

Sector: Electricity					
Recommendation	BUY	REFRIGERATION ELECTRICAI	L ENGINEERING	CORPORATION JSC (HOSE	: REE)
Current price:	56,200	Date	19/03/2021	Shareholder Structure	
Target price	68,500	Outstanding Shares (Million)	309	Platinum Victory Pte. Ptd	29.9%
Dividend yield	0%	Market Cap (VND billion)	17,368	Nguyen Thi Mai Thanh	12.2%
<u>Upside</u>	<u>21.9%</u>	Avg. 30D Trading vol	921,373	Apollo Asia Fund	5.9%
		% Foreign float	49.0%	VIETFUND Management	5.5%
Industry analyst:		Valuation			
Pham Nguyen Long (Utilities, Aviation) <u>longpn@bsc.com.vn</u>			•	t price of VND68,500/share sed on the partial valuation	
Technical Analyst:		Forecasting business results	i		
Nguyen Tien Duc <u>ducnt@bsc.com.vn</u> Target price: Stop-loss price:	63,500 VND 49,500 VND	6,289/share assuming: (1) F	ND 2,045 billior Projects new M& red to 2020 and	(+19.4% yoy) , 2021 FW EPS E project +20% yoy; (2) Office (3) Hydropower output read	S = VND e rent in

comparision between REE and VN Price index



P/E comparision between REE and VN index



billion kWh (+34% yoy) thanks to La Nina phenomenon.

Investment Thesis

- M&E and office leasing activities with stable profit margins are "money printing machines" bringing stable cash flow for REE.
- Power generation segment grows strongly in 2021 thanks to La Nina phenomenon and additional capacity from newly operating factories.

Risks

- Weather risks affect the output of the Hydropower segment and the construction process of renewable energy power plants.
- The Thuong Kon Tum project is behind schedule, reducing the amount of electricity mobilized in the year.

Company Update

- In 2020, REE recorded a revenue of VND 5,640 billion (+15.3% yoy) thanks to (1) electricity revenue +49.2% yoy due to La Nina's return and (2) M&E revenue +9.5% thanks to rooftop solar power EPC project.
- REE's NPAT reached VND 1,714 billion (-0.3% yoy) due to (1) financial income of VND 221 billion (-49% yoy) and (2) financial expense of VND 475 billion (+23% yoy) due to increased exchange rate loss during the year.
- REE does not pay dividends for 2020 to use for investment capital for power, water and real estate projects in 2021.

	2020	2021F	VN-Index		2018	2019	2020	2021F
PE (x)	10.5	8.8	18.3	Net Sales	5,101	4,890	5,640	6,591
PB (x)	1.5	1.4	2.5	Gross Profit	1,228	1,246	1,606	2,066
PS (x)	3.0	2.6	2.0	NPAT	1,885	1,720	1,714	2,045
ROE (%)	15%	17%	13.7%	EPS	5,754	5,286	5,251	6,289
ROA (%)	9%	10%	2.2%	EPS Growth	30%	-8%	-1%	20%
EV/ EBITDA (x)	7.5	7.7	17.3	Net Debt/ Equity	32%	51%	46%	41%



2020 COMPANY UPDATE

CHANGING COMPANY GOVERNANCE STRUCTURE

In 2020, REE restructured its governance model, whereby REE restructured the business by dividing it into 4 holdings 100% owned by REE, and separately managing 4 segments of the company as follows:



Source: REE, BSC Research

Compared with the old model, BSC expects that **the new governance model will support REE's business segments better** because (1) REE can manage its member companies more easily and transparently, (2) Subsidiaries can easily raise capital for each separate segment and (3) Subsidiaries can conduct IPOs, bringing back the source of profits to reinvest in the Parent Company in the future.

2020 BUSINESS RESULTS UPDATE

In 2020, REE recorded a revenue of **VND 5,640 billion (+15.3% yoy)**, **equivalent to 94% of the year plan** thanks to (1) Electricity revenue **+49.2% yoy** hydroelectricity is prioritized for mobilization and (2) revenue M&E segment **+9.5% yoy** because REE implements EPC contract for renewable solar power projects.

In terms of gross profit structure, the Real Estate & Office leasing segment contributed the largest proportion in 2020 thanks to the **improved gross profit margin to 70%, compared to 66% in 2019**.







Source: REE, BSC Research



While revenue grew year-on-year, the company's NPAT decreased slightly to only VND 1,714 billion (-0.3% yoy) due to:

- Financial revenue reached VND 221 billion (-49.8% yoy) due to income from deposit interest -33% yoy and profit from liquidation of investments -89% yoy (in 2019 incurred VND 87 billion of extraordinary income from the transfer of Vung Ang factory).
- Financial expenses reached VND 475 billion (+23% yoy) due to the exchange rate difference in the year recording a loss of VND 53 billion (the exchange rate loss in 2019 was recorded at a low level of VND 385 million).

M&E SEGMENT – SEIZE THE OPPORTUNITY

M&E revenue grew by 10% despite the impact of the Covid-19 epidemic. M&E revenue in 2020 reached VND 3,475 billion (+9.5% yoy), of which revenue from M&E segment reached VND 2,716 billion (+5.6% yoy) and revenue from REETECH segment reached VND 759 billion (+26). % yoy) due to:

- REE continues to sign projects to supply & install M&E systems in Ho Chi Minh City (such as The Metropole Thu Thiem project, Urban railway project No. 1, etc.). The value of newly signed M&E contracts in 2020 reached VND 2,981 billion.
- Revenue from REETECH segment recorded revenue from EPC projects for rooftop solar power about VND
 366 billion (+66% yoy) thanks to the booming trend of rooftop solar installation in 2020. As noted by BSC, REE have implemented more than 35 projects (total capacity 62 MWp) in the past year.



Figure 3: M&E revenue breakdown (VND billion)

Table 1: Ongoing M&E projects of REE

PROJECT	PACKAGE	DEPLOYMENT	COMPLETE
Headquarters Delivery Center - TKV		May 2020	July 2021
The Metropole Thu Thiem - The Galleria Residences	Supply and	April 2020	March 2021
Urban Railway Line No. 1 Ho Chi Minh City	installation of electromechanical systems	April 2020	November 2021
Asiana Capella Complex		October 2019	March 2021
Hoang Gia Marina Center		October 2019	September 2021

Source: REE, BSC Research

We forecast that the M&E segment in the period 2021-2025 will grow at CAGR = 15.7%/year due to:

- The real estate market recovered, helping the total value of new contracts to grow by 20%/year. The
 M&E segment accounts for about 20-50% of the contract value, so this segment depends on the real estate
 market. In the past period, policies to support the real estate market (for example, the revised Construction
 Law 2020, Decree 25/2020/ND-CP, etc.) have been issued, showing signs of a recovery in the real estate
 market. strong in 2021 (Industry report: Link). Therefore, BSC forecasts that the total value of new contracts
 signed in 2021 will increase by 20% over the same period, estimated at VND 3,577 billion.
- Increase the proportion of EPC projects for rooftop solar power with higher margin than traditional M&E segment. According to BSC's estimate, the NPAT margin of rooftop solar EPC projects is in the 15-20% range, significantly larger than the NPAT margin of the traditional M&E segment (6-7%). Having implemented more than 35 EPC projects in 2020 as well as having invested in its own Solar projects, we believe that REE has the potential to increase the profit margin of EPC projects.

In 2021, BSC forecasts revenue and NPAT of M&E segment to reach VND 3,980 billion (+14.5% yoy) and VND 299 billion (+33.0% yoy) respectively, based on the following assumptions: (1) contract value new signing in 2021 +20% yoy and (2) backlog implementation progress in the year +5% yoy due to the impact of the Covid-19 epidemic in 2020.

OFFICE FOR LEASE – HIGH PROFIT & STABLE CASH FLOW

NPAT of Office for lease in 2020 +11% yoy thanks to stable occupancy rate ~ 98%. Revenue and NPAT in 2020 reached VND 931 billion (+9.3% yoy) and VND 112 billion (+11.1 percent yoy) respectively thanks to the occupancy rate of the office building for lease remaining ~ 98% - higher than office space of the same grade (92-94%), at the same time with the full year contribution of E.town 5 building (comes into operation in 2019).



Figure 4: Revenue from office leasing segment (VND billion)

Source: REE, BSC Research

BSC believes that REE's office leasing will continue to grow at CAGR = 9.1%/year in the period 2021-2025 due to:

• The occupancy rate remains at 98-100%. Currently, REE is operating 150,000 m2 of Grade B office space in the inner districts of Ho Chi Minh City (Districts 1-3-4-5 and Tan Binh) with rental rates at 20-25 USD/m2/month, 25-30% lower than the average office of the same grade. With a convenient location and lower rental rates than the average, BSC believes that REE's occupancy rate will always be maintained at 98-100% in the following years.

Table 2: Current renta	al buildings	of REE			e (unit: US
Building	Office Grade	Area (m²)	Rental price 2021 (estimated) (USD/m ² /month)	35	
Cụm E.town Cong Hoa	В	100,010	20-22	30	
E.town Central	В	34,000	27	25	23
IDC Building	В	2,000	20	20	18
Maison Building	В	1,353	21	15	
Reecorp Building	В	3,370	20	10	
REE Tower	В	18,482	23	5	
Ree Ba Hom	В	1,574	21		
					2016

Figure 6: REE's office rental price is lower than the average (unit: USD/m²/month)



Source: REE, BSC Research

Source: Colliers International, BSC Research Page | 4



- Office rental rates continue to grow in the long term. According to Colliers International's <u>Q4/2020 Report</u>, Grade B office rental prices in Ho Chi Minh City in the coming years will continue to increase by 5-10% per year due to the limited supply of new office projects for lease. Therefore, BSC assumes that REE's office rental price will also **increase at 5-6%/year** following the general trend of the industry.
- In addition, REE's leasable area is expected to increase by 25% in 2023 when there is an additional 40,000 m2 of leasable area of E.town 6 building (16 floors above ground and 7 basements). The project is expected to start construction in 2021 and complete in 2023. Assuming the rental price of E.town 6 is at <u>22 USD/m²/month</u>, we expect the project to bring about a profit of about VND 120 billion from 2024, equivalent to 15% of the current NPAT of the office leasing segment.

In 2021, BSC forecasts that office leasing revenue and NPAT will reach VND 999 billion (+7.4% yoy) and VND 513 billion (+7.4% yoy) respectively, assuming: (1) occupancy rate. The occupancy rate in office buildings reached 98-100% and (2) the rental price increased by 5% compared to 2020.

(ĐV: tỷ VNĐ)	2020	2021E	2022F	2023F	2024F	2025F
Doanh thu	931	999	1,059	1,247	1,431	1,545
% tăng trưởng	9.3%	7.3%	6.0%	17.8%	14.8%	8.0%
LNST	478	520	551	686	816	881
% tăng trưởng	21.0%	8.8%	6.0%	24.5%	19.0%	8.1%

Table 3: Business results for office leasing segment 2020-2025

(Source: BSC Research)

POWER PRODUCTION SECTOR – GROWTH PROSPECTS FROM HYDROPOWER & RENEWAL ENERGY

REE owns a large capacity power portfolio. After the restructuring, REE Energy will directly own the power investment portfolio including 5 subsidiaries and 10 associated companies (including 7 hydropower companies and 3 coal-fired power companies). In total, REE has joint venture stakes in power companies with a total capacity of about 2,600 MW.

Table 4: REE's Power Portfolio:

Company	Stock code	Ownership rate	Factory	Туре	Year of operation	Capacity (MW)
SUBSIDIARIES						
Thac Ba Hydropower JSC	TBC	60.4%	Thac Ba Hydropower Plant	Hydropower	1971	120
Muong Hum Hydropower JSC	MHP	49.1%	Muong Hum Hydropower Plant	Hydropower	2011	32
Thuan Binh Wind Power JSC	TBW	50%	Phu Lac Wind Power	Wind Power	2016	24
Tra Vinh Rural Electricity JSC	DTV	66.3%		Power distribution		
REE Solar Power JSC	REE SE	99.9%	Rooftop solar power	Solar power	2020	71
ASSOCIATED COMPANY						
Central Hydropower JSC	СНР	22.7%	A Luoi Hydropower Plant	Thủy điện	2012	170
			ĐMT Cư Jut	Solar power	2019	50



Company	Stock code	Ownership rate	Factory	Туре	Year of operation	Capacity (MW)
			Da Siat Hydropower Plant		2009	13.5
Southern Hydropower JSC	SHP	11.1%	Da Dang 2 Hydropower Plant	Hydropower	2010	34
			Da Mbri Hydropower Plant		2010	75
Thac Mo Hydropower JSC	TMP	42.6%	Thac Mo Hydropower Plant	Hydropower	1995	220
			Vinh Son Hydropower Plant		1994	66
Vinh Son - Song Hinh Hydropower JSC	VSH	49.5%	Song Hinh Hydropower Plant	Hydropower	2001	70
			Thuong Kon Tum Hydropower Plant		2021	220
Srok Phu Mieng Hydropower JSC - IDICO	ISH	34.3%	Srok Phu Miêng Hydropower Plant	Hydropower	2006	51
Song Ba Ha Hydropower JSC	SBH	25.8%	Song Ba Ha Hydropower Plant	Hydropower	2009	220
Binh Dien Hydropower JSC	BDH	25.5%	Binh Dien Hydropower Plant	Hydropower	2009	44
	PPC	24.49/	Pha Lai 1 Thermal Power	Coal thermal	1983	440
Pha Lai Thermal Power JSC	PPC	24.1%	Pha Lai 2 Thermal Power	power	2001	600
Ninh Binh Thermal Power JSC	NBP	29.5%	Nhiệt điện Ninh Bình	Coal thermal power	1974	100
				Hydropower		1,336
	Tota	al		Coal thermal power		1,140
				Renewal energy		145

(Source: REE, BSC Research)



In 2020, electricity revenue will reach **VND 1,178 billion (+49.2% yoy)**, equivalent to 103.8% of the plan due to the <u>consolidation of subsidiaries</u>, including: Thuan Binh Wind Power JSC, Muong Hum Hydropower JSC and REE Sun Energy JSC into the company's business results.





HYDROPOWER – POSITIVE PROSPECTS FROM LA NINA

Revenue and NPAT of hydropower plants in 2020 are VND 697 billion (+8.7% yoy) and VND 570 billion (+8.8% yoy) respectively. REE's mobilized hydropower output in 2020 will reach 3.6 billion kWh (+1% yoy) because REE's hydropower plants were affected by a prolonged drought at the beginning of the year.



Figure 8: REE's hydropower output by quarter (million kWh)

Hydropower output is restored in the second half of 2020 due to increased rainfall, in which, in Q4/2020 alone, hydropower output is recorded at **1.5 billion kWh (+32% yoy)**. The amount of water entering the lake in 2021 is forecasted to be at a high level as La Nina continues.



Figure 9: Output of REE hydropower plants (million kWh)

Figure 10: Revenue and NPAT of hydropower plants (VND billion)



In 2021, BSC forecasts that revenue and NPAT of the hydropower segment will reach VND 746 billion (+18.7% yoy) and VND 679 billion (+19% yoy) equivalent to hydropower output in 2021 will reach 4.9 billion kWh (+38% yoy) based on the following assumptions:

- Hydropower plants have enough water to generate electricity for the whole year of 2021 due to high levels of water entering the lake. Accordingly, hydropower output in 2021 (excluding Thuong Kon Tum) is estimated at 4.3 billion kWh (+20.3% yoy).
- Thuong Kon Tum Hydropower Plant (220MW) is expected to start operation at <u>the end of March 2021</u>. The expected commercial power output in 2021 of Thuong Kon Tum plant is about **640 million kWh**, equivalent to **18%** contributing to the increased output in 2021.

	2021						
Company	Stock code	Net revenue	Gross profit	GPM	NPAT	NPAT margin	
Thac Mo Hydropower JSC	TMP	485	263	54%	201	41%	
Song Ba Ha Hydropower JSC	SBH	766	410	54%	429	56%	
Vinh Son - Song Hinh Hydropower JSC	VSH	1,054	620	59%	97	9% (*)	
Srok Phu Mieng Hydropower JSC	ISH	244	119	49%	74	30%	
Central Hydropower JSC	CHP	868	507	58%	345	40%	
Southern Hydropower JSC	SHP	449	157	35%	101	22%	
Thac Ba Hydropower JSC	TBC	640	378	59%	243	38%	

Table 5: Forecast of business results of REE hydropower companies (Unit: VND Billion)

(*) VSH's NPAT margin decreased as the Company started to record interest expenses on the Thuong Kon Tum project for 2021 (VND 447 billion).

(Source: BSC Research)



COAL POWER POWER – POOR OUTLOOK

In 2020, REE's after-tax profit from coal-fired power segment was recorded at VND 244 billion (-21% yoy), due to:

- Power output from two thermal power plants Pha Lai (PPC) and Ninh Binh thermal power plant (NBP) decreased to **5.7 billion kWh (-5.4% yoy).**
- The selling price of electricity in the CGM market remained below VND 1,000/kWh because hydroelectricity
 was prioritized for mobilization, leading to a significant decrease in electricity sales in the CGM market.
 Because La Nina will continue to happen, BSC believes that the electricity selling price in the CGM market
 will be below VND 1,000/kWh in 2021.



Figure 11: Electricity selling price in the CGM market in 2020 (VND/kWh)

According to EVN's orientation, more hydropower and renewable energy will be mobilized in 2021, so coal-fired power output will be mobilized less. In which, the power output of REE's plants (PPC and NBP) is estimated at **4.3 billion kWh (-24% yoy)**. BSC estimates that REE's NPAT received from coal-fired power segment in 2021 could reach **VND 164 billion (-31% yoy)**, with the main decrease coming from PPC (-32.9% yoy).







Source: REE, BSC Research

Source: EVN, BSC Research



Table 6: Forecast of business results of thermal power companies of REE

Company	Stock	N	let revenue			NPAT	
	code	2020	2021E	%	2020	2021E	%
Pha Lai Thermal Power JSC	PPC	7,929	5,420	-32%	1,008	676	-33%
Ninh Binh Thermal Power JSC	NBP	1,038	787	-24%	34	22	-35%

Source: REE, BSC Research

RENEWAL ENERGY – ACTIVE IMPLEMENTATION OF PROJECTS

- Tra Vinh offshore wind power project No. 3 (total capacity of 48 MW), with a total investment of about VND 2,120 billion is under construction to operate ahead of schedule. FIT price = 9.8 US cents/kWh for projects offshore wind power. BSC forecasts that the electricity output of Tra Vinh No. 3 project in 2021 is estimated at 42 million kWh/year (40% efficiency), corresponding to revenue and net profit in 2021 of about VND 100 billion and VND 15 billion, respectively.
- REE is continuing to deploy rooftop solar power projects with the goal of completing 150 MWp of capacity by the end of 2021 and reaching the target of 500 MWp by 2024. Based on the assumption that REE will complete 150 MWp on schedule. MWp mentioned above, BSC estimates that revenue and NPAT of rooftop solar power projects in 2021 will reach VND 175 billion and VND 26 billion, respectively.

WATER SECTION - STABLE GROWTH

REE owns a large Water portfolio with many water plants in Hanoi and Ho Chi Minh.

- Three B.O.O Thu Duc plants, Thu Duc III water plants, and Tan Hiep II water plants have a total designed capacity of 900,000 m3/day, equivalent to 41% of the designed clean water treatment capacity of the city. Ho Chi Minh.
- Song Da water plant with a capacity of 300,000 m3/day, accounting for about 20% of the city's water supply capacity. Hanoi. In addition, phase 2 of VCW (additional 300,000 m3/day) is still waiting for government approval.

Company	Stock code	Owned by REE	Field	Capacity
Song Da Clean Water Investment JSC	VCW	36.0%	Clean water production	300,000 m³/day
Saigon Clean Water Investment and Trading JSC	SWIC	30.0%	Clean water production	300,000 m³/day
B.O.O Thu Duc Water JSC	B.O.O Thu Duc	42.0%	Clean water production	300,000 m³/day
Tan Hiep Clean Water Investment JSC	TH2	32.0%	Clean water production	300,000 m³/day
Thu Duc Water Supply JSC	TDW	44.2%	Water supply	
Gia Dinh Water Supply JSC	GDW	20.0%	Water supply	
Nha Be Water Supply JSC	NBW	20.0%	Water supply	
Khanh Hoa Water Supply and Sewerage JSC	KHW	43.9%	Water Production & Supply	

Table 7: REE's clean water portfolio

Source: REE, BSC Research



NPAT from the Water segment in 2020 reached VND 259 billion (+58.9% yoy), 37% higher than the plan thanks to:

- Profit from Song Da Clean Water JSC (VCW) reached VND 71 billion (+42% yoy) because in 2020, VCW did • not have to record the cost of oil spill remediation (VND 77 billion) as in 2019.
- Water prices in big cities and provinces increased by 5-8% over the same period (see Table 8). •

Water segment is one of the business segments that make a steady contribution to REE's profit structure thanks to (1) high demand in major cities and provinces and (2) water price is often adjusted up annually according to the roadmap. Therefore, in 2021, BSC forecasts that 2021 REE's profit from water supply and drainage segment is estimated at VND 304 billion (+18.7% YoY), directly contributing 15.8% of the Company's NPAT, based on assumption the price of clean water continues to increase by 5-8% per year according to the roadmap in provinces and cities such as Ho Chi Minh City, Hanoi or Khanh Hoa.



Figure 13: Annual growth in NPAT of the Water segment (VND

Source: REE, BSC Research

Table 8: Selling price of domestic water in Hanoi, Ho Chi	i
Minh City and Khanh Hoa	

Unit price of domestic water (VND/m ³)	2020	2021	2022
(VND/m°)			
TDW	6,000 - 11,900	6,300 - 12,300	6,700 - 13,000
TH2	6,000 - 11,900	6,300 - 12,300	6,700 - 13,000
B.O.O Thủ Đức	6,000 - 11,900	6,300 - 12,300	6,700 - 13,000
GDW	6,000 - 11,900	6,300 - 12,300	6,700 - 13,000
NBW	6,000 - 11,900	6,300 - 12,300	6,700 - 13,000
SWIC	6,000 - 11,900	6,300 - 12,300	6,700 - 13,000
KHW	2,580 - 5,160	2,790 - 5,580	N/A
VCW	5,973 – 15,990	5,973 - 15,990	N/A

Source: Companies website, BSC Research



FORECAST 2021 BUSINESS RESULTS

BSC forecasts REE's business results in 2021 with **Net revenue and NPAT of VND 6,591 billion (+16.9% yoy)** and **VND 2,045 billion (+19.4% yoy)** respectively, with the following assumptions:

- Newly signed M&E projects +20% yoy thanks to the recovery of the real estate market and continued signing
 of EPC projects for rooftop solar power sector.
- Office rental price in rental buildings +5-6% yoy.
- Hydropower output reached **4.8 billion kWh (+34% yoy)** thanks to the large amount of water entering the lake and the Thuong Kon Tum project which has been in operation since March.
- Tra Vinh Wind Power Plant No. 3 will operate from the 3rd quarter of 2021, helping to increase wind power output in 2021 by 42 million kWh.

	2018	2019	2020E	2021F
Revenue	5,101	4,890	5,640	6,591
M&E	3,427	3,173	3,474	3,980
BÐS	839	927	987	1,015
Power production	834	790	1,178	1,595
Gross profit	1,228	1,246	1,606	2,066
GPM	24%	25%	28%	31%
SG&A	(313)	(300)	(366)	(411)
Financial revenue	304	442	222	233
Financial expenses	(111)	(386)	(475)	(460)
Other revenue/loss	12	11	22	26
Profits from affiliates	999	907	915	842
PBT	2,118	1,920	1,924	2,296
NPAT	1,885	1,720	1,714	2,045
EPS	5,754	5,286	5,251	6,289

Table 9: Forecast of REE's business results in 2021

Source: REE, BSC Research

VALUATION

Based on the partial valuation method (SOTP), BSC recommends **BUY** for REE, based on the fair value of REE stock of **VND68,500/share, 21.9% upside** from the reference price on 19th March 2020 is 56,200 VND/share.

Stock code	Company	Market Cap (USD million)	ROE TTM (%)	ROA TTM (%)	P/E (x)	P/B (x)	EV/EBITDA (x)
Hydropower							
AVC VN Equity	A VUONG HYDROPOWER JSC	84	14.0%	12.4%	10.7	1.5	15.1
SBA VN Equity	SONG BA HYDROPOWER JSC	42	12.9%	7.9%	9.5	1.2	7.2
S4A VN Equity	SESAN 4A HYDROPOWER JSC	50	16.4%	8.2%	13.5	2.2	10.2
DRL VN Equity	HYDROPOWER - ELECTRIC NO.3 JSC	23	48.2%	41.6%	9.2	4.0	7.6



Median			12.8%	7.3%	9.5	1.8	9.9
Mean			12.3%	8.6%	10.0	1.7	9.7
1542 HK Equity	TAIZHOU WATER GROUP CO-H	95	13.4%	3.3%	5.8	0.8	9.9
MWC PM Equity	MANILA WATER COMPANY	625	5.5%	2.9%	6.9	0.5	8.1
TTW TB Equity	TTW PCL	1,554	12.8%	22.1%	10.8	3.5	11.8
TDM VN Equity	THU DAU MOT WATER JSC	130	10.7%	7.3%	16.8	1.8	11.0
BWE VN Equity	BINH DUONG WATER - ENVIRONMENT JSC	268	19.1%	7.4%	9.5	1.8	7.7
Water production							
Median			16.1	10.8	8.2	1.2	5.9
Mean			19.4	9.0	7.4	1.1	6.8
POWR IJ Equity	CIKARANG LISTRINDO TBK PT	780	17.5%	8.6%	9.2	1.2	5.2
SJVN IN Equity	SJVN LTD	1,418	14.4%	10.8%	6.9	0.9	5.1
HUBC PA Equity	HUB POWER COMPANY	692	39.2%	11.1%	3.5	1.3	6.0
TPIPP TB Equity	TPI POLENE POWER PCL	1,213	16.1%	11.0%	8.2	1.3	8.2
NTPC IN Equity	NTPC LTD	14,619	10.1%	3.2%	9.4	0.9	9.7
Coal thermal powe	er						
Median			16.4%	11.3%	10.7	1.9	10.2
Mean			21.7%	16.3%	11.8	2.2	10.6
DNH VN Equity	DA NHIM - HAM THUAN - DA MI HYDROPOWER JSC	459	16.9%	11.3%	16.1	1.9	12.9

Source: Bloomberg, Fiinpro, BSC Research

Table 11: Valuation Summary

	NPAT (VND million)	Method	Target multiple	e Value
M&E segment	299,343	P/E	9.0x	2,694,084
Hydropower	699,838	P/E	12.0x	8,398,061
Coal thermal power	164,147	P/E	7.0x	1,149,026
Water production	304,347	P/E	10.0x	3,043,466
Office for lease	541,203	P/E	11.0x	5,953,238
Total				21,237,875
Number of shares (million)				310
Share value (VND/share)				68,509

Source: BSC Research



APPENDIX

IS (VND billion)	2018	2019	2020	2021F	C
Net revenue	5,101	4,890	5,640	6,591	F
COGS	(3,873)	(3,644)	(4,034)	(4,525)	0
Gross profit	1,228	1,246	1,606	2,066	C
Selling expenses	(99)	(78)	(83)	(93)	(
G&A	(215)	(222)	(284)	(318)	a
Operating income	2,106	1,910	1,901	2,270	
Financial income	304	442	222	233	F
Financial expenses	(111)	(386)	(475)	(460)	C
nterest expenses	(225)	(409)	(416)	(430)	a c
Gain/loss from affiliates	999	907	915	842	
Other gain/loss	12	11	22	26	0
Profit before tax	2,118	1,920	1,924	2,296	C
Corporate tax payment	(233)	(200)	(210)	(251)	(a
Profit after tax	1,885	1,720	1,714	2,045	c
Ainority interest	101	81	85	102	E
IPATMI	1,784	1,639	1,628	1,943	C
BITDA	2,504	2,512	2,662	3,048	E
EPS	5,754	5,286	5,251	6,289	
3S (VND billion)	2018	2019	2020	2021F	F
Cash & cash equivalent	1,865	1,540	652	163	L
hort term investment	1,139	1,221	1,329	1,329	C
ccount receivables	1,966	2,138	3,082	3,145	C
nventory	969	987	808	849	
other current assets	49	113	139	132	ę
otal current assets	5,988	5,999	6,009	5,617	0
angible assets	1,676	3,589	4,433	4,753	0
Depreciation	(1,261)	(1,762)	(1,914)	(2,088)	
ong term incomplete assets	153	68	276	166	E
ong term investment	6,992	9,214	9,287	9,767	0
Other non-current assets	285	588	550	511	0
Total non-current assets	9,512	13,624	14,522	14,893	0
Fotal Assets	15,500	19,623	20,530	20,510	C
Account payables	1,797	2,217	2,068	1,992	
Short-term debt	1,111	888	1,265	1,138	F
Other short-term debt	148	164	111	112	C
Current liabilities	3,057	3,269	3,443	3,242	F
_ong-term debt	2,070	4,739	4,335	3,901	F
Other long-term debt	445	513	540	576	F
Non-current liabilities	2,515	5,252	4,874	4,874	
Fotal Liabilities	5,571	8,521	8,318	8,117	١
Paid-in capital	3,101	3,101	3,101	3,101	F
Capital surplus	1,050	1,050	1,050	1,050	F
Retained earnings	4,928	6,006	7,115	9,042	
Other equity	-	-	-	-	C
Minority interest	610	705	760	818	٢
Shareholder's equity	9,928	11,102	12,213	12,394	E
Total Resources	15,500	19,623	20,530	20,510	F
Number of shares butstanding (million)	309	309	309	309	E

CF (VND billion)	2018	2019	2020	2021F
Profit after tax	1,885	1,720	1,714	2,045
Depreciation	161	183	322	322
Change in NWC	1,026	1,133	1,626	(147)
Other adjustments	(1,253)	(970)	(619)	(1,498)
CF from operating activities	90	319	613	722
Fixed assets investment	(340)	(295)	(1,394)	(327)
Other investment	120	(1,335)	567	(323)
CF from investing activities	(220)	(1,630)	(827)	(650)
Dividend paid	(602)	(620)	(604)	-
Cash from net borrowing	199	1,605	(70)	(560)
CF from financing activities	(403)	985	(674)	(560)
Beginning cash balance	2,397	1,865	1,540	652
Cash in year	(533)	(325)	(888)	(488)
Ending cash balance	1,865	1,540	652	164

Ratios (%)	2018	2019	2020	2021F		
Liquidity ratios						
Current ratio	2.0	1.8	1.7	1.7		
Quick ratio	1.6	1.5	1.5	1.5		
Solvency ratios						
Debt/ Total assets	21%	29%	27%	25%		
Debt/ Equity	32%	51%	46%	41%		
Efficiency ratios						
Days of inventories	119	98	81	67		
Days of receivables	111	153	169	172		
Days of payables	186	201	194	164		
ссс	43	50	56	75		
Profitability ratios						
Gross profit margin	24%	25%	28%	31%		
PBT margin	37%	35%	30%	31%		
ROE	20%	16%	15%	17%		
ROA	13%	10%	9%	10%		
Valuation						
PE	9.6	10.4	10.5	8.8		
PB	1.8	1.6	1.5	1.4		
Growth						
Net revenue growth	2%	-4%	15%	17%		
EBIT growth	28%	-1%	0%	16%		
PBT growth	23%	-9%	0%	19%		
EPS growth	30%	-8%	-1%	20%		
	Source: REE, BSC Research					



Disclosure

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