

Vinh Son - Song Hinh Hydropower JSC

(VSH VN)

Favorable conditions

Trading Buy
(Initial)

TP: VND48,645
Upside +19.1%

Mirae Asset Securities (Vietnam) JSC

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Investment highlights

Power demand is expected to grow rapidly towards 2030 and beyond: The Draft PDP8 forecasts annual power demand growth of approximately 9% during 2021–2030F, thanks to steady population growth and accelerating FDI inflows. By 7M22, the Manufacturing and Processing sector accounted for up to 74.6% of adjusted registered FDI, signifying strong power demand for manufacturing and business activities in the future.

Main beneficiaries of ongoing liberalisation in electricity market: Vinh Son - Song Hinh Hydropower JSC (VSH)'s low production costs make it competitive in selling electricity via the Competitive Generation Market. Moreover, the Vietnamese government's commitment to achieve net-zero carbon emissions by 2050, as well as rapid increases in coal and gas prices, has helped improve the mobilization rate of hydropower compared with other power sources.

Thuong Kontum factory (220MW) began operations in April 2021: The plant supplies an estimated 814mn kWh of electricity each year, bringing total production capacity to 356MW. Currently, the company is negotiating with EVN to raise Thuong Kontum's average selling price from VND1,100/kWh to VND1,300/kWh. If successful, it would add an additional VND200bn in profit before tax per year.

Higher-than-expected output, thanks to extended La Nina phase, which is expected to last until end-2022 (probability of 55%–65%): The General Department of Meteorology and Hydrology forecasts rainfall in the Central Highlands and South Central regions in 4Q22 to be 20–40% higher than the historical averages.

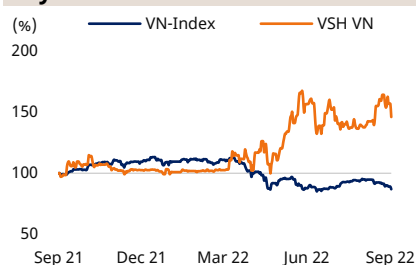
VSH has solid ownership structure, with 90.9% stake owned by three large shareholders: REE Energy successfully purchased 2.2mn VSH shares in May 2021, increasing its stake from 49.52% to 50.45%, and officially consolidated VSH's business results into its financial statements from 2Q21. With REE's support, we expect the negotiations over Thuong Kontum's selling price with EVN to accelerate.

Projections and valuation

Thanks to high output mobilization during La Nina and improved average selling prices, we expect VSH's commercial electricity volume to reach 2,298mn kWh in 2022F (+29.8% YoY), with net revenue and net profit of VND2,373bn (+47.3% YoY) and VND848bn (+118.7% YoY), respectively.

We initiate our coverage of VSH with a target price of VND48,645 (upside: 19.1%), combining both the Discounted Cash Flow (DCF) and EV/EBITDA methods. With regular cash dividends of VND1,000 thanks to stable operating cash flows, we recommend **Trading Buy** for VSH.

Key data



Share price (09/26/2022, VND)	40,850	Market cap (VNDbn)	9,650
OP (22F, VNDbn)	1,311	Shares outstanding (mn)	236
EPS growth (22F, %)	119%	Free float (%)	22.9
Market EPS growth (22F, %)	n/a	Foreign ownership (%)	11.5
P/E (22F, x)	11.4	Beta (12M)	0.6
Market P/E (22F, x)	12.5	52-week low (VND)	26,550
VN-Index	1,174	52-week high (VND)	48,000

Share performance

(%)	1M	6M	12M
Absolute	6.1	41.8	45.9
Relative	14.5	63.1	59.0

Earnings and valuation metrics

FY (December 31)	FY18	FY19	FY20	FY21	FY22F	FY23F
Revenue (VNDbn)	564	400	341	1,611	2,373	1,706
OP (VNDbn)	324	174	114	770	1,311	714
OP margin (%)	57.4	43.5	33.4	47.8	55.2	41.8
NP (VNDbn)	307	158	190	388	848	354
EPS (VND)	1,489	766	921	1,642	3,591	1,500
ROE (%)	10.4	5.1	5.9	10.6	19.7	7.6
P/E (x)	27.4	53.3	44.3	24.9	11.4	27.2
P/B (x)	2.8	2.7	2.5	2.1	1.8	1.8
Dividend yield (%)	2.4	-	-	2.4	2.4	2.4

Notes: Non-GAAP; net profit refers to net profit attributable to controlling interests.

Source: Company data, MAS Vietnam Research estimates

INVESTMENT HIGHLIGHTS

Power demand is expected to grow rapidly towards 2030 and beyond

Under the base-case scenario, the Draft PDP8 forecasts annual power demand growth of approximately 9% during 2021–2030F, as a result of an expected rapid economic recovery. Following the shift of supply chains from China and Russia, FDI inflows have accelerated since 2020. Breaking down adjusted registered FDI in 7M22, the Manufacturing and Processing sector accounted for the highest proportion, at 74.6%, signifying strong power demand for manufacturing and business activities in the future.

Figure 1. PDP8 power consumption forecast for 2021–2030F (bn kWh)

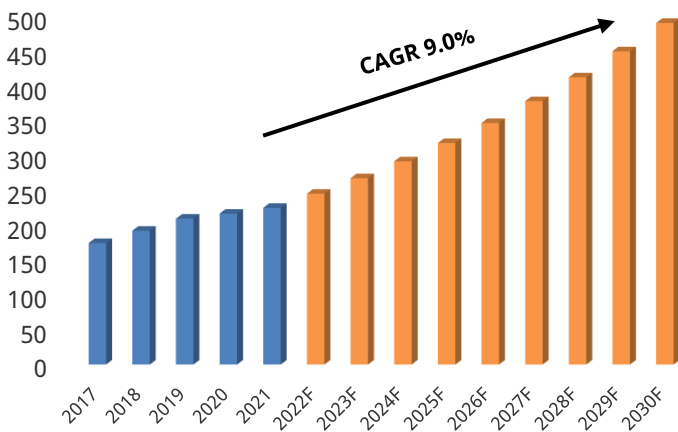
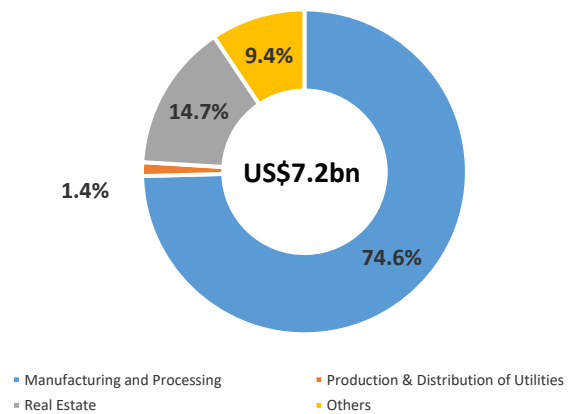


Figure 2. 7M22 adjusted registered FDI breakdown



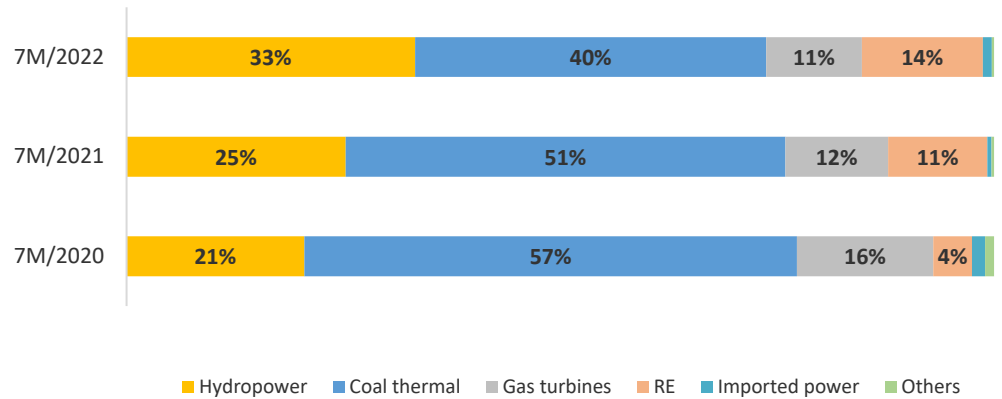
Source: VSH, Mirae Asset Vietnam Research

Main beneficiaries of ongoing liberalisation in electricity market

Imported coal and gas prices have increased by five and three times, respectively, since the beginning of 2021, raising the costs of production for these electricity sources up to VND2,000/kWh, while hydroelectricity is below VND1,000/kWh. Thanks to hydropower’s low CGM selling prices, EVN has proposed to mobilize hydropower to the maximum to compensate for the loss of coal and gas-fired power.

Meanwhile, Vietnam’s commitments at COP26 to de-carbonize the economy and transition towards clean energy have also helped improve the mobilization rate of hydropower. During 2020–2022 (7M cumulative), the hydropower mobilization rate increased constantly from 21% to 33% and remains one of the most prioritized power sources.

Figure 3. EVN's power mobilization rates



Source: VSH, Mirae Asset Vietnam Research

Thuong Kontum factory (220MW) began operations since April 2021

Before 2021, VSH owned two hydropower plants (Vinh Son & Song Hinh), with a total capacity of 136MW. These factories have low annual production costs and make VSH competitive in the market, as they have almost been fully depreciated and also incurred low debts (borrowing for Thuong Kontum was capitalized).

In April 2021, Thuong Kontum (220MW) became operational after ten years of construction delays due to legal issues. The plant produces electricity volume of 814mn kWh per year, making VSH the largest hydropower company on HoSE, with total capacity of 356MW. In 1H22, Thuong Kon Tum contributed about 688mn kWh. We expect that Thuong Kontum's production volume can reach 589mn kWh in 2H22, thanks to sufficient water storage since end-2021 and favorable hydrological conditions. As a result, the total production volume of VSH in 2022F could reach 2,322mn kWh, triple the pre-2021 level.

Currently, the company is negotiating with EVN to increase average selling price of Thuong Kontum from VND1,100/kWh to VND1,300/kWh (+18.2% compared with the current price), with EVN to cover investment costs. If successful, it would add an additional VND200bn in profit before tax per year.

Figure 4. VSH total production volume & total capacity

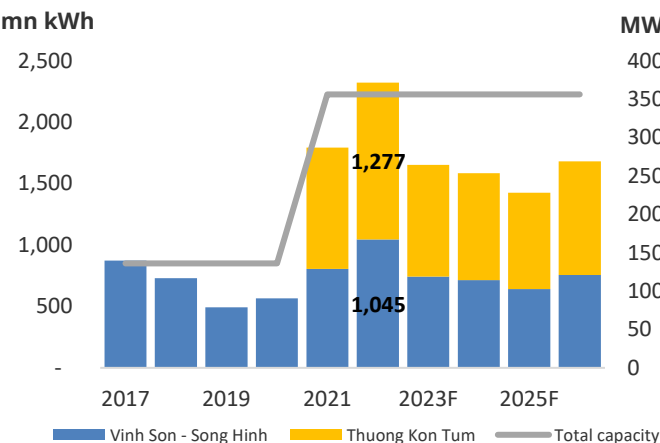
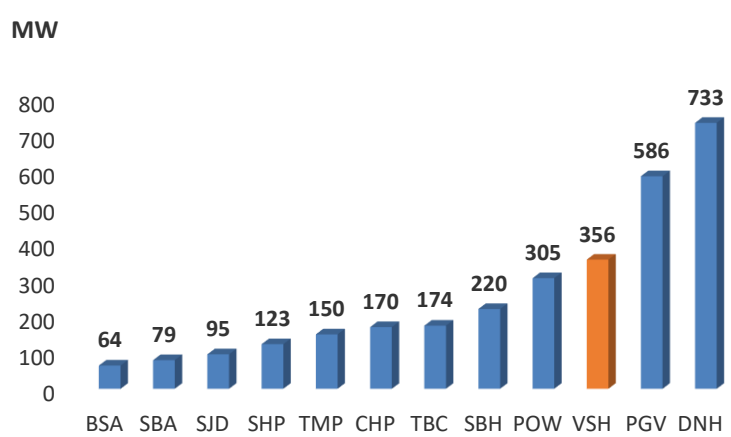


Figure 5. Total capacity of hydropower by company



Source: VSH, Mirae Asset Vietnam Research

VSH capex details**Short term:**

- VSH plans to increase the storage capacity of the Vinh Son and Song Hinh reservoirs (total cost: VND100bn), to add an estimated 50mn kWh to annual production volume. The project's paperwork has been completed and is now ready to move forward.

Medium-long term:

- Vinh Son 2 & 3's investment licenses were approved by the People's Committee of Binh Dinh in 2007, however, the projects were delayed due to relation to protected forest areas. Currently, the go-ahead for the projects was granted, and they will supply an estimated 366mn kWh and 113mn kWh, respectively, per year. We expect the Vinh Son 3 project to be prioritized, due to its lower investment cost and a reservoir area only falls within the buffer zone.

Table 1. VSH capex details

Projects	Operation	Capacity (MW)	River basin	Designed capacity (mn Kwh)	Total cost (VND bn)
Vinh Son (Binh Dinh)	1994	66	Kone	305	N/A
Song Hinh (Phu Yen)	2001	70	Hinh	354	N/A
Thuong Kontum (Kontum)	2021	220	Dak Snghe	814	9,429
Vinh Son - Song Hinh reservoirs upgrade	Expected 2023	N/A		50	100
Vinh Son 2 expansion (Gia Lai - Binh Dinh)	Halted	80		366	2,300
Vinh Son 3 expansion (Binh Dinh)	Expected 2026	30		113	777

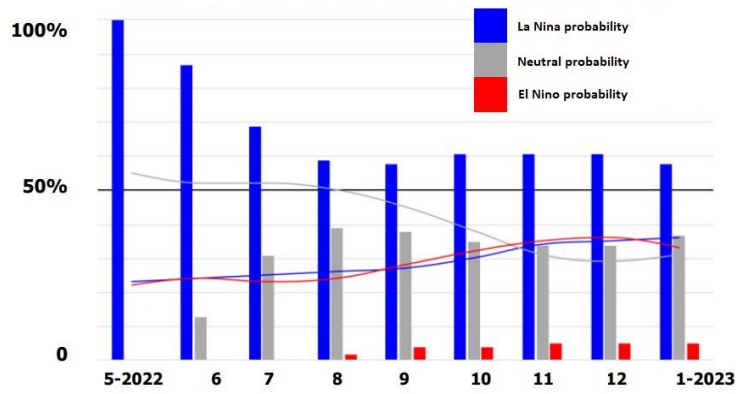
Source: VSH, Mirae Asset Vietnam Research

Higher-than-expected hydropower output

Historically, La Nina and El Nino occur on average every two to five years. For this year, the International Research Institute (IRI) ENSO forecast that La Nina will remain until January 2023 in the Northern Hemisphere area, with a probability of around 55%–65%. In the Central Highlands and South-Central regions, the National Centre for Hydrometeorological Forecasting expects average levels of rainfall in 3Q22 and 20%–40% higher-than-average levels in 4Q22. After that, La Nina will weaken and gradually disappear over the next five to six months.

We expect VSH to enjoy a significant increase in electricity production volumes to 2,322mn kWh in 2022F (+29.6% YoY). The return of normal weather conditions will result in lower volumes of electricity production; we expect a 28.8% YoY decline in output to 1,653m kWh in 2023F.

Figure 6. ENSO forecast to Jan. 2023



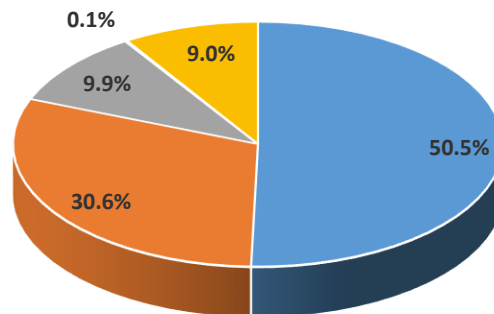
Source: IRI/CPC, Mirae Asset Vietnam Research

VSH has solid ownership structure, with 90.9% stake owned by 3 large shareholders

VSH’s three largest shareholders are: 1) REE Energy Company Limited, owned by Refrigeration Electrical Engineering JSC (REE), with an ownership stake of 50.5%; 2) EVNGENCO 3 (PGV), with 30.6%; and 3) Foreign fund Samarang UCITS, with 9.9%. In May 2021, REE successfully acquired VSH, increasing its ownership stake from 49.52% to 50.45%, and started to consolidate VSH’s business results into the financial statements from 2Q21. In order to improve its consolidated financial statements, we expect REE to try to accelerate the pace of negotiations with EVN over Thuong Kon Tum’s selling price, and to provide additional financial support to VSH.

In addition, GENCO3 has planned to divest from VSH when Thuong Kontum went into stable operation and negotiated new selling prices with EVN, which we expect to provide a further catalyst to support VSH’s share price in the short term.

Figure 7. VSH's ownership structure



- REE Energy Company Limited
- Power Generation Joint Stock Corporation 3
- Samarang UCITS - Samarang Asian Prosperity
- Directors and related person ownership
- Others

Source: VSH, Mirae Asset Vietnam Research

Projections and valuation

1. 1H22 highlights

By 1H22, VSH's net revenue increased by 113.4% YoY to reach VND1,470bn, completing 72.4% of the full year plan. Heavier rains in the South Central Coast and Central Highlands led to higher stored water volumes and commercial electricity volumes increased to 1,177mn kWh (+57.9% YoY), of which Thuong Kon Tum factory accounted for 59.3%. At the same time, VSH's average selling prices increased by about 38.4% YoY. Gross margin improved to 66% in 6M22 from 57.8% in 6M21.

Cost of goods sold (COGS) increased to VND500bn (+71.9% YoY), mostly due to higher resource tax and forest environmental service fees from Thuong Kon Tum; however, gross margin widened from 57.8% to 66%, as the increase in costs was much slower than that of revenue.

Interest expense from Thuong Kon Tum factory increased by VND111bn, resulting in a loss of VND217bn (6M21: loss of VND107bn). In all, net profit reached VND661bn (+179.3% YoY), completing 125.8% of the full-year plan.

By end-1H22, cash and short-term deposits amounted to VND304bn, equivalent to 3.1% of total assets. Financial leverage is reasonable, with a D/A of 0.48x and D/E of 1.06x. The company has repaid VND380bn of long-term debt over the past six months (7.5% of total debt); at the current pace, we expect VSH to pay off its current debt in 7–10 years.

Table 2. Income statements to 1H22

(VNDbn)	1H21	1H22	YoY
Commercial volume (mn kWh)	746	1,177	57.8%
Net revenue	689	1,470	113.4%
COGS	291	500	71.9%
Gross profit	398	970	143.7%
<i>Gross margin</i>	<i>57.8%</i>	<i>66.0%</i>	
Selling expenses	-	-	-
Administrative expenses	14	26	82.7%
<i>SG&A as % of sales</i>	<i>2.0%</i>	<i>1.8%</i>	
Operating profit	384	944	145.9%
<i>Operating margin</i>	<i>55.7%</i>	<i>64.2%</i>	
EBITDA	553	1,243	124.9%
<i>EBITDA margin</i>	<i>80.3%</i>	<i>84.6%</i>	
Net financial income	(107)	(217)	102.4%
Net other income	(0)	(0)	
Profit before tax	277	727	162.6%
Net profit	237	661	179.3%
<i>Net margin</i>	<i>34.3%</i>	<i>45.0%</i>	

Source: VSH, Mirae Asset Vietnam Research

2. Summarized forecasts

We project VSH's 2022F net sales and NPATMI of VND2,373bn (+47.3% YoY) and VND848bn (+118.7% YoY), respectively, with an estimated commercial electricity volume of 2,298mn kWh (+29.8% YoY). During 2021–2026F, we project net revenue and net profit to see a CAGR of 3% and 6%, respectively, based on the following assumptions:

- The La Nina phase will be extended until end-2022 and the El Nino phase will begin in 3Q23. After that, we assume each phase will last about two years. We expect the

utilization rate of VSH's three plants in the rainy season to be 10% points higher than that of the dry season.

- We estimate the ASP of VSH's three plants to be VND1,000/kWh in 2022F (+19.1% YoY), reflecting the higher ceiling price of hydropower in the Competitive General Market due to strong demand recovery from COVID-19, as well as current coal supply shortages. We expect Thuong Kon Tum's ASP to remain at VND1,100/kWh in 2022F. From 2023F onwards, we expect VSH's ASP to increase by 2% per year to reflect rising power demand.
- VSH has sufficient cash balance to finance the Vinh Son 3 project (VND777bn), which we expect to be constructed in 2024 (before the Vinh Son 2 project), without the need for further borrowing.
- Thuong Kon Tum pays zero tax in the first four years of operation and pays 10% in the subsequent nine years.

Table 3. Projection for 2022F–2026F

(VNDbn)	2021	2022F	2023F	2024F	2025F	2026F
Commercial volume (mn Kwh)	1,771	2,298	1,620	1,553	1,397	1,646
Net sales	1,611	2,373	1,706	1,668	1,531	1,839
Vinh Son - Song Hinh	583	983	706	691	634	762
Thuong Kon Tum	1,028	1,390	1,000	977	897	1,078
COGS	842	1,003	941	941	880	969
Vinh Son - Song Hinh	271	401	376	376	352	388
Thuong Kon Tum	570	602	565	565	528	582
Gross profit	815	1,370	765	727	651	870
SG&A expenses	45	59	51	50	46	55
Operating profit	770	1,311	714	677	605	815
EBITDA	1,240	1,876	1,285	1,251	1,179	1,389
Income from financial activities	11	29	33	37	41	58
Expenses of financial activities	324	407	358	321	289	262
Profit/loss from financial activities	(313)	(379)	(324)	(284)	(249)	(205)
Other income	-	-	-	-	-	-
Other expenses	5	-	-	-	-	-
Profit/loss from other activities	(5)	-	-	-	-	-
Profit from affiliates	-	-	-	-	-	-
Profit before tax	452	932	389	393	356	610
Income tax	64	84	35	35	52	88
Profit after tax	388	848	354	358	304	522

Net profit attributable to minority interest	-	-	-	-	-	-
Net profit attributable to equity shareholders	388	848	354	358	304	522

Source: VSH, Mirae Asset Vietnam Research

3. Valuation

Table 4. FCFF forecast for 2022F-2026F

(VNDbn)	2021	2022F	2023F	2024F	2025F	2026F
Net profit attributable to equity shareholders	388	848	354	358	304	522
+ Depreciation	470	565	572	574	574	574
+ Interest expenses after tax	277	370	325	292	247	224
- Bonus fund	-	-	-	-	-	-
- Interest income on initial cash position	(64)	(32)	(30)	(30)	(27)	(26)
Cash flow before WC movement	1,071	1,752	1,221	1,194	1,099	1,295
WC movement	(141)	27	14	9	33	62
Capital Expenditure	(507)	(185)	(111)	(237)	(239)	(240)
Free Cash Flow to Firm (FCFF)	422	1,595	1,124	965	893	1,117

Source: VSH, Mirae Asset Vietnam Research

Table 5. Valuation

WACC		Present value	
Equity	4,471	Present value of first stage	4,794
Debt	3,920	WACC	8.5%
E/(D+E)	54.74%	Growth rate to perpetuity	1.0%
D/(D+E)	45.26%	Terminal value	10,479
Cost of debt	8.60%	Terminal value/ Total company value	68.6%
Tax rate	9.00%	Intrinsic value	
After tax cost of debt	7.83%	Total company present value	15,273
Risk free rate	2.70%	- Debt	3,920
Beta	0.85	+ Cash and cash equivalent	620
Expected market return	10.20%	Net debt	3,299
Cost of equity	9.08%	Present value of Equity YE	11,974
WACC	8.51%	Outstanding number of shares	236,241,246
		Present value per share	50,684

Source: VSH, Mirae Asset Vietnam Research

We assume VSH's growth rate to perpetuity at 1%, as electricity is an essential sector that has stable growth over time. VSH's cost of debt is 8.6%, as most of its debts are long-term.

Table 6. Relative valuation method

	2022F
EBITDA	1,876
EV/TTM EBITDA multiple	7.5
Enterprise value	14,069
- Debt	3,920
+ Cash and cash equivalent	620
Equity value	10,769
Share price (EV/EBITDA)	45,587

Source: VSH, Mirae Asset Vietnam Research

Table 7. Consolidated results

Valuation model	Price	Weight	Weighted average
FCFF	50,684	60%	30,410
EV/EBITDA	45,587	40%	18,235
Average price			48,645

Source: VSH, Mirae Asset Vietnam Research

We initiate our coverage of VSH with a target price of VND48,645 (upside: 19.1%), combining both the Discounted Cash Flow (DCF) and EV/EBITDA methods.

Risks

1. Natural risks

VSH's revenue can fluctuate, due to weather changes in its hydro plants' regions. The La Nina phase could last for a shorter-than-expected period, causing lower-than-expected (by 10%–30%) rainfall and electricity production volumes. Moreover, the region of the Thuong Kon Tum factory has recently experienced consecutive earthquakes, ranging from 2–4 magnitude, that could have caused damage to the current hydropower system; however, we note that the plant continues to operate stably.

2. Uncontrollable selling price

As EVN is the sole customer of VSH, electricity selling prices will largely be dependent on EVN's decisions; hence, they could be lower than expected, which would make it difficult for VSH to cover its investment costs.

3. Interest rate risk

Currently, VSH's net profit is under pressure from interest rate hikes, as total debt accounts for 48% of its total assets (mostly long-term debt incurred for the Thuong Kontum project). However, the risk remains under control, as VSH's long-term debt has relatively low interest rates of about 8%–9%. We believe cash flows from operating activities will improve and long-term debts reduced once Thuong Kontum enjoys stable operations. Moreover, VSH's large shareholders, like REE and GENCO3, will provide financial support.

VINH SON-SONG HINH HYDROPOWER JSC (VSH VN)

Comprehensive Income Statement (Summarized)

(VNDbn)	2020	2021	2022F	2023F
Revenue	341	1,611	2,373	1,706
Cost of Sales	204	796	1,003	941
Gross Profit	137	815	1,370	765
SG&A Expenses	23	45	59	51
Operating Profit (Adj)	114	770	1,311	714
Operating Profit	114	770	1,311	714
Non-Operating Profit	123	(318)	(379)	(324)
Financial Income	123	11	29	33
Financial Expenses	1	324	407	358
Financial Profit	122	(313)	(379)	(324)
Other Profit	-	(5)	-	-
Net Gain from Inv in Associates	1	-	-	-
Pretax Profit	237	452	932	389
Income Tax	47	64	84	35
Profit from Continuing Operations	237	452	932	389
Profit from Discontinued Operations	-	-	-	-
Net Profit	190	388	848	354
Controlling Interests	190	388	848	354
Non-Controlling Interests	-	-	-	-
EBITDA	197	1,240	1,876	1,285
FCFF (Free Cash Flow to Firm)	(523)	434	1,601	1,130
EBITDA Margin (%)	57.9%	77.0%	79.0%	75.4%
Operating Profit Margin (%)	33.4%	47.8%	55.2%	41.8%
Net Profit Margin (%)	55.7%	24.1%	35.8%	20.8%

Cash Flows (Summarized)

(VNDbn)	2020	2021	2022F	2023F
Cash Flows from Op Activities	235	754	1,441	940
Net Profit	221	397	848	354
Non-Cash Income and Expense	(122)	5	1	-
Depreciation	83	470	565	572
Amortization	-	-	-	-
Net Interest Expense	0	244	-	-
Chg. in Working Capital	52	(362)	27	14
Chg. in AR & Other Receivables	18	(392)	(186)	176
Chg. in Inventories	0	0	(79)	11
Chg. in AP & Other Payables	35	37	293	(172)
Other adjustments	(1)	(7)	(1)	(2)
Cash Flows from Inv Activities	(688)	(325)	(185)	(111)
Chg. in PP&E	(822)	(328)	(185)	(111)
Chg. in Intangible Assets	-	-	-	-
Chg. in Financial Assets	131	-	-	-
Dividends & Interest Received	3	3	-	-
Cash Flows from Fin Activities	397	(392)	(908)	(714)
Chg. in Financial Liabilities	397	(692)	(672)	(478)
Chg. in Equity	-	300	-	-
Dividends Paid	-	-	(236)	(236)
Others	-	-	-	-
Increase (Decrease) in Cash	(56)	37	348	115
Beginning Balance	71	15	52	401
Ending Balance	15	52	401	515

Source: VSH, Mirae Asset Vietnam Research estimates

Statement of Financial Condition (Summarized)

(VNDbn)	2020	2021	2022F	2023F
Current Assets	363	691	1,303	1,231
Cash and Cash Equivalents	15	52	401	515
Account Receivables	94	475	584	417
Inventories	101	102	181	169
Other Current Assets	152	61	138	128
Non-Current Assets	9,314	9,326	8,947	8,487
Property, Plant and Equipment	510	9,136	8,747	8,275
Work-in-progress	8,791	176	185	195
Intangible Assets	-	-	-	-
Other Non-Current Assets	12	14	15	17
Total Assets	9,676	10,017	10,250	9,718
Current Liabilities	1,350	877	1,237	1,006
Account Payables	457	562	802	753
Short-Term Financial Liabilities	772	142	210	151
Other Current Liabilities	121	173	225	103
Non-Current Liabilities	4,996	5,129	4,390	3,971
Long-Term Financial Liabilities	4,996	4,927	4,188	3,769
Other Non-Current Liabilities	-	202	202	202
Total Liabilities	6,347	6,007	5,627	4,978
Capital Stock	2,069	2,369	2,369	2,369
Retained Earnings	877	1,258	1,870	1,988
Development & Investment Fund	356	356	356	356
Other Funds	28	28	28	28
Stockholders' Equity	3,330	4,010	4,623	4,741

Forecasts/Valuations (Summarized)

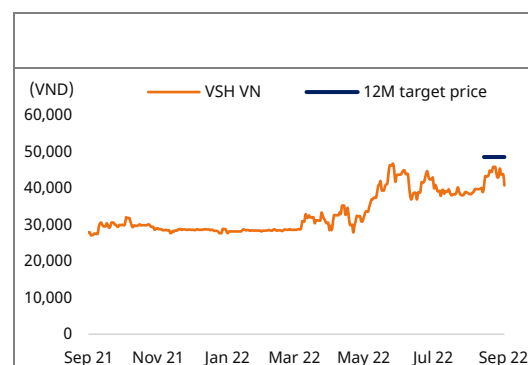
	2020	2021	2022F	2023F
P/E (x)	44.3	24.9	11.4	27.2
P/B (x)	2.5	2.1	1.8	1.8
EV/EBIT (x)	112.4	16.6	9.8	18.0
EV/EBITDA (x)	64.9	10.3	6.8	10.0
EPS (VND)	921	1,642	3,591	1,500
BPS (VND)	16,147	19,445	22,414	22,986
DPS (VND)	-	1,000	1,000	1,000
Payout ratio (%)	0.0%	60.9%	27.8%	66.7%
Dividend Yield (%)	0.0%	2.4%	2.4%	2.4%
Revenue Growth (%)	-14.8%	372.4%	47.3%	-28.1%
EBITDA Growth (%)	-22.8%	528.1%	51.3%	-31.5%
Operating Profit Growth (%)	-34.5%	575.4%	70.2%	-45.6%
EPS Growth (%)	20.3%	78.3%	118.7%	-58.2%
Asset Turnover (x)	0.0	0.2	0.2	0.2
Accounts Receivable Turnover (x)	3.4	5.6	4.4	3.3
Inventory Turnover (x)	2.0	7.9	7.1	5.4
Accounts Payable Turnover (x)	0.4	1.6	1.5	1.2
ROA (%)	1.9%	3.8%	8.5%	3.7%
ROE (%)	5.9%	10.6%	19.7%	7.6%
ROIC (%)	1.3%	8.3%	14.9%	8.5%
Liability to Equity Ratio (%)	190.6%	149.8%	121.7%	105.0%
Current Ratio (%)	26.9%	78.8%	105.3%	122.3%
Net Debt to Equity Ratio (%)	171.7%	124.1%	84.2%	69.6%
Interest Coverage Ratio (x)	238.0	2.4	3.3	2.1

APPENDIX 1

Important Disclosures & Disclaimers

2-Year Rating and Target Price History

Company (Code)	Date	Rating	Target price
Vinh Son – Song Hinh Hydropower JSC	09/27/2022	Trading Buy	48,645



Stock Ratings

Buy	: Relative performance of 20% or greater
Trading Buy	: Relative performance of 10% or greater, but with volatility
Hold	: Relative performance of -10% and 10%
Sell	: Relative performance of -10%

Industry Ratings

Overweight	: Fundamentals are favorable or improving
Neutral	: Fundamentals are steady without any material changes
Underweight	: Fundamentals are unfavorable or worsening

Ratings and Target Price History (Share price (—), Target price (—), Not covered (■), Buy (▲), Trading Buy (■), Hold (●), Sell (◆))

* Our investment rating is a guide to the relative return of the stock versus the market over the next 12 months.

* Although it is not part of the official ratings at Mirae Asset Co., Ltd., we may call a trading opportunity in case there is a technical or short-term material development.

* The target price was determined by the research analyst through valuation methods discussed in this report, in part based on the analyst's estimate of future earnings.

* The achievement of the target price may be affected by risks related to the subject securities and companies, as well as general market and economic conditions.

Equity Ratings Distribution & Investment Banking Services

	Buy	Trading Buy	Hold	Sell
Equity Ratings Distribution	74.13%	15.92%	9.95%	0.00%
Investment Banking Services	75.00%	11.11%	13.89%	0.00%

* Based on recommendations in the last 12-months (as of March 31, 2016)

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