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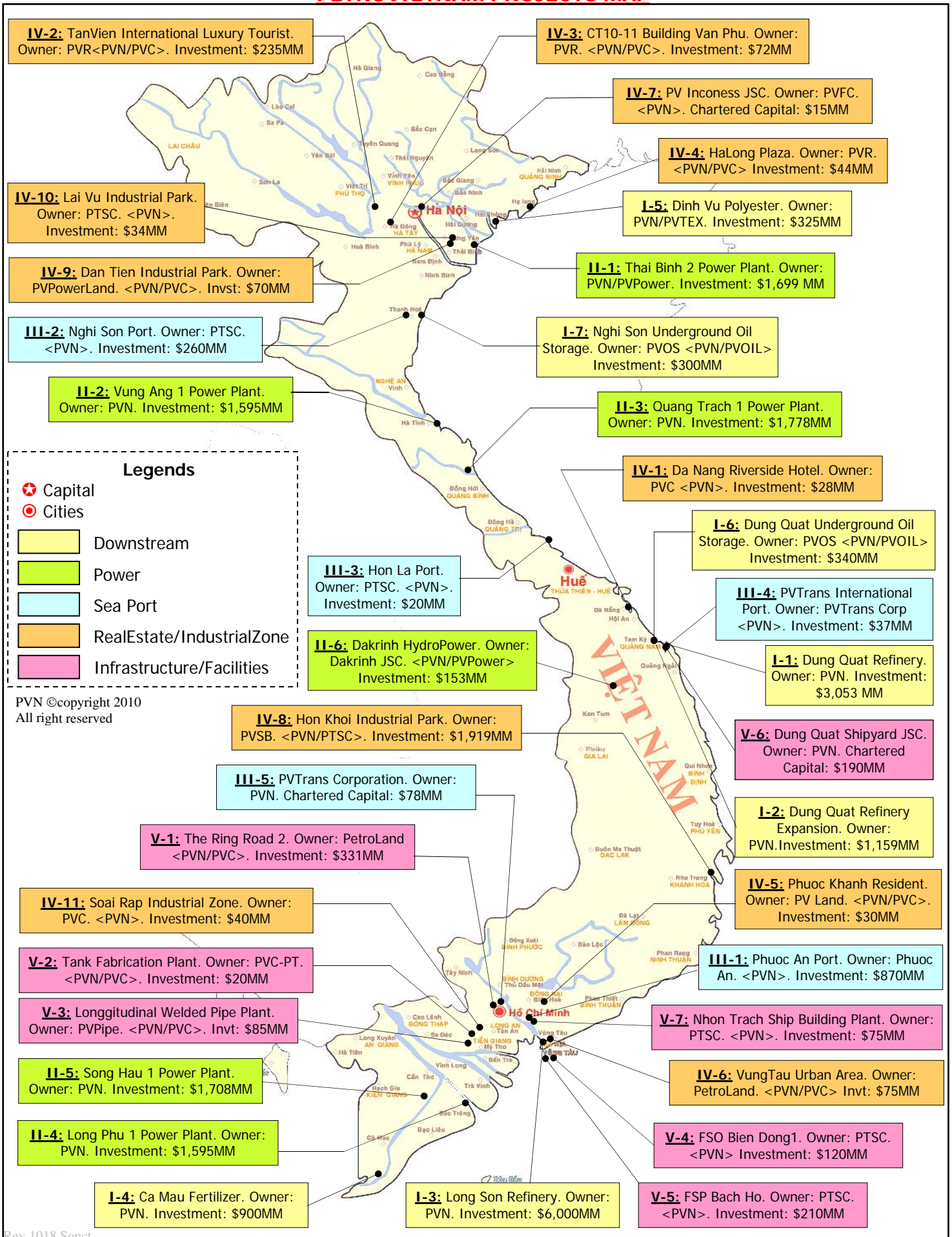


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PETROVIETNAM PROJECTS MAP



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LIST OF PROJECTS CALLING FOR INVESTMENT

Ord	Project Name	Owner	Location	Investment/ Chartered Cap. MM USD	Maximum % of transfer
I	Downstream			12,076	7 projects
I-1	Dung Quat Refinery (Refinery No. 1)	PVN	Quang Ngai Province	3,053	TBD
I-2	Dung Quat Refinery Expansion	PVN	Quang Ngai Province	1,159	49%
I-3	Long Son Refinery (Refinery No. 3)	PVN	Ba Ria Province	6,000	71%
I-4	Ca Mau Fertilizer Plant	PVN	Ca Mau Province	900	49%
I-5	Dinh Vu Polyester Plant	PVN/PVTEX	Hai Phong Province	325	TBD
I-6	Dung Quat Underground Oil Storage Terminal	PVN/PVOil/PVOS	Quang Ngai Province	340	31%
I-7	Nghi Son Underground Oil Storage Terminal	PVN/PVOil/PVOS	Thanh Hoa Province	300	31%
II	Power			8,529	6 projects
II-1	Thai Binh 2 Coal-fired power plant	PVN/PVPower	Thai Binh Province	1,699	71%
II-2	Vung Ang 1 Coal-fired power plant	PVN	Ha Tinh Province	1,595	49%
II-3	Quang Trach 1 Coal-fired power plant	PVN	Quang Binh Province	1,778	71%
II-4	Long Phu 1 Coal-fired power plant	PVN	Soc Trang Province	1,595	71%
II-5	Song Hau 1 Coal-fired power plant	PVN	Hau Giang Province	1,708	71%
II-6	Dakdrinh Hydropower Plant	PVN/Dakdrinh	Kontum Province	153	TBD
III	Sea port			1,265	5 projects
III-1	Phuoc An Port	PVN/Phuoc An JSC	Dong Nai Province	870	49%
III-2	Nghi Son Port - Thanh Hoa	PVN/PTSC	Thanh Hoa Province	260	49%

III-3	Hon La Port - Quang Binh	PVN/PTSC	Quang Binh Province	20	TBD
III-4	PVTrans International Port	PVN/PVTrans	Quang Ngai Province	37	49%
III-5	Petrovietnam Transport Corp	PVN	Ho Chi Minh City	78	18%
IV	Real Estate & Industrial Park			2,561	11 projects
IV-1	Danang Riverside Hotel	PVN/PVC/PVC-MT	Da Nang Province	28	TBD
IV-2	Tan Vien International Luxury Tourist Area	PVN/PVC/PVR	Ba Vi, Hanoi City	235	TBD
IV-3	CT10 -11 Building of Van Phu New Urban, Ha Dong	PVN/PVC/PVR	Ha Dong, Hanoi City	72	TBD
IV-4	Ha Long Plaza, office and Hotel Project (Time Tower)	PVN/PVC/PVR	Ha Long city, Quang Ninh Province	44	TBD
IV-5	Phuoc Khanh residential area	PVN/PVC/PVLand	Dong Nai Province	30	TBD
IV-6	Vung Tau Petroleum New Urban Area	PVN/PVC/Petroland	Vung Tau Province	75	TBD
IV-7	PV-Inconess Investment JSC (Royal Golf Course)	PVN/PVFC/PV-INCONESS	Hanoi City	15	49%
IV-8	Hon Khoi Petroleum Industrial Park	PVN/PTSC	Khanh Hoa Province	1,919	49%
IV-9	Dan Tien Industrial Park	PVN/PVC/PVPower Land	Hung Yen Province	70	TBD
IV-10	Lai Vu Industrial Park	PVN	Hai Duong Province	34	TBD
IV-11	Soai Rap Industrial Zone Infrastructure Service Business	PVN/PVC	Tien Giang Province	40	TBD
V	Infrastructure & Facilities			1,031	7 projects
V-1	The ring road 2 in HCM City	PVN/PVC/Petroland	Ho Chi Minh City	331	49%
V-2	Tank Fabrication Plant	PVN/PVC-PT	Tien Giang Province	20	49%
V-3	Longitudinal Welded Steel Pipe Production Factory	PVN/PVC/PV-PIPE	Tien Giang Province	85	49%

V-4	Floating Storage and Offloading (FSO) for Bien Dong 1 Project	PVN/PTSC	Vung Tau City	120	TBD
V-5	Floating Storage and Offloading (FSO) System for Bach Ho Project	PVN/PTSC	Vung Tau City	210	49%
V-6	Dung Quat Shipyard Company Profile	PVN/Dung Quat Shipyard	Quang Ngai Province	190	TBD
V-7	Nhon Trach Ship Building Plant	PVN/PTSC	Dong Nai Province	75	TBD
TOTAL				25,462	36 projects

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Note: TBD: To be discussed

SECTOR I DOWNSTREAM



DUNG QUAT REFINERY (So called Refinery No. 1)

DUNG QUAT REFINERY PROJECT (Refinery No. 1)

(Sector I: Downstream - Project: I-1)

1. **Project: Dung Quat Refinery** (So called Refinery No. 1).
2. **Location:** Dung Quat Economic Zone – Binh Son District– Quang Ngai Province.
3. **Owner:** Vietnam Oil and Gas Group (PetroVietnam).
4. **Capacity:** 6,500 KMTA (Kilo Metric Tons per Annum).
5. **Capital investment:** US\$ 3,053 million.
6. **Economic efficiency:** IRR 8.02%
7. **Financing:** from various sources – PVN, national budget, commercial loans...



8. **PVN’s expectation:** Partners are welcome to discuss for participation percentage up to 49% of Binh Son Refinery & Petrochemicals Co., Ltd (Petrovietnam’s subsidiary - operator and manager of Dung Quat Refinery).
9. **Feedstocks:** Vietnamese crude oil.
10. **Products:** LPG; Unleaded Gasoline (RON 92; 95); Jet-A1; Diesel; FO; Polypropylene Sulphur. The capacity by specific products as bellow table:

No.	Products	Quantity (BPSD)
1	LPG	11,100
2	Regular Gasoline	44,100
3	Premium Gasoline	21,800
4	Jet A-1/Kerosene	5,300
5	Diesel	53,200
6	Fuel Oil	7,000
7	Polypropylene	450 TBD
8	Sulfur	5 TPD
	Total Liquid Product	142,400

11. **Product specifications:** equivalent to Specification EURO II.

12. Overall plant site: Approximately 338 ha of land and 471 ha of sea, made up as follows :

- ✓ Main Refinery Process units and Utilities: 110 ha;
- ✓ Crude Tank Farm and Flare Area: 42 ha;
- ✓ Product Tank Farm: about 44 ha;
- ✓ Seawater intake, Waste Water and onshore Crude Pipelines: 17 ha;
- ✓ Interconnecting product pipelines: 78 ha;
- ✓ Harbour Product Export Area: 135 ha;
- ✓ SPM, offshore crude pipelines, entrance channel and turning basin: 336 ha.

13. Main process units:

1. Crude Distillation Unit (CDU)
2. Naphtha Hydrotreater (NHT)
3. Isomerization Unit (ISOM)
4. Continuous Catalytic Reforming Unit (CCR)
5. Kerosene Treating Unit (KTU)
6. Residue Fluid Catalytic Cracking (RFCC)
7. LCO Hydrotreating Unit (LCO HDT)
8. LPG Treating Unit (LTU)
9. RFCC Naphtha Treating Unit (NTU)
10. Amine Regeneration Unit (ARU)
11. Sour Water Stripper (SWS)
12. Caustic Neutralization Unit (CNU)
13. Propylene Recovery Unit (PRU)
14. Polypropylene Unit (PPU)
15. Sulfur Recovery Unit (SRU)

Besides, utilities and offsite facilities are designed in accordance with the standard of a grassroots refinery.

14. Tank farm:

1. Crude Tank Farm: 6 tanks with total capacity of 390,000 m³;
2. Product Tank Farm: 22 tanks with total capacity of 390,000 m³;
3. Intermediate Tanks: 23 tanks with total capacity of 280,000 m³.

15. Marine facilities:

- ✓ Crude offloading facility SPM (Single Point Mooring): for 80,000 – 110,000 DWT vessels.

- ✓ Product jetty: up to 30,000 DWT vessels.
- ✓ Breakwater: 1,600 m length and 10-11 m high.

16. EPC contractor:

The major EPC Contract has been signed on May, 17th 2005 (became effective on June, 25th 2005) with Consortium (Technip-Coflexip of France, Technip Geoproduction of Malaysia, JGC Corp of Japan and Technicas Reunidas of Spain) led by Technip France.

17. Project life: 25 years.**18. Project's schedule:**

- ✓ 2005 – 2009: investment period
- ✓ 2010: Start to operate at 90 - 100% capacity.

19. Current status

- ✓ Transferred from EPC Contractor in May 2010 and began commercial production at full capacity in June 2010;
- ✓ From January 01, 2010 to October 19, 2010: processed 4.7 million tons of crude oil and produced 4.4 million tons of products;
- ✓ Estimated for whole year of 2010: process 6.1 million tons of crude oil and produced 5.7 million tons of products.
- ✓ In 2010, Dung Quat Refinery supplied approximately 30 % of the country's demand for refined petroleum products.

20. Crude oil supply & Distribution system for oil products of Dung Quat refinery (Wholesaler)

- ✓ Crude Oil Supplier: PV Oil (Petrovietnam's subsidiary - International Trader for crude oils & petroleum products);
- ✓ Oil Products: Vietnamese major traders and distributors, such as PV Oil, PETEC, Petrolimex, etc;
- ✓ Gas Products: PVGas and its subsidiaries;
- ✓ Jet fuel: Vinapco for Vietnam Airlines, Military Petroleum Co.

21. Government policy to Dung Quat refinery project**❖ Investment incentives:**

Dung Quat refinery Project located in Dung Quat Economic Zone, Quang Ngai Province and granted a special Investment incentive in accordance with Correspondence 13/UDDT dated 15/02/2006 from Dung Quat Economic Zone Management Board.

❖ Tax incentive:

- Be entitled to the land rent exemption in overall project life.
- Be exempted from the land utilization;
- Be exempted from land utilizing taxes in overall project life;
- Be inherited tax rate, 10% of Corporate Income Tax (CIT) within 15 years commencing from the commercial operation of the project;
- Be exempted from the CIT for the 4 years when the taxable income is generated.
- Be entitled to 50% reduction for the next 9 consecutive years;
- Be entitled to the income tax of 50% reduction for high income people;
- Be exempted from the import tax levied on machinery, equipment and construction materials which cannot be produced in Vietnam;
- The Project is exempted from the VAT levied on the imported produced in Vietnam.



DUNG QUAT REFINERY EXPANSION PROJECT

(Sector I: Downstream – Project: I-2)

1. Project: Dung Quat Refinery Expansion Project (Including existing Dung Quat Refinery).

2. Location: Dung Quat Economic Zone – Binh Son District– Quang Ngai Province.

3. Owner: Vietnam Oil and Gas Group (Petrovietnam).

4. Capacity: 192,000 BPSD (8.5 million tons per year, equivalent to 130% of the original designed capacity);

5. Additional Capital investment: US\$ 1,158.6 million.

6. Economic efficiency: IRR 9.42%.

7. PVN’s expectation: Partners to participate 49% of the Project

8. Feedstocks: 50% Vietnamese Crude and 50% Middle East Sour Crude (Arabian Light), in which Vietnamese Crude is mixture of Bach Ho, Black Lion and Golden Lion. Bach Ho crude is mixture of Bach Ho and Ca Ngu Vang crude.

9. Products: LPG; Unleaded Gasoline (RON 92; 97); Jet-A1; Diesel; FO; Polypropylene, Sulphur. The capacity by specific products as bellow table:



Item	Product	Quantity (BPSD)
1	LPG	8,200
2	Regular Gasoline	59,400
3	Premium Gasoline	23,300
4	Jet A-1/Kerosene	14,600
5	Diesel	63,600
6	Fuel Oil	19,200
7	PolyPropylene	525 TPD
8	Sulfur	139 TPD
	Total Liquid Product	188,300

10. Product specifications and environmental regulation:

- ✓ Product specifications: equivalent to Specs EURO IV.
- ✓ Environmental regulation: equivalent to present Specs TCVN-2005 and TCVN-2009.

11. Main process units:

- ✓ Additional process units: Crude Preflasher; VDU; Visbreaker; Diesel HDS; Gasoline HDS; SHP/InAlk; Mercury Removal Unit...
- ✓ Modification of existing units: CDU, RFCC, NHT, KTU...

12. Utility units, offsite and marine facilities

- ✓ Modification of Utility Units and Marine Facilities is minimized.
- ✓ Additional Tanks: Crude tanks, Intermediate Tanks, Check Tanks and Product Tanks.

13. Project's schedule:

- ✓ 2011 – 2016: Investment and implementation phase.
- ✓ The end of 2016: Commissioning and Begin operation.

14. Current status:

- ✓ On 31 July 2009: Petrovietnam, represented by Binh Son Refinery & Petrochemicals Co., Ltd (BSR), signed the Contract with JGC Corporation (Japan) for Consultancy for Establishment of The Preliminary Feasibility Study (Pre-FS) for Dung Quat Refinery Expansion Project.
- ✓ In December 2009: JGC submitted the final Pre-FS.
- ✓ In October, 2010: After the Pre-FS is approved by the Government, JGC is continuously appointed to establish the Detail Feasibility Study which is expected to be finished within 6 months.

15. Government incentives: Dung Quat Refinery Expansion enjoys the same investment incentives of the existing Dung Quat Refinery.

LONG SON REFINERY PROJECT (Refinery No.3)

(Sector I: Downstream – Project: I-3)

1. **Project:** Long Son Refinery (so called Refinery No.3).
2. **Location:** Long Son Petroleum Industrial Zone, Long Son commune, Vung Tau city, Ba Ria - Vung Tau province.
3. **Owner:** Vietnam Oil and Gas Group (Petrovietnam).
4. **Capacity:** 10 million tons of crude oil per year (possible expansion to 20 million tons).
5. **Capital investment:** US\$ 7,000 – 8,000 million (rough estimation)
6. **Economic efficiency:** under studying
7. **PVN's expectation:** Foreign partners to participate 71% of the Project.
8. **Feedstocks:** 100% imported crude oil.
9. **Products:** Petroleum fuels to fulfill the domestic demand and feedstock for petrochemical industry.
10. **Product specification:** minimum equivalent with EURO IV.
11. **Overall plant site:**
 - ❖ The Refinery site:
 - The area for refinery site shall be 810 ha including future expansion. The site is located in the south of the Long Son Industrial Zone beside the coastal with ground level higher than 3m and a slope around 2%-5% from the hills south westwards towards the coastline. This area is currently utilized for shrimp hatching and salt farming.
 - It must be paid by Investors all the cost of compensation, relocation and site clearance with the supporting from Industrial Zone and Local authorities.
 - There is possible to build the SPM and jetty port for importing crude and offtake products. The initial and annual dredging is needed.
 - ❖ Location advantages:
 - The Long Son refinery is located in the Long Son industrial zone in the Long Son island, Ba Ria - Vung Tau province, Vietnam. Nearby this region, there are



also several big industry zones: Go Dau, My Xuan, Phu My and Cai Mep. This is the hugest area of heavy industry in Vietnam: oil, gas, fertilizer, steel, power generation and other heavy industries. There are also numerous local maintenance/inspection and mechanical labor companies that are furnishing local industries.

- The Long Son Industrial Zone is 15 km away from Ba Ria town and 30 km from Vung Tau city and 100 km from Ho Chi Minh city. There is a good network of roads in the region which furnishes existing industry and tourism centers: around 10 km from the highway no. 51 connecting to Ho Chi Minh city. No railway line in this area.
- Seaway: This region is located in nearby the international seaway route that runs to the existing industrial zones and Ho Chi Minh City.
- There are 03 mega projects in the Long Son industry zone: The Long Son refinery, the Southern Petrochemical complex and the Underground Storage (Stock piling). The utilities and services are good and available in this area for construction phase: electricity (for construction only), fresh water, telecom system.

12. Project's schedule: Expected time of commercial operation around 2020.

13. Government Incentives:

The Government has issued the incentive package applied for Long Son refinery as follows:

- ❖ GOV is responsible for all related infrastructures such as road, power, water, communication system to the fence of the Refinery.
- ❖ The Corporate Income Tax applied for Project is 10% afterward up to 30 years as follows:
 - 0% for 4 years following the first year of profitable operation.
 - 5% for the next 9 years
 - 10% for the next 17 years.
- ❖ Import tariff:
 - Exemption of Import Tax for crude oil import.
 - Exemption of Import Tax for machinery and equipment imported in the complete production line which is not able to be produced domestically and created fixed assets..

- Exemption of VAT for machinery, equipment, material imported in the complete production line which is not able to be produced domestically and created fixed during construction phase.
- ❖ In principle, 6 months after the EPC award, the Joint Venture can build up their import, distribution facilities and can distribute the Products based on import products by its own distribution networks, with the volume up to 50% of refinery production, provided that the Project complies with the Government regulation.

14. Other Attractiveness:

- ❖ Nearby the biggest petroleum fuel consumption market of Vietnam (southern market) which takes 60% of demand.
- ❖ Advantage in transportation in both domestic and international seaway transportation for crude import and products distribution.
- ❖ Located in the industry zone, all utilities are available at fence of the refinery with favorable fee that applied to other projects in the same area.
- ❖ Rapidly increased demand of the petroleum products in Vietnam. As officially forecasted, the average growth of fuel consumption in Vietnam up to 2025 shall be 6.7% per annual. Vietnam should import around 11 million tons of petroleum products in 2015 and 13.6 million tons in 2020.
- ❖ The project is strongly supported by Vietnamese Government.

CA MAU FERTILIZER PROJECT

(Sector I: Downstream – Project: I-4)

1. **Project: Ca Mau Fertilizer Project.**
2. **Location:** Khanh An, U Minh, Ca Mau Province, belongs to Ca Mau Gas-Power-Fertilizer Complex.
3. **Owner:** Vietnam Oil and Gas Group (Petrovietnam).
4. **Capacity:** 800,000 tones urea/year
5. **Capital investment:** US\$ 900.2 million.
6. **Economic efficiency:** IRR: 13.88%.
7. **Financing:** from various sources including: ECA, commercial loan from major Vietnam and International Banks up to 70% debt.
8. **PVN's expectation:** Partners are welcome to participate up to 49% of the Project.
9. **Feedstocks:** Natural Gas supply from PM3-CAA-46 plot and Cai Nuoc reservoirs.
10. **Products:** Granular urea.
11. **Overall plant site:** about 52 ha.
12. **Main process units:** Ammonia, urea and granulation unit.
13. **Technology:**
 - ✓ Ammonia synthesis technology of Haldor Topsoe SA – Denmark.
 - ✓ Urea synthesis technology of SAIPEM – Italy.
 - ✓ Spout Fluid Bed Granulation of Toyo Engineering Corp. – Japan
14. **Utilities/offsite facilities:**
 - ✓ Steam generation system
 - ✓ Flare system
 - ✓ Instrument and plant air system
 - ✓ Nitrogen generation system
 - ✓ Demineralization system
 - ✓ Cooling water system
 - ✓ Urea handling and storage (include ship loader for export urea to barge/ship)
 - ✓ Ammonia storage system
 - ✓ Waste water treatment and effluent system



- ✓ Firefighting system
- ✓ Potable water system

15. Code and standard applied for the project:

- ✓ Mandatory Vietnamese standard: Climate Data, Set of Hydrological Meteorological Atlas of Vietnam, seismic zone classification, Fire Prevention and Fire fighting, Environmental Regulations, Health, Safety, labor protection Regulations.
- ✓ Licensors Standards and Standard Drawings: Standards and Standard Drawings provided by LICENSORS are contained within the LICENSORS Basic Engineering Design packages.
- ✓ Code and Standards applied in the Project are international (ASME, API, JIS...) and Vietnamese mandatory regulations on safety, fire protection and especially environment.

16. Epc contractor:

- ✓ The EPC Contract has been signed on May, 6th 2008 (became effective on July, 01st 2008) with Consortium of Wuhan Engineering Co., Ltd (WEC) and China National Machinery Import and Export Corporation (CMC) led by WEC.

17. Project life: 25 years.

18. Operation days (per annum): 333 days.

19. Project's schedule: Operating from beginning of 2012.

20. Current status:

- ✓ Contractor has finished 59.57% of total planned workload, in which, design works achieved 93.56%, procurements achieved 74.15% and construction tasks achieved 35.02% of planned targets, respectively.

21. Government incentives:

- ❖ Import tax exemption for machineries, equipments, tools & spare parts used to make up fix asset;
- ❖ VAT is refunded for importing machineries, equipments, tools & spare parts that are not produced domestically.
- ❖ Land lease exemption during project lifetime.
- ❖ Corporate income tax: 10% for the first 15 years put in operation. Exemption 4 years since the first profit year and 50% deduction for the next 9 years following.

22. Other Attractiveness:

- ❖ Ca Mau fertilizer's product is granulated Urea, which is suited to international Urea consumption trend.
- ❖ Ca Mau fertilizer is placed next to Mekong Delta, which is the biggest farming area nationwide, and it is the main gate for exporting its products to Cambodia which is also a huge market for fertilizer.
- ❖ Ca Mau province is located in urea consumption area, so distribution cost to consumers could be minimized.



DINH VU POLYESTER PROJECT
(Sector I: Downstream – Project: I-5)

1. Project: Dinh Vu Polyester Project

2. Location: Dinh Vu Industrial Zone, Dong Hai 2 Ward, Hai An District, Hai Phong City,

3. Owner: Petrovietnam PetroChemical and Textile Fiber Company Jsc, (PVTEX)

4. Capacity: 175,000 tones /year

5. Capital investment: US\$ 324,85 million.

6. Economic efficiency: NPV: US\$ 65.46 million; IRR: 16.35%.

7. Financing: Project's financing has been arranged from various sources – PVN, ECAs, and commercial loans. Equity/debt ratio: 30/70.

8. PVN's expectation: Partners are welcome to discuss the participation percentage.

9. Feedstocks: PTA, MEG.

10. Products: Polyester staple fibre (PSF) and Filament.

11. Overall plant site: about 15 ha.

12. Main process units: Esterification & Polycondensation; Polyester staple fibre (PSF) and Filament unit.

13. Technology:

- ✓ Polymer production using two reactions flask technology of Uhde Inventa Fishcher - Germany. Ammonia synthesis technology of Haldor Topsoe SA – Denmark.
- ✓ Filament and Fiber production lines of Barmag & Neumag – Germany.
- ✓ Urea synthesis technology of SAIPEM – Italy.
- ✓ Spout Fluid Bed Granulation of Toyo Engineering Corp. – Japan

14. Utilities/offsite facilities:

- Steam & Condensate System
- Fuel Gas Supply System
- Water Supply System



- Waste Water System
- Air Supply System
- Nitrogen Supply System
- PTA Conveying and Storage
- PET Chip Conveying and Storage
- Staple Fiber Storage
- Filament Storage
- MEG Import Line and Storage

15. Code and standard applied for the project:

- ✓ Mandatory Vietnamese standard: Climate Data, Set of Hydrological Meteorological Atlas of Vietnam, seismic zone classification, Fire Prevention and Fire fighting, Environmental Regulations, Health, Safety, labor protection Regulations.
- ✓ Licensors Standards and Standard Drawings: Standards and Standard Drawings provided by LICENSORS are contained within the LICENSORS Basic Engineering Design packages.
- ✓ Code and Standards applied in the Project are international (AIA, API, JIS...) and Vietnamese mandatory regulations on safety, fire protection and especially environment.

16. Epc Contractor:

The EPC Contract has been signed on May, 14th 2009 with HEC-LGI-PVC (Hyundai Engineering – LG International- Petrovietnam Construction) and became effective on July, 09st 2009.

17. Project life: 22 years.

18. Operation days (per annum): 333 days.

19. Project's schedule: Commissioning and Operation by early of 2011.

20. Current status:

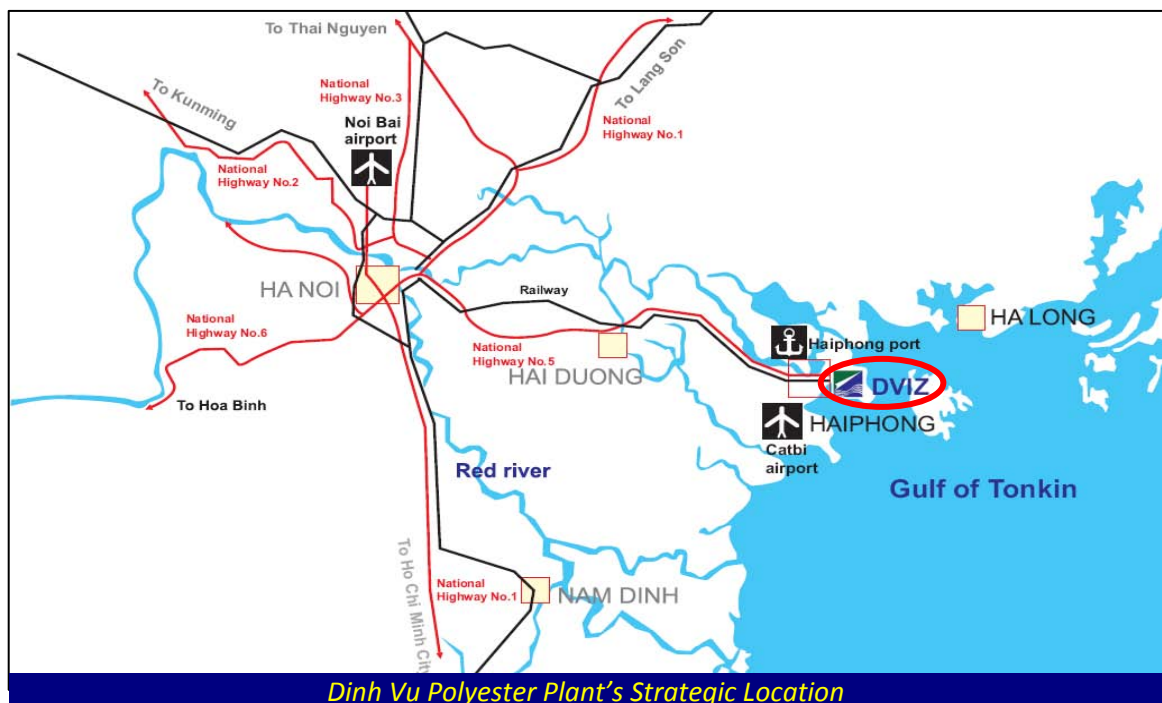
- ✓ The overall progress : 56,92% has achieved including:
 - Engineering: achieved 8,26/8,44%,
 - Procurement: achieved 38,51/67,64%,
 - Construction: achieved 9,15 /22,93%,

21. Government incentives: Investors in the Dinh Vu Industrial Zone (DVIZ) enjoy a wide range of tax benefits including:

- ❖ Import tax exemption for machineries, equipments, tools & spare parts used to make up fixed asset;
- ❖ Corporate income tax: 10% for the first 15 years put in operation. Exemption 4 years since the first profit year and 50% deduction for the next 9 years following.
- ❖ Personal income tax reduction of 50% is applicable according to the regulating rate for enterprises operate in Dinh Vu Industrial Zone - DVIZ).

22. Other Attractiveness

- ❖ Huge demand for the project's products
- ❖ Located in a industrial city, nearby the seaport, very convenient in both seaway, roadway to big domestic as well as international consumption markets.



DUNG QUAT UNDERGROUND OIL STORAGE TERMINAL PROJECT

(Sector I: Downstream – Project: I-6)

1. Project: Dung Quat Underground Oil Storage Terminal.

2. Location: Dung Quat Economic Zone, Binh Thuan Commune, Binh Son District, Quang Ngai Province, Vietnam.

3. Owner: Petrovietnam Oil Stockpile Company Ltd (PVOS).

4. Capacity: 1,600,000 m³ (phase 1 and phase 2).

5. Capital investment: US\$ 340 millions (rough estimation).

6. Economic efficiency: NPV: US\$ 19.39 Million; IRR: 15.2%.

7. Project life: 70 years.

8. PVN's expectation: Partners to participate up to 31% of PVOS's shares.

9. Traffic system:

✓ Road Transport:

- Next to 6.5 million tons/year Binh Son refinery (Refinery #1)
- 838km from Ho Chi Minh City
- 883km from Ha Noi City
- Highway 1A across Quang Ngai Province
- Provincial road connects to Da Nang – Quang Ngai highway
- Roadways connect to other Industrial Zone
- New roadways connect from Dung Quat to Sa Huynh
- Roadways connect to other near Economic Zone province

✓ Railway Transport:

- Connect to Nation railway system

✓ Sea/Ocean Transport:

- 765km from Ho Chi Minh City
- 700km from Ha Phong City
- 105km from Da Nang City
- Sa Ky port 25km, Dung Quat port 15km from northwest Quang Ngai City.



- Located in the central area of central port
- ✓ Air Transport:
 - Chu Lai Airport: 30 km from Chu Lai Airport

10. Major facilities:

- ✓ Underground cavern: 1,600,000m³ Crude and Product Oil storage tanks.
- ✓ Jetty/SPM:
 - Refinery #1's SPM: 110,000 DWT (existing);
 - Refinery #1's Jetty: 15,000 DWT to 30,000 DWT (expandable to 50,000 DWT);
 - New SPM: 250,000DWT (will be constructed)
- ✓ Pipeline system:
 - Crude oil Pipeline to SPM*
 - Length: 2km to proposed new SPM
 - Diameter: TBA
 - Flow rate: TBA
 - Working pressure: TBA
 - Crude oil Pipeline to Refinery*
 - Length: 7km to Refinery #1
 - Diameter: 32 inch
 - Medium: Crude oil

11. Project's schedule: 2010 - 2016 (partial operation).

12. Current status: Completion of Pre-FS.

13. Government incentives:

- ❖ Corporated Income Tax incentives:
 - 0% for first 4 years;
 - 5% for next 9 years;
 - 10% for next 2 years;
 - 25% afterwards.
- ❖ Import Tax incentive: 0% for Imported Equipments

14. Other attractiveness:

- ❖ Proximity to Dung Quat Refinery and Petrochemical complex, located at the high growth rate area (key central economic zone of Vietnam);
- ❖ Safe, friendly environment and profitable investment thank to low construction and operation costs, long life circle;
- ❖ Attract potential customers because of strategic location.

NGHI SON UNDERGROUND OIL STORAGE TERMINAL PROJECT

(Sector I: Downstream – Project: I-7)

1. Project: Nghi Son Underground Oil Storage Terminal.

2. Location: Nghi Son Economic Zone, Truc Lam Commune, Tinh Gia District, Thanh Hoa Province, Vietnam.

3. Owner: Petrovietnam Oil Stockpile Company Ltd (PVOS).

4. Capacity: 1,200,000 m3 (phase 1)

5. Capital investment: US\$ 300 million (rough estimation).

6. Project life: 70 years.

7. Economic efficiency: Under studying

8. PVN’s expectation: Partners to participate 31% of PVOS’s shares.

9. Traffic system:

✓ Road Transport:

- Next to 10 million tons/year Nghi Son Refinery & Petrochemical Complex.
- 40km from Thanh Hoa City.
- 200km from Ha Noi City.
- 1560km from Ho Chi Minh City.
- Provincial road connects to National highway 1A.
- Roadways connect to near Industrial Zone.
- Roadways connect to main point northern Economic Zone.

✓ Railway Transport:

- New railway across to National Highway 1

✓ Sea/Ocean Transport:

- Nghi Son Port: 50.000DWT.
- 145km from Hai Phong City
- 520km from Da Nang City
- 1380km from Ho Chi Minh City
- 980km from Nha Trang City
- Located in hub port area of North Central Vietnam.

✓ Air Transport:



- Vinh airport: 90 km from Nghi Son Economic Zone.

8. Major facilities:

- ✓ Underground cavern: 1,200,000m³ Crude And Product oil storage tanks
- ✓ Jetty/SPM:
 - SPM: 250,000 – 300,000 DWT (to be constructed by Refinery #2)
 - Jetty: 50,000 – 80,000 DWT (to be constructed)
- ✓ Pipeline system:
 - Product Pipeline:*
 - Length: 2 x 7.5km - 11.5km to proposed new Jetty
 - Diameter: TBA
 - Medium: Product oil
 - Crude oil Pipeline*
 - Length: 7.5km - 11.5km
 - Diameter: 48 inch
 - Medium: Crude oil

9. Project's schedule: 2010 – 2014 (partial operation).

10. Current status: Pre-FS Preparation.

11. Government incentives:

- ❖ Corporated Income Tax incentives:
 - 0% for first 2 years;
 - 10% for next 6 years;
 - 20% for next 20 years;
 - 25% afterwards.
- ❖ Import Tax incentive: 0% for Imported Equipments.

12. Other attractiveness:

- ❖ Proximity to Nghi Son Refinery and petrochemical Complex, located at the high growth rate area.
- ❖ Safe, friendly environment and profitable investment thank to low construction and operation costs, long life circle.
- ❖ Attract to potential customers thank to strategic location

END OF DOWNSTREAM SECTOR

SECTOR II **POWER**

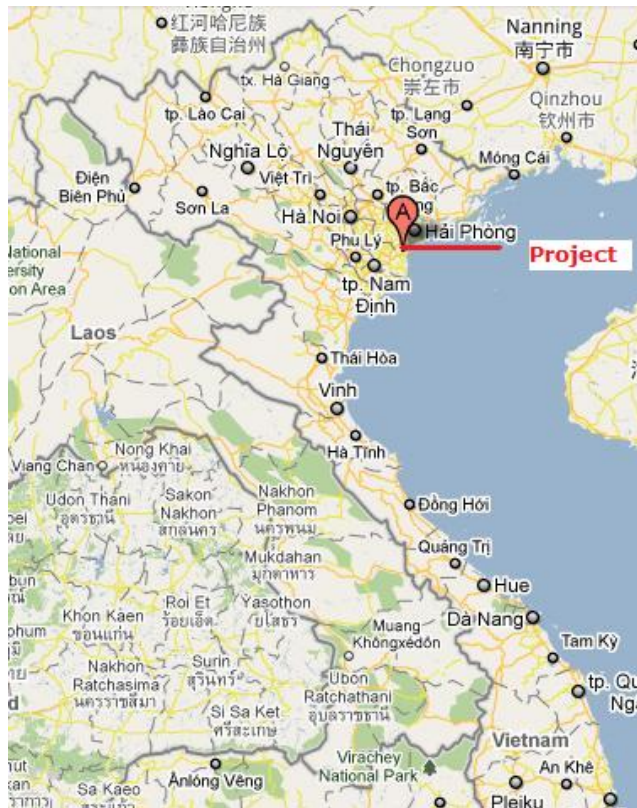


CA MAU COMBINED-CYCLE GAS POWER PLANT

THAI BINH 2 COAL-FIRED POWER PLANT

(Sector II: Power - Project: II-1)

1. **Project:** Thai Binh 2 Coal-fired Thermal Power plant project
2. **Location:** My Loc commune, Thai Thuy district, Thai Binh province, Vietnam.
3. **Project owner:** Petrovietnam Power Corporation (PV Power).
4. **Capacity:** 1200 MW (2 units of 600 MW).
5. **Investment capital:** US\$ 1,668 million.
6. **Economic efficiency:** NPV: US\$ 168.09 million; IRR: 12 %.
7. **Financing source:** from various sources – PVN, national budget, ECAs, commercial loans...with Equity/Debt: 30/70.
8. **Objectives:** Power supply to large area in the North, including Thai Binh, Hai Phong, Hai Duong, Bac Ninh, Hanoi etc., contributing to stable and sustainable national network.
9. **Maximum foreign equity ownership:** 71% of the Project.
10. **Fuel and limestone:**
 - Main fuel: Vinacomin agreed to provide dust coal No.6B in Quang Ninh area in accordance with Vietnamese standard of having low heating value of around 4180 Kcal/Kg and ash content of around 40 %.
 - o Coal will be transported to the plant by sea way, a separate coal unloading station for the plant will be constructed.
 - o Total coal consumption for Thai Binh 2 TPP is around 4,151,160 ton/year.
 - o Average coal price during project life: ~ 38.36 USD/ton.
 - Secondary fuel: The plant secondary fuel during start-up and support firing at boiler load of <40% rated load will be fuel oil No.2B (TCVN 6239-2002)
 - o Fuel oil will be transported by barges to the plant oil port.



- Oil consumption will be ~ 10,800 ton/year.
- FO price: ~450USD/ton (excluding VAT).
- Limestone:
 - Limestone is used for firing support in a CFB boiler for desulphurization in the flue gas, the whole plant limestone consumption is ~ 216,240 T/year.
 - Limestone is basically exploited in the area of Thuy Nguyen – Hai Phong and transported by barges to the power plant.
 - Temporary limestone price: ~8.0USD/ton (excluding VAT)

11. Area:

- The plant internal area is approximately 265 hectares which will be leveled to elevation of + 4.5m (National elevation system).

12. Main parameters:

- Unit number : 02
- Rated output of unit (raw): 600MW(RO)
- Unit configuration: 02 CFB boiler + 01 turbine + 01 generator
- Maximum average operation hours: 6,000 hour/year
- Auxiliary power rate: ≤ 6.2 %

13. Economic efficiency

No	Economic indicators	Value
1	Power tariff at plant bus-bar (cent/kWh)	5.718
2	Financial discount factor	9.20%
3	Financial Internal rate of return (FIRR)	12.00%
4	Net present value - NPV (million USD)	164.62
5	B/C	1.065
6	Payback period with discount rate	15

14. Project life: 25 years**15. Project schedule:**

- Unit No.1 (600MW): to be completed in QII /2014.

- Unit No. 2 (600MW) to be completed in QIV/2014.

16. Current status:

- Feasibility has been approved by PVN;
- Project's FEED is preparing.

17. Project attractiveness:

- Governmental guarantees: The Ministry of Finance, acting on behalf of the Vietnam's Government, will guarantee for overseas financing loans.
- Supplying power to Thai Binh province and the North of Vietnam, ensuring power security of the national grid, reducing losses in transmission lines and improving power quality.
- Conformable with Master Power Plan and socio-economic plans of Vietnam and the region.
- Suitable compensation & resettlement plan (up to now, land clearance and compensation are basically completed)
- More stable output because of invariable coal sources.
- Coal, oil, limestone, equipment and materials during construction could be transported without difficulties due to favorable project location.
- Supported by the Thai Binh People Committee, relevant ministries as well as international organizations.
- Strongly advocated by the people in Thai Binh province.

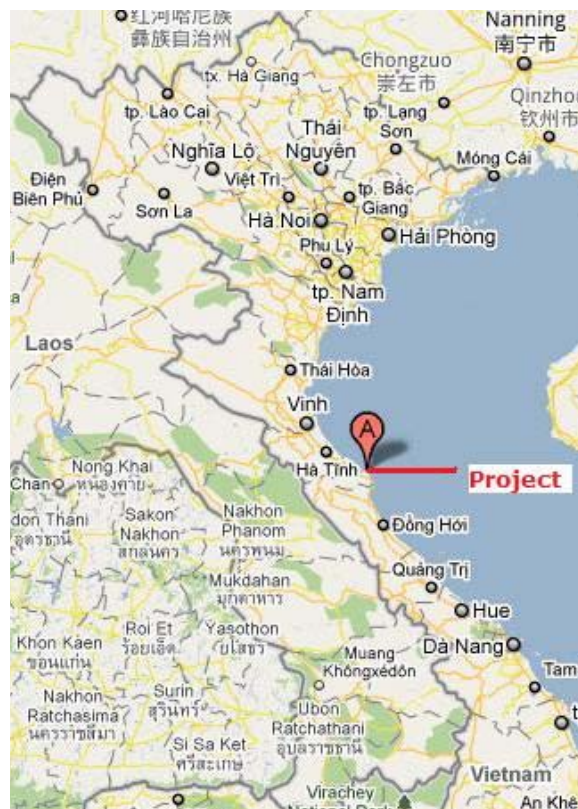


Construction site of a coal-fired power plant

VUNG ANG 1 COAL-FIRED POWER PLANT

(Sector II: Power - Project: II-2)

1. **Project:** Vung Ang 1 Thermal Power Plant Project.
2. **Location:** Ky Loi commune, Ky Anh district, Ha Tinh province, within Vung Ang Economic Zone, 9 km from the National Highway 1A.
3. **Project owner:** Petrovietnam.
4. **Capacity:** 1200 MW (2 units of 600 MW).
5. **Investment Capital:** US\$ 1.595 billion.
6. **Economic efficiency:**
 - NPVf = 116.72 million USD,
 - IRRf = 12%,
 - Payback period 14 year,
 - Average Electricity Price of the Project US\$5.88/MWh.
7. **Financing source:** Project's financing has been arranged from various sources – PVN, ECAs, and commercial loans with the equity/debt ratio is 30/70.
8. **Financing schedule:**



No.	Construction Period	CAPEX (excl. VAT) MM USD
1	Year 2009	210.90
2	Year 2010	471.47
3	Year 2011	379.41
4	Year 2012	358.23
5	Year 2013	35.59
Total		1,455.6

9. **Maximum foreign equity ownership:** 49% of the Project.

10. **Fuel source:**

- Type of coal (other fuel), calorific value: Coal Type: Anthracite - Dust Coal No. 5 (HG 100) in accordance with Vietnam Standard (TCVN 1790:1999).
- Coal (other fuel) prices (pricing formula): PVN and Vinacomin are under negotiation.

11. Area:

- Total areas: 189.63 ha
 - o Plant construction area: 39.84 ha.
 - o Project Management Board Area: 2.93 ha
 - o Staff housing area: 7.00 ha
 - o Ash pond area: 131.70 ha
 - o Other areas: 8.16 ha
 - o Site elevation: +8 m above mean sea level

12. Main parameters:

- Fuel rate consumption: Coal consumption: around 3,000,000 tons/year and Heavy Fuel Oil (HFO): around 14,400 tons/year.
- Main consumers: Connection options: 220kV Vung Ang 1 – Ba Don, 220kV Vung Ang 1 – Ha Tinh, 220kV Vung Ang 1 – Vung Ang Economic Zone.
- Sales volume: According to the approved FS, the Tmax of 6000h is equivalent to about 6.71bl kWh/year. However the actual volume will be mobilized by National Dispatch Center.

13. Project life: 25 years

14. Project schedule:

- Unit 1: expected to operate in July 2012.
- Unit 2: expected to operate in January 2013.
- EPC Contract: started on 27th April 2009
- EPC Contractor: LILAMA Corporation

15. Current status

- The shipment of Boiler materials (anchor bolts) is delivered on site.
- Start Unit 1 Boiler Main Steel Structure on 16th May 2010.
- Fuel supply guarantee: VINACOMIN commits to supply coal from local mines in northern Vietnam in long term for Vung Ang 1 Power Plant.
- Power pricing: EVN shall purchase electricity generated by Vung Ang 1 TTP for 30 years. Rates shall be agreed by both parties on basis of mutual benefits.

- Power sales guarantee: No guarantee of electricity sales is applied in case Vung Ang 1 TTP is owned and invested by PVN as a state-owned economic group.

16. Project Attractiveness:

- Governmental guarantees: The Ministry of Finance, acting on behalf of the Vietnam's Government, will guarantee for overseas financing loans.
- The project is strongly supported by Vietnamese Government and authority in Ha Tinh Province.

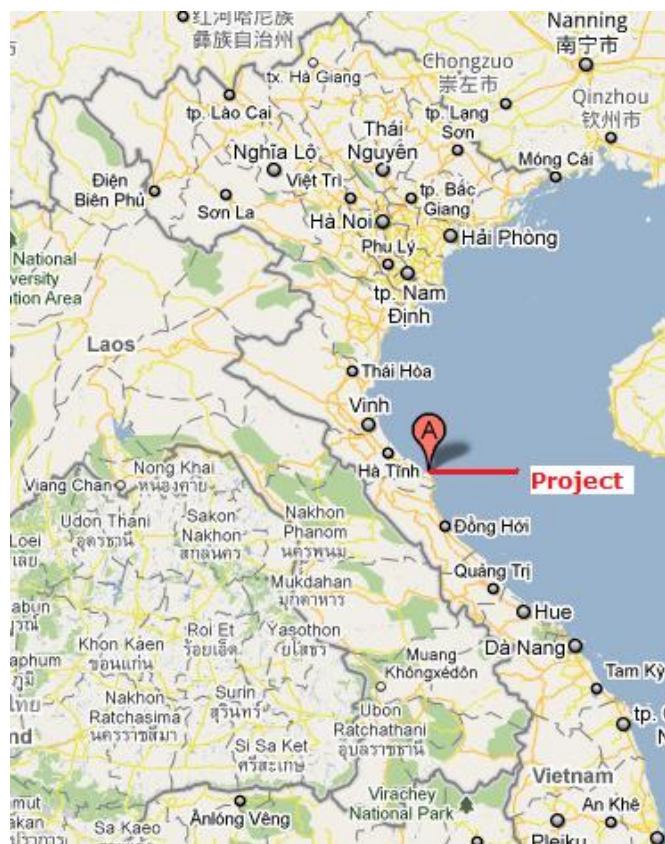


Vung Ang 1 Power Plant Construction Site as April/2010

QUANG TRACH 1 COAL-FIRED POWER PLANT

(Sector II: Power - Project: II-3)

1. **Project:** Quang Trach 1 Thermal Power Plant Project
2. **Location:** , Vinh Son village, Quang Dong Commune, Quang Trach District, Quang Binh Province, Central of Vietnam.
3. **Project owner:** Petrovietnam.
4. **Capacity:** 1200 MW (2 units of 600 MW).
5. **Investment Capital:** US\$ 1.668 billion.
6. **Financing source:** From various sources – PVN, ECAs, commercial loans...
7. **Economic efficiency:**
 - NPVf = USD 328.16 million.
 - IRRf = 12%.
 - Payback period = 13 years
8. **Financing schedule:** (Unit: Million USD)



No.	Construction Period	CAPEX (excl. VAT)	
		Owner (USD)	Loan (USD)
1	Year 2010	7.926.306	0
2	Year 2011	31.705.225	0
3	Year 2012	155.355.601	399.485.830
4	Year 2013	131.576.682	344.001.687
5	Year 2014	85.604.107	310.711.201
6	Year 2015	63.410.449	55.484.143
	Total	475.578.370	1.109.682.862

9. Maximum foreign equity ownership: up to 49% of the Project.

10. Fuel source:

- Imported Bitum coal from Australia and Indonesia.

11. Area:

- Total areas : 344 ha
 - o Inland : 240 ha
 - o Sea area : 100 ha
 - o Road areas : 4 ha
 - o Site elevation : +5.1 m above mean sea level



- Main parameters:

- Fuel rate consumption: Coal consumption: around 3,166,000 tons/year and Diesel Oil (DO): around 4,218 tons/year.
- Main consumers: Connection options: 500kV Quang Trach 1 – Vung Ang 2 (25 km).
- Sales volume: According to the FS, the Tmax of 6500h is equivalent to about 8.43bl kWh/year. However the actual volume will be mobilized by National Dispatch Center.

12. Project life: 25 years

13. Project schedule:

- Unit 1: expected to operate in June 2015.

- Unit 2: expected to operate in December 2015.

14. Current status

- Start infrastructure construction on 11th September 2010.
- Feasibility Study is expected to be approved by in December 2010.

15. Project attractiveness:

- Governmental guarantees: The Ministry of Finance, acting on behalf of the Vietnam's Government, will guarantee for overseas financing loans.
- The project is strongly supported by Vietnamese Government and authority in Ha Tinh Province.

LONG PHU 1 COAL-FIRED POWER PLANT

(Sector II: Power - Project: II-4)

1. Project: Long Phu 1 Thermal Power Plant Project.

2. Location: Long Duc commune, Long Phu district, Soc Trang province.

3. Project owner: Petro Vietnam

4. Capacity: 1200 MW (2 units of 600 MW).

5. Investment capital: US\$ 1.595 billion.

6. Economic efficiency: NPV: US\$ 114.74 Million; FIRR: 12%. Payback period: 18 years.

7. Financing sources: from various sources – PVN, national budget, ECAs, commercial loans... with Equity/Debt ratio: 30/70.

8. Objectives:

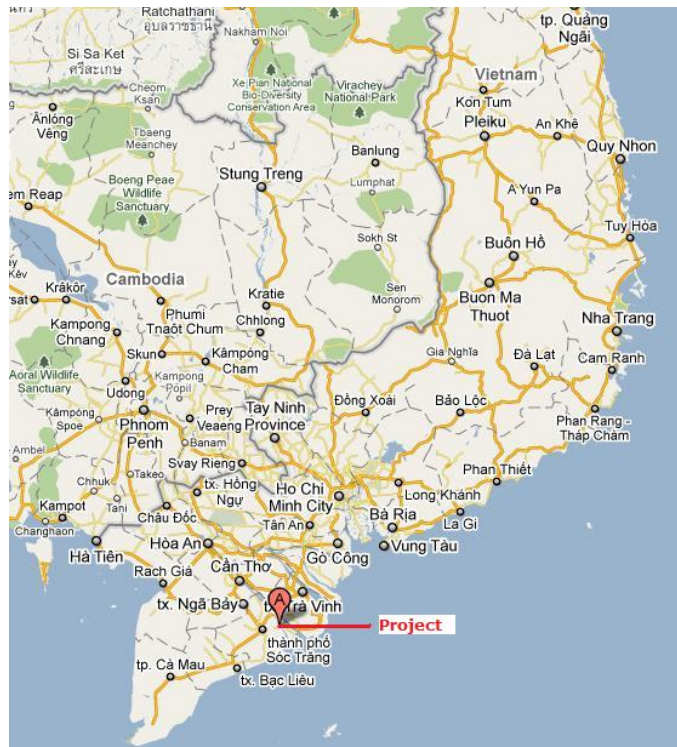
- Meeting the demands for Viet Nam’s development, securing the power supply for Viet Nam;
- Contributing to the development of local industry and creating job opportunities for local citizens.

9. Maximum foreign equity ownership: 71% of the Project.

10. Fuel source:

- Imported coal from Australia or Indonesia.
- Transportation plan: Since vessels accessing from Hau River are limited to 10,000- 15,000 DWT capacity only, coal shall be imported through an intermediate port. From the intermediate port, it will be transported by 10,000 DWT coal barge or ship to the power plants, including Long Phu 1.
- Coal price: with FOB coal price of Indonesia at 62 - 65 USD/ton, coal price at the Long Phu 1 power plant will be about 91 - 110 USD/ton depends on the location of the intermediate port.

11. Area:



- Total area: around 115 ha.
- Long Phu 1 Thermal Power Plant is located in Long Phu Power Complex project (total area of about 420.5ha), which is managed by owner and local authorities.

12. Main parameters:

- Rated Capacity: 2x600MW units with conventional technology, once through pulverized coal fired boiler with reheat, super steam pressure, advanced combustion technology (low NOx), equipments;
- Minimum capacity: 42.14%;
- Power expose: 7.8 GWh, Tmax: 6,500 hours, power expose to bus bar: 7.13 GWh;
- Fuel: Imported coal (bituminous or sub-bituminous) with heat value: 5500-6100kcal/kg, FO or HFO oil and limestone;
- Cooling water supply system: brackish water/fresh water from Hau River with flow rate of 56m³/s;
- Clean water supply system: Clean water from Hau River and pretreated, desalination and demineralization for boiler feed water.
- Electric system of the power plant: 220kV/500kV switchyard system.
- Basic characteristics of boiler at rated capacity: 2 units, using conventional technology, once through pulverized coal fired boiler
- Basic characteristics of turbine at rated capacity:
- Generator: Rated capacity: 600MW, Coefficient: 0.85/0.9, Frequency: 50Hz, revolution: 3000r/m

13. Project life: 25 years.

14. Project schedule:

- Commercial operation date of Unit 1: 5/2015;
- Commercial operation date of Unit 2: 9/2015.

15. Current status

- PVN have already approved for the FS of LP1 power plant.
- Completion of project site/land clearance.
- FEED consultancy contract signed on April 29, 2010.

16. Project's attractiveness:

- The project is strongly supported by Vietnamese Government and Soc Trang Province;

- Governmental guarantees: The Ministry of Finance, acting on behalf of the Vietnam's Government, will guarantee for overseas financing loans.
- The position of project is suitable for the coal transportation and the water resource (on the bank of Hau River).

17. Other Information:

Following are the projects that should be implemented prior to or at the same time with the Long Phu 1 power plant project:

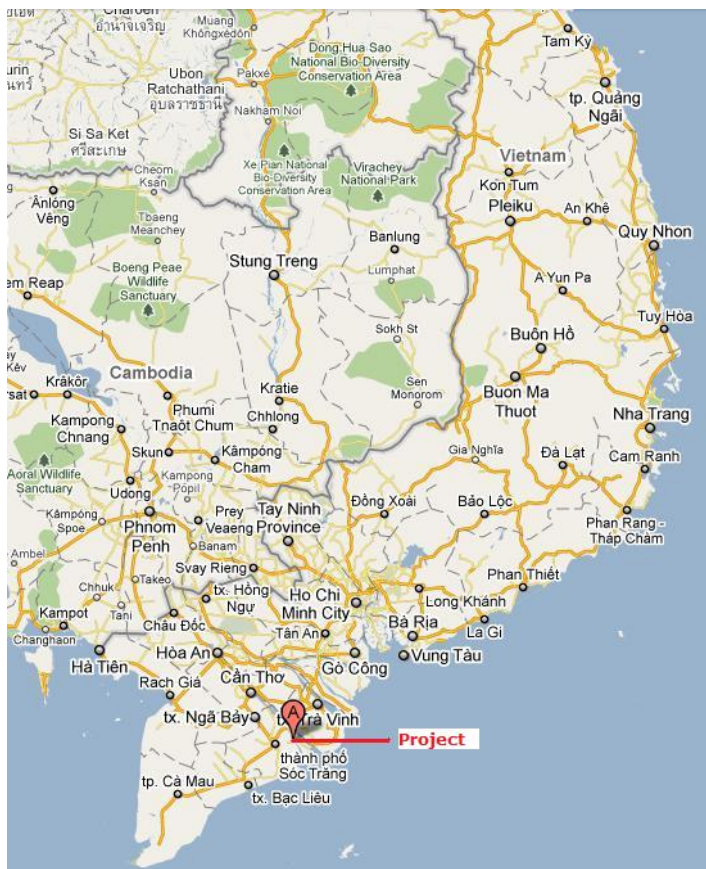
- Infrastructure of the Long Phu Power Complex,
- Power grid synchronizing with the Long Phu 1 power plant,
- Intermediate port of coal,
- Canal for high capacity vessel traveling in Hau River (Quan Chanh Bo canal).



SONG HAU 1 COAL-FIRED POWER PLANT

(Sector II: Power - Project: II-5)

1. **Project:** Song Hau 1 Thermal Power Plant Project
2. **Location:** Phu Huu A Commune, Chau Thanh District, Hau Giang Province.
3. **Owner:** Vietnam Oil & Gas Group
4. **Capacity:** 1,200 MW (2 units of 600 MW).
5. **Investment Capital:** US\$ 1,812 million.
22. **Economic efficiency:** NPV: US\$ 253 million; FIRR 12%. Payback Period: 20 years.
6. **Financing sources:** from various sources – PVN, national budget, ECAs, commercial loans... with Equity/Debt: 30/70.



7. **Objectives:**
 - Meeting the demands for Viet Nam's development, securing the power supply for Viet Nam;
 - Contributing to the development of local industry.
8. **Maximum foreign equity ownership:** 71% of the Project.
9. **Fuel source:** imported coal transported through an intermediate port to Song Hau 1 power plant by 10,000 DWT vessels.
10. **Area:**
 - Song Hau 1 Thermal Power Plant is located in Song Hau Power Complex project (the total area of about 367ha which is managed by owner and local authorities)
 - Area of the power plants and ancillaries; construction yard and storage and common infrastructures: 196 ha.
 - Ash disposal yard: 147ha.
 - Transmission line corridor of 500kV switch yard: 17ha.
 - Roads in power plant complex: 7 ha.

Construction area of Song Hau 1 No.1 Power Plant: 139,5ha. Including:

- Power plant and BOP: 52.5ha.
- Ash disposal yard: 47ha.
- 500kV switch yard: 8.0 ha.
- Cooling system and others: 41.5ha.

11. Main parameters

- Rated Capacity: 2x600MW units with conventional technology, once through pulverized coal fired boiler with reheat, super steam pressure, advanced combustion technology (low NOx), equipments;
- Minimum capacity (HHV): 40.61%;
- Power expose: 7.8 GWh, Tmax: 6.500 hours, Power expose to bus bar: 7.293 GWh;
- Fuel: Imported coal (bituminous or sub-bituminous) from Australia or Indonesia with heat value: 5,642-5,932kcal/kg, FO or HFO oil and limestone;
- Cooling water supply system: brackish water/fresh water from Hau River with flow rate: 50m³/s;
- Fresh water supply system: Fresh water from Hau River and pretreated, desalination and demineralization for boiler feed water.
- Limestone will be from Kien Giang or Middle North
- Electric system of the power plant: 500kV switchyard system.
- Basic characteristics of boiler at rated capacity: 2 units, using conventional technology, once through pulverized coal fired boiler
- Basic characteristics of turbine at rated capacity:
- Generator: Rated capacity: 600MW, Rated voltage: 21kV, Excitation system: Static excitation.
- Flue gas control equipments: ESP, FGD, SCR
- Height stack: 150- 200m.

12. Project life: 25 years.

13. Project schedule:

- Commercial operation date of Unit 1: 2015;
- Commercial operation date of Unit 2: 2016.

14. Current status:

- PVN now is assessing for the Feasibility Study of Song Hau No.1 power plant.
- Site clearance and land leveling has been starting on 27/08/2010.

- Feasibility Study is expected to be approved in December 2010.

15. Project attractiveness:

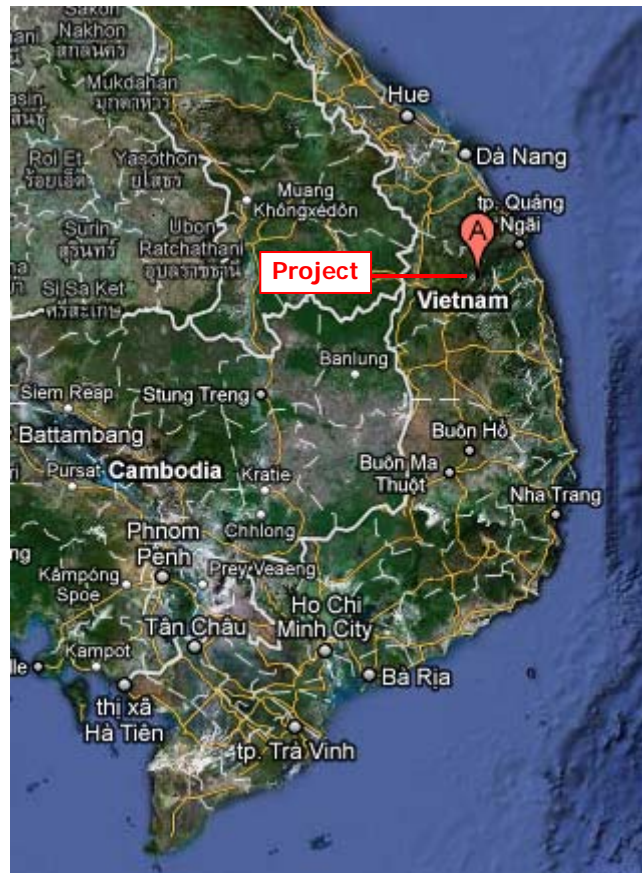
- The project's location is easy-to-access for coal transportation from seaway.
- The project is strongly supported by Vietnamese Government and Hau Giang Province;
- Possibility to obtain the Government guarantee for oversea financing loans.



DAKDRINH HYDROPOWER PLANT

(Sector II: Power - Project: II-6)

1. **Project:** Dakdrinh Hydropower plant project
2. **Location:** Son Tay District, Quang Ngai Province and KonPlong District, KonTum province, Vietnam
3. **Project owner:** Dakdrinh Hydropower Joint Stock Company
4. **Capacity:** 125 MW (02 units)
5. **Investment capital:** US\$ 153 million.



6. **Economic Effectency**
7. **Financing source:** Financing has been arranging from various sources including: PVN, national budget, ECAs, commercial loans (PVFC, BIDV, Credit Agricole...) with Equity/Debt ratio 30/70. The Facility Agreement is supposed to be signed in QI/2011.
8. **Maximum foreign equity ownership:** Partners are welcome to discuss participation percentage.
9. **Objective:** According to grand development plan of Vietnam Electricity Grid in 2001-2020 (Master Plan 6), national power demand in 2010 and 2020 is 70.4 billion KWh and 167 billion KWh correlatively. In order to meet that demand, it is essential to promptly construct power plants, especially the study of exploitation and resources of hydropower. Report on Dakdrinh Dakdrinh hydropower investment project is in the study program on hydropower of Tra Khuc River to optimize scale and locate Dakdrinh hydropower project to increase electricity supply in the Central which helps to improve infrastructure of Son Tay district of Quang Ngai province and KongPlong of Kon Tum province. These areas are underdeveloped. The project will supply water to Thach Nham Lake and Dung Quat Industrial Zone in dry season and eliminate flood in the downstream in the flood season.

10. Area: Acquired land 22.932.000 m²

11. Main parameters:

No.	Main parameter	Unit	Value
	Project category (for construction works)		I
	Category for energy alternative and power plant		II
1	Catchments specification		
1.1	Catchments area to the selected alternative (Flv)	km ²	420,00
1.2	Average flow per years (Q0)	m ³ /s	31,89
1.3	Total discharge flow per year (W0)	106 m ³	1005,7
2	Reservoir		
2.1	Normal water level(MNDBT)	m	410,00
2.2	Dead water level (MNC)	m	375,00
2.3	Water level with designed flood discharge (MNGC)	m	411,43
2.4	Water level with calculated flood discharge (MNKT)	m	414,88
2.5	Reservoir area with normal water level	km ²	9,124
2.6	Total volume (Vtb)	106 m ³	248,51
2.7	Useful volume (Vhi)	106 m ³	205,18
2.8	Dead volume (Vc)	106 m ³	43,33
3	Flow		
3.1	Assured flow (Q 90%)	m ³ /s	12,78
3.2	Max flow through the Power house (Q max)	m ³ /s	51,95
3.3	Flood discharge at the frequency:		
3.4	- P = 0,02% (examination)	m ³ /s	12638,7
3.5	- P = 0,1% (design)	m ³ /s	9264,4
4	Head		
4.1	Maximun head: Hmax	m	330,52
4.2	Avarage head: Hbq	m	309,20
4.3	Minimun head: Hmin	m	257,23

4.4	Calculated head: Htt	m	275,00
5	Water level at the downstream of the Powerhouse		
5.1	Maximun water level (Q x 0,1%)	m	90,36
5.2	Maximun water level (Q x 0,5%)	m	88,53
5.3	Minimun water level (1 unit)	m	75,56
6	Energy index		
6.1	Installed capacity (NIm)	MW	125,00
6.2	Assured capacity (Nđb)	MW	38,85
6.3	Avarage Output per years (Eo)	106 KWh	540,246
6.4	Hours	hour	4322

12. Economic efficiency

No.	Case	FIRR (%)	B/C	NPV (Bill VND)
1	Electric price 0.046 USD/kWh	9,51	0,98	- 61,570
2	Electric price 0.048 USD/kWh	10,20	1,01	30,280
3	Electric price 0.050 USD/kWh	10,89	1,05	121,830
	- Capital + 10%	10,26	1,01	38,653
	- Energy - 5%	10,69	1,04	90,483
	- Capital + 5%, Energy - 5%	9,86	0,99	- 14,340
	- 1 year behind schedule	9,80	0,99	- 20,953
4	Electric price 0.055 USD/kWh	12,57	1,13	344,670
	- Capital + 10%	11,92	1,10	268,108
	- Energy – 10%	11,43	1,07	182,099
	- Capital + 10%, Energy - 10%	9,75	0,99	- 29,730
	- 2 year behind schedule	9,72	0,98	- 39,045
5	Electric Price 0.057 USD/kWh	13,27	1,16	436,670
	- Capital + 10%	12,56	1,13	356,474
	- Energy - 10%	12,10	1,11	265,681
	- Capital + 10%, Energy - 10%	10,36	1,02	53,080
	- 2 year behind schedule	10,19	1,01	36,020

13. Project life: 40 years.

14. Project schedule:

- Discharge water through diversion tunnel: July 2009
- Operation of Unit 1: Quarter III/2013
- Operation of Unit 2: Quarter IV/2013

15. Current status: Deploying the preparation works, auxillary works for discharge water through diversion tunnel on January 2011

16. Project attractiveness:

- Hydro Power plant project has features of low industrial gas emission therefore, more advantageous in developing CER project in order to get benefit from the carbon market (CDM).
- Input of a hydro power plant is derived from water energy source, causing no cost for input factors, besides the environmental fee.

END OF POWER SECTOR

SECTOR III SEAPORT



PETROLEUM SERVICE PORT IN VUNG TAU

PHUOC AN PORT PROJECT

(Sector III: Seaport - Project: III-1)

1. Project name: Phuoc An Port Project.

2. Location: Southern Focal Economic Region, the water gate of the Southern Vietnam.

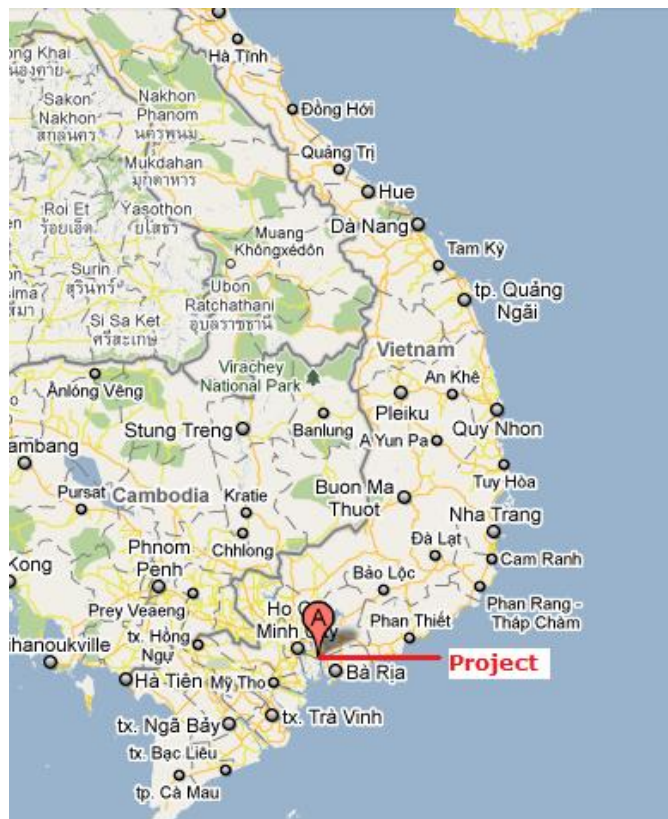
3. Owner: PetroVietnam Phuoc An Port Investment and Operation JSC (PAP).

4. Shareholders:

- PetroVietnam: 80%
- Dong Nai's People Committee: 15%;
- Others: 5%;

5. Capacity:

- 4.1 million TEU/year;
- 6.5 million Ton/year (General cargo)



No	Type	Unit	Operation Stages		
			2013	2015	2020
1	Container	TEU/year	630,000	1,366,000	4,100,000
		Ton/year	7,245,500	15,709,000	47,150,000
2	General cargo	Ton/year	-	2,000,000	6,500,000
Total:		Ton/year	7,245,000	17,709,000	53,550,000

6. Investment Capital: US\$ 870 million

In order to make the project effective and receive turnover within the shortest period of time, the project is divided into five investment stages, operation starts as soon as the construction of the berth No.1 is finished, the stages are as follows:

No	Stage	Capital (USD)
1	Stage 1	100 million
2	Stage 2	195 million
3	Stage 3	188 million
4	Stage 4	233 million
5	Stage 5	154 million
Estimated investment capital		870 million USD

The estimated capital investment excluded VAT (10%) and contingency cost (10%)

7. Economic efficiency: NPV: US\$ 75 million; IRR: 17%.

8. Maximum foreign equity ownership: Partners can invest in maximum up to 49% of charter capital in Phuoc An Port Project.

9. Main parameters:

- Port Capacities:

- o Total land area: 183 ha;
- o Total berth length: 3,050 meters;
- o Water depth of river: 15m;
- o 06 Container berths (60,000 DWT/berth);
- o 04 General cargo berths (60,000 DWT/berth);

- Logistic Zone Capacities (5 km away from the port);

- o Total land area: 555 ha;
- o ICD services;
- o Container and general cargo terminals;
- o Pre-production processing import/export;
- o Liquid storage yard (oil, gas etc) with the main purpose is to serve the refinery factory and the Long Thanh International Airport;
- o Warehouse services;
- o Office building;
- o Apartment building

- Entertainment facilities;
- And others logistics services.

10. Traffic System: The location of Phuoc An Port is not only closed to economic hub of Vietnam but also has a very convenient traffic system with connection to all the life-line traffic route of the region such as roads, seaways, airways, and railways.

11. Natural Conditions: Port and Logistic Zone are not affected by natural calamity like flood or infiltration, storm, tide.etc.

12. Current status:

- Completed works:
 - Survey for cadastral map;
 - Geological survey;
 - Detailed planning for construction 1/2000;
 - Detailed planning for construction 1/500;
 - Report for environmental impact statement;
 - Company's Investment License;
 - Cadastral survey 1/2000;
 - Approved decision for total compensation;
 - Reclamation decision for total project area).
- On-going works:
 - Drafting detailed compensation;
 - Planning 1/500 – Logistic zone;
 - Project investment – Basic design;
 - Detailed design – Phase 1.

13. Project Attractiveness:

- Strong support from PetroVietnam and Dong Nai's People Committee
- Biggest port (183 ha) in Vietnam with the berth length more than 3 km.
- Biggest Logistic zone with the area of 555 ha with multi-functions to support the port operation.
- Located in the largest national economic centre with important industries and in one of the busiest commercial areas in Vietnam.

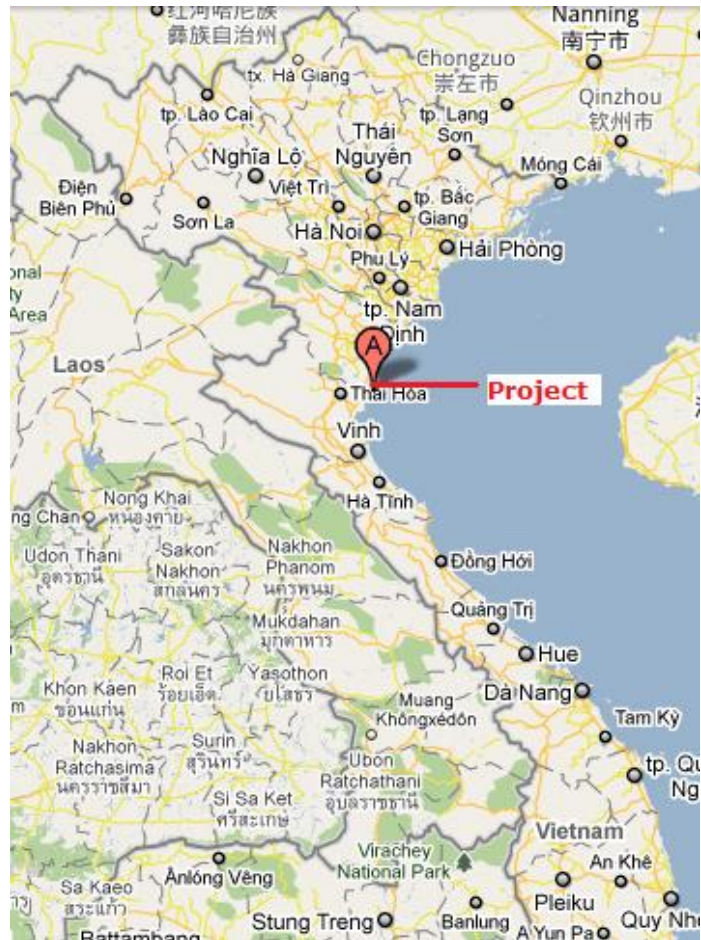
- Located in the busiest transportation region of cargo and container volume through Southern Focal Economic Region of Vietnam.
- The traffic through this region is recorded to account for 75% of cargo volume of Vietnam.
- In good condition of transportation, such as: by road, by waterway, by air and by train.
- Port and Logistic zone are not affected by natural calamity, such as: storm, flood, tide, etc..



NGHI SON PORT PROJECT

(Sector III: Seaport - Project: III-2)

1. **Project:** Based and Transferred Nghi Son port.
2. **Location:** Nghi Son Economic Zone, Tinh Gia district, Thanh Hoa province.
3. **Project Owner:** Petroleum Technical Service Corporation (PTSC)
4. **Capacity:** 2 million tons/year.
5. **Investment Capital:** US\$ 28.1 million.
6. **Economic efficiency:** Under studying.
7. **Maximum foreign equity ownership:** 49% of the Project.
8. **Purpose:** To serve the export - import demands of goods and raw materials, machinery and equipment, general goods, containers in Nghi Son economic zone and other enterprises.



9. Main parameters:

- Port No. 1: 165m length, started operation in 2002, capacity up to 10,000 DWT;
- Port No. 2: 225m length, started operation in 2007, capacity up to 30,000 DWT;
- Land area: 9 ha;
- Forecast of goods transporting through Nghi Son Port:

Description	Unit	2010 – 2015	2015 – 2020
Total goods	Tons/year	3,000,000	10,000,000

10. Traffic System: convenient transportation through roads, railways and seaways

- 14km away from 1A National Highway;

- Railway through Thanh Hoa Province with 9 stations to facilitate transport of raw materials and products;
- Close to international maritime routes.

11. Current status: Under operation at 150% of port capacity.

12. Project Attractiveness:

- Located South of Bien Son natural break water.
- The port can be expanded to accommodate 50,000 DWT ships. It is considered the best location in Central Vietnam to develop deep-water port.
- Demands are higher than the capacity of Nghi Son Port
- Nghi Son port is located in Nghi Son Economic Zone, a dynamic investment environment. Providing good incentives and transparent investment policies, it has attracted foreign investors to invest in large-scaled projects in refinery, petrochemical, ship building and repair etc.

HON LA PORT PROJECT

(Sector III: Seaport - Project: III-3)

1. Project: Expanding the second phase of Hon La Port.

2. Location: Hon La Economic Zone, Quang Dong district, Quang Binh province.

3. Project owner: Petroleum Technical Service Corporation (PTSC).

4. Capacity: 1.2 million tons/year.

5. Investment Capital: US\$ 21.2 million.

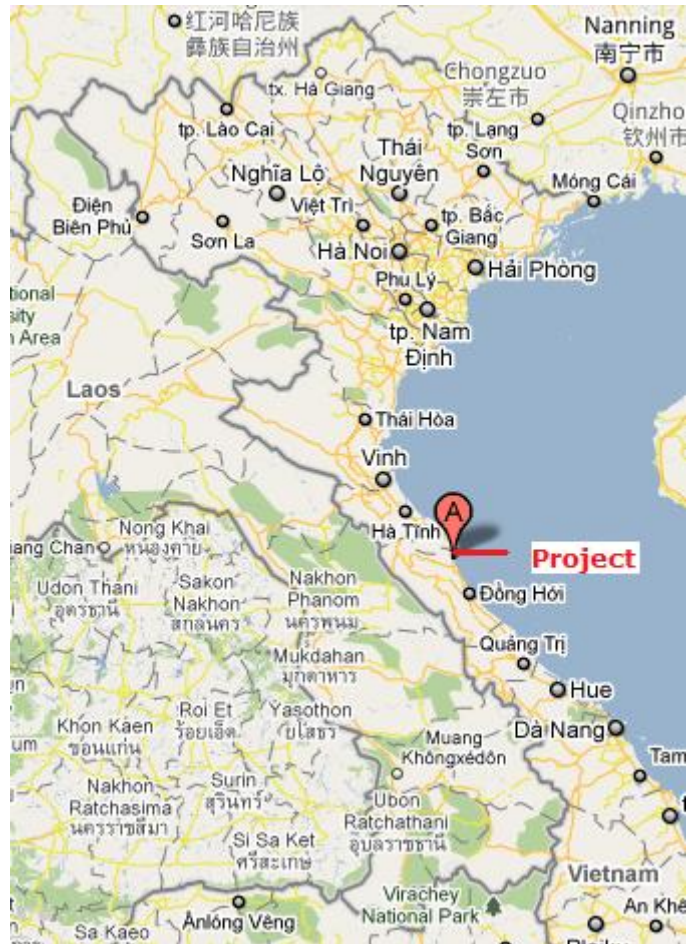
6. Economic efficiency: NPV: US\$ 3.8 million. IRR: 12.94%.

7. Maximum foreign equity ownership: 49% of the Project.

8. Purpose: to supply goods demand through area for socio economic development of Quang Binh province, construction and operation of manufacturing factories in Hon La economic zone, as well as cement industry in the province.

9. Main parameters:

- Land area: 9ha;
- Hon La gulf area: 9km²;
- Forecast of goods transporting through Hon La port:



No.	Descriptions	Unit	2010 – 2015	2015 - 2020
1	Goods for socio - economic development in Quang Binh province	Tons/year	450,000	650,000
2	Goods for Hon La economic zone	Tons/year	360,000	1,350,000

3	Goods for cement industry	Tons/year	450,000	1,200,000
	Total	Tons/year	1,260,000	3,200,000

10. Traffic system:

- 3km from National Highway 1A;
- 179 km from Cha Lo (Vietnam - Laos border gate);
- 301 km from Ta Khet (Laos - Thailand border gate);
- 40 km from Song Gianh cement factory, through National Road No. 1 and No. 12;
- 61km by waterway from Gianh river;
- 5.5 – 6 nautical miles from coastal maritime routes;
- 360 km from international maritime routes of the East Sea;
- In the middle of two large central ports in Da Nang and Hai Phong;
- Distance from Hon La port to other ports in the region is as follows:
 - o Nghi Son port: 110 km
 - o Cua Lo port: 74 km
 - o Ben Thuy port : 79 km
 - o Xuan Hai port: 76 km
 - o Vung Ang port: 25 km
 - o Gianh port: 25 km
 - o Nhat Le port : 65 km
 - o CuaViet port: 369 km
 - o Hai Phong port: 664 km
 - o Da Nang port: 386 km

11. Current status:

- 100m existing jetty with capacity up to 10,000 DWT started operating in April 2009.
- 115m jetty expected to start operation in 2011 with capacity up to 10,000 DWT or simultaneously 02 ships with less than 10,000 DWT in order to push up port capacity to 1.2 million tons/year.

12. Project attractiveness:

- The natural breakwater helps protect the port from waves and wind.
- Convenient location for expansion to accommodate ships up to 100,000 DWT.
- Demands are higher than capacity of Hon La Port.



PVTRANS INTERNATIONAL PORT PROJECT

(Sector III: Seaport - Project: III-4)

1. **Project:** PVTrans International Port.
2. **Location:** Dung Quat Economic Zone, Binh Thuan commune, Binh Son district, Quang Ngai province.
3. **Owner:** Petrovietnam Transportation Corporation (PV Trans).
4. **Capacity:** vessels up to 50,000DWT.
5. **Investment Capital:** US\$ 37.3 million.
6. **Economic efficiency:**
 - NPV: US\$ 10.58 million;
 - IRR: 15.44%;
 - Payback Period: 12 years.
7. **Financing:** Equity/Debt ratio: 30/70.
8. **Maximum foreign equity ownership:** 49% of the Project.



9. **Purpose:**
 - To transport cargo for Dung Quat Economic Zone and provide logistics services for PV Trans' fleets and for other clients. Transportation demands are estimated at 1.2 – 1.7 million tons/year from 2010 and 2.9 – 4.3 million tons/year by 2020.
 - To meet logistics demands for PVTrans and other companies' ships. The logistics arrangements are very important to PVTrans since it will be responsible for frequent transportation of 6,500 KMTA – Dung Quat Refinery crude oil and oil products.
10. **Main parameters:**
 - Total land area: 16.2ha;
 - Total water area: 2.9ha;
 - Berth length: 290m;
 - Office building: 2,000 m²;
 - Warehouse:

- Container Freight Station (CFS): 2,700 m²;
- General cargo warehouse: 4,095m²;
- Factory: 1,404m², for reparation and storage of equipment.
- Outdoor yard:
 - Container yard: 14,070m²;
 - Empty container yard: 2,800m²;
 - General cargo yard: 31,760m²;
- Utilities: fuel station, water pump station, transformer station, 80-ton balance, firefighting equipment.
- Technology:
 - Packed goods: cranes, trucks, forklifts.
 - Unpacked goods: cranes, conveyors, trucks
 - Container: cranes, trailers, reach stackers/forklifts.

11. Construction schedule: 2011 – 2015

12. Current Status: Developing construction design.

13. Project Attractiveness:

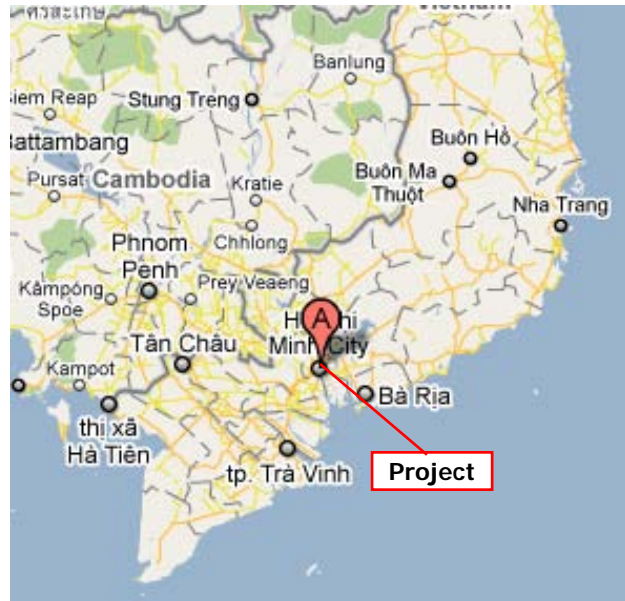
- Only 1.37% of Vietnam ports can receive vessels over 50,000 DWT.
- Nearby Dung Quat Economic Zone.
- The project receives special investment preferences and support from the Government and People's Committee in Quang Ngai Province.

PETROVIETNAM TRANSPORTATION CORPORATION

COMPANY PROFILE

(Sector III: Seaport - Project: III-5)

1. **Company name:** PetroVietnam Transportation Corporation (PVTrans).
2. **Location:** 4th Floor, H3 Building, 384 Hoang Dieu Street, Ward 6, District 4, Ho Chi Minh city.
3. **Date of establishment:** May 27, 2002.
4. **Operation license:** Business Certificate No. 0302743192 dated March 30, 2010



5. **Planned chartered capital contribution:**

Year	2010	2011	2012	2013	2014	2015
Charter Capital (US\$ million)	125.7	127.1	143.2	156.4	193.7	248.5

6. **Equity** (as of December 31, 2009): US\$ 77.8 million
7. **Liabilities** (as of December 31, 2009): US\$ 223.7 million

8. **Shareholders:**

- PVN:	58.40%
- Minority shareholders:	41.60%
Total	100%

9. **Business activities**

- Owning, operating and chartering crude oil, oil products, gas products, and chemical tankers as well as offshore support vessels and other cargo ships;
- Owning, operating and chartering FPSO/FSO;
- Providing offshore petroleum technical services including marine survey, fabrication, installation, maintenance and repair of oil and gas facilities;
- Operating onshore port logistics and supply bases;



- Supplying manpower for marine and offshore crew;
- Ship brokerage and agency; and other related marine services;
- Road and inland waterway transportation including gas taxis, LPG trucks and busses;
- Freight forwarding and international multi-modal transportation;
- Procurement and supply of materials and equipment for oil and gas and transportation industries;
- Other commercial and financial investment services.

10. Revenue (2009): US\$ 111.9 million

11. Net profit (2009): US\$ 0.47 million

12. ROE (2009): 0,60%.

13. Expected Net profit (2010): US\$ 6.8 million

14. Expected ROE (2010): 2,23%

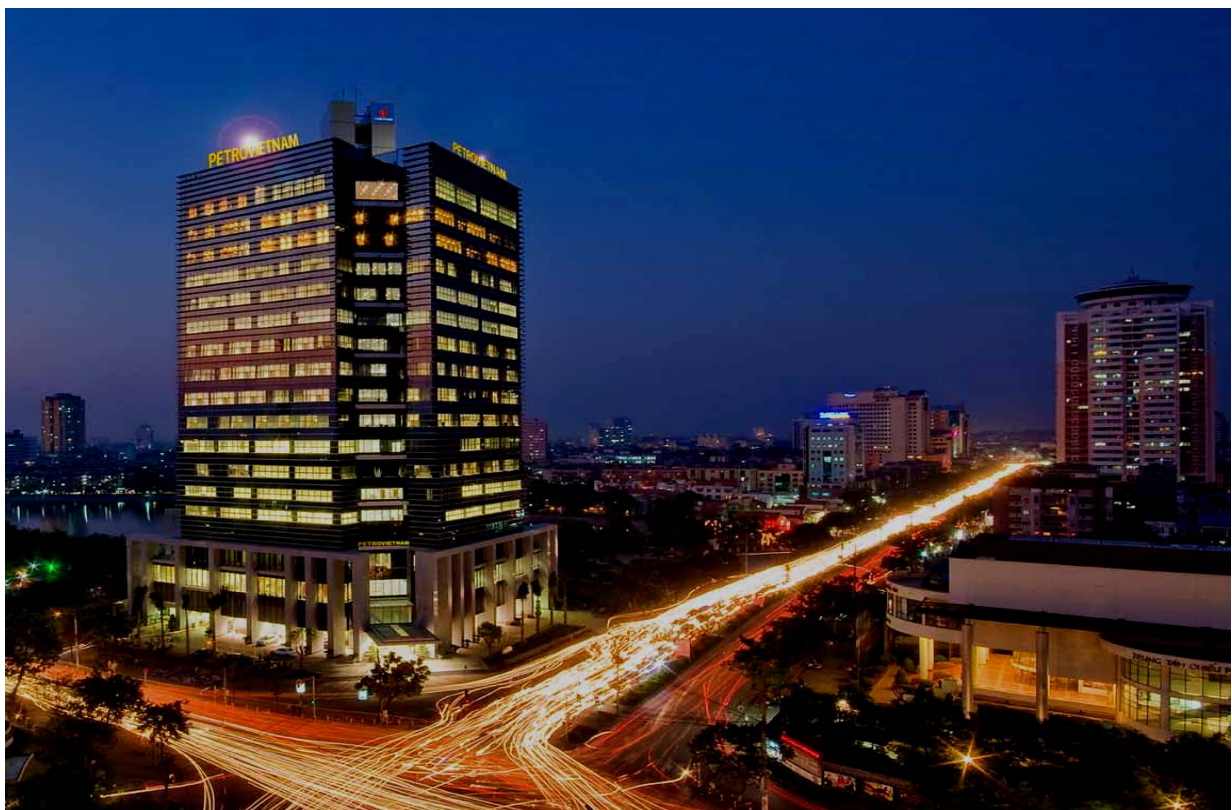
15. Maximum foreign equity ownership: partners are welcome to discuss the participation percentage up to 18% PVTrans' shares.

16. Other information

- Marine business is supported by the Vietnamese Government;
- PVTrans is the biggest Vietnam's shipping company in Oil and Gas transportation;
- 100% crude oil input and 100% gasoline & diesel output for Dung Quat Refinery which will cover 33% of gasoline & diesel demand in Vietnam;
- Commitment to HSE DNV ISO 9001:2008;
- Opportunities to operate supply services, including transport of crude oil and oil products for PVN's refinery No 2 & 3 in 2014 & 2015; coals for 05 PVN's power plants;
- PVTrans was listed on Hochiminh Stock Exchange in 2007 with code (PVT).

END OF SEAPORT SECTOR

SECTOR IV REAL ESTATE & INDUSTRIAL PARK



PETROVIETNAM HEADQUARTER OFFICE

DA NANG RIVERSIDE HOTEL

(Sector IV: Real Estate & Industrial Park - Project: IV-1)

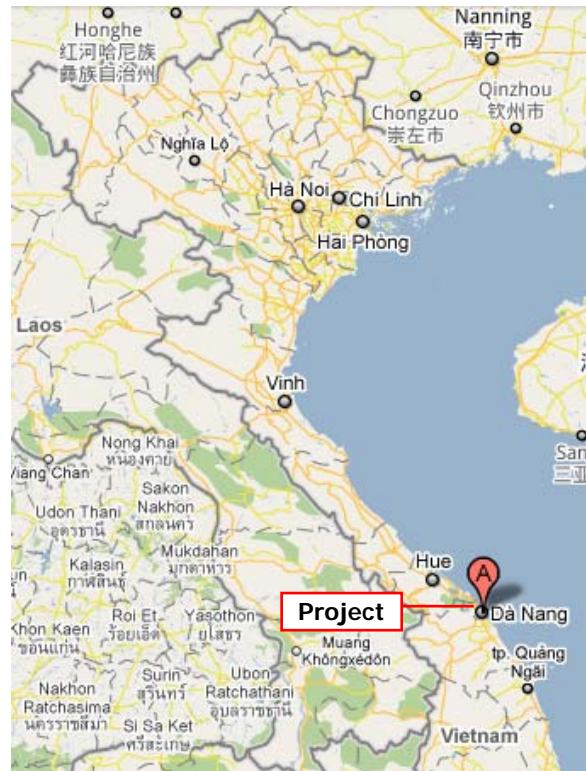
1. Project Name: Danang Riverside Hotel.

2. Location: A30 Tran Hung Dao St., Son Tra Dist., Da Nang city, Viet Nam

3. Project Owner: Mien Trung Petroleum Construction JSC (PVC-MT).

4. Project objectives:

- Diversification of industries, strategic development of the petroleum industry Vietnam to 2015 and orientation to 2025 of Viet Nam oil and gas Group.
- Increasing brand for corporations as well as companies in Central Viet Nam, increasing the value of shares on the market.
 - Creating stable and long-term revenue for company.
- Meeting the strategic development of company in Central Viet Nam.
- Facilitating the development of urban infrastructure systems, providing travel services to up-to-date standards in term of community satisfaction.
- Contributing to Da Nang's funds of travel services and others -fund projects for tourism industry, creating more choices for accommodation needs of tourists, experts and entrepreneurs in the country.
- Contributing to the state budget through taxes.



5. Capacity:

a) Da Nang Riverside hotel (Existing Stage 1): 14-storeys hotel and 3-storeys restaurant.

- 14 Apartments;
- 06 Suite Rooms;
- 33 Superior Rooms;
- 54 Deluxe/ VIP Rooms;
- 02 Conference Rooms: Capacity from 20 to 700



guests, equipped with modern facilities for professional meetings, conferences and seminars;

- 01 Restaurant (Food and Beverage): No warm space, open space and luxury with 700 guests, is decorated splendid, sound equipment, lighting.

b) Danang Riverside hotel (Expansion stage 2).

- 21 floors Tower included Commercial Center, 53 rental offices, 153 apartments and recreational areas.

6. Schedule:

1. Danang Riverside Hotel (Stage 01, Existing): Under Operating
2. Danang Riverside Hotel (Stage 02): Looking for co-Investors

7. Total investment capital:

1. Danang Riverside Hotel (Stage 01, Existing): US\$ 9.1 million
2. Danang Riverside Hotel (Stage 02): Estimate of US\$ 27.6 million

8. Economic efficiency: NPV: USD\$ 9,8 million; IRR: 12,12%

9. Maximum foreign equity ownership: To be discussed

10. Attractiveness:

- Located in the heart of Danang City on the Han River looking over the downtown business district 2 kilometers from the international airport and the railway station.
- Nearby Cham Museum, 2 kilometers from The Son Tra Peninsula providing scenic beauty with mountains (Marble Mountain), coastal views and beaches for the ecological tourist



Da Nang Riverside Hotel at Fireworks Festival night

TAN VIEN INTERNATIONAL LUXURY TOURIST AREA

(Sector IV: Real Estate & Industrial Park - Project: IV-2)

1. **Project Name:** Tan Vien International Luxury Tourist Area Project.
2. **Project Owner:** Petrovietnam Premier Recreation Joint Stock Company (PVR).
3. **Location:** Ba Vi District, Hanoi City, Vietnam
4. **Project objectives:** Tourism Complex, Golf & Resorts...
5. **Capacity:** 1204 ha (includes island area & exclusive water area)
6. **Schedule:** 2010 – 2020
 - PHASE 1 (2010-2013): 158.34 ha
 - A 18-hole golf course on island (Private course)



- Villas and resort
 - Gambling
 - 5-star hotel and luxury spa
 - Water park
 - Light Tower
 - Tourism Services center
7. **Total investment capital:** US\$ 234.5 million
 8. **Economic efficiency:** NPV: US\$ 15.2 million; IRR : 16,04%; Payback: 5,5 years;

9. **Maximum foreign equity ownership:** To be discussed.

10. **Current status:**

- Detail plan of construction scaled 1/500 is under submission for approval;
- Carrying out Compensation and Land Acquisition;
- Making Investment Project on Infrastructure for land providing.

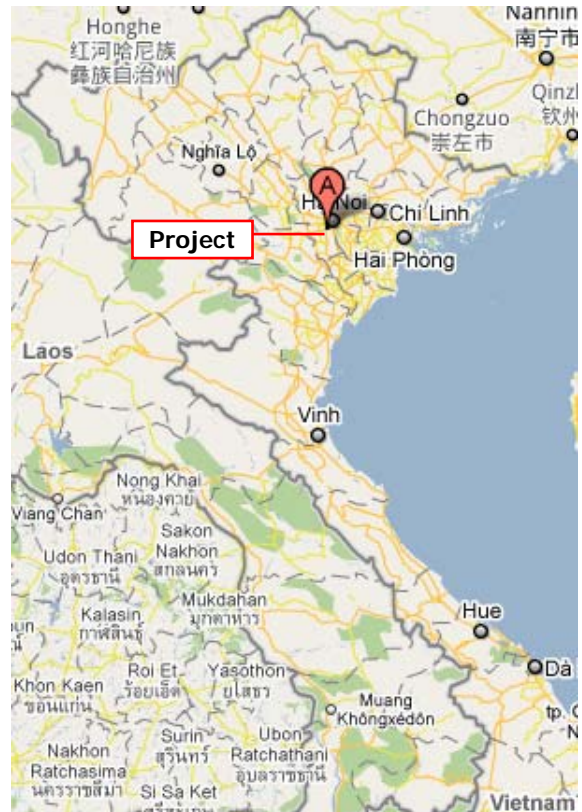
11. Attractiveness:

- Strong support from Ha Noi authorities
- One of the most attractive in-land resort in Viet Nam
- 40km from the center of Ha Noi

CT10-11 BUILDING OF VAN PHU NEW URBAN AREA

(Sector IV: Real Estate & Industrial Park - Project: IV-3)

- 1. Project Name:** CT10 -11 Building of Van Phu New Urban
- 2. Location:** Van Phu New Urban, Ha Dong district, Hanoi
- 3. Project Owner:** Petrovietnam Premier Recreation Joint Stock Company
- 4. Objectives:** Residential Complex Building and services
- 5. Capacity:**
 - Land area: 7.023 m²
 - Building density: 49.70%
 - Construction areas: 3,490 m²
 - Numbers of floors: 39
 - Numbers of Basement: 2
 - Total floor areas: 112.055 m²
- 6. Schedule:** 2010 – 2014
 - Investment preparation: Quarter III/2010
 - Starting date: Quarter IV/2010
 - Handover date: Quarter IV/2014



- 7. Total investment:** US\$ 71 million.
- 8. Economic efficiency:**
 - NPV: 14,4%;
 - IRR: 15,07%;
 - Payback: 3 years and 11 months.
- 9. Maximum foreign equity ownership:** To be discussed.
- 10. Current status:** Carrying out

discussion in order to sign the Contract of land and project's transfer.

11. Attractiveness

- Located in one of the hottest new urban in Ha Dong Dist.
- Ready for construction.

HALONG PLAZA

(Sector IV: Real Estate & Industrial Park - Project: IV-4)

1. **Project's name:** Halong Office and Hotel Plaza.
2. **Location:** Clock Tower, Tran Hung Dao District and Bach Dang District, Ha Long City, Quang Ninh Province.
3. **Owner:** PetroVietnam Premier Recreation Joint Stock Company & Megastar Real Estate Joint Stock Company
4. **Summary:** Halong Office and Hotel Plaza is one of the major projects in Ha Long city with 02 modern buildings of 21 storeys, separated functional space. Being the landmark of the Clock Tower, the buildings will satisfy accommodation demands for tourists of Halong Bay – the World Heritage Site.



5. **Total area:** 10,000m².
6. **Schedule:** Construction started on February 3/2010 and will complete in 2013.
7. **Total investment:** US\$ 47.1 million.
8. **Economic efficiency:** NPV: 1.5 million; IRR: 14.4%.
9. **Current status:** Under construction.
10. **Maximum foreign equity ownership:** To be discussed.
11. **Attractiveness:**
 - Located in the most expensive area in Quang Ninh Province;
 - Ready for construction.



Ha Long Plaza located in Ha Long Bay - the World Heritage Site

PHUOC KHANH RESIDENTIAL AREA

(Sector IV: Real Estate & Industrial Park - Project: IV-5)

1. Project name: Phuoc Khanh Residential Area.

2. Location: The project is located on 54.8 ha area in Phuoc Khanh Commune, Nhon Trach District, Dong Nai Province

- The Northern area borders with Ong Thuoc River and Tac Mieu irrigation ditch.
- The Southern area borders with Huong route to Phuoc Khanh People’s Committee.
- The Eastern area borders with resettlement area of Phuoc Khanh commune (phase 2).
- The Western area borders with small irrigation ditch.

3. Project owner: PetroVietnam Power Real Estate JSC (PV Power Land).

4. Purpose: Infrastructure construction for Phuoc Khanh Residential Area.

5. Capacity: 8,000 habitants.

6. Schedule:

➤ **Phase I:**

- Investment preparation: QII/2008 -QIV/2009
- Relocation and compensation: QIII/2010 - QIV/2011
- Technical infrastructure construction: QIII/2011 - QI/2013
- Equipment procurement: QIV/2011 - QII/2013

➤ **Phase II:**

- Relocation and compensation: QIV/2013 - QIV/2014
- Technical infrastructure construction: QIV/2013 - QIV/2014
- Equipment procurement: QIII/2014 - QI/2015"

7. Total investment capital: US\$ 36 million

8. Economic efficiency:

- NPV: US\$ 500,000;



- IRR: 17,26%;

9. Current status: Investment preparation

10. Maximum foreign equity ownership: to be discussed.

11. Attractiveness:

- Suitable with the Master Plan of Nhon Trach city; and the detailed plan 1/500 of Phuoc Khanh residential area is approved;
- Convenient traffic road to the central of communes and surrounding areas.
- Pure environment, favorable water drainage system;
- The project land comprises most of empty and arable land, easy for land transfer and clearance.



VUNG TAU PETROLEUM NEW URBAN AREA

(Sector IV: Real Estate & Industrial Park - Project: IV-6)

1. **Project Name:** Vung Tau Petroleum New Urban Area.
2. **Location:** Ward 11, Vung Tau city, Ba Ria – Vung Tau Province
3. **Project Owner:** Petroland and PVC-IC.
4. **Objectives:** Creating a new urban ecology differ from other new urban areas that have been building at Vung Tau and Ho Chi Minh City. Creating land and housing fund for long term service
5. **Capacity:** 69.46 ha
6. **Schedule:** 2010-2019
7. **Total investment capital:** US\$ 75 million
8. **Economic efficiency:** expected IRR = 30%
9. **Current status:**
 - Approved by Ba Ria – Vung Tau people Committee on the investment plan and place for the project
 - Approved by Ba Ria – Vung Tau People Committee on the general plan of the compensation, resettlement assistance



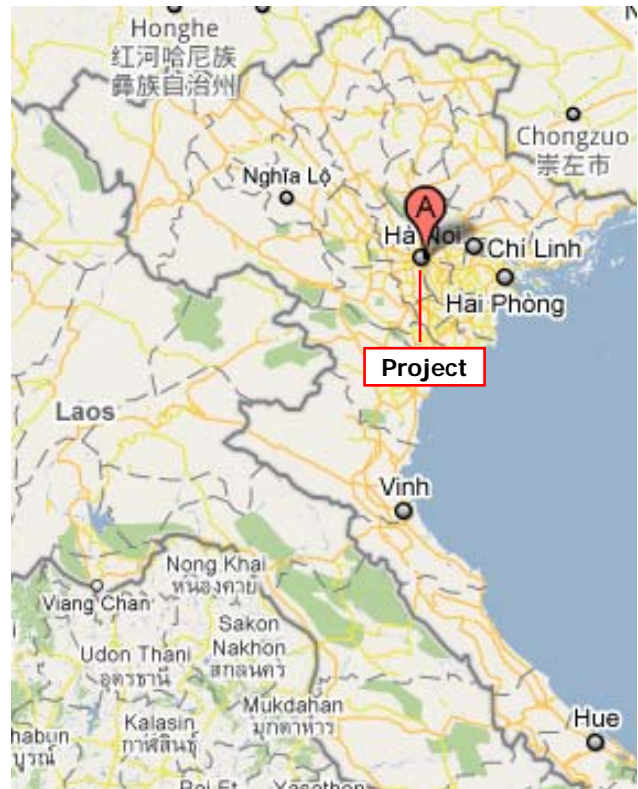
10. **Maximum foreign equity ownership:** To be discussed
11. **Attractiveness:**
 - Strong support from Vung Tau authorities;
 - Proximity to the beach



PVINCONESS COMPANY PROFILE

(Sector IV: Real Estate & Industrial Park - Project: IV-7)

1. **Company name:** PVINCONESS Investment joint stock company.
2. **Address:** HQ 1: 226 Hoang Ngan, Trung Hoa, Cau Giay District, Ha Noi City. HQ2: Hamlet 4B Dong Son commune, Tam Diep Town, Ninh Binh Province
3. **Operation Registration:** No 0103017981 issued by Planning and Investment Department of Hanoi City.
4. **Established Date:** June 15 2007.
5. **Registered Capital:** US\$ 16 million.
6. **Capital Investment Contribution Schedule:** 100% capital is contributed.
 - Equity: US\$ 16.8 million.
 - Liabilities: US\$ 10.6 million.
7. **Shareholders**
 - PVN: 25,38%
 - Strategic Shareholders: 18,70%
 - Public and others: 55,92%
8. **Business Activites**
 - Investment consultancy, business management;
 - Domestic business travel, international travel and other services for tourists;
 - Business accommodation, tourism services garden, food service docks and drink and other services for guest entertainment.
9. **Turnover 2009:** US\$ 0.3 million
10. **Net Profit 2009:** US\$ 0.2 million
11. **Return on Equity:** 1,13%
12. **Expected Net profit 2010:** N/A.
13. **Expected ROE 2010:** N/A.
14. **Maximum foreign equity ownership:** 49%.



15. Attractiveness:

- Strong support of state authorities in Ninh Binh Province;
- No more Golf Course at international standard is allowed to be developed;
- Communication is convenient, located on the main north-south road;
- The company has completed 18-hole golf course and other facilities.



PVINCONESS's 18-hole golf course

HON KHOI INDUSTRIAL ZONE

(Sector IV: Real Estate & Industrial Park - Project: IV-8)

1. Project's name: Hon Khoi Industrial Zone.

2. Location: Ninh Hoa, Nha Trang city

3. Owner: Sao Mai Ben Dinh Petroleum Investment JSC (PVSB)

4. Purpose: Hon Khoi Petroleum Industrial Zone

5. Capacity: 350ha

a) Oil and gas service area (70 ha)

- 02 berths for importing and exporting goods and materials for 10,000 DWT ship

- Supply area for materials and equipment for drilling and other offshore activities

- Area for manufacturing, pipe coating and concrete structure

- General warehouse services

b) Area for ship-building, drilling platform and means of floating transportation (100ha)

- Dock for newly building and repairing drilling platform and means of floating transportation

- Dock for newly building and repairing ships;

- 614-meter wharfs to receive materials combined with the outfitting berth

- Lifting for 10,000 DWT ships ;

- Yard for fabrication and receipt of materials, repairment and internal road;

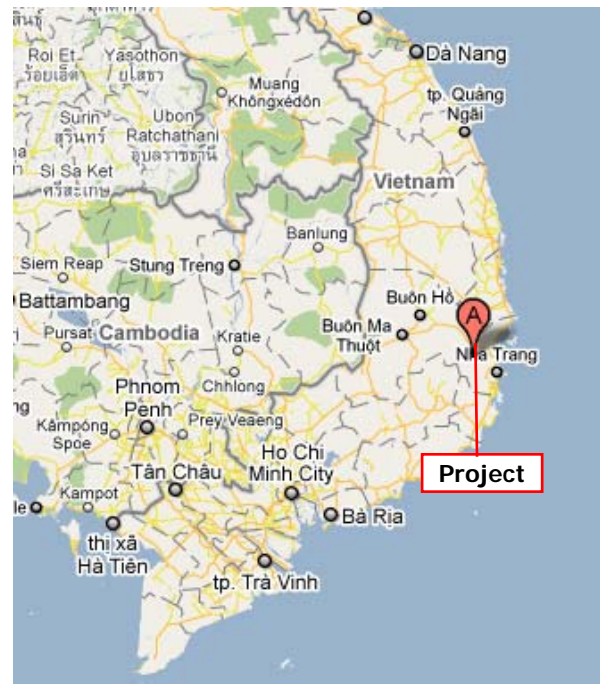
- Workshops including electricity, machinery, assembling, manufacturing, wooding, pipes, maintenance, paint and repair;

- General warehouse.

c) General Port area (80 ha)

- 01 general port harbour for 30.000 DWT vessels;

- 02 general port harbour for 20.000 DWT vessels;



- General depot and internal way;
- General warehouse.
- d) Oil and LPG warehouses (50 ha)
 - Berth for importing and exporting oil and LPG
 - Oil warehouses
 - LPG warehouse
- e) Logistics area and entrance road (45ha)
 - Logistic area
 - General warehouse
 - Office and administrative area
 - Accommodation and entertainment area for staff
 - Road traffic to port

6. Schedule: 2011-2017;

7. Project life: 50 years

8. Total capital investment: US\$ 1,919 million

9. Economic efficiency:

- Profit after tax of Project: US\$ 7,167 million
- Expected time of capital return: 16 Years

10. Current status: Investment preparation

11. Maximum foreign equity ownership: 49%

12. Incentives:

- Corporate income tax (CIT) of 10% for 15 years from the commencement date of operation of the investment projects;
- 10% CIT for hi-tech investment projects and investment projects in Van Phong Economic Zone;
- 50% reduction of personal income tax applicable for high income;
- 5 years of import tax exemption starting from the operation date and applicable for production of raw materials, supplies, components and semi-finished.

DAN TIEN INDUSTRIAL ZONE

(Sector IV: Real Estate & Industrial Park - Project: IV-9)

1. Project's name: Dan Tien Industrial Zone.

2. Location: Dan Tien commune, Khoai Chau town, Hung Yen Province :

- Located in the areas of Dan Tien, An Vi, Phung Hung communes, Khoai Chau town, and Dan Tan commune
- Northern border next to newly-planned road, farmland of Tan Dan commune.



- Southern border connected to the Provincial Road 204, an important traffic route link with National Road 39 and 5B Hanoi – Haiphong highway.
- Eastern borders next to farm land area.
- Western border next to Eastern canal and farmland area.

3. Owner: PetroVietnam Power Real Estate JSC (PV Power Land)

4. Construction purpose: Industrial zone (Phase I: 150 ha)

5. Capacity:

- Phase I: 150 ha;
- Phase II: 100 ha.

6. Timeline:

- QII/2010: Formulate, evaluate and approve project investment report; scheduled to be completed in early QIII/2010;
- QIV/2010: Site clearance and compensation;
- QI/2011: Select contractors to perform technical infrastructure, expected to be completed in QIII/2012.

7. Total investment capital: US\$ 70.3 million

8. Economic Efficiency:

- NPV : US \$1.3 million;

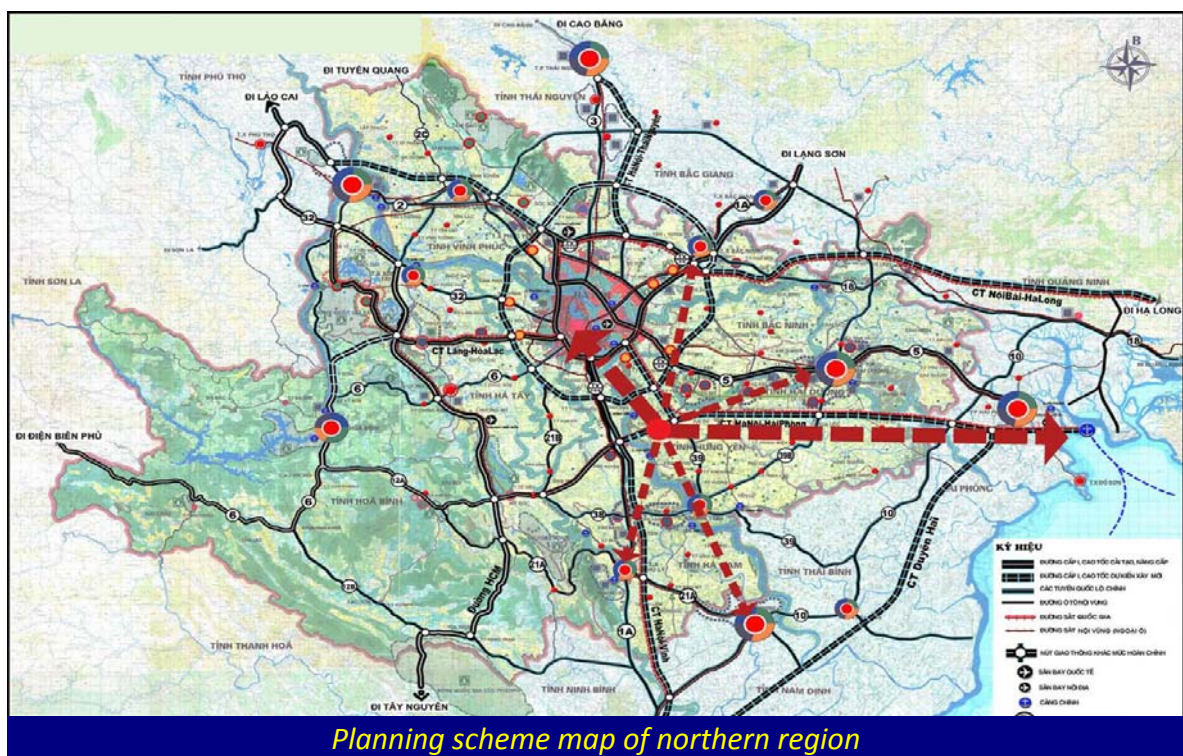
- IRR: 21.9%.

9. Current status: Formulating, evaluating and submitted project investment report for approval, projected completion in early QIII/2010

10. Maximum foreign equity ownership: To be discussed

11. Attractiveness:

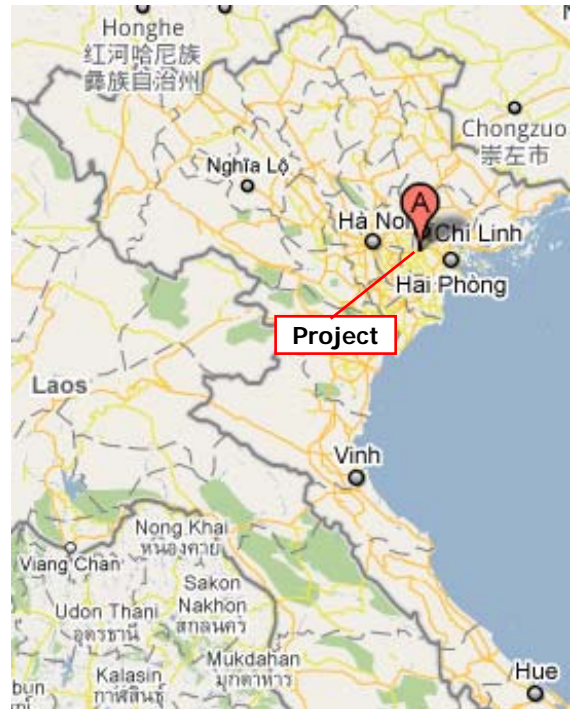
- Supported by the Government and local authorities
- Tenants in industrial zones enjoy tax incentives and rapid procedures
- Convenient transportation to the North and Northwest, the Northeast Economic Zone in the capital, by both waterway and airway.
- The project is under the State's Master Plan of Economic Restructure in Agriculture, Industry and Services.



LAI VU INDUSTRIAL PARK

(Sector IV: Real Estate & Industrial Park - Project: IV-10)

1. **Project's name:** Lai Vu Industrial Park.
2. **Location:** Lai Vu village, Kim Thanh district, Hai Duong Province (North of Vietnam), 1 hour driving from Hanoi city
3. **Owner:** PetroVietnam
4. **Objectives:**
 - Manufacturing machinery, shipbuilding industry, automobile spare parts, motorbikes, farm machinery and assembling cars, gas, garment, etc;
 - Producing electron, shiping, air conditioning;
 - Producing and installing education, sports and office equipment
 - Producing new tech construction material.
5. **Legal base:**
 - Decision No. 1106/QD-TTg dated 18/10/2005 of Prime Minister on approval Viet Nam Industrial Zone to 2015;
 - Decision No. 2326/QD-UBND dated 25/06/2007 of the People's Committee Hai Duong province on approval detail planning;
 - Decision No.926/QDD-TTg dated 18/06/2010 of Prime Minister on the Restructuring of Vinashin Group and Transfer projects to PVN.
6. **Project's life:** 45 years.
7. **Capacity:** 212.9 ha.
8. **Total capital investment:** US\$ 34.4 million
9. **Economic efficiency:**
 - NPV: US\$ 3.4 million;
 - IRR: 17.79 %.
10. **Current status:**
 - Completion of Internal transport system, Power supply system, Water and Surface water drainage systems
 - Under completion of waste water drainage system
 - Under leasing for some customers



11. Maximum foreign equity ownership: To be discussed

12. Attractiveness:

- Strong support from state authorities in Hai Duong province
- Some manufactories are built and producing
- Located in key economic triangle of Ha Noi, Hai Phong and Quang Ninh, very convenient for transportation by National Highway (No.5), river and sea
- Port complex synthesis of Shipbuilding Industrial Zone Lai Vu, Kinh Thay River north, river cruise ships to the port is and barges. By design the largest tonnage of ships and barges through the Port is 1000DWT, the amount of cargo through the port every year is 1,000,000 DWT (in which approximately 300,000 DWT container, packing: bulk 350,000 DWT and 350,000 DWT). Port cluster storage system with a total area of the yard: 13,990 m² warehouse areas are 3.965m². Port group is ongoing construction and will soon go into operation.

SOAI RAP INDUSTRIAL ZONE

(Sector IV: Real Estate & Industrial Park - Project: IV-1)

1. Project Name: Soai Rap Industrial Zone Infrastructure Service Business Project.

2. Location: Soai Rap Industrial zone, Vam Lang - Gia Thuan Commune, Go Cong Dong District, Tien Giang Province

3. Project Owner: Petroleum Pipeline and Tank Construction Joint-Stock Company (PVC-PT)

4. Objectives: Providing of

- Project ground rent services
- Port services

5. Capacity: 285 ha.

6. Construction schedule:

- Stage 1: 2010-2013 (30%);
- Stage 2: 2013-2016 (30%);
- Stage 3: 2016-2020 (40%)

7. Total investment capital: US\$ 40 million.

8. Economic efficiency: IRR 25%.

9. Maximum foreign equity ownership: To be discussed

10. Current status:

- Leveling;
- Approval of 1/2000 design
- Completing the rest of legal procedure.

11. Incentives/Other information:

- Being considered as the most important industrial zone of PVN in Southern of Vietnam
- A part of project is implemented at the end of October 2010 (approved by Tien Giang Committee).



END OF REAL ESTATE & INDUSTRIAL PARK SECTOR

SECTOR V **INFRASTRUCTURE & FACILITIES**

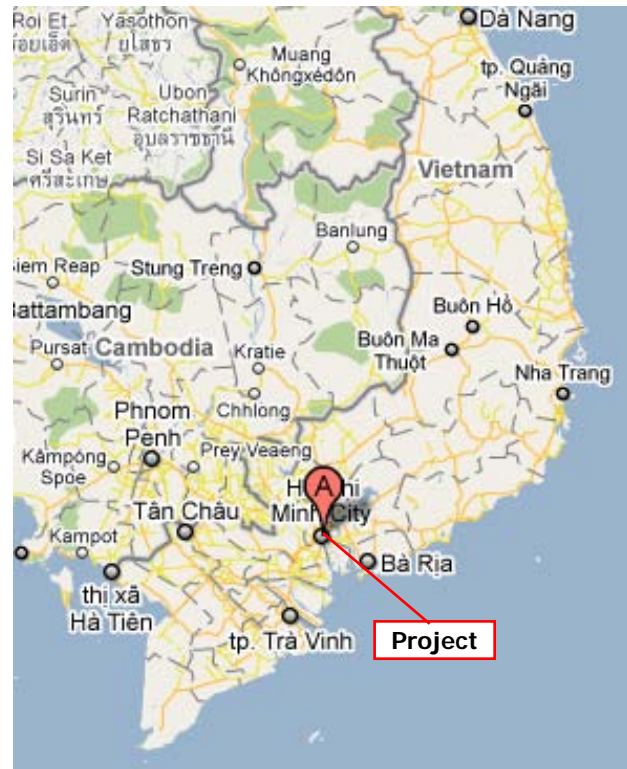


PTSC's Petroleum Service Port in Vung Tau

RING ROAD NO.2, HOCHIMINH CITY

(Sector V: Infrastructure & Facilities. Project: V-1)

1. **Project name:** The Southern Section Ring Road No.2, Ho Chi Minh City.
2. **Location:** Passing by three districts, including District 8, Binh Tan Dist., Binh Chanh Dist., Ho Chi Minh City.
3. **Project Owner:** PETROLAND.
4. **Objectives:** The Ring Road 2 together with other ring roads guarantees for long-term-stabilization and effective operation of Hiep Phuoc and Cat Lai sea ports which help to disperse traffic flows, to saves over-load traffic condition on the centre zone of the city.



5. **Capacity:**
 - Total Length: 7.7 km.
 - Width: 10 Lanes (60m)
 - City highway Road.



6. **Schedule:** 60 months.
7. **Total investment capital:** ~ US\$ 331 million
8. **Maximum foreign equity ownership:** 49%.
9. **Current status:** Preparing Feasibility Study.

10. **Attractiveness/Other information:**
 - Strong support from Ho Chi Minh city authorities.
 - Investment form: Build – Transfer (BT)

TANK FABRICATION PLANT PROJECT

(Sector V: Infrastructure & Facilities. Project: V-2)

1. Project Name: Tank Fabrication Plant Project.

2. Location: Soai Rap Industrial zone, Vam Lang - Gia Thuan Commune, Go Cong Dong District, Tien Giang Province

3. Project Owner: Petroleum Pipeline and Tank Construction Joint-Stock Company (PVC-PT)

4. Objective: Fabrication of

- Pressure spherical tank
- Cylindrical tank
- Other mechanical product

5. Capacity:

- Spherical tank: 4,000-5,000 ton/year
- Cylindrical tank: 10,000-12,000 ton/year
- Other product: 10,000 ton/year

6. Schedule: As planned, the plant would be completed in December 2010

7. Total investment capital: US\$ 18.5 million;

8. Economic efficiency:

- NPV: US\$ 9.6 million;
- IRR: 23.43%.

9. Maximum foreign equity ownership: To be discussed.

10. Current status: Appraising the feasibility study

11. Incentives/Other information:

- All outputs will be used in PVN projects
- Located in the most important industrial zone of PVN in Southern of Vietnam



LONGITUDINAL WELDED STEEL PIPE PRODUCTION FACTORY

(Sector V: Infrastructure & Facilities. Project: V-3)

- 1. Project Name:** Longitudinal Welded Steel Pipe Production Factory.
- 2. Location:** Soai Rap Industrial Zone, Tien Giang Province, SR Vietnam
- 3. Project Owner:** Petrovietnam Steel Pipe Joint Stock Company (PV-PIPE)
- 4. Objectives:** Production steel pipe for oil & gas pipelines and fabrication of drilling rig jacket
- 5. Capacity:** ~ 200,000 tons steel pipes/years
- 6. Construction schedule:** First production ~ October 2011
- 7. Total investment capital:** US\$ 95.4 million
- 8. Economic efficiency:**
 NPV: US\$ 2.8 Million
 IRR: 34,96%

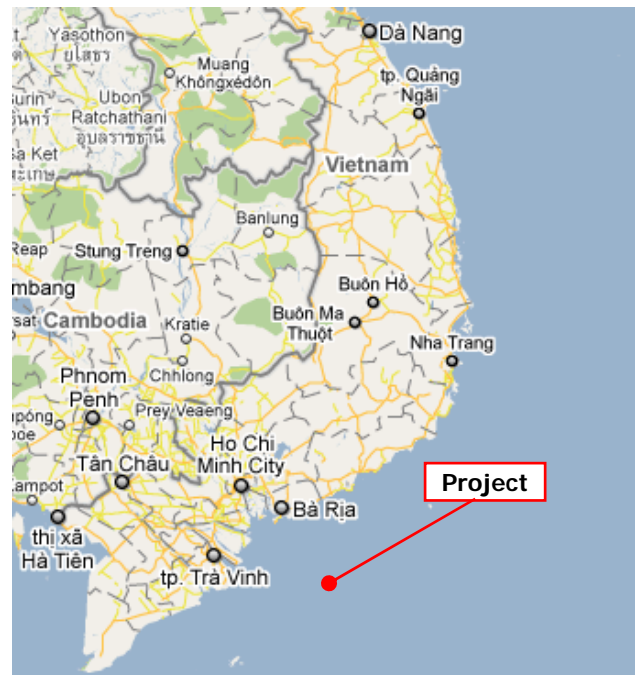


- 9. Maximum foreign equity ownership:** 30% - 49% of the total charter capital
- 10. Current status:** The project is implementing
- 11. Attractiveness:**
 - All outputs will be used in PVN projects
 - Located in the most important industrial zone of PVN in Southern of Vietnam

FSO - BIEN DONG 1

(Sector V: Infrastructure & Facilities. Project: V-4)

- 1. Project name: Bien Dong 1 Project - FSO Facilities.**
- 2. Location:** Blocks 05-2 & 05-3, offshore Vietnam
- 3. Owner:** Petroleum Technical Services Corporation (PTSC)
- 4. Capacity:** 350,000 bbls
- 5. Total investment capital:** US\$120 million.
- 6. Structure of equity ownership:** Open for discussion
- 7. Purpose:**



- Bien Dong Petroleum Operating Company (BDPOC) is the Operator of Blocks 05.2 and 05.3, offshore Vietnam. BDPOC intends to develop these blocks by installing gas and condensation of production and exporting facilities into the Moc Tinh and Hai Thach fields (Bien Dong Development Project). This will require a wellhead platform in Moc Tinh, WHP-MT1, tied back to the Hai Thach development, which will consist of another wellhead platform, WHP-HT1, a process quarters platform, PQP-HT, and an FSO.
- The FSO vessel is moored at a location near the PQP-HT and designed to remain permanently on station, even in severe environmental criteria. The FSO shall comply with Classification and Vietnamese regulations and the contract requirements for tank arrangement/ storage, accommodation, utilities offloading and health, safety and environment (HSE).
- PetroVietnam Technical Services Corporation (PTSC) has been officially nominated by BDPOC to arrange the Provision of FSO Services. Based on Request for Proposal (RFP) for the Provision of FSO Services issued by BDPOC on the 10th April 2010, PTSC shall issue an invitation to bid (ITB) and conduct the tender for the provision of FSO Bareboat services via a competitive tender process with the terms and conditions permitting PTSC to purchase the FSO system.

Investors can contribute to the ownership of the FSO system during the charter period.

8. Project schedule:

✓ Tender process:

Item	Chronology of Events
Invitation to Bid (ITB)	
1.	BDPOC to issue the RFP
2.	PTSC to submit the ITB including the Tender Plan to BDPOC
3.	BDPOC to approve the ITB
4.	Bid Issuance
5.	Bid Closing
Tender Evaluation & Award	
6.	Technical Bid Opening
7.	Approval of Technical Evaluation Results
8.	Commercial Bid Opening
9.	Approval of Commercial Evaluation
10.	Approval of Bid Evaluation & Award Recommendation Report
11.	Issue LOA to Successful Bidders/ Contract negotiation
12.	Contract signing

✓ Construction works:

Key Milestone	Description
KM-1	Commencement date
KM-2	Award of FSO construction contract to shipyard.
KM-2 (Conversion Case)	Tanker acquisition and delivery to designated conversion yard completed.
KM-3	All major purchase orders issued for FSO system
KM-4	All major materials and equipment delivered for FSO system.
KM-5	Turret mooring system fabrication, mechanical completion, testing, pre-commissioning completed - ready for installation into FSO.
KM-6	Provisional acceptance of FSO system FSO system completed as a unit, pre-commissioned, and ready to sail for Hai Thach site, block 05.2, offshore Vietnam. The company has issued the provisional acceptance certificate.
KM-7	Installation start date Marine construction spread and FSO system fully mobilized at Hai Thach site and ready for installation.
KM-8	Installation complete date FSO system has been installed and flexible risers connected and tested

	and marine construction spread demobilized
KM-9	Ready for first condensate FSO system commissioned and ready for receiving stabilized condensate. Company has issued the ready for first condensate certificate. Commencement of charter period.
KM-10	Final acceptance of FSO system Performance & reliability tests completed and the Company issued the Final Acceptance Certificate.

✓ Charter periods:

Activity	Durat- ion	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Firm Charter Period	10 years																					
1st Optional Extension Period	5 years																					
2nd Optional Extension Period	2 years																					
3rd Optional Extension Period	2 years																					
4th Optional Extension Period	1 year																					

9. Current Status: Under preparation for Detailed Design, Procurement and Manufacturing facilities. The "first cut" taken by VSP and PTSC from 21/06/2010.

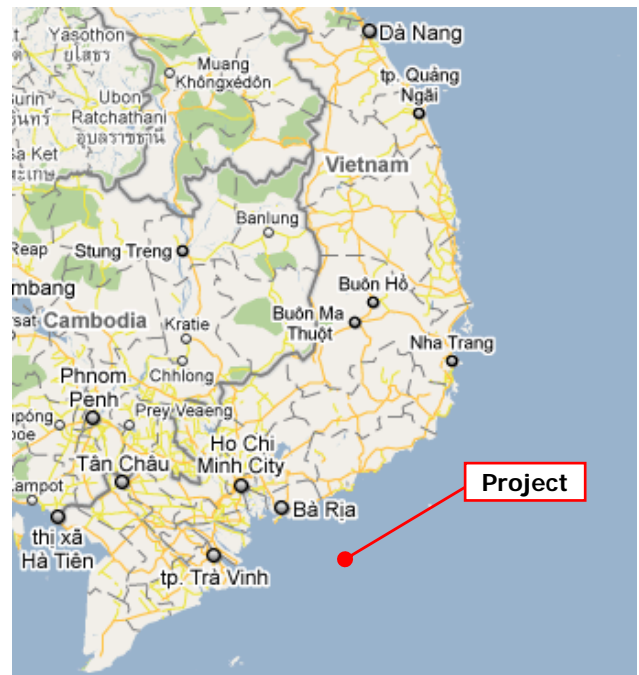
10. Project Attractiveness: Ensure the Project's output by BDPOC.



FSO PROJECT - BACH HO

(Sector V: Infrastructure & Facilities. Project: V-1)

1. **Project name:** Bach Ho Project - FSO Facilities.
2. **Location:** Blocks 09-1, offshore Vietnam, offshore Vietnam
3. **Owner:** Petroleum Technical Services Corporation (PTSC)
4. **Capacity:** 1,000,000 bbls. Inlet capacity: 100,000 bpd
5. **Total investment capital:** US\$ 210 million
6. **Structure of equity ownership:** Open for discussion
7. **Purpose:** Provision of FSO Facilities for the development of Bach Ho (White Tiger) fields.



- Vietsovpetro has become main force of Vietnam’s petroleum industry and economy. Three oilfields with commercial oil - White Tiger, Dragon and Big Bear - were discovered and brought into production with low exploration costs, besides 4 adjacent structures with hydrocarbon indication. In particular, discovery of big oil reservoir in White Tiger basement has been an essential factor to increase oil output, and at the same time to attract foreign investment into Vietnamese petroleum industry.
- Bach Ho is Vietnam's largest Oil Field was found in 1975 and standing 3th Oil Reserve was discovered in the belt of the North West region provision. BachHo crude oil is waxy, with very low sulfur content. As a good quality, sweet oil, Vietnamese crude oil is highly favored by customers from Japan, Singapore, and other countries.
- FSO PTSC BachHo is moored at the location at UBN-2 position, 200 nautical miles from Vietnamese coast and designed to remain permanently on the station, even in severe environmental criteria. The FSO complied with dual Class (ABS/VRES) and Vietnamese regulations and the contract requirements for tank arrangement/ storage, accommodation, utilities offloading and health, safety and environment (HSE).

- PetroVietnam Technical Services Corporation (PTSC) has been officially nominated by Vietsovpetro to arrange the Provision of FSO Services. The FSO PTSC Bach Ho was also under contract of chartering for Vietsovpetro from 19 November 2009.
- Investor can contribute Financial Investment/Arrangement to set up joint venture to operate and maintain FSO.

8. Project schedule:

- 18 December 2006: The FSO-5 project was awarded to Vinashin
- 03 May 2007: Its first cutting was on
- 22 June 2008: keel-laying on
- 14 January 2009: Load out ceremony was
- 26 April 2010: the FSO-5 that is named as “PTSC Bach Ho”, was sailed away from Nasico to Bach Ho field with the purpose of installation and commissioning.

Activity	Duration	A p r i l																						
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
Construction/Conversion Works	2 years																							
Firm Charter Period	10 Yrs																							
First Optional Extension Period	5 Yrs																							
Second Optional Extension Period	1 Yrs																							
Third Optional Extension Period	1 Yrs																							
Fourth Optional Extension Period	1 Yrs																							

9. Current Status:

The target first oil in October, 2010 and contract duration is 10 year stating from the first Oil

10. Project Attractiveness:

- Ensure the Project's output by Vietsovpetro
- Long time charter period.
- Capable and experience local partner (PTSC).
- Opportunity to invest in coming projects as PTSC is assigned by PetroVietnam for provision and charter of FSO/FPSO for all PVN projects such as FPSO for

LSJOC, FSO for Chevron, Offshore Production and Offtaking facilities for TLJOC (if required)...

- Financial investment/arrangement for other ongoing projects, like FPSO Ruby 2 (350mil.), FSO BienDong (120mil.) and other projects.

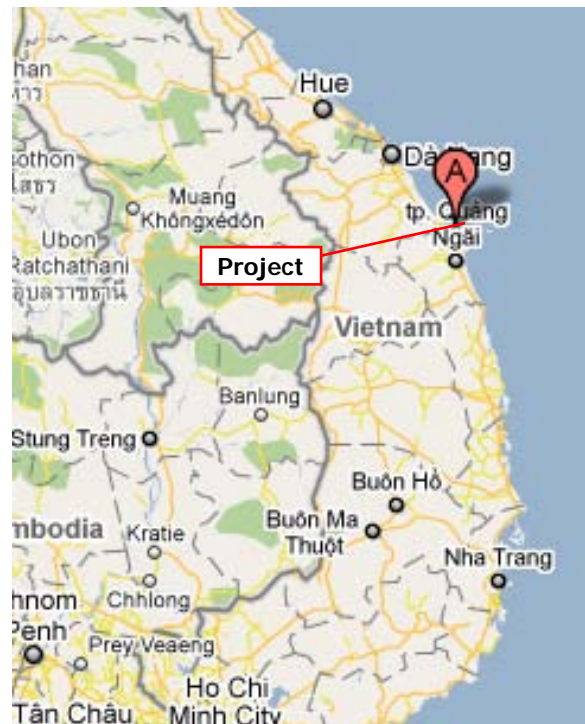


PTSC's FPSO Bach Ho

DUNG QUAT SHIPYARD COMPANY PROFILE

(Sector V: Infrastructure & Facilities. Project: V-6)

1. **Company name:** Dung Quat Shipyard.
2. **Add.:** Tan Hy commune, Binh Dong Village, Binh Son District, Quang Ngai Province, S.R. Vietnam.
3. **Operation Registration:** No 4300338693 issued by Dung Quat Economic Zone Authority of Quang Ngai Province, S.R. Vietnam.
4. **Established Date:** 24 February 2006
5. **Registered Capital of the Company:** USD\$ 190 million
6. **Capital Investment Contribution Schedule:**
 - Legal capital : USD \$ 0.5 million
 - Shareholders : N/A



7. Business Activities

- New building and repair of ship, floating equipments and vehicles.
- Manufacturing steel structure of lifting equipment (types of crane).
- Dismantle old ships, overhaul equipment and materials.

8. Capacity:

- Total area of shipyard: 118 ha;
- Total area of workshop: 130.000m²;
- Area for preliminary hull assembly: 16.500 m²;
- Area of stock yard;
- For steel plate: 3000m²;
- For constructed hull block: 10.000m².



9. Facilities:

- Flat segment manufacturing lines: 01 unit;
- Corrugated iron pretreatment line: 01 unit;

- Hydraulic press machine 1.000 ton: 01 unit;
- CNC IMI (9x36m), Plasma (10x30m) machine: 04 unit.
- 13 Conrrugated ion bending machine, steel bending machine: 01 unit;
- Crane from 20-50 ton: 01 unit;
- CNC Piping cutting machine: 01 unit.

10. Current Projects:

- Barge 180,000DWT: 70% completion
- Tug Boat: 2 x 1200HP NO.1: 94% completion
- Oil Carrier 104,000DWT: 90% completion
- Oil Tanker: 105,000DWT: 60% completion
- Bunk Carrier: 54,000DWT: 60% completion



- Dry Dock No. 1 (380 x 86 x 14)m: Being used
- Dry Dock No. 2(520 x 110 x 14)m: under construction
- o Building ship tonnage of up to 300,000 DWT, capacity of 1.1 million tons per year.
- o Payback period: 11.2 years
- o Total Investment capital: USD\$ 129.5
- o Economic efficiency: NPV = USD\$ 61million, IRR= 17.55%

11. Turnover 2009 : USD\$ 32.5 million

12. ROE (Return On Equity) : USD\$ 35.5 million

13. Expected Net profit 2010: USD\$ 1 million

14. Expected ROE 2010: USD\$ 20 million

15. Maximum participation of foreign investors: to be discussed.

16. Incentives/Other information:

- Strong support from authorities in Quang Ngai Province;
- Located in Dung Quat Bay which has a lot of Natural advantages and good conditions to achieve the goal to build large ships with tonnage up to 105,000DWT;

- Located in multi-functioned ports in deep sea thus it can receive cargo-ships up to 50,000DWT and oil tankers of 150.000DWT.

NHON TRACH SHIP BUILDING PLANT

(Sector V: Infrastructure & Facilities. Project: V-7)

1. Company name: Nhon Trach Specialized Shipyard and Ship Facility Manufacturer.

2. Location: Village 3 Phuoc Khanh Commune, Nhon Trach Dist, Dong Nai Province

3. Owner: PetroVietnam Technical and Services Corporation (PTSC).

4. Objective: New shipbuilding and repair floating facility for PTSC

5. Legal base:

- Decision No.926/QDD-TTg dated 18/06/2010 of Prime Minister on the Restructuring of Vinashin Group and Transferring projects to PVN
- Minutes of meeting 6210/BB-DKVN dated 15/07/2010 between PetroVietnam and Vinashin on transferring and taking over Nhon Trach Shipyard Project

6. Capacity: 20 ha.

7. Business Activities:

- New building and repairing of ships, vessels and floating equipment, vehicles supporting for the operation of oil and gas industry.
- Storage and Logistic services



8. Current status: completing Feasibility Study;

9. Maximum Participation of foreign investors: To be discussed

10. Incentives/Other information:

- Strong support from state authorities in Dong Nai Province and PetroVietnam.
- PTSC's strategy is to develop a new ship building and repairing for PTSC fleets.

END OF INFRASTRUCTURE & FACILITIES SECTOR