# PTSC OFFSHORE SERVICES (POS)

WH I W

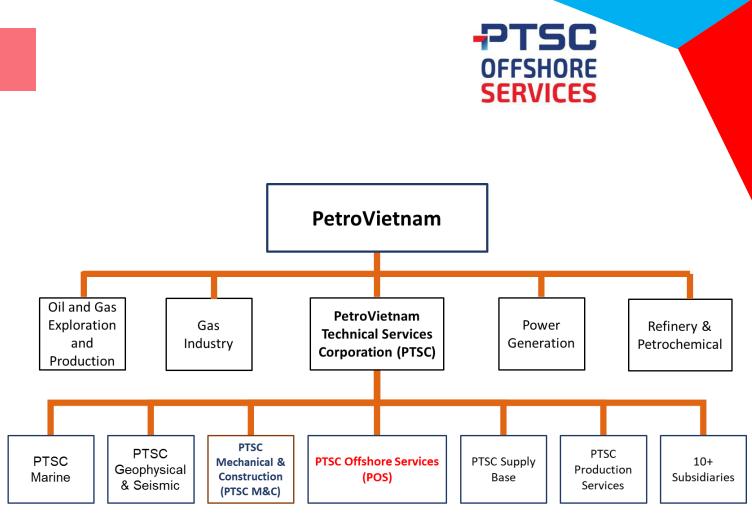
#### **COMPANY PRESENTATION**





#### **ABOUT US - POS**

- PTSC Offshore Services (POS) is a subsidiary of PetroVietnam Technical Services Corporation (PTSC Corporation), who in turn is a member of Vietnam Oil and Gas Group (PetroVietnam).
- Inside PTSC Corporation there are more than 20 *independent* subsidiaries, of which PTSC M&C (PMC) is well known to the market as an EPC contractor and PTSC POS is well known to the market as a HUC & Brownfield Modification contractor, amongst other services.
- Established in 2007, PTSC POS premise is located within a regionally modern and wellequipped complex in Vung Tau city (the Oil and Gas hub of Vietnam).
- QHSE Management system certified by reputed organization (BSI), Quality Management system (ISO 9001-2008), Environmental Management system (ISO 14001-2004) and Occupational Health and Safety (ISO 45001)



#### **OUR FACILITIES & RESOURCES**



#### Skilled and experienced workforce





- Under POS payroll there are approximately 550 permanent staff, in which:
  - 150 engineers
  - ✓ 300 skilled workforce
  - ✓ 100 functional staff to support projects and company operation
- For big HUC & Brownfield projects, POS can quickly ramp up its workforce to 1,500 pax or more for working simultaneously at various locations.

#### **OUR FACILITIES & RESOURCES**

-PTSC OFFSHORE SERVICES

Workshop

#### The workshop of 11,462m<sup>2</sup> includes:

- ✓ 01 Valve mechanical workshop
- ✓ 01 E&I/Pump workshop
- ✓ 01 Structure & piping workshop
- ✓ 01 O&M Office building

•02 additional fabrication and painting workshops of 4,500m2

#### - Well Equipped Workshop











E&I Workshop



#### **OUR FACILITIES & RESOURCES**

#### **300 Pax Accommodation Crane** Work Barge - PTSC Offshore 1

#### **Barge Specification:**

- Built: 2009 Vietnam
- Flag:
- Classed by:
- Clear Deck: 1,800 m2
- Deck strength: 12mt/m2
- Deck Crane : 1 x 300mt HUISMAN

DNV

300 berth • Accommodation:

#### **Barge's qualification:**

- Passed Safety Case of Brunei EDPMO
- Qualified by TOTAL E&P Borneo BV
- Certified by OVID

-PTSC

**OFFSHORE** SERVICES

#### 5,000 Ton Flat Top Barge - PTSC 01

5,5m

4,0m

#### **Principal Dimension:**

- Length (overall): 90,0m •
- Breadth: 34,6m ٠
- Depth: ٠
- Draught:
- Displacement: 11.585t
- Dead weight: 9.515t .
- Gross tonnage: 4.424t ٠
- Net tonnage: 1.327t ٠



#### Professional One-Stop Services



ABOUT US

02

OFFSHORE CONSTRUCTION

ONSHORE CONSTRUCTION

**OPERATION &** MAINTENANCE



#### I HUC and BROWNFIELD MODIFICATION / INTEGRATION

I.a Major Brownfield / Integration Projects

I.b HUC and Minor Brownfield Projects

#### **II** TRANSPORTATION AND INSTALLATION

**III** OFFSHORE DECOMMISSIONING



#### I HUC and BROWNFIELD MODIFICATION / INTEGRATION

I.a Major Brownfield / Integration Projects

### GALLAF BATCH 1: **EPCI** HUC & MODIFICATION (2020-2021)

Client: PTSC M&C / North Oil Company (NOC)

**Contract Mode**: <u>POS</u> as a subcontractor through the EPC contractor <u>PTSC M&C</u> to ultimately serve <u>NOC</u>.

Contract Value: ~ 35.000.000 USD

**Total Mhrs**: ~ **1,300,000** Mhrs, non-LTI. **850 Pax** mobilized during Covid-19; 3 Jack-up Barges for 3 locations.

Location: Offshore Qatar, Al Shaheen Oil Field

#### **Project SOW:**

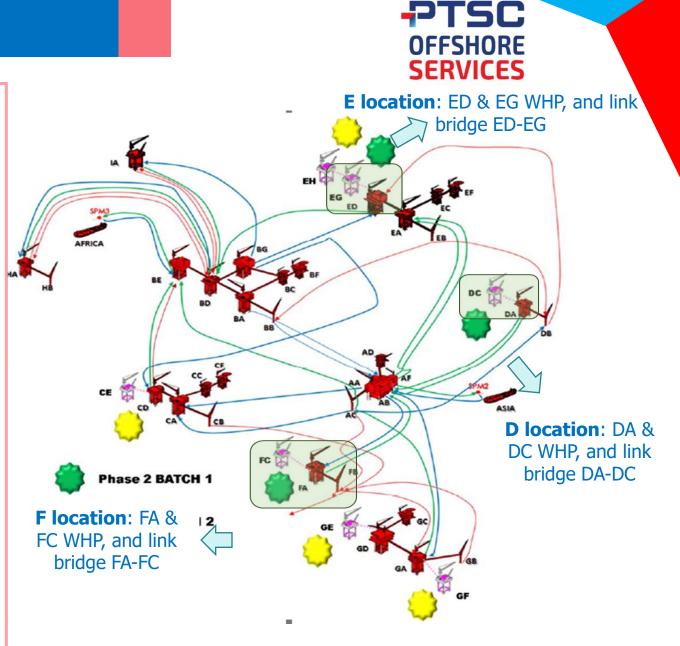
POS performing full EPCI scope for HUC & Integration Work for 3 locations including 6 WHPs and 3 link bridges

#### **Construction:**

- > Lifting & scaffolding works.
- Structural Steel works
- Insulation and coating works
- Piping works
- Equipment Erection works
- > HVAC and Architectural works in Buildings
- Electrical works
- Instrumentation works + Telecom

#### Pre-com/Com:

Pre-Commissioning/Commissioning



### GALLAF BATCH 3 – PACKAGE 6: **EPCI** HUC & MODIFICATION (On-going) (2023 – 2024)

#### -PTSC OFFSHORE SERVICES

#### Client: DSME / North Oil Company (NOC)

**Contract Mode**: <u>POS</u> as a subcontractor through the EPC contractor <u>DSME</u> to ultimately serve <u>NOC</u>.

#### Contract Value (Estimated): ~ 48.000.000 USD

Total Mhrs: ~ assumed 1,250,000 Mhrs.

Location: Offshore Qatar, Al Shaheen Oil Field

#### **Project SOW:**

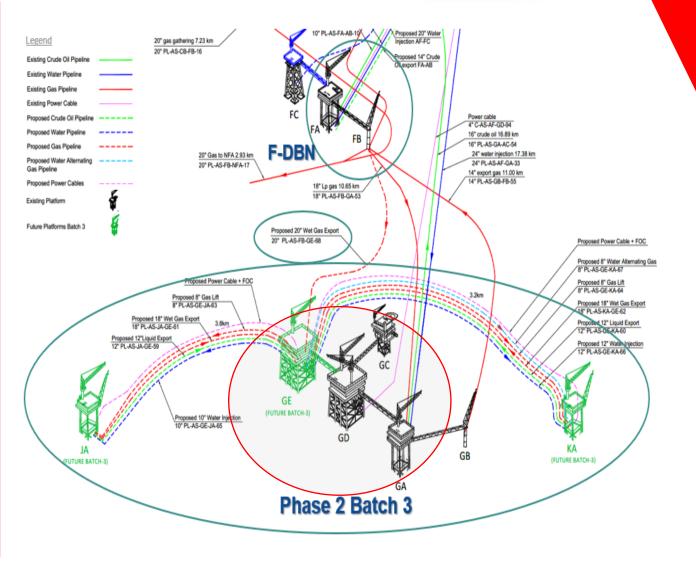
POS performing full EPCI scope of new CPP GE to existing G location (modifications on GA, GE, GD)

#### **Construction:**

- Lifting & scaffolding works.
- Structural Steel works
- Insulation and coating works
- Piping works
- Equipment Erection works
- > HVAC and Architectural works in Buildings
- Electrical works
- Instrumentation works + Telecom

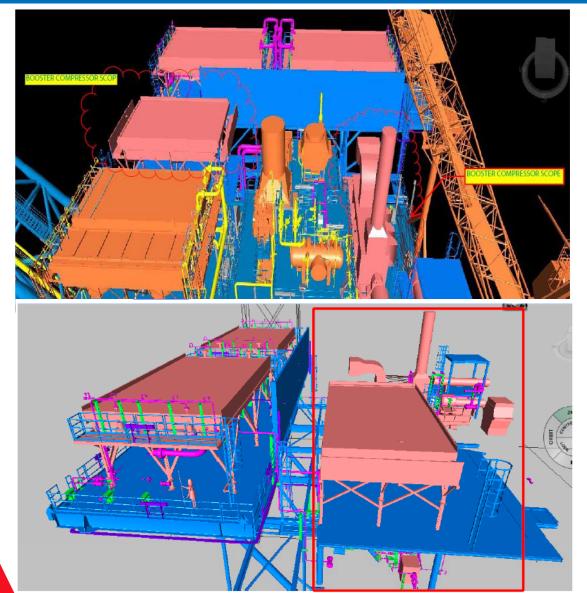
#### Pre-com/Com:

Pre-Commissioning/Commissioning



### BOOSTER COMPRESSOR: **EPCI** HUC & MODIFICATION (2010 – 2012)





Client: KNOC (Korea National Oil Corporation)

**Contract Mode**: <u>POS</u> signing contract **directly** with KNOC

Contract Value: ~ 45.000.000 USD

Total Mhrs: ~ 450,000 Mhrs.

Location: Offshore Vietnam

#### **Project SOW:**

POS performing full **EPCI scope** for upgrading of the Rong Doi CPP, including:

- 1 Train, 1 Stage (1 Turbine+1 Compressor), Discharge cooler, Scrubber Drum.
- Booster Compressor Module: 400 MT
- > Discharge Cooler Module: 110MT
- Scrubber Unit
- Suction Cooler unit
- Structure/Piping & E&I site modification

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#### RUBY-B GAS LIFT: **EPCI** HUC & MODIFICATION (2011 – 2013)



Client: PCVL (PETRONAS CARIGALI VIETNAM LIMITED)

Contract Mode: POS signing contract directly with PCVL

Contract Value: ~ 45.000.000 USD

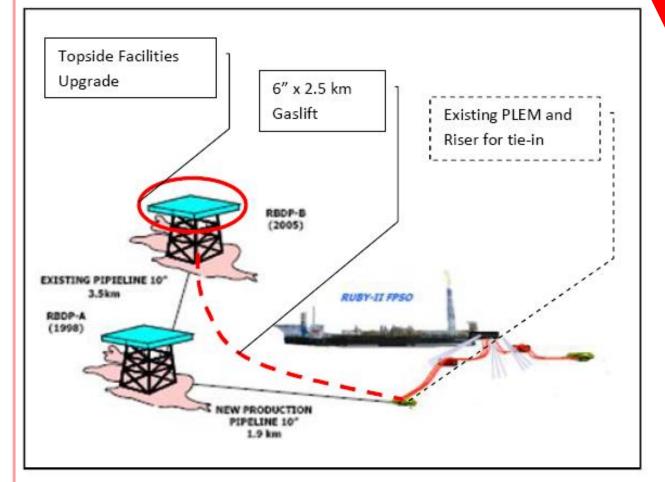
Total Mhrs: ~ 580,000 Mhrs.

Location: Offshore Vietnam

#### **Project SOW:**

POS performing full **EPCI scope** for upgrading of the existing RUBY-B platform and install new pipeline, including:

- > 6" rigid riser and a 6" x 2.5 km flexible pipeline.
- Removal of current Micro-Turbine Generators, Portable Diesel Generator, LP Separator, Air Compressor Unit and Utility Gas Scrubber. Relocation of Navigational Aids System (Nav-Aids).
- Installation of Gaslift Header, Gaslift Receiver, Gaslift Flowlines, Vapour Recovery Compressor, Gas Engine Generator, Portable Diesel Generator, Switchboard, LP Separator, Production Transfer Pumps, Utility Gas Heater and Sand Removal Package.
- > Facilities tie-in for Gaslift pipelines and associated equipments.
- Structural, Electrical, Instrumentation, Piping and Safety Equipments modifications to support the facilities above.



### TGT-H1 Water Handling System: **EPCI** HUC & MODIFICATION (2016 – 2017)

HSD-WHP

1 x 16" Multiphase Pipelin

1 x 8" Water Injection Pipelin 1 x 6" Gas-lift Pipeline

44\_\A/H

HST-WHP

H1-WH

1.8 km

~ 12.5 km

1 x 12" Multiphase Pipeline 1 x 8" Water Injection Pipeline

1 x 6" Gas-lift Pipeline

H1 Local Water

Handling System

1 x 8" Gas Expo

CCP at Bach Ho Filed

x 10" Water Injection Pipe

WATER DEPTH : ~ 43.9 meter

PLEM



Client: Hoang Long Joint Operating Company (HLJOC – a JV including SOCO and OPECO)
Contract Mode: POS signing contract directly with HLJOC
Contract Value: ~ 3.000.000 USD
Total Mhrs: ~ 220,000 Mhrs.
Location: Offshore Vietnam
Project SOW:

POS performing full **EPCI scope** for modification of the existing TGT-H1 platform for integration of new Water Handling System, including:

No.	NEW SKID / ITEMS	IEW SKID / ITEMS DIMENSION (M)	
1.	DEGASSING PUMP SKID	4.650L x 2.600B x 2.544H	11
2.	DEGASSING VESSEL SKID	2.290L x 2.030B x 5.078H	7
3.	KNOCK-OUT DRUM SKID	4.202L x 2.250B x 2.705H	6
4.	3-PHASE SEPARATOR SKID	14.000L x 5.798B x 8.010H	143
5.	COMPACT FLOATING UNIT	4.809L x 3.809B x 7.300H	36
6.	FLARE BOOM	30.000L x 10.000B x 7.000H	32
7.	CAISSON     Section 1: 18.7 x 0.762 x 0.762       Section 2: 16.4 x 0.762 x 0.762     Section 3: 14.6 x 0.762 x 0.762		Section 1: 10 Section 2: 8 Section 3: 7

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### E1 EXTENSION DECK MODULE : **EPCI** HUC & MODIFICATION (2018 – 2019)



#### Client: JVPC (JAPAN VIETNAM PETROLEUM CO.LTD)

**Contract Mode**: <u>POS</u> signing contract **directly** with JVPC

Contract Value: ~ 3.000.000 USD

Total Mhrs: ~136,000 Mhrs.

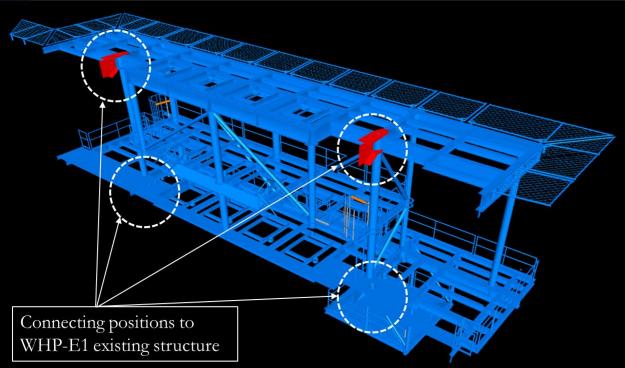
Location: Offshore Vietnam

#### **Project SOW:**

POS performing full **EPCI scope** for modification of the existing E1 platform for integration of extension deck module, 03 x conductor guide frames, and conductor guides, including:

- Extension deck of 91-ton including piping and E&I for new wells
- Subcellar Deck Extension at level +16m
- > 03 x conductor guide frames
- > 01 x conductor guard
- Piping, E&I, Structure hook-up & commissioning from Extension module to existing system.

No.	Description	Q'ty	Dimension (m)	Weight (MT)
1	E1 Extension Module	1	3x20.5x10.5	91



## BADAMYAR: **EPCI** HUC & MODIFICATION (2015-2017)



**Client:** Huyndai Heavy Industries Co., LTD / TOTAL E&P Myanmar

**Contract Mode**: <u>POS</u> as a subcontractor through the EPC contractor <u>HHI</u> to ultimately serve <u>TOTAL</u>.

#### Contract Value: ~ 20.000.000 USD

Total Mhrs: ~ 850,000 Mhrs.

**Location:** Offshore Myanmar

#### **Project SOW:**

#### Piping

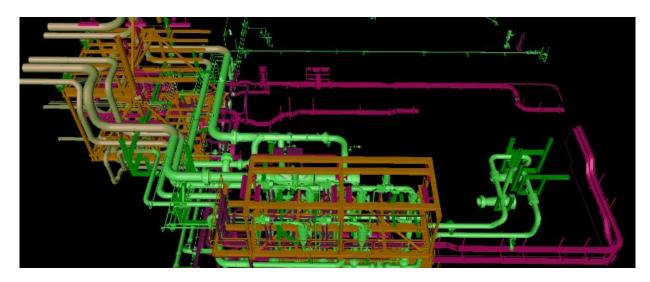
- > 561 spools
- Off-shore weld: 2,033 inch diameter

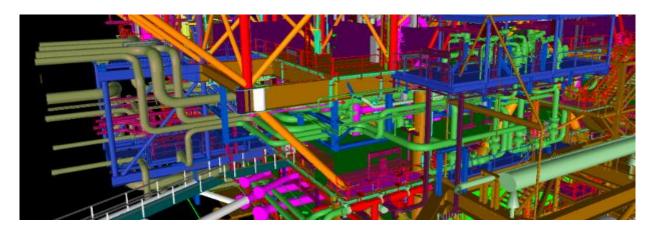
#### **Structure**

- Offshore welding: 70 tons, including bridge access extension-10 tons; deck extension-10 tons)
- > 2,500 E&I support

#### **Mechanical**

- > Installation of sand removal package;
- Installation of coaleser package
- Installation of 02 oily water pumps
- Replacement of 02 condensate injection pumps







I HUC and BROWNFIELD MODIFICATION / INTEGRATION

I.b HUC and Minor Brownfield Projects

### NASR PROJECT: HUC & MODIFICATION (2017-2019)



**Client:** Hyundai Heavy Industries Co., LTD/ ADMA

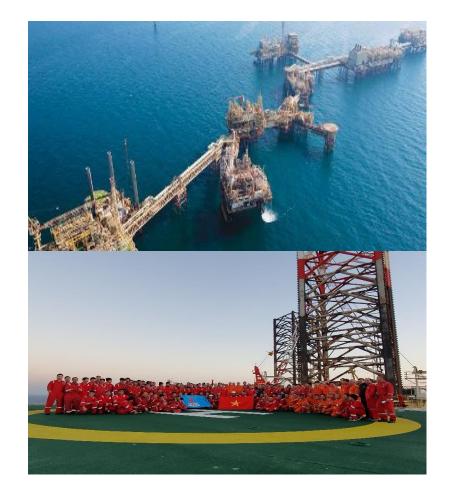
**Contract Mode**: <u>POS</u> as a subcontractor through the EPC contractor <u>HHI</u> to ultimately serve <u>ADMA</u>.

Contract Value: ~ 7.000.000 USD

Total Mhrs: ~ 500,000 Mhrs. 250 pax mobilized

Location: Offshore U.A.E

**Project SOW:** Provision Of Offshore Manpower to HHI as a subcontractor (amongst many other subcontractors to HHI) and having been highly regarded by HHI for good productivity and performance over others.



## FMB HUC and CARRY-OVER WORK (2016-2017)



Client: Technip FMC / Qatar Petroleum (QP)

**Contract Mode**: <u>POS</u> as a subcontractor through the EPC contractor Technip FMC to ultimately serve QP.

Contract Value: ~ 7.000.000 USD

Total Mhrs: ~ 250,000 Mhrs, 300 pax mobilized

Location: Offshore Qatar

#### **Project SOW:**

#### **Construction**

- Scaffolding
- Structural Steel Works
- Insulation Works
- Piping Works
- Painting Works
- Equipment Erection Works
- > HVAC and Architectural Works in Buildings
- > Electrical Works
- Instrumentation Works + Telecom

#### Pre-com/Com

- Pre-Commissioning
- Commissioning





#### ZAWTIKA 1A HUC & CARRY-OVER WORK (2013-2014)



**Client:** PTTEP Thailand

**Contract Mode**: <u>POS</u> signing contract **directly** with PTTEP Thailand

Contract Value: ~ 9.000.000 USD

Total Mhrs: ~ 100,000 Mhrs

**Location:** Offshore Myanmar

#### **Project SOW:**

- Carry-over work for 3 well-head platforms
- Flange Management and Leak test
- Survey and procure permanent materials to close Piping, E&I punch list
- Located offshore Myanmar, logistics base at Ranong, Thailand
- Remote working, stay on POS's Accommodation Barge, daily transportation by Crew Boat
- ➢ SIMOPS with Rig





### MAHARAJA LELA SOUTH HUC & MODIFICATION (2014-2015)



Client: PTSC M&C / TOTAL E&P Borneo BV

**Contract Mode**: <u>POS</u> as a subcontractor through the EPC contractor PTSC M&C to ultimately serve TOTAL

Contract Value: ~ 11.000.000 USD

Total Mhrs: ~ 105,000 Mhrs.

Location: Offshore Brunei

#### **Project SOW:**

- Onshore fabrication of permanent pipeline, structure, installation aid for T&I operation
- Onshore commissioning with SPIE, utilizing ICAPS Software following UPERCOM Methodology.
- Offshore hook-up and commissioning for MLJ3 Platform.
- Offshore brownfield modification for MLJ1 and MLJ2.
- Provision of POS's Accommodation Barge (our own Barge POS-1), fast crew boat, first AHT, second AHT cum supply vessel



#### GALLAF BATCH 2: HUC & MODIFICATION 01/2022 – 08/2022



Client: North Oil Company (NOC)

**Contract Mode**: <u>POS</u> signing contract **directly** with North Oil Company (NOC).

#### Location: Qatar

**Project SOW:** Provision of supervisors and engineers from POS directly to NOC as an integral part of NOC's team for managing the EPCI Contractor, including below disciplines:

- > Electrical and Instrument
- Structure and Piping
- Pre-Commissioning



### STT FFD PHASE 1 HUC & MODIFICATION (2015 – 2016) SAO VANG CPP HUC & MODIFICATION (2019 – 2020)

Client: Cuu Long JOC (ConocoPhillips) / PTSC M&C

Work Location: Offshore Viet Nam

#### **Project SOW:**

#### **Construction**

- > Lifting & scaffolding works.
- Structural Steel Works
- Insulation and coating Works
- Piping Works
- > Equipment Erection Works
- > HVAC and Architectural Works in Buildings
- Electrical Works
- Instrumentation Works + Telecom

#### Pre-com/Com

- Pre-Commissioning
- Commissioning

#### Manpower:

- HUC STT FFD Phase 1: 166,000 man-hours with 455 pax for 03 locations at the same time.
- HUC SV-CPP: **110,000** man-hours with 250 pax for main HUC campaign (CPP Jacket: 17.000 MT & CPP Topside: 10.000 MT)





#### **II** TRANSPORTATION AND INSTALLATION

Professional One-Stop Services

#### TRANSPORTATION AND INSTALLATION PROJECTS

#### **Typical T&I Projects that POS has carried out:**

1. Client: Idemitsu Gas Production Vietnam

Project: Transportation and Installation of Sao Vang CPP

Location: Offshore Viet Nam

**Project SOW:** T&I for SV-CPP Jacket, Piles, Wellhead Service Deck and SV-CPP Topside including:

> SV-CPP Jacket : 17,000 MT

- > SV-CPP Platform: 10,000 MT
- 2. Client: Cuu Long JOC

Project: T&I for Su Tu Trang Full-field Development

Location: Offshore Viet Nam

**Project SOW:** T&I for the following offshore facilities:

- > LQ Jacket, Pile & Topside
- CPP Topside (2 Modules)
- Linked Bridges

**3. Client:** Bien Dong POC

Project: T&I for Hai Thach PQ, Hai Thach WHP & Moc Tinh WHP

Location: Offshore Viet Nam

**Project SOW:** T&I for the following offshore facilities:

- > 1 Jacket (11,000 MT) + 1 Jacket (16,500 MT)
- > 01 Topside (3,000MT) + 1 Topside (14,000 MT)













#### III OFFSHORE DECOMMISSIONING

Professional One-Stop Services

#### OFFSHORE PIPELINE DECOMMISSIONING 10/2021 – 7/2022



Client: Chevron Thailand

**Contract Mode**: <u>POS</u> signing contract **directly** with Chevron Thailand

Total Mhrs: ~ 500,000 Mhrs

Location: Offshore Thailand

#### **Project SOW:**

- Workpack 01: Disconnection and removal of 60 tie-in spools
- Workpack 02: Disconnection and removal of Tantawan PLEM.
- > Workpack 04: Installation of Tie-in Spool for Phase 59





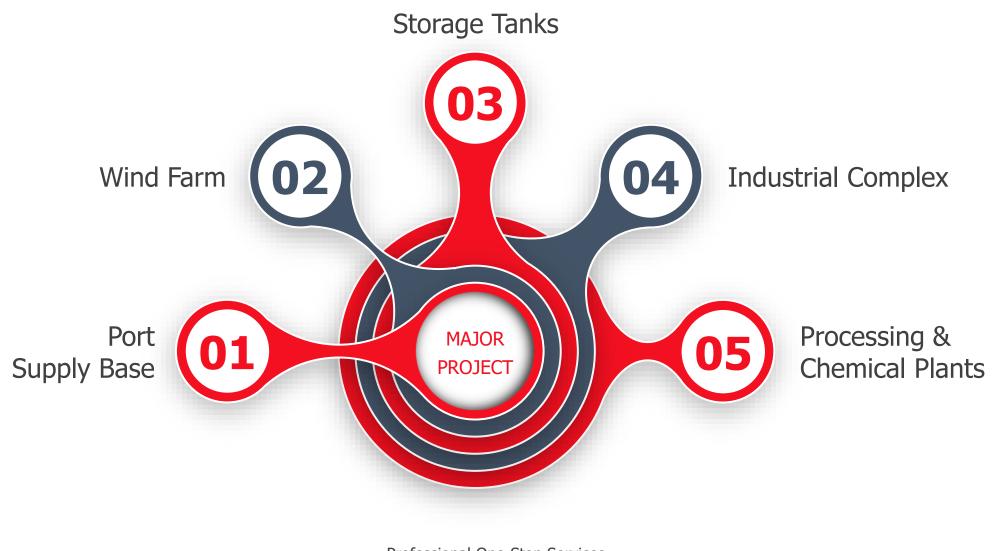






#### **ONSHORE CONSTRUCTION**





#### LSP COMPLEX PROJECT- PACKAGE A1 OLEFINS PLANT (ONGOING)



#### **Client: TPSK**

#### Work Location: Long Son, Vung Tau city

#### **Project SOW:**

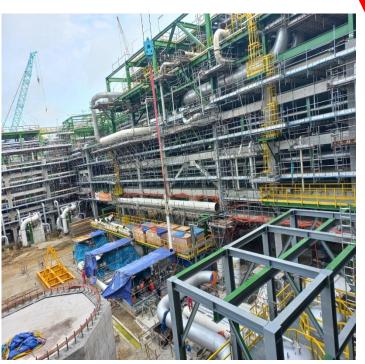
- Civil works
- ➢ PC Piperack
- Steel structure erection
- > Piping work fabrication and erection
- Common scaffolding erection works

#### Insulation works

- > Equipment Installation:
- Pre-commissioning







#### HSVC1 PP4 PROJECT (2018 – 2019)



### Client: Hyosung Vina Chemicals/ Etec Work location: Cai Mep, Vung Tau City Project SOW:

- Piping fabrication & erection~ 160,000 DI, Duplex, SS, CS
- Equipment Installation: ~ 3000MT static & rotating equipment
- Pre-com & Commissioning





#### LPG ENHANCEMENT FOR GPP DINH CO (2017 – 2018)



#### **Client: PetroVietnam Gas (PVGas)**

Work location: Long Dien District, Ba Ria Vung Tau Province

#### **Project SOW:**

- ➢ Installation of Rectifier C-05B
- ➢ Installation of Heat Exchanger E-14B
- Construction, Installation of Technonoly System, Electrical system, Lighting system and other support system.
- Hook-up and Commissioning between new and existing system including piping, valve system
- ➢ Installation of DCS, SSD, F&G



#### STRUCTURES & SPOOLS PRE-METROLOGY FABRICATION for GREAT WESTERN FLANK 2 PROJECT (2017)



- Project: Structures and spools for Great Western Flank 2 Project (GWF2) - 2018
- > Client: Subsea 7 Australia / Woodside
- Scope of work: Fabrication of Structures and Inconel 625 clad spool kits
- > Total Weight: 1200 MT





#### FABRICASTION OF SUBSEA STRUCTURE FOR PHONG LAN DAI FIELD DEVELOPMENT (PLD Project) (2018)



- > **Project:** Fabrication of Subsea Structures for PLD Project
- > **Client:** Subsea 7 Australia / Rosneft Vietnam
- > **Scope of work:** Fabrication of PLEMs, PLETs, Tie in spools
- > Total Weight: 500 MT





#### EPC FOR INLET AND OUTLET DUCT FABRICATION (ONGOING)



- Project: ePC for Inlet and Outlet Duct System
- Client: Innovative Steam Technologies /Siemens
- Scope of work: Fabrication of Inlet and Outlet Ducting System
- > Total Weight: 800 MT







#### **OPERATION AND MAINTENANCE**

Currently, PTSC Offshore Services (POS) has long-term contracts to provide Operation and Maintenance (O&M) services for almost of the big Oil and Gas Exploration and Production (E&P) Companies in Vietnam, including:

Client	Service	Location
Cuu Long JOC	Long-Term Manpower Services For CPP & Thai Binh VN	Thai Binh VN FPSO
KNOC	Operation & Maintenance Service for KNOC	Rang Dong Oil Field
JVPC	Long-term Operation & Maintenance Service for KNOC	CPC Platform
PCVL	Provision of supplying Wellhead Operators for PCVL	Ruby A & Ruby B platform





#### **OFFSHORE MAINTENANCE PROJECTS**

#### 1. Client: Bien Dong POC

**Project:** Turnaround 2021- Pressure Vessel Internal cleaning & Inspection

#### Work location: Offshore Viet Nam

#### **Project SOW:**

- > Fabricate thin spades
- > Scaffolding and Insulation for NDT, breaking joints
- Flushing & cleaning for vessel entry
- > Reinstate the breaking joints and manholes
- Support production for leak test
- **2. Client:** Binh Son Refining and Petrochemical **Project:** Maintenance of Single Point Mooring (SPM) of Binh

Son Refinery

Work location: Binh Son Refinery

#### **Project SOW:**

Covers all routine activities that are essential to maintain an uninterrupted operation of the SPM Package & Subsea Crude Pipelines, all performed by POS's resident team at work site at the Refinery.





#### **MAJOR CLIENTS**





PTSC OFFSHORE SERVICES JOINT STOCK COMPANY

### THANK YOU VERY MUCH FOR YOUR KIND ATTENTION