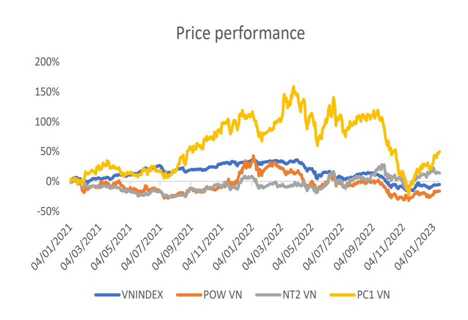
Yuanta Research

Sector update

Vietnam: Renewable Energy

30 January 2023



What's new?

- Renewable energy production grew by +16% YoY in 2022.
- Renewables now represent Vietnam's 3rd largest source at 26% of total capacity.
- MOIT's new pricing scheme for renewable energy is ~16-29% below the earlier incentive FIT pricing.
- FEPT to deliver USD 15.5bn in long-term capital for renewable energy.

Our view

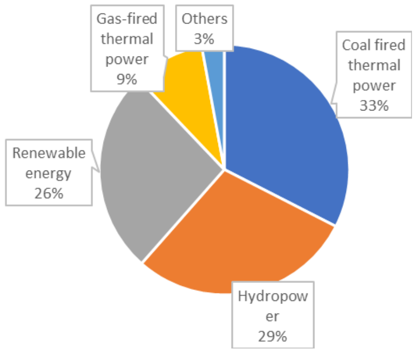
- PDP8 remains in limbo due to pricing issues.
- MOIT's new renewable pricing scheme is likely to disappoint green energy investors who missed the FIT deadline – but it's better than nothing.
- The FEPT scheme should continue to promote renewable energy over carbon over the long term.
- PC1 (BUY – our top pick) provides excellent exposure to green power demand. GEG (Not rated) is another beneficiary of this trend.

Yuanta energy sector coverage

Tickers	Recommendation	Current price (VND)	Target price (VND)	Current EV/EBITDA (x)	Current P/B (x)
PC1 VN	BUY	25,900	34,123	9.56	1.35
POW VN	SELL	12,200	12,157	6.72	0.94
NT2 VN	SELL	28,200	19,318	5.05	1.83

Source: Bloomberg, YSVN

Installed capacity breakdown: Yearend 2022



Source: nangluongvietnam.vn

MOIT's New transitional pricing

#	Plants	Ceiling price (VNĐ/kWh)	% Change to original
1	Ground Solar	1,184.90	-29.2%
2	Floating solar	1,508.27	-16.9%
3	In-land wind	1,587.12	-20.9%
4	Offshore wind	1,815.95	-21.5%

*Note: "Change to original" refers to the difference between the MOIT's transitional pricing and the earlier incentive FIT rates.
Source: MOIT, YSVN

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The Future is Green

Renewable power is now 26.4% of total capacity at 20,165MW in 2022. Renewables are thus Vietnam's third largest power source, behind coal at 25,312MW (32.5% of the total) and hydropower at 22,544MW (29.0%).

But renewable energy generated just 12.9% of total production in 2022. Reasons for the discrepancy between share of capacity and production include insufficient grid coverage and reluctance to buy more expensive electricity from the main (effectively, the only) buyer: EVN. But production of renewable power grew by +16% YoY in 2022, outpacing total production growth of +5.3%, as coal production fell by -11.1%.

MOIT's new transitional pricing scheme for renewable energy: Better than nothing. The Ministry of Industry and Trade's transitional pricing for solar and wind power projects is ~16%-29% lower than the original incentive FIT rates. Although this is not a dream come true for power generators, it should at least allow projects that failed to meet the FIT deadlines to generate cashflow by utilizing currently idle capacity. Subsequent projects will be subject to the framework set out by PDP8.

The Just Energy Transition Partnership (JETP) is set to deliver USD 15.5bn for renewable energy investments in Vietnam in the years ahead. JETP proposes several lofty goals including to reach a renewable energy share of at least 47% by 2030 (vs. the current target of 29% by 2030). This investment bolsters our positive case for renewable energy.

The latest Power Development Plan 8 (PDP 8) once again failed to be approved in November 2022 due to pricing issues. But we think the spirit of the plan that is eventually adopted should retain the same government commitment to renewable energy development.

PC1 (BUY) offers excellent exposure to Vietnam's long-term shift to green energy in line with the government's COP26 commitment to achieve net-zero carbon emissions by 2050. See our Dec 15 report here.

PVS (Not rated) should benefit from the US$15bn FETP investment in Vietnam's green power capacity over the next several years.

GEG (Not rated) should be eligible for MITI's new pricing scheme given that its 100MW Tan Phu Dong 1wind farm should be launched in 2023.

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MOIT's new pricing scheme won't please everyone, but it should allow for cashflow generation at currently idle wind farms

New pricing scheme for renewable energy. The Ministry of Industry and Trade (MOIT) has issued a new pricing framework for electricity generated by transitional solar and wind power projects. The new prices are approximately ~16%-29% lower than the original FIT pricing that had been set as an incentive for projects completed by October 2021(wind power) and Jan 2021 (solar power).

Fig. 1: Transitional price set for renewable energy

Number	Plants	Ceiling price (VNĐ/kWh)	Original Feed-In-Tarrif (VNĐ/kWh)	% Change
1	Ground Solar farms	1,184.90	1,673	-29.2%
2	Floating solar farms	1,508.27	1,815	-16.9%
3	In-land wind farms	1,587.12	2,006	-20.9%
4	Offshore wind farms	1,815.95	2,313	-21.5%

Source: MOIT, YSVN

Generally speaking, the new price scheme is disappointing compared to the previous FIT pricing. The new price set is not a fantastic deal for power generators, but it should at least allow projects that are ineligible for the FIT pricing (because they were not completed before the deadlines) to sell electricity, albeit at a more modest price.

Thus, taking a positive perspective, the MITI scheme should help to release the unused renewable energy capacity and generate cashflow for these projects. Subsequent power projects will be subject to pricing as regulated in PDP8.

The transitional pricing is not great news for power generators. However, it is better than nothing. GEG (Not rated) should be subject to the new pricing as the company intends to launch its 100MW Tan Phu Dong 1 wind farm in 2023. Without the new pricing, this wind power project would likely be idle after completion assuming a lack of demand from EVN in the absence of an established price mechanism, in our opinion. GEG is a pure renewable energy generation company with 159MW of hydropower capacity, 260MWp of solar power, and 230MW of wind power.

Vietnam's future development relies on renewable energy

Renewable power is now Vietnam's third largest power source. Total installed electricity production capacity reached 77,800MW in 2022, up by +1.8% YoY, according to EVN. Electricity production reached 261.2 bn kwh (+6.08% YoY) in 2022 as economic activity recovered post the pandemic. Renewable energy capacity reached 20,165 MW, accounting for 26.4% of system capacity. Renewables are thus the third largest power source, behind coal at 25,312 MW (32.5% of the total) and hydropower at 22,544 MW (29.0%).

Renewable energy production grew at faster pace than total system production in 2022. Specifically, renewable energy generated 34,757 Gwh in 2022, accounting for 12.9% of total electricity production. Renewable power generation increased by +16% YoY, well ahead of total production growth of +5.3% YoY to reach 268,442 Gwh. This is because coal-fired power production declined by -11.1% YoY to 104,921 Gwh (39.09% of total production).

The latest Power Development Plan 8 (PDP 8) once again failed to be approved in November 2022 due to pricing issues. But we think the spirit of the plan that will eventually be adopted should remain the same as that envisioned in the draft PDP8.

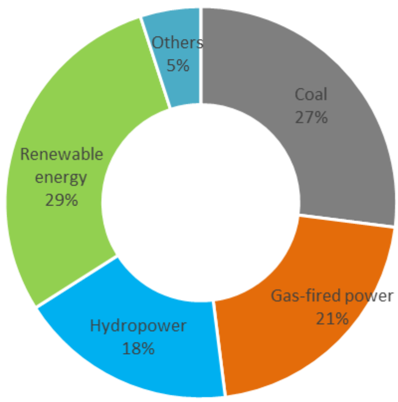
Specifically, the government has committed to focus more on renewable energy development rather than relying on carbon-based thermal power.

According to draft PDP8, by 2030 Vietnam will need 137.2GW of electricity capacity, up by +76.3% from the end of 2022 (or 77.8GW), equivalent to 7.3% CAGR in 2021-30. More specifically. the draft PDP 8 targets 28,480MW of wind power capacity by 2030 (7x that of 2021) and 153,550MW of wind power by 2050 (37.5x that of 2021).

The total investment needed to develop the electricity system is projected at USD128.3bn, of which USD95.4bn is planned for power production and USD32.9bn is intended for the transmission system, according to the draft PDP8.

As the market leader in the power construction business, PC1 is particularly well positioned to benefit from this wave.

Fig. 2: Draft PDP8 production capacity plan for 2030



Source: Latest Draft PDP8

JETP: A USD 15.5bn (VND 365 trillion) funding package for renewable energy. A group of funding nations has agreed to support Vietnam's climate and green energy goals with a USD15.5 billion funding package over the next 3 to 5 years. This financing mechanism, the Just Energy Transition Partnership (JETP), proposes to achieve several lofty goals regarding green energy and reduced carbon emissions, including to reach a renewable energy share of at least 47% by 2030 (vs. the current target of 29% by 2030).

Whatever one thinks about the likelihood of achieving these targets, this program should clearly promote the use of renewable energy instead of carbon-based alternatives over the long term.

Stock Ideas:

1) **Power Construction No. 1 (PC1 VN, BUY) offers excellent exposure to Vietnam's long-term shift to green energy** in line with the government's COP26 commitment to achieve net-zero carbon emissions by 2050. The company plans to increase its wind power capacity by +143% to reach 350MW by 2025.

   Strategic shift to drive profitability. PC1 is widely known for its construction services at EVN projects. However, the company has engaged in a strategic transformation to become an EPC contractor for the private sector, which should allow it to improve its gross margin from the power construction business. We also think this strategy positions it well to benefit from the USD 15.5bn investment in the electricity system pledged by the FEPT.

   Other potential catalysts for PC1 in 2023E include 1) the realization of property sales that were delayed from 2022, 2) PC1's entry into nickel mining/refining via a separate subsidiary, and 3) a possible provisioning recovery of ~VND40bn due to the VND's 0.96% appreciation vs. the USD in 4Q22 – this is a non-cash item but it might move the shares anyway.

   We reiterate our BUY call on PC1, which is our top pick in the energy sector. Please see our recent report here.

2) **Petrovietnam Technical Services (PVS VN, Not Rated) is also a beneficiary of Vietnam's long-term shift to green energy**.

   Company profile. PVS provides Oil & Gas technical services (excluding drilling services). PVS is the market leader with majority market shares in related industries, including offshore support vessels (OSV/ship segment, 97% market share), mechanics & construction (M&C), supply base (port segment, 100%) and floating oil storage (FSO/FPSO, 60%). PVS owns and operates a fleet of 18 vessels, three floating storage offloading (FSO) facilities, and two floating production and storage offloading (FPSO) facilities.

   PVS is also a beneficiary to Vietnam's long-term shift to green energy. PVS's renewable energy construction track record dates back to 2008-2010 in Truong Sa islands and Phu Quy Island, followed by several wind power projects including transportation and installation of wind turbines at Hoa Binh 5. PVS has supply vessels for several wind power projects in Ben Tre province.

   Most recently, the company has engaged as a sub-contractor for the Hai Long 2 & 3 wind power projects in Taiwan, with total contract value of USD 68mn to build two offshore substations.

   Block B could be another catalyst. The government is actively encouraging the related parties to initiate the long-stalled USD10bn Block B mega gas project at O Mon. Although the timing of initiation is difficult to forecast, Block B's eventual start-up would likely be a key revenue driver for PVS in subsequent years.

3) **Gia Lai Electricity (GEG VN, Not rated)**

Company profile: GEG is a pure renewable energy player. The company's diversified green power production capacity comprises:

- 14 Hydropower plants – 81MW
- 5 Solar power farms – 260MWp
- 34 rooftop systems – 32 MWp
- 4 Wind power farms – 130 MW

GEG is expanding its installed capacity. Specifically, GEG plans to expand its wind power capacity by 76.9% to 230MW upon launching the 100MW Tan Phu Dong 1 wind power farm in 2023.

100MW Tan Phu Dong 1 wind farm is eligible for MOIT's new pricing. Although the new pricing is less than we had hoped for, this wind power project would likely be idle after completion without it. The absence of this established mechanism would mean a continued lack of demand from EVN, in our opinion.

In the longer-term, GEG should benefit from Vietnam's long-term shift to green power. GEG plans to add 1,144MWp of renewable energy capacity to its portfolio by 2025. We assume that this plan is only feasible if more accommodative policies are established, perhaps as set out by Power Development Plan 8. We expect the eventual PDP8 that is adopted to retain the draft version's original focus on renewable energy given Vietnam's COP26 commitment to net zero carbon emissions by 2050.

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