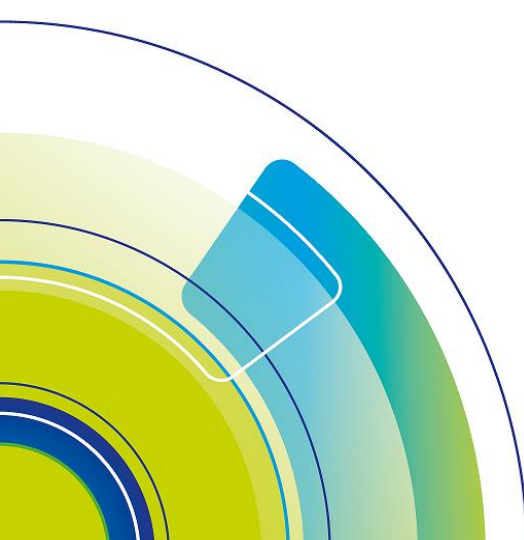




# Initiation **POW - BUY**

**Friday, January 27, 2023**

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## Company Initiation

Recommendation

**BUY**
**HOSE: POW**
**Utility: Energy**
**Current price (VND)** 12,150

**Target price (VND)** 15,007

**Expected share price return** 23.5%

**Expected dividend yield** 0.0%

**Expected total return** 23.5%

## Stock performance (%)

	YTD	1M	3M	12M
Absolute	14.6	6.1	9.5	-21.1
Relative	5.2	1.6	5.8	1.4

Source: Bloomberg



## Ownership

**PVN** 79.94%

**Norges Bank** 1.27%

## Stock Statistics 19-Jan-22

**Bloomberg code** POW VN

**52-week range (VND)** 20,350 – 8,910

**Shares (m)** 2,342

**Mkt cap (VND bn)** 28,454

**Mkt cap (USD bn)** 1.2

**Foreign room left (%)** 18.79

**Est. free float (m)** 440

**3m avg daily vol (mil shrs)** 12.9

**VND/USD** 23,650

**Index: VNIndex / HNX** 1098.3/218.4

## Petrovietnam Power Corporation (Hose: POW)

POW is the largest-scale listed energy producer primarily focused on gas powered generation, owning over 4,200 MW of capacity across seven chief generators, with ambitious LNG gas-fired projects in the pipeline to set the stage for long term investment. We issue a BUY recommendation on POW with a target price of 15,007 VND, representing a 23.5% total expected return.

Despite the National Power Plan VIII (PP8) not yet being officially approved, the latest draft further clarifies the Government's orientation in looking for more environmentally friendly energy sources to reduce carbon emissions, as per commitments made at COP26, while at the same time assuring sufficient energy production to facilitate sustainable long term economy growth. As a result, gas-fired generation is considered as the number one contender to replace coal thermal as a fundamental source that could sufficiently serve both objectives and enhance energy development in the future.

According to PP8's 4<sup>th</sup> draft, energy consumption is expected to reach 391 bn kWh in 2030, up more than 50% compared to 2021 output, in which gas-fired is expected to account for 17.4% - 68 bn kWh; and will become the largest supply energy group in 2045, accounting for 25.8% of 867 bn kWh generated nationally. Increasing overall power demand (expected at 8% – 10% per year) and the transformation of the sector are catalysts for gas thermal projects to thrive, which would directly benefit POW with its large scale portfolio in this field.

POW is a power generation company with a portfolio of over 4,200 MW of capacity, of which, gas fired generation accounts for 93% spread across several plants in different provinces including Nhon Trach (NT) 1 & 2, and Ca Mau (CM) 1 & 2. POW's plants can supply up to 10% of the current energy demand of the whole country (nearly 23 bn kWh).

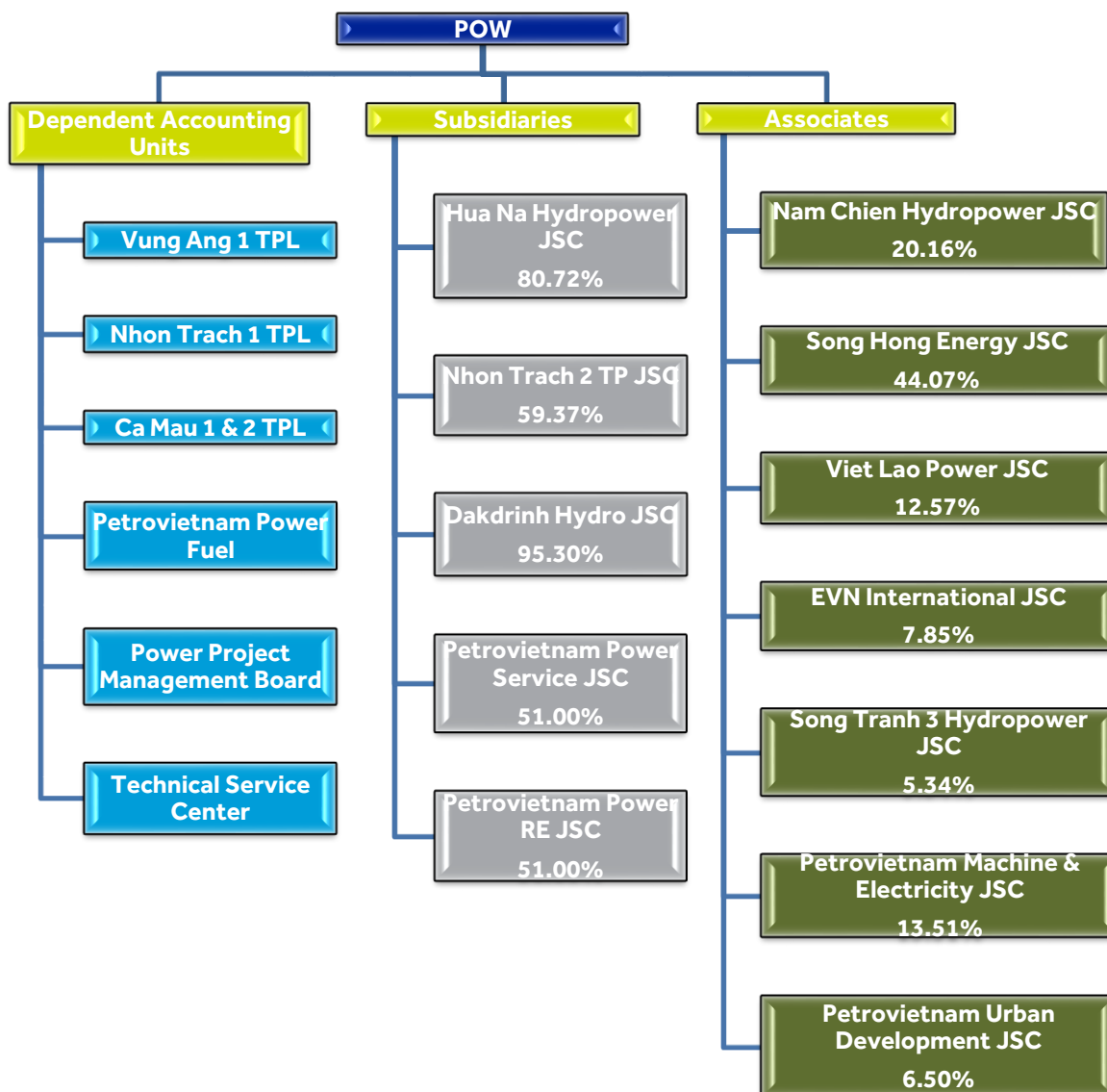
In 2021, POW announced and received approval for its ambitious plans to develop three more gas-powered plants: NT3 & 4 (Capacity: 1,500 MW – Capital: 32,487 bn VND) and Quang Ninh (Capacity: 1,500 MW – Capital: 46,000 bn VND). More specifically, construction of NT3 & 4 began in Q2-2022 and are projected to be put into commercial operation in Q4-2024 and Q2-2025, while Quang Ninh Power Plant JSC has been established with a 30% share contribution from POW in Sep, 2022 and is expected start development in 2023 and be completed in Q2-2027.

Unit: bn VND	2021	2022F	2023F	2024F	2025F
Net Sales	24,561	23,874	35,107	36,622	42,849
Growth	-17%	-3%	47%	4%	17%
EBITDA	5,632	5,158	6,341	7,282	9,516
Growth	-12%	-8%	23%	15%	31%
Net Profit	1,799	1,594	2,676	3,486	3,705
Growth	-24%	-11%	68%	30%	6%
EPS: VND	768	693	1,143	1,489	1,582
Growth	-24%	-11%	68%	30%	6%
ROE	6%	5%	8%	9%	9%
ROA	3%	2%	3%	4%	4%
Net debt / EBITDA (x)	1.5	3.4	4.4	5.3	3.9
EV / EBITDA (x)	5.0	8.9	7.9	7.7	5.0
PER (x)	15.8	17.8	10.6	8.2	7.7
PBR (x)	0.9	0.9	0.8	0.7	0.7
DPS: VND	200	-	-	-	-
Dividend Yield	2%	-	-	-	-

### CORPORATION INFORMATION

POW was founded in 2007, operating chiefly in the field of power generation. PV Power has invested and operated power plants across various fields of thermal power (both coal and gas), hydropower and other renewables. PV Power also develops services such as operations, maintenance and repair, electrical engineering services, fuel supply for power plants, etc. and has become the leading enterprise in the Gas-Electricity market in Vietnam. The Company officially transformed its operation model into a joint stock company from Jul 2018 and listed on HOSE from 2019.

#### POW Organizational Chart (including ownership percentage of subsidiaries and associates)



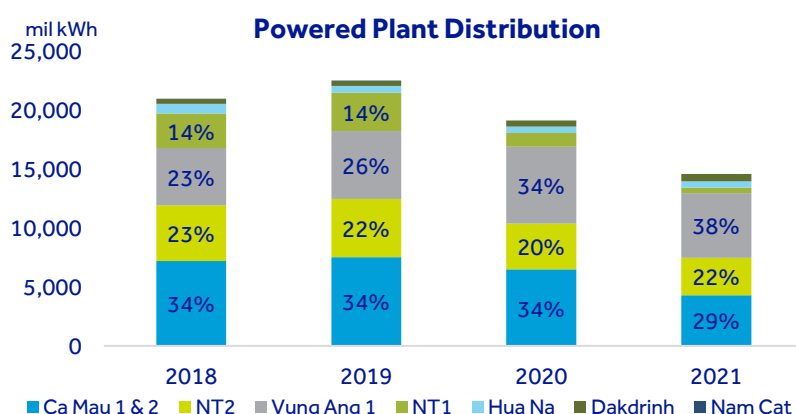
## PRIMARY ENERGY PORTFOLIO

POW currently owns seven (7) energy plants with 4,200 MW in capacity.

	Plants	Location	Ownership	Type	Capacity: MW	COD	Capital: bn VND	Technology
1	CM1	Ca Mau	100%	Gas - Oil	750	2008	6,571	CCGT <sup>1</sup>
2	CM2	Ca Mau	100%	Gas - Oil	750	2008	6,153	CCGT
3	NT1	Dong Nai	100%	Gas - Oil	450	2009	6,344	CCGT
4	NT2	Dong Nai	59%	Gas - Oil	750	2011	11,355	CCGT
5	VA1	Ha Tinh	100%	Coal -Fired	1,200	2015	33,651	Critical
6	Hua Na	Nghe An	81%	Hydro	180	2013	7,092	Francis Turbine
7	Dakdrinh	Quang Ngai	95%	Hydro	125	2014	5,921	Francis Turbine
	<b>Total</b>				<b>4,205</b>			

Sources: ACBS, POW

Four (4) chief gas-fired plants, including NT1 & 2 and CM1 & 2, together with the coal thermal plants – VA1 have historically contributed over 90% of POW's total output and account for a significant portion in POW's revenue and profit.



Output: mil kWh	2018	2019	2020	2021
CM 1 & 2	7,211	7,556	6,498	4,300
NT2	4,737	4,952	3,903	3,195
VA1	4,877	5,771	6,544	5,500
NT1	2,935	3,255	1,148	445
Hua Na	806	560	566	563
Dakdrinh	423	433	505	620
Nam Cat	18	17		
<b>POW</b>	<b>21,007</b>	<b>22,543</b>	<b>19,164</b>	<b>14,623</b>

Source: ACBS, POW

## Price scheme with EVN and PVN

The Vietnamese energy market underwent a transformation in 2019 with the full adoption of the Vietnam Wholesale Electricity Market (VWEM) scheme after undergoing a pilot launch during the 2015-2019 period. One of the key points in the VWEM is that EVN (and its subsidiaries) will remain the key buyer of electricity on the market, purchasing c. 60-95% of the overall production, while the remainder can be sold on the general market (GM). According to the circular 41/2010/TT-BCT and 30/2014/TT-BCT, price and revenue for POW's power plants set as below:

$$\text{Rev} = \text{Rev}_m + \text{Rev}_{Qc}$$

$$= (P_{Qm} \times Q_m) + (P_{Qc} \times Q_c)$$

$$= (FMP \times Q_{FMP} + P_{\text{other}} \times Q_{\text{other}}) + [(FC_{CN} + VC_{CN} + FC_{DT} + VC_{DT}) \times Q_c]$$

<sup>1</sup> CCGT: Combined Cycle Combustion Turbine

**Rev:** Plant's revenue.

**Rev<sub>m</sub>:** Revenue from selling electricity output on VWEM.

**Rev<sub>QC</sub>:** Revenue from selling electricity output for EVN under contract.

**FMP:** Full Market Price = SML (System Marginal Price) + CAN (Capacity Add on Price).

**FC<sub>CN</sub>, FC<sub>DT</sub>:** Fixed cost of building thermal plant such as technology and labors and other relevant expenses including clearances.

**VC<sub>CN</sub>, VC<sub>DT</sub>:** Variable cost of using fuel accordance with generators such as bid price, conversion and transportation expenses.

**Q<sub>other</sub>:** Including beyond price cap revenue, Misdispatch revenue and others.

**Qc:** Quality control: Electricity productions agreement in Purchasing Power Agreement (PPA) contract sign with EVN, could be adjusted yearly but no lower than minimum level 60% of the total generator's designed output.

**Qc =  $\alpha \times \text{AGO}$**

In which:	AGO = EGO	if: $\text{GO} \times a \leq \text{EGO} \leq b \times \text{GO}$
	AGO = $a \times \text{GO}$	EGO < $a \times \text{GO}$
	AGO = $b \times \text{GO}$	EGO > $b \times \text{GO}$

**$\alpha$ :** Rate of output paid at contract price at year N (%),  $60\% \leq \alpha \leq 95\%$ .

**AGO:** Actually planned output in year N (kWh).

**EGO:** Expected output in year N (kWh) under market simulation model.

**GO:** Many years average output (kWh).

**a,b:** Annual output correction factor, usually  $a = 0.9$  and  $b = 1.1$ ; otherwise adjusted by Ministry of Industry and Trade (MoIT).

Thanks to the PPAs with EVN, volatility in fossil fuel prices are directly transferred to EVN's shoulders given Qc, resulting in less risk to the power generation companies. However, for volumes sold on the VWEM, POW's thermal plants must compete with other generation types, such as hydropower, which can have cost advantages due to fluctuating input costs or conditions (i.e. La Nina creating favourable hydro conditions with increased rainfall).

In addition, according to legislation 2175/VPCP-KTKH, domestic gas price indexes to oil prices given formula:  $46\% \times \text{Medium Fuel Oil (MFO)}$  which means the converted gas price at forty six percent (46%) of average monthly FO price on Singapore market according to Platt's Magazine, denominated in USD/MMBTU and rounded up to six (06) decimal digits accommodating the transport and delivery charges corresponding to the basin.

## PROJECTS

POW is currently processing two of the three gas thermal projects they've received approval for in Dong Nai and Quang Ninh, totaling 3,000 MW in capacity. After these plants reach commercial operations, POW's energy portfolio would add 1,950 MW in capacity in accordance with the ownership, up to 6,155 MW, **+46%**.

	Projects	Location	Ownership	Type	Capacity: MW	COD	Capital: bn VND	Investment Rate: bn VND/MW	Energy Conversion Efficiency
1	NT3	Dong Nai	100%	Gas - Oil	750	4Q2024	15,500	21	>60%
2	NT4	Dong Nai	100%	Gas - Oil	750	2Q2025	15,500	21	>60%
3	QN-LNG	Quang Ninh	30%	Gas - Oil	1,500	2Q2027	49,900	31	>60%
4	CM3	Ca Mau		Gas – Oil	1,500	After 2028			>60%
Sources: ACBS, POW									

Sources: ACBS, POW

### NT3 & 4

NT3 & 4 projects were initially included in the National Power Plan 7 (PP7) and have been transferred to PP8. These are planned to be the first gas-fired electricity generators using imported LNG in Vietnam, which are anticipated to created the foundation for another 15 LNG thermal generators.

NT3 & 4		Details
Equipment supplier	GE	General Electric (America)
Technology	H class gas turbine	
Model	9HA	Most GE's currently efficient technology
Life expectancy	20 years	
Constructor	Samsung C & T Corporation & Lilama	
Construction Agreement	EPC	Engineering, Procurement & Construction
Fuel	Imported LNG	<ul style="list-style-type: none"> <li>First imported LNG usage power plant</li> <li>Expected 1.5 bn m<sup>3</sup>/year</li> </ul>
Efficiency	>60%	
Expected yearly output	9 bn kWh	
Equity	25%	7,000 bn VND financed by POW
Credit	75%	<ul style="list-style-type: none"> <li>Nearly 15,000 bn VND arranged by Export Credit Arrangement (ECA) with support from ING Bank (Netherlands) and Citi Bank (USA).</li> <li>Over 7,000 bn VND from foreign funds</li> </ul>
Maintenance	GE	POW and GE had signed Heads of Agreement (HOA) overhaul and maintenance contracts.
Contracts	<ul style="list-style-type: none"> <li>PPA - EVN</li> <li>GSA - PVN</li> </ul>	<ul style="list-style-type: none"> <li>Gas sales agreement (GSA) has been discussed in all conditions by both parties POW and PVN yet waiting for PPA.</li> <li>Purchasing power agreement (PPA) is agreed with all conditions given exceptions: <ul style="list-style-type: none"> <li>a. Quantity control (Qc).</li> <li>b. Horizontal transfer from fuel consumption to electricity production.</li> </ul> </li> </ul>

Sources: ACBS, POW

Although construction has been progressing, there are still some negotiations pending between POW, EVN and PVN regarding the energy buying agreements. POW proposed they would like 80% - 90% in Qc and direct conversion between fuel price and electricity price in 15 years, which is similar to POW's other power plants to guarantee for the project's economic and financial life. However, as per Circular 24/2019/TT-BCT, if EVN signs a power purchase contract, they are only required to commit to a minimum of 60% of Qc, lower than what POW is targeting, which has been the source of ongoing negotiations.

Nevertheless, Electricity Power Trading Company - EVN (EPTC), who represents EVN in these types of negotiations, has rejected POW's initial terms based on reasons :

- a. In the currently excess supply condition in Nhon Trach, EVN could only negotiate Qc on an annual basis, otherwise; it would be the minimum level of 60% Qc according to circular 24/2019/TT-BCT and could be only 10 years as well.
- b. EVN is a state owned enterprise (SOE), and as such, one of the main priorities of an SOE is to not make a financial loss for the State. EVN has been experiencing losses in recent years given that input prices for energy have been increasing (particularly in oil and gas markets), while the average retail price for electricity has not been adjusted since Mar 2019 and sits at just 8 cents / kWh, one of the lowest in the region. Consequently, accepting POW's proposals would make further losses incur resulting in more burdens for EVN to inspection agencies.

### QN-LNG

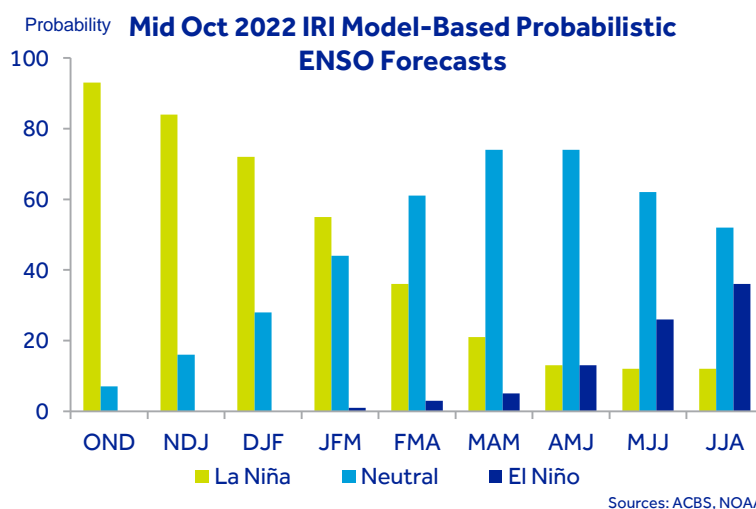
Nov 7<sup>th</sup>, 2022 QN-LNG JSC's business registration certificate was approved by Quang Ninh Planning and Investment Department. POW has committed to contribute 30% of the capital to this project, with the remainder are: Vietnam Mechanical and Erection JSC (Colavi), Tokyo Gas Co. Ltd and Marubeni Corporation. We expect POW to benefit from the cooperation with its partners given their expertise and experience in the energy generation markets.



### INVESTMENT THESIS

#### Macro Factors

1. Vietnam has had a strong economic recovery post pandemic, resulting in a strong rebound in the country's power consumption in 2022 compared to a low base 2021. The economy's energy consumption is forecasted to grow at 8% – 10% annually during the 2021 – 2030 period, and prices are expected to rise about 1% per year unless there will be another "black swan event" similar COVID-19 according to the Government's analysts in PP8 draft.
2. The La Nina effect is forecasted to last longer than expected, until the beginning of 2023 instead of mid-2022. According to NOAA, latest update in mid Oct, 2022, the El Nino's probability start to occur in Jan-Feb-Mar (JFM)-2023 with only 1% and was expected to increase significantly until almost 40% in Jun-Jul-Aug (JJA) 2023. Meanwhile, Q4-2022's rainfall is forecasted to still remain at higher level than many year average due in part to La Nina impact. Nevertheless, precipitation is forecasted to begin to ease from Q1-2023 resulting in lower water reservoir levels as the El Nino effect starts to take over, which negatively influences hydropower's results. However, the proportion of all POW's thermal plants (3,900 MW) is much larger compared to hydro (305 MW). Thus, we project POW's financial outlook for 2023 generally would be improved thanks to robust expected results from thermoelectric segment, which should outperform the hydroelectric group.



3. According to PP8, wind power, especially offshore, would play as a center stage in renewable energy; whereas, gas thermal would supplant coal-fired as the backbone support for the whole system to quickly balance out shortages of renewables and cover peak load demand in the meantime. Therefore, many gas power plants are urgently being developed, including POW's projects, as Vietnam reorients their energy markets to a more environmentally friendly mix.



## POW Operational Updates

1. In Sept 2021, VA1 suffered a technical issue with the S1 turbine. At first, it was expected to be addressed completely by Nov 2022, however, delays in the selection process for the repair contract has contributed to the expected resumption of operations to be delayed until Q1-2023. Therefore, we expect the 2022 output from VA1 would be modest 3.3 bn kWh, **-35% YoY**. We expect that the issues at VA1 will be resolved as per the company's most recent update and that VA1 could normalize operation in 2023 and produce over 5.7 bn kWh.
2. NT2 underwent a regularly scheduled overhaul in 2021, while the La Nina phenomenon has resulted in higher than average precipitation, which created favourable weather conditions that favoured the hydropower group. However, we expect 2022 would be a vibrant year result (outputs might be just over 4.0 bn kWh compared to 3.2 bn kWh - 2021) as the former was completed and 2023 performance would even be better (4.8 bn kWh) as also the latter would be replaced by El Nino resulting in reverse impact with La Nina.
3. CM1 also underwent a scheduled overhaul in 2022. Thus, we expect Ca Mau plants would have a similar result with 2021 as undergoing CM2 overhaul, which is about 4.2 bn kWh and surge to 6.9 bn kWh in 2023 as normalizing business performance post maintenances.
4. NT1 had a disappointing 2021 result compared to previous years because of low Qc, with only 445 mil kWh output and lacking fuel input as, completed 60% of the plan and only operated 102 over 356 days. The underlying reasons were partially because of the pandemic resulting in curtailment and preferences to Phu My 2.2 and Phu My 3, which are BOT power plants, bringing into full play. However, from 2023 these BOT plants will be transferred back to EVN and participate GM resulting in privilege eliminations. Thus, it bodes well for our expectation that NT1 will post a better result in 2022 and especially since 2023.
5. Hua Na and Dakdrinh hydropower plants are projected to post a strong result in 2022 with 770 and 593 mil kWh respectively, attributable to favourable weather conditions resulting in higher precipitation than average. 2023's production would be more humble due to suffering El Nino effect as noted above.

Output: mil kWh	2022F	2023F
CM 1 & 2	4,186	6,900
NT2	4,050	4,845
VA 1	3,278	5,692
NT1	1,125	1,798
Hua Na	770	563
Dakdrinh	593	433
POW	14,001	20,231

Sources: ACBS

## RISKS

1. Huge capital investment for NT 3 & 4 and QN-LNG could result in pressure of debts borrowing and interest payments when interest rate rising. The totally initial capital for both projects varies around 46,000 bn VND. We expect POW would increase its net debts by 30,000 bn VND to support for these projects.

Unit: bn VND	2021	2022F	2023F	2024F	2025F
Net debt	8,458	17,762	27,896	38,649	36,757
Equity	31,128	32,722	35,398	38,884	42,590
Debt/Equity	0.27	0.54	0.79	0.99	0.86

2. Gas-powered projects might face delays in development given the scale and complexity. At first, NT3 & 4 project are expected to be finalized in 2022. It means they underwent a three-year postponement regarding to legislation, clearance and unified expenses.
3. Furthermore, NT 3 & 4 might deal with curtailment risk on the ground that PPAs contract have not signed with EVN as we noted above.
4. Price inflation of fossil fuels might continue in 2023 and 2024, which would have a negative impact on the POW's profit. We expect fossil fuels keep remain at high base. Specifically, Vietnamese natural gas price linger at the high level because it is indexed to the oil price which is forecasted to stay over 85\$ / brrl in 2022 and 2023.

## Recent Financial Results

POW's consolidated Q3-2022 revenue reached 6,042 bn VND, **+13% YoY**; while cost of goods sold (COGS) reached 5,339 bn VND, **+19% YoY**, resulting in the gross margin condensing to 12% from 16% in Q3 2021. The operating company's<sup>2</sup> results were disappointing, with Q3-2022 revenue reaching only 3,297 bn VND (**-14% YoY**), while COGS were 3,450 bn VND (**+1% YoY**), resulting in gross profit posting a negative result with -153 bn VND (**-136% YoY**). Positive results from the subsidiary power plants, mainly Hua Na (hydro), Dakdrinh (hydro) and NT2 (gas powered), contributed to POW posting top line growth and a positive net result during the quarter.

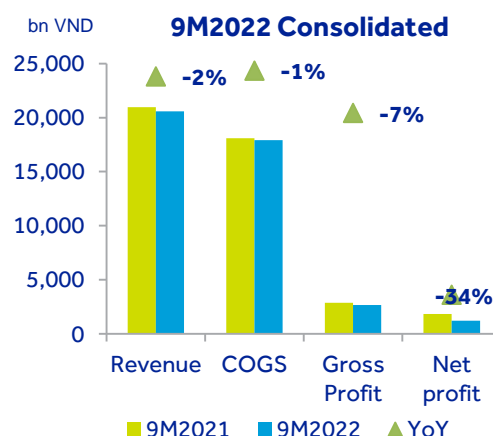
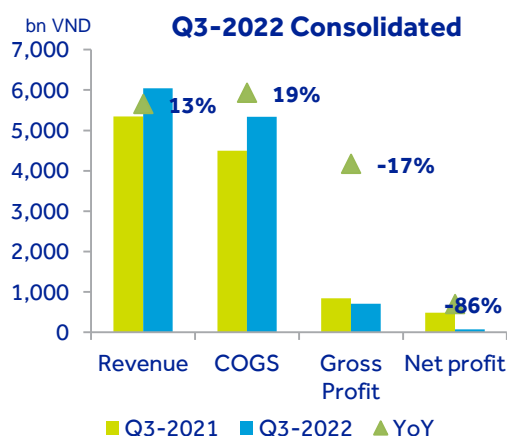
The sharp reduction in gross profit from the operating assets is mainly attributable to:

- 1) The decline in output, at the direction of the National Load Dispatch Center (NLDC), which allocates electricity buying on behalf of EVN, as renewables were favoured over fossil fuels,
- 2) Several maintenance projects at Vung Ang 1 (VA1), that's affecting one of the two generators, and Ca Mau 1 (CM1), which restricted capacity. VA1 is not expected to resume operations in the affected generator until after Feb, 2023; and,
- 3) Prices of input fossil fuels including coal (c.5%) and gas (c.8%) affecting the energy production sold on Vietnam Competition Generation Market (GM).

<sup>2</sup> Consisting of four main plants: NT1, CM1 & 2 (gas-fired); and VA1 (coal thermal) of which POW owns 100%, but excluding the effects of consolidation of three chief plants: Hua na, Dakdrinh (hydro); and NT2 (gas powered) where POW owns between 59-95% of the subsidiaries

The above hampered POW's profit margin as both output decreased (POW's operating assets' production decreased 21% YoY) and input costs faced upwards pressure. To illustrate, Ca Mau 1&2 gas-fired outputs were only 615 mil kWh Q3-2022, whereas 745 mil kWh Q3-2021. Similarity, NT1 only produced 166 mil kWh in Q3-2022 compared to 238 mil kWh in Q3-2021.

POW's consolidated 9M2022 sales achieved 20,566 bn VND (-2% YoY), while the gross margin contracted by 1ppt to 13%, resulting in gross profit hitting 2,659 bn VND (-7% YoY). In comparison, net earnings of the operating company was far more modest, at only 422 bn VND (-75% YoY). The consolidated performance was greater than the operating company thanks to the Dakdrinh and Hua Na hydropower plants, which were beneficiaries of the longer than expected La Nina effect, which brought higher than average precipitation.



Unit: bn VND	Q3-2021	Q3-2022	YoY	9M2021	9M2022	YoY
<b>Consolidated</b>						
Revenue	5,342	6,042	13%	20,967	20,566	-2%
COGS	4,500	5,339	19%	18,098	17,907	-1%
Gross Profit	842	703	-17%	2,869	2,659	-7%
Gross profit margin	16%	12%		14%	13%	
Net consolidated profit	482	67	-86%	1,840	1,210	-34%
Net profit margin	9%	1%		9%	6%	
<b>Operating Company</b>						
Revenue	3,838	3,297	-14%	15,494	12,305	-21%
COGS	3,417	3,450	1%	13,577	11,630	-14%
Gross Profit	421	(153)	-136%	1,917	675	-65%
Gross profit margin	11%	-5%		12%	5%	
Net profit from Op Co	263	(289)	-210%	1,669	422	-75%
Net profit margin	7%	-9%		11%	3%	

Source: ACBS, POW

## VALUATION

### Current Power Plants

**Output and Revenues:** Based on our assessment in the 'Operational Outlook' section earlier in the report, we forecast overall output from the current 7 power plants to increase an impressive 47% in 2023. The growth is mainly driven by the resumption of full operations at CM 1 & 2 and VA1 after these plans underwent maintenance programs during 2022 and the return of the El Nino cycle that is expected to support POW's positive outlook in 2023 - 2024 period.

In addition, we forecast the selling price would face a cumulative average growth rate of 1% in the 2022 – 2030 period comply to the expectation from MoIT in the latest PP8 draft report.

	2022F			2023F		
	Price: VND	Output: bn kWh	Rev: bn VND	Price: VND	Output: bn kWh	Rev: bn VND
CM1 & 2		4,186	7,041		6,900	11,723
VA1	1,682 <sup>3</sup>	3,278	5,514	1,699	5,692	9,671
NT1		1,125	1,892		1,798	3,055
<b>POW Operating</b>		<b>8,589</b>	<b>14,446</b>		<b>14,390</b>	<b>24,446</b>
NT2	1,944	4,050	7,874	1,964	4,845	9,514
Hòa Na	1,249	770	962	1,261	563	710
Đakdrinh	999	593	592	1,009	433	437
<b>Sub total</b>		<b>5,413</b>	<b>9,428</b>		<b>5,841</b>	<b>10,661</b>
<b>Consolidated</b>		<b>14,001</b>	<b>23,874</b>		<b>20,231</b>	<b>35,107</b>

**COGS:** POW continues to undergo a challenging period with the high level of input fossil fuel prices until at least the beginning of 2023. Expectations are that oil and gas prices will ease on the grounds of decreasing demand on global recessionary pressures. However, this would only influence the gross margins on energy sold on the GM, which we expect will account for a small portion – around 10 to 15%. Overall we expect pressures on the COGS would ease from 2024 attributable to the decreasing oil prices.

**Operating Expenses:** General and Administrative costs for POW have been fairly stable over recent years and we expect they will be able to maintain a ratio of c. 3% of revenues going forward.

**Debts and Interest:** POW is expected to take on significant amounts of debts from 2023 to fund the new projects in their pipeline. For the 2023-2024 period we expect that the company will be able to obtain loan packages at favourable rates of c. 9%, given their history of preferential rates and the related projects being of national importance.

POW has noted they do not plan on paying dividends in the 2022-2025 period to concentrate all resources in developing these two projects.

<sup>3</sup> Estimated average selling price of four (4) dependent accounting generators: VA1, NT1 and CM1 & 2.

## New Projects

We include the NT3 & 4 and QN-LNG projects in our forecast model based on several assumptions:

1. POW would be able to successfully settle PPAs with EVN before NT 3 & 4 are headed into commercial operation. As a result, the Qc yearly is around designed 9 bn kWh and similar situation for QN-LNG.
2. NT 3 & 4 are commercially operated as expectation which is Q4-2024 and Q2-2025 and we expect the plants would have huge overhaul in 2028 due to reaching 25,000 EOH.
3. The cyclical nature of output is a result of the expected 2 year cycles between La Nina and El Nino

Unit: bn VND	NT3 & 4			QN-LNG		
	2025F	2026F	2027F	2028F	2029F	2030F
<b>Rev</b>	<b>11,357</b>	<b>15,294</b>	<b>19,861</b>	<b>20,060</b>	<b>15,758</b>	<b>15,915</b>
Output: mil kWh	5,670	7,560	9,720	9,720	7,560	7,560
Price: VND	2,003	2,023	2,043	2,064	2,084	2,105
<b>Operating Expenses</b>	<b>10,679</b>	<b>13,559</b>	<b>16,897</b>	<b>17,227</b>	<b>14,113</b>	<b>14,246</b>
<b>Materials</b>	<b>7,292</b>	<b>9,820</b>	<b>12,752</b>	<b>12,879</b>	<b>10,117</b>	<b>10,219</b>
/ Rev	64%	64%	64%	64%	64%	64%
<b>Employment</b>	<b>237</b>	<b>252</b>	<b>267</b>	<b>283</b>	<b>300</b>	<b>318</b>
/ Rev	2%	2%	1%	1%	2%	2%
<b>Depreciation</b>	<b>2,176</b>	<b>2,176</b>	<b>2,176</b>	<b>2,345</b>	<b>2,345</b>	<b>2,345</b>
<b>Outsources</b>	<b>853</b>	<b>1,149</b>	<b>1,492</b>	<b>1,507</b>	<b>1,157</b>	<b>1,196</b>
/ Rev	8%	8%	8%	8%	8%	8%
<b>Others</b>	<b>120</b>	<b>162</b>	<b>211</b>	<b>213</b>	<b>167</b>	<b>169</b>
/ Rev	1%	1%	1%	1%	1%	1%
<b>FCFE</b>	<b>2,854</b>	<b>3,912</b>	<b>5,140</b>	<b>5,178</b>	<b>3,990</b>	<b>4,015</b>

Applying a combination of a DCF and a P/E metric in equal weights, we derive a target price of **15,007 VND/share** and issue a **Buy Recommendation** with a **23.5%** total expected return given the substantial scale in gas thermal power generation and the corporation's important role in national energy system.

POW FINANCIALS MODEL	Price: VND	12,150	Target: VND	15,007	Mkt cap: bn VND	28,454
Unit: VND bn except where stated	2021	2022F	2023F	2024F	2025F	
Total Net Sales	24,561	23,874	35,107	36,622	42,849	
<i>Sales growth</i>	-17%	-3%	47%	4%	17%	
COGS	22,021	20,800	30,587	31,129	37,447	
EBITDA	5,632	5,158	6,341	7,282	9,516	
<i>EBITDA margin</i>	23%	22%	18%	20%	22%	
Depreciation	2,818	2,818	2,818	2,818	4,994	
Operating profit	2,460	1,989	3,349	4,366	4,445	
<i>Operating profit margin</i>	10%	8%	10%	12%	10%	
Net interest expense	510	367	170	84	60	
<i>as % of avg, net debt</i>	6%	2%	1%	0%	0%	
Tax	164	187	315	410	134	
<i>Tax rate</i>	7%	9%	9%	9%	9%	
Minorities	254	225	378	492	345	
Net profit	1,799	1,594	2,676	3,486	3,705	
<i>Net profit margin</i>	7%	7%	8%	10%	9%	
Number of shares (m)	2,342	2,342	2,342	2,342	2,342	
EPS (VND)	768	681	1,143	1,489	1,582	
<i>EPS growth</i>	-24%	-11%	68%	30%	6%	

KEY CASHFLOW AND BS ITEMS	2021	2022F	2023F	2024F	2025F
Increase in working capital: bn VND	661	(4,208)	690	(172)	126
Capex: bn VND	22,662	12,653	12,653	470	470
Free cash flow: bn VND	(16,368)	(11,703)	(5,621)	6,640	9,171
Share issues (mil)	-	-	-	-	-
Dividends paid: VND	(751)	-	-	-	-
Increase in net debt: bn VND	(3,952)	9,304	10,134	10,754	(1,892)
Net debt, end of year: bn VND	8,458	17,762	27,896	38,649	36,757
Enterprise value: bn VND	24,878	45,909	50,301	55,793	47,127
Shareholders' equity: bn VND	31,128	32,752	35,398	38,884	42,590
BVPS: VND	13,291	13,973	15,115	16,604	18,186
Net debt / equity	27%	54%	79%	99%	86%
Net debt / EBITDA	150%	344%	440%	531%	386%
Total assets: bn VND	52,980	63,878	76,688	90,928	92,741

KEY RETURN AND VALUATION RATIOS	2021	2022F	2023F	2024F	2025F
ROE	6%	5%	8%	9%	9%
ROA	3%	2%	3%	4%	4%
WACC	-	11%	11%	11%	10%
PER (x)	15.8	17.8	10.6	8.2	7.7
EV/EBITDA (x)	5.0	8.9	7.9	7.7	5.0
EV/FCFF (x)	(1.7)	(3.9)	(8.9)	8.4	5.1
PBR (x)	0.9	0.9	0.8	0.7	0.7
PSR (x)	1.2	1.2	0.8	0.8	0.9
EV/sales (x)	1.1	1.9	1.4	1.5	1.1
DPS: VND	200	-	-	-	-
Dividend yield	2%	-	-	-	-



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### Our Recommendation System

**BUY:** where we believe prospective 12 month VND total return (including dividends) will be 15% or more.

**HOLD:** where we believe it will be -15% to 15%.

**SELL:** where we believe it will be lower than -15%.

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