% |
| Upside to TP: | +9.0% | NPAT (VND bn) | 743 | 852 | 1,280 | 1,675 |
| Dividend Yield: | <u>2.6%</u> | EV/EBITDA | 8.5x | 7.3x | 5.4x | 4.0x |
| TSR: | +11.6% | P/E | 13.4x | 12.7x | 8.4x | 6.4x |
| | | DPS (VND) | 1,300 | 1,400 | 1,500 | 1,600 |



| | | | | | |
|-----------------------|----------|---|------------|--------------|------------|
| Market Cap: | USD384mn | | BWE | Peers | VNI |
| Foreign Room: | USD128mn | P/E (ttm) | 13.4x | 18.6x | 13.8x |
| ADTV30D: | USD0.3mn | P/B | 1.6x | 1.3x | 1.7x |
| State Ownership: | 19% | Net D/E | 63.6% | 53.3% | N/A |
| Outstanding Shares: | 193 mn | ROE | 17.6% | 8.1% | 14.3% |
| Fully Diluted Shares: | 193 mn | ROA | 7.8% | 4.0% | 2.2% |
| PEG 3-Year | 0.4 | (*) Excluding non-core; (**) Four-year median of regional peers | | | |

Company Overview

BWE is the second largest water distribution company in Vietnam and had a capacity of 750,000 cbm per day as of 2020. BWE offers a full environmental value chain from water generation and distribution (80% of gross profit) to wastewater treatment. BWE is also active in waste treatment, funeral services and rooftop solar.

Duong Dinh
 Senior Manager
duong.dinh@vcsc.com.vn
 +84 28 3914 3588 ext. 140

Earnings to rebound from 2022's low base

- We trim our target price for BWE by 2% to VND50,700/share following a 4% cut in our aggregate 2023-2027F earnings forecast. Additionally, we downgrade our rating from BUY to OUTPERFORM as BWE's share price has increased ~30% over the past three months.
- We reduce our 2023-2026F NPAT forecast due to our lower industrial volume assumption, which is partly offset by our lower interest expense forecast as interest expenses in 2022 completed 84% of our previous projection.
- We forecast 2023F reported NPAT growth of 15% YoY due to (1) 8% YoY NPAT growth from the water segment, (2) an upbeat performance from the waste treatment segment as we maintain a 10% YoY higher residential waste treatment tariff assumption and (3) lower forex losses YoY.
- BWE's valuation looks attractive at a 2023F P/E of 12.7x and implied PEG of 0.4 based on a projected 2022-2025F EPS CAGR of ~30%.
- Upside catalyst: Successful M&A with Long An water companies. Downside risk: Lower-than-expected sales volume if there is a disappointing amount of manufacturing activity.

We expect 2023F sales volume to rise 7% YoY. We lower our projected 2023 volume growth for BWE from 12% YoY to 7% YoY, which is driven by 9% YoY residential water volume growth and 5% YoY industrial water volume growth. In our view, industrial water demand will weaken in H1 2023 but then recover in H2 2023 thanks to the recovery of high water-consuming sectors like the wood processing and textile industries, in addition to a new contribution from industrial clients in the Minh Hung Industrial Park. In 2022, BWE's water volume rose only 4% YoY (vs our previous estimate of 8% YoY) as industrial water demand (+0.1% YoY) was weak in 2022, implying a slowdown in manufacturing activities; meanwhile, residential water demand increased 8.6% YoY.

BWE plans M&A with DNP Long An Water JSC. On February 8, BWE announced a BOD resolution to acquire a 20%-100% stake of DNP Long An Water Infrastructure JSC (DNP Long An Water), which possesses the Nhi Thanh water processing plant with a capacity of a 60,000 cbm per day that provides water for industrial parks in Long An Province. DNP Long An Water has also secured enough land bank to double its capacity to 120,000 cbm/day — ~15% of BWE's capacity. According to BWE, Long An Water has a ~50%-60% market share. The price and timeline of the acquisition have not been specified. We believe a successful M&A with a reasonable acquisition price will add value to BWE. The water industry in Long An Province has positive prospects from rapid urbanization and population growth, increasing frequency of drought and saltwater intrusion leading to strong demand for clean water, and a projected 2020-2030F CAGR of 5% (per BWE's

guidance). Moreover, BWE expects that industrial water demand could double over the next 10 years.

2022 Recap: High profit from water segment to help core earnings rise 14% YoY

Figure 5: BWE's 2022 results (VND bn)

| VND bn | Q4 2022 | YoY Growth | 2022 | YoY Growth | % of VCSC's forecast | VCSC's comments on 2022 results |
|---|--------------|-------------|--------------|------------|----------------------|--|
| Water sales volume (million cbm) | 46 | 0% | 181 | 4% | 96% | Lower-than-expected sales volume due to the sluggish recovery of key manufacturing industries in Q4 2022. |
| Revenue | 1,043 | 3% | 3,483 | 12% | 100% | |
| Water supply | 548 | 5% | 2,159 | 10% | 96% | Including mineral water, water pipeline & material trading and rooftop solar. |
| Waste treatment | 273 | -26% | 707 | 5% | 110% | |
| Wastewater treatment | 32 | 403% | 151 | 195% | 92% | |
| Trading and others | 191 | 65% | 467 | 11% | 111% | |
| COGS | -706 | 12% | -2,062 | 15% | 104% | |
| Gross profit | 337 | -12% | 1,421 | 8% | 96% | |
| Water supply | 266 | 0% | 1,136 | 6% | 97% | Due to a newly advanced wastewater treatment system that was put into operation in Q4 2022. |
| Waste treatment | 34 | -63% | 113 | -14% | 81% | |
| Wastewater treatment | 7 | N.M. | 39 | 549% | 139% | |
| Trading and others | 30 | 6% | 133 | 27% | 91% | |
| SG&A expenses | -142 | 0% | -502 | 7% | 95% | |
| Operating profit | 195 | -19% | 919 | 9% | 96% | |
| Financial income | 22 | -37% | 104 | -5% | 73% | |
| Financial expenses | -35 | 659% | -226 | 185% | 78% | |
| In which: Interest expenses | -48 | 25% | -170 | 10% | 84% | |
| Share profit from associates | 7 | 78% | 18 | 124% | N.M. | Including shared profit from Chanh Phu Hoa JSC and a loss from GIWACO. |
| Other income/loss | 10 | 33% | 23 | N.M. | N.M. | |
| Profit before tax | 199 | -30% | 838 | -2% | 103% | |
| NPAT before MI | 170 | -30% | 747 | 0% | 101% | |
| NPAT after MI | 168 | -31% | 743 | -1% | 102% | Flat YoY NPAT is due to higher financial expenses resulting from USD/VND appreciation and higher interest expenses, which offset core NPAT growth. |
| Core NPAT * | 155 | -28% | 798 | 14% | 98% | Mainly due to solid earnings growth from the water segment that outweighed the weak results of the waste treatment segment. |
| Water supply | 117 | -2% | 582 | 10% | 106% | Due to higher depreciation expenses from new waste treatment systems. |
| Waste treatment | 1 | -98% | 13 | -75% | 20% | |
| Wastewater treatment | 2 | N.M. | 19 | N.M. | 81% | |
| Trading & others | 34 | 18% | 185 | 47% | 103% | Huge profits from water pipeline & material trading in 9M 2022 thanks to high steel prices and low costs. |

Source: BWE's financial statements, VCSC forecast. (*) Excluding provision/reversal provision expenses for financial investments and unrealized forex loss.

2023 Outlook: Strong growth of waste segment; resilient residential water demand

Figure 6: BWE's 2023 outlook (VND bn)

| VND bn | 2022 | 2023F Revised | YoY Growth | 2023F Revised vs Previous | VCSC's comments for: (1) Revised vs previous forecast (2) 2023F vs 2022F |
|---|---------------|---------------|------------|---------------------------|---|
| Water sales volume (million cbm) | 181 | 194 | 7% | -8% | (2) Driven by 9% YoY residential water volume growth and 5% YoY industrial water volume growth. In our view, industrial water demand will be weak in H1 2023 but then gradually recover in H2 2023 thanks to the recovery of water-consuming sectors like the wood processing and textile industries. |
| Revenue | 3,484 | 3,653 | 5% | -4% | |
| Water supply | 2,159 | 2,305 | 7% | -8% | |
| Waste treatment | 707 | 718 | 2% | -2% | * We forecast sales volume growth of 10% YoY and 10% YoY growth of the residential waste segment, the latter of which is mainly driven by rising demand for residential waste treatment due to the increased disposal of facemasks and e-commerce packaging. |
| Wastewater treatment | 151 | 164 | 8% | 0% | |
| Trading and others | 467 | 467 | 0% | 11% | * Including mineral water, water pipeline & material trading and rooftop solar. |
| COGS | -2,063 | -2,157 | 5% | -2% | |
| Gross profit | 1,421 | 1,496 | 5% | -8% | |
| Water supply | 1,136 | 1,163 | 2% | -11% | |
| Waste treatment | 113 | 162 | 43% | -18% | (2) Due to a 2022's low base as there were higher-than-expected depreciation expenses. In addition, we expect GPM of the waste treatment segment to improve thanks to a 10% YoY increase in the waste treatment tariff, electricity cost savings and higher sales volume. |
| Wastewater treatment | 39 | 41 | 4% | 46% | (1) Due to higher efficiency from the new wastewater treatment system that was put into use in Q4 2022. |
| Trading and others | 133 | 131 | -2% | 25% | |
| SG&A expenses | -502 | -520 | 3% | -8% | |
| Operating profit | 919 | 976 | 6% | -9% | |
| Financial income | 104 | 179 | 71% | 0% | |
| Financial expenses | -226 | -232 | 3% | -12% | (1) Due to a lower interest expense assumption. (2) Lower projected forex losses. |
| In which: Interest expenses | -170 | -221 | 29% | -13% | |
| Share profit from associates | 18 | 19 | 5% | N.M. | |
| Other income/loss | 23 | 1 | N.M | 0% | |
| Profit before tax | 838 | 943 | 13% | -5% | |
| NPAT after MI | 743 | 852 | 15% | -4% | (1) We reduce our projected water sales volume as the industrial segment is recovering slower than expected. (2) Driven by water supply segment NPAT growth of 8% YoY and upbeat performance from the waste treatment segment. |
| Core NPAT * | 798 | 852 | 7% | -4% | |
| Water supply | 582 | 629 | 8% | -10% | |
| Waste treatment | 13 | 86 | 555% | -25% | (2) Thanks to a 10% YoY increase in the waste treatment tariff and electricity cost savings. |
| Wastewater treatment | 19 | 21 | 10% | -10% | |
| Trading & others | 185 | 116 | -37% | 127% | (2) Earnings from water pipelines & materials to normalize due to there not being any low-cost inventory. |

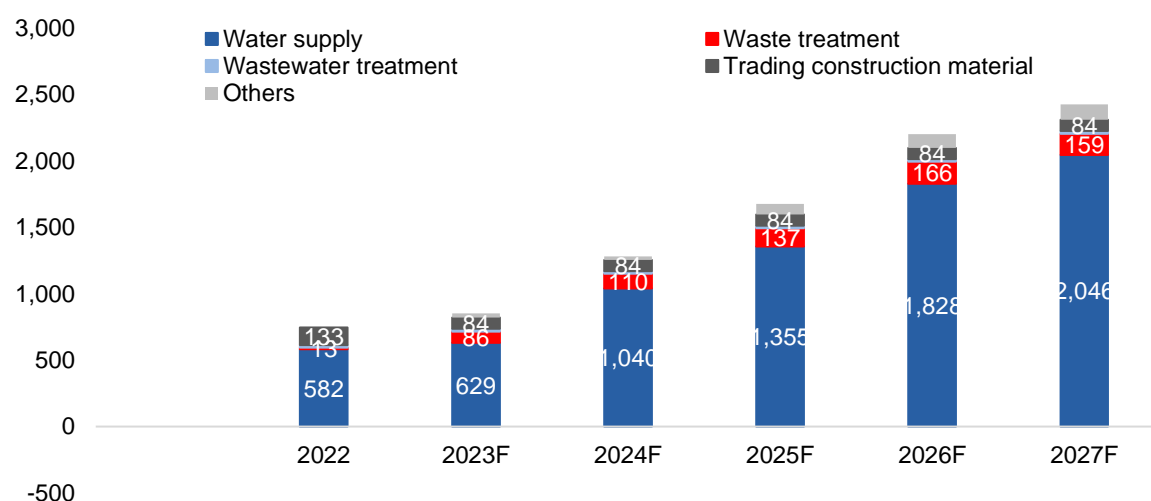
Source: VCSC forecasts. (*) Excluding provision/reversal provision expenses for financial investments and unrealized forex loss.

Long-term outlook across segments

We reduce our aggregate 2023-2027F earnings forecast by 4% as we lower our water sales volume assumptions. This is partly offset by lower projected interest expense.

We forecast an NPAT CAGR of ~30% in 2022-2025F, which is mainly due to (1) robust water volume growth of 7%-18% p.a., (2) a 3% p.a. water tariff increase starting in 2024F, (3) electricity cost savings thanks to new rooftop solar capacity at water plants (BWE installed 4.6 MWp in 2021 and targets to have 35 MWp by 2025), and (4) 5 MW and 10 MW of thermal power capacity installed in the waste treatment segment in 2022 and 2023, respectively, that will also help to lower electricity costs. We have incorporated depreciation/interest expenses and capex for this new power capacity. The electricity cost savings from this power capacity is larger than associated costs, which partly helps to contribute additional earnings. In addition, we expect the tariff for the residential waste to increase 10% in 2023 as there is higher demand from this segment.

Figure 7: NPAT breakdown by segment (VND bn)



Source: BWE, VCSC forecast

Valuation

We continue to evaluate BWE using a 100% discounted cash flow (DCF) valuation model as we believe it fully captures the intrinsic value of the business and is the most accurate method to assess the stable cash flow of utilities companies. We also incorporate BWE's water operations in Can Tho and Dong Nai Province, including its ownership interests in Can Tho Water Company (valued using the P/B method), GIWACO (valued by DCF method), and Dong Nai Water JSC (UPCoM: DNW — valued by DCF method).

We keep a 10% valuation discount for policy risk, which is a typical risk in heavily regulated industries. This discount is less than the 15% discount rate we apply to power stocks. Compared to electricity rates — which are mostly established by Government bodies & ministries and are sensitive to national economic growth — water tariffs in Vietnam are more subject to policy and systemic risks because they are primarily set by provincial authorities. In the past, water rates in a number of Vietnamese cities and provinces have remained unchanged or have slightly increased. Nevertheless, power plants occasionally undergo a review regarding power purchase agreements, which lowers the cost of electricity.

In this Update Report, we cut our target price by 2% to VND50,700/share due to a 4% cut in our 2023-2026F earnings forecast.

Figure 8: BWE's valuation (DCF) (VND/share)

| Method | Fair value | Weight | Target price (VND/share) |
|---|------------|--------|--------------------------|
| DCF of BWE's core business | 48,007 | 100% | 48,007 |
| 18% stake in Dong Nai Water (DNW) | | | 3,502 |
| 32% stake in Gia Tan Water (GIWACO) | | | 1,753 |
| 24-49% stake in Can Tho water companies | | | 3,119 |
| Fair value | | | 56,381 |
| Discount (%) | | | 10.0% |
| Target price | | | 50,700 |
| Upside % | | | 9.0% |
| Dividend yield % | | | 2.6% |
| TSR % | | | 11.6% |
| 2023 P/E at TP (x) | | | 13.8x |

Source: VCSC forecast

Figure 9: DCF valuation

| Cost of Capital | Previous | Revised | FCFF (Five Years) | VND bn |
|-----------------------|--------------|--------------|-----------------------------|---------------|
| Beta | 1.0 | 1.0 | PV of Free Cash Flows | 5,192 |
| Market Risk Premium % | 8.0% | 8.0% | PV of Terminal Val (1% g) | 6,985 |
| Risk-free Rate % | 6.0% | 6.0% | PV of FCF and TV | 12,176 |
| Cost of Equity % | 14.0% | 14.0% | + Cash & ST investments | 1,147 |
| Cost of Debt % | 7.5% | 7.5% | - Debt | -4,018 |
| Debt % | 49.1% | 49.1% | - Minority Interest | -44 |
| Equity % | 50.9% | 50.9% | Equity Value | 9,262 |
| Corporate Tax Rate % | 10.2% | 10.2% | Shares (million) | 193 |
| WACC % | 10.4% | 10.4% | Value per share, VND | 48,007 |

Source: VCSC forecast

We note the corporate tax rate is 10%, which is lower than the statutory rate. In accordance with Circular 78/2014/TT-BTC of the Ministry of Finance (dated June 18, 2014), BWE's business segment is classified as a special business segment that is eligible for a favorable tax rate. As a result, BWE will have a tax rate of 10% for its current business model.

Figure 10: Cash flows (VND bn)

| (VND bn) | 2022 | 2023F | 2024F | 2025F | 2026F | 2027F |
|------------------------------|------------|--------------|--------------|--------------|--------------|--------------|
| EBIT & Dividend | 954 | 1,018 | 1,432 | 1,772 | 2,298 | 2,508 |
| less: tax | -78 | -88 | -135 | -179 | -238 | -262 |
| add: depreciation | 479 | 564 | 562 | 589 | 252 | 274 |
| less: net capex | -874 | -399 | -400 | -400 | -400 | -1,100 |
| (increase) / decrease in NWC | -152 | -32 | -145 | -166 | -92 | -223 |
| Free Cash Flow | 328 | 1,063 | 1,314 | 1,615 | 1,821 | 1,197 |
| Present Value of FCF | | 963 | 1,077 | 1,199 | 1,224 | 729 |
| Cumulative PV of FCF | | 963 | 2,040 | 3,239 | 4,463 | 5,192 |

Source: VCSC forecast

Figure 11: BWE's capex guidance for 2021-2023

| Projects | Investment capital (VND bn) |
|---|-----------------------------|
| Expanding water supply capacity | 900 |
| Expanding distribution system for Nam Tan Uyen and Uyen Hung plants | 132 |
| Expanding distribution system for Tan Hiep plants | 275 |
| Total | 1,307 |

Source: BWE, VCSC

Valuation of Can Tho water companies

According to BWE, it spent ~VND300bn to acquire the Can Tho water companies; their implied 2021 P/E is 15x and implied 2021 P/B is 1.3x, which we believe are fair given their dominant positions and potential growth outlooks. We value these investments at 2x book value (given their profitability and growth outlooks), implying a value contribution to BWE of VND602bn and VND3,119/share, respectively.

Figure 12: Value contribution of Can Tho water companies to BWE

| Item | VND bn |
|-----------------------------------|--------------|
| BWE's investment at 2x book value | 602 |
| BWE's shares (million shares) | 193 |
| Value per share (VND) | 3,119 |

Source: VCSC forecast

TDM submitted a plan to spend a total of VND213bn (VND143bn in CTW and VND70bn in Can Tho 2 JSC) to acquire stakes in these water companies. We incorporate TDM's equity raising into our model and thus incorporate value from the two Can Tho water companies. We assume the auction of 10 million shares in 2023 will be successful at an assumed price of VND28,300/share following the company's board resolution on November 9, 2022. Moreover, we assume TDM will use the proceeds from its equity raising to acquire additional stakes in the two Can Tho water companies.

We value TDM's investment in the Can Tho water companies by 2x book value, implying a value contribution to TDM of VND426bn and VND3,873/share, respectively.

Figure 13: Value contribution of Can Tho water companies to TDM

| Item | VND bn |
|-----------------------------------|--------------|
| TDM's investment at 2x book value | 426 |
| TDM's shares (million shares) | 110 |
| Value per share (VND) | 3,873 |

Source: VCSC forecast

Dong Nai Water valuation

Figure 14: DNW's valuation

| Item | VND bn |
|-------------------------------|--------------|
| Equity value | 3,817 |
| BWE's stake (%) | 18% |
| Value of BWE's stake | 676 |
| BWE's shares (million shares) | 193 |
| Value per share (VND) | 3,502 |

Source: DNW, VCSC forecast

Figure 15: DNW's DCF valuation

| Cost of Capital | Current | FCFF (Five Years) | VND bn |
|-----------------------|--------------|---------------------------|--------------|
| Beta | 1.0 | PV of Free Cash Flows | 2,662 |
| Market Risk Premium % | 8.0% | PV of Terminal Val (1% g) | 3,020 |
| Risk-free Rate % | 6.0% | PV of FCF and TV | 5,682 |
| Cost of Equity % | 14.0% | + Cash & ST investments | 109 |
| Cost of Debt % | 7.5% | - Debt | -1,867 |
| Debt % | 52.6% | - Minority Interest | -107 |
| Equity % | 47.4% | Equity Value | 3,817 |
| Corporate Tax Rate % | 6.0% | | |
| WACC % | 10.3% | | |

Source: DNW, VCSC forecast

Figure 16: DNW's cash flows (VND bn)

| Cash Flows | 2022 | 2023F | 2024F | 2025F | 2026F | 2027F |
|------------------------------|------------|------------|--------------|--------------|--------------|--------------|
| EBIT | 402 | 448 | 499 | 555 | 618 | 686 |
| less: tax | -21 | -24 | -27 | -30 | -34 | -38 |
| add: depreciation | 241 | 241 | 241 | 241 | 241 | 241 |
| less: net capex | -80 | -80 | -80 | -80 | -80 | -80 |
| (increase) / decrease in NWC | 28 | 28 | 28 | 28 | 28 | 28 |
| Free Cash Flow | 570 | 614 | 662 | 715 | 773 | 837 |
| Present Value of FCF | | 557 | 545 | 535 | 525 | 517 |
| Cumulative PV of FCF | | 557 | 1,102 | 1,637 | 2,162 | 2,662 |

Source: VCSC forecast

GIWACO valuation

Figure 17: GIWACO's valuation

| Item | VND bn |
|-------------------------------|--------------|
| Equity value | 1,057 |
| BWE's stake (%) | 32% |
| Value of BWE's stake | 338 |
| BWE's shares (million shares) | 193 |
| Value per share (VND) | 1,753 |

Source: GIWACO, VCSC

Figure 18: GIWACO's DCF valuation

| Cost of Capital | Current | FCFF (Ten Years) | VND bn |
|-----------------------|-------------|---------------------------|--------------|
| Beta | 1.0 | PV of Free Cash Flows | 798 |
| Market Risk Premium % | 8.0% | PV of Terminal Val (1% g) | 648 |
| Risk-free Rate % | 6.0% | PV of FCF and TV | 1,446 |
| Cost of Equity % | 14.0% | + Cash & ST investments | 0 |
| Cost of Debt % | 7.5% | - Debt | -389 |
| Debt % | 70.0% | - Minority Interest | 0 |
| Equity % | 30.0% | Equity Value | 1,057 |
| Corporate Tax Rate % | 5.0% | | |
| WACC % | 9.2% | | |

Source: VCSC forecast

Figure 19: GIWACO's cash flows (VND bn)

| (VND bn) | 2022 | 2023F | 2024F | 2025F | 2026F | 2027F | 2028F | 2029F | 2030F | 2031F | 2032F | 2033F |
|-----------------------------|------------|------------|------------|------------|-------------|------------|------------|------------|------------|------------|------------|------------|
| EBIT | -19 | 11 | 33 | 139 | 133 | 191 | 229 | 237 | 194 | 245 | 299 | 309 |
| less: tax | 0 | 0 | 0 | -7 | -6 | -9 | -11 | -11 | -9 | -12 | -15 | -15 |
| add: depreciation | 39 | 46 | 52 | 59 | 86 | 92 | 95 | 98 | 102 | 105 | 109 | 112 |
| less: net capex | -100 | -100 | -100 | -100 | -400 | -100 | 0 | 0 | 0 | 0 | 0 | -250 |
| Change in NWC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Free Cash Flow | -80 | -43 | -14 | 92 | -188 | 175 | 313 | 324 | 286 | 338 | 393 | 157 |
| Present Value of FCF | | -39 | -12 | 68 | -126 | 106 | 173 | 162 | 129 | 138 | 146 | 53 |
| Cumulative PV of FCF | | -39 | -51 | 17 | -109 | -2 | 170 | 332 | 461 | 600 | 745 | 798 |

Source: GIWACO, VCSC forecast

Peers

Regional peers

We have chosen regional peers — including listed Asian water supply firms — to conduct comparison analysis with BWE. These businesses all work in the water supply sector and have tariffs that are regulated. However, the water supply industry is highly fragmented due to regional variations in geography, demographics and economic development levels, hence these businesses are not exactly commensurate to BWE. As BWE has a significantly smaller market cap than Chinese water businesses, we exclude them from our list of regional counterparts.

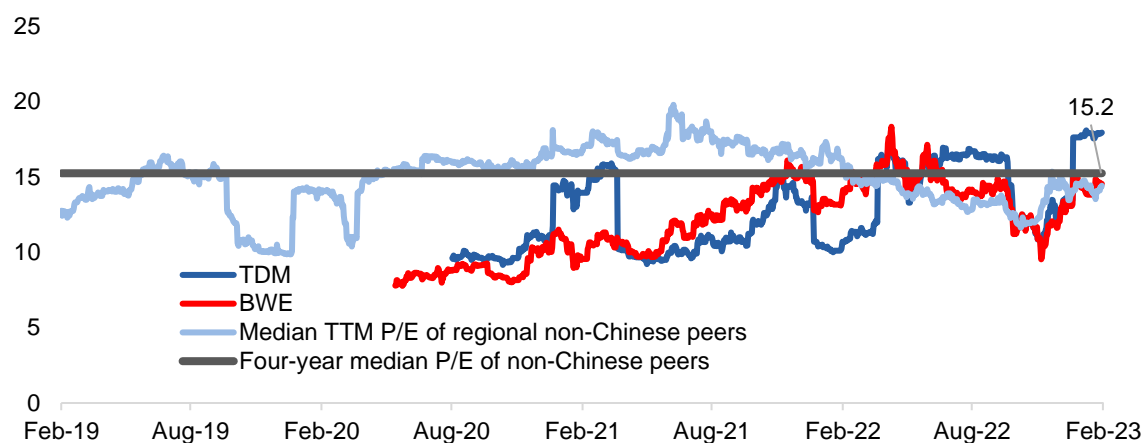
BWE possesses higher efficiency than most of its peers due to a lower water loss ratio and an ROE that is ~2x vs peers.

Figure 20: Regional peers – non-Chinese peers

| Company | Country | Market Cap (USD mn) | TTM Net sales (USD mn) | YoY (%) | TTM NPAT (USD mn) | YoY (%) | Net D/E (%) | ROE (%) | ROA (%) | Div yield (%) | TTM PER (x) | PBR (x) | EV/ EBIT DA (x) | GPM (%) |
|------------------|----------------|---------------------|------------------------|-------------|-------------------|--------------|-------------|-------------|------------|---------------|-------------|------------|-----------------|-------------|
| TTW Pcl | Thailand | 1,145 | 166 | -4.0 | 97.1 | -5.3 | 52.8 | 22.0 | 14.1 | 6.4 | 12.5 | 2.7 | 10.0 | 68.2 |
| VA TECH WABAG LT | India | 237 | 400 | 5.1 | 17.7 | 19.8 | 3.0 | 8.9 | 3.2 | N/A | 14.7 | 1.3 | 7.5 | 22.5 |
| EASTERN Water Re | Thailand | 274 | 128 | -4.6 | 33.2 | -21.5 | 86.6 | 7.3 | 3.4 | 6.7 | 11.2 | 0.8 | 9.0 | 41.8 |
| WHA Utilities An | Thailand | 474 | 67 | 9.4 | 23.0 | -11.9 | 92.8 | 3.6 | 1.7 | 5.4 | 33.8 | 1.2 | 30.6 | 32.3 |
| MANILA Water | Philippines | 1,066 | 408 | 6.0 | 74.5 | -0.4 | 98.2 | 6.1 | 2.8 | 1.9 | 13.3 | 0.6 | 10.2 | 55.9 |
| TALIWORK S CORP | Malaysia | 409 | 75 | 6.4 | 18.9 | -43.5 | -3.2 | 5.4 | 2.4 | 7.7 | 37.4 | 2.2 | 16.6 | 46.2 |
| PBA Holdings Bhd | Malaysia | 63 | 80 | 2.0 | 8.9 | 414.2 | 14.5 | 7.0 | 3.4 | 3.1 | 3.1 | 0.3 | 3.1 | 33.2 |
| RANHILL UTILITIE | Malaysia | 155 | 397 | 17.2 | 7.4 | 84.3 | 81.9 | 4.4 | 1.0 | 1.0 | 22.5 | 0.9 | 2.8 | 22.2 |
| Average | | 478 | 215 | 4.7 | 35.1 | 54.4 | 53.3 | 8.1 | 4.0 | 4.6 | 18.6 | 1.3 | 11.2 | 40.3 |
| Median | | 342 | 147 | 5.5 | 21.0 | -2.8 | 67.4 | 6.6 | 3.0 | 5.4 | 14.0 | 1.1 | 9.5 | 37.5 |
| BWE | Vietnam | 387 | 149 | 11.7 | 31.7 | -0.8 | 63.3 | 14.7 | 7.8 | 2.8 | 14.7 | 2.0 | 8.9 | 11.7 |
| TDM | Vietnam | 161 | 20 | 14.8 | 9.0 | -32.9 | 10.9 | 10.8 | 9.2 | N/A | 18.6 | 1.8 | 10.2 | 52.0 |

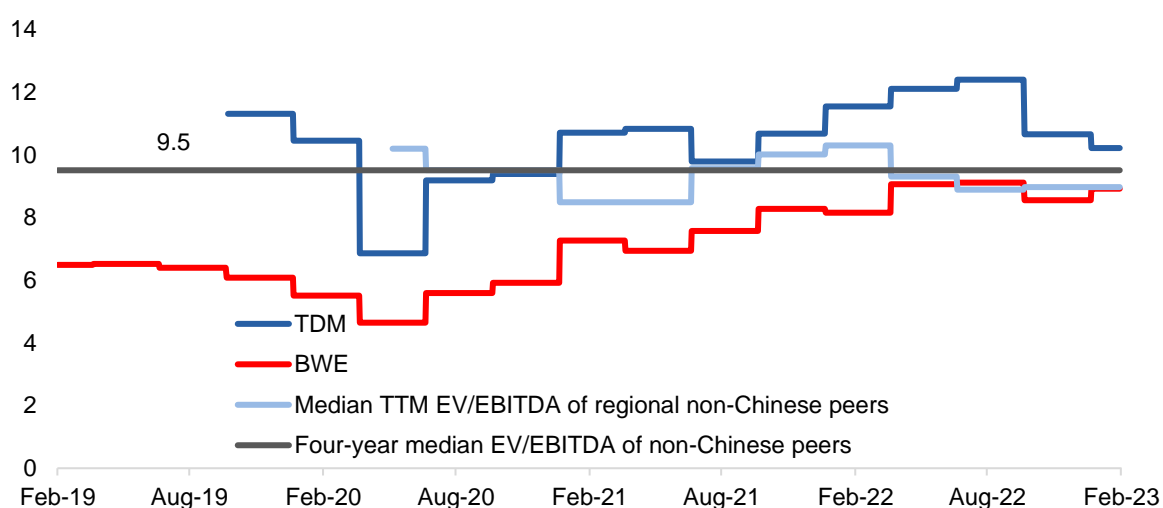
Source: Bloomberg, VCSC (data as of February 13, 2023)

Figure 21: Historical P/E of peers (non-Chinese, x)



Source: Bloomberg, VCSC (data as of February 13, 2023)

Figure 22: Historical EV/EBITDA of peers (non-Chinese, x)



Source: Bloomberg, VCSC (data as of February 13, 2023)

BWE also outperforms its Chinese peers in terms of key financial metrics.

Compared to Chinese water companies, BWE is much smaller in terms of market cap; however, it outperforms its Chinese peers in ROE and ROA.

Figure 23: Regional peers – China

| Company | Country | Market Cap (USD mn) | TTM Net sales (USD mn) | YoY (%) | TTM NPAT (USD mn) | YoY (%) | Net D/E (%) | ROE (%) | ROA (%) | Div yield (%) | TTM PER (x) | PBR (x) | EV/ EBIT DA (x) |
|------------------|----------------|---------------------|------------------------|-------------|-------------------|--------------|--------------|-------------|------------|---------------|-------------|------------|-----------------|
| Chongqing Wate-A | China | 3,753 | 1,126 | 2.0 | 322.1 | -22.6 | 14.5 | 10.6 | 6.1 | 4.9 | 14.3 | 1.5 | N/A |
| Grandblue Env-A | China | 2,232 | 2,177 | 50.8 | 180.4 | -9.4 | 102.8 | 11.1 | 3.6 | 1.2 | 13.5 | 1.4 | N/A |
| Beijing Cap Co-A | China | 3,203 | 3,352 | -5.7 | 354.7 | 43.7 | 101.4 | 19.7 | 3.3 | 3.4 | 6.0 | 1.1 | N/A |
| Chengdu Xingro-A | China | 2,241 | 1,092 | 15.9 | 231.7 | 9.3 | 40.0 | 11.8 | 4.7 | 2.0 | 9.2 | 1.0 | N/A |
| Zhongshan Publ-A | China | 1,599 | 362 | -3.5 | 227.3 | -35.0 | 4.8 | 6.5 | 4.3 | 4.1 | 11.1 | 0.7 | N/A |
| Jiangxi Hongch-A | China | 1,154 | 1,159 | -8.0 | 127.2 | -9.1 | 55.5 | 13.8 | 4.3 | 7.0 | 8.2 | 1.1 | N/A |
| Wuhan Sanzhen-A | China | 653 | 366 | -3.9 | 61.9 | 31.8 | 153.6 | 5.1 | 1.5 | 2.7 | 16.2 | 0.9 | N/A |
| Guangxi Nannin-A | China | 711 | 379 | 44.7 | 45.7 | 134 | 202.2 | 7.5 | 1.9 | 1.9 | 14.0 | 1.0 | N/A |
| Heilongjiang I-A | China | 699 | 53 | -18.7 | -14.0 | N/A | -18.8 | -7.1 | -5.2 | N/A | N/A | 1.5 | N/A |
| Qianjiang Wate-A | China | 692 | 261 | 15.0 | 23.4 | -33.1 | 35.4 | 6.2 | 2.0 | 1.1 | 35.6 | 2.2 | N/A |
| Jiangsu Jiangn-A | China | 919 | 172 | -0.4 | 42.9 | -10.5 | -19.2 | 8.0 | 4.4 | 1.4 | 23.3 | 1.8 | N/A |
| Sound Global Ltd | China | N/A | 606 | 2.4 | -151 | -23.1 | 221 | -17.9 | -4.3 | N/A | N/A | N/A | N/A |
| Greentech Envi-A | China | 257 | 81 | -12.6 | 9.7 | -16.4 | -29.1 | 6.1 | 4.0 | 0.4 | 27.6 | 1.6 | 13.0 |
| Shanghai Safbo-A | China | 283 | N/A | N/A | 202.1 | -148 | 304.1 | -128 | -30.9 | N/A | N/A | 4.6 | N/A |
| China Everbright | China | 559 | 933 | 9.3 | 154.4 | 0.4 | 92.4 | 10.3 | 3.6 | 8.5 | 3.7 | 0.4 | 9.1 |
| Kunming Dianch-H | China | 184 | 362 | 15.7 | 52.5 | -0.5 | 103.9 | 8.0 | 3.1 | 8.4 | 3.5 | 0.3 | 7.3 |
| Kangda Env | China | 153 | 481 | 0.9 | 64.0 | -21.6 | 169.8 | 7.1 | 2.0 | N/A | 2.7 | 0.2 | 9.0 |
| Yunnan Water I-H | China | 56 | 736 | -41.1 | -137 | N/A | 372.1 | -28.4 | -2.1 | N/A | N/A | 0.1 | 34.7 |
| Luzhou Xinglu -H | China | 103 | 177 | -43.5 | 37.5 | 7.4 | 63.8 | 10.2 | 3.3 | 6.2 | 2.8 | 0.3 | N/A |
| Taizhou Water -H | China | 67 | 77 | -4.4 | 18.7 | -24.4 | 227.4 | 10.2 | 2.0 | 7.6 | 4.9 | 0.5 | 15.8 |
| Average | | 1,027 | 734 | 0.8 | 72.4 | -7.0 | 109.9 | -1.4 | 0.6 | 4.1 | 12.3 | 1.2 | 14.8 |
| Median | | 692 | 379 | -0.4 | 49.1 | -10.0 | 96.9 | 7.8 | 3.2 | 3.4 | 10.1 | 1.0 | 11.0 |
| BWE | Vietnam | 387 | 149 | 11.7 | 31.7 | -0.8 | 63.3 | 14.7 | 7.8 | 2.8 | 14.7 | 2.0 | 8.9 |

Source: Bloomberg, VCSC (data as of February 13, 2023)

Domestic peers

Our domestic peers include water supply/distribution companies in big cities and provinces; however, our analysis shows that two-thirds of these peers are small companies, creating certain inadequacies when comparing to BWE. In general, BWE has a significantly higher ROE than its domestic peers; nevertheless, it is trading at a much lower P/E.

Figure 24: Domestic peers

| Company | Country | Market Cap (USD mn) | TTM Net sales (USD mn) | YoY (%) | TTM NPAT (USD mn) | YoY (%) | Net D/E (%) | ROE (%) | ROA (%) | Div yield (%) | TTM PER (x) | PBR (x) | EV/ EBIT DA (x) |
|------------------|----------------|---------------------|------------------------|-------------|-------------------|-------------|--------------|-------------|------------|---------------|-------------|------------|-----------------|
| Song Da Water In | Vietnam | 387 | 149 | -1.7 | 8.7 | 1.9 | 52.4 | 15.7 | 9.7 | 6.8 | 16.6 | 2.4 | 10.4 |
| Cho Lon Wasuco | Vietnam | 141 | 23 | 8.7 | 1.3 | 8.7 | -36.5 | 15.7 | 6.7 | 5.4 | N/A | 1.3 | 4.4 |
| Ca Mau Water Sup | Vietnam | 12 | 54 | -10.6 | 0.4 | -2.7 | 3.8 | 5.8 | 2.9 | 3.7 | N/A | N/A | N/A |
| Dong Nai Water J | Vietnam | N/A | 5 | 3.6 | 16.9 | 160.0 | 45.9 | 21.1 | 10.6 | 5.6 | 8.7 | 1.7 | 6.9 |
| Gia Dinh Water S | Vietnam | 136 | 50 | 2.5 | 0.8 | 63.0 | -23.0 | 16.0 | 9.3 | 3.8 | 11.5 | 1.8 | 2.2 |
| Hai Phong Water | Vietnam | 13 | 26 | 2.8 | 3.9 | -1.0 | 79.4 | 8.8 | 3.6 | 4.8 | 14.8 | 1.3 | 6.0 |
| Long Khanh Water | Vietnam | 56 | 45 | 8.7 | 0.7 | 16.2 | -61.2 | 19.9 | 23.2 | 4.7 | 6.8 | 1.3 | 3.7 |
| Nha Be Water Sup | Vietnam | 3 | 2 | 14.0 | 0.9 | 13.5 | -39.4 | 11.8 | 7.4 | 7.4 | 8.8 | 1.0 | 4.7 |
| Hanoi Water Supp | Vietnam | 8 | 36 | 3.8 | 0.7 | 24.1 | 5.5 | 1.4 | 1.3 | 2.0 | 50.3 | 0.7 | 4.9 |
| Nhon Trach Water | Vietnam | 18 | 20 | 1.1 | 0.7 | 25.8 | -33.2 | 8.4 | 7.5 | 7.5 | 11.2 | 0.9 | 5.5 |
| Phu Hoa Tan Jsc | Vietnam | 7 | 7 | -5.7 | 0.4 | 15.3 | -48.0 | 7.6 | 5.5 | 4.4 | 12.5 | 0.9 | 1.6 |
| Phu Yen Water Su | Vietnam | 5 | 15 | 0.1 | 0.8 | -9.4 | -21.1 | 4.2 | 3.6 | 4.1 | 23.3 | 1.0 | 7.6 |
| Tan Hoa Water Su | Vietnam | 18 | 5 | -1.5 | 0.3 | 2.6 | -65.1 | 6.3 | 5.3 | 6.3 | 13.1 | 0.8 | N/A |
| Thai Nguyen Wate | Vietnam | 2 | 7 | 5.6 | 0.2 | -17.6 | 117.1 | 2.5 | 0.8 | 9.3 | 18.4 | 0.5 | 9.0 |
| Water Supply Sew | Vietnam | 5 | 9 | 31.2 | 1.0 | -51.9 | 49.3 | 20.8 | 7.9 | 11.1 | 10.0 | 1.2 | 5.6 |
| Viet Nam Water | Vietnam | 10 | 14 | -14.4 | 0.1 | -34.6 | -36.3 | 5.4 | 2.9 | 8.0 | 21.0 | 1.1 | 20.7 |
| Average | | 29 | 20 | 3.0 | 2.4 | 13.4 | -0.6 | 10.7 | 6.8 | 5.9 | 16.2 | 1.2 | 6.7 |
| Median | | 10 | 14 | 2.6 | 0.8 | 5.7 | -22.1 | 8.6 | 6.1 | 5.5 | 12.8 | 1.1 | 5.5 |
| BWE | Vietnam | 387 | 149 | 11.7 | 31.7 | -0.8 | 63.3 | 14.7 | 7.8 | 2.8 | 14.7 | 2.0 | 8.9 |

Source: Bloomberg, VCSC (data as of February 13, 2023)

BWE's Financial Statements

| P&L (VND bn) | 2022 | 2023F | 2024F | 2025F | B/S (VND bn) | 2022 | 2023F | 2024F | 2025F |
|----------------------------|--------------|--------------|--------------|--------------|----------------------------------|---------------|--------------|---------------|---------------|
| Revenue | 3,484 | 3,653 | 4,197 | 4,751 | Cash & equivalents | 275 | 364 | 805 | 1,560 |
| - Cost of goods sold | -2,063 | -2,157 | -2,239 | -2,382 | ST investment | 872 | 872 | 872 | 872 |
| Gross profit | 1,421 | 1,496 | 1,958 | 2,368 | Accounts receivables | 912 | 801 | 920 | 1,041 |
| - Sales & marketing | -320 | -348 | -387 | -434 | Inventories | 714 | 916 | 951 | 1,012 |
| - General & admin | -182 | -172 | -180 | -204 | Other current assets | 13 | 13 | 13 | 13 |
| Operating profit | 919 | 976 | 1,390 | 1,730 | Total Current assets | 2,786 | 2,966 | 3,560 | 4,498 |
| - Financial income | 104 | 179 | 188 | 171 | Fixed assets, gross | 7,842 | 8,461 | 8,761 | 9,161 |
| - Financial expenses | -226 | -232 | -193 | -148 | Fixed assets, net | 3,617 | 3,670 | 3,408 | 3,220 |
| In which, interest expense | -170 | -221 | -193 | -148 | Construction in progress | 1,000 | 781 | 881 | 881 |
| - Share from associates | 18 | 19 | 27 | 66 | LT investment | 1,437 | 1,437 | 1,437 | 1,437 |
| - Net other income/loss | 23 | 1 | 8 | 40 | LT assets other | 1,138 | 1,138 | 1,138 | 1,138 |
| EBT | 838 | 943 | 1,419 | 1,858 | Total LT assets | 7,201 | 7,026 | 6,864 | 6,675 |
| - Income tax expense | -92 | -88 | -135 | -179 | Total Assets | 9,987 | 9,991 | 10,424 | 11,173 |
| Profit after tax | 746 | 856 | 1,284 | 1,679 | Accounts payable | 184 | 242 | 252 | 268 |
| - Minority interests | -4 | -4 | -4 | -4 | Short-term debt | 1,326 | 1,247 | 1,247 | 1,214 |
| Reported NPAT-MI | 743 | 852 | 1,280 | 1,675 | Other ST liabilities | 479 | 479 | 479 | 479 |
| Core NPAT-MI | 797 | 852 | 1,280 | 1,675 | Total current liabilities | 1,989 | 1,968 | 1,977 | 1,961 |
| EBITDA | 1,398 | 1,541 | 1,952 | 2,319 | Long term debt | 2,692 | 2,270 | 1,899 | 1,561 |
| EPS basic, VND | 3,461 | 3,670 | 5,516 | 7,218 | Other LT liabilities | 769 | 769 | 769 | 769 |
| EPS FD, VND | 3,461 | 3,669 | 5,516 | 7,217 | Total Liabilities | 5,449 | 5,006 | 4,645 | 4,291 |
| Dividend per share | 1,300 | 1,400 | 1,500 | 1,600 | Preferred Equity | 0 | 0 | 0 | 0 |
| DPS/EPS | 37.6% | 38.1% | 27.2% | 22.2% | Paid in capital | 1,929 | 1,929 | 1,929 | 1,929 |
| RATIOS | 2022 | 2023F | 2024F | 2025F | Share premium | 621 | 621 | 621 | 621 |
| Growth | | | | | Retained earnings | 957 | 1,414 | 2,208 | 3,311 |
| Revenue growth % | 11.7% | 4.9% | 14.9% | 13.2% | Other equity | 987 | 987 | 987 | 987 |
| Op profit growth % | 8.8% | 6.3% | 42.3% | 24.5% | Minority interest | 44 | 34 | 34 | 34 |
| NPAT-MI growth % | -0.8% | 14.7% | 50.3% | 30.9% | Total equity | 4,538 | 4,985 | 5,779 | 6,882 |
| EPS FD growth, % | 7.3% | 6.0% | 50.3% | 30.9% | Liabilities & equity | 9,987 | 9,991 | 10,424 | 11,173 |
| | | | | | Y/E shares out, mn | 193 | 193 | 193 | 193 |
| Profitability | | | | | CASH FLOW (VND bn) | 2022 | 2023F | 2024F | 2025F |
| Gross margin % | 40.8% | 40.9% | 46.6% | 49.9% | Beginning Cash Balance | 476 | 275 | 364 | 805 |
| EBIT % | 26.4% | 26.7% | 33.1% | 36.4% | Net Income | 743 | 852 | 1,280 | 1,675 |
| EBITDA % | 40.1% | 42.2% | 46.5% | 48.8% | Dep, & amortization | 479 | 564 | 562 | 589 |
| NPAT margin % | 21.3% | 23.3% | 30.5% | 35.3% | Change in Working Cap | -152 | -32 | -145 | -166 |
| ROE % | 17.6% | 17.9% | 23.8% | 26.5% | Other adjustments | 283 | -144 | -216 | -283 |
| ROA % | 7.8% | 8.5% | 12.5% | 15.5% | Cash from Operations | 1,352 | 1,240 | 1,482 | 1,815 |
| Efficiency | | | | | Capital Expenditures, net | -874 | -399 | -400 | -400 |
| Days Inventory on Hand | 125 | 138 | 152 | 150 | Investments, net | -825 | 0 | 0 | 0 |
| Days Accts, Receivable | 95 | 86 | 75 | 75 | Cash from Investments | -1,699 | -399 | -400 | -400 |
| Days Accts, Payable | 34 | 36 | 40 | 40 | Dividends Paid | -236 | -251 | -270 | -289 |
| Cash Conversion Days | 187 | 187 | 187 | 186 | Δ in Share Capital | 0 | 0 | 0 | 0 |
| Liquidity | | | | | Δ in ST debt | 116 | -80 | 0 | -32 |
| Current Ratio x | 1.4 | 1.5 | 1.8 | 2.3 | Δ in LT debt | 383 | -422 | -370 | -338 |
| Quick Ratio x | 1.0 | 1.0 | 1.3 | 1.8 | Other financing C/F | -116 | 0 | 0 | 0 |
| Cash Ratio x | 0.1 | 0.2 | 0.4 | 0.8 | Cash from Financing | 146 | -752 | -640 | -660 |
| Debt / Assets | 40.2% | 35.2% | 30.2% | 24.8% | Net Change in Cash | -201 | 88 | 441 | 755 |
| Debt / Capital | 47.0% | 41.4% | 35.2% | 28.7% | Ending Cash Balance | 275 | 364 | 805 | 1,560 |
| Net Debt / Equity | 63.3% | 45.8% | 25.4% | 5.0% | | | | | |
| Interest Coverage x | 5.4 | 4.4 | 7.2 | 11.7 | | | | | |

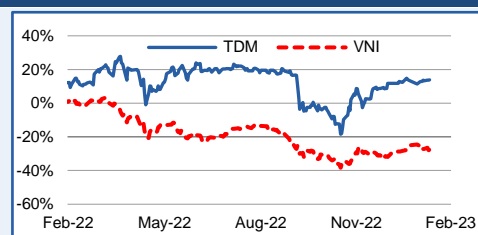
Source: BWE's financial statements, VCSC



Thu Dau Mot Water (TDM) [BUY +25.5%]

Update Report

| | | | | | | |
|---------------------|--------------------------|----------------|-------------|--------------|--------------|--------------|
| Industry: | Utilities | | 2022 | 2023F | 2024F | 2025F |
| Report Date: | February 14, 2023 | Rev YoY | 14.9% | 15.4% | 15.4% | 15.4% |
| Current Price: | VND36,500 | F.D. EPS YoY | -32.9% | 39.3% | 25.9% | 19.2% |
| Target Price: | VND44,600 | Recur EPS YoY* | 34.1% | 7.4% | 25.9% | 19.2% |
| Last Target Price: | VND44,000 | NPAT (VND bn) | 220 | 338 | 425 | 507 |
| Upside to TP: | 22.2% | DPS | 1,300 | 1,400 | 1,500 | 1,600 |
| Dividend Yield: | 3.3% | EV/EBITDA | 9.9x | 8.9x | 7.2x | 5.6x |
| TSR: | 25.5% | P/E | 18.0x | 12.9x | 10.3x | 8.6x |



Company Overview:

TDM is a private water supply company in Binh Duong Province (southern Vietnam). TDM had a capacity of 260,000 cbm per day in 2021. TDM has a 37% stake in Binh Duong Water Environment JSC (HOSE: BWE), a leading player and full value chain water company in Binh Duong Province.

| | | | | | |
|-----------------------|----------|-----------|------------|--------------|------------|
| Market Cap: | USD155mn | | TDM | Peers | VNI |
| Foreign Room: | USD55mn | P/E (ttm) | 14.5x | 18.6x | 13.8x |
| ADTV30D: | USD0.2mn | P/B | 1.7x | 1.3x | 1.7x |
| State Ownership: | 0% | Net D/E | 12.9% | 53.3% | N/A |
| Outstanding Shares: | 100 mn | ROE | 11.6% | 8.1% | 14.3% |
| Fully Diluted Shares: | 110 mn | ROA | 9.1% | 4.0% | 2.2% |

(*) Excluding one-off item & BWE's dividend accounting treatment;

Duong Dinh
 Senior Manager
duong.dinh@vcsc.com.vn
 +84 28 3914 3588 ext. 140

Looking forward to strong growth in 2023F

- We maintain our optimistic view on TDM due to its oligopoly power in Binh Duong Province and ~37% stake in BWE — the second biggest water supply & distribution provider in Vietnam. In addition, we raise our target price by 1% to VND44,600/share and maintain our BUY rating.
- Our higher TP is due to a 2% increase in our 2023-2027F aggregate NPAT forecast due to our higher volume assumption.
- We forecast 2023F EPS growth of ~40% YoY thanks to 13% sales volume growth that is backed by solid residential water demand and the recognition of dividend income from BWE (vs no such recognition in 2022).
- We project 2022-2025F CAGRs of 10% for revenue and 32% for reported EPS and maintain our respective DPS assumptions of VND1,400/1,500 in 2023/2024F.
- TDM's valuation looks attractive at our projected 2023F P/E of 12.9x, implying a PEG of 0.4x based on our reported NPAT CAGR forecast of 32% in 2022-2025.
- Upside catalyst: Further M&A activities; higher-than-expected issuance price.
- Downside risk: Lower-than-expected volume due to weaker-than-expected industrial production.

We project stronger volume growth for TDM compared to BWE in 2023. We raise our projected 2023 volume for TDM to 79 million cbm (+13% YoY) as its 2022 results beat our expectation. We attribute the stronger volume growth for TDM vs BWE in 2022-2023 to 1) TDM being impacted more severely compared to BWE in 2020-2021, and 2) TDM's major water plants being in the most populated industrial hub of Binh Duong Province (Di An Ward), which faces less risk of an economic slowdown compared to other districts.

TDM delayed its equity issuance from Q4 2022 to H1 2023. The equity issuance of 10 million shares (10% of total shares outstanding) was delayed from Q4 2022 to H1 2023 via public auction, according to TDM's recently published EGM materials. The minimum bidding price will be VND28,300/share (a ~22% discount to current market price), which implies minimum proceeds of VND283bn. We incorporate the equity issuance into our valuation and assume an auction price of VND28,300/share following the company's board resolution on November 9, 2022. The main purpose for this issuance is to invest in water companies in Can Tho, as well as to invest in Dong Nai Water (UPCoM: DNW) and a water generation pipeline for its Di An water plant.

2022 Recap: Solid residential water demand drives NPAT from water generation

Figure 25: TDM's 2022 results

| VND bn | Q4 2022 | YoY | 2022 | YoY | % of Old 2022F | VCSC's comments on 2022 result |
|---------------------------------|---------|------|------|------|----------------|--|
| Sales volume (million cbm) | 18 | 7% | 70 | 9% | 102% | Driven by solid residential water demand in Di An Ward. However, industrial water demand was sluggish as sales volume growth decelerated in December 2022, indicating a slowdown of manufacturing activities in Binh Duong Province. |
| Revenue | 126 | 11% | 479 | 15% | 100% | Thanks to 9% YoY sales volume growth and a 6% YoY increase in ASP. |
| COGS | -59 | 2% | -230 | 10% | 94% | |
| In which: Depreciation expenses | -36 | 1% | -145 | 12% | 95% | |
| Gross profit | 67 | 20% | 249 | 20% | 106% | |
| SG&A expenses | -2 | 6% | -10 | -48% | 104% | Lower SGA costs compared to the high base in 2021 that resulted from the purchase of medical supplies. |
| Operating profit | 65 | 21% | 238 | 27% | 106% | |
| Financial income | 22 | -78% | 24 | -87% | 141% | Due to a lack of dividend income from BWE in 2022. |
| Financial expenses | -10 | -41% | -33 | -19% | 121% | |
| In which: Interest expenses | -6 | -9% | -21 | -23% | 102% | |
| Other income/loss | 0 | N.M. | 1 | 88% | N.M. | |
| Profit before tax | 77 | -44% | 231 | -31% | 108% | |
| Income tax expense | -3 | 113% | -11 | 53% | 106% | |
| NPAT | 74 | -46% | 220 | -33% | 108% | |
| NPAT from water generation | 74 | 108% | 220 | 56% | 108% | Thanks to solid top-line growth and the water tariff increasing 5% YoY. |

Source: TDM's financial statements, VCSC forecast

2023 Outlook: Earnings growth to accelerate with solid residential water volume, dividend income

Figure 26: TDM's 2023 outlook

| VND bn | 2022F | 2023F | YoY | 2023F New vs Old | VCSC's comments for: (1) 2023F vs 2022F (2) New vs old forecast |
|-----------------------------------|------------|------------|------------|------------------|--|
| Sales volume (million cbm) | 70 | 79 | 13% | 1% | (1) Thanks to solid residential water demand in Di An, Thuan An and Thu Dau Mot. |
| Revenue | 479 | 553 | 15% | 1% | (1) Thanks to 13% sales volume growth. |
| COGS | -230 | -260 | 13% | 0% | (1) Driven by increasing variable costs (i.e., labor and chemicals). |
| In which: Depreciation expenses | -145 | -157 | 8% | 0% | (1) Due to capacity expansion projects for the Di An and Bau Bang water plants. |
| Gross profit | 249 | 292 | 17% | 3% | |
| SG&A expenses | -10 | -11 | 5% | 4% | |
| Operating profit | 239 | 281 | 18% | 3% | |
| Financial income | 24 | 113 | 372% | 1% | (1) Due to a low base in 2022 as TDM did not recognize dividend payment from BWE. |
| Financial expenses | -33 | -32 | -3% | 0% | |
| In which: interest expenses | -21 | -32 | 48% | 0% | (1) Driven by our higher interest expenses assumption from paying the Binh Duong Development Fund. |
| Other income/loss | 1 | 0 | N.M. | N.M. | |
| Profit before tax | 231 | 363 | 57% | 3% | |
| Income tax expense | -11 | -25 | 141% | 4% | |
| NPAT | 220 | 338 | 53% | 3% | (1) Mainly due to recurring NPAT growth of 7% YoY and BWE dividend income recognition. |
| Recurring NPAT* | 315 | 338 | 7% | 3% | |

Source: VCSC forecasts (* adjusted for one-off item and accounting treatment on BWE's dividend income)

Long-term outlook

We increase our 2023-2027F earnings forecasts by 2% as we raise our sales volume forecasts. We raise our 2023 sales volume forecast by 1%, assuming robust residential water demand could outweigh the slower-than-expected growth of industrial water demand as a result of sluggish manufacturing activity in Binh Duong Province. As a result, we raise our 2023 NPAT forecast by 3% as we expect water sales volume growth and dividend income recognition could surpass higher interest expenses growth due to capex/debt disbursement in 2023.

In addition, we expect the water tariff to increase 3% p.a. starting in 2024, which should support TDM's top-line growth.

Figure 27: VCSC's long term forecast changes for TDM

| | 2022 | 2023F | 2024F | 2025F | 2026F | 2027F | Aggregate 2023- 2027F |
|----------------------------|------|-------|-------|-------|-------|-------|-----------------------------|
| Old forecast | | | | | | | |
| Sales volume (million cbm) | 68 | 78 | 87 | 98 | 107 | 118 | 488 |
| NPAT (VND bn) | 204 | 329 | 416 | 496 | 578 | 674 | 2,491 |
| Revised forecast | | | | | | | |
| Sales volume (million cbm) | 70 | 79 | 88 | 99 | 109 | 120 | 495 |
| NPAT (VND bn) | 220 | 338 | 425 | 507 | 591 | 688 | 2,549 |
| Revised vs old | | | | | | | |
| Sales volume | 2% | 1% | 1% | 1% | 1% | 1% | 1% |
| NPAT | 8% | 3% | 2% | 2% | 2% | 2% | 2% |

Source: TDM, VCSC forecast

TDM's capital raising plan

TDM plans to issue 10 million shares (10% of outstanding shares) in H1 2023 via a public auction with a minimum price of VND28,300/share. The main purpose for this issuance is to invest in water companies in Can Tho, in addition to invest in DNW and a water generation pipeline for its Di An water plant (**Figure 31**).

Figure 28: Purpose of equity raising plan

| | Investment cost |
|---|---------------------------|
| M&A | |
| Invest in Can Tho Water Supply – Sewerage (UPCoM: CTW) | VND143bn (USD6mn) |
| Invest in water generation pipeline D1600 for Di An water plant | VND140bn (USD6mn) |
| Total | VND283bn (USD13mn) |

Source: TDM, VCSC

Valuation

In this Update Report, we maintain our sum-of-the-parts valuation methodology for TDM to transparently reflect its 37% economic interest in BWE.

We note that we use a 10% valuation discount assumption for policy risk, which is common among highly regulated industries; however, this discount is lower than the 15% discount that we apply for power generation stocks. Water tariffs in Vietnam are mainly decided by provincial authorities, thus they have less exposure to policy/systematic risks than electricity tariffs that are mainly decided by Government authorities & ministries and are sensitive to national economic growth. Historically, the water tariffs in several cities/provinces in Vietnam have mainly remained flat or increased. Meanwhile, power plants sometimes go through a power purchase agreement review, which may cause power prices to decline.

We continue to apply a 50% valuation discount for TDM's 37% stake in BWE as we believe this is unlikely to be realized in the short term given the strategic relationship between TDM and BWE and as BWE is TDM's sole customer. As such, we think this discount is justified as the DDM model for dividend streams from BWE (**Figure 36**) suggests that BWE's contribution to TDM's value per share is VND11,667/share, which is lower than our DCF-based target value of VND15,577/share for BWE. In addition, inconsistent accounting treatments for dividend income from BWE in TDM's financial statements weigh on TDM's share price. Even though BWE and TDM's share prices have exhibited a strong correlation over the previous three years, BWE's share price has since significantly outperformed TDM's share price (**Figure 39**). We expect TDM to release IFRS-based consolidated financial statements over the long term, which helps to lower the discount.

In this Update Report, we increase our TP by 1% to VND44,600/share due to a 2% increase in our 2023-2027F aggregate NPAT forecast.

Figure 29: TDM's sum-of-the-part valuation (VND/share)

| (VND/share) | Fair value | Weight | Value |
|---|------------|--------|---------------|
| DCF for TDM's water generating business | 24,000 | 100% | 24,000 |
| 37% stake in BWE with 50% discount | | | 15,577 |
| 12% stake in Dong Nai Water ⁽¹⁾ | | | 4,185 |
| 20% stake in Gia Tan Water ⁽²⁾ | | | 1,921 |
| 20% stake in Can Tho water companies ⁽³⁾ | | | 3,873 |
| Fair value | | | 49,600 |
| Discount (%) | | | 10.0% |
| Target price | | | 44,600 |
| Upside % | | | 22.2% |
| Dividend yield % | | | 3.3% |
| TSR % | | | 25.5% |
| 2023 parent P/E at TP (x) | | | 15.8x |
| 2023 consolidated P/E at TP (x) | | | 13.5x |
| 2023 dividend yield at TP % | | | 2.7% |

Source: VCSC forecast (for (1), (2) & (3), see pages 10-12)

Figure 30: DCF valuation for TDM's water business

| Cost of Capital | Previous | Revised | FCFF (Five Years) | VND bn |
|-----------------------|--------------|--------------|-----------------------------|---------------|
| Beta | 1.0 | 1.0 | PV of Free Cash Flows | 1,187 |
| Market Risk Premium % | 8.0% | 8.0% | PV of Terminal Val (2% g) | 1,696 |
| Risk-free Rate % | 6.0% | 6.0% | PV of FCF and TV | 2,884 |
| Cost of Equity % | 14.0% | 14.0% | + Cash & ST investments | 28 |
| Cost of Debt % | 8.0% | 8.0% | - Debt | -277 |
| Debt % | 13.8% | 13.8% | - Minority Interest | 0 |
| Equity % | 86.2% | 86.2% | Equity Value | 2,635 |
| Corporate Tax Rate % | 10.0% | 10.0% | Shares (million) | 110 |
| WACC % | 13.1% | 13.1% | Value per share, VND | 24,000 |

Source: VCSC forecast

We note the corporate tax rate is 10%, which is lower than the statutory rate. The reason for this difference is — in accordance with Decree No. 218/2013/NĐ-CP — TDM's business segment is classified as a special business segment that is eligible for a favorable tax rate. TDM will have a tax rate of 10% for its entire business life. In addition, the company has a 0% tax rate for the first four operational years and 50% discount for the next five years.

Capex plan. TDM targets to spend ~VND1tn to expand its water business. Specifically, it plans to spend VND365bn (USD16mn) for the Bau Bang water plant as well as VND265bn (USD12mn) for the Di An water plant to invest in its raw water pipe in 2022-2023. In terms of water supply capacity, TDM guides to spend VND100bn (USD4mn) to expand the Di An water plant by 100,000 cbm/day in 2024 and VND100bn (USD4mn) for an additional 100,000 cbm/day in 2026. For the Bau Bang water plant, TDM guides to spend VND100bn (USD4mn) to expand it by 100,000 cbm/day in 2024 and VND100bn (USD4mn) for an additional 100,000 cbm/day in 2027.

Figure 31: Cash flow projections

| VND bn | 2022 | 2023F | 2024F | 2025F | 2026F | 2027F |
|------------------------------|------------|------------|------------|------------|------------|--------------|
| EBIT | 239 | 281 | 332 | 399 | 466 | 542 |
| less: tax | 0 | 0 | 0 | 0 | 0 | 0 |
| add: depreciation | -11 | -25 | -34 | -43 | -51 | -61 |
| less: net capex | 153 | 157 | 175 | 186 | 197 | 209 |
| (increase) / decrease in NWC | -40 | -270 | -170 | -170 | -170 | -300 |
| Free Cash Flow | 22 | 12 | -21 | -24 | -24 | -27 |
| Present Value of FCF | 364 | 155 | 282 | 349 | 418 | 362 |
| Cumulative PV of FCF | | 155 | 404 | 677 | 966 | 1,187 |

Source: VCSC forecast

Figure 32: BWE's 37% stake valuation

| | |
|--|---------------|
| Equity value (VND bn) based on our valuation | 9,262 |
| TDM's stake (%) | 37% |
| Value of TDM's stake (VND bn) | 3,427 |
| TDM's shares (million shares) | 110 |
| Value per share (VND) | 31,154 |
| Value per share (VND) with 50% discount | 15,577 |

Source: TDM, BWE, VCSC forecast

Figure 33: DDM model for BWE's dividend income stream

| | |
|--|---------------|
| Dividend discount model for BWE | |
| Dividend per share (VND) | 1,400 |
| Discount rate % | 14% |
| Terminal growth % | 2% |
| Value per share (VND) | 11,667 |
| Number of shares (37% stake) | 72 |
| Value (VND bn) | 843 |

Source: TDM, BWE, VCSC forecast

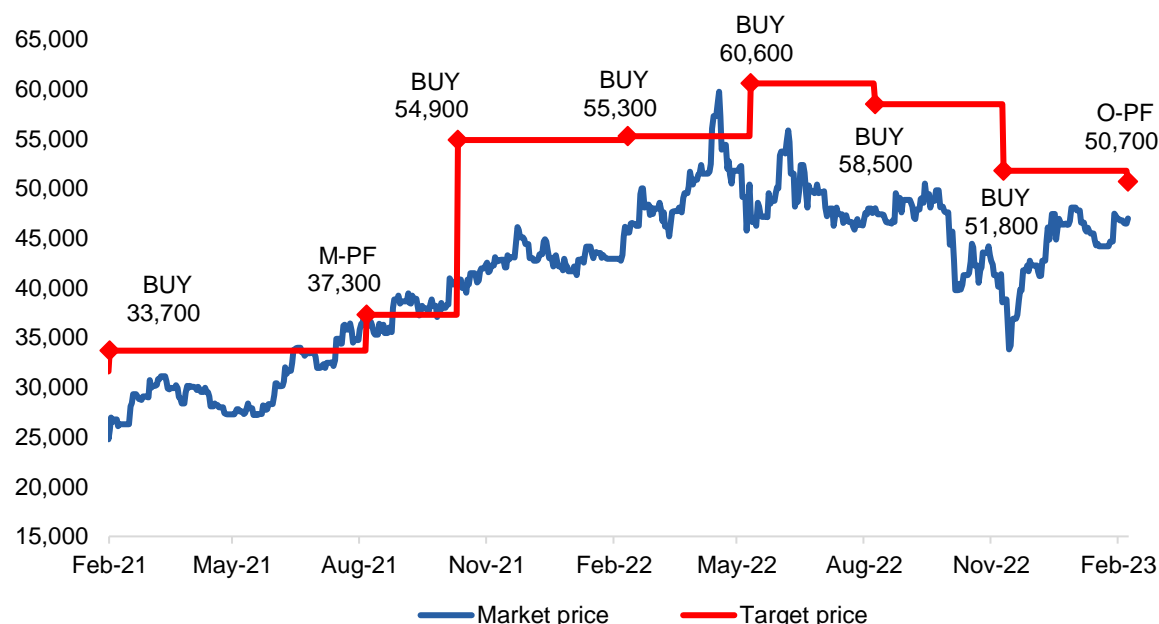
TDM Parent Company Financial Statements*

| P&L (VND bn) | 2022 | 2023F | 2024F | 2025F | B/S (VND bn) | 2022 | 2023F | 2024F | 2025F |
|--------------------------------|-------------|--------------|--------------|--------------|----------------------------------|--------------|--------------|--------------|--------------|
| Revenue | 479 | 553 | 637 | 735 | Cash & equivalents | 28 | 275 | 448 | 782 |
| - Cost of goods sold | -230 | -260 | -294 | -324 | ST investment | 0 | 0 | 0 | 0 |
| Gross profit | 249 | 292 | 343 | 411 | Accounts receivables | 123 | 112 | 134 | 159 |
| - Sales & marketing | 0 | 0 | 0 | 0 | Inventories | 5 | 6 | 6 | 7 |
| - General & admin | -10 | -11 | -11 | -12 | Other current assets | 18 | 18 | 18 | 18 |
| Operating profit | 239 | 281 | 332 | 399 | Total Current assets | 174 | 410 | 606 | 966 |
| - Financial income | 24 | 113 | 134 | 153 | Fixed assets, gross | 1,354 | 1,624 | 1,793 | 1,963 |
| - Financial expenses | -33 | -32 | -6 | -3 | - Depreciation | -605 | -761 | -936 | -1,122 |
| In which, interest expense | -21 | -32 | -6 | -3 | Fixed assets, net | 749 | 862 | 857 | 841 |
| - Share from associates | 0 | 0 | 0 | 0 | LT investment | 1,501 | 1,501 | 1,501 | 1,501 |
| - Net other income/loss | 1 | 0 | 0 | 0 | LT assets other | 1 | 1 | 1 | 1 |
| EBT | 231 | 363 | 460 | 550 | Total LT assets | 2,251 | 2,364 | 2,359 | 2,343 |
| - Income tax expense | -11 | -25 | -34 | -43 | Total Assets | 2,425 | 2,774 | 2,965 | 3,309 |
| Profit after tax | 220 | 338 | 425 | 507 | Accounts payable | 13 | 14 | 16 | 18 |
| - Minority interests | 0 | 1 | 0 | 0 | Short-term debt | 165 | 118 | 35 | 35 |
| NPAT-MI, parent | 220 | 338 | 425 | 507 | Other ST liabilities | 187 | 187 | 187 | 187 |
| NPAT -MI, consolidated* | 504 | 617 | 853 | 1,080 | Total current liabilities | 365 | 320 | 239 | 240 |
| EBITDA | 392 | 438 | 507 | 585 | Long term debt | 112 | 29 | 29 | 29 |
| EPS basic, parent VND | 2,028 | 2,825 | 3,558 | 4,242 | Other LT liabilities | 0 | 0 | 0 | 0 |
| EPS F.D, parent VND | 2,028 | 2,825 | 3,558 | 4,242 | Total Liabilities | 477 | 349 | 268 | 269 |
| EPS F.D, consolidated VND* | 3,297 | 4,482 | 5,890 | 7,265 | Preferred Equity | 0 | 0 | 0 | 0 |
| Dividend per share VND | 1,300 | 1,400 | 1,500 | 1,600 | Paid in capital | 1,000 | 1,100 | 1,100 | 1,100 |
| DPS/EPS | 64.1% | 49.6% | 42.2% | 37.7% | Share premium | 398 | 581 | 581 | 581 |
| RATIOS | 2022 | 2023F | 2024F | 2025F | Retained earnings | 311 | 506 | 777 | 1,119 |
| Growth | | | | | Other equity | 2 | 2 | 2 | 2 |
| Revenue growth % | 14.9% | 15.4% | 15.4% | 15.4% | Minority interest | 0 | 0 | 0 | 0 |
| NPAT-MI growth % | -32.9% | 53.2% | 25.9% | 19.2% | Total equity | 1,948 | 2,426 | 2,697 | 3,039 |
| EPS growth, parent | -32.9% | 39.3% | 25.9% | 19.2% | Liabilities & equity | 2,425 | 2,774 | 2,965 | 3,309 |
| EPS growth, consolidated % | -22.2% | 35.9% | 31.4% | 23.3% | Y/E shares out, mn | 100 | 110 | 110 | 110 |
| Profitability | | | | | CASH FLOW (VND bn) | 2022 | 2023F | 2024F | 2025F |
| Gross margin % | 52.0% | 52.9% | 53.8% | 55.9% | Beginning Cash Balance | 86 | 28 | 275 | 448 |
| EBIT % | 49.8% | 50.9% | 52.1% | 54.3% | Net Income | 220 | 338 | 425 | 507 |
| EBITDA % | 81.9% | 79.3% | 79.5% | 79.6% | Dep, & amortization | 153 | 157 | 175 | 186 |
| NPAT margin, parent % | 46.0% | 61.1% | 66.7% | 69.0% | Change in Working Cap | 22 | 12 | -21 | -24 |
| ROE, parent % | 11.6% | 15.4% | 16.6% | 17.7% | Other adjustments | 0 | 0 | 0 | 0 |
| ROE, consolidated % * | 26.6% | 28.2% | 33.3% | 37.7% | Cash from Operations | 396 | 507 | 579 | 669 |
| Efficiency | | | | | Capital Expenditures, net | -40 | -270 | -170 | -170 |
| Days Inventory on Hand | 42.0 | 36.3 | 7.3 | 7.3 | Investments, net | -204 | 0 | 0 | 0 |
| Days Accts, Receivable | 85.4 | 77.8 | 70.6 | 72.9 | Cash from Investments | -244 | -270 | -170 | -170 |
| Days Accts, Payable | 13.3 | 19.0 | 19.0 | 19.2 | Dividends Paid | -120 | -143 | -154 | -165 |
| Cash Conversion Days | 108.4 | 66.1 | 58.9 | 61.0 | Δ in Share Capital | 0 | 283 | 0 | 0 |
| Liquidity | | | | | Δ in ST debt | 11 | -47 | -83 | 0 |
| Current Ratio x | 0.5 | 1.3 | 2.5 | 4.0 | Δ in LT debt | -101 | -83 | 0 | 0 |
| Quick Ratio x | 0.5 | 1.3 | 2.5 | 4.0 | Other financing C/F | 0 | 0 | 0 | 0 |
| Cash Ratio x | 0.1 | 0.9 | 1.9 | 3.3 | Cash from Financing | -210 | 10 | -237 | -165 |
| Debt / Assets | 11.4% | 5.3% | 2.2% | 1.9% | Net Change in Cash | -58 | 247 | 173 | 334 |
| Debt / Capital | 12.4% | 5.7% | 2.3% | 2.1% | Ending Cash Balance | 28 | 275 | 448 | 782 |
| Net Debt / Equity | 12.8% | -5.3% | -14.2% | -23.6% | | | | | |
| Interest Coverage x | 11.2 | 8.9 | 58.2 | 142.6 | | | | | |

Source: TDM, VCSC. * We note that a consolidated financial statement is not available. TDM uses the cost method for its investment in BWE. We estimate consolidated NPAT, EPS and ROE using the equity method for TDM's investment in BWE.

Recommendation History for BWE

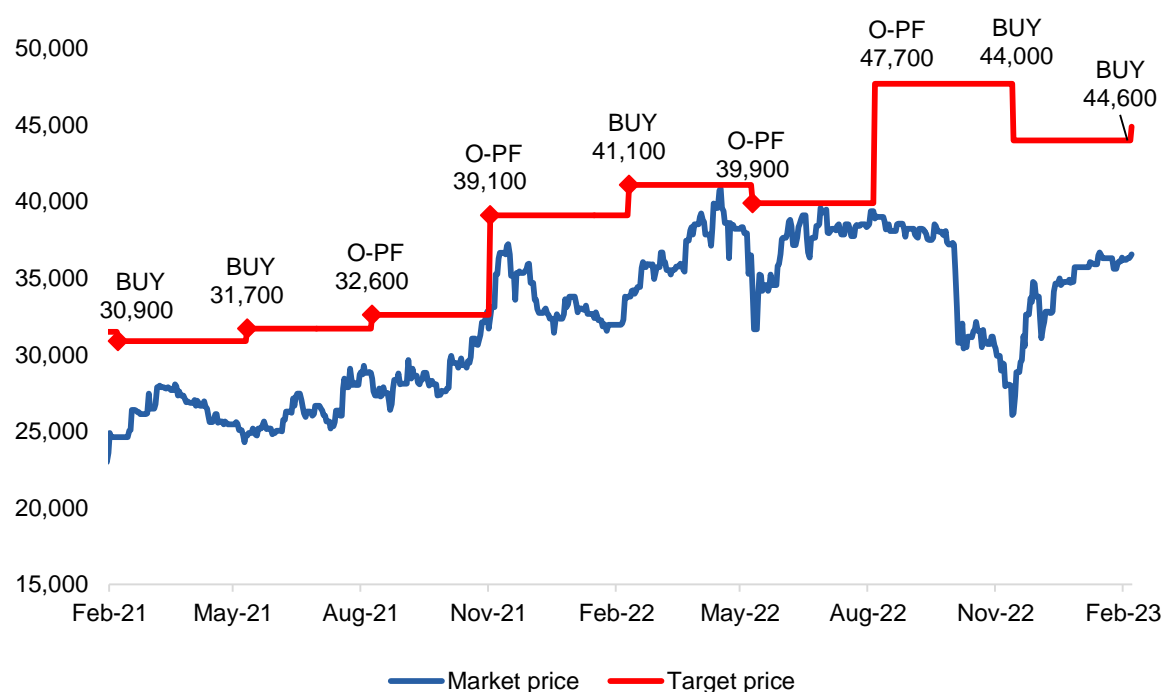
Figure 34: Recommendation history (VND/share)



Source: Bloomberg, VCSC (data as of February 13, 2023)

Recommendation History for TDM

Figure 35: Recommendation history (VND/share)

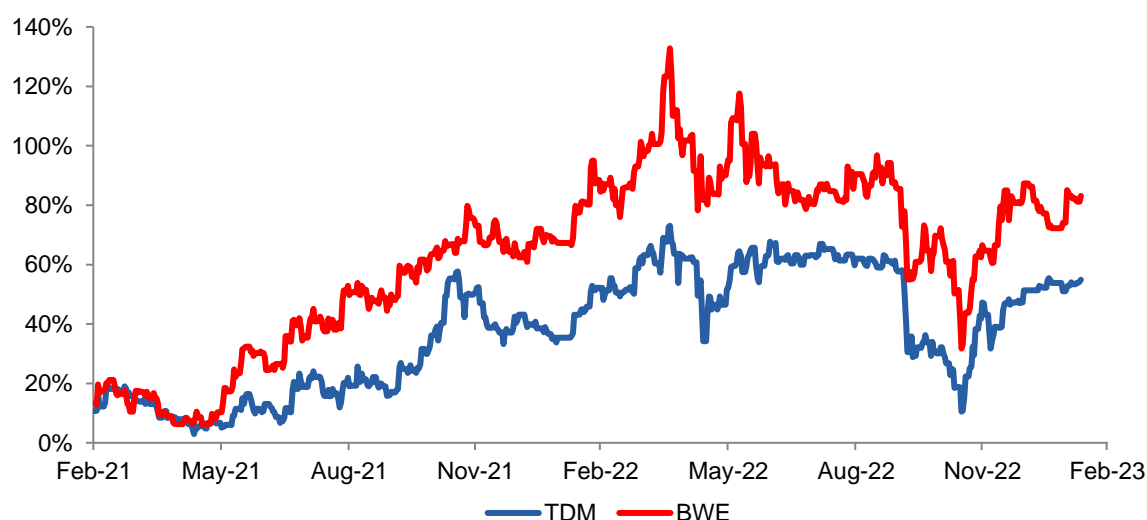


Source: Bloomberg, VCSC (data as of February 13, 2023)

TDM's 37% stake in BWE has been discounted by the market since its listing

In our view, the discount is due to three reasons: (1) TDM's ownership in BWE is less than 50% and thus does not exert control over BWE, (2) TDM has used cost method accounting for BWE's dividend income in its NPAT-MI instead of shared profit from BWE, and (3) BWE has bigger stakes in other water companies in which both TDM and BWE have invested. This valuation discount and shared performance discrepancy can be seen in **Figure 39**. Going forward, we think TDM can be re-rated when its dividend payment schedule from BWE becomes more stable, its NPAT-MI includes BWE's earnings, and as listed companies are required to follow IFRS standards after 2025 (Decision 345/QĐ-BTC 2020, Ministry of Finance).

Figure 36: BWE and TDM's cumulative returns (%)



Source: Bloomberg, VCSC (data as of February 13, 2023)

Appendices

Water pricing mechanism

Regulated sector with variable pricing among municipalities and provinces; authorities are tasked with approving water tariffs.

According to Decree 117/2007/N-CP, issued July 11, 2007, water rates for end users in a province must be approved or determined by provincial authorities. These tariffs also need to fall within the price range that the Ministry of Finance has set. Wholesale and retail water supply firms should come to an agreement on wholesale clean water prices. In the event of a dispute, either party (or both parties) may request the intervention of provincial authorities. Additionally, Circular 44/2021/TT-BTC, dated June 18, 2022, which outlines the guiding principles, procedures and legal frameworks for establishing clean water rates, was put into effect by the Ministry of Finance. According to this circular, each province shall have its own water tariff, which must be approved by provincial authorities and fall within the regulated range shown in **Figure 6**.

Figure 6: Regulated tariff range for clean water, including VAT

| VND/cbm | Minimum | Maximum |
|--|---------|---------|
| Special municipalities and Tier 1 cities | 3,500 | 18,000 |
| Tier 2, 3, 4 & 5 cities | 3,000 | 15,000 |
| Rural areas | 2,000 | 11,000 |

Source: Circular 44/2021/TT-BTC, VCSC

We understand that the water tariff is set based on the unit cost of producing clean water plus a predetermined return, as below (Circular 44/2021):

$$\text{Cost per cbm} = \frac{\text{Material cost} + \text{Labor cost} + \text{Depreciation cost} + \text{SG\&A expense} + \text{Financial expense} + \text{Safety fee} - \text{Non water revenue}}{\text{Total sales volume (*)}}$$

In which:

(*): Total production volume minus water loss. According to the circular, the maximum water loss ratio of 20% shall be included in the water tariff calculation. In 2025, the maximum water ratio of 15% shall be included in water tariff calculations unless otherwise determined by the Prime Minister.

The water tariff is regulated by the formula below:

$$\text{Water tariff (VND per cbm)} = (\text{Cost per cbm} + P) * H_i$$

P: Regulated profit, which is regulated to range from VND360 to VND1,500 per cbm.

H_i: Coefficient, which is subjected for approval by provincial authorities. H_i = 1 for wholesale clients.

Additionally, there is still huge growth potential as industrial and residential water demand increases. Local water supply companies will continue to face rising costs as they need to improve their ability to attract private capital in order to fund expansion plans — especially capital-intensive activities such as developing water infrastructure in rural & urban areas and adding water production capacity derived from the large amount of industrial demand in their respective provinces. We expect water tariffs throughout Vietnam will continue to increase moving forward.

Figure 37: Water tariff increases for residential & industrial wholesale prices in 2013-2022

| Year | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--------------------------|-------|-------|-------|------|-------|--------|------|------|------|------|
| Binh Phuoc | | | | | | | | | | |
| Residential | N/A | N/A | N/A | N/A | N/A | 6.1% | 5.7% | 5.4% | 5.1% | 0.9% |
| Industrial | N/A | N/A | N/A | N/A | N/A | 5.5% | 5.2% | 5.6% | 5.5% | 9.0% |
| Binh Duong | | | | | | | | | | |
| Residential | 18.7% | 18.8% | 0.0% | 0.0% | 0.0% | -17.2% | 5.9% | 5.6% | 5.3% | 5.0% |
| Industrial | 2.4% | 12.9% | 0.0% | 0.0% | 0.0% | 19.8% | 4.3% | 5.0% | 4.8% | 4.5% |
| Dong Nai | | | | | | | | | | |
| Residential | N/A | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Industrial | N/A | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Ba Ria – Vung Tau | | | | | | | | | | |
| Residential | N/A | 0.0% | 10.3% | 9.4% | 7.1% | 13.3% | 0.0% | 0.0% | 0.0% | 0.0% |
| Industrial | N/A | 0.0% | 9.3% | 9.8% | 11.1% | 15.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| HCMC | | | | | | | | | | |
| Residential | 7.6% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 5.9% | 6.3% | 5.6% | 6.3% |
| Industrial | 17.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 6.3% | 5.9% | 5.6% | 6.1% |
| Hanoi | | | | | | | | | | |
| Residential | 20.0% | 22.7% | 18.9% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Industrial | 35.5% | 27.8% | 18.6% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Can Tho | | | | | | | | | | |
| Residential | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Industrial | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |

Source: VCSC compilation

Notably, the tariff for the residential segment in the industrial hub of Binh Duong Province is more competitive compared to other provinces/municipalities. The water tariff for Binh Duong's residential segment is currently a fixed price policy that differs significantly compared to other provinces. In 2011-2017, the province's residential water tariff was on a ladder scale basis, meaning that end-users would have to pay a higher tariff based on the amount of water they use in order to encourage economical use. According to 68/2014/QĐ, dated December 24, 2014, end-

users must pay VND6,100/cbm for the first 10 cbm, VND8,600/cbm for 10-20 cbm, VND10,600/cbm for 20-30 cbm and VND13,000/cbm for 30 cbm onward. However, beginning in 2018, the tariff was converted to a fixed price policy in order to encourage residents to use processed water. In other provinces, the tariff continues to be based on a ladder scale basis.

In addition, the residential tariff is lower than the tariff for the industrial segment, which is in line with the policies of provincial authorities to support Binh Duong residents.

Figure 38: Water tariff in Binh Duong Province vs other provinces/municipalities in 2022 (VND/cbm)

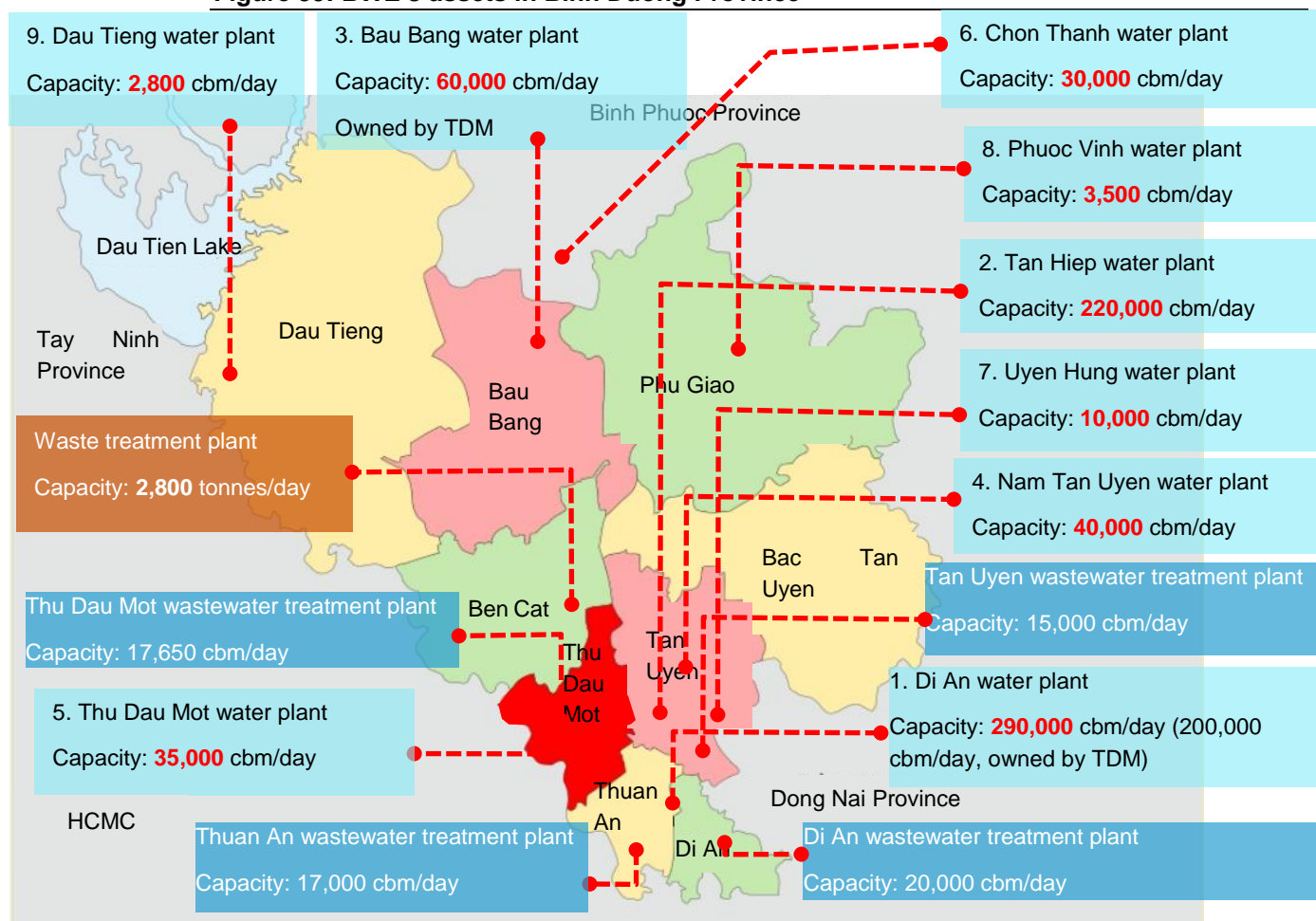
| VND/cbm | Binh Phuoc | Binh Duong | Ba Ria - Vung Tau | Dong Nai | HCMC | Hanoi |
|------------------------------|------------------------------------|------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Residential | 7,813-14,400 on ladder scale basis | 10,500 | 4,500-12,500 on ladder scale basis | 5,800-12,800 on ladder scale basis | 6,700-14,400 on ladder scale basis | 5,973-15,929 on ladder scale basis |
| Industrial (wholesale price) | 14,233 | 13,100 | 11,500 | 10,300 | 12,100 | 11,615 |

Source: BWE, VCSC. Note: Prices do not include VAT (5%) and environmental protection fee (10%)

In contrast, Binh Duong's water tariff for industrial demand is higher than tariffs in most other provinces/municipalities but lower than the tariff in Binh Phuoc Province. Binh Duong's tariff is 8.2% and 12.8% higher than in HCMC and Hanoi, respectively, which could be partly justified by the strong industrial demand in the province.

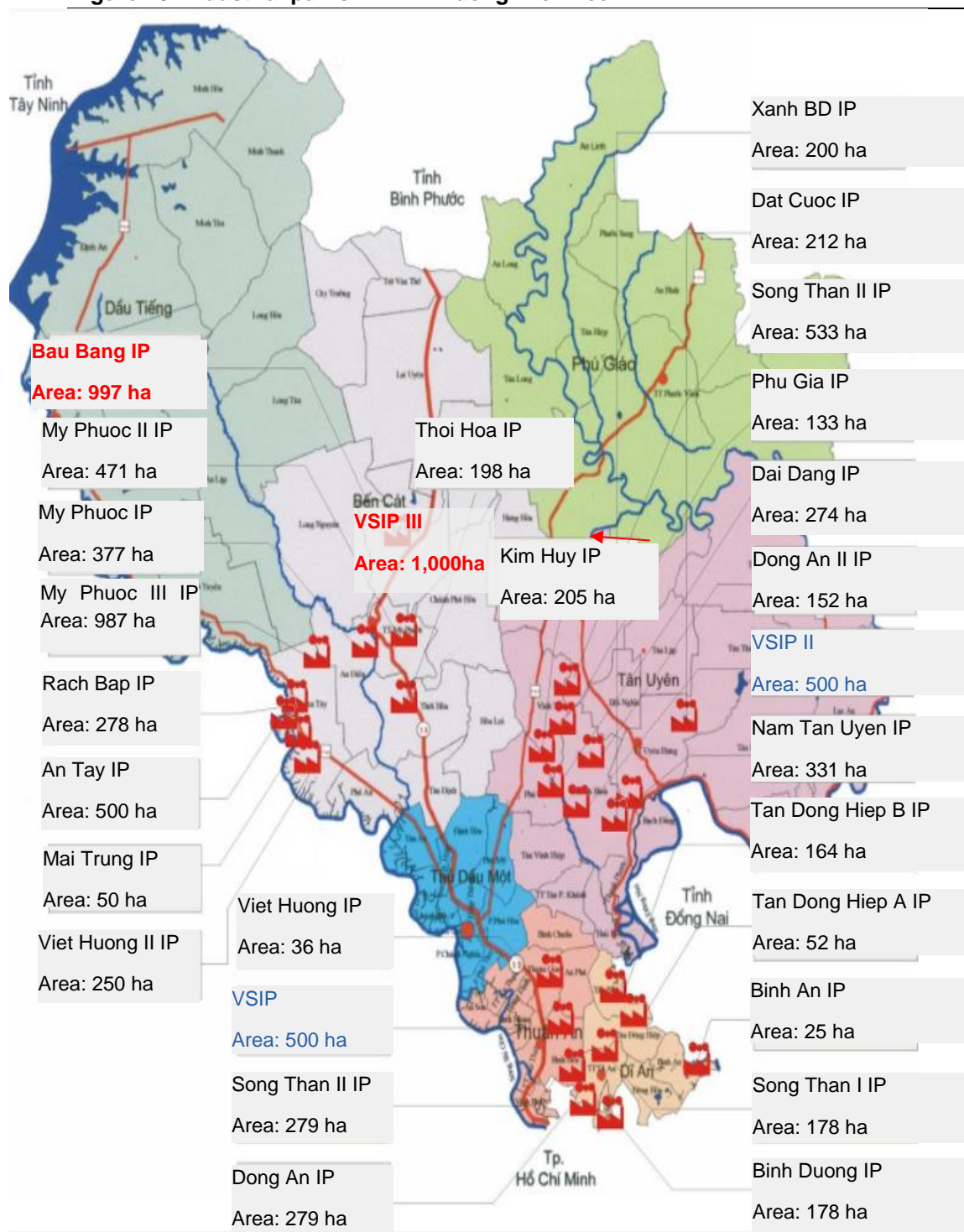
BWE's assets in Binh Duong Province

Figure 39: BWE's assets in Binh Duong Province



Source: BWE, VCSC

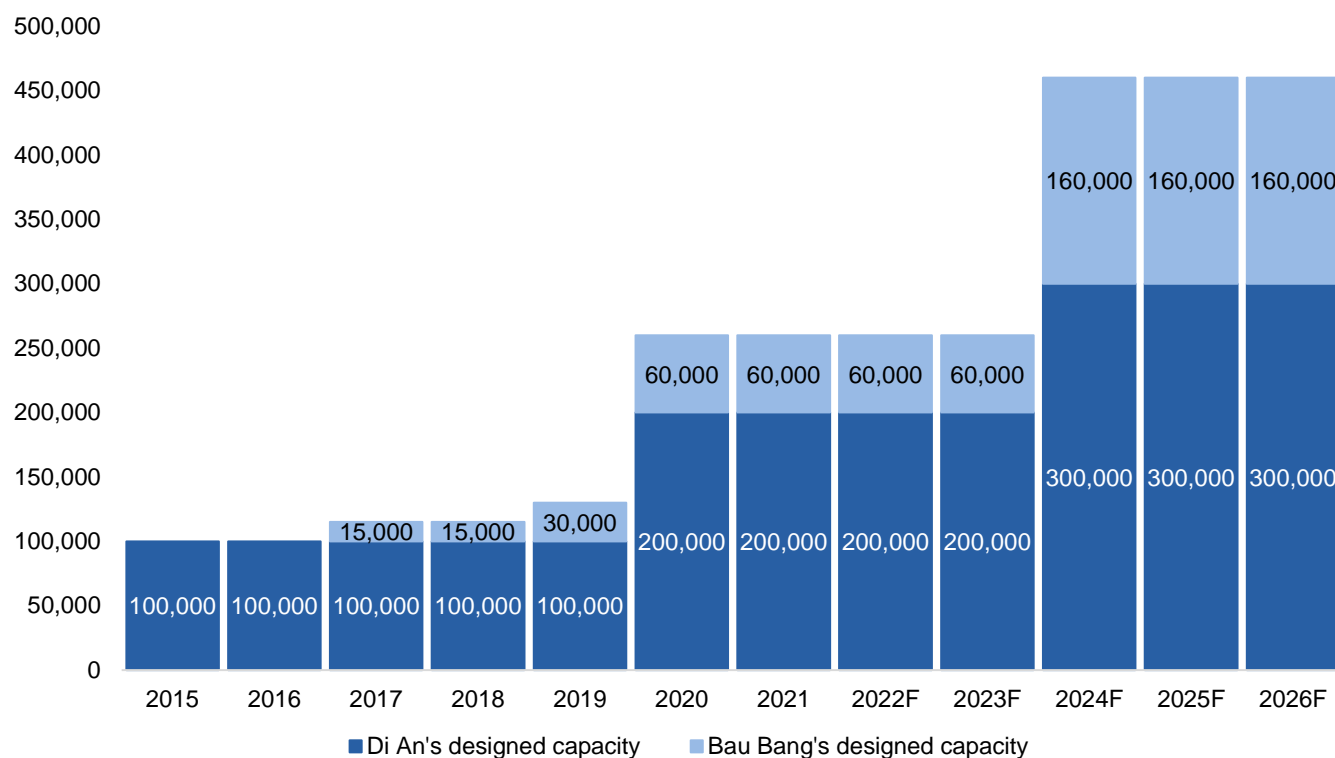
Figure 40: Industrial parks in Binh Duong Province



Source: Invert Real Estates, VCSC

TDM will nearly double its capacity in the next five years

Figure 41: Projected volume of the Di An and Bau Bang water plants (cbm/day)



Source: TDM, VCSC forecast

BWE and TDM are aiming to achieve a 20%-30% market share in Dong Nai Province over the long term

Dong Nai Water JSC. Currently, BWE and TDM have respective 17% and 12% stakes in Dong Nai Water JSC (UPCoM: DNW), which has a capacity of 500,000 cbm per day (~70% of BWE's capacity). BWE's chairman Mr. Nguyen Van Thien is also the vice chairman of DNW. In addition, DNW's water loss ratio was high (20%) in 2020, so it desires to reduce this ratio. We believe BWE can help to improve this ratio in the future due its experience and expertise in the water industry. In return, BWE could potentially receive a higher dividend from DNW.

GIWACO. Since Q2 2021, BWE and TDM have had respective 32% and 20% stakes in Gia Tan Water Company (GIWACO). BWE's chairman is also the chairman of GIWACO. Notably, BWE and its related parties hold a 68% stake in GIWACO; therefore, BWE defines GIWACO as project investment and not a financial investment. GIWACO is ideally located close to the new Long Thanh International Airport, the Cai Mep – Thi Vai Port and four highways. Thanks to this ideal location, Dong Nai Province has received approval from the Prime Minister for an additional 12,000 ha of IP land. As a result, BWE believes GIWACO has huge growth potential thanks to solid water demand from manufacturing companies in these IPs as well as from population growth. GIWACO currently has a designed capacity of 20,000 cbm/day and has received a license to expand its water capacity to 100,000 cbm/day. In addition, GIWACO targets to reach 200,000 cbm/day in 2030-2035.

Figure 42: GIWACO's 2021-2025 earnings guidance

| VND bn | 2021 | 2022G | 2023G | 2024G | 2025G |
|----------------------------------|------|--------|-------|-------|-------|
| Water sales volume (million cbm) | 0.7 | 1.9 | 7.3 | 12.7 | 18.2 |
| YoY growth (%) | | 171.4% | 33.3% | 75.0% | 42.9% |
| Loss ratio (%) | 14% | 11% | 11% | 11% | 11% |
| Revenue | 8 | 17 | 64 | 112 | 160 |
| NPAT | -30 | -27 | -16 | 17 | 35 |

Source: GIWACO, VCSC

Water industry in Dong Nai Province

Dong Nai Province has huge demand for clean water

Dong Nai has a population of 3.4 million — ~1.5x Binh Duong's population. In Dong Nai's recent industrial park (IP) master plan, provincial authorities target to develop another 12,000 ha of IP land bank over the next 10 years vs currently 10,000 ha and 11,000 ha of IP land in Binh Duong Province. This target implies huge water demand potential. Moreover, Long Thanh International Airport (which is targeted to come online in 2025) will help to accelerate the development of IPs in Dong Nai Province. Compared to Binh Duong Province, the water coverage ratio of Dong Nai Province is low (~80% on average); as a result, there is still a huge demand for water.

The water tariff in Dong Nai Province is poised to increase

The water tariff in urban areas of Dong Nai Province has remained the same since 2014; as such, BWE expects that authorities in Dong Nai will approve a higher tariff that will help the company's water business in the province to satisfy its IRR target.

Furthermore, the water tariff (which has been effective since 2020) in rural areas of Dong Nai is ~15%-20% higher than the tariff in urban areas.

Figure 43: Water tariff in Dong Nai Province, urban areas (VND/cbm)

| | 2014-2021 |
|---------------------------------|-----------|
| Residential (households) | |
| From 0-10 cbm | 5,800 |
| From 10-30 cbm | 8,500 |
| From 20-30 cbm | 10,000 |
| Over 30 cbm | 12,800 |
| Manufacturing | |
| - Retail | 11,500 |
| - Wholesale | 10,300 |

Source: Decree 20/2014/QĐ-UBND of Dong Nai People's Committee (dated July 23, 2014), VCSC.
 Note: Above prices do not include VAT (5%) and environmental protection fee (10%).

Figure 44: Water tariff in Dong Nai Province, rural areas (VND/cbm)

| | No e-invoice | With e-invoice |
|---------------------------------|---------------|----------------|
| Residential (households) | | |
| From 0-10 cbm | 7,933 | 7,211 |
| From 10-30 cbm | 9,917 | 9,014 |
| From 20-30 cbm | 11,900 | 10,816 |
| Over 30 cbm | 13,844 | 12,620 |
| Manufacturing | 13,844 | 12,620 |

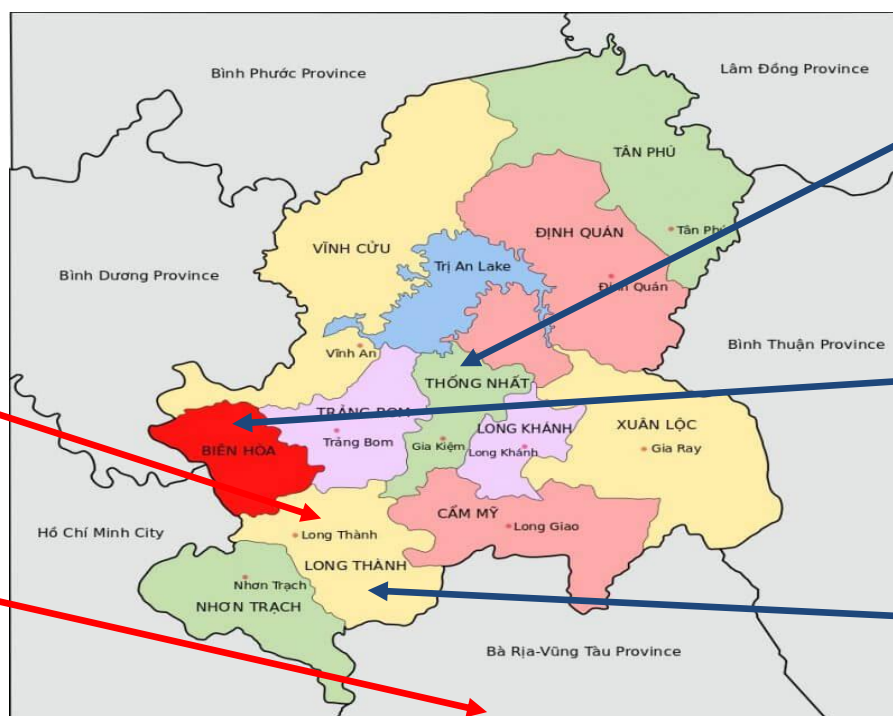
Source: Decree 29/2020/QĐ-UBND of Dong Nai People's Committee (dated July 23, 2020), VCSC.
 Note: Above prices do not include VAT (5%) and environmental protection fee (10%).

BWE is working on the Long Thanh Highway water project

The Long Thanh Highway water project will be built to ensure water demand for economic zones and cities around the upcoming Long Thanh International Airport and other regions in Dong Nai Province. BWE has proposed to install total water capacity of up to 600,000 cbm/day for the next 15-20 years (Phase 1: 300,000 cbm/day; Phase 2: 300,000 cbm/day). The total investment cost is targeted at VND5.2tn (USD226mn) and divided into two phases (Phase 1: VND3.7tn; Phase 2: VND1.5tn).

BWE has submitted an investment proposal to Dong Nai authorities. Subsequently, BWE and its partners must join a bidding process to become the sole investor in this project. If successful, they will establish a JSC, in which BWE plans to have a 30%-35% stake.

BWE expects to receive investment approval for the Long Thanh Highway water project in 2023. In addition, BWE anticipates that it will raise capital to finance this project; however, the company has not yet provided details on the required amount, method and exact timing.



GIWACO's capacity expansion is completed

Per management, while GIWACO's current sales volume is only 13,000 cbm/day, the company has significant growth potential once the extended distribution networks to abovementioned areas are established because estimated industrial water demand in Long Khanh, Thong Nhat District and Dau Giay District is 10,000 cbm/day, 4,000 cbm/day and 3,000 cbm/day, respectively. We also expect GIWACO to be more profitable thanks to the new water tariff applied starting in October 2022, which is roughly 20% higher than the previous 2014-2021 water tariff (Decision 29/2020 of Dong Nai People's Committee).

Can Tho water companies

BWE announced it acquired a 24.64% stake in Can Tho Water Supply – Sewerage (UPCoM: CTW) and 48.86% stake in Can Tho 2 Water Supply JSC. These water companies have a dominant combined market share of ~90% in Can Tho's water industry and a total designed capacity of ~200,000 cbm/day — one-third of BWE's current capacity. Per our discussion with management, residential water demand is currently the main driver of the water supply segment in Can Tho. Furthermore, management expects that the upcoming Vietnam Singapore Industrial Park (VSIP) X Industrial Park will boost industrial water demand beginning in 2023. As of 2021, CTW and Can Tho 2 had share capital of VND280bn (USD12mn) and VND111bn (USD5mn), respectively. In terms of profitability, both companies have performed well. CTW recorded NPAT-MI of VND39bn (USD2mn; -10% YoY) and EPS of VND1,409 in 2021, while Can Tho 2 recorded NPAT of VND21bn (USD1mn; +31% YoY) and EPS of VND1,782 in 2020. Thanks to their stable earnings, CTW and Can Tho 2 paid cash dividends of ~VND688/share in 2021 and VND740/share in 2020, respectively.

Notably, BWE's chairman and CEO has joined the board of directors of CTW and Can Tho 2 Water Supply JSC.

VCSC Rating System

Stock ratings are set based on projected total shareholder return (TSR), defined as (target price – current price)/current price + dividend yield, and are not related to market performance.

| Equity rating key | Definition |
|--|---|
| BUY | If the projected TSR is 20% or higher |
| OUTPERFORM | If the projected TSR is between 10% and 20% |
| MARKET PERFORM | If the projected TSR is between -10% and 10% |
| UNDERPERFORM | If the projected TSR is between -10% and -20% |
| SELL | If the projected TSR is -20% or lower |
| NOT RATED | The company is or may be covered by the Research Department but no rating or target price is assigned either voluntarily or to comply with applicable regulation and/or firm policies in certain circumstances, including when VCSC is acting in an advisory capacity in a merger or strategic transaction involving the company. |
| RATING SUSPENDED; COVERAGE TERMINATED | A rating may be suspended, or coverage terminated, if fundamental information is deemed insufficient to determine a target price or investment rating or due to a reallocation of research resources. Any previous investment rating and target price are no longer in effect. |

Unless otherwise specified, these performance parameters are set with a 12-month horizon. Movement in share prices may cause a temporary mismatch between the latest published rating and projected TSR for a stock based on its market price and the latest published target price.

Target prices are generally based on the analyst's assessment of the stock's fair value over a 12-month horizon. However, the target price may differ from the analyst's fair value if the analyst believes that the market will not price the stock in line with assessed fair value over the specified time horizon.

Risks: Past performance is not necessarily indicative of future results. Foreign currency rates of exchange may adversely affect the value, price or income of any security or related instrument mentioned in this report. For investment advice, trade execution or other enquiries, clients should contact their local sales representative.

Disclaimer

Analyst Certification of Independence

I, Duong Dinh, hereby certify that the views expressed in this report accurately reflect my personal views about the subject securities or issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this report. The equity research analysts responsible for the preparation of this report receive compensation based upon various factors, including the quality and accuracy of research, client feedback, competitive factors, and overall firm revenues, which include revenues from, among other business units, Institutional Equities and Investment Banking.

VCSC and its officers, directors and employees may have positions in any securities mentioned in this document (or in any related investment) and may from time to time add to or dispose of any such securities (or investment). VCSC may have, within the last three years, served as manager or co-manager of a public offering of securities for, or currently may make a primary market in issues of, any or all of the entities mentioned in this report or may be providing, or have provided within the previous 12 months, significant advice or investment services in relation to the investment concerned or a related investment.

Copyright 2023 Viet Capital Securities Company "VCSC". All rights reserved. This report has been prepared on the basis of information believed to be reliable at the time of publication. VCSC makes no representation or warranty regarding the completeness and accuracy of such information. Opinions, estimates and projection expressed in this report represent the current views of the author at the date of publication only. They do not necessarily reflect the opinions of VCSC and are subject to change without notice. This report is provided, for information purposes only, to institutional investors and retail clients of VCSC in Vietnam and overseas in accordance to relevant laws and regulations explicit to the country where this report is distributed, and does not constitute an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction. Investors must make their investment decisions based upon independent advice subject to their particular financial situation and investment objectives. This report may not be copied, reproduced, published or redistributed by any person for any purpose without the written permission of an authorized representative of VCSC. Please cite sources when quoting.

U.K. and European Economic Area (EEA): Unless specified to the contrary, issued and approved for distribution in the U.K. and the EEA by VCSC issued by VCSC has been prepared in accordance with VCSC's policies for managing conflicts of interest arising as a result of publication and distribution of investment research. Many European regulators require a firm to establish, implement and maintain such a policy. This report has been issued in the U.K. only to persons of a kind described in Article 19 (5), 38, 47 and 49 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (all such persons being referred to as "relevant persons"). This document must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is only available to relevant persons and will be engaged in only with relevant persons. In other EEA countries, the report has been issued to persons regarded as professional investors (or equivalent) in their home jurisdiction. **Australia:** This material is issued and distributed by VCSC in Australia to "wholesale clients" only. VCSC does not issue or distribute this material to "retail clients". The recipient of this material must not distribute it to any third party or outside Australia without the prior written consent of VCSC. For the purposes of this paragraph the terms "wholesale client" and "retail client" have the meanings given to them in section 761G of the Corporations Act 2001. **Hong Kong:** The 1% ownership disclosure as of the previous month end satisfies the requirements under Paragraph 16.5(a) of the Hong Kong Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission. (For research published within the first ten days of the month, the disclosure may be based on the month end data from two months prior.) **Japan:** There is a risk that a loss may occur due to a change in the price of the shares in the case of share trading, and that a loss may occur due to the exchange rate in the case of foreign share trading. In the case of share trading, VCSC will be receiving a brokerage fee and consumption tax (shouhizei) calculated by multiplying the executed price by the commission rate which was individually agreed between VCSC and the customer in advance. **Korea:** This report may have been edited or contributed to from time to time by affiliates of VCSC. **Singapore:** VCSC and/or its affiliates may have a holding in any of the securities discussed in this report; for securities where the holding is 1% or greater, the specific holding is disclosed in the Important Disclosures section above. **India:** For private circulation only, not for sale. **Pakistan:** For private circulation only, not for sale. **New Zealand:** This material is issued and distributed by VCSC in New Zealand only to persons whose principal business is the investment of money or who, in the course of and for the purposes of their business, habitually invest money. VCSC does not issue or distribute this material to members of "the public" as determined in accordance with section 3 of the Securities Act 1978. The recipient of this material must not distribute it to any third party or outside New Zealand without the prior written consent of VCSC. **Canada:** The information contained herein is not, and under no circumstances is to be construed as, a prospectus, an advertisement, a public offering, an offer to sell securities described herein, or solicitation of an offer to buy securities described herein, in Canada or any province or territory thereof. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by a dealer properly registered under applicable securities laws or, alternatively, pursuant to an exemption from the dealer registration requirement in the relevant province or territory of Canada in which such offer or sale is made. The information contained herein is under no circumstances to be construed as investment advice in any province or territory of Canada and is not tailored to the needs of the recipient. To the extent that the information contained herein references securities of an issuer incorporated, formed or created under the laws of Canada or a province or territory of Canada, any trades in such securities must be conducted through a dealer registered in Canada. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed judgment upon these materials, the information contained herein or the merits of the securities described herein, and any representation to the contrary is an offence. **Dubai:** This report has been issued to persons regarded as professional clients as defined under the DFSA rules. **United States:** This research report prepared by VCSC is distributed in the United States to Major US Institutional Investors (as defined in Rule 15a-6 under the Securities Exchange Act of 1934, as amended) only by Decker&Co, LLC, a broker-dealer registered in the US (registered under Section 15 of Securities Exchange Act of 1934, as amended). All responsibility for the distribution of this report by Decker&Co, LLC in the US shall be borne by Decker&Co, LLC. All resulting transactions by a US person or entity should be effected through a registered broker-dealer in the US. This report is not directed at you if VCSC Broker or Decker&Co, LLC is prohibited or restricted by any legislation or regulation in any jurisdiction from making it available to you. You should satisfy yourself before reading it that Decker&Co, LLC and VCSC is permitted to provide research material concerning investment to you under relevant legislation and regulations.

Contacts Corporate

www.vcsc.com.vn

Head Office

Bitexco Financial Tower, 15th Floor
2 Hai Trieu Street, District 1, HCMC
+84 28 3914 3588

Head Office

Vinatex Building, 1st & 3rd Floor
10 Nguyen Hue Street, District 1, HCMC
+84 28 3914 3588 (417)

Transaction Office Dong Da

9 Nguyen Ngoc Doan
Dong Da District, Hanoi
+84 24 6262 6999

Hanoi Branch

109 Tran Hung Dao
Hoan Kiem District, Hanoi
+84 24 6262 6999

Transaction Office Ham Nghi

16th Floor, Doji Tower, 81-83-83B-85 Ham Nghi Street
District 1, HCMC
+84 28 3914 3588 (400)

Transaction Office ABS

Sailing Tower, 8th Floor
111A Pasteur Street, District 1, HCMC
+84 28 3914 3588 (403)

Research

Research Team: +84 28 3914 3588
research@vcsc.com.vn

Alastair Macdonald, Head of Research, ext 105
alastair.macdonald@vcsc.com.vn

Banks, Securities and Insurance

Duy Nguyen, Senior Manager, ext 123

- Truc Ngo, Senior Analyst, ext 116
- Ngoc Huynh, Senior Analyst, ext 138
- Nga Ho, Analyst, ext 516

Macro

Luong Hoang, Senior Manager, ext 364

- Nguyen Truong, Senior Analyst, ext 132

Consumer

Nam Hoang, Senior Manager, ext 124

- Ha Huynh, Analyst, ext 185
- Han Mai, Analyst, ext 538
- Khanh Vu, Analyst, ext 130

Oil & Gas and Power

Duong Dinh, Senior Manager, ext 140

- Ngan Ly, Analyst, ext 532
- Man Bach, Analyst, ext 135

Real Estate and Infrastructure

Hong Luu, Senior Manager, ext 120

- Anh Pham, Analyst, ext 149
- Thuc Than, Analyst, ext 174

Materials and Industrials

Vy Nguyen, Manager, ext 147

- Vinh Bui, Senior Analyst, ext 191

Retail Client Research

Duc Vu, Associate Director, ext 363

- Trung Nguyen, Senior Analyst, ext 129
- Anh Tong, Senior Analyst, ext 366
- Ha Bui, Analyst, ext 365

Brokerage and Institutional Sales & Trading

Tuan Nhan

Managing Director, Brokerage & Institutional Sales & Trading

+84 28 3914 3588, ext 107

tuan.nhan@vcsc.com.vn

Quynh Chau

Managing Director Brokerage

+84 28 3914 3588, ext 222

quynh.chau@vcsc.com.vn

Dung Nguyen

Director Institutional Sales & Trading

+84 28 3914 3588, ext 136

dung.nguyen@vcsc.com.vn