GIALAI ELECTRICITY JSC (HSX: GEG)

Strong growth vehicles are capital intensive

Gia Lai Electricity JSC (HSX: GEG) is a lucrative business in the power industry with three segments including hydropower, solar and wind power. GEG currently possesses five solar power and 11 hydropower plants with a total of 344 MW capacity and numerous projects in the pipeline. Supplying 585 million kWh in 2019, GEG accounts for 0.3% total national consumption. GEG has experience in the solar power market including low-cost capex and speedy construction, hence is able to capitalize on its current capacity and to anticipate the wind power trend in the near future.

We believe that non-hydro renewable energy is GEG's important growth vehicles in the long term. In light of the government's master plant, GEG can speed up its construction progress to meet the deadline and enjoy a profitable electricity sale price. It has been operating its solar power segment at superior profit margin, and we think GEG is going to develop its wind power the same way. Three new wind power farms, scheduled to operate in late-2021, are going to fuel GEG's growth turbine for the next five years.

*Three-wind projects will be operated in late 2021, stable operation from solar power plants, alongside with hydropower, GEG's fair value is determined at **VND 20,800** per share using a combination of FCFF, P/E and P/B valuation methods. This offers a **42%** upside from the closing price on November 06th, 2020, thus we recommend to **BUY** this stock. Investment risks include dilution because of capital raising activities and possible overcapacity issue among the plant locations.*

Investment Rationales

- Holding numerous advantages, solar power is set to be the the main pillar for GEG's earnings in the medium term.
- Wind power fuels long-term growth by three simultaneous projects COD in 2021.
- Stable hydropower segment contributes fundings for Capex.

Risk

- Funding new projects requires raising both equity and debt, hence borrowing-related issues and possible dilution for pre-private placement shareholders.
- Overcapacity is a harzard that GEG may encounter in the medium term, causing electricity output to plummet, consequently possible unexpectedly-low earnings.

Key financial ratios

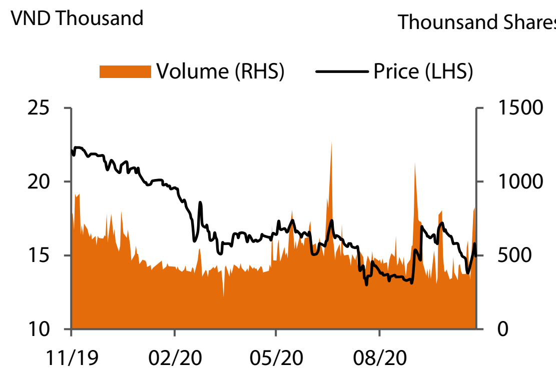
End year (VND bn)	FY2018	FY2019	9T2020	FY2020E	FY2021F
Net revenue	559	1,159	960	1,350	1,710
% growth	*4*	*107*	19	16	27
PAT	145	251	206	266	357
% growth	*-11*	*73.5*	-4.2	6.1	34.2
Net profit margin (%)	25.9	21.6	21.4	19.7	20.9
ROA (%)	3.3	3.7		2.9	3.0
ROE (%)	6.6	10.8		8.2	9.9
EPS (VND)	1,078	1,146		958	1,285
BV (VND)	11,210	11,384		11,998	13,284
Cash dividend (VND)	700	700		0	0
P/E (x)	19.6	23.6		15.3	11.4
P/BV (x)	1.7	2.1		1.7	1.6

Source: Rong Viet Securities

BUY	**+42%**
Market price (VND)	14,650
Target price (VND)	20,800
Cash dividend (*)	0

**Expected in the next 12 months*

Stock Info	
Sector	Utilities
Market Cap (VND Bn)	4,203
Share O/S (Mn)	271
Beta	1
Free Float (%)	29.46
52 weeks high	22,311
52 weeks low	12,992
Average trading volume (20 sessions)	494,957



Performance (%)

	1M	3M	1Y
GEG	-13.3	-9.0	-40.3
Utilities	-4.3	4.0	-11.0
VN-Index	2.5	11.7	-8.5

Major shareholders (%)

TTC's group	18.12
SBT	7.3
Amstrong	19.16
Betrimex	11.96
IFC	13.99
Others	29.46
Foreigner investor remaining room (%)	*12.6*

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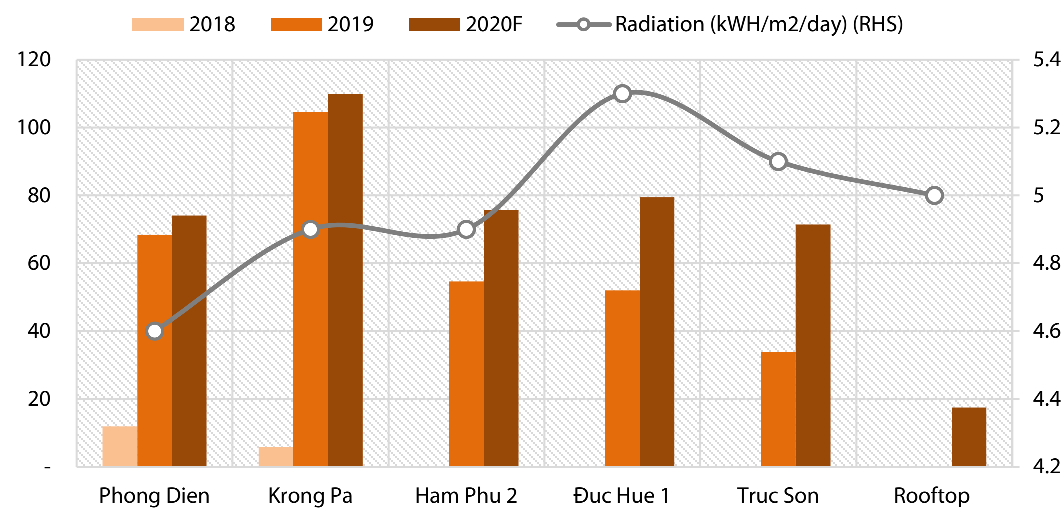
INVESTMENT RATIONALES

Holding numerous advantages, solar power is set to be the main pillar for GEG's earnings in the medium term

Solar power remains a stable with the low capex

Solar power has remained stable with sustainable volume and revenue since its Commercial Operation Date (COD). In 2020, with five current solar plants and rooftop solar project, we expect that GEG will grow volume by 36% compared to 2019 due to Duc Hue 1, Ham Phu 2 and Truc Son had COD in April and June 2019. In terms of radiation, Duc Hue 1 plant is located in promising land with the highest radiation among those solar plants. GEG's solar plants are located where high radiation in a range of 4.6 and 5.3 kWh/m2 per day while those in Vietnam range from 3 to 5.6 kWh/m2 per day. (Figure 1) With the current five solar plants and one rooftop solar plant, we believe that solar power volume will remain stable in the following year with 445 million kWh on average from 2020 to 2025.

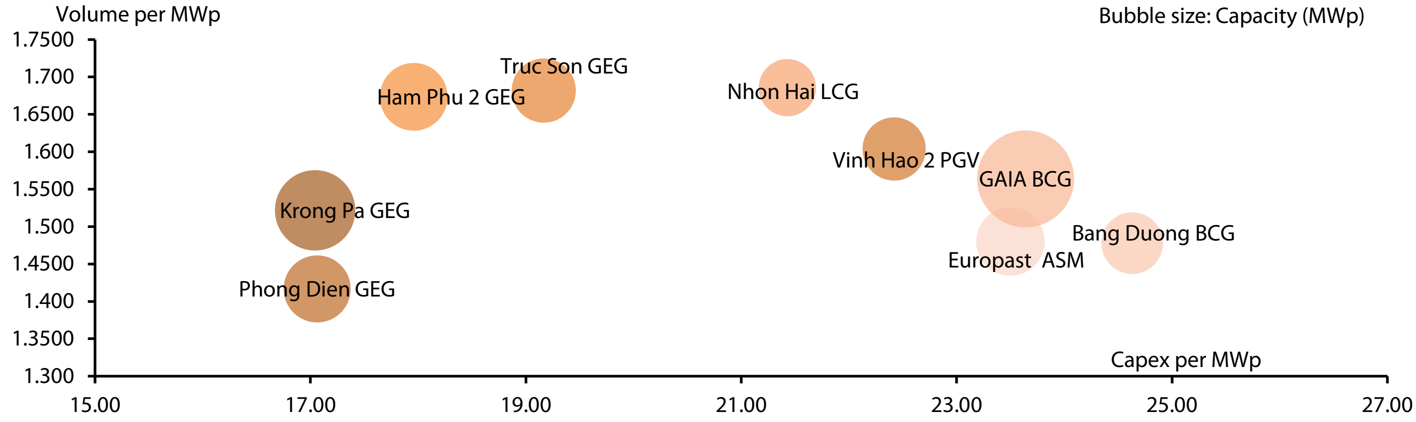
Figure 1: Solar power volume (LHS, million kWh) and radiation by solar plant



Source: Rong Viet Securities

In comparison with other projects in Vietnam, GEG's CAPEX per MWp is relatively low compared to the others (Figure 2). The average investment in the market is over VND 21 billion while those of GEG fluctuate from VND 17 billion to nearly VND 20 billion. The reason is that GEG is an experienced constructor with its own value chain (Figure 5) and the solar panel Capex trending downward (Figure 15). On top of that, the volume GEG plants produce approximately more compared to the average except for the Phong Dien plant. As a result, we note that with the same initial investment, GEG's project produce with the higher volume compared to other projects (figure 2).

Figure 2: GEG's advantage competitiveness amongst solar projects

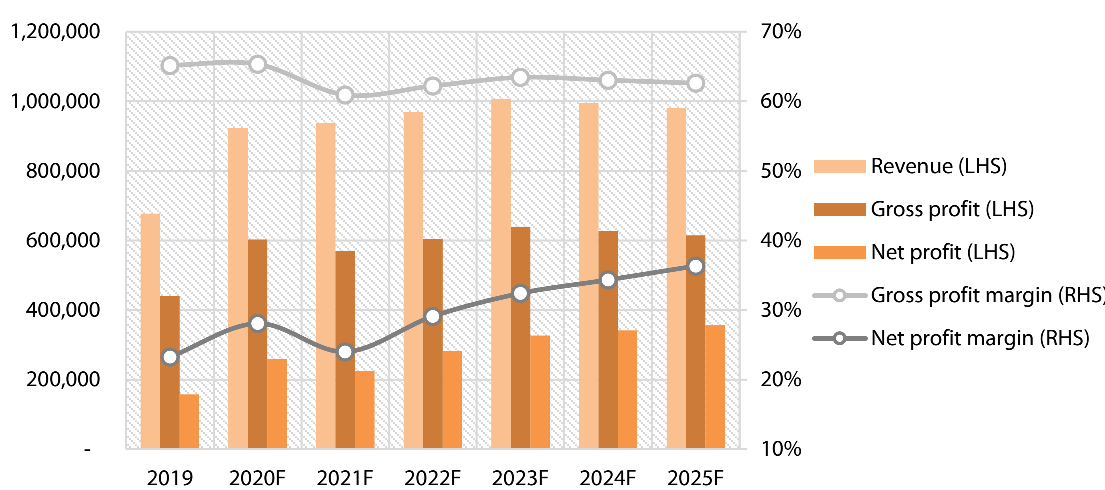


Source: Rong Viet Securities

GEG is going to capitalize on selling price among these solar power farms. The extremely high price offered by EVN at 9.35 USD cents for five plants during 20 years reinforces GEG's solar power performance. Such a generous price was offered for those projects COD prior to 30 June 2019, the latter COD project received a lower price (Table 4). Accordingly, revenue, gross and net profit margin from this segment are relatively attractive (65% and 33% respectively) and an IRR fluctuating between the range of 13% and 19%. When running at full capacity in 2021, GEG's solar power segment is going to bring about VND 937 billion in revenue and contributes 51% NPAT to the company (Figure 3).

GEG's solar farms have another advantage, which is tax incentive. The five projects enjoy 0% corporate income tax during the first 4 profitable years, and 5% for the next nine years. While its existing hydropower plants currently pay 10% income tax, contribution from solar farms will reduce its overall tax rate.

Figure 3: Perfomance of the solar power segment (VND million)

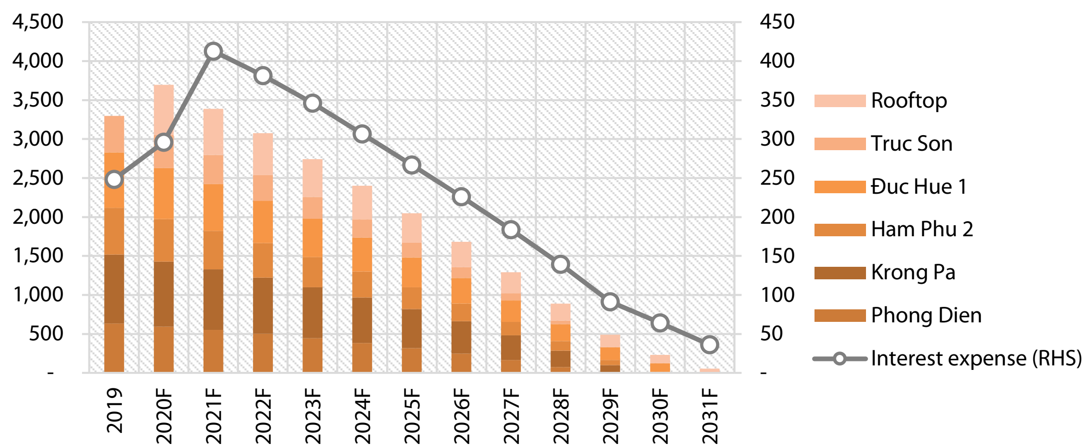


Source: Rong Viet Securities

Solar power is going to be the main pillar for GEG's profit in the next few years. We forecast that this segment will be responsible for over 60% of GEG's 2020 profit, down a bit to 51% in 2021 because hydropower's profit will be improving due to La Nina.

Achieving such earnings means GEG will be capable of settling all loans for those projects within 10-12 years. In fact, GEG has just refinanced the Truc Son project in order to save cost with interest rate going down from 9% to 7%. In the near term, we expect that GEG will be approached by foreign banks to refinance, as the renewable industry is prioritized by ADB (more specific details below). Accordingly, interest expenses from this segment will gradually fall because of (1) the speeding loan settlement amounts; (2) the interest rate in the market declining by 1% throughout the year 2020. We estimate that each percentage point cut in interest rate will result in VND43 billion lower in interest expenses and VND 72 billion in 2020 and 2021, respectively (Figure 4). Hence, the increasing profit from solar power segment is inevitable in the medium term.

Figure 4: Outstanding loan repayment schedule by solar plant (LHS, VND billion) and interest expenses (RHS, VND billion)

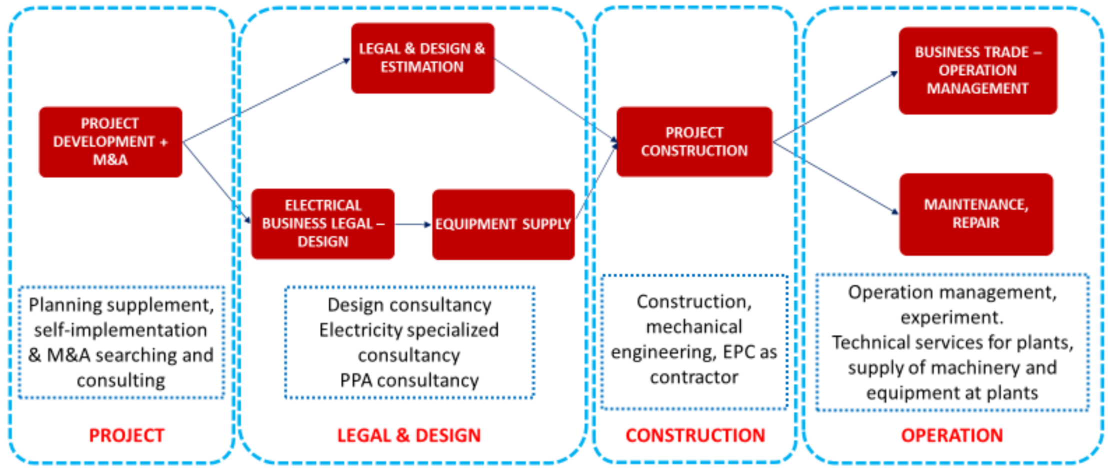


Source: Rong Viet Securities

In terms of medium-term growth, GEG will expand its solar power capacity by 30 MWp to 290 MWp at the end of 2020 via rooftop panels. The new capacity will enjoy FiT (Feed in Tariff) price at 8.38 USD cents, which are for those projects that COD prior to 31 December 2020. We expect rooftop solar to contribute at least 17 million kWh in 2020 and 42 million kWh annually, equivalent to VND34 billion in 2020 and VND 84 billion annually in revenue terms. As a result, the solar power segment will contribute to strong profits. From 2021 to 2025, we forecast that this segment will be responsible for 50% and 54% in total revenue and gross profit, respectively.

A longer term for this segment's depends not only on GEG's capacity expansion but also its value chain. GEG plans to possess 20 solar plants by 2025 with 1,161 MWp of total capacity, comprising of three types: solar plants, rooftop solar and floating solar plants. Up to now, there is no official decision from the government for Competitive Auction market for solar power project COD subsequent to 2020. However, GEG is preparing itself by building the whole value chain including EPC (Engineering - Procurement - Construction) and O&M (Operation and Maintenance) to cut investment cost per MW. Amid discouraging information about the new competitive price for solar power, GEG's efforts to improve the ability to make profit at lower selling price are important. Therefore, we believe GEG is developing certain strengths to continue growing on a "land" that has already been deemed to be fully occupied.

Figure 5: GEG's Value chain for solar power project



Source: GEG, Rong Viet Securities

Wind power fuels long-term growth by three simultaneous projects COD in 2021

We believe GEG is starting a new growth phase by entering the wind power segment. Similar to how it penetrated the solar power, GEG is constructing three wind power projects, totaling 130 MWs in capacity. The total CAPEX for these will reach VND 5,650 billion and the strategic capital structure will be 7:3, debt and equity respectively. This capacity is scheduled to COD before November 2021 to meet MoIT's deadline to have FiT price, ranging from 8.5 to 9.8 cent per kWh. The three wind power projects are located in Gia Lai, Tien Giang, Ben Tre; Tien Giang and Ben Tre are places that are not in overcapacity zones. Thus, we expect the company will achieve full wind plant capacity. GEG attempt to complete the three projects by November by below action (1) They did order sufficient materials for 3 wind projects to eliminate the material shortage risk in the hectic wind power market (2) The speedy of site clearance for the three projects (mostly over 70%).

Table 1: GEG's wind power projects

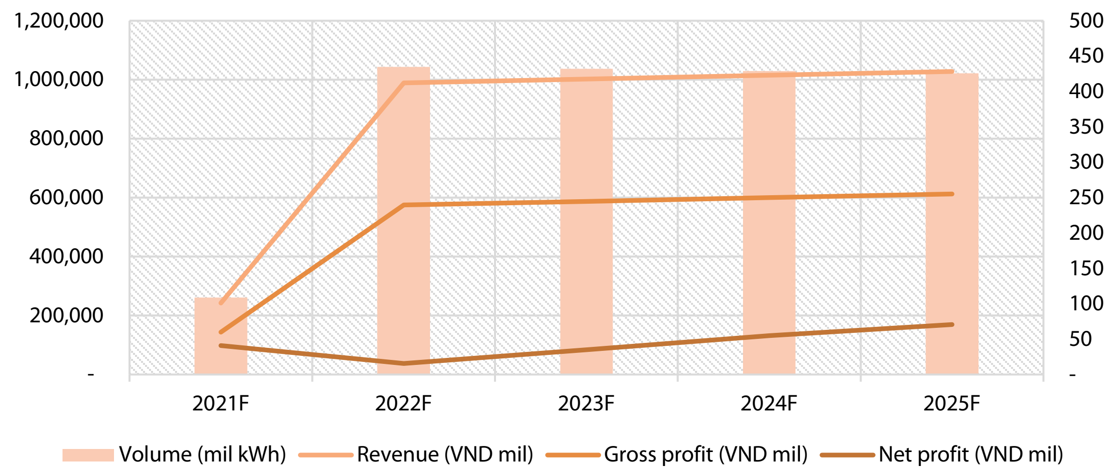
Project	Capacity (MW)	Place	Total Capex (VND billion)	Debt (VND billion)	Capex per MW (VND billion)	Estimated Volume (million kWh)
Ia Bang	50	Gia Lai	2,050	1,435	41	121
Tan Phu Dong 1	50	Tien Giang	2,250	1,575	45	121
VPL	30	Ben Tre	1,350	945	45	73

Source: Rong Viet Securities

The company is considered an experienced player in the renewable energy sector as it benefits largely from the solar power market. More importantly, we notice similarities between the solar and wind power sectors in terms of mechanism, in which the ability to obtain construction approvals and to COD before deadlines allow the developer to enjoy higher IRR. Hence, with those experience at five successful solar farms, GEG can utilize to complete three projects to meet the deadline by November 2021 to enjoy FiT price at 8.5 and 9.8 USD cents for onshore and offshore projects, corresponding. Among the three wind projects, Ia Bang is the onshore project and the remainders are nearshore (9.8 USD cents). In terms of wind farm contruction progress, VPL project started in September 2020, the remainders will start in November. Hence, we believe that GEG is capable of completing their three projects by the end of November 2021.

Wind power developers can capitalize on favorable market conditions, including the governmental subsidy policies and relatively low borrowing rates. The FiT price for wind power offered by EVN stems from government policy, which encourages and concentrates on sustainable and renewable power from now to 2045. Therefore, wind projects that have COD prior to deadline will achieve relatively high IRR and the low payback period of within 10 years per our estimation. In terms of IRR, with VND 41 VND billion and 45 billion per MW in Capex for on shore and offshore projects, we estimate IRR to be 13% and excess 15%, respectively. Most importantly, in the period that interest rate is low and stable, it is the best time for leverage player such as GEG to utilize debt finance for projects. Hence, the attractive profit and IRR from wind power project will contribute positively to the total performance of GEG in the long run.

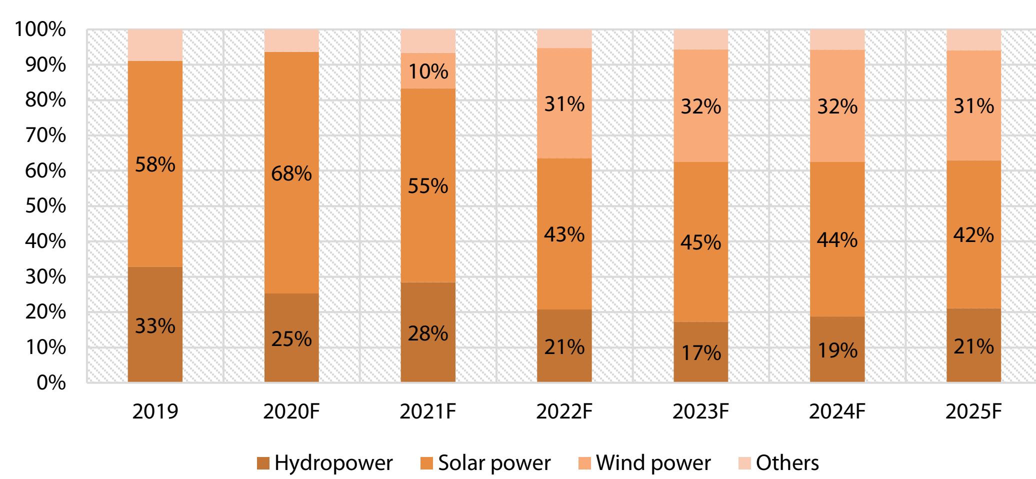
Figure 6: GEG's wind power performance (LHS) and volume (RHS)



Source: Rong Viet Securities

Wind power is a segment that is an emphasis for the long run. The company will add 130 MW by 2021 and still grow to 614 MW by 2025 with seven wind power plants. For the three wind power projects COD in 2021, this segment will contribute more than 314 million kWh annually and roughly VND700 billion in revenue terms. In the long term, wind power will contribute considerably with roughly 30% revenue of total GEG's revenue as figure 7 illustrates. From that, GEG is expected to top the list of listed renewables company in the near term.

Figure 7: Revenue contribution by segment

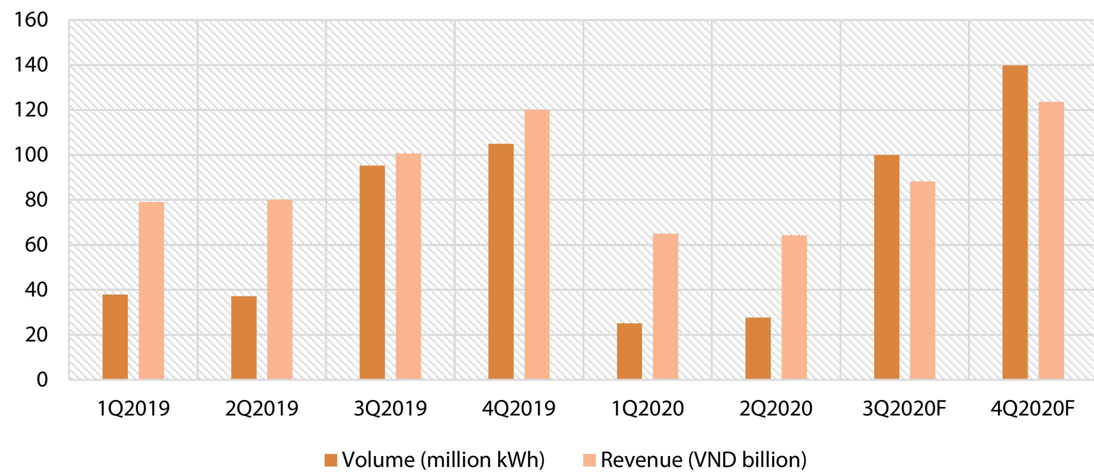


Source: Rong Viet Securities

Stable hydropower segment contributes fundings for Capex

La Nina ensures stability of earnings. The hydropower segment immediately enjoys the perks as La Nina is coming back. According to the NCEP (National Centers for Environmental Prediction), from now to 2021, the probability of La Nina is high compared to other ENSO phenomena (El Nino and Neutral) with 60% - 80%. This probability is predicted to provide abundant water, allowing volume increase in the hydropower segment subsequent to off-peak season and a bright outlook for the near term. In 3rd quarter, volume is triple compared to 2nd quarter while revenue increased 37%. We anticipate volume and revenue continue to increase by 40% QoQ in the last quarter.

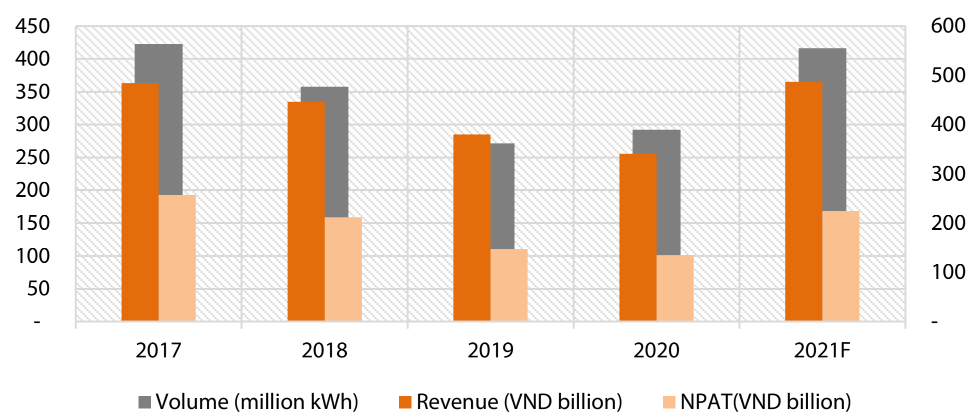
Figure 8: Hydropower segment's volume and revenue



Source: Rong Viet Securities

The hydropower segment is completetely dependent on the weather and output price. GEG can take advantage of operating small-scale hydropower plants (HPPs), whose output price relatively higher compared to CGM (Competitive Generation Market). Revenue reached a significant height during the 2017 La Nina period and we expect such rise to return in 2021. The gross profit margin from the hydropower segment was relatively high and stable in the range of 50% and 60% from 2014 to 2019 and is predicted to fall slightly in 2020 due to severe weather in 1H2020 (Figure 8). From lately 2Q2020, when La Nina comes back, gross profit margin will recapture relatively high margin. In 2021, volume and revenue are predicted to surge by 42% YoY.

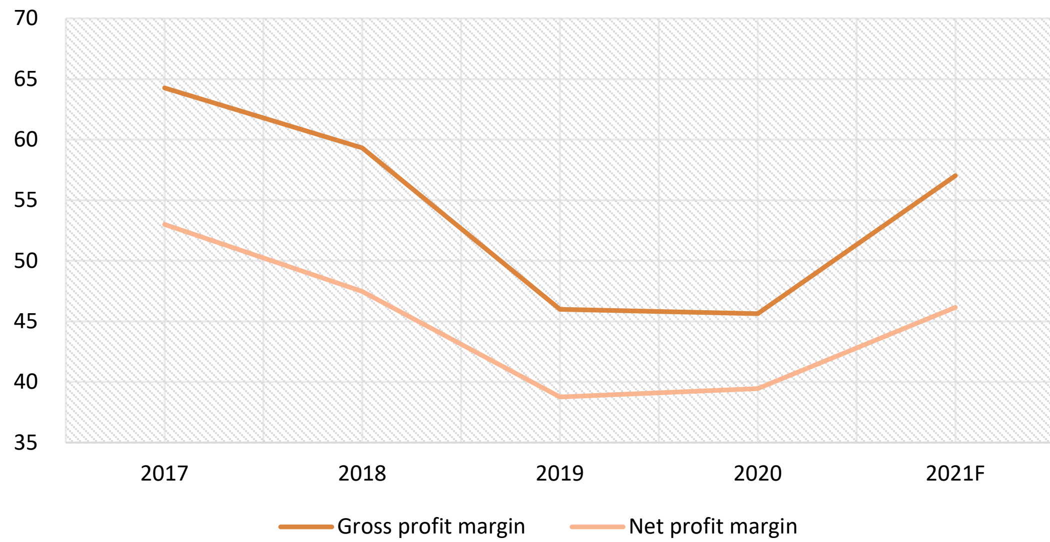
Figure 9: Hydropower's volume (LHS) and performance (RHS)



Source: Rong Viet Securities

GEG's net profit margin is over 35% owing to efficient management, more attractive compared to other sectors. In the near future, the ERP system will go live, indicating that the company will operate more efficiently and save more management expenses not only in hydropower but also in other segments.

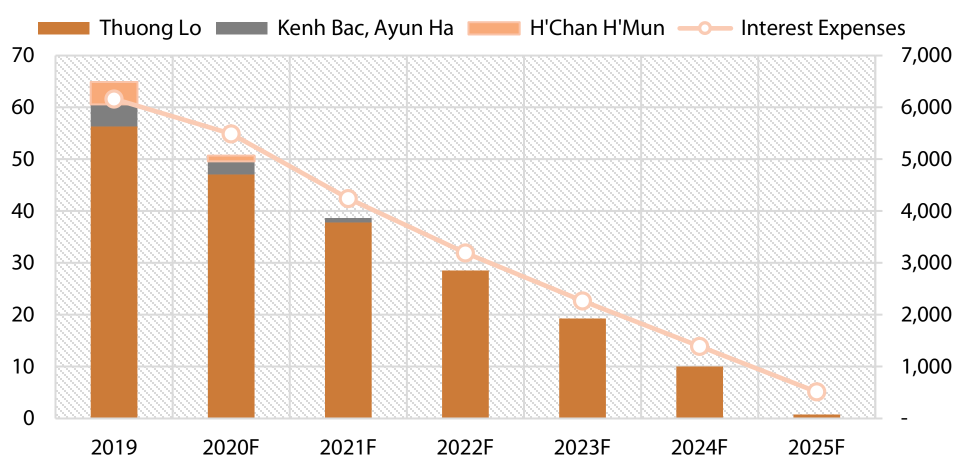
Figure 10: Hydropower's gross and net profit margin (%)



Source: Rong Viet Securities

Stability in earnings leads to stable cash flow contribution. Hydropower loans account for 2% of the company's outstanding loans, with only VND65 billion outstanding balance from Vietinbank as at 31 December 2019. Up to now, the company has settled most of the loans to realize the cash flow from this segment. Therefore, financial expenses for this segment in the following years will be less compared to the previous years. More specifically, only the Thuong Lo and Auyn Ha plants have outstanding loans while the rest is for the maintennance of H'Mun and H'Chan plants (Figure 11).

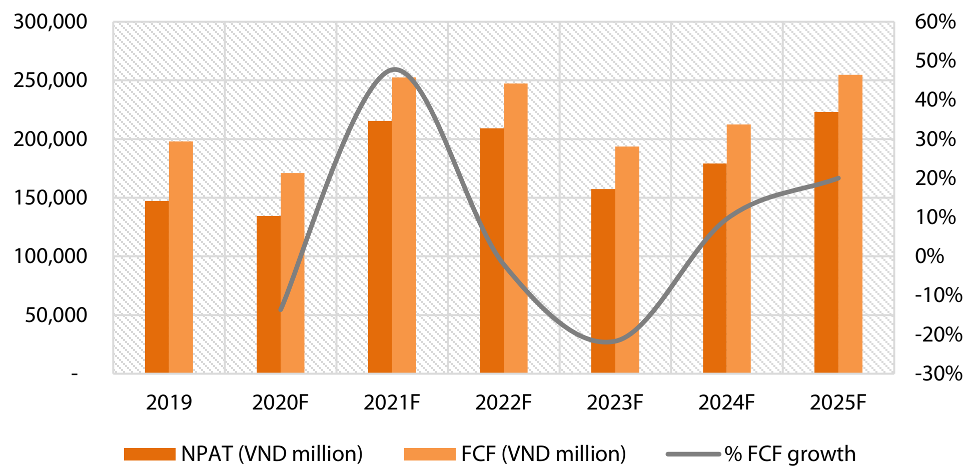
Figure 11: Outstanding loans (LHS, VND billion) and interest expenses (RHS, VND million) from the hydropower segment



Source: Rong Viet Securities

Hence, the cash flow from this segment is going to contribute more to the total GEG's cash flow. We forecast that during 2020-2025, this segment's cash flow after debt payment will average VND 220 billion per year. The hydropower segment will contribute the largest portion of total cash flow due to the depreciation and small interest expenses mentioned above. On the one hand, depreciation is the main contributor to COGS, thus the cash flow derived from depreciation is considerable, making up roughly 26% of revenue and 73% of COGS. On the other hand, several hydropower plants will run out of depreciation from 2021. At which point, this will have a more positive contribution to profit compared to previous years, thus, strenghthening the investment capacity in solar and wind power (Figure 12).

Figure 12: Cashflow from hydropower from 2019 to 2025 (LHS) and cashflow growth (RHS)



Source: Rong Viet Securities

RISKS

The biggest hazard that GEG encounters triggering from raising capital for numerous projects simultaneously.

Having ambitious expansion strategy, GEG may stuck with capital raising for their future portfolio, which lead to dillution risk and high interest expense. In terms of solar power project, the relatively high cost of debt of these projects may affect profits. However, GEG just refinances a bank loan for Truc Son project, other projects are expected to follow same direction to save financing costs. Refinancing activity may not have a significant impact on the company's profit, yet it will relieve the financial burden at an early stage of these projects. In addition, the interest rates have declined by 1% in total the year to date, which is positive for a leverage player such as GEG.

Regarding the wind power projects, GEG currently raised both equity and debt to finance three of them. Lately the company issued stock for current stakeholders with a 4:1 ratio and is going to execute a private placement at the end of this year. GEG expects that its chartered capital will exceeds VND 2,900 billion by the end of 2020. Moreover, three wind projects will begin contributing to profit at the end of 2021. Hence, GEG's stock may face some dillution. Assuming a private placement in 2020, we estimate that for investors that buy the stock on the exchange after issuance to existing shareholders but before private placement, their 2020 EPS will be diluted by 10%. In return, because of the new wind power farms COD in November 2021, 2022 EPS is forecasted to grow by 34%.

GEG's profit is quite interest rate- sensitive**.** Per our estimation, for each 0.25 percentage points interest increase, GEG's NPAT will decline roughly VND 10 billion, accountings for around 3% NPAT in 2020.

Overcapacity can be considered as the harzard that GEG may face in the long run due to the numerous renewable energy plants in its pipeline located in Binh Thuan and Ninh Thuan, as a result of high radiation and wind speed.

At the moment, GEG's solar farms are operating at full capacity. Per our estimation, break even points for GEG's solar farms are around 70%, equivalent to 320 million kWh in 2021. However, the whole current GEG's solar projects was approved to utilize full capacity via Master plan, we anticipate that the probability GEG stucks with overcapacity holding minority.

For upcoming projects, (1) Ham Phu 1 was approved to provide full capacity in the governemnt's master plan (2) wind plants located in Ben Tre, Tien Giang and Gia Lai, which are not in overcapacity zones, GEG will produce at full capacity.

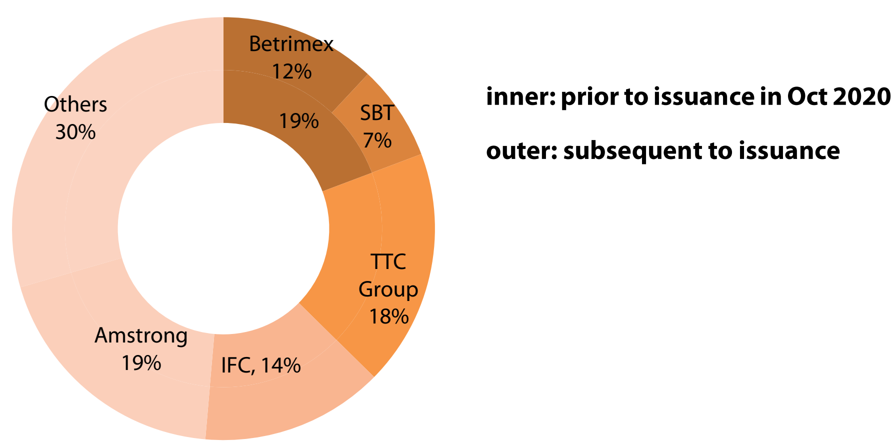
COMPANY OVERVIEW

Gia Lai Electricity JSC was an initially 100% stated-owned hydropower plant started in 1989. The company's IPO took place in 2010, listed on UPCOM from March 2017 and listed on HSX in September 2019. The company currently possesses 12 hydropower plants; five solar plants with a total capacity of 83.7 MW, 259.4 MWp (equivalent to 202 MW), respectively and one rooftop solar will COD at the end of 2020 of 30 MWp. Gia Lai Electricity JSC is in charge of supplying roughly 585 million kWh per year to the national system, accounting for 0.31% of total national electricity consumption.

Shareholder Structure

The GEG's ownership structure is relatively concentrated with four main owners including: Armstrong Asset Management, Betrimex Vietnam, International Finance Corporation, Thanh Thanh Cong - Bien Hoa Joint Stock Company and the remaining 29.5% belonging to other investors. Per our estimation, SBT lately purchased call options from Betrimex, which will change the structure (Figure 13). In general, SBT and their related party (Betrimex, Ms Dang Huynh Uc My, BOD and BOM of GEG) own 42.2%, which may impact shareholder in terms of domination and agency risk.

Figure 13: Shareholder structure

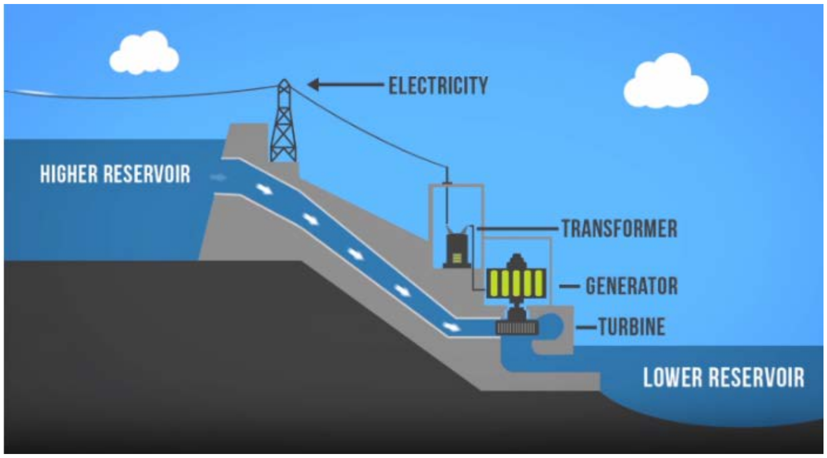


Core business

GEG initially operated in hydropower sector and started penetrating the solar sector in 2018 and wind sector in 2020. Currently, GEG's core business is supply electricity supply contributed by three segments with main contribution from solar power (Figure 18).

(1) Hydropower: GEG's hydropower has a 2% market share nationally. Subsequent to divestment of Kenh Bac - Ayun Ha hydro power JSC in 1Q2020, GEG currently possesses 12 hydro plants with 83.7 MW. Except for the Thuong Lo plant located in the North, the others are located in the highlands. These contributed the majority of the total revenue in 2018 at 80%. Reversely, GEG's revenue from hydropower only contributed to 33% of the firrm's total in 2019. GEG plans to reduce the hydropower contribution to its bottom line.

Figure 14: A typical hydropower generator



Source: Rong Viet Securities

GEG's hydro plants are small in size with capacity lower than 30 MW (Table 2). For these plants, if capacity is lower than 30 MW, the output price is fixed and announced in advance and mostly higher compared to the price in CGM. Therefore, possessing 12 modest hydro plants is a perk.

Table 2: Hydropower plants

Plants	Area	Total square (ha)	Capacity (MW)	Input	Output	Average voume (GWh per year)	Volume in 2019 (million kWh)	Tax rate schedule	
								Tax rate	Applied year
H'Mun	Highland	18,158	16.2	Ayun river	Middle EVN	66.4	65.22	10%	2015-2023
Ayun Thuong		642,696	12	Ayun river		50.4	49.17	5%	2015-2023
								10%	2024-2025
H' Chan		14,181	12	Ayun river		56.4	53.28	10%	2019-2020
Dak Pi Hao 2		106,183	9.6	Dak Pi hao stream		36.9	32.45	10%	2012-2020
Da Khai		32,000	8.1	Da Nhim river	Southern EVN	37	34.56	5%	2015-2023
								10%	2024-2025
Ia Puch 3		147,148	6.6	Puch stream	Middle EVN	30.6	25.75	10%	2013-2021
Thuong Lo	Nothern	44,284	6	Ba Ran River		18	17.7	0%	2016-2019
								5%	2020-2028
								10%	2029-2030
Dak Pi Hao 1	Highland	66,082	5	Dak Pi hao stream		21	20.66	5%	2018-2026
								10%	2027-2028
Ayun Ha		6,069	3	Ayun river		20	18.94		
IA Muer 3		63,888	1.8	Ia Meur stream		7.8	6.63	20%	2019
IA Drang 3		24,690	1.6	Ia Đrang stream		8.8	7.31	20%	2019
IA Drang 2		66,082	1.2	Ia Đrang stream		6.5	5.63	20%	2019
Kenh Bac Ayun Ha		3481	1	Ayun Ha hydro chanel		6			
IA Drang 1		41,929	0.6	Ia Đrang stream		3.4	2.88	10%	2002 - 2017

Source: Rong Viet Securities

GEG is going to divest from the Chu Prong hydropower plant group, which includes Ia Drang 1, Ia Drang 2, Ia Drang 3, Ia Puch 3, Ia Muer 3 with a total of 11.8 MW. This is the only monopoly plant group that produces and sells electricity directly to buyers equal to the EVN price, restating the selling price every three years. However, due to the low performance of the group compared to other hydropower plants, gross profit margin is just 36% on an average basis while others stand at 42%. Until now the company is still looking for investors and there is no clear information, and thus we do not reflect it in our model.

(2) Solar power: GEG's solar power has a 5% of the national market share in 2019. It embarked on earning revenues this segment from 2018 and this now contributes 7% to the total revenue with the Phong Dien and Krong Pa plant. Contribution surged to 53% in 2019 with three additional plants including Ham Phu 2, Duc Hue 1, Truc Son. Currently, GEG possesses five plants with 260 MWp capacity, 22 MWp rooftop solar which will reach 30 MWp at the end of this year, with technology from Japan. According to the annual report, GEG plans to expand the segment to 42% in terms of capacity in 2025. The table below illustrates the robust performance of solar power with high gross margin, ranging from 63% to 71%.

Table 3: GEG's solar power plants

Plants	COD	Capacity (MWp)	Equivalent (MW)	CAPEX (VND billion)	Estimate volume per year (kWh million)	Volume in 2019 (kWh million)	Estimated volume 2020 (kWh million)	Capex per MWp (VND Billion)	Outstanding balance loan (VND Billion)
Phong Dien	Oct-18	48.0	35.0	819	60	68.39	74.04	17.06	653
Krong Pa	Dec-18	69.0	50.3	1176	103	104.62	109.93	17.04	926
Duc Hue 1	Apr-19	49.0	35.7	976	73	51.95	75.73	19.92	622
Ham Phu 2	Apr-19	49.0	35.7	880	77	54.6	79.41	17.96	632
Truc Son	Jun-19	44.4	32.4	851	68	33.82	71.41	19.17	599
Rooftop	2020	30	21.9	510	42	-	17.50	17	638

Source: Rong Viet Securities

In terms of degradation of solar panels, GEG estimates that it will decrease by around 0.7% per annum, which is considered relatively low compared to panels of older technology. Per our estimation, five current solar plants will have a 10 MW reduction total in 2025 in case they do not have any maintenance for five years, resulting in a VND 17 Bn decline in revenue in 2025. Nevertheless, GEG inspects its plants regularly to repair and maintain in case of any deterioration. Thus, from our perspective we believe that GEG is capable of controlling and remaining the stable volume and revenue in the medium term.

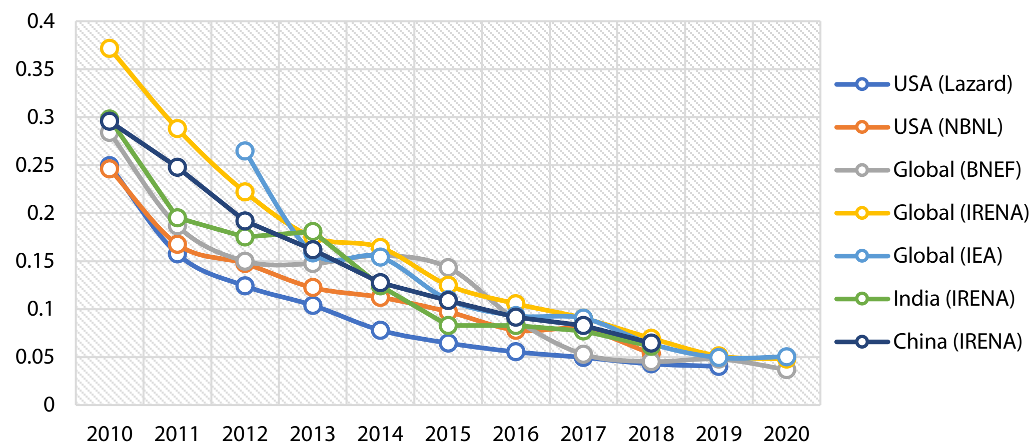
Table 4: Solar power price mechanism

COD	Ground projects	Rooftop projects (USD cent)	Floating projects (USD cent)	Binh Thuan Project (USD cent)
30-Jun-19	9.35	9.35	9.35	9.35
31-Dec-20	7.09	8.38	7.69	9.35

Source: Rong Viet Securities

Regarding the ambiguity of the solar power sector subsequent to 2020, GEG may suspend building solar power projects and will await clearer information from the competitive auction market terms. Per our estimation, in case the output price is below sevent cents and capex per MWp remains unchanged, new solar power projects will only have IRR of under 10%, relatively lower compared to those of current projects. Nevertheless, we believe that capex per MWp will keep declining at the same speed as recent years in light of the trend worldwide (Figure 15). Most importantly, GEG has relatively low capex for building solar power plants compared to other projects.

Figure 15: Capex per kWh across the nations (USD)



Source: Ramez Naam, Rong Viet Securities

Although the electricity industry is under the state's umbrella, GEG is supported by Thanh Thanh Cong group and government by their state-owned origin. Moreover, GEG is supported by TTC to own prime location, which is adjacent to the national grid, allowing it to save a large amount on transmission CAPEX. As table 5 illustrated, most projects have a relatively high CAPEX per MWp, over VND21.5 billion on an average basis while those of GEG are lower than VND20 billion, which indicates that the company has advantage in the industry. Therefore, the company is capable of maintaining an attractive IRR of roughly 13% for its potential solar power pipelines up to 2025.

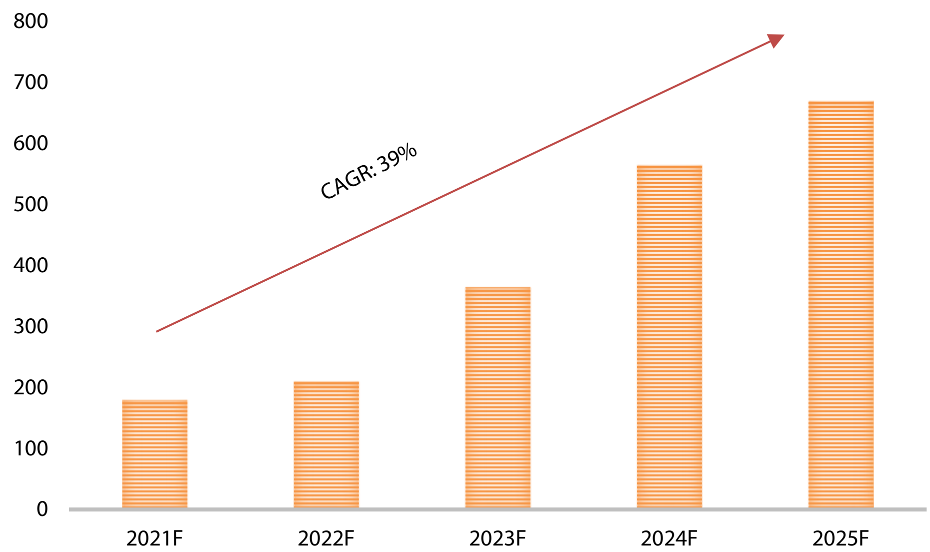
Table 5: Solar power plants on the market

Project	Company	Capex per MWp (VND billion)	CAPEX (VND billion)	Capacity (MW)
Europast	ASM	23.5	1,175	50
Bang Duong	BCG	24.6	1,000	41
GAIA	BCG	23.6	2,374	100
Nhon Hai	LCG	21.4	750	35
My Son 1	LCG	15.9	984	62
My Son 2	LCG	16.2	811	50
Hong Phong 4.1	HDG	20.8	1,000	48
Infra	HDG	21.1	1,055	50
Vinh Hao 6	FCN	25.0	1,249	50
Vĩnh Tân 2	PGV	22.4	956	43

Source: Rong Viet Securities

(3) Wind power: GEG invests on wind farms in 2020 with three projects including VPL, Ia Bang and Tan Phu Dong with a total of 130 MW, expected to COD next year. GEG has seven 7 wind power projects in their pipelines by 2025 (Table 6). Wind power will become GEG's growth engine in the long term with 669 MW in 2025 with a CAGR reaching 39% (Figure 16). According to the Electricity Master Plan, there will be 60 GW capacity from wind power in 2045 thus there is a huge potential for this segment. Hence, GEG places an emphasis on wind power in the long run to enjoy benefits from national policy.

Figure 16: GEG's wind power capacity (MW)



Source: Rong Viet Securities

The big hazard for companies in the wind power industry is the delay in machinery deliveries. GEG expects that turbines will arrive in Vietnam in April 2021. Amongst the three wind power projects, VPL is the one that fulfilled sufficient responsibility in site clearance terms, the remainders fulfilled roughly 70% - 80%. Hence, with such rapid speed, we believe that GEG is capable of adding an extra 130 MW of wind power in 2021.

Table 6: GEG's wind power projects

STT	Plants	Capacity (MW)	Places	COD
1	VPL	30	Ben Tre	2021
2	Ia Bang	50	Gia Lai	2021
3	Tan Phu Dong	100	Tien Giang	2021
4	Project A2	30	Ben Tre	2022
5	Project D1,2	154	Tien Giang	2023
6	Project E1,2	200	Tien Giang	2024 -2025
7	Project C2	105	Ca Mau	2025
	Total	**614**		**2021-2025**

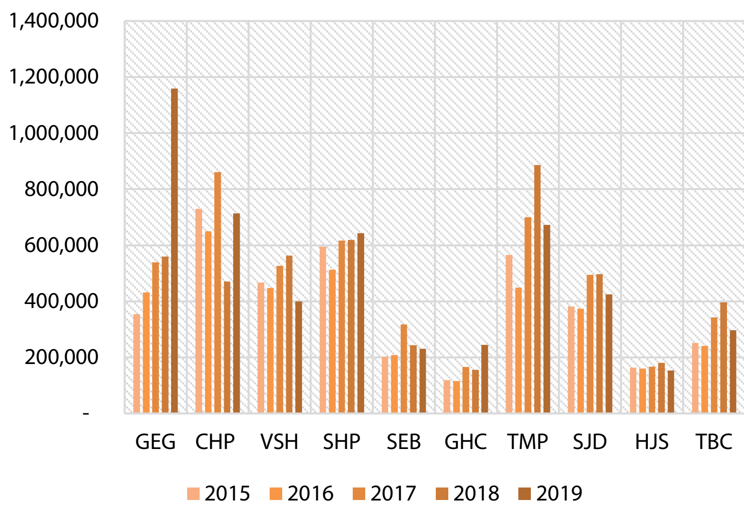
Source: Rong Viet Securities

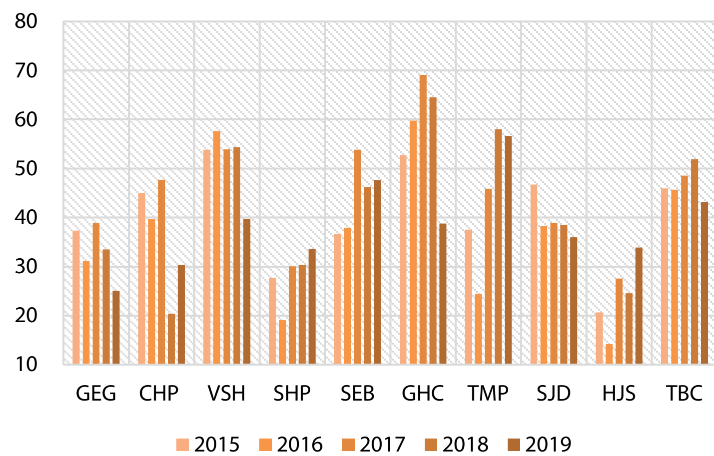
FINANCIAL ANALYSIS

Growth

In comparison with other companies in the hydropower sector, GEG experienced a robust growth in revenue in the recent five years. In 2019, it expanded its operations into solar power sector favoring to significant surge with 107% yoy (Figure 17). GEG's revenue increased more than 20% each year from 2015 except for 2018 (4%) due to the El Nino phenomenon. In spite of stable revenue growth, net profit margin flutuated due to G&A and interest expenses. GEG raised more bank loans and issued bond to finance the solar power projects activities.

Figure 17: Revenue (VND million, LHS) and net profit margin (%, RHS) in comparison with peer companies

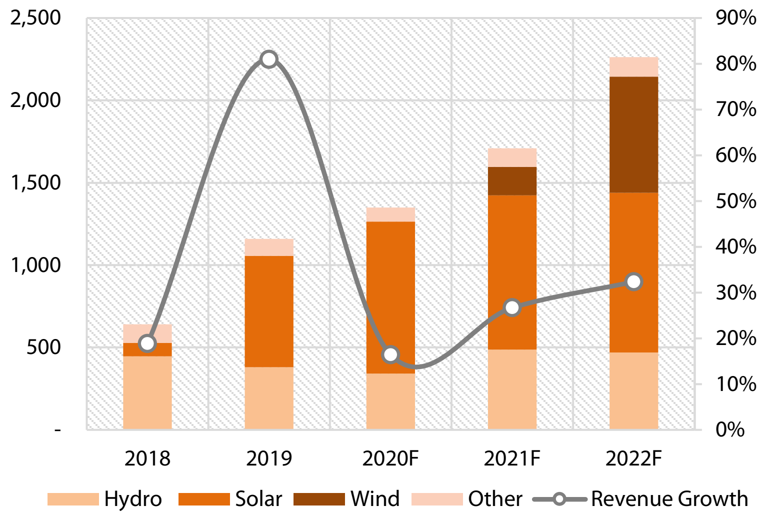


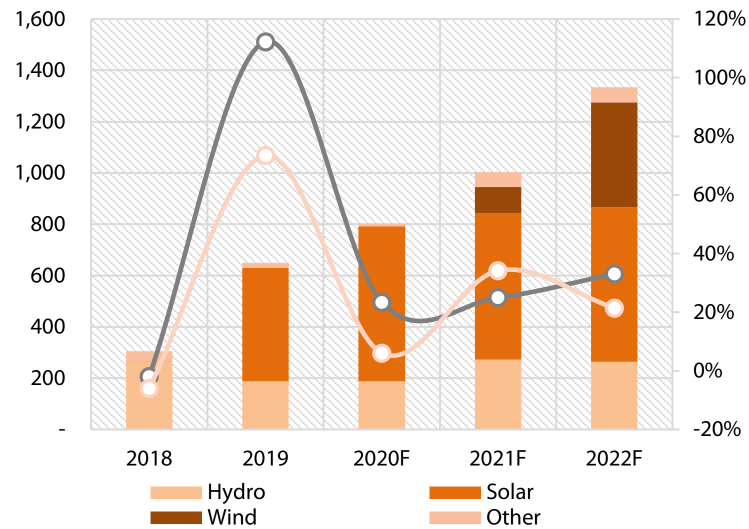


Source: Rong Viet Securities

In terms of revenue growth by segment, the company has concentrated on non-hydro renewable since 2018. Revenue will change from a hydro power company in 2018 to a renewable energy one in 2022. CAGR at that time, from that segment, will reach 37% of total revenue. 2020 experienced a moderate increase of 16% owing to rooftop solar. 2021 and 2022 are going to grow 27% and 32% respectively due to three wind power plants. Hence, with GEG's high expansion rate, we strongly believe that it will soon become a top leader in renewable energy.

Figure 18: Revenue (VND billion, LHS) and gross profit (VND billion, RHS) by segment





Source: Rong Viet Securities

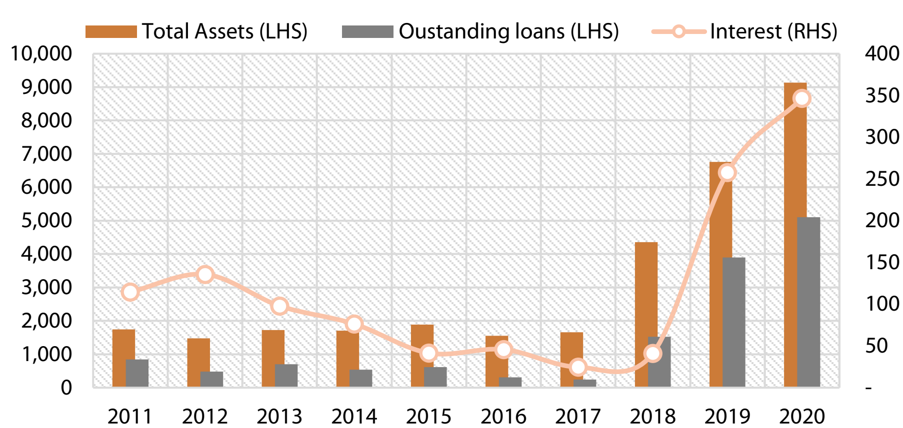
Regarding gross profit, it increased significantly in 2019 due to the solar contribution, and will continue increasing over 23% from 2020 to 2022 with CAGR 5-year 44% from 2018.

Accordingly, the net profit margin growth will move in line with that of gross profit except for 2022. At that point the growth speed will slow down because of a surge in interest expenses. The net profit CAGR from 2018 to 2022 is estimated at roughly 25%. Net profit margin in the recent years is over 20%, and we believe that the company is capable of maintaining this margin in the following years.

Financial activities

Surging debts because of expanding to non-hydro electricity. Since 2013, subsequent to the divestment from the thermal segment, outstanding loans and interests gradually fell to lower than VND 240 billion and VND 24 billion, respectively. Thereafter the company embarked on investing on solar power and wind power in 2018 and 2020. The total CAPEX for five current solar power plants reaches to VND4,702 billion, (of which 70% was financed by debt). The oustanding debt of the company will gradually increase with at the same speed as it keeps expanding.

Figure 19: GEG's capital structure (VND million)



Source: Rong Viet Securities

The company is a leveraged player in the renewable industry with numerous projects in its portfolio. Because of relatively high investment for rooftop solar and wind power projects, the company's outstanding debt and interest amounts increase to roughly VND 5,100 billion and roughly VND 347 billion, respectively in 2020. With a high outstanding debt, cash flow is of essence for survival.

Having said that, amid stable and cheap interest rates, using leverage to finance projects is optimal strategy for stakeholders. The prime interest rate has declined twice in 2020 by 1% and we estimate that will benefit from late 2020 and early 2021 due to the lag of interest rate revision. Per our estimation, the company can save VND 51 billion pretax profit.

Working capital management

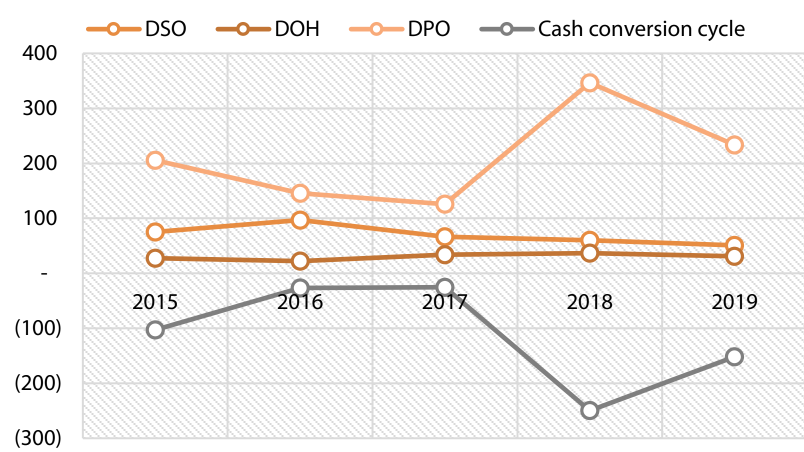
Receivables are biased because its loans out to related parties. At the end of 1H2020, GEG's receivables were VND 826 billion, out of which only VND 250 billion was trade receivables. The remaining is GEG's loans to related parties, mostly brother companies and prepayments to suppliers for solar panels. The loans are granted at fairly high interest rate, ranging from 9.0% to 13.0% p.a. Thus, we think this is not a downside to GEG's profit and loss statement, yet it makes Days of Sales Outstanding (DSO) questionable.

Similarly, inventory went up remarkably in 2019 due to its inventory treatment. In particular, GEG's solar panels are registered as inventory. Normally renewable electricity companies need not hold much inventory. Thus, we would like to emphasize that Days of inventory On Hand (DOH) is actually not a concern.

In terms of payables, it can be clearly seen in Figure 18 that since joining the solar power sector, GEG has enjoyed a better credit policy from its solar panel suppliers. This allowed GEG to hold payment up to one year (2018) or seven months (2019). This is an important advantage that allows GEG to capitalize on its working capital.

We calculated GEG's true cash conversion cycle and found out that it has maintained a negative cash conversion days. It means that it has excess cash flows, which it loaned out at quite an attractive interest rate.

Figure 20: Cash coversion cycle from 2017 to 2022 (days)



Source: Rong Viet Securities

DuPont analysis

Table 7: DuPont breakdown

DUPONT ANALYSIS	2016	2017	2018	2019	2020F
EBIT / Sales	39%	46%	41%	46%	48%
Sales / Total assets	28%	33%	13%	17%	15%
Interest expenses / Total assets	3%	1%	1%	4%	4%
(A/E) x (1-t)	123%	114%	163%	250%	269%
ROE = {(1) x (2) - (3)} x (4)	10%	15%	7%	11%	9%

Source: Rong Viet Securities

ROE has improved since 2018 but cannot be as high as 2017. GEG has increased its operating profit margin from 2018 to 2020 from 41% to 48%. At this point, asset turnover declined due to the huge CAPEX on solar and wind power plants. GEG's capital structure for solar and wind projects is at 7:3, thus leverage gradually grows at the same speed as asset growth. Therefore, interest expenses have increased since 2018 as result of loan growth. Hence, return on equity is roughly at 10%. In short, the improvement in ROE is likely the result from an extensive use of leverage along side with a better profit margin owing to the non-hydro business lines.

FORECAST

Electricity volume will grow by 23% and 28% YoY in 2020 and 2021, respectively. Revenue in 2020 will increase by 16% while COGS will increase just 14% resulting in gross profit moderately growing by 18%. Interest expenses in 2020 will surge by 16% due to the huge CAPEX in rooftop solar. Hence, the net profit of the company will experience a 6% growth, which is mainly due to hydropower rebounding and extra rooftop capacity.

Table 8: GEG's performance forecasts (VND billion)

	2019	2020	2021	5-year average (2020 - 2024)	YoY 2020 (%)
Volume (million kWh)	585	721	924	961	23%
Revenue	1,159	1,350	1,710	1,966	16%
COGS	(510)	(581)	(713)	(819)	14%
Gross Profit	650	769	997	1,147	18%
Selling expenses	(1)	(1)	(1)	(1)	16%
G&A expenses	(111)	(122)	(137)	(141)	10%
Operating profit	538	646	859	1,005	20%
Financial income	24	30	18	21	23%
Interest expenses	(258)	(358)	(443)	(531)	39%
Pretax profit	304	318	433	494	4%
Net income	251	266	357	417	6%

Source: Rong Viet Securities

(1) Hydropower

After a dry 1H2020, recover in 3rd quarter, we predict that 4th quarter's output will recover to 2017 level. Altogether, we forecast that this segment's output will increase slightly by 8% YoY. Afterwards, 2021 is predicted to be a full La Nina year and GEG's hydropower output could reach 416 million kWh, +42% YoY.

Revenue will slightly drop by 10% in 2020 and surge by 42% in 2021, respectively. Meanwhile, COGS is going to decline 10% in 2020, COGS in 2019 was relatively high because of maintenance expenses at some plants. Gross profit from hydropower segment will drop by 10% and surge by 72% in 2021.

Ultimately, interest expenses for this segment are low due to the speedy loan settlement and low G&A expenses benefiting the net profit margin. In general, we anticipate that the company will maintain the net profit margin from hydropower in a range of 40% and 46% from 2020 to 2024.

Table 9: Hydropower performance from 2019 to 2024 (VND million)

	2019	2020	2021	5-year average (2020 -2024)	YoY 2020 (%)
Volume (million kWh)	271	293	416	325	8%
Revenue	379,750	340,996	486,538	422,256	-10%
COGS	(205,065)	(185,374)	(219,146)	(204,758)	-10%
Gross profit	174,685	155,622	267,392	217,498	-11%
Net profit margin	39%	39%	44%	42%	1%

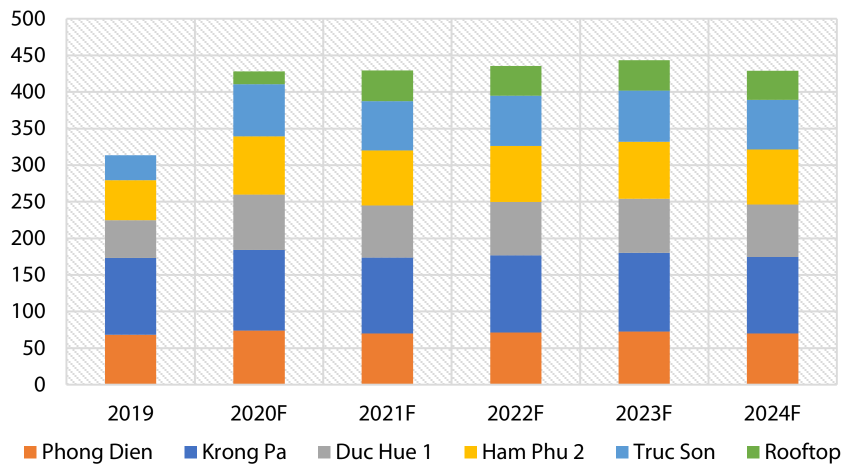
Source: Rong Viet Securities

(2) Solar power

In terms of solar power performance, the operation is stable and is going to contribute the major part of the company's performance. As we mention above, solar power market subsequent to 2020, the company will only add 30 MWp, which makes 290 MWp in total capacity. Others plants in their pipeline will suspend construction until clear information regarding Competitive Auction. Hence, we just reflect in our model that the company only has six plants.

Per our estimation, the volume from this segment will sustainably grow in the near term. In 2020, we estimate that the volume and revenue are going to grow by 36% due to: (1) The total volume from three plants operating since the mid 2019 increase as they perform through out the year compared to previous years, (2) The company has just brought an extra capacity from rooftop solar with 30 MWp. 2021 output growth for this segment is predicted at 1% YoY (429 million kWh) as we assume no further capacity expansion and La Nina impact.

Figure 21: Solar power volume (million kWh)



Source: Rong Viet Securities

This segment's revenue depends on the USD exchange rate due to the fact that output price is fixed by that currency. 2020 ASP is estimated at VND 2,159 per kWh. This is relatively high among peers. This core advantage will be prolonged in the long term and will enable GEG to enjoy a strong profit margin compared to solar farms COD after 30/06/2019 who have lower sale price.

In terms of COGS, depreciation holds majority in the total, thus this amount slightly increases YoY. As a result, gross profit will increase by 37% in 2020 and slightly drop 5% in 2021 because of La Nina impact. Although high interest expenses for solar power projects, we estimate that the company can expect net profit margin from this segemnt in a range of 28% and 30% from 2020 to 2024.

Table 10: Solar power performance from 2019 to 2024

	2019	2020	2021	5-year average (2020 -2024)	YoY 2020 (%)
Volume	313	428	429	433	37%
Revenue	676,790	923,178	937,261	966,531	36%
COGS	(235,760)	(320,213)	(366,351)	(357,861)	36%
Gross profit	441,030	602,965	570,910	608,670	37%
Net profit margin	23%	28%	24%	30%	5%

Source: Rong Viet Securities

(3) Wind power

GEG's three new wind power farms are going to COD in late-2021, which means they will only contribute noticeably from 2022. As the company will finish three wind farms prior to November 2021, we estimate that GEG is capable of producing 79 million kWh in 2021 and this amount is set to surge in 2022 to 314 million kWh. In the following years, only three wind farms without maintence will see the volume falls little due to turbine's degradation.

Once running at full capacity in 2022, volume and revenue will be triple compared to 2021. With the sales price ranging from 8.5 to 9.8 US cents, wind power's gross profit margin will hover around 60%. Nevertheless, interest expenses for this segment will also be high in light of huge CAPEX. The interest amount is going to eat up 90% of gross profit, but will decrease steadily year over year due to speedy loan settlement. As a result, the net profit margin from the wind power segment will gradually increase YoY.

Table 11: Wind power performance from 2019 to 2024 (VND million)

	2021	2022	2023	5-year average (2020 -2024)	YoY 2022 (%)
Volume	79	314	312	310	300%
Revenue	172,643	704,381	713,440	722,659	308%
COGS	(70,625)	(296,625)	(296,807)	(296,992)	320%
Gross profit	102,018	407,756	416,633	425,667	300%
Net profit margin	2%	4%	9%	13%	2%

Source: Rong Viet Securities

VALUATION

We use three methods including FCFF, P/E and P/B with a proportion of 20%, 40% and 40%, respectively to valuate the fair value of GEG:

(1) FCFF valuation: We use a WACC of 11% and the long-term asset growth of 0.03%. The FCFF valuation comes at VND 28,272 per share. This method returns a very high upside because it reflects the full potential of the company in the long run. We included an important assumption saying GEG will successfully raise its chartered capital to fund its three wind power farms sufficiently with a 7:3 D/E capital structure.

(2) P/B valuation: We use multiple of 1.5x, which is computed by the market-cap weighted P/B of the sector in Vietnam and Asia, discounted by 30% because of GEG's intensive leverage. It results in VND 19,925 per share. It should also be noticed that GEG's average P/B since listing is 1.8x (Figure 21).

(3) P/E valuation: We use multiple of 14x P/E multiple, which is equivalent to the market-cap weighted P/E of the sector in Vietnam and Asian, discounted by 30% for the same reason. This results in VND 17,990 per share. It should also be noticed that GEG's average P/E since listing is 19x (Figure 22).

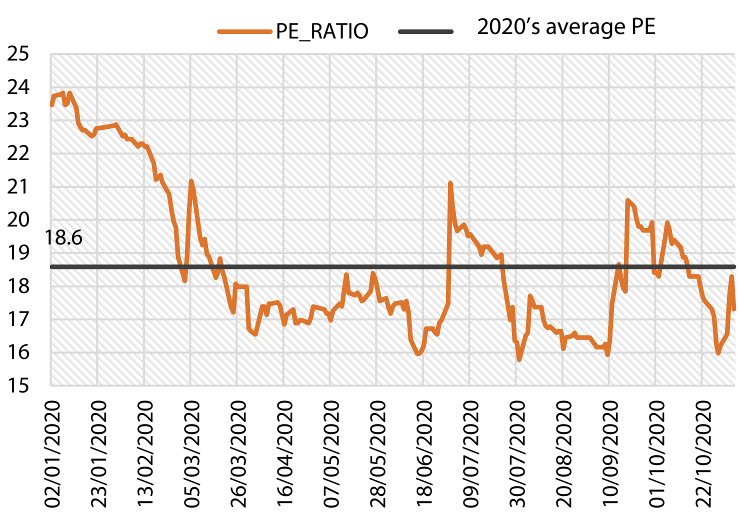
In conclusion, the target price of GEG is **VND 20,800**, **42%** higher compared to the closing price on October 23rd, 2020. Therefore, we recommend to BUY the stock to anticipate its 2021 growth phase. While holding this stock, investors should also monitor closely the downside risk, which is its interest expenses as well as keep in mind GEG's book value at the end of 2020 is estimated at VND 12,145 per share.

Table 12: Valuation matrix

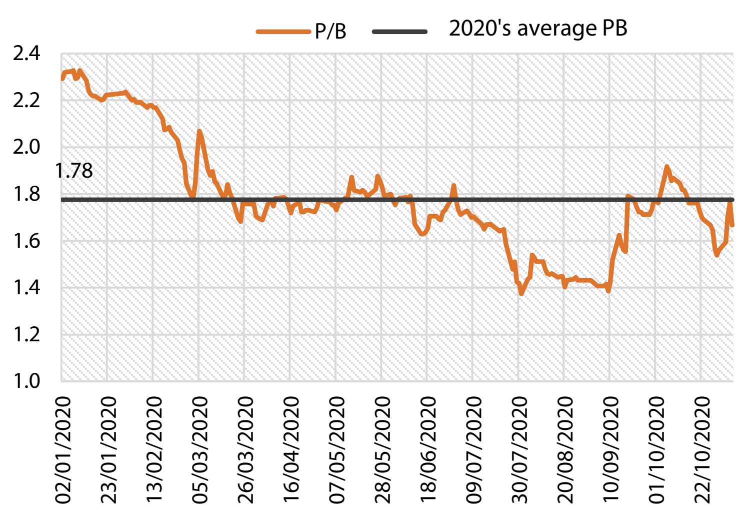
Method	Valuation	Weight	Weighted average
FCFF	28,272	20%	5,654
PE	17,990	40%	7,196
PB	19,925	40%	7,970
Total		**100%**	**20,800**

Source: Rong Viet Securities

Figure 22: GEG's historical P/E & P/B



Source: Bloomberg



Source: Bloomberg

INDUSTRY OVERVIEW

Power sector is the backbone of high-speed growth in Vietnam

Vietnam’s electricity demand has grown at a pace of roughly 10% p.a from 2010 to 2019 **(Figure 24).** Vietnam's electricity consumption has grown sharply in recent years in parallel with the country's industrialization process. Especially since 2017, these two indices have been almost equal months over months (Figure 23). Moreover, both the industrial production and the electricity production indices remained above 100 for the last five years and increased sharply in 2017 and 2018. This is evidence that industrial activity contributed significantly to electricity consumption.

In 2020, electricity demand growth suffered a decline in the first eight months of 2%, and is set to grow to 3.5% throughout 2020. Vietnam is one country that still maintains a positive GDP growth amid the Covid 19 outbreak. Hence, electricity demand is going to rebound subsequent to Covid 19, particularly around 10% in 2021. In the long run, power capacity in Vietnam is anticipated to grow by 4.9% on an average basis from 2020 to 2029 according to Fitch Solutions. Such robust growth stems from ambitious capacity expansion and supported policies from the government.

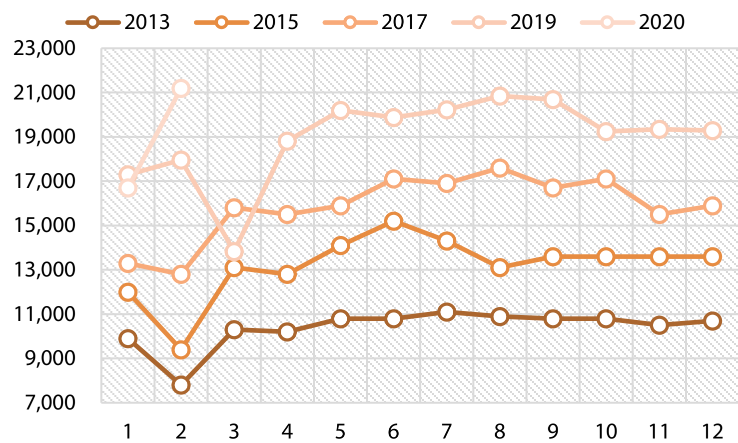
The driving force of electricity demand growth is also due to the relocation of factories to Southeast Asia in general and Vietnam in particular due to the impact of the world trade war, as well as to take advantage of Vietnam’s cheap labor, land and utilities. The disbursement of FDI sector since 2015 has pushed Vietnam's electricity consumption growth (Figure 27).

For the first nine month in 2020, total FDI (Foreign Direct Investment) has reached USD 21.2 billion, down by 18.9% YoY. The surge in September indicates that the economic growth has recovered since that point. For first 9 months accumulation, power industry ranks second with USD4.4 billion accounting for 20.6% total registered FDI.

Electricity shortage is a substantial problem. Thus, there is a huge potential for power plants with stable capacity and brand-new investors to invest in this sector. According to EVN, Vietnam is anticipated to face a high supply demand gap in 2021 and must import electricty. (Figure 28) In addition, income per capita growth and urbanization also contribute to the growth of electricity demand. Fitch Solutions forecasts that Vietnam's electricity demand per capita will reach 2,500 kWh / year in the next five years, an increase of 32% compared to 2019 (Figure 26).

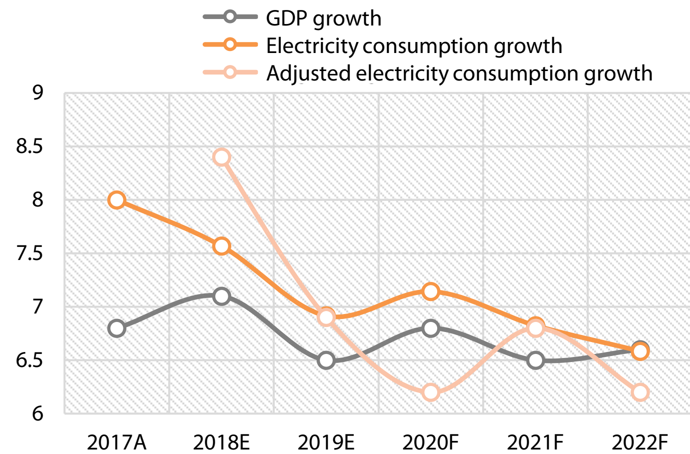
All of these factors contribute to a sustainable demand for electricity consumption in the coming years. This also means that the demand for new construction of power plants will be considerable. Hence, we believe that government will release the attractive policies to support the electricity industry.

Figure 23: Electricity production (million kWh)



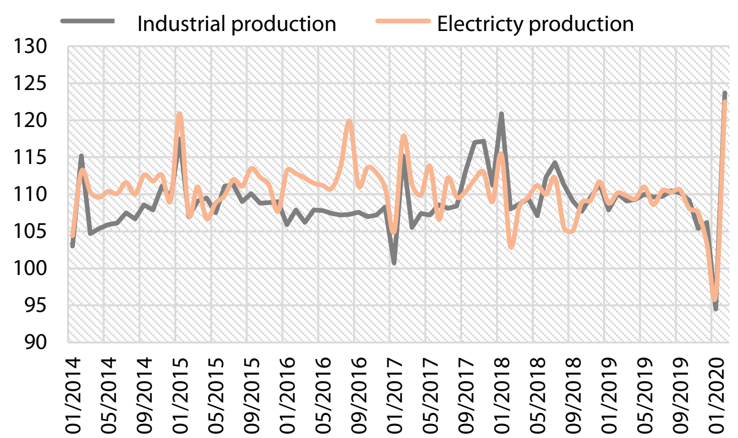
Source: GSO, Rong Viet Securities

Figure 24: Electricity demand forecast before and after COVID-19 breakout (% YoY)



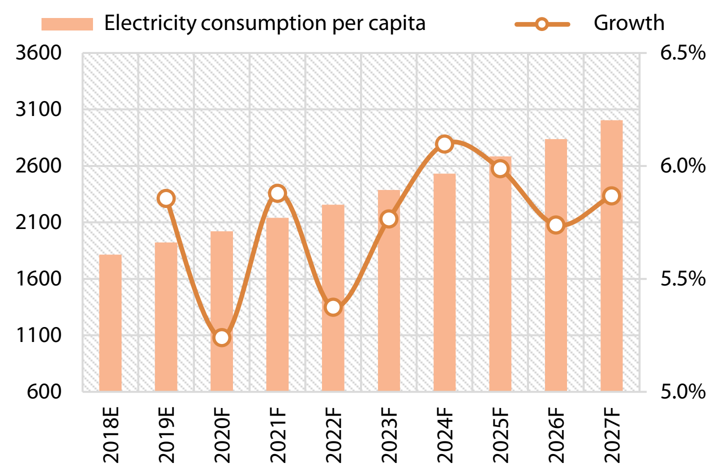
Source: Fitch Solutions, Rong Viet Securities

Figure 25: Industrial production and electricity production indices



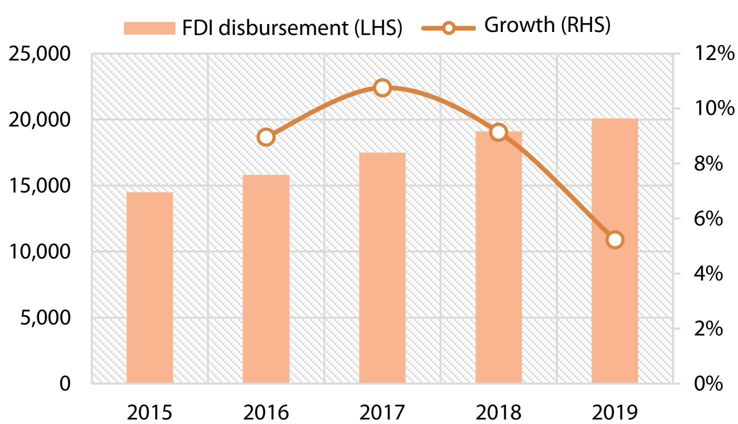
Source: GSO, Rong Viet Securities

Figure 26: Electricity consumption per capita



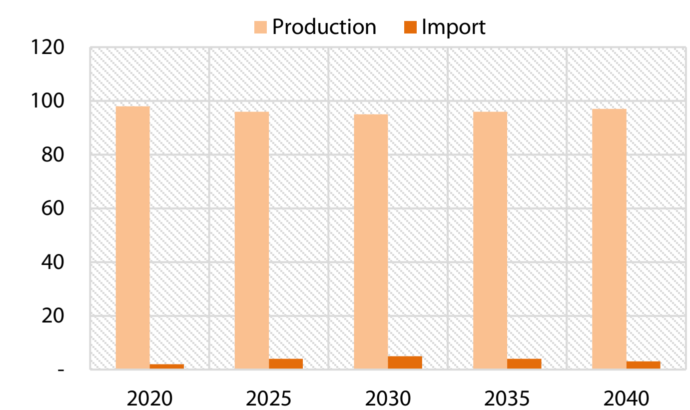
Source: Fitch Solutions, Rong Viet Securities

Figure 27: FDI disbursement (USD million)



Source: GSO, Rong Viet Securities

Figure 28: Production and import portion (%)



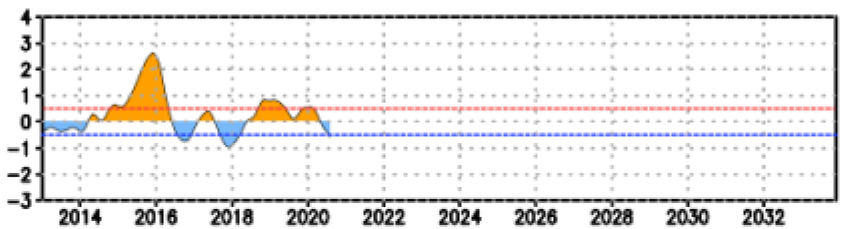
Source: EVN, Rong Viet Securities

La Nina is coming back, 2021 – 2022 will be prosperous phase for the hydropower sector

La Nina is coming back since May 2020 and is set to peak in 2021 and 2022. According to NCEP, the probability that La Nina happens from now to April 2021 is over 60%, higher compared to El Nino and Neutral phenomena. Subsequent to the severe weather in 2019 and early 2020 with droughts, the hydropower segment suffered a decline in volume and revenue terms (Figure 29) (The orange one represents the El Nino phenomenon while the blue one is La Nina).

The coming back of La Nina is going to benefit hydropower plants in the near term, particularly modest hydropower plants, which do not have reservoir. Hence, we estimate that the hydropower sector will run at full capacity from 2H2020.

Figure 29: ENSO historical movements



Source: Rong Viet Securities

In terms of long-term prospect, hydropower is expected to increase marginally by 1.3% in capacity terms over the coming decade due to the completely weather dependence according to Fitch Solution. The hydro potential has been fully deployed presently, and is expected not be able to expand. However, the segment is set to maintain its contribution in the total national capacity (Figure 30).

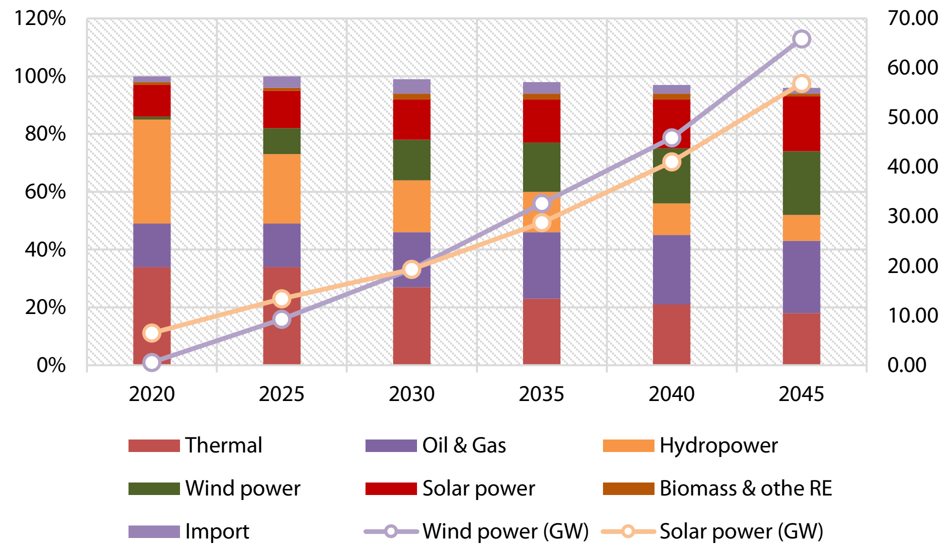
The 8th Electricity Master Plan place an emphasis on non-hydro renewable energy

Since 2017, MoiT has switched its focus from thermal to renewable energy because of environment and low-cost resources. In its recent proposal for the 8th Master plan, MoiT concentrated on renewable capacity and transmission expansion from now to 2045 (Figure 30). In the near term, Vietnam's power generation mix will be largely dominated by thermal source, but solar and wind power are the main source of growth. More specific, wind power will surge from 0.59 GW to 66 GW with CAGR ranks first with 1,57 and solar power experiencing the same trend from 6.5 GW to 57 GW with CAGR 0.54%. Over the next decade, non-hydro renewable energy will go up roughly fifth times in capacity terms. Hence, supportive policies from the government and huge potential from non-hydropower, offers valuable opportunities for investors.

With regard to solar power, it seems less attractive for those projects cannot meet the deadline by the end of 2020. However, with the Master Plan concentrates on non-hydro renewable energy. We strongly believe that government will soon release another policy to encourage newcomers in order to address electricity short fall. Besides, the next trend is believed to focus on floating and rooftop solar power. Therefore, companies that possess large areas of rooftop or lake will have a chance to benefit from this policy.

In terms of the wind power market, it had the same growth story with the solar power in 2019 because of attractive output price stemming from non-hydro renewable energy capacity expansion. On-shore projects will receive 8.5 cents per kWh, near-shore and off-shore projects will enjoy 9.8 cents per kWh. The most important condition is that they will have to COD before 30/11/2020. Numerous proposals have been put in place to extend this deadline from 2021 to 2023 because of the delay caused by COVID-19. In short, there are two difficulties that wind power companies may encounter: (1) the COVID 19 outbreak may slowdown construction; (2) rushing deadlines by November 2021. Hence, such competition completely benefits certain companies (1) that are senior in solar power competition, (2) that can avoid overcapacity zones to operate power plants, (3) that are raising mass funding. Therefore, companies like GEG have a huge potential in the untapped wind power market.

Figure 30: Power capacity portion (LHS) and capaicity growth (RHS) from 2020 to 2045

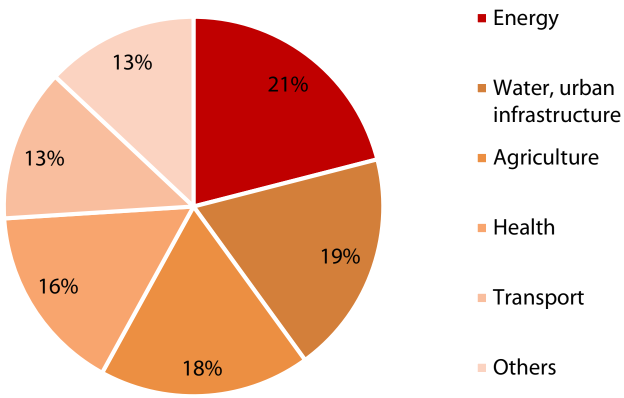


Source: EVN, Rong Viet Securities

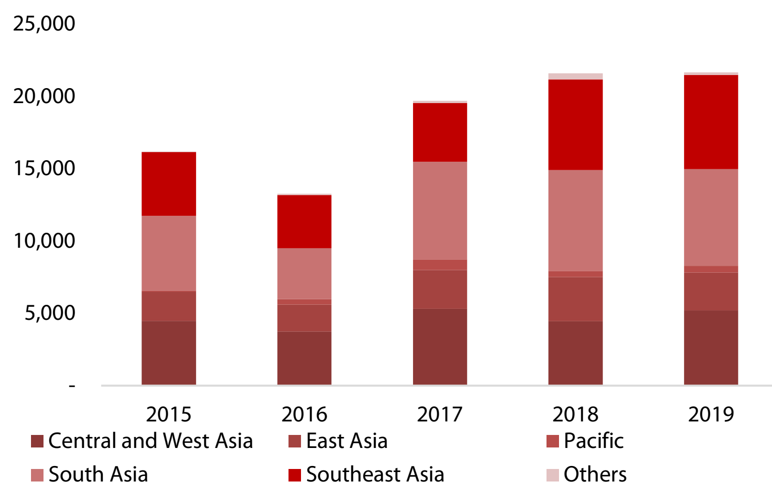
Foreign banks prioritize renewable energy financing

Numerous foreign banks target loan disbursements for renewable energy. According to the ADB's 2019 annual report, it will concentrate on renewable energy for 2019- 2024 loaning out 24% of its disbursements in this sector (Figure 31). To implement the 2030 operational plan, ADB will provide tailored debt and guarantee, products, broaden its currency offerings to improve project outcomes.

Figure 31: ADB's capital and resouces commitment by segment (LHS) and by area (RHS, US million)



Source: Rong Viet Securities



Source: Rong Viet Securities

According to World Bank Renewable Energy Fund, WB commits to help countries manage trade-offs between financial and environmental costs. It is currently committing 21.4 trillion USD in grant and 27.5 trillion USD in credit for its Strategic Climate Fund.

All these implies that there is an abundant funding with lower cost for investors in the renewable energy sphere. It also means that there is a substantial opportunity for current renewable energy refinance to approach low cost funding. Renewable power companies in Vietnam can seize this opportunity.

Unit: VND bn

PL	FY2018E	FY2019E	FY2020E	FY2021E
Revenue	559	1,159	1,350	1,710
COGS	253	510	581	713
Gross profit	306	650	769	997
Selling expenses	1	1	1	1
G&A expenses	77	111	122	137
Financial income	19	24	30	18
Financial expense	41	258	358	443
Other income/loss	0	0	0	-1
Gain/(loss) from joint ventures	0	0	0	0
PBT	207	304	318	433
Tax expense	20	13	12	22
Minority interests	43	40	40	54
PAT	145	251	266	357
EBIT	229	538	646	859
EBITDA	326	823	1,074	1,381

FINANCIAL RATIOS	FY2018E	FY2019E	FY2020E	FY2021E
Growth				%
Revenue	4	107	16	27
EBITDA	0	152	30	29
EBIT	-7	135	20	33
PAT	-6	73	6	34
Total assets	163	55	34	33
Total equity	83	2	5	11
Profitability				
Gross margin	55	56	57	58
EBITDA margin	58	71	80	81
EBIT margin	41	46	48	50
Net margin	26	22	20	21
ROA	3	4	3	3
ROCE	6	9	9	9
ROE				
Efficiency				*times*
Receivables turnover	2.3	1.7	2.3	2.3
Inventories turnover	10.3	1.6	3.0	3.5
Payables turnover	0.6	2.0	1.6	1.6
Liquidity				*times*
Current	2.4	1.5	0.5	0.6
Quick	2.3	1.1	0.4	0.5
Finance Structure				%
Total debt/equity	30.2	173.4	425.8	570.1
ST debt/equity	9.5	48.6	140.6	119.0
LT debt/equity	20.7	124.8	285.2	451.1

Unit: VND bn

BS	FY2018	FY2019	FY2020	FY2021
Cash and cash equivalents	609	105	154	84
Short-term investments	237	12	13	15
Accounts receivable	246	688	592	750
Inventories	25	314	193	201
Other current assets (inc. non-trade receivables)	98	71	74	78
Property, plant & equipment	3,087	5,503	7,984	10,844
Acquired intangible assets (inc. Goodwill)	14	25	23	20
Investment in affiliates	0	3	0	0
Other non-current assets	29	42	44	47
Total assets	**4,361**	**6,763**	**9,077**	**12,039**
Accounts payable	401	251	374	460
Short-term borrowings	106	554	1,687	1,581
Long-term borrowings	232	1,420	3,422	5,993
Other non-current liabilities	21	32	38	47
Bonus and Welfare fund	1	1	1	1
Technology-science development fund	1,837	3,936	5,198	7,605
Total liabilities	**2,598**	**6,193**	**10,719**	**15,686**
Treasury stock (enter as -)	145	165	416	753
Other comprehensive income / (loss)	61	79	87	99
Investment and Development Fund	2,177	2,321	3,254	3,602
Total equity	**2,383**	**2,565**	**3,757**	**4,454**
Minority Interest	**231**	**258**	**298**	**352**

Unit: VND bn

CF	FY2018E	FY2019E	FY2020E	FY2021E
Profit before tax	207	304	318	433
-Depreciation	98	285	428	522
-Adjustments	21	222	(30)	(18)
+/- Working capital	(185)	(1,146)	325	(107)
Net Operating CFs	**140**	**(336)**	**1,041**	**831**
+/- Fixed Asset	(1,810)	(2,665)	(2,909)	(3,381)
+/- Deposit, equity investment	(244)	237	239	(1)
Interest, dividend, cash profit received	14	23	30	18
Net Investing CFs	**(2,040)**	**(2,405)**	**(2,640)**	**(3,365)**
+/- Capital	1,050	270,260	471,064	-
+/- Debt	1,292	2,368	1,212	2,465
Dividend paid & other	(151)	(270,157)	(470,593)	-
Net Financing CFs	**2,191**	**2,471**	**1,683**	**2,465**
Beginning cash & equivalents	**223**	**609**	**105**	**154**
+/- cash & equivalents	291	(269)	84	(69)
Ending cash & equivalents	**609**	**105**	**154**	**84**

Initial Coverage

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Ratings	BUY	ACCUMULATE	REDUCE	SELL
Total Return including Dividends in 12-month horizon	>20%	5% to 20%	-20% to -5%	<-20%

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