

PV Power (POW)

Positive outlook in the long term

July 12, 2021

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| The consumption demand and growth of the power industry in Vietnam is still very large | Vietnam's average growth of electricity output from 2016 to 2020 is 6.7%, and should grow to 8.6% in 2021–2025. In the latter period, the demand for electricity will also increase, while the Government has to import electricity from China and Laos. High demand amid insufficient supply is a driving force for power plants. |
|--|--|
| Growth will return in 2022 when the majority of large gas power plants have completed their overhauls in 2021 | PetroVietnam Power (POW) has to temporarily close Ca Mau 1, Vung Ang 1 (unit 2), and Hua Na power plants for an overhaul, and pause the operation of Nhon Trach 1 &2, and Ca Mau 2 plants for maintenance. Therefore, the production output in 2021 is estimated at 19.45 billion kWh (+1% YoY). However, we estimate POW's 2022 output will reach 22.2 billion kWh (+14 YoY) when the repaired units come into stable operation with high efficiency. |
| Nhon Trach 3 & 4 LNG gas power plant projects will drive the growth | LNG Nhon Trach 3 & 4 power projects whose total investment of USD1.4 billion are nationally important. Each plant would operate in 6,000 hours annually, and provide 4.5 billion kWh to the national power system. It is expected that Nhon Trach 3 will go into operation in 4Q23, and Nhon Trach 4 will operate in 2Q24, raising the total power generation capacity of POW to 5,705 MW, up 36%. |
| BUY recommendation with a target price of VND13,800 apiece | All things considered, we recommend to BUY POW shares with the target price of VND13,800 per share in 2021, 18% higher than the closing price on July 5, 2021. |

Buy initial

P/B (x)

ROE (%)

Dividend yield (%)

| Target price VND1 | .3,800 | Trading data |
|--|--------------------------|--------------------------|
| | , | Free float (%) |
| Upside/downside | 18 % | 3M avg. trading |
| Current price (July 5, 2021) | VND11.700 | Foreign owners |
| Consensus target price | VND15.000 | State holder (Pe |
| Market cap (VNDbn) | 27,000 | |
| Forecast earnings & valuation | | |
| Forecast earnings & valuation | | |
| FY-end | 2019A | 2020A |
| | 2019A 35.374 | 2020A 29.731 |
| FY-end | | |
| FY-end Revenue (VNDbn) | 35.374 | 29.731 |
| FY-end Revenue (VNDbn) EBIT (VNDbn) | 35.374 3.116 | 29.731 2.855 |
| FY-end Revenue (VNDbn) EBIT (VNDbn) Post-tax earnings (VNDbn) | 35.374 3.116 2.854 | 29.731 2.855 2.662 |

9.3

3%

9,7%

8.7

2%

8,5%

| Trading data | |
|-----------------------------------|--------|
| Free float (%) | 20% |
| 3M avg. trading value (VNDbn) | 174,89 |
| Foreign ownership (%) | 3,16% |
| State holder (PetroVietnam – PVN) | 79,94% |

2021F

29.931

3.091

2.707

1,156

1,7%

10.1

8.1

2%

8,1%

2022F

34.079

3.799

3.323

1,419 22,8%

8.2

7.5

2%

9,1%

| (%) | 1M | 3M | 6M | 12M |
|----------|----|-----|------|-----|
| POW | 7% | -8% | -13% | 19% |
| VN-Index | 7% | 15% | 18% | 58% |



Source: Bloomberg, KB Securities Vietnam

I. Overview

Development history



POW is formerly a single shareholder limited liability company wholly owned by Vietnam Oil & Gas Group (PetroVietnam – PVN). POW was established in 2007, and officially transformed into a PVN's joint stock company July 1, 2018. After 14 years of operation, POW is currently operating seven power plants including four gas power plants, two hydro power plants and one thermal power plant with a total installed capacity of 4,205 MW, accounting for more than 6% of the total capacity of Vietnam power system in 2020. The actual capacity of PV Power in 2020 will reach 19.16 billion kWh, or 8% of the total electricity output of the country. POW is the country's largest gas thermal power producer with the capacity of gas power reaching 2,700 MW or 64% of total capacity. The rest is 1200 MW (29%) coal-fired power and 305 MW (7%) hydroelectricity.

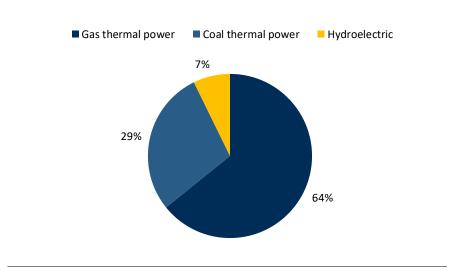
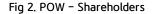
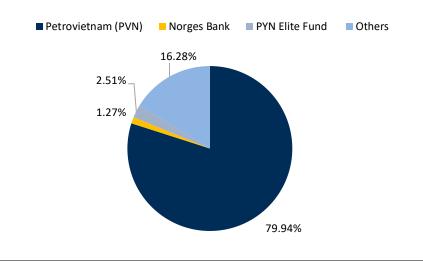


Fig 1. POW - Power generating types

Source: PV Power, KB Securities Vietnam

PVN is currently the largest shareholder of POW with a 79.94% stake. Following are the two foreign shareholders, Norges Bank and PYN Elite Fund, holding 1.27% and 2.51% of POW's charter capital, respectively.





Source: PV Power, KB Securities Vietnam

POW has a capacity of 4,205 MW with an annual power output of about 19 billion kWh

POW owns seven largest power plants with a total capacity of 4,205 MW in the Southern key economic zone, including four gas power plants generating 64% power in the South. The South accounts for nearly 49% of the country's total electricity consumption, and as of 2020, the total installed electricity capacity in the area is only about 40% of the country's electricity capacity located in this area. Therefore, Southern existing plants, including POW's gas plants, are always mobilized with high frequency. Besides, in POW's power plant portfolio, coal-fired power and hydroelectricity also contribute a significant part in the total power output of the company. Annually, electricity production revenue and electricity output reach about VND28,000 billion and 19 billion kWh.

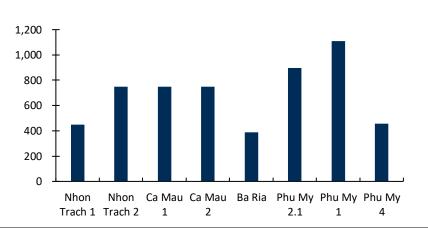


Fig 3. Southern gas power plants - Production capacity (MW)

Source: KB Securities Vietnam

II. Business operation

POW's main business consists of two segments: power generation and ancillary services:

1) Power generation is the core business, accounting for more than 90% of annual revenue and profit. POW's plants have a total capacity of 4,205 MW, the gas power segment accounts for the highest proportion of 64%, the rest includes 29% coal-fired power and 7% hydroelectricity.

2) POW's ancillary services include technical service activities. Technical service activities are carried out by two subsidiaries where POW holds 51%, namely PV Power Services (HNX: PPS) and PV Machinery – Technology (Upcom: PVM). These companies conduct technical inspection and analysis, power plant operation and repair, and perform advanced plant operation solution consulting services. However, POW divested all of its capital from PVM 1Q21 and recorded VND358 billion in pre-tax profit in its parent's financial statements, POW continued to consolidate PVM and delayed the recording of this divestment profit in the consolidated financial statements for 1Q21.

Management approved to establish PV Power Renewable Energy JSC with a holding capital of 51% in 3Q20. The subsidiary would research, invest, develop, build, operate and exploit clean energy and renewable energy projects.

POW owns four plants, namely Nhon Trach 1&2, Ca Mau 1&2 with a total capacity of 2,700 MW.

Genco3 (PGV) owns four plants: Phu My 2.1, 1, 4 and Ba Ria with a total capacity of 2,850 MW. These plants play an important role in providing stable energy for economic development in the South.

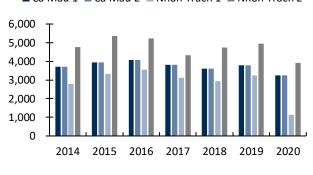
Gas thermal power

POW's gas-fired thermal power plants are Ca Mau 1&2 and Nhon Trach 1&2 with a total capacity of 2,700 MW. All plants use combined cycle technology, so they can take advantage of the heat excess through the heat recovery boiler. POW's development focus is on gas-fired power plants and this is also the type that generates the largest revenue for the company.

Ca Mau 1&2 power plants with a total capacity of 2x750 MW have operated since 2008, using modern technology and machinery manufactured by Siemens Group in Germany. The configuration of each plant is 2-2-3-1 (2 gas turbines of the F generation, 2 heat recovery furnaces of horizontal type, natural circulation, 3 pressure levels with re-drying, and 1 steam turbine). The main fuel supplied to the plant is natural gas taken from the PM3-CAA gas system and Lot 46 Cai Nuoc each year. These two plants use an average of 1.4 billion m³ of gas, and the backup fuel is diesel oil. Ca Mau 1&2 plants participate in a special power purchase agreement with Electricity of Vietnam (EVN) since 2008. The contract fixed the cost of capacity, so all risks of input gas prices and operation are transferred to the selling price of electricity to EVN. However, in 2021, EVN requires POW to participate in the competitive electricity market for Ca Mau 1 & 2 projects, the negotiation process has agreed on 3/5 issues: 1) Qc mobilization rate is 85%; 2) the conversion rate is VND22,900; and 3) Tmax according to the circular stipulated by Ca Mau project is 6000 hours. The two issues that two sides have not reached an agreement are the time to apply the new power sale contract and the O&M cost. The negotiation process is expected to be completed in 2Q21. Besides, both Ca Mau 1 & 2 plants's depreciation period ended in 2019.

Nhon Trach 1 (450 MW) and Nhon Trach 2 (750 MW) power plants were put into operation in 2009 and 2011. Both plants use technology from Siemens Germany, with configuration 2-2-1. Nhon Trach 2 alone is operated automatically on SPPA-T3000 control system. The input fuel is natural gas from Nam Con Son and Cuu Long basins with average annual gas consumption for Nhon Trach 1 and Nhon Trach 2 of 530 and 860 million m³ respectively. However, the gas output of Nam Con Son and Cuu Long basins have been gradually exhausted, the additional gas source for the Southeast region will be taken from Sao Vang Dai Nguyet field with an additional gas output of 1.5 billion m³/year. The gas prices in the PPA power purchase agreement is determined by the formula 46% MFO + transportation fee, the gas price is anchored to the oil price, so when the oil prices increase, the gas prices also rise, leading to the selling price of electricity on the competitive market not be prioritized because power trading companies on CGM will prioritize mobilizing prices from low to high. Nhon Trach 1 and Nhon Trach 2 factories are expected to be fully depreciated in 2021 and 2024.

Fig 4. POW - Power output for sale (kWh)



■ Ca Mau 1 ■ Ca Mau 2 ■ Nhon Trach 1 ■ Nhon Trach 2

Source: PV Power, KB Securities Vietnam

Source: PV Power, KB Securities Vietnam

2014

2015

2016

2017

2018

2019

2020

Coal-fired power

PVN hired PV Power Ha Tinh to manage and operate Vung Ang 1 power plant in 2015, and handed over Vung Ang 1 to POW in 2015. Vung Ang 1 is one of the key projects in the national power system with a total capacity of 1,200 MW. It is connected to the 500 kV North-South power transmission line, and uses coal-fired direct injection technology, and HFO (used when starting and burning when the load is low) with high efficiency. POW signed a contract to buy and sell 5a coal with Vinacomin with a total volume of 3 million tons +/-5%, and is licensed to actively import mixed coal to ensure the source of raw materials for production. The contract selling price of Vung Ang 1 power plant is temporarily calculated based on the total approved investment, not calculated according to the final settlement value of the project investment capital. This causes POW to be withheld by EVN from selling electricity. It is expected that in 2021, in addition to the effective operation of Vung Ang 1, POW will accelerate the implementation of electricity price negotiations after the final settlement price of the project investment is approved to optimize the revenue source from Vung Ang 1. Vung Ang 1 plant contributed an average of 19% in 2015-2018, 25.6% in 2019, and 34.1% of POW's total electricity output in 2020.

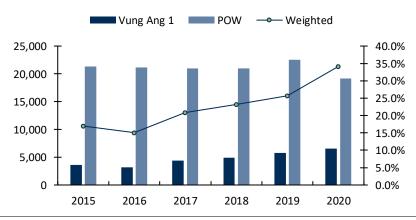


Fig 6. POW - Vung Ang coal-fired power output (billion kWh - %)

Fig 5. POW – Consumed gas volume (million m³)

1200

1000

800

600 400

200

0

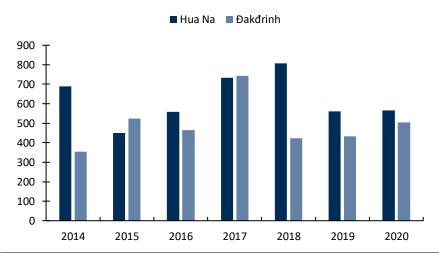
Ca Mau 1 Ca Mau 2 Nhon Trach 1 Nhon Trach 2

Source: PV Power, KB Securities Vietnam

Hydropower

POW owns two hydropower plants, Hua Na and Dakdrinh with a capacity of 180 MW and 125 MW, respectively. Hua Na has been in operation since 2013, and Dakdrinh has operated since 2014. Both of them signed power purchase agreements with EVN.





Source: PV Power, KB Securities Vietnam

Table 8. POW - Power plants

| Туре | Wattage | Total investment (bn VND) | Investment rate (bn/MW) | Operation | Tmax | Ownership |
|---------|------------------|---|--|---|---|--|
| | 750 | 6.571 | 8,76 | 2008 | 6000 | 100% |
| Gas — | 750 | 6.153 | 8,2 | 2009 | 6000 | 100% |
| | 450 | 6.344 | 14,1 | 2009 | 5556 | 100% |
| | 750 | 11.448 | 15,26 | 2011 | 6000 | 59% |
| Hydro — | 180 | 7.092 | 39,4 | 2013 | 1000 | 84.14% |
| Tydro | 125 | 5.921 | 47,37 | 2014 | 1000 | 95.27% |
| Coal | 1200 | 28.739 | 23,95 | 2015 | 6500 | 100% |
| | Gas — Hydro — | Gas 750 Gas 450 750 180 Hydro 125 | Type Wattage VND) Gas 750 6.571 450 6.344 750 11.448 Hydro 180 7.092 125 5.921 | Type Wattage VND) (bn/MW) Gas 750 6.571 8.76 450 6.153 8.2 450 6.344 14.1 750 11.448 15,26 Hydro 180 7.092 39,4 125 5.921 47,37 | Type Wattage VND) (bn/MW) Operation Gas 750 6.571 8.76 2008 450 6.153 8.2 2009 750 6.344 14,1 2009 750 11.448 15,26 2011 Hydro 180 7.092 39,4 2013 125 5.921 47,37 2014 | Type Wattage VND) (bn/MW) Operation Tmax Gas 750 6.571 8,76 2008 6000 450 6.153 8,2 2009 6000 450 6.344 14,1 2009 5556 750 11.448 15,26 2011 6000 Hydro 180 7.092 39,4 2013 1000 |

Source: PV Power, KB Securities Vietnam

III. Business performance

| POW's 2020 earnings are VND2,662 billion on revenue of VND29,731 billion | The Coronavirus outbreak in 2020 and its prolonged effects hit hard on domestic production, thereby reducing the growth of electricity consumption demand. In addition, the supply of the national power system increased significantly because renewable energy power projects were put into operation (the capacity of solar energy projects by the end of 2020 reached 16,500 MW), affecting the mobilization of power output of POW's power plants. POW's 2020 earnings are VND2,662 billion (~6.7% YoY) on revenue of VND29,731 billion (~10.9% YoY). Gross profit margin reached 15.4%, up 1% compared to 2019. General and administrative expenses increased to 3.9% in 2020 compared to 3.3% in 2019 due to lower revenue. |
|--|--|
| 1Q21 consolidated profit reached VND566 billion on revenue of VND7,661 billion | POW's 1Q21 net revenue reached VND7,661 billion (-4% YoY), financial expenses decreased by 61% YoY to only VND158 billion, (mainly a decrease of VND100 billion in interest expense and VND130 billion in unrealized exchange rate loss). Selling and administrative expenses both increased over the same period, but profit after tax reached VND566 billion (+12% YoY) as abundant water reserve led to a high increase in power output. The average electricity purchase prices in 1Q21 were also higher than the same period last year. |
| Total assets tend to decrease due to annual depreciation of fixed assets | Fixed assets and short-term receivables account for the largest proportions, 64% and 13.3% respectively. POW's asset trend will continue to decrease due to the annual depreciation of fixed assets. Total assets as of December 31, 2020 reached VND54,050 billion, down VND1,645 billion, equivalent to 3% compared to December 31, 2019. The reduction mostly comes from fixed assets. |
| Debt decreases rapidly, making the financial structure healthier | With the power plants coming into stable operation and the long-term repayment schedule over the years, POW's capital structure has become healthier, financial leverage (A/E) has decreased gradually over the years, from 2.8 in 2014 to only 1.73 in 2020. The proportion of debt to pay interest decreased from 57.1% in 2014 to 28.4% in 2020. |
| POW successfully divested 19.93 million PV Machino shares (equivalent to 51.58% of outstanding shares) through trading on the exchange | POW successfully sold all 19.93 million PVM shares by order matching method on Upcom between March 17 and March 19, 2021. With the average divestment price of VND27,470/share and the book value recorded in the parent company's financial statements of about VND 9,500/share, it is estimated that POW will record a pre-tax profit of VND358.5 billion in 2021. |

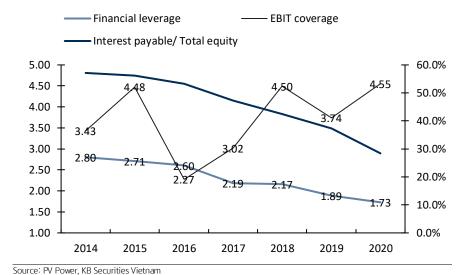
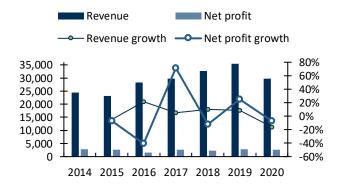


Fig 9. POW - Financial leverage and ability to pay interest

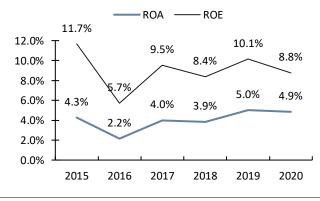


Fig 10. POW - Earnings and revenue



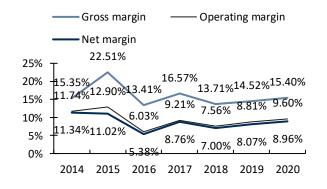
Source: PV Power, KB Securities Vietnam

Fig 12. POW - ROE and ROE



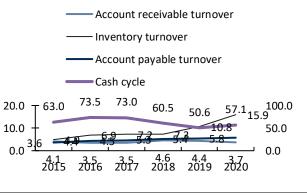
Source: PV Power, KB Securities Vietnam

Fig 11. POW - Financial indicators



Source: PV Power, KB Securities Vietnam

Fig 13. POW - Rotation indicators



Source: PV Power, KB Securities Vietnam

IV. Financial investment

The consumption demand and growth of the electricity industry in Vietnam is still very large

Vietnam is a developing country, with an average GDP growth rate of 6.6% in the period 2014–2019. In 2020 alone, the GDP growth rate only reached 2.91% due to the Covid–19 pandemic, but Vietnam is one of the few countries with positive growth. According to the forecast of the Asian Development Bank (ADB), Vietnam's economic growth is forecast to recover to 6.7% in 2021, and increase to 7% in 2022, so power demand in Vietnam in the short term and long term is big and grow quickly. On average, in the period 2014–2020, electricity consumption will grow by an average of 7.8%/year. In the first five months of 2021, despite pandemic, sold electricity volume still hit 90.51 billion kWh, up 8.51% YoY.

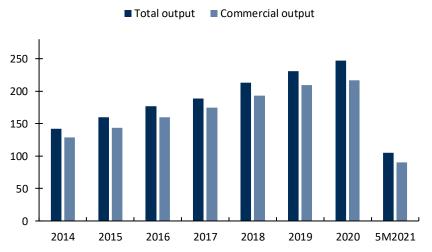
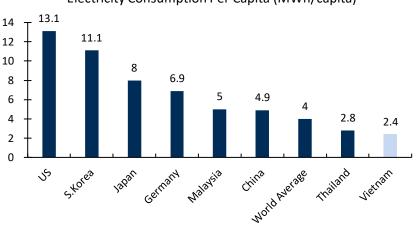


Fig 14. POW - Power output for manufacturing and sale

Source: PV Power, KB Securities Vietnam

Vietnam's per capita electricity consumption in 2018 reached 2.4 MWh/person, which is quite low compared to developed countries in the world such as the US 13.1 MWh/person, South Korea 11.1 MWh/person, or other regional countries like Malaysia 5 MWh/person and Thailand 2.8 MWh/person and the world average 4 MWh/person.

Fig 25. Global - Electricity consumption per capita in 2018 (MWh/person)



Electricity Consumption Per Capita (MWh/capita)

By the end of 2020, the total installed capacity of the national power system was 69,300 MW. The current power supply system generally ensures the supply of electricity for the current load demand. Although the total capacity of the power source is still quite large compared to the load demand, uncertain renewable energy sources account for a high proportion. In 2020, solar and wind power sources had a total capacity of 17,430 MW, so over 25% of total power capacity will be uncertain sources (wind and solar) that depend heavily on the weather. Hydropower sources had a total capacity of over 20,790 MW, accounting for 30% which also depends on water conditions each year. Therefore, an important and indispensable power supply is still coal and gas thermal power, so a company like POW that owns a thermal power plant portfolio of up to 93% will benefit.

Nhon Trach 3 & 4 LNG power projects (USD1.4 billion in investment capital) with a scale of 2x750 MW and a 1–1–1 combined cycle gas turbine configuration are important. The equity structure consists of 25%, equivalent to VND8,000 billion. the rest of loan capital includes ICA loans and commercial loans in VND, equivalent to VND24,000 billion. POW should accelerate to solve important issues related to land transfer from local authorities, negotiation of power purchase contract with EVN and drafting gas sale agreement (GSA) before 2Q21. There are 18 bidding packages, 8 packages have been selected, the winning value is reduced by 27% compared to the package price, the company is choosing a contractor for land clearing, EPC contractor and management supervision contractor, which should be done in July 2021.

Each plant would operate in 6,000 hours annually, and provide 4.5 billion kWh to the national power system. It is expected that Nhon Trach 3 will go into operation in 4Q23, and Nhon Trach 4 will operate in 2Q24, raising the total power generation capacity of POW to 5,705 MW, up 36%.

Power depends on fixed power sources (coal and gas)

Nhon Trach 3 & 4 LNG gas power plants are the driving growth force

Source: International Energy Agency, KB Securities Vietnam

Growth will return in 2022 when the majority of large gas power plants have completed their overhauls in 2021

Weather risks

In this year, POW has to temporarily close Ca Mau 1, Vung Ang 1 (unit 2), and Hua Na power plants for an overhaul, and pause the operation of Nhon Trach 1 &2, and Ca Mau 2 plants for maintenance. Therefore, the production output in 2021 is estimated at 19.45 billion kWh (+1% YoY). However, we estimate POW's 2022 output will reach 22.2 billion kWh (+14 YoY) when the repaired units come into stable operation with high efficiency.

V. Risks

The national dispatching system (A0) usually prioritizes mobilizing electricity from hydropower plants first because the production cost of hydroelectricity is the cheapest among the power plants. Therefore, in the months of the rainy season, which usually lasts from July to October every year or may last longer if the La Nina occurs, the mobilized power output of thermal power plants is also lower than that in the remaining months of the year. Therefore, thermal power plants will carry out repair and maintenance of machinery to ensure operation in the 'low season'.

In 2020, La Nina from the middle of the year and the Covid–19 pandemic lowered the demand for electricity throughout the system. Hydropower is prioritized for mobilization due to its low cost, while other types of power generation were less mobilized (including POW's thermal power plants with 93% of capacity). According to the International Research Institute for Climate and Society, the weather in 1H21 will be in the neutral phase with a probability of nearly 80%. According to this agency, the probability of La Nina will increase gradually from 30–50% in 2H21. Given this forecast and the rainy season, the mobilized output from hydroelectric power plants will increase, reducing electricity prices in the competitive electricity market and lower the need to mobilize electricity from thermal power plants, including those of POW.

However, with the increasing demand for electricity throughout the system, using electricity from hydroelectricity will not be able to provide all, but will have to be combined with thermal power plants with advanced technology in the system. There are gas turbines and coal-fired power plants of POW, so the risk of weather will also be greatly reduced.

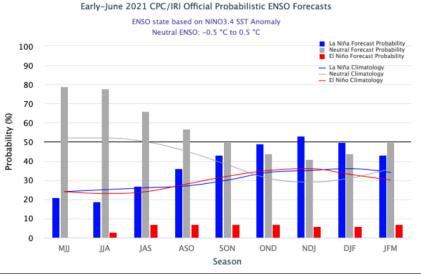


Fig 36. Probability of weather patterns

Source: International Research Institute for Climate and Society, KB Securities Vietnam

Unstable input material supply risks

With a thermal power plant portfolio accounting for 93% of POW's total capacity, it is important to be fully supplied with input material needs because restarting the furnace is expensive and takes a long time. The lack of input materials will force power plants to only operate in moderation with low efficiency or worse, have to pause the furnaces, which adds to the startup costs of the plants. However, at present, both the current coal and gas supplies for POW plants are unstable.

The coal used for Vung Ang 1 plant is bran coal grade 5a of Cam Pha – Hon Gai – Vang Danh – Uong Bi supplied by Vinacomin. After many years of exploitation, coal mines are decreasing in output and mining conditions are becoming more and more difficult, plus the increasing demand from coal-fired power plants. Sometimes, coal suppliers cannot provide enough coal to meet the needs of thermal power plants. Therefore, from 2020, coal-fired power plants will have to use coal sources mixed from domestically produced coal and imported coal. However, A0's high mobilization demand for Vung Ang plant is increasing, in addition to coal provided by Vinacomin, POW will actively import the remaining coal to serve production and business needs.

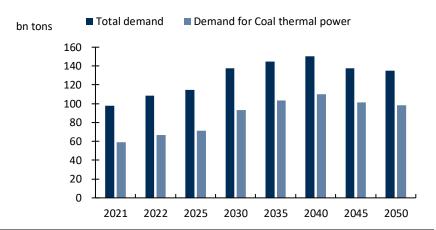


Fig 17. Vietnam – Coal output for total demand and power generation (thousand tons)

Source: National Assembly's Development Draft of Coal Industry, KB Securities Vietnam

For cheap gas sources in the Southeast and Southwest regions, which are increasingly declining. This greatly affects the Qc plan as well as the competitiveness of POW when participating in bids in the electricity market. In addition, the difference in gas prices caused by the lack of agreement on the proportion of Petronas supplementary gas distribution between PVN and EVN on average of VND40 billion/month affected the production operation and efficiency of power plants. Additional gas source from Sao Vang – Dai Nguyet field adds an output of about 1.8 billion m³/year, but high gas prices will affect the ability of plants to bid in the competitive electricity market. Besides, the shortage of gas supply will make plants switch to running on diesel oil with high costs, which will reduce gross profit margin.

The operation of thermal power plants is extremely complicated, requiring synchronous processes and high quality of qualified personnel. There are small incidents that only reduce plant capacity in a short period of time, but there are very large incidents such as the one at Vung Ang 1 thermal power plant that cracked the rotor shaft for more than one year. POW's profit halved from VND2,169 billion in 2015 to VND1,075 billion in 2016.

Exchange rate risksBy the end of 2020, debts in USD were valued about VND2700 billion, down
52.5% compared to 2019. This showed that POW actively minimizes financial
burden along with risks from adverse fluctuations in the exchange rate.
However, in the coming time, POW will invest in Nhon Trach 3 & 4, so it has to
face the risk of debt when investing in foreign currencies, along with fluctuating
exchange rates that also affect input gas prices and business activities.

Power plant operation risks

VI. Valuation

2021F business performance

In 2021, POW has to close some power plants for maintenance and record VND358 billion from divestment from PVM, its net revenue and profit after tax may reach VND29,931 billion (+0, 67% YoY) and VND2,707 billion (+1.7% YoY). Power output for sale should be 19.45 billion kWh (+1% YoY). Business situation will be better in 2022 when POW's power plants complete repairs and come into stable operation.

Table 18. POW - Projected output from different types of power generation

| | 2019 | 2020 | 2021F | 2022F |
|-------------------------------|-----------|-----------|-----------|-----------|
| Revenue from electricity | 33,700.36 | 29,119.70 | 29,329.88 | 33,466.98 |
| Output | 22,525.90 | 19,163.00 | 19,448.23 | 22,201.70 |
| - Gas | 15,762.80 | 11,550.00 | 12,784.13 | 14,143.41 |
| - Coal | 5,770.50 | 6,542.00 | 5,694.00 | 7,008.00 |
| - Hydro | 992.60 | 1,071.00 | 970.10 | 1,050,29 |
| Cost of raw materials | 15,892.87 | 11,706.40 | 17,147.30 | 18,137.17 |
| Average selling price | 1,496.07 | 1,519.58 | 1,508.10 | 1,507.41 |
| Average cost of raw materials | 705.54 | 610.89 | 881.69 | 816.93 |

Source: KB Securities Vietnam

BUY recommendation with valuation of VND13,800/share, 18% higher than the closing price on July 5, 2021

We conclude that POW is one of the largest power developers in Vietnam, and Nhon Trach 3 and Nhon Trach 4 power plants will drive the growth for a long term.

We use the average of two valuation methods: FCFF and P/E to find the fair value of POW. We recommend to BUY POW shares with a target price of VND13,800 apiece, 18% upside compared to the closing price on July 5, 2021:

- According to P/E, we value POW at a reasonable P/E of 10 times, equivalent to a price of VND11,500/share

- According to FCFF, we value POW at VND16,100/share.

2021F

58,124

17,357

7,575

789

2022F

73,590

16,103

5,111

789

POW - Financials and forecast

| Income | Statement |
|--------|-----------|
| | |

| (VND billion) | 2018A | 2019A | 2020A | 2021F | 2022F |
|---|---------|---------|---------|---------|---------|
| Net sales | 32,662 | 35,374 | 29,732 | 29,931 | 34,079 |
| Cost of sales | -28,186 | -30,237 | -25,152 | -25,764 | -28,811 |
| Gross Profit | 4,477 | 5,138 | 4,580 | 4,167 | 5,268 |
| Financial income | 516 | 453 | 440 | 834 | 474 |
| Financial expenses | -1,779 | -1,324 | -999 | -1,038 | -951 |
| of which: interest expenses | -712 | -1,154 | -809 | -799 | -500 |
| Gain/(loss) from joint ventures (from 2015) | 0 | 0 | 0 | 0 | (|
| Selling expenses | -20 | -27 | -35 | -35 | -40 |
| General and admin expenses | -773 | -1,176 | -1,174 | -836 | -952 |
| Operating profit/(loss) | 2,469 | 3,116 | 2,855 | 3,091 | 3,799 |
| Other incomes | 33 | 68 | 30 | 0 | (|
| Other expenses | -11 | -19 | -11 | 0 | (|
| Net other income/(expenses) | 22 | 49 | 20 | 20 | 20 |
| Net accounting profit/(loss) before tax | 2,492 | 3,165 | 2,875 | 3,111 | 3,819 |
| Corporate income tax expenses | -205 | -310 | -212 | -404 | -496 |
| Net profit/(loss) after tax | 2,287 | 2,855 | 2,663 | 2,708 | 3,324 |
| Minority interests | 366 | 345 | 298 | 230 | 266 |
| Attributable to parent company | 1,921 | 2,510 | 2,365 | 2,478 | 3,058 |

| largin ratio | | | | | |
|-------------------------|-------|-------|-------|-------|-------|
| %) | 2018A | 2019A | 2020A | 2021F | 2022F |
| Gross profit margin | 13.7% | 14.5% | 15.4% | 13.9% | 15.5% |
| EBITDA margin | 21.7% | 21.0% | 21.8% | 23.1% | 21.5% |
| EBIT margin | 9.8% | 12.2% | 12.4% | 13.1% | 12.7% |
| Pre-tax profit margin | 7.6% | 8.9% | 9.7% | 10.4% | 11.2% |
| Operating profit margin | 7.6% | 8.8% | 9.6% | 10.3% | 11.1% |
| Net profit margin | 7.0% | 8.1% | 9.0% | 9.0% | 9.8% |

Accounts receivable 7,531 8,714 7,196 7,078 8,059 Inventories 4,187 1,428 1,728 1,770 1,979 LONG-TERM ASSETS 42,860 39,621 37,153 40,766 57,487 Long-term trade receivables 42 3 3 3 3 40,177 28,456 Fixed assets 37,320 34,614 31,535 Long-term incomplete assets 378 251 26.561 217 6.936 Long-term investments 937 983 1,028 1,028 1,028 Goodwill 16 LIABILITIES 31,296 26,186 24,617 37,228 22,784 Current liabilities 17,571 17,064 16,480 16,471 15,883 Trade accounts payable 5,900 4,202 4,649 4,580 4,933 Short-term unrealized revenue 1 1 1 0 0 Short-term borrowings 6,554 9,158 7,019 7,000 7,000 Long-term liabilities 13,725 9,123 6,304 8,146 21,345 Long-term trade payables 0 0 0 0 0 Long-term advances from customers 0 0 0 0 0 Unrealized revenue 0 0 0 0 0 13.304 8.394 7.235 20.434 Long-term borrowings 5.391 OWNER'S EQUITY 26,815 29,509 31,267 33,506 36,361 Paid-in capital 23,419 23,419 23,419 23,419 23,419 Share premium 0 0 0 0 0 Undistributed earnings 859 2,651 4,302 5,947 8,536 Stare budget and other funds 228 228 226 226 226 Minority interests 2,309 2,623 2,729 2,959 3,225

2018A

58,111

15.251

3,185

176

2019A

55,696

16.075

5,083

658

2020A

54,050

16,897

7,070

789

Balance Sheet (VND billion)

TOTAL ASSETS

Key ratios

Account Payable Turnover

CURRENT ASSETS

Cash and cash equivalents

Short-term investments

Cash Flow Statement

| (VND billion) | 2018A | 2019A | 2020A | 2021F | 2022F |
|---|---------|---------|---------|--------|---------|
| Net profit/(loss) before tax | 2,492 | 3,165 | 2,860 | 3,111 | 3,819 |
| Depreciation and amortisation | 3,920 | 3,132 | 2,824 | 3,079 | 3,079 |
| Profit/loss from investing activities | -357 | -306 | -441 | 0 | 0 |
| Interest expense | -1,318 | -1,203 | -893 | -799 | -500 |
| Operating profit/(loss) before changes in Working Capital | 7,524 | 7,884 | 7,624 | 6,990 | 7,399 |
| (Increase)/decrease in receivables | -1,201 | -1,535 | 1,288 | 118 | -981 |
| (Increase)/decrease in inventories | -624 | 2,774 | -240 | -42 | -209 |
| Increase/(decrease) in payables | 642 | -2,375 | 707 | 10 | -588 |
| (Increase)/decrease in prepaid expenses | 129 | 215 | -117 | 0 | 0 |
| Net cash inflows/(outflows) from operating activities | 4,996 | 5,323 | 7,908 | 5,834 | 4,430 |
| Purchases of fixed assets and other long term assets | -219 | -187 | -147 | -6,685 | -19,625 |
| Proceeds from disposal of fixed assets | 0 | -4 | 3 | 0 | 0 |
| Loans granted, purchases of debt instruments | -293 | -896 | -601 | 0 | 0 |
| Collection of loans, proceeds from sales of debts instruments | 1,184 | 286 | 520 | 0 | 0 |
| Investments in other entities | 0 | 0 | 0 | 0 | 0 |
| Proceeds from divestment in other entities | 124 | 81 | 0 | 0 | 0 |
| Dividends and interest received | 759 | 298 | 374 | 0 | 0 |
| Net cash inflows/(outflows) from investing activities | 1,555 | -422 | 149 | -6,685 | -19,625 |
| Proceeds from issue of shares | 0 | 2 | 125 | 0 | 0 |
| Payments for share returns and repurchases | 0 | 0 | 0 | 0 | 0 |
| Proceeds from borrowings | 7,103 | 12,947 | 14,186 | 1,825 | 13,199 |
| Repayment of borrowings | -12,387 | -15,201 | -19,358 | 0 | 0 |
| Finance lease principal payments | 0 | 0 | 0 | 0 | 0 |
| Dividends paid | -349 | -751 | -1,025 | -468 | -468 |
| Interests, dividends, profits received | 0 | 0 | 0 | 0 | 0 |
| Net cash inflows/(outflows) from financing activities | -5,633 | -3,003 | -6,072 | 1,356 | 12,731 |
| Net increase in cash and cash equivalents | 919 | 1,898 | 1,986 | 506 | -2,465 |
| Cash and cash equivalents at the beginning of period | 2,266 | 3,185 | 5,083 | 7,070 | 7,575 |
| Cash and cash equivalents at the end of period | 3,185 | 5,083 | 7,070 | 7,575 | 5,111 |

| (,%,VND) | 2018A | 2019A | 2020A | 2021F | 2022F |
|--------------------------------|--------|-------|--------|--------|--------|
| fultiple | | | | | |
| P/E | 12.0 | 9.6 | 10.3 | 10.1 | 8.2 |
| P/E diluted | 12.0 | 9.6 | 10.3 | 10.1 | 8.5 |
| P/B | 10.2 | 9.3 | 8.8 | 8.2 | 7.5 |
| P/S | 0.8 | 0.8 | 0.9 | 0.9 | 0.8 |
| P/Tangible Book | 10.2 | 9.3 | 8.8 | 8.2 | 7.6 |
| P/Cash Flow | 5.5 | 5.1 | 3.5 | 4.7 | 6.2 |
| EV/EBITDA | 6.5 | 5.7 | 5.5 | 5.3 | 7.2 |
| EV/EBIT | 14.5 | 9.8 | 9.6 | 9.5 | 12.3 |
| perating performance | | | | | |
| ROE | 8.4% | 10.1% | 8.8% | 8.4% | 9.5% |
| ROA | 3.2% | 4.4% | 4.3% | 4.4% | 4.6% |
| ROIC | 6.5% | 9.2% | 8.1% | 8.6% | 7.7% |
| inancial structure | | | | | |
| Cash Ratio | 19.1% | 33.6% | 47.7% | 50.8% | 37.1% |
| Quick Ratio | 62.0% | 84.7% | 91.3% | 93.8% | 87.9% |
| Current Ratio | 86.8% | 94.2% | 102.5% | 105.4% | 101.4% |
| LT Debt/Equity | 49.6% | 30.9% | 20.2% | 24.3% | 58.7% |
| LT Debt/Total Assets | 22.9% | 15.1% | 10.0% | 12.4% | 27.8% |
| Debt/Equity | 24.4% | 31.0% | 22.4% | 20.9% | 19.3% |
| Debt/Total Assets | 11.3% | 16.4% | 13.0% | 12.0% | 9.5% |
| ST Liabilities/Equity | 65.5% | 57.8% | 52.7% | 49.2% | 43.7% |
| ST Liabilities/Total Assets | 30.2% | 30.6% | 30.5% | 28.3% | 21.6% |
| Total Liabilities/Equity | 116.7% | 88.7% | 72.9% | 73.5% | 102.4% |
| Total Liabilities/Total Assets | 53.9% | 47.0% | 42.2% | 42.4% | 50.6% |
| ctivity ratios | | | | | |
| Account Receivable Turnover | 4.6 | 4.4 | 3.7 | 4.2 | 4.5 |
| Inventory Turnover | 7.3 | 10.8 | 15.9 | 14.7 | 15.4 |

5.3

5.4

Source: PV Power, KB Securities Vietnam

5.6

6.1

5.8

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Investment ratings & definitions

Investment Ratings for Stocks

| (based on expectations for absolute price gains over the next 6 months) | | |
|---|--------------|--------------|
| Buy: | Hold: | Sell: |
| +15% or more | +15% to -15% | -15% or more |
| | | |

Investment Ratings for Sectors

| (based on expectations for absolute price gains over the next 6 months) | | | |
|---|---------------------------------|-------------------------|--|
| Positive: | Neutral: | Negative: | |
| Outperform the market | Perform in line with the market | Underperform the market | |

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