



**PROTON**  
ENGINEERING SIMPLIFIED

**COMPLETE SOLUTION PROVIDER  
FOR PLANT DESIGNING**

Oil prices have recovered to \$107/bbl after turning negative in April 2020.

O&G companies display less capital discipline and would focus more on the core business than on new sustainability opportunities.

O&G companies these days are more disciplined with production and capital guidance

# OIL PRICE IMPACTS AND PRESENT MARKET SITUATIONS OF OIL AND GAS INDUSTRY



Low-carbon producers and hydrocarbon stalwarts will most likely monetize this period to optimize and decarbonize their hydrocarbon operations.

A strong oil price enables investment in riskier and expensive green energy solutions, such as carbon capture, utilization, and storage (CCUS).

# TRENDS IN O & G INDUSTRY

## Challenges are

1. Production of cleaner-burning fuels
2. Plateau in demand for transportation fuels by 2030

## Crude-to-Chemicals can be solution



The future success of oil and gas companies is dependent on access to capital.



The 2022 oil and gas Merger and Acquisition outlook appears strong.

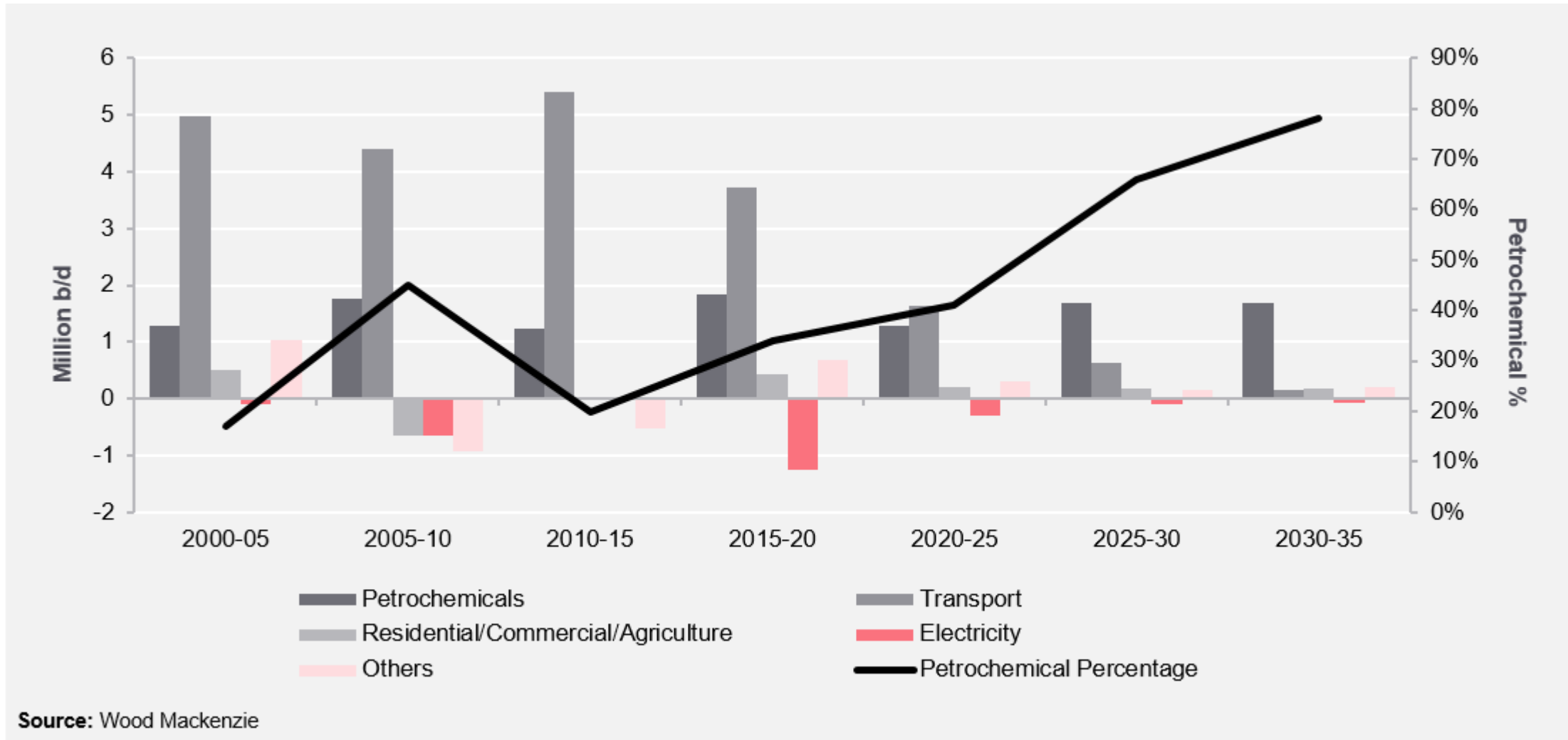


Much More oil companies will invest in renewable energy projects in each of the coming years.



# Crude Oil Demands

By Products (2000-35)



# COTC plants

2018-2025

Project	Refinery capacity (MMTPA)	P-Xylene Capacity (MMTPA)	Olefin Capacity (MMTPA)	Estimated Chemical conversion/ bbl of oil (%)	Investment (\$ billion)	Start Trial Operation
Hengli Petrochemical	20	4.3	1.5	42	11.4	2018
Zhejiang Petroleum and Chemical (ZPC) Phase 1	20	4	1.4	45	12	Est. Q2 2019
Hengyi (Brunei) PMB Refinery-Petrochem	8	1.5	0.5	>40	3.45	2019
Zhejiang Petroleum and Chemical (ZPC) Phase 2	20	4.8	1.2	50	12	2021
Shenghong refinery and Integrated Petrochem	16	2.8	1.1	60	11	2021
Aramco/SABIC JV	20	-	3	45	20	2025

# PMC ENGINEERING

## Phases of Project Management Cycle (PMC):

1. Initiation Phase: Initiation phase solutions are designed to capture your plant or facility vision.

2. Planning Phase: Our engineers, designers, and other team members harness the latest technology to provide accuracy.

3. Execution Phase: Proton pays close attention to vendor selection, bidding, purchase decision, and delivery management to ensure budget and schedule are met.

4. Termination Phase : We strives to sync with your team to ensure site safety, budget management, supplier coordination, and schedule maintenance requirements are met.



# PLANT DESIGN PHASES

1

Feasibility  
Study

2

Concept  
Development/Design

3

Pre-FEED

4

Front End Engg. &  
Design(FEED)

5

Detailed  
Engineering

6

Procurement

7

Onsite/Offsite  
Fabrication

8

Construction

9

InstErection/  
allation

10

Pre-  
commissioning

11

Commissioning

12

Production  
Start-Up

# Laser Scan to Intelligent 3D Models

**Laser scan technology is a** Non-contact, non-destructive technology. .

3D Laser scanning provides a quick, accurate and comprehensive method to collect as-built data.

The captured cloud point data, collected from the laser scanning, can be used to produce an intelligent, or non-intelligent, accurate 3D as-built CAD model

Our methodologies integrate multi-mode scan data into a single point cloud to create as-built conditions, plant sites, and more.

## Advantages



Increased efficiency



Improved speed and quality,



Accurate & Detailed data



High return on investment










# Modular Construction

**This technology** Involves prefabricating equipment and systems into modules offsite in a controlled manufacturing facility

We collaborate with our clients to assess their particular project circumstances and evaluate the merits of a modular construction strategy.

## Advantages

-  Reliable Access to Skilled Manpower
-  Shorter development schedule
-  Improved quality
-  Workers safety and comfort
-  Minimized congestion of site



# 3D MODELING



We have vast experience in conducting as-built surveys of all kinds of industrial sites, When it comes to converting the point cloud into 3D modeling.



We collaborate with our clients to assess their particular project circumstances and evaluate the merits of a modular construction strategy



Depending on site conditions, size of parts, access to area etc. We provide highest level 3D Modeling. Recommended for models which will be used for visualizations, or for very sensitive designing works.



We have developed sophisticated methods of identifying modules, developing module specification packages, auditing fabricators' design, conducting inspections and planning and coordinating transportation and installation of the modules at project sites around the world.






# SKILLED RESOURCE SOURCING

We supply **skilled resource** engineers, designers, project managers and other technical and professional personnel to leading industrial clients worldwide.

Proton employs an international pool of Mechanical Engineering, Piping Engineering, Electrical, Instrumentation Engineering and Civil & Structural Engineering

Be it a short-term project or a long term, Proton is a single-window solution for all your technical resource requirements.

## Our Strengths

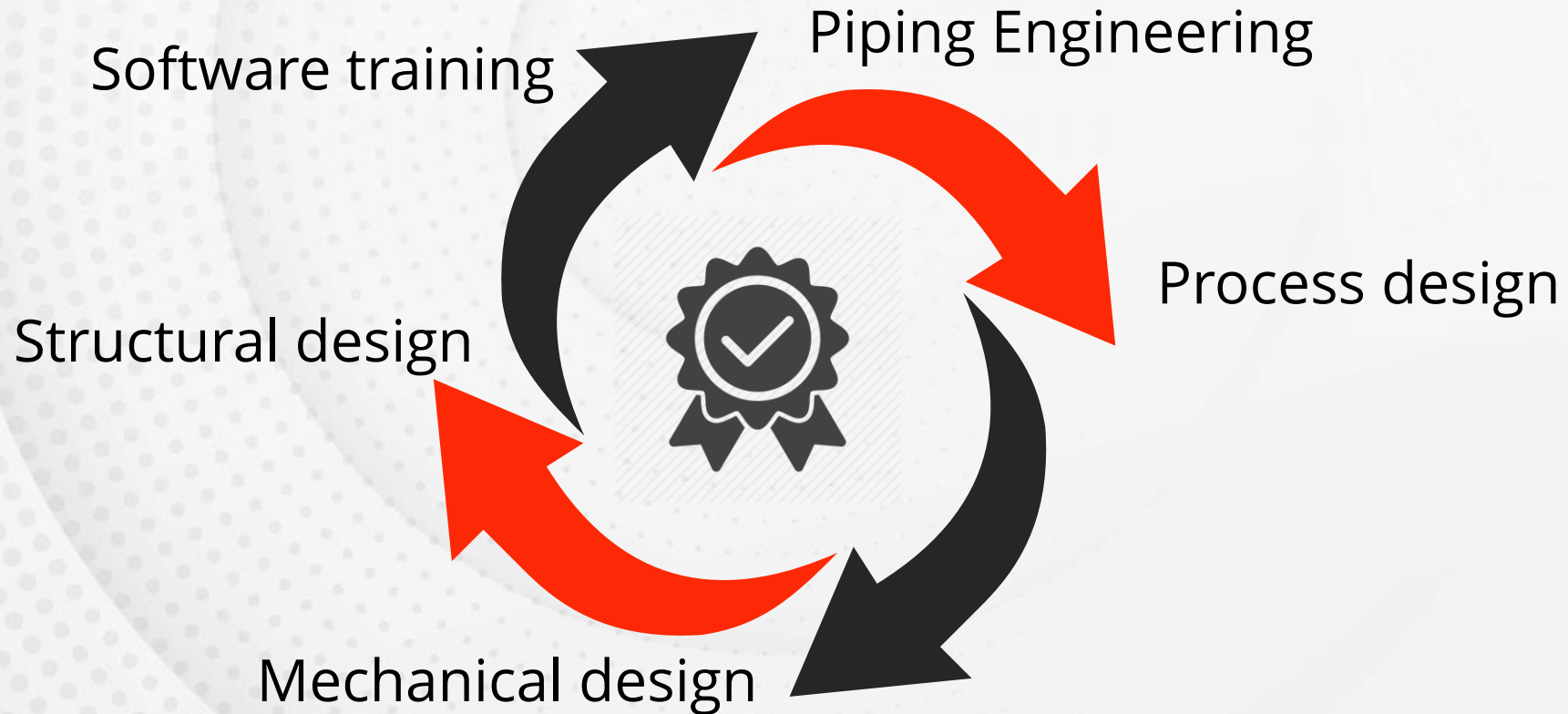
-  Strong database of experienced and skilled resources
-  Cater all industry verticals of Engineering
-  Cater all Engineering disciplines and job profiles



# CERTIFIED COURSES

A Specialized training provider that delivers first class certifications and training solutions.

We provide Certificate in realms like:



# OUR CLIENTS



**Technip**



**Worley**  
energy | chemicals | resources



**L&T Hydrocarbon  
Engineering**

**VOLTAS**



**ION EXCHANGE**  
Refreshing the Planet



Engineers India Limited

**Petrofac**

