



TTCL VIETNAM CORPORATION LIMITED
Engineering - Procurement - Construction

THE LEADING INTEGRATED
EPC CONTRACTOR
IN VIETNAM



Subsidiaries of TTCL Public Company Limited



ABOUT TTCL GROUP

TTCL is the engineering contractor who specializes in design and engineering, procurement of equipment and materials, and construction of turnkey project for industrial and process plants including related facilities.

TTCL Public Company Limited (TTCL), the first integrated Engineering, Procurement and Construction (Integrated EPC) company in Thailand, was incorporated in 1985. TTCL was formed by the joint venture of 2 leading international engineering and construction companies from Japan and Thailand, Toyo Engineering Corporation (TEC) and Italian-Thai Development Public Company Limited (ITD).

In 1997, TTCL set up TTCL Vietnam Corporation Limited, to serve the demand for specialized integrated design and construction engineering for all turnkey projects in Vietnam.





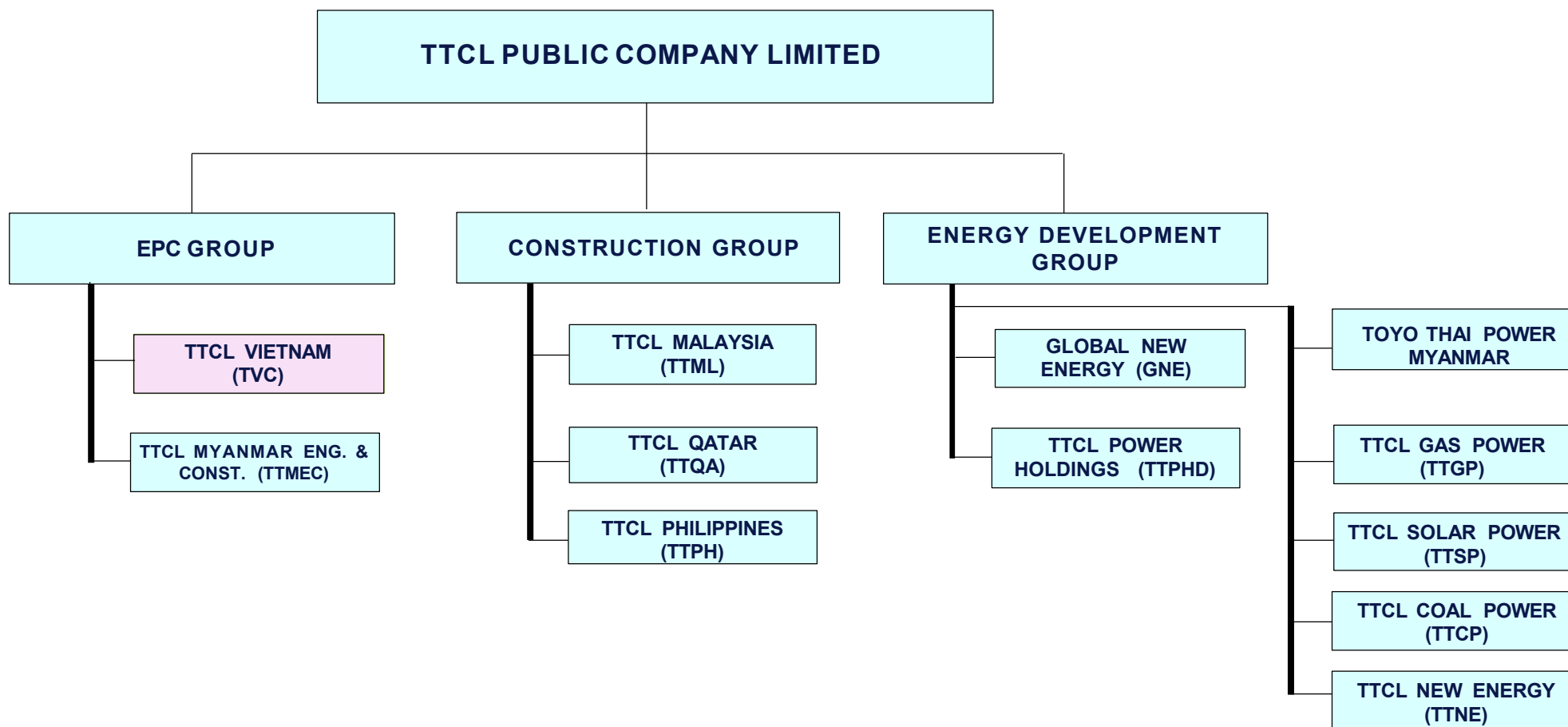
ABOUT TTCL GROUP

- **Name:** TTCL Public Company Limited
- **Established:** April 24th, 1985
- **Major Shareholder:** Mr. Hironobu Iriya
 - Global Business Management Co., Ltd.
 - Daiwa Capital Markets Singapore Ltd.
- **Employees:** 1,564
- **Head Office:** Bangkok, Thailand
- **Services:** Feasibility Study, Basic & Detail Design and Engineering, Procurement of Equipment and Materials, Construction, Commissioning and Operation
- **Chairman:** Mr. Eiji Hagiwara
- **CEO:** Mr. Hironobu Iriya
- **URL:** <http://www.ttcl.com>



TTCL GROUP STRUCTURE

TTCL is proud to be the first successful Thai company who has proved its competence and competitiveness to any other leading foreign companies.



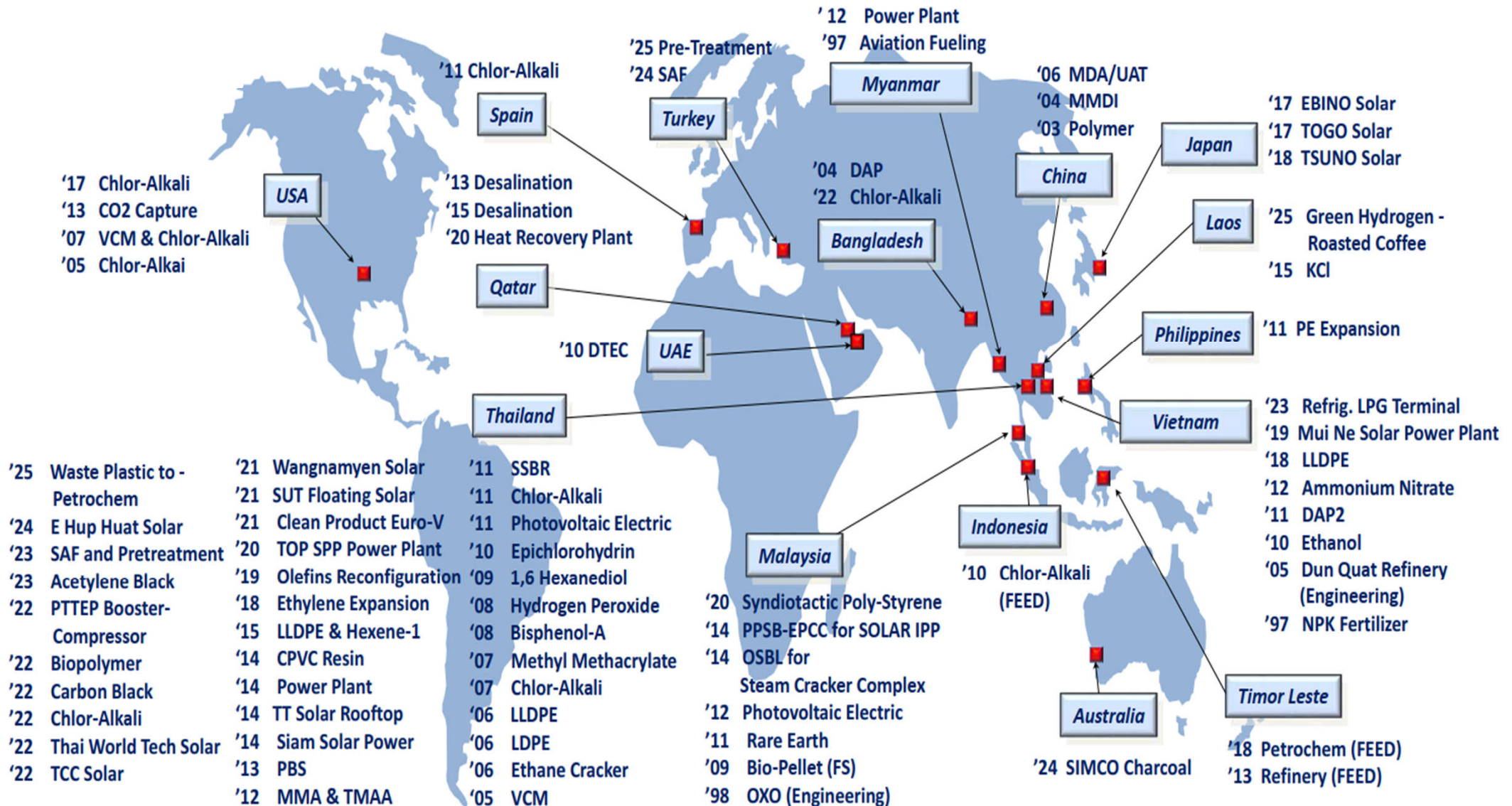


TTCL KEY CORPORATE MILESTONES

- ❑ **1985** **Toyo-Thai Corporation Limited (TTCL), the First and only Integrated EPC company in Thailand**, was formed by “Toyo Engineering Corporation (TEC) in Japan” and “Italian- Thai Development Public Company Limited (ITD) in Thailand” to contribute to the development of Thailand Oil & Gas Industry firm.
- ❑ **1997** After the above precious phases and success on domestic projects, TTCL expands its **overseas presence** to Vietnam, Malaysia, Myanmar, China, Bangladesh becoming a leading engineering companies in Asia.

TTCL set up TTCL Vietnam Corporation Limited, to serve the demand for specialized integrated design and construction engineering for all turnkey projects and continuously establish other **Subsidiaries and Affiliate Companies** worldwide in line with business development. (ref. to next slides)
- ❑ **2009** TTCL was **listed on the Stock Exchange of Thailand**.
- ❑ **2015** TTCL changes the Company name from “Toyo Thai Corporation Public Company Limited” to **“TTCL Public Company Limited”**
- ❑ **2020** **TTCL has acquisition the share of Blackwood Technology B.V.** representing 51%

WORLDWIDE RECOGNITION



ABOUT TTCL VIETNAM

- **Name Company:** TTCL Vietnam Corporation Limited.
- **Established:** Feb 19th, 1997.
- **Major Shareholder:**
 - Mr. Hironobu Iriya
 - Mr. Sugiura Atsushi
 - TTCL Public Company Limited
- **Employees:** 300
- **Head Office:** Ho Chi Minh City – Viet Nam
- **Services:** EPC/EPCM/Design & Build / Project & Construction Management (PMC Services) - Design & Engineering / Permitting Formality / Turnaround services.
- **Chairman:** Mr. Hironobu Iriya
- **General Director:** Mr. Yukio Kobe
- URL : www.ttcl-vn.com

TVC MAJOR MILESTONES

- ❑ **1997** Company establishment.
- ❑ **2011 – 2012** There are **many EPC & EPCM projects in fields** (Amway, Dow Chemical, United Pharma, PVFCCo ...)
- ❑ **2015** **Toyo Vietnam Corporation Limited officially renamed TTCL Viet Nam Corporation Limited**, major EPC projects includes Di – Ammonium Phosphate (DAP) plant project, Ammonitrate Thai Binh Plant.
- ❑ **2018 – 2019** **The first EPC contract for Renewable energy** Solar Power Plant, EPC Denko Petrochemical and EPC Shwe Lin Pan (SLP) in Yangon - Myanmar
- ❑ **2021** **EPC contract for High-Technological Municipal Waste to Energy Plant Project;** Basic Design for PDH-PP Stavian Project.
- ❑ **2022 - 2023** Completed **EPC contract for The New Beta-lactam Factory** Meets Global GMP Standards, **Completed EPC contract for Black Pellet Factory in Binh Dinh**, Biological Pond Project for NSRP, The first EPC contract for **LPG Terminal in Viet Nam**
- ❑ **Currently, TVC's have been executed more than 200 projects**

MANPOWER RESOURCE

- ❖ Teamwork and Dedication is the foundation of everything we build. TVC is very proud of having built up a human resource with technical excellence and a professional, self-motivated teamwork spirit.

Board of Management (BOM)

1. **Mr. Yukio Kobe** General Director
2. **Mr. Ho Dac Tuan** Deputy General Director
3. **Mr. Nguyen Van Lanh** Deputy General Director
4. **Mrs. Dang Thi Thanh Chau** Deputy General Director
5. **Mrs. Nguyen Hong Hanh** General Manager (Sales & Business Development)
6. **Mr. Luu Van Ba** General Manager (Engineering)
7. **Mr. Pham Van Nghiep** General Manager (Construction)

Board of Directors (BOD)



Mr. H. Iriya

Chairman of TVC



Mrs. Bui Boi Hai

Vice Chairman of TVC



Mr. Yukio Kobe

General Director



Mr. Ho Dac Tuan

Deputy General Director



Mr. Nguyen Van Lanh

Deputy General Director



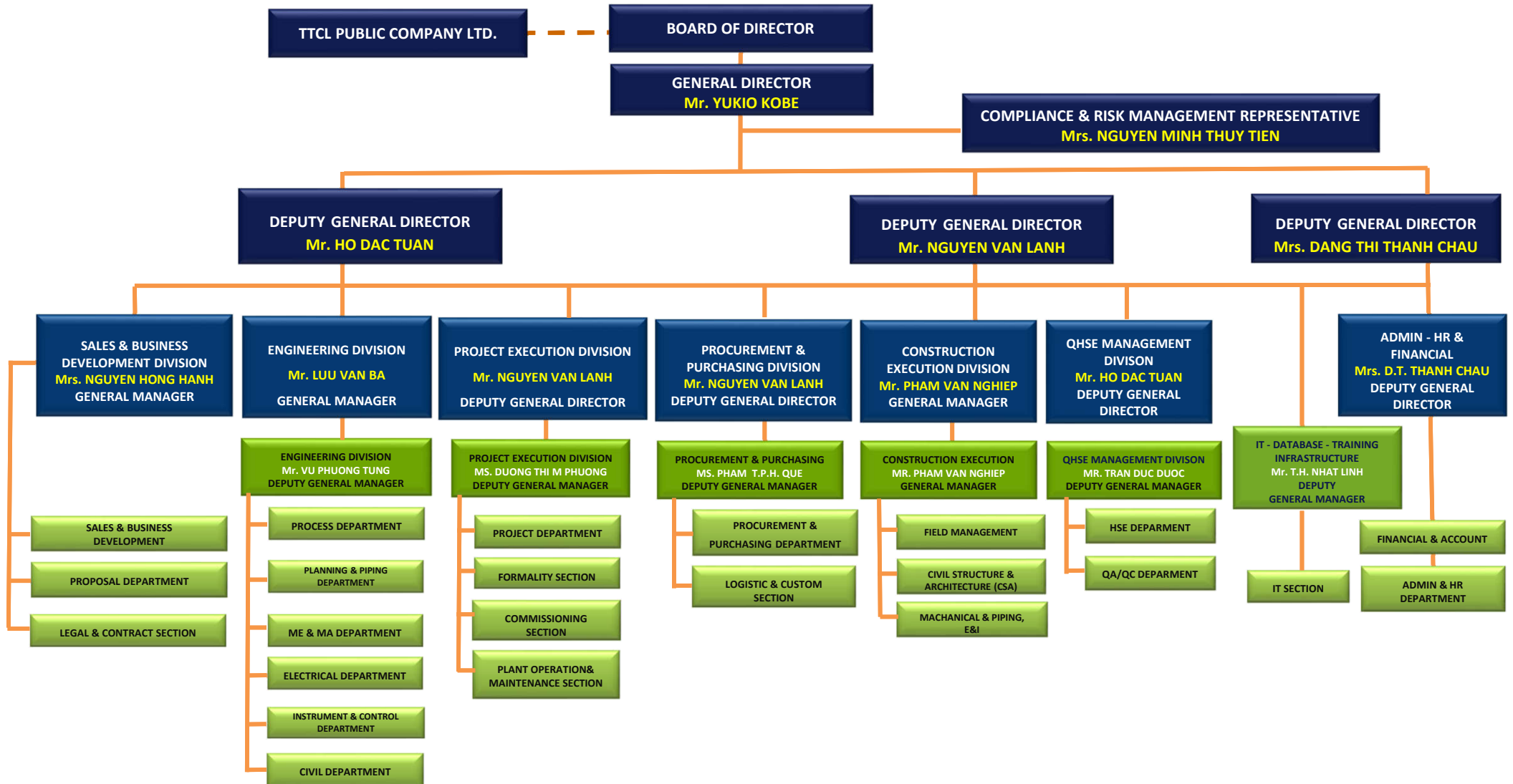
Mrs. D.T.T Chau

Deputy General Director

We have created and maintained a working environment and company culture where every individual feels valued and can contribute to his maximum potential to achieve shared business objectives. This results in greater dedication, commitment and productivity.

MANPOWER RESOURCE

- ❖ TVC's manpower resource covers all design and engineering from process, instrument and control, electrical, layout and piping, fire fighting, mechanical equipment, HVAC, civil and structure, to procurement, project and construction management including safety and quality assurance.



MANPOWER RESOURCE

TOTAL OF MAN POWER

Board of Management

Engineering Division

Process

Civil, Structural & Architectural

Mechanical Equipment & HVAC

Electrical

Instrumentation

Planning & Piping

Proposal/Project & Procurement/QHSE Div.

Project & Construction

Procurement

Quality Control

HSSE

Proposal

IT

Sales & Admin & Others

300

13

158

17

30

28

31

26

26

107

65

10

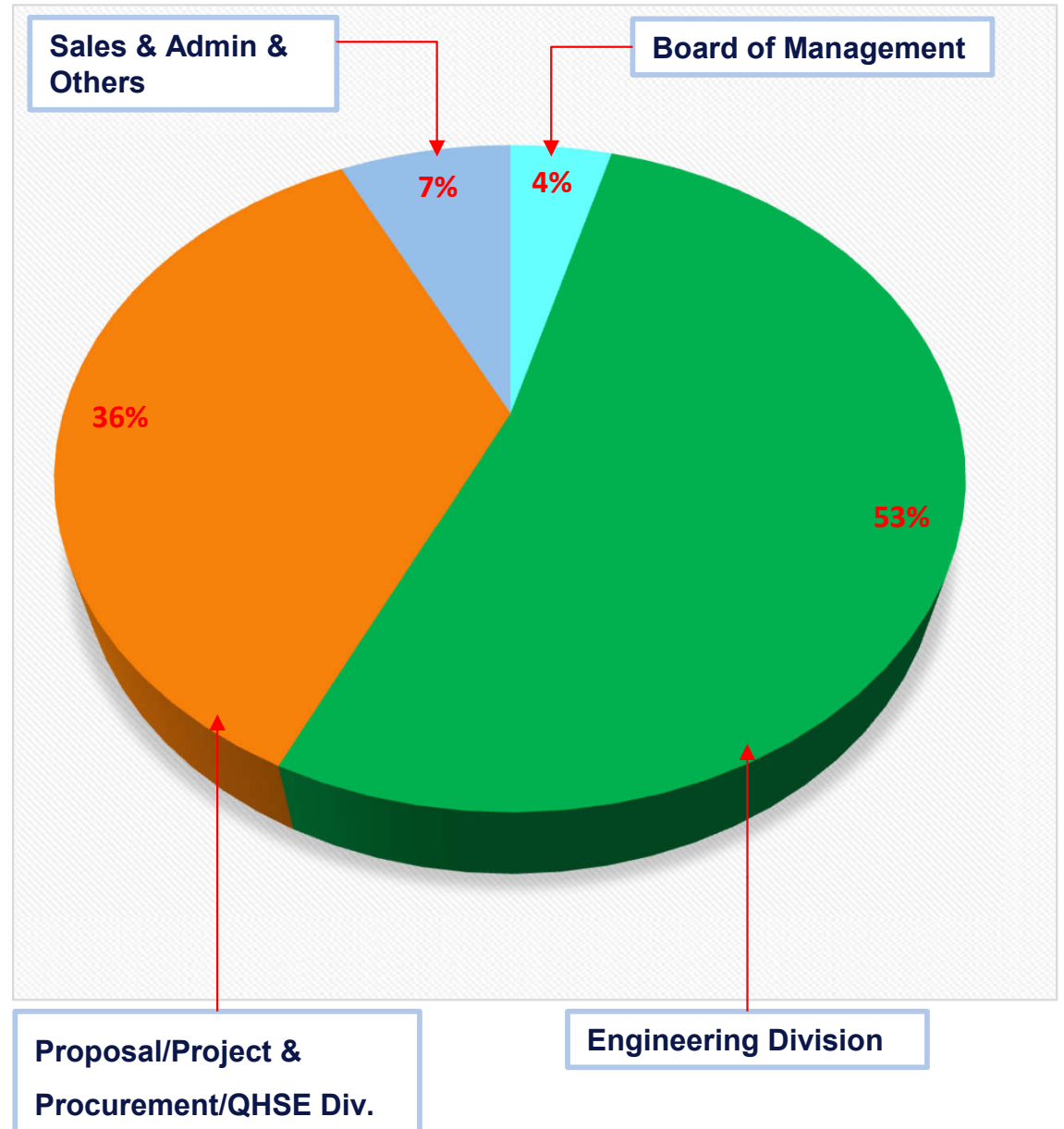
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16

3

2

22

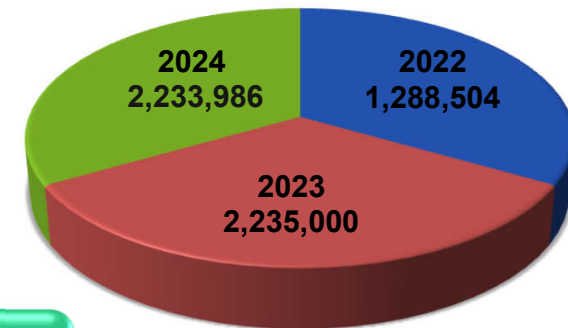




HSSE PERFORMANCE



Total safety Man-hours
worked in last 3 years:

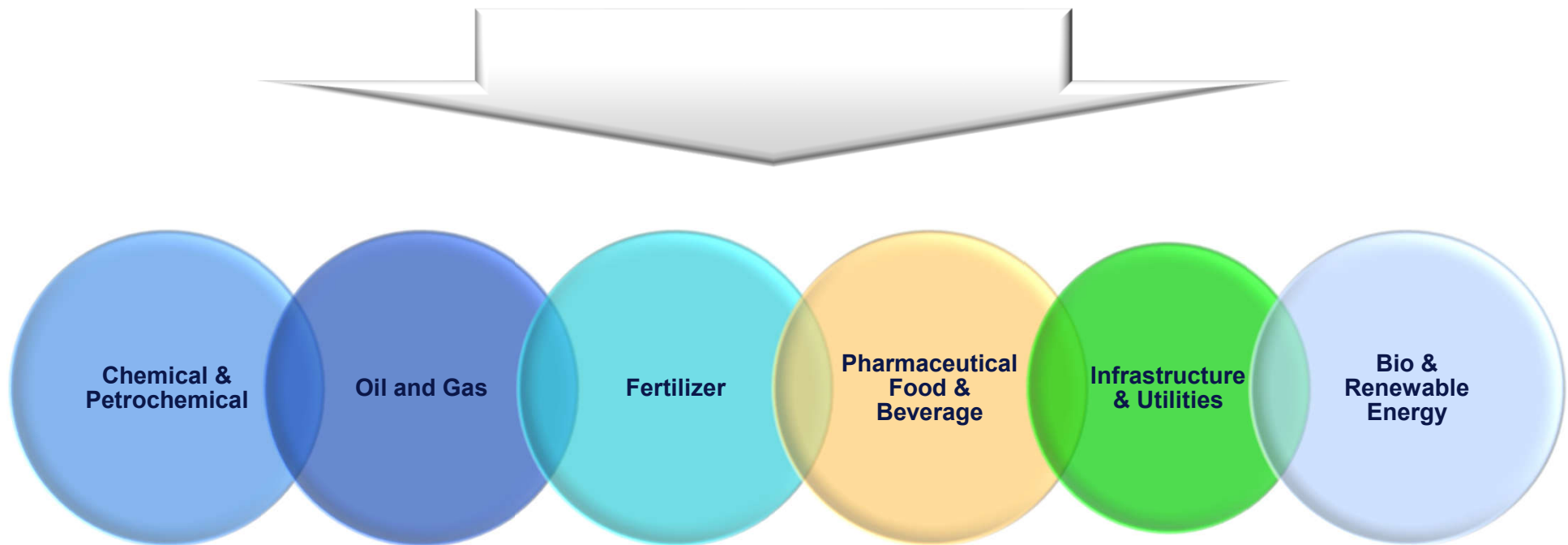


Safety is everyone's responsibility!!!

OUR SERVICES

- EPC / EPCM / DESIGN & BUILD
- PROJECT & CONSTRUCTION MANAGEMENT (PMC SERVICES)
- DESIGN & ENGINEERING/ PERMITTING FORMALITY
- TURNAROUND SERVICES

The field of plant Engineering, Procurement and Construction service covers to



OUR CERTIFICATES

CONSTRUCTION ACTIVITY CAPABILITY CERTIFICATE

MINISTRY OF CONSTRUCTION SOCIALIST REPUBLIC OF VIETNAM
THE SOUTH AGENCY Independence – Freedom – Happiness

CERTIFICATE OF CONSTRUCTION ACTIVITY CAPACITY

No.: BXD – 00000321

(Promulgated with Decision No. 88/QĐ-CPN-DN dated 25 February 2022)

Organization's name: TTCL VIETNAM CORPORATION LIMITED

Enterprise registration Certificate/Decision on Establishment No.: 0300790729

Date of issue: 12 June 2008, 6th registration to change on 12 August 2020

Issuing authority: Ho Chi Minh City Department of Planning and Investment

Legal representative:

Mr./Mrs.: Iriya Hironobu

Position: Chairman of Members' Council

Principal address: No. 106, Nguyen Van Troi Street, Ward 8, Phu Nhuan District, Ho Chi Minh City

Tel: 028 39977118

Fax: 028 39911086

Email: sales@ttcl-vn.com

Website: www.ttcl-vn.com

Scope of construction activities:

- Design and verification of industrial works construction design: Class I
- Management consultancy of investment projects of industrial works construction: Class I
- Supervision consultancy of industrial works construction execution: Class I
- Industrial works construction execution: Class I

This certificate is valid until 25 February 2032 inclusive.

I, TRAN THI BICH HANH, Citizen No.: 066189012755, date of issue: 12 August 2021, place of issue: Director General of the Police Department for Administrative Management of Social Order, undertake that I have accurately translated this document from Vietnamese into English.

Tôi, TRAN THI BICH HANH, CCCD số: 066189012755, cấp ngày 12/08/2021, tại Cục Trưởng Cục Cảnh Sát Quản Lý Hành Chính Về Trật Tự Xã Hội, cam đoan đã dịch chính xác nội dung của giấy tờ văn bản này từ tiếng Việt sang tiếng Anh.

Ngày 28 tháng 03 năm 2022
Người dịch:

TRAN THI BICH HANH

Date: 28 March 2022
(The twenty eighth of March, twenty twenty-two)
At People's Committee of District 10, Ho Chi Minh City
I, *Ginh Hằng Việt*
Deputy Chief of Justice Division of District 10
CERTIFY THAT
Ms.: TRAN THI BICH HANH has signed in this document.
Ngày hai mươi tám tháng ba năm hai ngàn không trăm hai mươi hai)
Tại Ủy Ban Nhân Dân Quận 10- TP Hồ Chí Minh
Tôi, *Ginh Hằng Việt*
Là Phó Trưởng Phòng Tư Pháp Quận 10
CHỨNG THỰC
Bà TRAN THI BICH HANH
Là người đã ký vào bản dịch này.
Số chứng thực: 00021873
quyển số: 83-SCT/CKND
Ngày 28 tháng 03 năm 2022



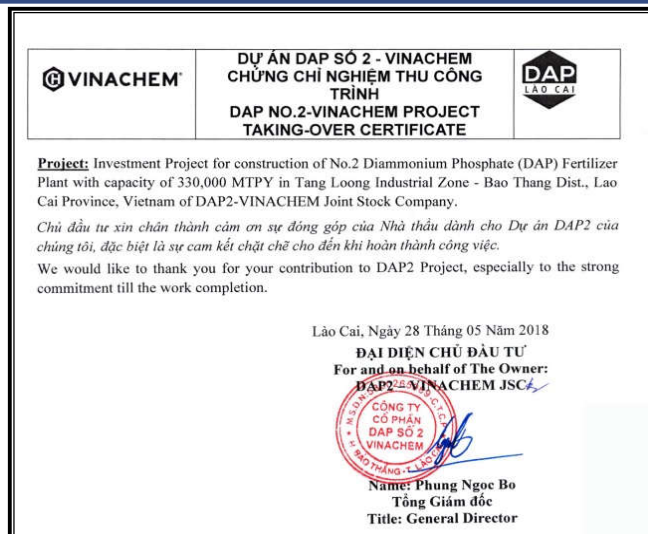
TTCL Viet Nam has been certified for:

- ❖ Quality Management System in accordance with ISO 9001: 2015
- ❖ Environmental Management System in accordance with ISO 14001:2015
- ❖ Occupational Health and Safety Management System in accordance with ISO 45001: 2018 by DNV GL Business Assurance

Vietnam Co., LTD.



Idemitsu Black Pellet Commercial Project – Certificate of Appreciation



Dap No.2 Vinachem project Taking – Over Certificate



UFC85/ Formaldehyde Plant– Mechanical Completion Certificate



Jotun Greenfield Project – Leed Gold Certificate



Ammonium Nitrate Plant Project Taking – Over Certificate



Bi-o Ethanol Plant– Mechanical Completion Certificate

ENGINEERING DESIGN SOFTWARE

SYSTEM		MAJOR USED FUCTION
PMI® GLOBAL STANDARD		PROJECT MANAGEMENT for manage the Scope, Schedule, Cost, Quality, Resource, Communication, Risk, Procurement, Stakeholder included the Change Management for all.
SOFTWARE NAME	LICENSE	MAJOR USED FUCTION
AutoCAD 2D /3D	Autodesk	Plant design automation
PDMS/ PDS/CADWORX	Aveva/ Intergraph	Datacentric, multi-disciplinary design environment for full 3D modeling of process plant/ Intelligent computer-aided design/engineering (CAD/CAE) application for plant design, construction, and operations
Naviswork	Autodesk	3D plant navigator
Revit	Autodesk	3D model
Pipenet	Sunrise	Fire fighting hydraulic calculation
PV Elite	COADE	Pressure Vessel/ Shell & tube heat exchanger Strength Calculation
ETAP	Operation Tech, Inc.	The most comprehensive analysis platform for the design, simulation, and operation of generation, distribution, and industrial power systems
Pvsyst	ISE University of Geneva	Software package for the study, sizing, simulation and data analysis of complete PV system
Staad Pro	Bentley	Design reinforced concrete and steel structure
Tekla Structures	Tekla	Structural design Structural building information modeling (BIM)system

HIGH PROFILE CLIENTS

1. CHEMICAL & PETROCHEMICAL



3. OIL & GAS



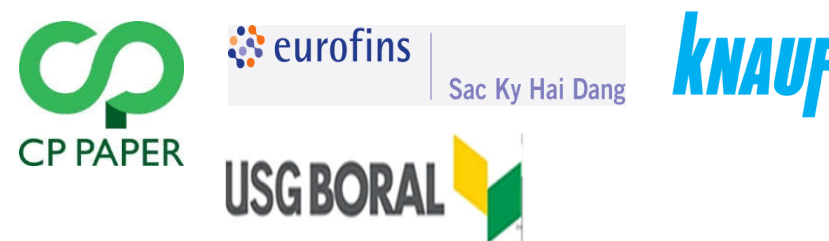
5. FERTILIZER



2. PHARMACEUTICAL - FOOD & BEVERAGE



4. INFRASTRUCTURE & UTILITIES



6. BIO - RENEWABLE ENERGY





MAJOR EXPERIENCES



PROJECT EXPERIENCES

- ❑ **Client:** Yen Hung Petrochemical Joint Stock Company
- ❑ **Project Name:** Yen Hung LPG Storage Terminal Project
- ❑ **Location:** Tien Phong Commune, Quang Yen Town, Quang Ninh Province,
- ❑ **Capacity:** 176,400 m³
- ❑ **Project period:** Aug/2023 to Sep/2026
- ❑ **Role of TVC:** Member of Consortium with TTCL Public Company Limited
- ❑ **Scope of work:** EPC
- ❑ **Project Description:**
 - The LPG Refrigerated Terminal total area of 9,6 ha.
 - C3 & C4 Steel double wall storage tank with capacity: C3 Storage tank is 100,000 m³ & C4 Storage tank is 60,000 m³.
 - Pressurized LPG storage tank with capacity: 02 sphere tanks is 6,248 m³
 - Main process system: LPG Truck Loading, LPG Ship unloading/ loading system, BOG system, C3 Heater system, Flare system,
 - Utilities, facilities and infrastructure: Compressed air, Nitrogen Air, water supply, waste water treatment system; Electrical system included: 22kV substation, Power distribution, lighting, lightning & grounding, fire alarm system, telecommunication; Instrumentation system included: DCS system, ESD system, Fire & Gas system,...Fire fighting system and the infrastructure included control room, pipe rack, parking area, road & paving, drainage system, fence & gate...



PROJECT EXPERIENCES

❑ **Client:** Idemitsu Green Energy Vietnam (IGEV)

❑ **Project Name:** 1st Black Pellet Commercial Plant Project

❑ **Location:** Hoai Nhon Town, Binh Dinh Province, Viet Nam.

❑ **Capacity:** 120.000 Ton/Year (Black Pellet)

❑ **Project period:** Oct/2021 to Jul/2023

❑ **Role of TVC:** Main Contractor

❑ **Scope of work:** EPC

❑ **Project Description:**

- The Black Pellet Processing Plant shall consist of 2 trains of production. The Plant Process Section consists of the following process systems: White Pellet Handling System (WPH), Torrefaction System (TOR), Black Pellet Cooling System (BPC), Black Pellet Handling System (BPH), Pre-Heater and TORR Gas Scrubber System.
- Utility system include: Plant air system, Nitrogen system, Process water system (including Potable water), FFT System, LPG System, waste water treatment system, Emergency diesel generator system...
- Other infrastructure of plant such as road & paving, guardhouse, warehouse, silos, truck scale, pipe rack, fence & gate, parking....



PROJECT EXPERIENCES

- ❑ **Client:** Thang Long Energy Environment Joint Stock Company
- ❑ **Project Name:** High- Technological Municipal Waste To Energy
- ❑ **Location:** Dong Sai village, Phu Lang commune, Que Vo district, Bac Ninh
- ❑ **Capacity:**
 - + 500 tons of municipal waste/day & 100 tons of industrial waste/day;
 - + Power Generation Capacity: 11.6 MW
- ❑ **Project period:** Nov/2021 – Dec/2024
- ❑ **Role of TVC:** Main Contractor
- ❑ **Scope of work:** EPC
- ❑ **Project Description:**

- Major equipment: **Pre -Treatment Unit:** BMH Technology Oy – Finland; **CFB Boiler:** Valmet Technologies Oy – Finland; **Steam Turbine Generator:** SIEMENS ENERGY – India
- Main process system: Steam Turbine Generator & Air Compressor Building, Boiler & Flue Gas Treatment System, Cooling tower system,
- Utilities, facilities and infrastructure: FFT System, Raw Water & Demin water Treatment, Waste Water Treatment System, Air Compressed; Electrical System included: Power distribution house, lighting, lightning & grounding, fire alarm system, telecommunication; Instrumentation system included: DCS system, ESD system, Fire & Gas system. The infrastructure included FFT Pump Station, 22kV Substation, RDF Plant, control room, pipe rack, road & paving, drainage system, weighbridge.....



PROJECT EXPERIENCES

- ❑ **Client:** DHG Pharmaceutical Joint Stock Company
- ❑ **Project Name:** The New Betalactam Factory Meets Global GMP Standards
- ❑ **Location:** Tan Phu Thanh Industrial Park, Chau Thanh A, Hau Giang Province
- ❑ **Capacity:** Capacity of 681 million products/year with product group of cephalosporin and penicillin
- ❑ **Area:** 2 ha
- ❑ **Project period:** July/2022 – Nov/2023
- ❑ **Scope of Work:** EPC
- ❑ **Project Description:** Main Item of Project including
 - Production Area (Clean room: Cleanliness Grade C, D, E); Office Building; Product Warehouse, Control Room; Chemical & Hazardous Warehouse; Laboratory, Canteen.
 - The Utilities system: Waste Water Treatment; Potable water, purified water (RO), CIP, Compressed Air, boiler, Firefighting System..... Utilities system for pharmaceutical factory follow with EU-GMP, Japan-GMP and PIC/S-GMP requirements.



PROJECT EXPERIENCES

Project Name	LLDPE PLANT PROJECT
Client	TTCL Public Company Limited/ Long Son Petrochemicals Co., Ltd.
Location	Long Son Commune, Ba Ria-Vung Tau Province, Viet Nam
Project period	49 months
Description	Linear Low Density Polyethylene (LLDPE)
Capacity	500,000 metric tons of LLDPE based on 8,000 operating hours per calendar year. EPCC Lump Sum (TTCL Thai)
Scope	Raw Material & Ethylene Purification and H2 Booster system area, T2 Supply area, Reaction system area, Vent Recovery system area, Degassing & Pelletizing system area, Pellet Silo & Bagging Machine system area, Utility
Features	Univation Technologies
Process Licensor	



PROJECT EXPERIENCES

❑ **Client:** Vinacomin-Mining Chemical Industry Holding Corporation Limited

❑ **Project Name:** Ammonium Nitrate Plant Project

❑ **Location:** Thai Thuy District, Thai Binh Province, Vietnam

❑ **Capacity:** Ammonium Nitrate 200,000 Ton/Year

❑ **Project period:** May/2012 – Dec/2014

❑ **Role of TVC:** Member of Consortium with TTCL Public Company Limited

❑ **Scope of work:** EPC

❑ **Project Description:**

- Main Process system: Ammonium Nitrate Production unit, Nitric Acid Production Unit, Ammonia truck unloading system...
- Utilities, facilities system include: Storage area (Nitric Acid Storage, CPAN and PPAN Storage and packaging, Ammonia Storage), Compressed Air System, water supply system, cooling tower system, Demineralized Water system, raw water treatment system, raw water pump station, raw water pipe line, production waste water treatment station, Boiler and steam distribution system, FFT System, HVAC system for control building, and lab room. Electrical System included the LV Switchgear, MCC and Distribution panel, Telecommunication system, lighting, portable water system,...
- Other infrastructure of plant such as Process building, Administration building and communication station, pipe rack, pipe bridge, operation platform, foundation, drainage system, road, paving, fence, gate, Laboratory and its facilities, Equipment warehouse, Weight station ..



PROJECT EXPERIENCES

❑ **Client:** Nghi Son Refinery And Petrochemical Limited Liability (NSRP)

❑ **Project Name:** Biological Pond System Project

❑ **Location:** Nghi Son Economic Zone, Thanh Hoa Province

❑ **Capacity:** 51000 m³/3 days of maximum permitted discharge rate

❑ **Project period:** 07/2021 – 02/2023

❑ **Role of TVC:** Main Contractor

❑ **Scope of work:** EPC

❑ **Project Description:**

- Biological pond system will be constructed for the purpose of providing additional treatment/ emergency containment of wastewater which has been treated from Effluent Treatment Plant (ETP) of the Refinery before being discharged into the sea and so preventing environmental incidents caused by waste water.
- Main Process System: With Pond system include 05 Ponds: Incident Pond (ET-1) depth of 4m with volume of 5,015m³; Biological Pond No. 1 (SP-1) has a volume of 23,081 m³ and Biological Pond No. 2 (SP-2) has a volume of 30,955 m³ and Biological Pond No. 3 (SP-3) has a volume of 39,375m³ and have an equivalent depth of 2.5m, Constructed Wetland Pond (CW-1) and Fish Indication Pond. In addition, has Electrical & Instrument house, Pump Station...
- Utilities, facilities system include: circulation water system, water filter package, air blowing system, CCTV system, Lighting, Earthing, FFT System, Fire Alarm System Communication System, Instrument Control system, Power management System,
- Other infrastructure such as Fence, Road, Drainage system, Safety handrail, Cable trench and duct bank



DIAMMONIUM PHOSPHATE NO.02 FERTILIZER PLANT

- ❑ **Client:** DAP No.2-VINACHEM Joint Stock Company
- ❑ **Location:** Tang Loong Industrial Zone, Bao Thang Dist, Lao Cai Province,
- ❑ **Capacity:** Diammonium Phosphate 330,000 Ton/Year
- ❑ **Project period:** Dec/2011 – Jul/2014
- ❑ **Role of TVC:** Member of Consortium with TTCL Public Company Limited
- ❑ **Scope of work:** EPC
- ❑ **Project Description:**

- Main process system :
 - Sulfuric Acid plant (Include: Sulfuric Acid storage and Sulfur storage)
 - Phosphoric Acid unit (Include: phosphoric acid storage, Gypsum treatment disposal area)
 - DAP Plant (Main production, DAP Storage and packing..)
 - Power Generator Station (Coal Storage, Boiler and Slag dump, Turbine)
- Utilities, facilities system include: Boiler system, instrument air system, water supply system, Demin Water system, Electrical System included the electrical Substation with MV Switchgear, transformer, MCC, Distribution panel and Power cable, UPS, Control and Instrumentation system included DCS system, PLC system, Instrument Protection system (IPS), Fire and Gas System (FGS), Operational Data store (ODS),.. Fire alarm system, fire fighting system, Grounding & Lightning protection system and other ELV system, Communication system, ...
- Other infrastructure of plant such as Process building, pipe rack, pipe bridge, raw material warehouse, product warehouse, Admin building, Laboratory building, Liquid Ammonia storage, road & paving, drainage system, fence and gate...



PROJECT EXPERIENCES

❑ **Client:** Denko Petrochemical Management Company

❑ **Project Name:** Thilawa Oil Storage Tank Terminal Project

❑ **Location:** Thilawa - Yangon, Myanmar

❑ **Capacity:** 135,000 m3 (10 tanks)

❑ **Project period:** Jun/2018 - Dec/2019

❑ **Role of TVC:** Main Contractor

❑ **Scope of work:** EPC

❑ **Project Description:**

- Main Process System: Terminal Area (10 tanks), Unloading system from Jetty to Terminal and Barge loading from terminal to ship, Truck loading area (16 loading bays), Additive injection and Dye coloring System
- Utilities, facilities system include : Compressed Air, water supply, oily water collection and treatment, Instrumentation system included the SCADA + PLC, ESD system, Fire and Gas system, Tank Gauging system, Metering skid and Batch control, field instrument, Electrical System included: Medium Voltage System (33kV), Transformer, LV Switchgear, MCC, Distribution Panel, UPS, Diesel Generator, Cable, cable tray, ...LV System: Lighting system, Grounding and Lightning system, Telecommunication, LAN, CCTV, Paggging System, Fire fighting system and Fire Alarm
- Other infrastructure of terminal such as tank foundation, underground water pond, pipe rack and pipe bridge, road & paving, drainage system, fence and gate.



PROJECT EXPERIENCES

- ❑ **Client:** LNG Son My Terminal Limited Liability Company
- ❑ **Project Name:** Son My LNG Terminal Project
- ❑ **Location:** Son My IZ, Ham Tan Dist, Binh Thuan Province, Vietnam
- ❑ **Capacity:** 02 full containment tanks with capacity 180.000 m3 each tank.
- ❑ **Project period:** Nov/2022 – May/2023
- ❑ **Scope of work:** Update Basic Design with same level of detail as FEED
- ❑ **Project Description:**
 - Son My LNG Terminal Project aims to supply gasified LNG to Son My I Power Plants and Son My II Power Plants with a capacity of 2,250MW each, with a maximum consumption demand of up to 3.6 million tons of LNG/year (equivalent to about 5 billion m3 of gas/year).
 - Project main items include: Jetty & associated facilities; LNG loading/unloading facilities; LNG storage tanks & their associated facilities; BOG system; vaporization facilities; Metering facilities; Sea water intake & discharge facilities; Firefighting system and Other facilities such as: electrical system, control system, instrument/utility air system, nitrogen system, control room, generator house, water supply & drainage, waste water treatment, fence, gates. etc...



**EXPERIENCES
AND
CLIENTS**



**PHARMACEUTICAL
FOOD & BEVERAGE**

PROJECT EXPERIENCES

- ❑ **Client:** DHG Pharmaceutical Joint Stock Company
- ❑ **Project Name:** The New Betalactam Factory Meets Global GMP Standards
- ❑ **Location:** Tan Phu Thanh Industrial Park, Chau Thanh A, Hau Giang Province
- ❑ **Capacity:** Capacity of 681 million products/year with product group of cephalosporin and penicillin
- ❑ **Area:** 2 ha
- ❑ **Project period:** July/2022 – Nov/2023
- ❑ **Scope of Work:** EPC
- ❑ **Project Description:** Main Item of Project including
 - Production Area (Clean room: Cleanliness Grade C, D, E); Office Building; Product Warehouse, Control Room; Chemical & Hazardous Warehouse; Laboratory, Canteen.
 - The Utilities system: Waste Water Treatment; Potable water, purified water (RO), CIP, Compressed Air, boiler, Firefighting System..... Utilities system for pharmaceutical factory follow with EU-GMP, Japan-GMP and PIC/S-GMP requirements.



PROJECT EXPERIENCES

- ❑ **Client:** Amway Vietnam Company Limited
- ❑ **Project Name:** The Amway Liquid Manufacturing Facility Project
- ❑ **Location:** VSIP IIA Industrial Zone, Tan Uyen, Binh Duong
- ❑ **Capacity:** 23.280.000 products/year (equivalent 1,379 ton/year)
- ❑ **Project period:** Nov/2013 – Mar/2015
- ❑ **Scope of Work:** EPC
- ❑ **Project Description:** Main Item of Project including
 - All of production building, other function building and infrastructure
 - The Utilities system: Potable water, purified water (RO), CIP, Compressed Air, boiler, waste water treatment system
 - Electrical system included the Power supplied system, lighting system and other ELV system: grounding & lightning, fire alarm, CCTV,
 - HVAC system with required cleaning class 100,000
 - Fire fighting system; BMS system



PROJECT EXPERIENCES

❑ **Client:** United International Pharma Company Limited

❑ **Project Name:** United International Pharma Project

❑ **Location:** VSIP II, Binh Duong Province, Vietnam

❑ **Area:** 3.5 ha

❑ **Project period:** Sep/2010 - Jan/2012

❑ **Scope of Work:** EPC

❑ **Project Description:**

- Civil/ Structure/ Architecture for Production building, warehouse building and Admin building; Waste water treatment plant
- Utility System included Purifier water, Softener water, Domestic water, Potable Water, Compressed Air, Boiler and Steam Distribution, Building Management system; HVAC System: 200 clean rooms class 100.000, clean panels, demountable wall panel, Chilled water dust collection system, smoke extract system; Electrical System included 22kV tie-in point, MV switchgear, transformer, MCC, Distribution panel, UPS, Generator, lighting, lightning & grounding system, fire alarm system, CCTV system, Paging system, Telecommunication system, Fire fighting system
- The pharmaceutical factory follow with GMP-WHO/PICS requirements.



PROJECT EXPERIENCES

- ❑ **Client:** Elanco Vietnam Company Limited
- ❑ **Project Name:** Animal Health – Production site of Elanco Vietnam
- ❑ **Location:** Loc An - Binh Son IZ, Long Thanh District, Dong Nai Province
- ❑ **Capacity:**
 - Premixes For Animal Feed For Cattle, Poultry & Ornamental Animals & Aquaculture Products With A Scale Of 10,000 Tons/ Year;
 - Biological Products, Microorganisms, Chemicals, Substances For Environmental Improvement In Aquaculture, Food Storage, Husbandry Farms (Excluding Pesticides And Herbicides) ith Tissue 5,000 Tons / Year;
 - Veterinary Drugs And Vaccines With A Scale Of 1,000 Tons/ Year.
- ❑ **Area:** 4ha
- ❑ **Project period:** Feb/2020 – Aug/2021
- ❑ **Scope of Work:** EPCm
- ❑ **Project Description:** Main Item of Project including
 - Production area, FG Warehouse, Utility Area, Office Building, Laboratory Area, Canteen, Pallet Treatment, Guardhouse, Parking area and Waste Water Treatment
 - The pharmaceutical factory follow with GMP – WHO requirements.



PROJECT EXPERIENCES

- ❑ **Client:** Tetra Pak Vietnam Joint Stock Company
- ❑ **Project Name:** Tetra Pak Binh Duong Project
- ❑ **Location:** No. 12, VSIP II-A, Street No. 30, Vinh Tan Town, Tan Uyen Dist., Binh Duong Province
- ❑ **Area:** Construction area of 34,950m², on land area of 100,000 m².
- ❑ **Capacity :** 12 billion packages / year
- ❑ **Project period:** Jan/2017 – June/2018
- ❑ **Scope of Work:** EPCm
- ❑ **Project Description:** Main Item of Project including
 - Production building, Warehouse, Utility building, support building, office, locker and other infrastructure such as road, paving, drainage,
 - Utilities system included: Chilled water plant (5 Chillers of total capacity 2750 ton), compressed air, Sewage system, domestic water supply
 - HVAC system with required cleaning class 100,000
 - Electrical system included the Power supplied system, lighting system and other ELV system: grounding & lightning, fire alarm, CCTV.
 - Fire fighting system followed FM Global requirement.
 - Building Management System (BMS)
 - Project achieved LEED Gold Ver 4 certification



PROJECT EXPERIENCES

❑ **Client:** Medical Devices & Biomaterial JSC (MEDEP)

❑ **Project Name:** Crystalline Lens Factory Project

❑ **Location:** VSIP II, Binh Duong Province, Vietnam

❑ **Capacity:** Hydrophobic & hydrophilic intraocular lenses

❑ **Area:** 1ha

❑ **Project period:** Jan/2018

❑ **Scope of Work:** EPC

❑ **Project Description:**

- All of production building include production area, laboratory area, warehouse area, other function building and infrastructure such as Drainage system; internal road, parking, guard house.....
- The Utilities system: Potable water, purified water (RO), Compressed Air, HVAC system, Electrical system included the Power supplied system, lighting system and other ELV system: grounding & lightning, fire alarm, CCTV,...Fire fighting system.
- Factory Standard: ISO 14644, ISO 13485, ISO 8573, ASTM D1193
- Required cleaning class: 9/8/7 followed ISO 14644



PROJECT EXPERIENCES

- ❑ **Client:** One More Company Limited
- ❑ **Project Name:** Instant Noodle Factory Project
- ❑ **Location:** Tomnubkobsrov, Phnom Penh, Cambodia
- ❑ **Area:** 12ha
- ❑ **Project period:** Apr/2015 – Dec/2016
- ❑ **Scope of Work:** EPCm
- ❑ **Project Description:** Main Item of Project including
 - Integrated factory building (Ground floor, Mezzanine & Warehouse); Utility & facility Building.
 - Utility system included: Steam and condensate system, Compressor Air System, FO/DO System, Water treatment System, Chilled Water System, Palm Oil System, Cooling & Hot water system, Waste Water Treatment,
 - Electrical system included: ELV system, Lightning Protection System, Grounding System, Emergence power Generator, Fire Alarm System
 - Instrument Control System
 - Infrastructure system included: Road & Drainage, Industrial Landscaping, Parking, Guard House, Main Gate, Fence



PROJECT EXPERIENCES

- ❑ **Client:** Masan Industrial Company
- ❑ **Project Name:** Chilli Sauce Project
- ❑ **Location:** Lot 6, Tan Dong Hiep A Industrial Zone, Tan Dong Hiep Ward, Di An District, Binh Duong Province
- ❑ **Capacity:** 28,000 tons/year
- ❑ **Project period:** Mar/2017 – Dec/2017
- ❑ **Scope of Work:** Detailed Engineering and Construction Management
- ❑ **Project Description:** Main Item of Project including
 - Production building included the raw material storage and preparation area (Chili, salt) Ferment area, Product filling line and product storage area
 - HVAC System for production building
 - Utility System included: Water supply system, RO System, compressed air, steam which tie-in with existing system.
 - Electrical system, included: Power supplied system from existing system, Lighting system, fire alarm system, Grounding & Lightning system.
 - Fire fighting system



PROJECT EXPERIENCES

- ❑ **Client:** Masan Brewery HG Company Limited
- ❑ **Project Name:** Masan Brewery HG Beer Factory Project
- ❑ **Location:** Song Hau Industrial Zone, Hau Giang Province
- ❑ **Capacity:** 150 mil liter/ year
- ❑ **Project period:** May/2015 – Feb/2016
- ❑ **Scope of Work:** Construction management
- ❑ **Project Description:** Production and warehouse area included: Brew house, Material Storage and Intake building, Silo area, Product Material Storage, filtration area and CIP building, Yeast Trial room, CIP, BBT tank, CAN line area, Bottle Line Area, Warehouse, Empty Bottle Yard. Other building: Office & Canteen building, Guard house, Spare part warehouse Maintenance workshop, Hazardous waste storage, parking area, utilities area
 - Infrastructure: Road & paving, drainage system, landscape, fence, gate
 - Utility system: Water treatment system, water supply, cooling water, Boiler and steam system, Compressor and compressed air distribution, waste water treatment (bio pond); HVAC system for buildings, fire fighting system
 - Electrical system: 22kV system, power supplied system, lighting system, grounding and lightning system, Telephone, CCTV, LAN Fire alarm system,
 - Other facility: Elevator, weight bridge



PROJECT EXPERIENCES

- ❑ **Client:** Coca-Cola Beverages Vietnam Limited
- ❑ **Project Name:** Coca-Cola Beverages Plant Extension Project
- ❑ **Location:** 1A Highway, Hoa Minh ward, Lien Chieu district, Da Nang City
- ❑ **Project period:** Apr/2016 - Dec/2016
- ❑ **Scope of Work:** EPCm
- ❑ **Project Description:**
 - New product warehouse: 4,800 m3
 - Loading Canopy 1,500 m2
 - Infrastructure included: Internal Road/ Drainage system, paving, Driver waiting area, Sign Board, walk way, bollard
 - Warehouse office: 90 m2
 - Renovation existing Office
 - Remove the existing Gate to adapt with new traffic route
 - Fire fighting system with new water tank, new water pump
 - Electrical supply and distribution system/ Lighting, fire alarm, data telephone, access control
 - HVAC system
 - Weigh Bridge 60 tons



PROJECT EXPERIENCES

- ❑ **Client:** LOF Milk JSC – Binh Duong Branch
- ❑ **Project Name:** Binh Duong - Bau Bang Milk Factory Project
- ❑ **Location:** Bau Bang Expansion IP, Binh Duong Province
- ❑ **Capacity:** 200,000 tons milks/year
- ❑ **Project period:** Aug/2022 – May/2023
- ❑ **Scope of Work:** Construction Management
- ❑ **Project Description:** Main Item of Project including
 - Production building and warehouse building include Cold storage warehouse for milk, warehouse for raw material, Office Building.
 - Utility system including chiller systems & Cooling towers; compressed air systems + nitrogen; Fire fighting systems; boiler systems; water treatment systems; wastewater treatment systems, ELV System...
 - Other Facility including Road & Drainage System, Parking; weighing stations, Guard house, Fence.....



**EXPERIENCES
AND
CLIENTS**



**CHEMICAL &
PETROCHEMICAL**

PROJECT EXPERIENCES

- ❑ **Client:** SeAH M&S Vietnam Limited
- ❑ **Project Name :** SeAH M&S Vietnam Plant
- ❑ **Location:** Lot F4, Phu My 3 Specialized Industrial Park, Phuoc Hoa Ward, Phu My Town, Ba Ria Vung Tau Province,
- ❑ **Project period: Basic Design:** May/2023 to Apr/2024 & **EPC:** Oct/2024 to Aug/2025
- ❑ **Role of TVC:** Main Contractor
- ❑ **Scope of Work:** Basic Design & EPC
- ❑ **Project Description:**
 - SeAH M&S is a producer of Molybdenum product in Korea, SeAH M&S Vietnam plans to build a similar plant to produce the Molybdenum Oxide Powder (Phase 1) and Ferro Alloy-Phase 2 (Ferro Molybdenum). The Project comprises the 03 main processes unit (Leaching process, Roasting process and Ferro Molybdenum process) to produce Ferro Molybdenum and Molybdenum Oxide and Wet gas Sulfuric Acid (WSA). TTCL Viet Nam is EPC Contractor to executive Phase 1 of Project main items include : FeMo Area, FeMo Crushing, Slag storage, Utility (City water; Compressed air; Boiler & steam system; Demin. Water; Demin. Water...), Other infrastructure of plant (Building, Warehouse, Truck scale, Firefighting system, Piperack, Pipe bridge; Fence & Gate....)
 - The capacity of the project:
 - Molybdenum High Cu Concentration Leaching Process Unit (Capacity 20Mil Lb Mo/Year). Molybdenum Low Cu Concentration Roasting Process Unit (Capacity 20Mil Lb Mo/Year). Ferro Molybdenum Process (Capacity 15,000MT/Year).



PROJECT EXPERIENCES

Project Name	Stavian VP Chlorine Plant
Client	Stavian VP Tay Ninh Joint Stock Company
Location	Lot B10.2, Thanh Thanh Cong Industrial Zone, An Hoa Ward, Trang Bang Town, Tay Ninh Province, Vietnam
Project period	Mar'2025 – Oct'2025 (8 months)
Description	The plant will manufacture key products such as hydrogen peroxide, liquid caustic soda, calcium hypochlorite, and other by-products
Capacity	N/A
Scope	F/S – Basic Design & FEED Design including +/-10% cost estimation
Process Licensor	N/A



PROJECT EXPERIENCES

❑ **Client:** AGC Chemicals Vietnam Co., Ltd. (ACVN)

❑ **Project Name:** Bulk Delivery System Project

❑ **Location:**, Cai Mep Industrial Park, Phuoc Hoa Ward, Phu My Town, Ba Ria Vung Tau Province,

❑ **Project period:** Dec/2019 – Oct/2020

❑ **Role of TVC:** Main Contractor

❑ **Scope of Work:** EPC

❑ **Project Description:**

Engineering, Procurement and Construction for PVC Powder Delivery System included:

- Pneumatic Conveying system
- Big Silo with capacity 200 tons
- Truck Loading system for PVC Powder included: Rotary Valve, Telescopic Loader, Return hopper
- PLC system, and modification the DCS system
- Electrical system included: Lighting system, Power supplied system tie-in with existing system, Grounding System with modify and tie-in in existing grounding loop
- Utilities system: Cooling water, Instrument Air and Plant Air, tie-in with existing system
- Structure for Big Silo Support (43 m height)
- Foundation for structure and Silo
- Modification the Road & Paving, drainage system, ...



PROJECT EXPERIENCES

- ❑ **Client:** PetroVietnam Fertilizer and Chemicals Corp
- ❑ **Project Name:** UFC85/ Formaldehyde Plant Project
- ❑ **Location:** Phu My 1 IZ, Ba Ria - Vung Tau Province, VietNam
- ❑ **Capacity:** UFC85 15,000 Ton/Year or Formaldehyde 37% 25,000 Ton/Year
- ❑ **Project period:** Apr/2014 – Nov/2015
- ❑ **Role of TVC:** Main Contractor
- ❑ **Scope of work:** EPC
- ❑ **Project Description:**
 - Main Process System: Reactor, Heat exchanger, Absorbed tower, O2 Loading arm with capacity 20 tons/hr...
 - Utilities, facilities system include: Tank Farm Area for Methanol Storage (760 m3) and Formaldehyde storage (1,176 m3),, piping system, steam system, water supply, instrument air and plant air with tie-in from existing Phu My Fertilizer, new cooling tower and cooling water distribution system, waste water treatment system which using the biological technology, Fire fighting system, Grounding, lightning protection system, fire alarm system, radio system....
 - Other infrastructure of plant such as Steel structure for process building, pipe rack, pipe bridge, operation platform, foundation, drainage system, Road, paving, fence, gate and landscape system



PROJECT EXPERIENCES

- ❑ **Client:** Jotun Paints Vietnam Co., Ltd
- ❑ **Project Name:** Jotun Greenfield Project
- ❑ **Location:** Hiep Phuoc Industrial Zone, Ho Chi Minh City
- ❑ **Area:** 10 ha, Construction area: 35,816 m²
- ❑ **Capacity:** Water - based paint: 85 million liters per year
Powder coating: 10,000 tons per year
- ❑ **Project period:** Apr/ 2018 – Apr/ 2021
- ❑ **Scope of Work:** EPCm
- ❑ **Project Description:**
 - **Main items include:** Water Based paint factory, Powder Factory, water based tank farm, slurry tanks, raw material warehouse, Finish Good warehouse, Canteen/Office, Maintenance house, utility area and other infrastructure such as road, paving, fence and gate, drainage system..
 - **Utility system include:** Heating, ventilation and Air conditioning included the dust collection and vacuum cleaner for Powder factory, Water Treatment system, Waste treatment system, Nitrogen Generator, Natural gas, Compressed Air, Chiller, Electrical Power supplied system included 22kV system, HV Power system, LV power supplied system, UPS, Earthing and lightning system, ELV System included lighting, CCTV, access control, Paging system, SCADA, PLS, HMI and Instrument/bus, Fire fighting system included automatic foam system, fire alarm system; Photo voltaic systems/ Solar Systems.
 - **Special Requirement:** LEED Gold revision 4, 3D model Autodesk Revit, Building information modelling Level LOD300 (BIM)



PROJECT EXPERIENCES

- ❑ **Client:** Becker Industrial Coatings (Vietnam) Co., Ltd
- ❑ **Project Name:** Becker New Factory Project
- ❑ **Location:** Dong An Industrial Park, Thuan An City, Binh Duong Province
- ❑ **Area:** 2,5 ha, Construction area: 12,919 m²
- ❑ **Capacity:** Solvent based paints: 18,000 Ton/Year
- ❑ **Project period:** Jun/2021 – Aug/2021
- ❑ **Scope of Work:** Basic design and Cost estimation $\pm 10\%$

- ❑ **Project Description:**

Solvent Based paint factory with integrated: Laboratory & Production office, Solvent and Resin tank farm, Powder Storage, raw material warehouse, Finish Good warehouse, Office, Maintenance & Spare part , Utility area and other infrastructure such as road, paving, fence and gate, drainage system

Utility System include: Heating, ventilation and Air conditioning included the dust collection and VOC treatment for Solvent Based factory, Waste treatment system, Nitrogen Generator, Chilled water system, Compressed Air, Electrical Power supplied system included 22kV system, HV Power system, LV power supplied system, UPS, Earthing and lightning system, ELV System included lighting, CCTV, LAN/Telecommunication system, PLC Control and Fire fighting system included automatic foam system, fire alarm system



PROJECT EXPERIENCES

❑ **Client:** ICI Paints Vietnam (Holdings) Pte Ltd.

❑ **Project Name:** ICI Emulsion & Solvent Paint Factory Project

❑ **Location:** My Phuoc 2 Industrial Zone, Binh Duong Province, Vietnam

❑ **Project period:** Nov/2005 – Sep/2007

❑ **Scope of Work:** EPCM

❑ **Project Description:**

- **Main Item include:** Waterborne production building, Solvent borne building, bulk liquid storage, Amenities building, office building, containment pond, unloading area...and infrastructure such as road & paving, fence gate, guardhouse, parking area, drainage system
- **Emulsion and Solvent born process equipment**
- **Utility System include:** Heating, ventilation and Air conditioning included the solvent vapor collection for SB factory, Dust collection for Powder factory, Water Treatment system, Waste treatment system, Open Vent, Compressed Air, cooling system, Electrical Power supplied system included 22kV system, HV Power system, LV power supplied system, UPS, Earthing and lightning system, ELV System included lighting, telephone system, Fire fighting system included automatic foam system, fire alarm system



PROJECT EXPERIENCES

- ❑ **Client:** A&A Green Phoenix Group Joint Stock Company (PHENIKAA)/ Japan Chemical Engineering & Machinery Vietnam (JCEM)
- ❑ **Project Name:** PEKN Resin Manufacture Factory Plant Project
- ❑ **Location:** Hoa Lac High Industrial Zone, Thach That, Ha Noi
- ❑ **Project period:** Jan/2019 – Oct/2019
- ❑ **Capacity:** 25,000 tons/year, Reactor: 30 tons/batch
- ❑ **Scope of Work:** EP&Cm
- ❑ **Project Description:**

The Owner investment in UV resistible and weather durable Polyeste plant in producing artificial quartz stone and other composite materials.

Scope of work of TVC will be Detail Technical design, Construction drawing detail design for whole process area of resin manufacture factory included process engineering, Instrumentation engineering, mechanical and machinery Engineering, electrical engineering, piping and layout engineering, steel structure for pipe rack, pipe bridge, operation platform

Additional, provide Procurement service & Construction and installation management for the key equipment included: reactor, heat exchanger, raw material storage tank and product storage tank, field instrument, control valve, on-off valve, MCCs and DCS system and Support test run and factory handover.



PROJECT EXPERIENCES

❑ **Client:** Huntsman Singapore Pte. Ltd/ Huntsman Vietnam Co., Ltd

❑ **Project Name:** Huntsman Vip Project

❑ **Location:** Amata Industrial Zone, Dong Nai

❑ **Project period:** Jul/2017 – Jun/2018

❑ **Capacity:** 8,100 tons/year

❑ **Scope of Work:** EPCm

❑ **Project Description:**

Scope of work of TVC will be Detailed Engineering, Procurement and Construction Management for Polyol & Admat plastic factory include: Process and Utilities system (4m3 reactor) and utilities (compressed air, supply water, hot oil boiler and heating system), HVAC system, FFT System, Piping including pipe supports, platform/ Foundation for equipment...

Additional, TVC provide Procurement service, Permitting document preparation (fire fighting permit, design verification and construction permit application and provide whatever engineering related information to the EIA permit) & Construction management.



PROJECT EXPERIENCES

❑ **Client:** Jotun Paints Vietnam Co., Ltd

❑ **Project Name:** New Emulsion Binder (VAE) Project

❑ **Location:** Song Than 1 Industrial Zone, Di An, Binh Duong Vietnam

❑ **Project period:** Jan/2019 – Jun/2019

❑ **Scope of Work:** E&Cm

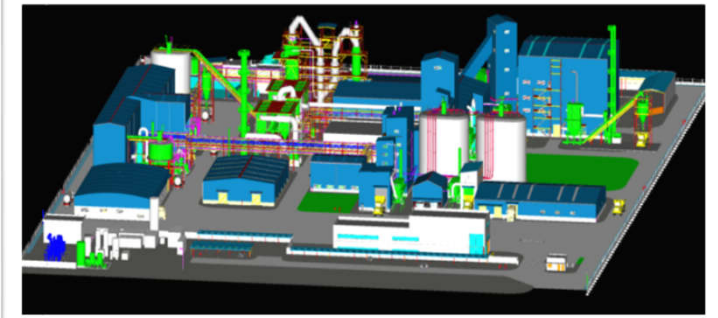
❑ **Project Description:**

- New tank 60m3 to store new kind of Emulsion (this tank will be converted to store SB in future)
- New unloading/ loading pumps with filters
- New piping connect to mixer: 221/222/224/225/226/227 and manual station
- Modify PLC/SCADA program
- Electrical Supplied for Pump

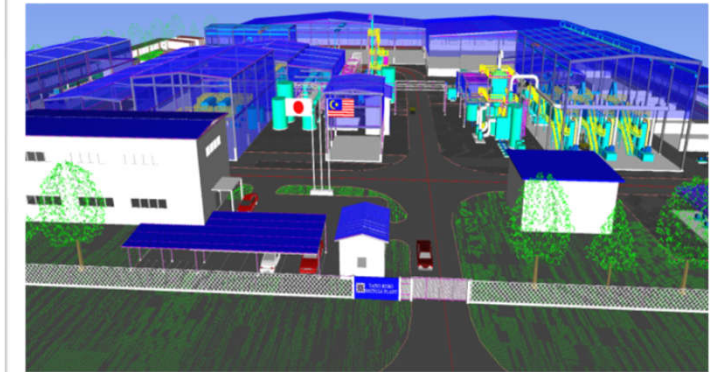


PROJECT EXPERIENCES

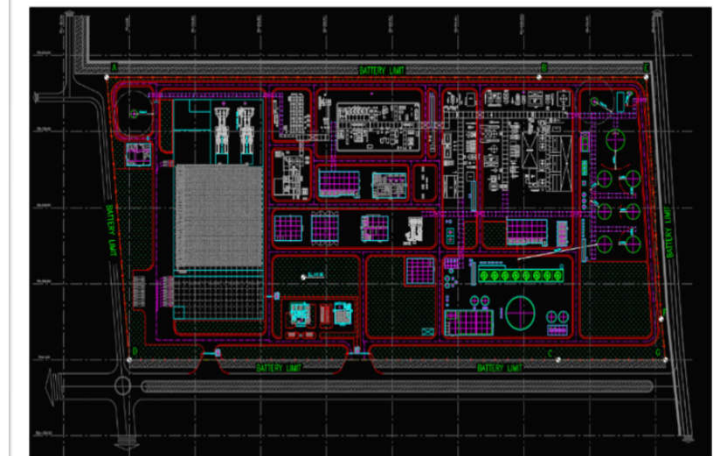
Project Name	SPANISH FULL CYCLE ZINC OXIDE PROJECT
Client	Zinc Resources Ltd. (ZINCOX,UK)
Location	Port of Castellon, Western of Spain
Project period	Nov'2018 – May'2019
Description	Basic engineering design, material take off, 3D modeling for Zinc oxide recycling plant from Electrical Arc Furnaces Dust
Capacity	100.000 TPY (EAFD)
Scope	Basic Engineering
Process Licensor	Zinc Resources Ltd. (ZINCOX,UK)



Project Name	TAIYO KOKO RECYCLE PLANT PROJECT
Client	Toyo Engineering & Construction Sdn Bhd./ Taiyo Koko Company LTD
Location	Nghi Son, Thanh Hoa Province, Vietnam
Project period	Mar'2016 - May'2016 (3 months)
Description	Feed of Vanadium & Molybdenum recovery plan from de – 50x spent catalyst.
Capacity	Treating capacity 7000 T/Y
Scope	FEED
Process Licensor	Taiyo Koko Company LTD



Project Name	THE PDH – Polypropylene Plant Project
Client	Stavian Quang Yen Petrochemical JSC
Location	Tien Phong Industry Zone, Quang Ninh Province.
Project period	Oct '2021 – Jun '2022 (09 months)
Description	N/A
Capacity	600,000 MTPY
Scope	Detail -FS



PROJECT EXPERIENCES

Project Name

HOT DE – MINERALIZED WATER CHARGE SYSTEM PROJECT

Client

AGC Chemical Vietnam Co., Ltd

Location

Ba Ria - Vung Tau Province, Viet Nam.

Project period

Nov'2015 - Apr'2016 (05 months)

Description

Engineering and construction of Hot Demineralized Water Charge System to increase capacity of the factory from 100,000 TPY to 152,000 TPY.

Capacity

As above

Scope

EPC Lump Sum



Project Name

VIETNAM RECYCLING PLANT PROJECT

Client

Zinc Oxide Corporation VN

Location

Phu My 3 IZ, Ba Ria Vung Tau Province, Vietnam

Project period

May'2017 - Jul'2017 (02 months)

Description

Basic design for the project of recycling plant to recover zinc and iron from the waste dust collected from the gas cleaning systems of Electric Arc Furnaces of steel mills

Capacity

100.000 TPY (EAFD)

Scope

Basic Engineering

Process Licensor

Zincox Resources Ltd. (ZINCOX,UK)



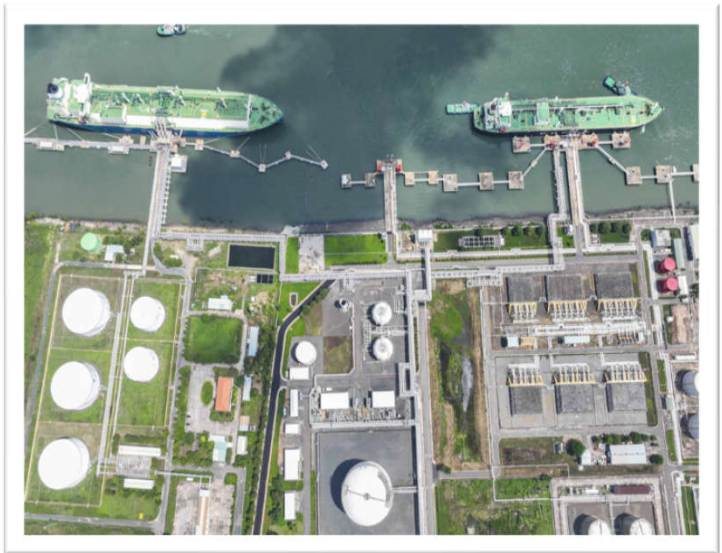
EXPERIENCES AND CLIENTS



OIL & GAS

PROJECT EXPERIENCES

- ❑ **Client:** Petrovietnam Gas Corporation (PV Gas)
- ❑ **Project Name:** Thi Vai LNG Terminal Expansion Project
- ❑ **Location:** Cai Mep Industrial Zone, Ba Ria – Vung Tau Province, Vietnam
- ❑ **Capacity:** 1 LNG tank with a capacity of 200,000 m³;
- ❑ **Project period:** Aug/2025 – Dec/2025
- ❑ **Scope of work:** FEED Design and Cost Estimation Prepare the EPC Invitation to Bid (ITB)
- ❑ **Project Description:**
 - Project purposed is increase the total natural gas send – out capacity of terminal up to 3 MMTPA (including capacity of existing Thi Vai LNG 1 MMTPA)
 - Standard requirement: Building Information Modelling (BIM)
 - One (01) LNG storage tank and its associated facilities including: LP LNG pumps; HP LNG pumps; Ship loading pumps; Vaporization facilities; BOG treatment facilities; Metering facilities; Flaring and venting facilities; River water intake and discharge facilities; Interconnecting piping;
 - Utility facilities like electrical system, control system, air compressors, nitrogen generation package, control room, generator house, roads, fence, gates etc.; Firefighting system.



PROJECT EXPERIENCES

❑ **Client:** Denko Petrochemical Management Company

❑ **Project Name:** Shwe Lin Pan (slp) Depot project

❑ **Location:** Shwe Lin Pan - Yangon, Myanmar

❑ **Capacity:** 5,000 m3 (05 tanks)

❑ **Project period:** Jan/2020 – Jan/2021

❑ **Role of TVC:** Main Contractor

❑ **Scope of work:** EPC

❑ **Project Description:**

- Main Process System : Terminal Area (05 tanks), Unloading system from Jetty to Terminal and Barge loading from terminal to ship, Truck loading area & Diesel Drum filling , Additive injection and Dye coloring System.
- Utilities, facilities system include: compressed air, water supply, oily water collection and treatment, instrumentation system included the SCADA, PLC, ESD system, fire and gas system, tank gauging system, Metering skid and Batch control, field instrument, Electrical system included: Medium voltage system (33kV), Transformer, LV Switchgear, MCC, Distribution panel, UPS, Diesel Generator, ...LV System: Lighting system, Grounding and Lightning system, Telecommunication, LAN, CCTV, Pagging System, Fire fighting system and Fire Alarm
- Other infrastructure of terminal such as tank foundation, underground water pond, pipe rack and pipe bridge, road & paving, drainage system, fence and gate...



PROJECT EXPERIENCES

- ❑ **Client:** Total Vietnam Limited
- ❑ **Project Name:** LPG System Upgrade Project
- ❑ **Location:** Go Dau Industrial Zone, Dong Nai Province, Vietnam
- ❑ **Capacity:** sphere tank 1 x 4060 m³, pressure tanks 11 x 225m³ and 1 x 250 m³ bullet tanks
- ❑ **Project period:** Apr/2017 – Jan/2018
- ❑ **Scope of work:** Update Basic Design with same level of detail as FEED
- ❑ **Project Description:**
 - Upgrading the LPG terminal project, plant capacity included: 1 x 4060 m³ (sphere tank) and 11 x 225m³ & 1 x 250 m³ bullet tanks
 - Utility system such as Compressed Air Supply, Instrumentation equipment on LPG tank, Gas and fire detectors, Paging system and emergency stop, Electrical system, Grounding and lightning protection
 - In addition, other works related to the LPG truck loading/unloading system and LPG bottling system were also carried out.



PROJECT EXPERIENCES

- ❑ **Client:** PetroVietnam Gas JSC (PV Gas)
- ❑ **Project Name:** LPG Storage Re - Arrangement Project
- ❑ **Location:** Cai Mep IZ, Ba Ria – Vung Tau Province
- ❑ **Capacity:** 3 spherical tank with the capacity 2,000m³/ tank
- ❑ **Project period:** Jan/2020 – Jul/2021
- ❑ **Scope of work:** Soil investigation, basic design and cost estimation
- ❑ **Project Description:**

- Construction of 3 LPG spherical storage tanks to replace and decommission the 33 existing bullet tanks and its associated facilities including: Marine Loading System; Truck Loading System; Cooling water System; LPG Vapor Return Compressor System; Flare system
- Utilities included Instrument Air System, Nitrogen System, Service Water System; Fire fighting system, Fire Alarm System, Fire and Gas Detection; Electrical System: Power Supplied System, Lighting System, Lightning and Grounding System, CCTV System
- Tank foundation, steel structure support and other infrastructure and civil work.

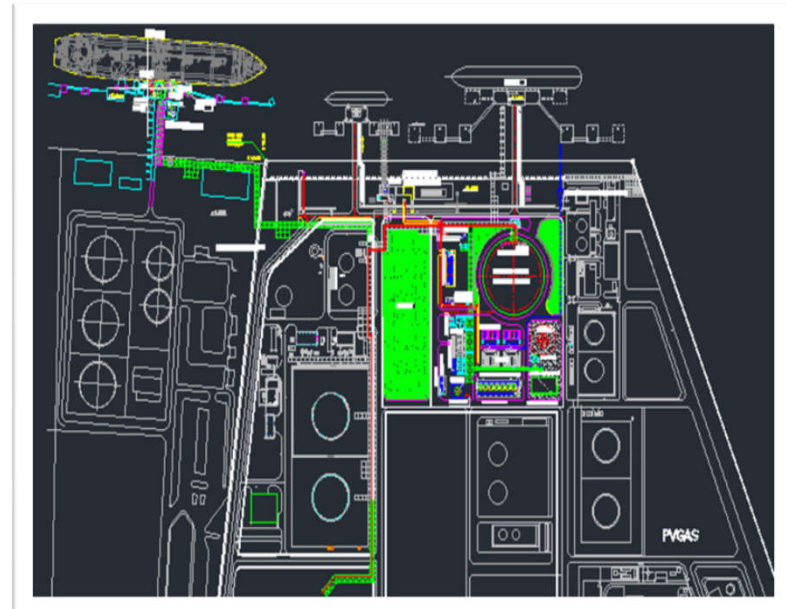


PROJECT EXPERIENCES

Project Name	PRESSURE REMOVAL STATION OF THI VAI PROJECT
Client	PetroVietnam Gas JSC (PV Gas)
Location	Cai Mep IZ - Ba Ria – Vung Tau Province, Vietnam
Project period	12 month (Apr/2022 – Jan/2023)
Description	Reduce the outlet pressure of the supply gas pipeline for industrial customers.
Capacity	50.000Sm3/h
Scope	EPC Turnkey



Project Name	THI VAI LNG RECEIVING TERMINAL EXPANSION PROJECT
Client	PetroVietnam Gas JSC (PV Gas)
Location	Cai Mep IZ, Ba Ria – Vung Tau Province, Vietnam
Project period	Oct/2020 – Mar/2021 (6 months)
Description	200,000 m ³ LNG storage tank Increase the gas send-out capacity of Terminal to 3 MMTPA
Capacity	As above
Scope	Basic Design and Cost Estimation Prepare the EPC Invitation to Bid (ITB)



PROJECT EXPERIENCES

- ❑ **Client:** Orient Bio – Fuels Company Limited
- ❑ **Project Name:** Binh Phuoc Ethanol Plant
- ❑ **Location:** Hamlet 8, Minh Hung Commune, Bu dang Dist., Binh Phuoc
- ❑ **Capacity:** 300,000 little/day Bio-Ethanol
- ❑ **Project period:** Oct/2010 to Feb/2012
- ❑ **Role of TVC:** Member of Consortium with TTCL Public Company Limited & Petrovietnam Engineering Consultancy Joint Stock Company
- ❑ **Scope of work:** EPC
- ❑ **Project Description:**



- **Main Process System:** Slurry preparation system, Liquefaction system, Batch fermentation system; CIP cleaning system including portable module, Distillation – Rectification system, Dehydration system, Decantation system.
- **Main Building of Project:** Administration Building, Main production Building, Boiler House (Boiler, Steam, Boiler Feed Water), Milling House, Ethanol Loading Station, Laboratory, Catalyst/Chemical/Enzyme/ Yeast Warehouse,,, Ethanol plant tankage (Intermediate and product tanks)...Wood Chip Warehouse, Electrical Station, MCC & Control Room,
- **Utilities, facilities system include:** Biomass Boiler system and steam distribution, Water treatment system, Waste water collection system, Waste water treatment system, Cooling Tower, Air Compressor, Instrument System, Electrical & Telecommunication System include lighting, lightning and cathodic protection system, FFT System & Fixed foam system , Fire Alarm System, Gas Detection System,...
- Other infrastructure of plant such as, Roads & paving, Storm Water Drains, Garage, Canteen & Kitchen, Piperack, Pipe tracks , Fence and Security system, Workshop, Weight Bridge.....

PROJECT EXPERIENCES

Project Name	LONG SON – NEW AIR SEPRATION PLANT PROJECT
Client	Vietnam Japan Gas Joint Stock Company
Location	Ba Ria Vung Tau Province, Vietnam
Project period	Jul/2020 to July/2021 (12 months)
Description	Total Area: 19,368 m² Nitrogen: 12,500 Nm3/h (equivalent 135,000 tons annual) Oxygen: 8,500 Nm3/h (equivalent 105,000 tons annual) Argon: 280 Nm3/h Nm3/h (equivalent 4,300 tons annual).
Capacity	As above
Scope	EPC



EXPERIENCES AND CLIENTS



BIO – RENEWABLE ENERGY

PROJECT EXPERIENCES

Project Name	TRA VINH GREEN HYDRO PLANT PROJECT
Client	The Green Solutions Group
Location	Dong Hai Commune, Duyen Hai District, Tra Vinh Province
Project period	2022.
Description	The large-scale project according to the “Alkaline Electrolysis” technology of ThyssenKrupp Group.
Capacity	Hydrogen generation by alkaline water electrolysis 240 MW and Ammonia Synthesis.
Scope	Detail FS & Basic Design.



Project Name	BLACK PELLET PILOT PLANT PROJECT
Client	Ha Tien Energy Corporation (“HATIECO”)
Location	Lot A2, Hoai Tan IC, Hoai Nhon Dist, Binh Dinh Province, Vietnam
Project period	Jun’2020 – Sep’2020 (3 months)
Description	Addition of a torrefaction unit to transform white pellet of existing production plant into black pellet, the best biomass fuel for co-firing. And send back hot flue gas in the process to the existing wood chip dryer for heat recovery.
Capacity	15,000 ton/year Black Pellet Product
Scope	EPC
Features	Biomass thermal upgrading technology by Direct Torrefaction Rotary Reactor. Utilize the gasified biomass from torrefaction as fuel for furnace to provide heat back to the reactor.
Process Licensor	TSI (USA)



PROJECT EXPERIENCES

Project Name	MUI NE SOLAR POWER PROJECT
Client	Duc Thanh - Mui Ne JSC
Location	Phan Thiet, Binh Thuan Province, Viet Nam.
Project period	Aug'2018 - May'2019 (09 months)
Description	Capacity of 40 MWp, total area of 36 hectares, stretching over 4 km
Capacity	As above
Scope	EPC



EXPERIENCES AND CLIENTS



FERTILIZERS

PROJECT EXPERIENCES

Project Name

UPGRADE AND SUPPLY RAW CO2 AT CAMAU FERTILIZER PLANT

Client

Petrovietnam Ca mau Fertilizer Joint Stock Company (PVCFC)
An Khanh, U Minh district, Ca Mau province, VietNam

Location

Mar'2021 – Apr'2022 (370 days)

Project period

Description

The CO2 extraction system is based on the absorption and desorption of activated MDEA fluid (BASF technology), the solvent is used for CO2 absorption is MDEA. The main system includes:

- A CO2 absorption tower, a CO2 compressor package (new).
- A CO2 separator, two flash separators and circulating pumps, heat exchangers (utilizing the existing system).

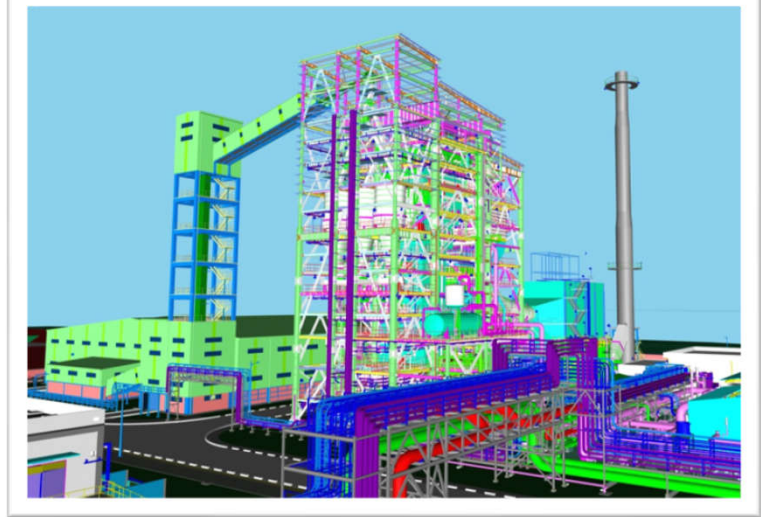
Scope Feature

Install some new equipment that can integrate with existing system to take advantage of the available utilities (MDEA solution, desorber with high pressure and low pressure, stripping column...). After install new system combine with existing system, capacity of CO2 recovery will increase 110 tons/day.

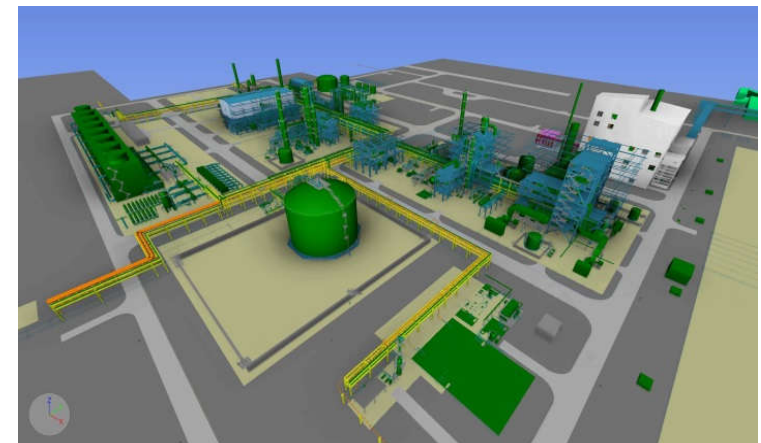


PROJECT EXPERIENCES

Project Name	ROCK SALT EXPLOITATION & PROCESSING PLANT PROJECT
Client	Vinachem/ Vilachemsalt
Location	Khammouane, Laos
Project period	Aug'2015- Nov'2018 (40 months)
Description	Potash (KCL95%) 320,000TPY NaCl(NaCl 98%) ≤ 300,000 TPY As above
Capacity	
Scope	EPC Turn – Key Lump Sum (Consortium with TTCL Public)
Process Licensor	K-UTEC AG Salt Technologies (KUTEC)



Project Name	FEED CAMAU COMPOUND NPK FERTILIZER PLANT 300KTA PROJECT
Client	PVCFC (PETROVIETNAM Ca Mau Fertilizer JSC)
Location	Ca Mau Province, Vietnam
Project period	103 calendar days from effective date
Description	300 MTPY(45.5TPH,1000TPD) for NPK grade 20-20-15 or 16-16-8, molten urea based
Capacity	As above
Scope	FEED



**EXPERIENCES
AND
CLIENTS**



**INFRASTRUCTURE
& UTILITIES**

PROJECT EXPERIENCES

Project Name
Client
Location
Project period
Description
Capacity
Scope

EUROFIN OFFICE & LABORATORY BUILDING PROJECT

Eurofins Sac Ky Hai Dang
Saigon HiTech Park, Dist 9 ,HCMC, Vietnam
Jun'2016 - Feb'2017 (09 months)
N/A
N/A
EPC



Project Name
Client
Location
Project period
Description
Capacity
Scope

BAMBOO LOBP PROJECT

Shell Vietnam
Go Dau IZ, Long Thanh, Dong Nai Province, Viet Nam.
Apr'2016 – Nov'2016 (08 months)
Re-organize and expand the current plant
As above
EPC Lump Sum



Project Name
Client
Location
Project period
Description

COLD STORAGE WAREHOUSE PROJECT

New land VJ JSC
Binh Duong Province, Vietnam
Dec'2015 - Jun'2016 (08 months)
Project total area is 23,000 m² including construction area is nearly 17,000 m²
As above
EPCM
Frozen storage -40°C, -20°C Chilled storage 0°C, 5°C with 20 import/ export dock



**EXPERIENCES
AND
CLIENTS**

**TURNAROUND
SERVICES**

PROJECT EXPERIENCES

Project Name	3rd Turnaround Project
Client	AGC Chemicals Vietnam Co., Ltd
Location	Cai Mep IZ, Ba Ria Vung Tau Province, Vietnam
Project period	Oct'2014 - Dec'2014 (03 months)
Description	Mechanical, Electrical, Instrumentation and associated turnaround works
Capacity	As above
Scope	Turnaround Service



Project Name	NPK Fertilizer Granulator Renewal Project
Client	Japan Vietnam Fertilizer Company
Location	Go Dau IZ, Dong Nai Province, Viet Nam.
Project period	Aug'2016 - Nov'2017 (16 months)
Description	Replace the M122 granulator
Capacity	Keeping factory capacity of 350000 TPY
Scope	Turnaround Service



PROJECT EXPERIENCES

Name of Owner (Client)	Location	Project Description	Service	Year
A. CHEMICAL & PETROCHEMICAL				
SeAH M&S Vietnam Company Limited	Phu My 3 SIP – Ba Ria – Vung Tau	SEAH M&S's Viet Nam Plant Project	E.P.C	2023 -2024
PV Chem	Nghi Son Economic Zone – Thanh Hoa	PET Plant Project	E	2023
Stavian Chemical Joint Stock Company	Nam Dinh Vu Industrial Zone, Hai Phong	Polystyrenic plastics Plant Project	E	2023
Surint Omya (Vietnam) Company Limited	Bai Ba - Dong Thanh Industrial Cluster, Thanh Ba district, Phu Tho Province,	Phu Tho Calcium Carbonate Plant Project	E	2021-2022
STAVIAN Quang Yen Petrochemical Joint Stock Company	Lot CN25, Bac Tien Phong Industrial Zone, Tien Phong Commune, Quang Yen Town, Quang Ninh Province, Viet Nam	The PDH – PP Plant Project	FS	2021
Becker Industrial Coatings (VietNam)	Binh Duong Province, Vietnam	Becker New Factory Project	E	2021
Nghi Son Refinery And Petrochemical Limited Liability Company	Nghi Son Economic Zone, Hai Yen Commune, Nghi Son District, Thanh Hoa Province, Vietnam.	Biological Pond System Project	E.P.C	2021-2022
Accredo Asia Phase 2 Project	VSip II-A, Tan Uyen Town, Binh Duong Province, Vietnam	Accredo Asia Phase 2 Project	E, Permitting	2020
TTCL Public Company Limited / Long Son Petrochemicals Co., Ltd.	Long Son Commune, Vung Tau, Ba Ria-Vung Tau Province, Vietnam	LLDPE Plant Project	E.P.C	2020
AGC Chemicals Vietnam Co., Ltd. (ACVN)	Cai Mep IZ, Tan Thanh District, Ba Ria – Vung Tau Province, Vietnam	Bulk Delivery System Project – Package 1	E.P.C	2019-2020
Mitsubishi Corporation (MC)	Phu My 3 SIP, Ba Ria Vung Tau, Vietnam	Mitsubishi Chlor Alkali/ VCM Complex Project	E	2019
TTCL Public Co., Ltd./ Long Son Petrochemicals Co., Ltd.	Long Son, Ba Ria – Vung Tau, Vietnam	LLDPE Plant Project	Consultant	2019
A&A Green Phoenix Group Joint Stock Company (PHENIKAA)	Hoa Lac High Industrial Zone, Thach That, Ha Noi	PEKN Resin Manufacture Factory Plant Project	EPCM	2018-2020
Zincox Resources Ltd. (ZINCOX, UK)	Port of Castellon, Western of Spain, Spain	Spanish Full Cycle Zinc Project	E	2019
Jotun Paints Vietnam Ltd.	Hiep Phuoc IZ – Nha Be District - HCMC	Jotun Vietnam – Greenfield project	EPCM	2018-2020
Dow Chemical (Rohm & Hass)	Nhon Trach IZ No.3, Dong Nai, Vietnam	Vietnam Capacity Expansion Project	E.P.C	2018

PROJECT EXPERIENCES

Name of Owner (Client)	Location	Project Description	Service	Year
Dai Ngan Son Service Trading Manufacturing Co. Ltd.	Tien Giang Province, Vietnam	Chlor Alkali plant project	EPCM	2018
Top Solvent Vietnam (Thaioil)	Dinh Vu IZ, Hai Phong, Vietnam	Haiphong Terminal Project	PMC	2017
Huntsman (Singapore) Pte Ltd.	Amata IZ, Dong Nai province	VIP Project	EPCM	2017
Zinc Oxide Corporation Vietnam J.S Ltd.	Phu My 3 Specialized IZ, Ba Ria, Vung Tau	Vietnam Recycling Plant Project	E	2017
Vietnam Lubricants & Chemicals JS (VILUBE)	Hiep Phuoc - Nha Be District, HCMC	Vilube Plant Development Project	EPCM	2017
Dow Chemical (Rohm & Hass)	Nhon Trach IZ No.3, Dong Nai, Vietnam	Dong Nai High Pressure Project	E.P.C	2016
Shell Vietnam Ltd.	Go Dau IZ, Dong Nai, Vietnam	Bamboo LOBP Project	E.P.C	2016
Toyo Engineering & Construction Sdn Bhd. / Taiyo Koko Company Limited	Nghi Son, Thanh Hoa , Vietnam	Taiyo Koko Recycle Plant Project	FEED	2016
AGC Chemicals Vietnam Co. Ltd.	Phu My IZ, Baria – Vung Tau, Vietnam	Hot Demineralized Water Charge System	E.P.C	2015
PetroVietnam Fertilizer & Chemical Corporation (PVFCCo)	Phu My IZ, Baria – Vung Tau, Vietnam	UFC85/Formaldehyde Plant project	E.P.C	2014
Vinacomin-Mining Chemical Industry Holding Co., Ltd	Thai Binh, Vietnam	200,000 TPY Ammonium Nitrate plant	E.P.C	2012
Top Solvent Vietnam	Go Dau IZ, Dong Nai, Vietnam	Top Solvent & Shell separation project	E	2012
PetroVietnam Fertilizer & Chemical Corporation (PVFCCo)	Phu My IZ, Baria – Vung Tau, Vietnam	Glyphosate Project	FS	2012
Shell Vietnam Ltd.	GoDau IZ, Dong Nai Province	VII Dissolving Unit Project	E & Consultant	2010
Exxon Mobil Vietnam Ltd.	Go Dau IZ, Dong Nai, Vietnam	Fire Water System (Piping, Pumping system and Storage Tank 1000m3)	E.P.C	2006
Shell Vietnam Ltd.	Dinh Vu IZ, Hai Phong City, Vietnam	Shell Bitumen Depot	E	2006
Shell Vietnam Ltd.	Go Dau IZ, Dong Nai, Vietnam	New Chemical Storage Tank	FEED & E	2006
ICI Paints Vietnam (Holdings) Pte. Ltd.	My Phuoc IZ, Binh Duong, Vietnam	ICI Emulsion & Solvent Paint Factory Project	EPCM	2005
Surint Omya Vietnam	Go Dau IZ, Dong Nai, Vietnam	Calcium Carbonate Powder Plant	E	2005

PROJECT EXPERIENCES

Name of Owner (Client)	Location	Project Description	Service	Year
B. OIL & GAS				
LNG Son My Terminal Limited Liability	Son My IZ, Ham Tan Dist, Binh Thuan	Son My LNG Terminal Project	E	2023
PetroVietnam Gas JSC (PV Gas)	Cai Mep IZ – BRVT – Viet Nam	Renovation Plant & Re-arrangement LPG Storage Tanks Project	E	2020
PetroVietnam Gas JSC (PV Gas)	Cai Mep IZ – BRVT – Viet Nam	Pressure Removal Station of Thi Vai Project	E.P.C	2022
PetroVietnam Gas JSC (PV Gas)	Cai Mep IZ – BRVT – Viet Nam	Thi Vai LNG Receiving Terminal Expansion Project	E	2021
Yen Hung Petrochemical Joint Stock Company	Quang Yen Town, Quang Ninh Province,	Liquid Petro Gas Storage terminal project	E.P.C	2023
Vietnam Japan Gas Joint Stock Company (VJG)	Long Son Commune, Vung Tau, Ba Ria-Vung Tau Province	Long Son- New Air Separation Plant Project. Equipment Installation & Piping Installation Work	E.P.C	2019-2020
Denko Petrochemical Management Company Limited	Shwe Lin Pan, Hlaing Thar Yar Township, Yangon, Myanmar	Shwe Lin Pan (SLP) Depot Project	E.P.C	2020
Vietnam Japan Gas Joint Stock Company (VJG)	Long Son Commune, Vung Tau, Ba Ria-Vung Tau Province	Long Son - New Air Separation Plant Project	E.P.C	2019-2020
Denko Petrochemical Management Co., Ltd.	Thilawa, Yangon, Myanmar	Denko Thilawa Oil Storage Tank Terminal Project	E.P.C	2018-2019
Total Vietnam Limited	Go Dau IZ, Dong Nai, Vietnam	LPG System Upgrading Project	E.P.C	2017
Posco Engineering Co., Ltd / Tokyo Gas Engineering Co., Ltd	Ba Ria – Vung Tau, Vietnam	PVGas Fast Track LNG Terminal FEED Project	FEED	2012
Japan Vietnam Fertilizer Company	Go Dau IZ, Dong Nai, Vietnam	Natural gas pipeline and conversion of fuel oil burners (Boiler & Furnace)	E.P.C	2010
Penjico / Van Phong Petroleum Terminal	VanPhong Bay, Nha Trang, Vietnam	Hot Oil Boiler system -Van Phong Petroleum Terminal project	E.P.C	2010
Orient Bio-Fuels Co., Ltd.	Binh Phuoc, Vietnam	300,000 little/day Bio-Ethanol plant	E.P.C	2010
PetroVietnam Gas Investment & Construction	Ca Mau, Vietnam	Train 2 for Gas Supply to Camau Fertilizer	E	2009
Orient Bio-Fuels Co., Ltd.	Binh Phuoc, Vietnam	300,000 little/day Bio-Ethanol Plant	FS	2009
PVGas-South	Dung Quat, Quang Ngai, Vietnam	Verification Dung Quat LPG terminal	E	2009
PVGas-South	Ba Ria – Vung Tau, Vietnam	Verification CNG stations	E	2009
PetroVietnam Gas Corporation	Nhon Trach, Dong Nai, Vietnam	Gas supply Train for Nhon Trach 2 Power Plant	FEED	2009

PROJECT EXPERIENCES

Name of Owner (Client)	Location	Project Description	Service	Year
Itochu /PV Gas	Baria-Vungtau, Vietnam	LPG Refrigerated Storage tanks	FS & E	2008
Saigon Gas Holdings Corporation	Cai Mep IZ, Baria-Vungtau, Vietnam	Thi Vai LPG Tank Farm project	FS & E	2007
J.P Kenny Pty Ltd. / Vietsov Petro	Ca Mau, Vietnam	PM3 – Ca Mau Gas Pipeline	E	2005
VTN-P Petrochemical JV. Co. Ltd.	Can Tho, Vietnam	Supply of pressure vessels and towers for petrochemical plant	E.P.C	2003
C. FERTILIZER				
Japan Vietnam Fertilizer Company (JVF)	Go Dau IZ, Long Thanh, Dong Nai, Vietnam	Reinforced Concrete Structure Repairing Project	E.P.C	2019
Japan Vietnam Fertilizer Company (JVF)	Go Dau IZ, Long Thanh, Dong Nai, Vietnam	Replacement of Granulator Project	E.P.C	2017
PetroVietnam Ca Mau Fertilizer Joint Stock Company	Lot D, Industrial Zone, Ngo Quyen street, Ward 1, Ca Mau City, Vietnam	FEED Design The Ca Mau Compound NPK Fertilizer plant 300KTA	FEED	2016
VINACHEM / VILACHEMSALT	Khammouane, Lao	Rock Salt Exploitation & Processing Plant	E.P.C	2015
Baconco Co. Ltd.	Phu My IZ, Baria – Vung Tau, Vietnam	100,000 TPY NPK Fertilizer	E.P.C	2013
DAP-2 VINACHEM JSC.	Lao Cai, Vietnam	330,000 TPY Diammonium Phosphate Fertilizer Plant	E.P.C	2012
Baconco Co. Ltd.	Phu My IZ, Baria – Vung Tau, Vietnam	Dust Exhaust System of NPK Fertilizer Plant	E.P.C	2008
PetroVietnam Fertilizer & Chemical Corporation (PVFCCo)	Phu My IZ, Baria – Vung Tau, Vietnam	NPK Fertilizer Plant	FS	2008
PetroVietnam Fertilizer & Chemical Corporation (PVFCCo)	Phu My IZ, Baria – Vung Tau, Vietnam	SA Fertilizer Plant	FS	2008
Japan Vietnam Fertilizer Company	Go Dau IZ, Dong Nai, Vietnam	NPK Raw Material Section extension including facility	E.P.C	2007
Japan Vietnam Fertilizer Company	Go Dau IZ, Dong Nai, Vietnam	NPK Product warehouse extension including facility	E.P.C	2006
Baconco Co. Ltd.	Phu My IZ, Baria – Vung Tau, Vietnam	Dust Exhaust System of NPK Fertilizer Plant	E.P.C	2000
Japan Vietnam Fertilizer Company	Go Dau IZ, Dong Nai, Vietnam	350,000TPY NPK Compound Fertilizer Plant	E.P.C Under TTCL group	1997

PROJECT EXPERIENCES

Name of Owner (Client)	Location	Project Description	Service	Year
D. PHARMACEUTICAL – FOOD & BEVERAGE				
DHG Pharmeceutical JSC	Tan Phu Thanh IZ, Chau Thanh, Hau Giang	New Betalactam Factory	EPC	2022 - 2023
International Dairy Products JSC	Bau Bang iZ, Dau Tieng Dist, Binh Duong	IDP Milk Factory	PMC	2022-2023
Bayer Vietnam Limited Company	Loc An IZ, Binh Son, Long Thanh, Dong Nai	Production Supply New Site Project	EPCM	2021
Phu Yen Food Technology Co., Ltd.	North East, Song Cau IZ – Phase 2, Phu Yen	Phu Yen Food Factory Complex Project	E	2020
Accredo Asia Co., Ltd.	No.28, 32 Street, Vsip II-A, Tan Binh Commune, Bac Tan Uyen Town, Binh Duong Province	Accredo Asia Phase 2 Project	E	2020
Medical Devices and Biomaterial JSC	Saigon High Tech Park, District 9, HCMC	Infrastructure Surgical Suture Project	E.P.C	2018
Medical Devices and Biomaterial JSC	Saigon High Tech Park, District 9, HCMC	Crystalline Lens Factory Project	E.P.C	2016
Amway Vietnam Company Limited	VSIP-2A , Binh Duong, Vietnam	Nutrition Food Manufacturing Plant	Design & Build	2013
United International Pharma Company Ltd.	VSIP-2, Binh Duong, Vietnam	Pharmaceutical Factory Project	Design & Build	2010
Masan Food Corporation	Tan Dong Hiep B IZ, Binh Duong, Vietnam	Chilly Sauce project	E & CM	2017
Tetra Pak Vietnam JSC	VSIP 2A, Binh Duong, Vietnam	Tetra Pak SE Asia Project	EPCM	2017
Koyu & Unitek Co., Ltd.	Bien Hoa – Dong Nai	New Chicken Meat Processing Plant Project	E.P.C	2016
Masan Phu Quoc	Phu Quoc – Kien Giang	Nam Ngu Factory Project	E & CM	2016
Coca-Cola Beverages Vietnam Company Limited	Lien Chieu District, Da Nang City, Vietnam	Coca-Cola Beverages Plant extension project	EPCM	2016
Masan Food Corporation	Tan Dong Hiep B IZ, Binh Duong, Vietnam	R&D building and Soy Sauce factory	E & CM	2016
Masan Brewery HG Company Ltd.	Hau Giang, Vietnam	Masan Brewery HG Beer Factory	PMC	2015
One More Limited (VITAL)	Pnom Penh, Cambodia	Instant Noodle Factory	E & CM	2015
Suntory PepsiCo Vietnam Beverage Co., Ltd.	Can Tho, Vietnam	Suntory PepsiCo Can Tho Distribution Center	PMC	2014
Masan Food Corporation	Tan Dong Hiep B IZ, Binh Duong, Vietnam	Masan Food factory project	E & CM	2014

PROJECT EXPERIENCES

Name of Owner (Client)	Location	Project Description	Service	Year
Unilever Vietnam	Tay Bac–Cu Chi IZ, HCMC, Vietnam	New Unilever Food Factory	PMC	2010
Masan Food Corporation	Tan Dong Hiep B IZ, Binh Duong, Vietnam	Masan Food factory complex	PMC	2010
P&G Indochina	Dong An IP, Binh Duong Province	Tanzanite Facilities and Utilities Design Project	E	2017
Kimberly-Clark Vietnam Limited	VSIP-1, Binh Duong, Vietnam	Infrastructure Expansion	EPCM	2012
Unilever Vietnam	Tay Bac–Cu Chi IZ, HCMC, Vietnam	New Homecare Liquid (Phase 1, 2, 3) and VIM Plant	E & Services	2010
Procter & Gamble Indochina	Dong An IZ, Binh Duong, Vietnam	Facility engineering projects	E	2005-2013
Procter & Gamble Co., Ltd.	Dong An IZ, Binh Duong, Vietnam	Increase capacity of Detergent Factory	E.P.C	2004
Procter & Gamble Co.Ltd	Dong An IZ, Binh Duong, Vietnam	Robinhood Project	E	1999
E. BIO – RENEWABLE ENERGY				
Idemitsu Green Energy Vietnam Limited Company (IGEV)	Hoai Nhon Town, Binh Dinh Province, Viet Nam	1 st Black Pellet Commercial Plant Construction Project	E.P.C	2021-2022
The Green Solutions Group	Dong Hai Commune, Duyen Hai District, Tra Vinh Province	Tra Vinh Green Hydro Plant Project	FEED	2022
Thang Long Energy Environment JSC	Phu Lang Ward , Que Vo Dist , Bac Ninh Province, Vietnam	Bac Ninh High-Technological Municipal Waste To Energy Plant	E.P.C	2021-2023
TTCL Group	Hoai Tan IC, Hoai Tan Com., Hoai Nhon Dist., Binh Dinh Province, Vietnam	Black Pellet Pilot Plant Project	E.P.C	2020
Solar Power Utility Company (SPUC)	Tang Nhon Phu B Ward, District 9, HCMC, Vietnam	Solar Rooftop Coats Phong Phu Project	E.P.C	2019
Duc Thanh – Mui Ne Joint Stock Company (PACIFICO)	Binh Thuan Province, Vietnam	40MWp Mui Ne Solar Power Plant Project	E.P.C	2018-2019
Phung Vinh Hung Paper JSC	LMX3 IP, Binh Chanh, HCM, Vietnam	Paper Warehouse PVH Project	EPCM	2018
F. INFRASTRUCTURE & UTILITY				
AICA Laminates Vietnam/ Soltec Vietnam Company	Nhon Trach 3 IZ, Nhon Trach District, Dong Nai Province, Vietnam	AICA Laminates Vietnam Factory Project	E.P.C	2018-2019
USG Boral Vietnam	Hiep Phuoc IZ, Nha Be Dist., HCMC	Warehouse Extention Project	E.P.C	2018

PROJECT EXPERIENCES

Name of Owner (Client)	Location	Project Description	Service	Year
Phung Vinh Hung Paper JSC	LMX3 IP, Binh Chanh, HCM, Vietnam	Paper Warehouse PVH Project	EPCM	2018
EUROFINS	Saigon High Tech Park, District 9, HCMC	New Office & Laboratory Building Project	E.P.C	2016
New Land Company Limited	Binh An IP, Di An District, Binh Duong Province, Vietnam	Warehouse Project (13,000m2 cool storage and cold storage)	EPCM	2015
ON Semiconductor Binh Duong	VSIP-1, Binh Duong, Vietnam	HVAC/Exhaust and Fire Protection Upgrade Project	E & Service	2015
Yueh Chaeng Canned Food Co.Ltd	Long An, Vietnam	Cold Storage 400 Ton	E.P.C	2003
Yueh Chaeng Canned Food Co.Ltd	Long An, Vietnam	Plant Utilities Building and Revamping	E.P.C	2003
H. TURNAROUND SERVICE				
Japan Vietnam Fertilizer Company	Go Dau IZ, Dong Nai, Vietnam	NPK Fertilizer Granulator Renewal Project	E.P.C	2016
AGC Chemicals Vietnam Co. Ltd.	Phu My IZ, Baria – Vung Tau, Vietnam	Mechanical, Electrical, Instrumentation and associated turnaround works	Turnaround	2014
Japan Vietnam Fertilizer Company	Go Dau IZ, Dong Nai, Vietnam	NPK Fertilizer Dryer Renewal Project	E.P.C	2012

E: Engineering

P: Procurement

C: Construction

FS: Feasibility Study

FEED: Front-End Engineering Design

CM: Construction Management

PMC: Project & Construction Management

EPCM: Engineering, Procurement and Construction Management

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thank
you