

PETROVIETNAM TECHNICAL SERVICES CORPORATION (HNX: PVS)
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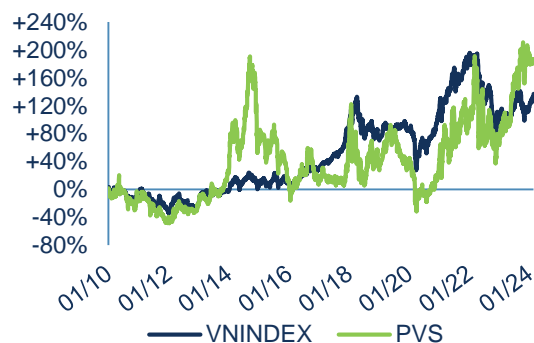
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PVS and VNINDEX price

Transaction information **28/02/2024**

Current price (VND/share)	37,200
Highest price in 52 weeks (VND/share)	40,200
Low price for 52 weeks (VND/share)	23,600
Number of listed shares (million shares)	479
Number of outstanding shares (million shares)	479
Average 30-day trading volume (shares)	6,052,533
% Foreign ownership	19.8%
Charter capital (billion VND)	4,779
Capitalization (billion VND)	17,828
P/E trailing 12 months (times)	20,6x
EPS trailing 12 months (VND/share)	1,813

Business overview

Name	PetroVietNam Technical Services Corporation
Address	5th Floor, Petro Vietnam Building, 1-5 Le Duan, Ben Nghe Ward, District 1, HCM City
Main revenue	Oil and gas construction services
Competitive advantage	The system of warehouses, ports and oil and gas service fleet helps PVS take the lead in constructing and installing oil and gas projects in Vietnam and gradually becoming a builder of offshore wind power projects in the region.
Main risks	Extending the progress of future projects will affect PVS's workload

DOMESTIC OIL AND GAS PROJECTS BRING GROWTH PROSPECTS
I. 2023 BUSINESS RESULT: SLIGHT REDUCTION RESULTING FROM THE LACK OF DOMESTIC OIL AND GAS PROJECTS

In 2023, PVS recorded revenue of 19,349 billion VND (+18.2% yoy). Net profit reached 866 billion VND (-2.0% yoy). Revenue grew mainly due to a recognition of wind power projects while domestic oil and gas projects continued to lag behind schedule.

PVS's business results slightly decreased due to an increase in corporate management costs, in which staff costs went up by 45.7% yoy to prepare for oil and gas and wind power projects in 2024. [\(See more\)](#)

II. BUSINESS OUTLOOK AND FORECAST 2024 RESULTS
Business prospects: [\(See more\)](#)

We believe that PVS's business results will grow in 2024, primarily from the M&C segment when domestic oil and gas construction projects show more positive signs and the ability to sign new wind power construction contracts:

- (1) We suppose that the upstream of Vietnam's oil and gas industry is optimistically changing** when projects achieve new progress such as: Golden Camel project has FID and awarded limited letter of award (LLOA) for project Block B– O Mon.
- (2) The new wind power project will be recognized in 2024** when the Semco Maritime - PTSC Joint Venture continuously wins the bidding for two projects Baltica 2 and Fengmiao at the end of 2023 and begins implementation in 2024. PVS shared that they will sign 1 – 2 more new wind power construction contracts valued at around 700 - 1,000 million USD in 2024.

Forecasted business results for 2024: [\(See more\)](#)

We forecast that PVS's revenue will reach 24,056 trillion VND (+24.3% yoy). Of which, M&C segment revenue reach VND 11,151 billion, +37.8% yoy thanks to the contribution of domestic oil and gas projects and offshore wind power.

Gross profit will reach VND 1,494 billion, +57.5% yoy based on growing revenue and expanding gross profit margins of all segments when domestic oil and gas M&C activities return.

Net profit will get VND 1,067 billion, + 23.2% yoy, because financial revenue will decrease by 28.3% yoy mainly from deposit interest: (1) Cash amount will reduce due to PVS participating in construction activities; (2) Deposit interest rates are lower than in 2023.

III. VALUATION AND RECOMMENDATION [\(See more\)](#)

With the closing price on February 28, 2024 reaching 37,200 VND/share, PVS is trading at P/E TTM = 20.6x. We value PVS using the P/E method **(1) Projected EPS for 2024 reaches 2,232 VND/share** and **(2) Target P/E ratio is 17.8X**. We issue a **NEUTRAL recommendation** for PVS stock with a target price of 39,750 VND/share, 6.9% higher than the closing price on February 28, 2024.

Investors can sell PVS and buy when the stock has a better discount (about 33,100 VND/share with an expected return rate of 20%).

I - BUSINESS OVERVIEW:

1.1. History of formation and development:



1993: PetroVietNam Technical Services Corporation (PTSC) was born from the merger of two units, Petroleum Service Company (PSC) and Geophysical and Petroleum Service Company (GPTS).

2006 - 2007: Implemented equitization, operated under the Joint Stock Company model and listed shares on HNX with stock code PVS.

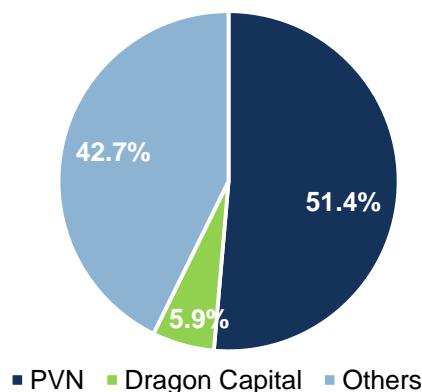
2008 - 2015: During the strong growth period of Vietnam's oil and gas industry, PVS continuously increased charter capital, invested in expanding service offerings such as FSO/FPSO; ROV ships; developed oil and gas port system; deployed EPCI bidding packages for large domestic oil and gas construction.

2016 - 2021: During a difficult period for Vietnam's oil and gas industry, PVS narrowed services such as seismic - geological surveys, technical vessel services, shifted services to onshore industrial projects, moved to foreign markets to seek more opportunities. The bright spot in this period is winning and implementing the EPCI package of Central Gas Processing Platform - CPP and 1 wellhead platform - WHP for Sao Vang Dai Nguyet project.

2021 - 2023: Participated in the field of offshore wind renewable energy, with EPC contracts Offshore transformer station for Hai Long 2 and 3 projects, Base fabrication for Greater Changhua Offshore Wind project 2b & 4.

1.2. Shareholder structure

Chart 1: PVS's shareholder structure:



As of February 28, 2024, Vietnam Oil and Gas Group (PVN) is the largest shareholder of PVS with an ownership ratio of 51.4%. The remaining major shareholder is Dragon Capital Fund group holding 5.9% of shares.

Regarding PVN's ability to divest capital, in the approving decision to restructure PVN until the end of 2025 - No. 1243/QQD-TTg is clearly stated that PVN will continue to hold over 50% of PVS's shares until the end of 2025. .

Source: PVS, FPTs research

1.3. Enterprise structure

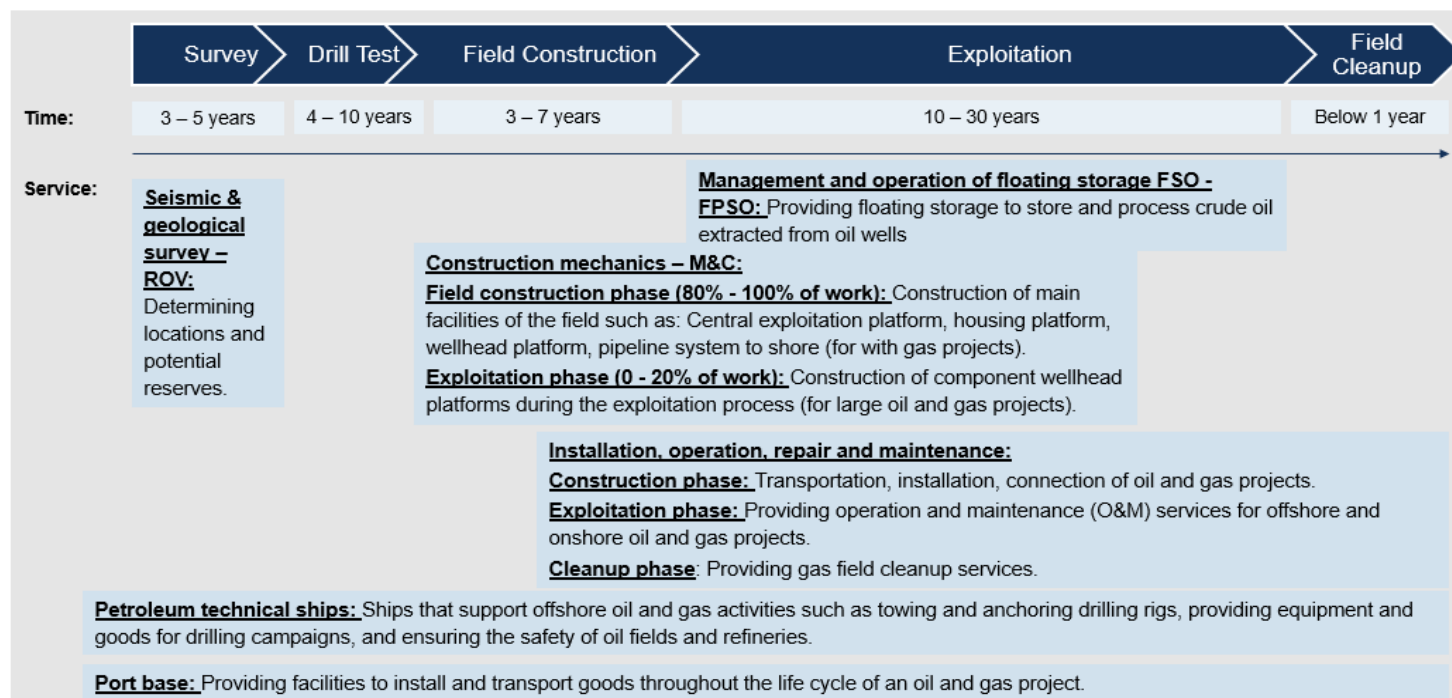
PVS owns 6 branches, 12 subsidiaries and invests in 06 joint ventures companies. All branches/companies mainly operate in the field of providing oil and gas services on the basis of division and specialization according to 6 main business services of PVS. ([Appendix 1 : Organization chart and List of subsidiaries](#))

1.4. Business activities:

PVS is a provider of technical services in the fields of oil and gas, energy and industry

The services PVS provides include high-quality, comprehensive technical solutions for oil and gas projects and industrial construction. PVS's business areas are closely connected to each other and provide comprehensive solutions to customers throughout the life cycle of an oil and gas project, specifically:

Figure 1: PVS's services during the oil and gas project life cycle:



Source: FPTs research

[\(Appendix 2: Overview of services provided by PVS\)](#)

Among the 6 services provided, M&C, FSO/FPSO, supply bases and oil and gas technical vessels are the business segments that contribute greatly to PVS's business results, of which the main segment is M&C, contributing 52.4% of revenue and 33.3% of gross profit respectively in the period 2017 - 2023.

Chart 2: PVS's revenue and gross profit structure in 2017 - 2023



Source: PVS, FPTs research

In 2021, PVS participated in the field of renewable energy with initial activities: Engineering, Procurement, and Construction (EPC) of offshore wind power projects. Business results of the mechanic manufacturing and construction of offshore oil and gas projects are accounted for in PVS's M&C segment and this is an segment that is assessed to bring growth prospects for PVS in the long term. [\(Appendix 3: Overview of offshore wind power construction and installation activities\)](#)

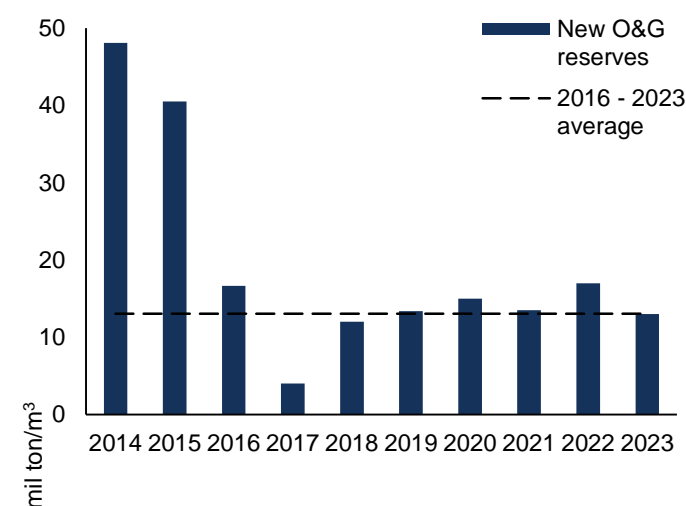
II – BUSINESS ACTIVITIES :

1. Domestic oil and gas activities have been gloomy in the period 2016 - present

Since 2015, oil and gas exploration activities in Vietnam are no longer attractive because crude oil prices have dropped sharply and remain low, about 40 - 60 USD/barrel lower than the average break-even exploitation price which is about 60 USD/barrel in Vietnam in the period 2015 - 2021. ([Appendix 4: Crude oil price developments](#))

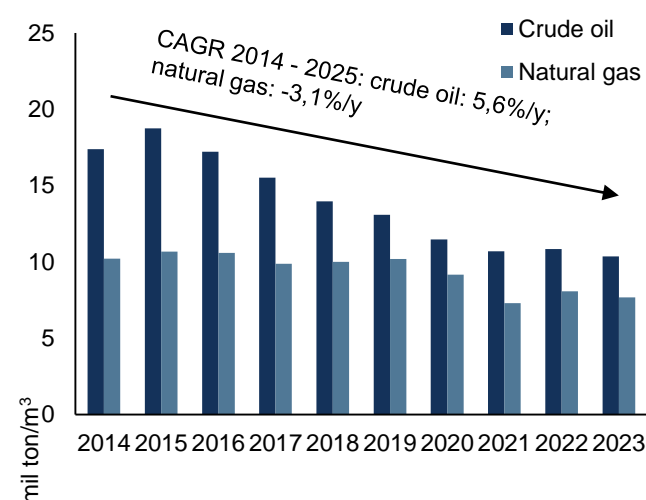
Low oil prices negatively affect oil and gas exploration and production activities when: (1) Increased of average oil and gas reserves during 2016-2023 reached less than 30% compared to 2014 and (2) Domestic crude oil and dry gas production output decreased by 5.6%/year and 3.1%/year respectively in the period 2014 - 2023.

Chart 3: Increase in domestic oil and gas reserves



Source: Ministry of Industry and Trade; FPTs research

Chart 4: Domestic oil and gas production output



Source: PVN; FPTs research

Implementation progress of key oil and gas projects continues to disappoint: In addition to slow reserve increases and declining oil and gas production output, key domestic oil and gas projects are continuously being pushed back from 1 to 5 years and small oil and gas projects were narrowed/eliminated during the gloomy period of the oil and gas industry, specifically:

Figure 2: Some prominent oil and gas projects in Vietnam:

Projects	Contract value ^(*) (Mil USD)	2016	2017	2018	2019	2020	2021	2022	2023	2024F	2025F	2026F	2027F	2028F	2029F	2030F
Sao Vang - Dai Nguyet	850			EPC + FSO												
White Lion P2B	500					EPCI + FSO					EPCI + FSO					
Nam Du - U Minh	300					EPCI + FSO					EPCI + FSO					
Block B - O Mon	2.100				EPCI + FSO						EPCI + FSO					
Blue Whale	850						EPCI						EPCI			
Ca Rong do	N/A			Suspended												

Previous plan Updated plan

(*) Compiled and estimated from published information sources
Source: FPTs research

Oil and gas projects are continually delayed/cancelled due to: field owners and operators face financial issues crude oil/dry gas price decreasing along with oil prices, leading to narrow investments. In the period 2021 - 2023, although oil prices have recovered, the progress of projects continues to be slow due to: (1) Time to approve field development plans (FDP) and approve final investment decisions (FID) for key projects takes a long time due to overlaps between laws and

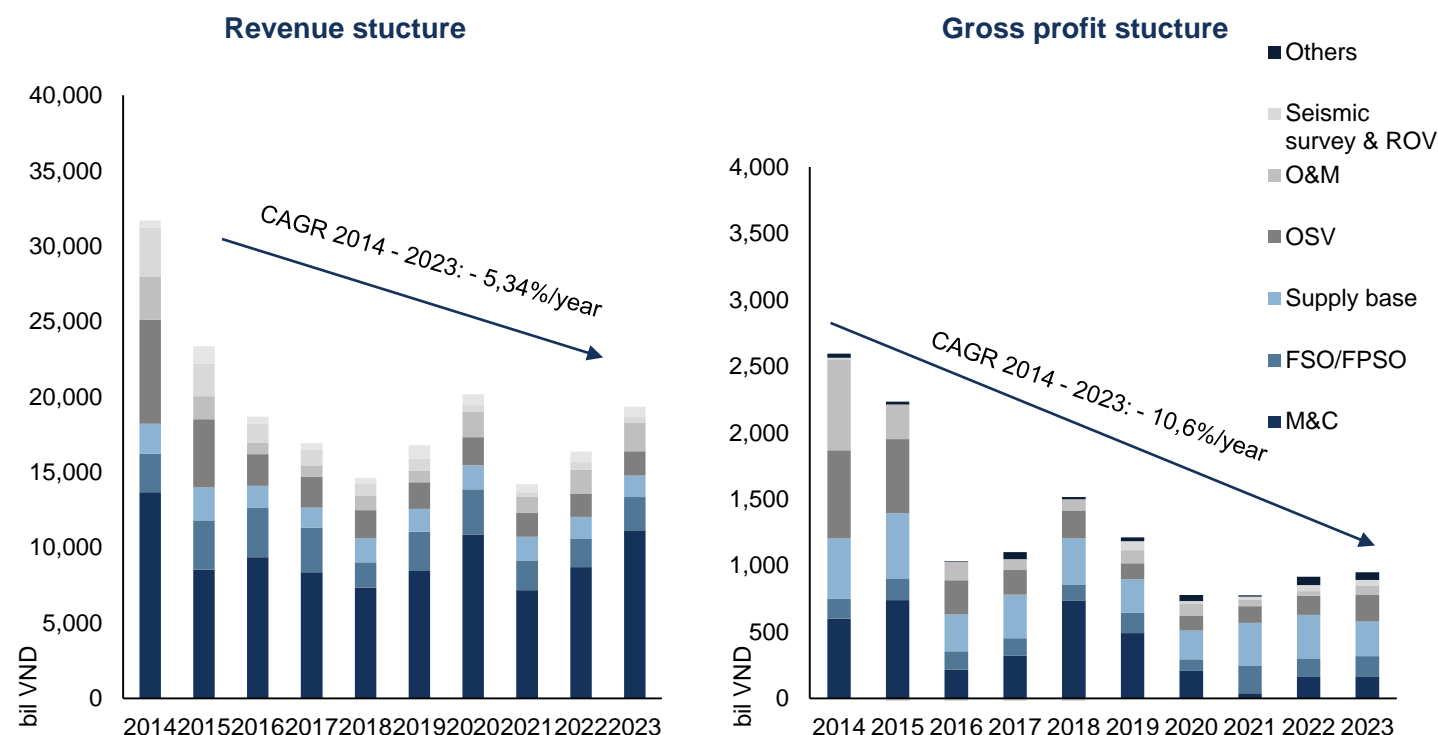
lack of consensus on gas price framework; (2) Tensions in the East Sea hinder the ability to expand oil and gas exploration activities (Ca Rong Do field must stop production activities).

Among the above projects, the Block B - O Mon is the project receiving the most attention with the capability to supply about 5 billion m³ of gas per year, equivalent to 65% of the annual gas supply of PV GAS in the context of a dramatical decline in domestic dry gas supply. Despite receiving a lot of concern and efforts from the government, the Block B - O Mon project has not yet reached a final investment decision after two delays to Q4 2022 and July 2023. Currently, the project Lot B - O Mon has had some new developments when it has awarded limited contracts for 3/5 of the main bidding packages with the expectation of having FID in Q2/2024. [\(See also outlook section\)](#)

2. PVS's business results were affected during a period of gloom in the oil and gas industry, but there was differentiation between segments.

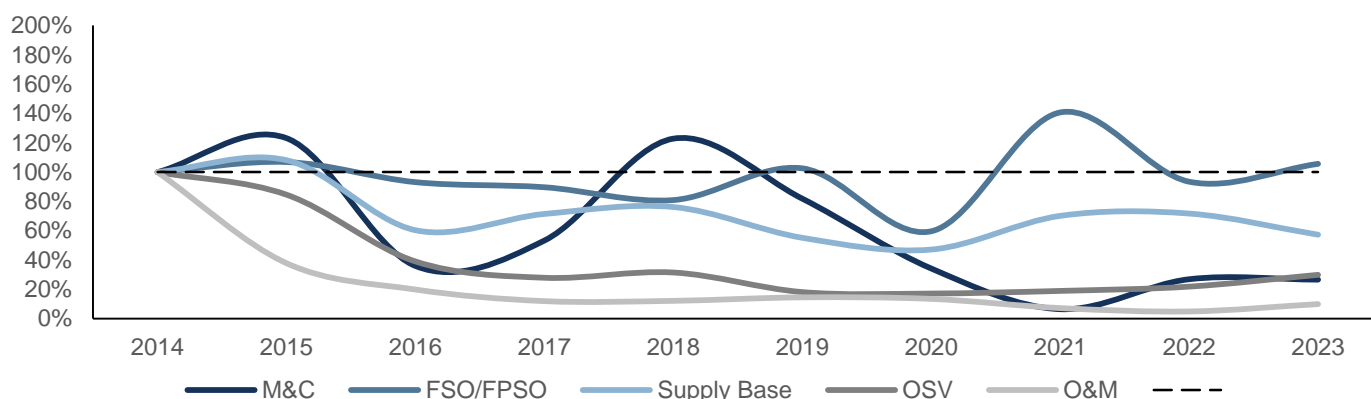
The gloomy oil and gas upstream situation caused PVS's business results to decline due to: (1) Reduced workload and (2) Increased competition (due to less work) leading to businesses having to reduce unit prices services, thereby affecting profits. In the period 2014 - 2023, PVS's revenue and gross profit went down by 5.34%/year and 10.6%/year, respectively, and in 2023, revenue and gross profit only reached 61.0% and 36.5% respectively compared to 2014 business results.

Chart 5: PVS's segments business result (Unit: Billion VND)



Source: PVS; FPTs research

The decline in business results is differentiated between segments. In which, there are segments that are less affected including: (1) FSO/FPSO operation management and (2) Port bases. The major affected segments are: (1) M&C segment; (2) Oil and gas technical vessel segment and (3) O&M segment, specifically the gross profit evolution of the business segments

Chart 6: PVS's segment gross profit movements


Source: PVS, FPTs research

2.1. FSO/FPSO management and operation segment : Still maintaining the same profit level compared to 2014

The business results of the FSO/FPSO management and operation segment still maintain a similar profit level compared to 2014 thanks to: (1) The FSO/FPSO management and operation segment operates in the opening phase of production of an oil and gas project, therefore less affected by the gloomy upstream oil and gas situation and (2) Being continued to invest after 2014 with FSO Golden Star (Joint Venture MVOT, going into operation at the end of 2020) participated in at Sao Vang - Dai Nguyet project.

2.2. Supply base segment: Gross profit decreased by 20 - 30% compared to the peak in 2014 and maintain stabled

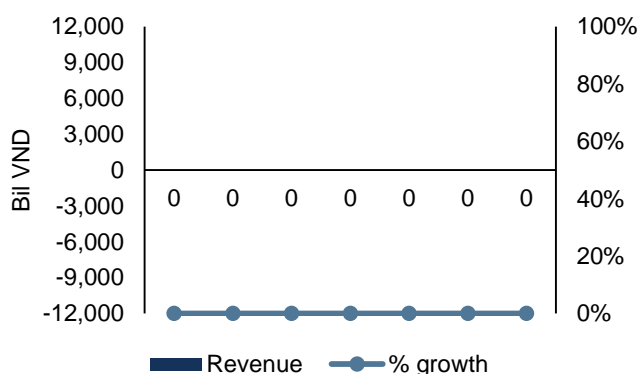
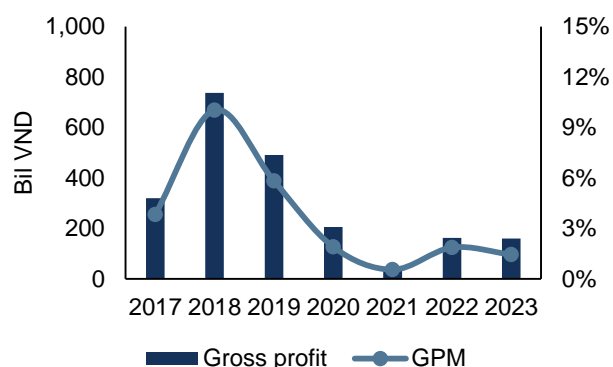
Business results of the port base segment decreased by about 20 - 30% compared to the peak in 2014, mainly because the provision of logistics services, ports and manufacturing warehouses for new projects was affected due to lack of jobs deriving from domestic oil and gas projects are behind schedule. However, gross profit of this segment still contributes a stable 250 - 300 billion VND/year to PVS thanks to: (1) Providing logistics services for domestic oil and gas operators/exploiters - still operating in current exploitation projects and (2) PVS's warehouse is capable of serving, loading and unloading goods outside the oil and gas industry.

2.3. M&C segment: Gross profit decreased sharply due to extend progress of most offshore oil and gas projects

The upstream oil and gas situation is gloomy and key oil and gas projects are continuously postponed, causing low workload. PVS must look for opportunities to participate in projects with lower profit margins to maintain business operations such as: (1) EPC Onshore industrial projects: GPP Dinh Co, NH3 factory /NPK Phu My, thermal power plants and LPG warehouses (Low gross profit margin due to simpler work than offshore projects and not PVS's strength); (2) EPCI offshore oil and gas projects in foreign countries such as Galaf - Qatar; Shwe - Myanmar (with higher costs and competitiveness compared to domestic projects).

In the period 2018 - 2020, PVS's gross profit recovered mainly from: (1) Sudden profit from the refund of costs of industrial EPC projects (in 2018) and (2) Contribution from EPCI implementation of Sao Vang - Dai Nguyet project.

In the period 2021 - present, PVS has mainly carried out EPCI for offshore oil and gas projects abroad with lower profit margins during difficult time of domestic oil and gas projects segment. In addition, PVS began participating in the construction and installation of offshore wind power projects, however, these projects have not contributed much profits because they are experimental projects with low profit margins

Chart 7: PVS's M&C segment revenue

Chart 8: PVS's gross profit margin of main segments:


Source: PVS, FPTs research

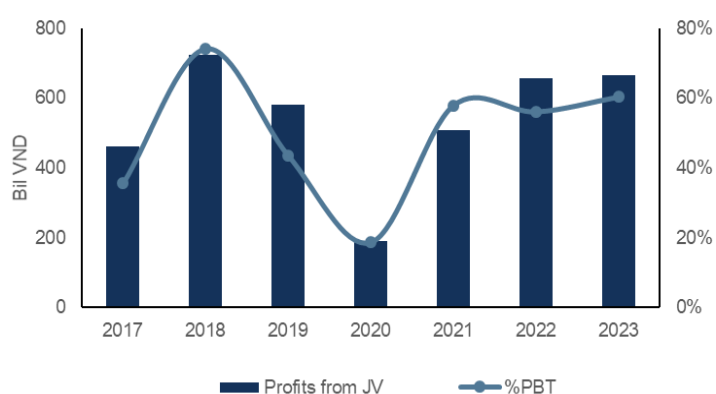
In 2023, PVS's M&C segment revenue recorded revenue of VND 11,151 billion, an increase of 28.2% yoy thanks to recording revenue from: (1) Foreign oil and gas projects such as Galaf Phase 3 - Qatar, Shwe – Myanmar and (2) Wind power projects such as: Hai Long 2 - 3 and Greater Changhua 2b & 4 (PVS shared that the growth of the wind power segment reached 3 times over the same period).

The absence of domestic construction projects caused the gross profit margin of the M&C segment to continue to remain low in 2023. Gross profit of the M&C segment decreased slightly by 1.1% yoy, reaching VND 160 billion. Gross profit margin of the M&C segment reached 1.4%, continuing to remain low in the period 2021 - 2023. Low profit margin due to lack of domestic offshore oil and gas projects explained by the progress of the Block B - O project continues to be delayed until 2024.

3. Profits from joint venture companies contribute greatly to PVS's business results:

PVS's joint venture companies are companies that own FSO/FPSO operated by PVS. During the gloomy upstream period of Vietnam's oil and gas industry (from 2016 - present), profits from joint venture companies contributed 50 - 60% of PVS's profits.

The business results of FSO/FPSO remain often stable thanks to: (1) The unit price is fixed and can only change at the end of the contract; (2) Floating storage services operate during the exploitation period of an oil and gas project, so it is not affected too much by the upstream situation of Vietnam's oil and gas. However, FSO/FPSO owners will face pressure to reduce FSO/FPSO day rate to support customers who are mining units when oil prices drop to low levels (below 60 USD/barrel).

Chart 9: PVS's profit from JV


Source: PVS, FPTs research

In 2020, profit from joint venture companies decreased sharply by 60.2%yoy due to provisioning: (1) VND 240 billion for FPSO Lam Son when facing the risk of contract expiration in June/ 2021 and (2) 124 billion VND when FSO MV12 encountered technical problems. Currently, FPSO Lam Son has returned to stable operation in 2022 while FSO MV12 has stopped operating and PVS has made a complete provision for this FSO.

In 2023, FSO/FPSOs operated normally under contracts, helping the profits of joint venture companies to reach VND 664 billion, +1.1% yoy, accounting for 60.2% of PVS's PBT.

III – BUSINESS RESULTS IN 2023: SLIGHT REDUCTION DUE TO THE LACK OF DOMESTIC OIL AND GAS PROJECTS [\(Back to cover page\)](#)

Table 1: PVS's 2023 business results

	2023	2022	%Yoy	Note
Revenue	19,349	16,373	18.2%	
<i>M&C segment</i>	11,151	8,697	28.2%	Revenue growth of 18.2% mainly came from 3 segments: M&C increased by 28.2% yoy, O&M segment increased by 22.9% yoy and FSO/FPSO segment increased by 17.8% yoy.
<i>FSO/FPSO</i>	2,207	1,874	17.8%	
<i>Port base</i>	1,418	1,455	-2.6%	
<i>Petroleum technical vessel</i>	1,607	1,570	2.4%	The M&C segment recorded growth mainly thanks to the offshore wind power construction, which increased 3 times over the same period. PVS did not record revenue from construction of domestic offshore oil and gas projects because the projects continued to fall behind schedule.
<i>O&M</i>	1,911	1,555	22.9%	
<i>Seismic and geological surveys</i>	405	510	-20.6%	
Cost of goods sold	18,401	15,458	19.0%	
Gross profit	948	915	3.7%	
Gross profit margin	4.9%	5.6%	-0.7 dpt	Gross profit grew by 3.7% yoy, lower than revenue growth due to profit margin narrowing by 0.7 ppt, especially in key services such as: M&C (-0.4 ppt); FSO/FPSO (-0.3 ppt); port base (-4.1 ppt) due to the lack of domestic oil and gas construction projects.
<i>M&C segment</i>	1.4%	1.9%	-0.4 dpt	
<i>FSO/FPSO</i>	7.1%	7.4%	-0.3 dpt	
<i>Port base</i>	18.4%	22.5%	-4.1 dpt	Main business activities lost 188 billion compared to 7 billion in 2022 due to the increase of 26.9% yoy in corporate management expenditure, especially in H2/2023 due to: (1) Staff expenditure increased to prepare for the Block B - O Mon project and upcoming wind power projects. (2) Warranty reserve reversal expenditure for projects in Q4/2023 decreased by 41.4% yoy.
<i>Petroleum technical vessel</i>	12.3%	9.2%	3.1 ppt	
<i>O&M</i>	3.6%	2.2%	1.4 ppt	
<i>Seismic and geological surveys</i>	11.2%	8.8%	2.4 ppt	
Selling Expense	85	79	7.7%	
Business Management Expense	1,050	828	26.9%	
Main operating profit	(188)	7	N/A	
Financial revenue	776	489	58.6%	Profit after tax reached 899 billion VND, (-4.8% yoy) although main operating profit was negative mainly thanks to:
Financial expenses	215	163	32.4%	
<i>Interest expenses</i>	73	51	44.2%	
Other profits	66	183	-63.9%	(1) Financial revenue increased by 58.6% yoy due to large amount of cash.
Profit of joint venture company	664	657	1.1%	(2) Profit from joint venture companies reached 664 billion VND, up 1.1% yoy.
Profit before tax	1,103	1,174	-6.0%	
CIT	204	229	-11.1%	
Profit after tax	899	944	-4.8%	
NPAT belongs to shareholders	866	884	-2.0%	

IV – PROSPECTS AND FORECASTS OF BUSINESS RESULTS IN 2024:

We believe that PVS's business results will be more positive in 2024, mainly from the M&C segment when domestic oil and gas construction projects show more positive signs and the chance to sign new wind power construction contracts, specifically:

- Domestic oil and gas construction projects are expected to be implemented as planned, helping M&C segment profits grow:** [\(Back to cover\)](#) [\(Back to business\)](#)

We see that the upstream of Vietnam's oil and gas industry has experienced more optimistic changes when oil and gas projects achieve new progress such as: (1) Murphy Oil makes the final investment decision (FID) for Lac Da Vang oilfield and is opening EPCI bids for main items; (2) Limited letter of award (LLOA) for EPCI#1-3 packages of Block B - O Mon project with the winning bidder being PVS and PVS's joint ventures, specifically the main packages of the Block project B:

Table 2: Main bidding packages of Block B project:

	Package	Job	Value (Mil USD)	Progress	Contractors
Upstream	EPCI #1	1 CPP + 1 housing platform	1,100	In progress	Joint venture MCDermott - PVS
	EPCI #2	4 WHPS	400	Bidding results are available	PTSC M&C - PVS's subsidiary
Midstream	EPCI #3	Onshore pipeline	300	Bidding results are available	Joint venture PVS - Lilama 18
	EPCI #4	Offshore pipeline	400	Bidding	PVS is participating in the bidding
During the exploitation phase	EPCI #5	42 WHPs	4,200	Bidding	Potential candidate is PTSC M&C
	FSO		400	Bidding	PVS is participating in the bidding

Source: PVS; FPTs research

We estimate the total contract value belonging to PVS for EPCI package #1,2,3 of Block B - O Mon project is about 1,200 million USD, in addition, PVS is participating in bidding for EPCI contract #4 of Block B project with an estimated value of about 400 million USD. However, the official implementation of the bidding package and clear reflection on PVS's business results will only take place after the project has FID (expected Q2/2024).

We realize that the following oil and gas projects will not be recorded in 2024 including: (1) Nam Du - U Minh project which has just signed a gas sales framework - HOA with PV GAS, will need to sign GSA, GPSA gas purchase contract so as to be able to get FID in 2025; (2) Su Tu Trang Phase 2B and Ca Voi Xanh projects which both do not have new developments.

New wind power projects will be recorded in 2024: In addition to oil and gas projects, we believe that the offshore wind power construction segment will contribute to growth as PVS has recorded strong progress in that field. In detail, the Semco Maritime and PTSC M&C joint venture has continuously been awarded two new projects at the end of 2023 and will begin implementation in 2024: (1) EPC contract to provide offshore transformer stations with capacity of 375 MW for the Baltica 2 wind power project in Poland and (2) Offshore transformer EPC contract with a capacity of 500 MW for the Fengmiao offshore wind power project in Taiwan.

PVS will sign more wind power construction contracts thanks to the strong growth of wind power capacity in the period 2023 - 2032, focusing mainly in China and Europe where PVS has affirmed its capability through winning wind power projects [\(Appendix 3.1: Projection of newly installed offshore wind power capacity in the period 2023 - 2032F\)](#). PVS shared during the extraordinary general meeting in February 2024 that there is a possibility of signing 1 - 2 more offshore wind power construction contracts worth about 700 - 1,000 million USD in 2024.

Forecasted business results of the M&C segment: We forecast that PVS's revenue will reach 632 million USD (about 15.3 trillion VND), an increase of 37.8% yoy, of which the offshore oil and gas construction segment will reach 305 million USD; Wind power construction will reach 308 million USD and industrial projects will reach 19.2 million USD, specifically projects as below:

Table 3: Projected revenue recorded for PVS's projects in 2024: (Unit: Million USD)

No	Project	Total value	Revenue 2024F	Remaining value after 2024F	Time	Project information
Offshore oil and gas project						
1	Gallaf Phase 3	380	35	0	Q4/2021 - Q1/2024	PVS won the bid for two wellhead platforms for the Al-Shasheen field project in Qatar
2	Block B - O Mon	1,550	211	1,339	Q1/2024 - 2027	<p>Block B - O Mon project includes 4 construction and installation packages, of which:</p> <p>EPCI#1 - EPCI 1 CPP platform and housing platform belong to Mc Dermott - PVS joint venture with PVS's share being 493 million USD.</p> <p>EPCI#2 - EPCI 4 wellhead platforms belong to PVS with an estimated value of 400 million USD.</p> <p>EPCI#3 - Installation of ~100km of onshore pipeline belongs to Lima18 - PVS joint venture with PVS's share being 257 million USD.</p> <p>EPCI#4 (*) – Installation of ~300km of 26-inch offshore pipeline, the potential winning bidder is PVS with an estimated value of about 400 million USD.</p>
3	Lac Da Vang (*)	356	59	297	Q2/2024 - Q3/2026	EPCI bidding for 1 CPP center platform and 2 wellhead platforms LDV A - LDV B, estimated total value of 356 million USD
Offshore wind power project						
4	Hai Long 2 -3	68	17	0	Q3/2022 - Q1/2024	EPCI 2 transformer stations offshore Taiwan
5	Greater Changhua 2b&4	320	142	107	Q3/2023 - Q4/2025	EPC 33 pylons for Taiwan offshore wind power project
6	Baltica 2	180	68	101	Q4/2023 - Q1/2026	The joint venture Semco Maritime and PTSC M&C awarded an EPC contract for 4 offshore transformer stations with a capacity of 375 MW for a project offshore Poland.
7	Fengmiao	100	35	65	Q1/2024 - Q2/2026	Joint venture Semco Maritime and PTSC M&C awarded EPC contract for offshore transformer station with capacity of 500 MW offshore Taiwan
8	Potential wind power projects(*)	800	44	755.6	Q3/2024 - Q4/2028	PVS will earn 1 - 2 more offshore wind power construction contracts worth about 700 - 1000 million USD in 2024
Industrial buildings						
9	Thi Vai LPG Warehouse	32	19.2	0	Q3/2023 - Q3/2024	
Total		3,786	632	2,663		

(*) Potential projects

Source: PVS, FPTs compiled and estimated

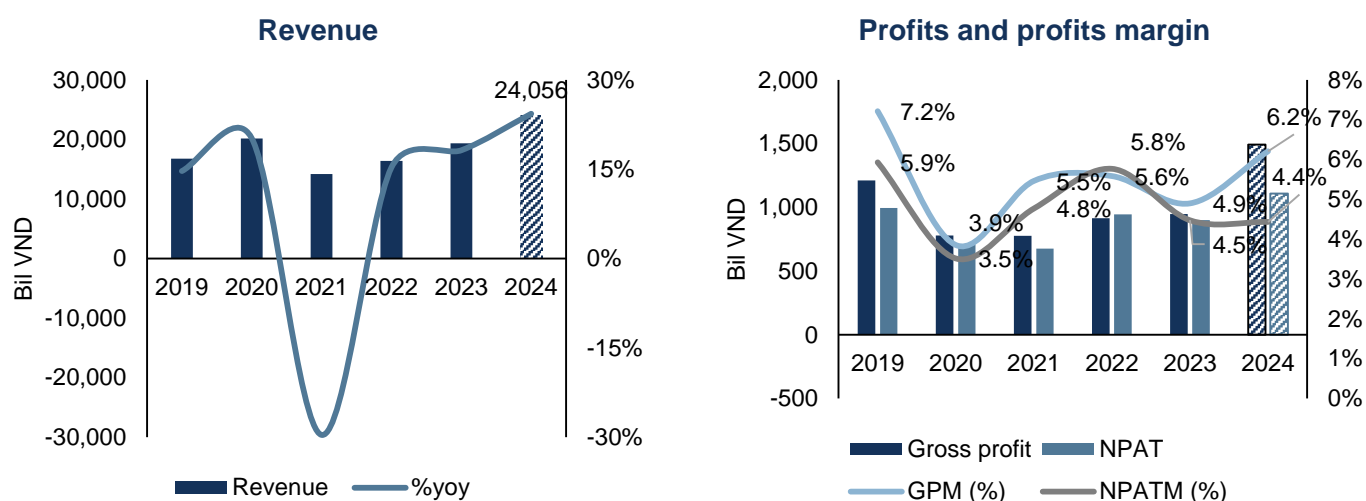
We forecast gross profit of the M&C segment to reach 568.4 billion VND, up 255% yoy, corresponding to a gross profit margin of 3.7%, in which the profit margin of the construction segments will respectively reach: (1) 5.0% for domestic oil and gas projects while the net profit margin of EPCI package #1 is 4%; (2) 2.3% for wind power construction when large projects such as Greater Changhua and Baltica 2 begin to record revenue; (3) 3.5% for domestic oil and gas projects.

2. Projected results of 2024 business results: [\(Back to cover page\)](#)

We forecast PVS's revenue and net profit to reach VND 24,056 billion (+24.3% yoy) and VND 1,067 billion (+23.2% yoy) respectively in 2024, specifically forecast:

Table 4: Projected business results of PVS in 2024 (Unit: Billion VND)

Business results	2023	2024	%yoy	Note
Revenue	19,349	24,056	24.3%	
MC	11,151	15,362	37.8%	Revenue will grow 24.3% yoy thanks to: (1) M&C segment will grow 37.8% yoy from new projects
FSO/FPSO	2,207	2,262	2.5%	
Port base	1,418	1,539	8.5%	
Petroleum technical vessel	1,607	1,687	5.0%	(2) FSO/FPSO segment will grow slightly due to signed lease contracts
O&M	1,911	2,140	12.0%	(3) Port Base segment; Petroleum technical vessels; O&M will grow thanks to the recovery of the M&C segment.
Gross profit	948	1,494	57.5%	
Gross profit margin	4.9%	6.2%	1.3 ppt	Gross profit will develop by 57.5% yoy thanks to growth revenue and gross profit margins of all business segments expand when:
MC	1.4%	3.7%	2.3 points	
FSO/FPSO	7.1%	7.4%	0.3 dpt	
Port base	18.4%	21.3%	2.9 ppt	(1) Gross profit of M&C segment will increase by 1.3 ppt thanks to contributions from domestic oil and gas projects (~5%) and wind power projects (~2.3%)
Petroleum technical vessel	12.3%	12.3%	-0.1 dpt	
O&M	3.6%	5.4%	1.8 ppt	
Selling & Business Management Expense	1,136	1,178	3.8%	(2) Gross profit in other segments will increase according to the recovery of M&C activities.
Operating profit	-188	315	N/A	
Financial revenue	776	556	-28.3%	Net profit will grow by 23.2% yoy lower than gross profit mainly because financial revenue decreased by 28.3% yoy mainly from deposit interest due to: (1) PVS will raise investment and take part in other construction activities causing short-term deposits /financial investments to decrease; (2) Deposit interest rates are lower than in 2023.
Financial expenses	215	223	3.5%	
Interest expenses	73	76	4.1%	
Other profits	66	69	4.6%	
Profit/(loss) of joint venture company	664	676	1.7%	
Net profit	866	1,067	23.2%	
Net profit margin	4.5%	4.4%	-0.04 dpt	

Chart 10: PVS's revenue and profit forecast result


Source: FPTs research

V – VALUATION AND RECOMMENDATION ([Back to cover](#))

With the closing price on February 28, 2024, PVS shares are trading at P/E TTM = 20.6x; respectively higher than the historical average P/E of 10.4x and the industry average P/E of 17.8x. We evaluate PVS shares using the P/E method with EPS forward in 2024 reaching 2,232 VND/share and the industry average P/E is 17.8x.

We issue a **WATCH recommendation** for PVS stock with a target price of 39,750 VND/share, 6.9% higher than the closing price on February 28, 2024. Investors can sell PVS at the current price and buy when the stock has a better discount (about 33,100 VND/share with an expected profit rate of 20%).

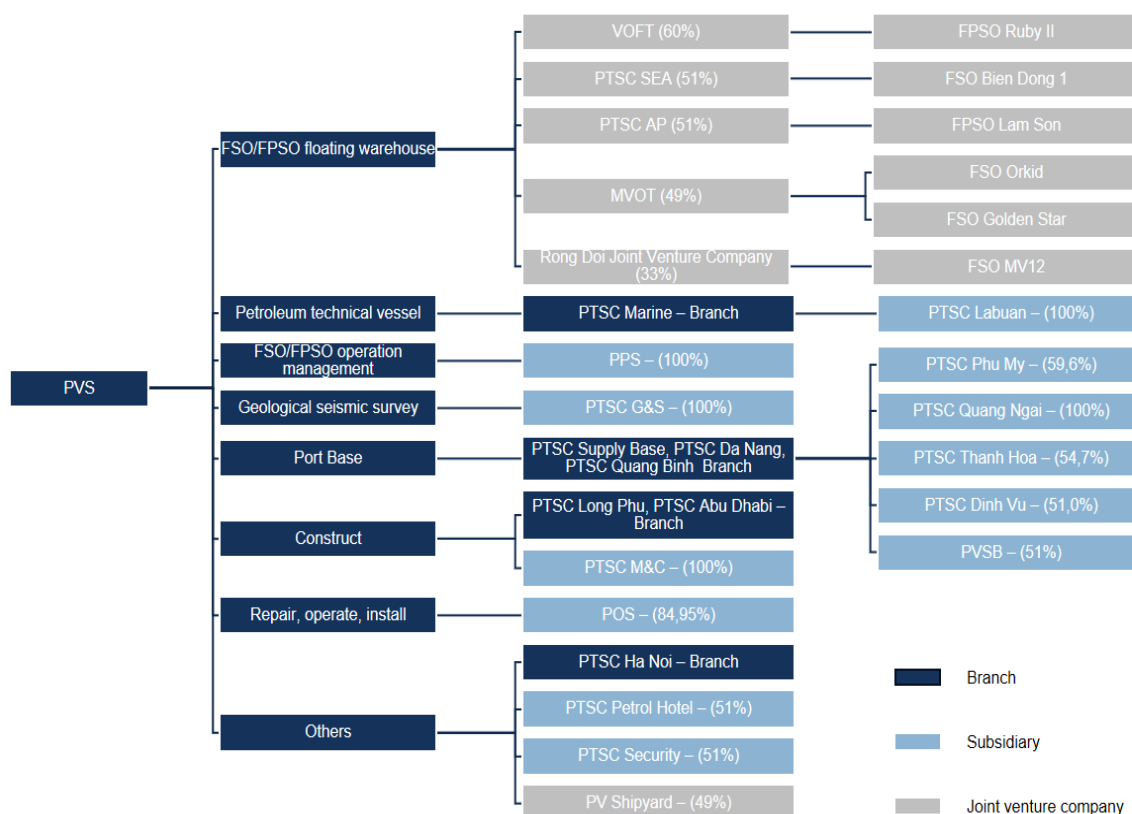
Company	Nation	Capitalization	Revenue 2023	NPAT 2023	ROE	D/E	P/E (*)
Keppel Ltd	Singapore	9,616	5,188	3,037	37.9%	108.1%	30.4
MISC Berhard	Malaysia	7,134	3,131	473	5.4%	45.2%	15.5
Dialog Group BHD	Malaysia	2,193	679	114	8.6%	24.3%	21.7
Yinson Holdings BHD	Malaysia	1,518	2,408	189	12.1%	198.2%	10.5
MODEC Inc	Japan	1,384	3,583	97	11.0%	57.5%	8.4
PVD	Vietnam	651	245	24	4.1%	22.8%	29.8
Dayang Enterprise Holding	Malaysia	525	218	37	9.2%	23.7%	19.5
Thoresen Thai Agencies PCL	Thailand	339	700	29	3.9%	37.9%	16.1
Petrosea Tbk	Indonesia	322	565	21	7.9%	95.0%	14.2
Mermaid Maritime PCL	Singapore	104	254	8	4.8%	47.7%	19.6
Deleum Bhd	Malaysia	88	192	10	11.6%	0.5%	10.2
Medium		2,170	1,560	367	10.6%	60.1%	17.8
PVS		731	812	36	7.0%	13.7%	20.7

VI – APPENDIX:

Appendix 1: Organization chart – list of subsidiaries and affiliated companies: [\(Back to presentation\)](#)

PVS's organizational structure includes 6 branches, 12 subsidiaries and 6 joint venture companies, specifically:

Figure 3: Diagram of PVS's subsidiaries divided by business segment



Source: PVS, compiled by FPTTS

PVS's branches, subsidiaries, and joint ventures mainly operate in 6 main services of PVS, in which the port base segment includes 5 subsidiaries that are oil and gas ports; The FPSO segment includes 5 joint ventures that own 6 FSO/FPSO floating warehouses.

Appendix 2: Overview of PVS's business services: [\(Back to presentation\)](#)

PVS's business areas are closely related to each other and provide comprehensive solutions to customers throughout the life cycle of an oil and gas project, specifically:

1. Seismic survey:

PVS provides seismic survey services - structural geology and survey and repair of underground structures using ROV (Remote Operated Vehicle) equipment. Seismic and geological surveys are the first step in the oil and gas exploitation process to determine data on locations and exploitable oil and gas reserves.

PVS has narrowed the seismic and geological survey segment since 2017 due to low domestic oil and gas exploration demand when: (1) Oil prices dropped sharply and remained below 70 USD/barrel for a long time (2015-2020) causing domestic projects to be postponed/delayed or canceled, thereby negatively affecting PVS's business results and (2) Investment trend in renewable energy.

2. Petroleum technical vessel:

Currently, PVS owns a fleet of 21 oil and gas technical vessels that can provide different types of services transporting equipment, supplies, human resources from land to offshore, towing, holding and floating near-shore vessels, offshore drilling rigs..., specifically list of vessels owned by PVS:

No	Service fleet	Capacity (BBH)	Age Number	Type	Note
1	PTSC Golden Star ship	6500	9	AHTS	Multi-purpose service ships help tow vehicles, supplies, and human resources; make anchors for drilling rigs, FSO/FPSO.
2	Phong Nha ship	5300	23	AHTS DP1	
3	Binh An ship	8900	22	AHTS	
4	PTSC Vung Tau ship	7080	18	AHTS DP1	
5	PTSC Hai Phong ship	5220	15	AHTS DP1	
6	PTSC Thai Binh ship	8080	15	AHTS DP2	
7	PTSC Thang Long ship	7200	15	AHTS DP2	
8	PTSC Tien Phong ship	7080	15	AHTS	
9	PTSC Saigon ship	5150	9	AHTS DP2	
10	PTSC Hai An ship	5150	9	AHTS DP1	
11	PTSC NN TLHN 02 ship	3500	14	Utility Towing	Tugboat serving Dung Quat Oil Refinery.
12	PTSC NN TLHN 03 ship	4750	14	Utility Towing	
13	PTSC 04 ship	2140	13	Utility Towing	
14	PTSC 05 ship	3200	13	Tug	Tugboat serving Dung Quat Oil Refinery.
15	PTSC 06 ship	3200	5	Tug	
16	PTSC 07 ship	1600	6	Tug	Tugboat serving Nghi Son Oil Refinery.
17	PTSC 08 ship	800	5	Tug	
18	PTSC 09 ship	5000	5	Tug	
19	PTSC 10 ship	2700	5	Tug	
20	PTSC 11 ship	1600	5	Tug	
21	PTSC 12 ship	1430	5	Service Boat	Transporting people working at Oil Filling Buoy (SPM) at Nghi Son Oil Refinery.

In addition, depending on market conditions, PVS will charter additional bareboat vessels to meet customer needs.

3. Supply base:

Currently, PVS is managing and operating 08 oil and gas service port bases in all three regions of Vietnam with a total area of over 360ha and over 2,700m of wharf, specifically:

No	Port name	Location	Acreage	Scale	Owned by PVS
1	Vung Tau Lower Port	Vung Tau City, BR-VT Province	82.2	Number of berths: 09 Berth length: 750m Ship receiving capacity: 10,000 DWT	100%
2	Hon La port	Quang Trach District, Quang Binh	11.02	Number of berths: 01 Berth length: 215m Ship receiving capacity: 10,000 DWT	100%
3	Son Tra Port	Da Nang City	7.5	Number of berths: 09 Berth length: 750m Ship receiving capacity :10,000 DWT	100%
4	Dung Quat port	Binh Son District, Quang Ngai Province	14.5	Number of berths: 02 Berth length: 370m Ship receiving capacity: 70,000 DWT Tug dock: 70m	95.19%

5	PTSC Phu My Port	Tan Thanh District, BR-VT Province	26.5	Number of berths: 02 Berth length: 600m Ship receiving capacity: 80,000 DWT	59.61%
6	Nghi Son Port	Tinh Gia District, Thanh Hoa Province	43.9	Number of berths: 02 Berth length: 390m Ship receiving capacity: 70,000 DWT Tug dock: 70m	54.69%
7	PTSC Dinh Vu Port	Hai An District, Hai Phong City	15.28	Number of berths: 01 Berth length: 330m Ship receiving capacity: 20,000 DWT	51%
8	Sao Mai - Ben Dinh Port	Vung Tau City, BR- VT Province	113	Developing	51%

At ports, PVS provides: (1) Logistics services for companies and contractors operating in oil and gas exploration and production in Vietnam, (2) Manufacturing warehouse for oil, gas and industrial projects. In addition, PVS's port warehouse is also capable of serving port warehouses, loading and unloading goods outside the oil and gas industry, so the business results of the port base segment are not seriously affected when the domestic oil and gas industry situation is gloomy.

4. Mechanical manufacturing and construction services – M&C:

The M&C segment is the largest contributor to PVS's revenue and profit. Previously, PVS's M&C services included 2 services: (1) Petroleum mechanical engineering with the implementation of EPCI contracts for construction and installation of offshore oil and gas projects such as central processing platforms, residential platforms, wellhead platforms and (2) Construction of onshore Industrial projects such as power plants, petrochemical refineries; LPG and LNG warehouse; onshore gas and petroleum pipelines,...

PVS leads domestic oil and gas mechanical services and strengthens its presence in the international arena, owning warehouses and manufacturing oil and gas construction in Vung Tau, Quang Ngai, Thanh Hoa with condition of facilities and port, warehouse, drawbridge - lifting equipment serve the entire production process.

Since 2021, PVS has participated in the renewable energy segment with initial activities being the construction and installation of offshore wind power projects. Thanks to experience from building offshore oil and gas projects and competitive advantages in mechanical capacity and oil and gas port and warehouse systems, PVS has obtained EPC contracts for offshore transformer stations, Offshore wind power bases of customers Northland Power, Orsted ,etc

According to estimates, offshore wind power substations and stands account for 23% of the cost structure of a wind power project and in the future, PVS may expand to EPCI stands, substations and cables bidding, about 35% of the cost structure of an offshore wind power project.

5. FSO - FPSO floating warehouse management and operation services:

FSO/FPSO supplying service is stable and long-lasting. Floating storage oil (FSO) and floating storage processing oil (FPSO) are offshore vessels used to store crude oil products and condensate during the offshore exploitation process, therefore associated with oil field exploitation activities (10 - 20 years). Currently, PVS owns/co-owns 6 specific FSO/FPSO:

No	Name of floating warehouse	Capacity	Investment capital (Million USD)	Activity area	Year of operation	Joint venture ownership	% of PVS	Rented by customers
1	FSO Orkid	745,000	169	PM3 CAA field	2009	MVOT	49%	Repsol Oil & Gas Malaysia Limited
2	FPSO Ruby II	645,000	300	Hong Ngoc field	2010	VOFT	60%	PVN

3	FSO PTSC Bien Dong 01	350,000	149	Hai Thach - Moc Tinh field cluster	2011	SEA	51%	BDPOC
4	FPSO PTSC Lam Son	350,000	400	Thang Long - Dong Do field cluster 1&02/97	2014	AP	51%	PVEP
5	FSO Golden Star	777,695	120	Sao Vang - Dai Nguyet field cluster 05-1b & 05-1c	2020	MVOT	49%	Idemitsu
6	FSO Rong Doi MV12	300,000	180	Rong Doi field	2007	Rong Doi JV	33%	Korea National Oil Corporation - KNOC

Source: PVS, FPTTS research

PVS records revenue from the FSO/FPSO operations management segment as follows:

- (1) Revenue from leasing FSO Bien Dong 01 and FPSO PTSC Lam Son with rental price:

PVS's fixed-term rental price = bareboat rental price from the joint venture + operating and management service fee)

- (2) Revenue from providing operation and management services for FSO Orkid, FPSO Ruby II, FSO Golden Star and FSO Rong Doi MV12.

6. Installation, operation, repair and maintenance services:

PVS participates in providing the following main services: human resource supply; transportation - installation - floating connection services; operation; repair - maintenance and dismantling of oil and gas construction on both land and offshore. In which: (1) Operations and Maintenances (O&M) services bring stable business results for the segment with typical projects such as operation - maintenance of Dung Quat Oil Refinery, Nghi Son Oil Refinery, maintenance of FSO/FPSO for third parties,... (2) Transportation - installation - connection services depend on the M&C segment.

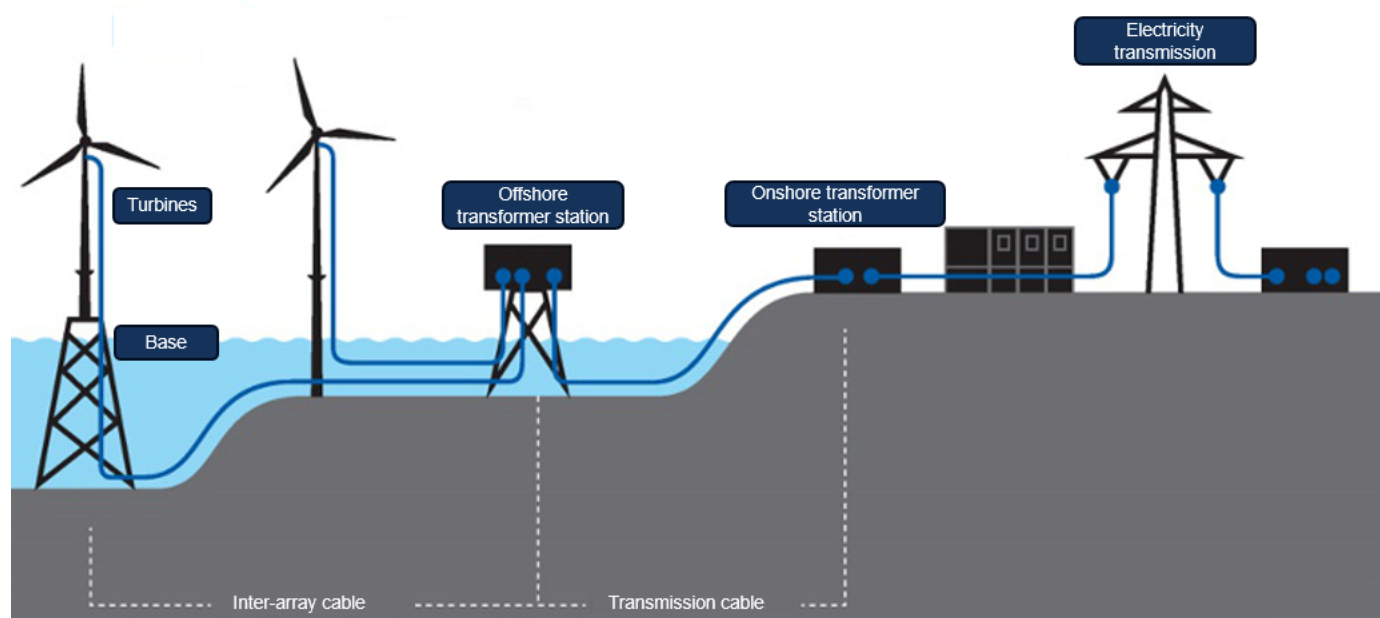
Appendix 3: Overview of offshore wind power construction and installation activities [\(Return to business overview\)](#)

Offshore wind power is a form of power generation that exploits wind power at sea, turns it into electricity and supplies it to the onshore power transmission network.

Wind power investment is a global trend in an effort to reduce greenhouse gas emissions to solve the problem of climate change, creating a need for low-carbon forms of renewable energy. In addition, other factors such as: (1) International commitment to reduce net carbon emissions by 2050 at COP 26 (2021) and (2) Energy crisis in Europe and (3) The number of wind power onshore tends to decrease when the appearance of projects with large capacity has promoted the shift to using wind power, especially offshore wind power (less impact on the environment than onshore wind power).

Enterprises in the oil and gas industry are shifting to offshore wind power thanks to (1) Offshore wind power production and installation technology is similar to oil and gas projects and (2) Strongly potential growth in the period 2022 - 2032.

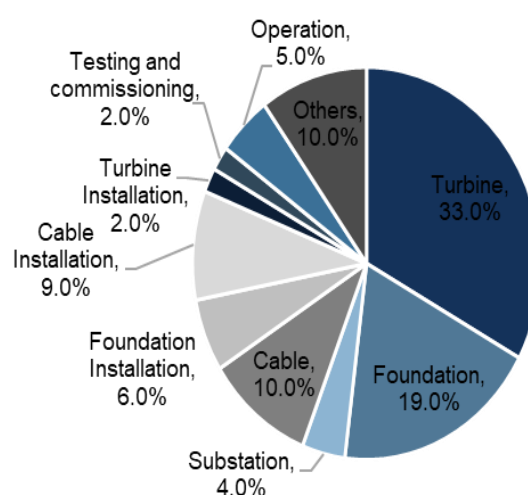
The main components in an offshore wind project are Turbines; Base; Offshore transformer stations and cable systems bringing power to land, specifically:

Figure 4: Main components in an offshore wind power project


Source: FPTs research

In particular, manufacturing turbines and bases accounts for the majority (~52%) of the cost structure of an offshore wind power project because a wind power project of about 600 MW requires 80 – 100 wind turbines (depending on the wind speed in the area where the turbine is located). Besides, offshore installation accounts for about 15% of the cost of a wind power project.

Regarding offshore wind power manufacturing and installation technology, many technologies used in the offshore wind power industry are innovations originating from the oil and gas industry, even simpler such as: (1) Bases are built in nearshore warehouses similar to oil and gas rig bases, (2) The transportation and installation of offshore wind power projects such as turbine installation, substations and cable systems will be similar in conjunction with the installation of offshore oil and gas projects such as wellhead platforms; gas pipeline system to shore and the ability to use workers and service fleets in the oil and gas industry to implement.

Chart 11: Offshore wind power's cost structure


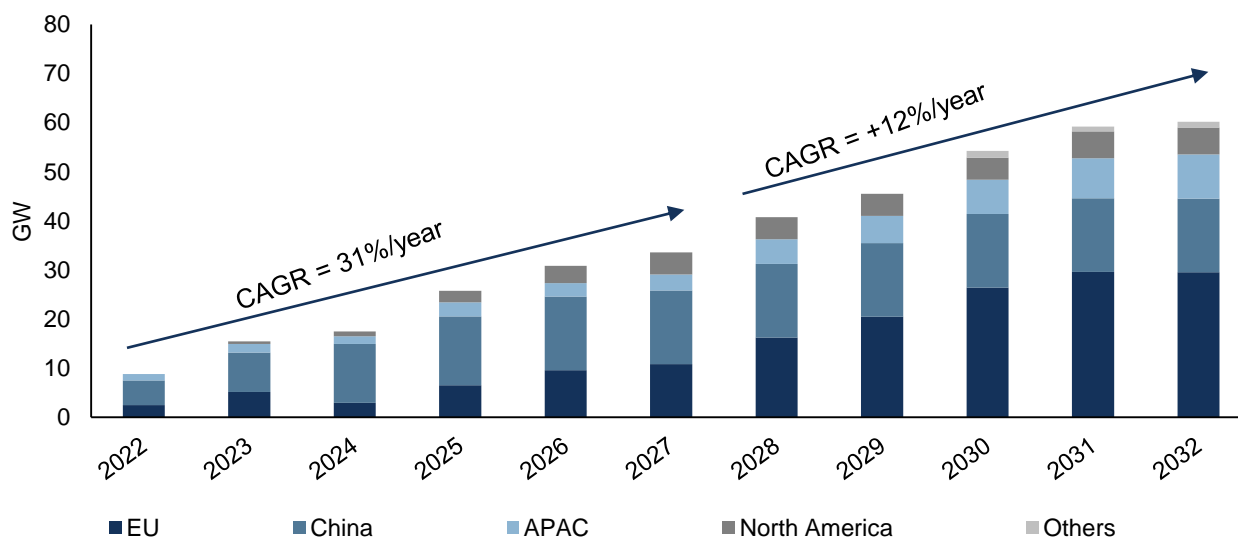
Source: FPTs research

Appendix 3.1: Forecast installation capacity of the world's offshore wind power segment: [\(Back to outlook\)](#)

Newly installed capacity of wind power projects is expected to grow well in the period 2023 - 2032: This is the main trend in developing clean energy sources in the medium term and is accompanied by the impact of the energy crisis in Europe assisting the installed capacity of offshore wind power is expected to increase sharply. According to the International Wind Energy Council - GWEC, newly installed offshore wind power capacity in 2023 will reach 15.5 GW and

reach an average growth rate of 31%/year in the period 2023 - 2027F before decreasing to the average level, 12%/year in the period 2028F - 2032F. Newly installed capacity growth comes from China with an average increase of 15 GW/year and an average growth of 28.3%/year from Europe thanks to: (1) Large wind farms have become more competitive and (2) The ambitious targets and strong policies of the European Green Deal help accelerate the clean energy transition.

Chart 12: Global new offshore installation capacity

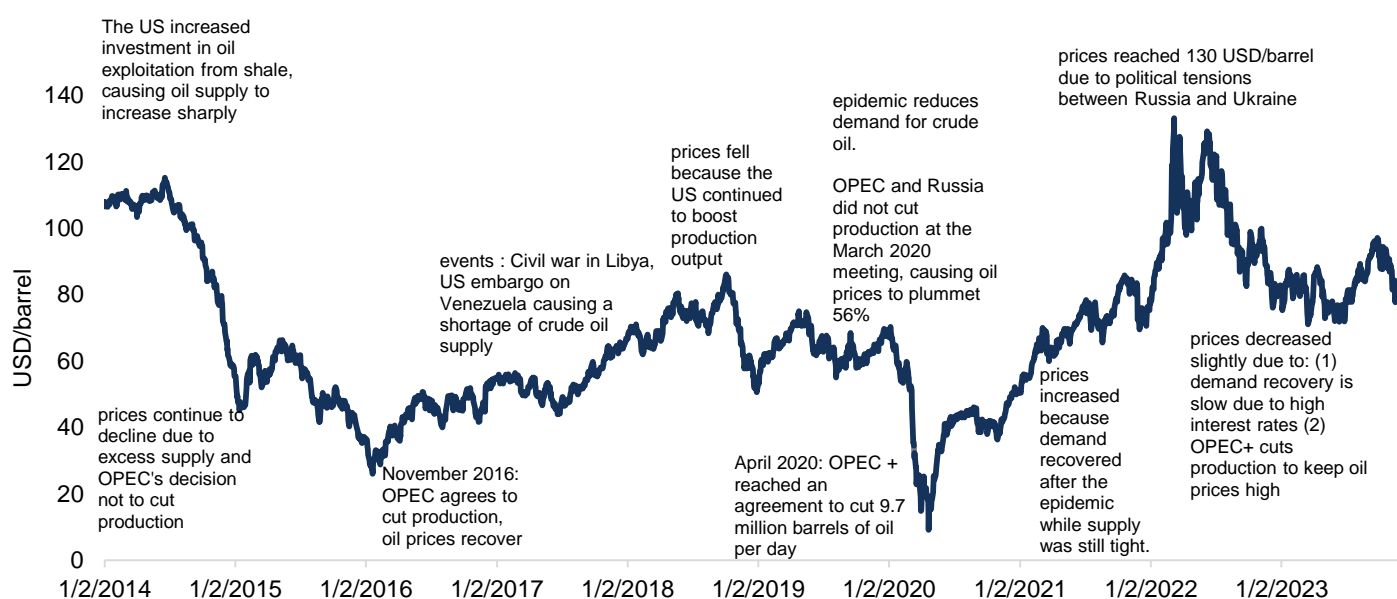


Source: GWEC, FPTs research

Appendix 4: Crude oil price developments: [\(Back to presentation\)](#)

After a flat period of 100 - 120 USD during 2010 - 2014, crude oil prices fell sharply to 40 USD/barrel in late 2014 and remained below 60 USD/barrel for a long time until the energy crisis in 2022 resulting from the outbreak of the Russia-Ukraine war, specifically oil price movements:

Chart 13: Crude oil price developments in the period 2014 - 2023



Source: EIA; FPTs research

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