

Sinopec Engineering (Group) Co., Ltd.

中石化炼化工程 (集团) 股份有限公司











2. SEG Competence



3. Major Domestic Experiences



4. Major Overseas

Experiences







- SINOPEC Group is one of the world largest integrated energy companies.
- SINOPEC Group is China's state-owned super large petroleum and petrochemical group.
- SINOPEC Group ranked 5^h in *Fortune Global 500* (2024) with revenue of US\$ 429 billion.

SINOPEC Group is the holding company of SINOPEC Engineering (Group) Co., Ltd. ("SEG")



SEG, headquartered in Beijing, was established in 2007 since SINOPEC reformed and restructured its engineering and construction sector, all SINOPEC's engineering and construction companies, with over 70 years' expertise and experiences, were integrated into SEG as subsidiaries. Currently SEG owns 11 domestic subsidiaries:



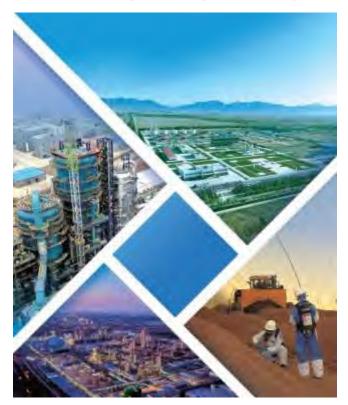




COMPANY Development Vision

COMPANY Development Strategies

Building a World-leading Technology-driven Engineering Company









Sinopec Group's Business Sectors

Oil & Gas



Refining &



Petrochemicals



Engineering & Trade and Logistics Construction Services



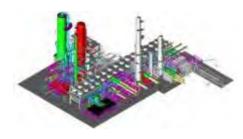
Research & **Development**



- · SINOPEC Exploration & Production Dept.
- · SINOPEC Petroleum Engineering Management Dept.
- · Sinopec International **Exploration** and Production Co.

- · SINOPEC Refining Dept.
- · SINOPEC Petrochemical Dept.
- · SINOPEC Refining and **Petrochemical Plants**

- · SINOPEC ENGINEERING (GROUP) CO., LTD. - SEG
- · SINOPEC Petroleum Service Co.



- · SINOPEC International United Petroleum & Chemical Co.
- · SINOPEC Oil / **Chemical Product** Sales Co.

- · SINOPEC Science & Technology Development Dept.
- · SINOPEC Technology Co.





Development History

☆ Harvesting from 7 decades' industry experience and continuous innovation in technology, execution and management



1950s

Recovery development nurture



1960s

Proprietary engineering capabilities



1970s

Innovation enhanced engineering



1980s

Learnt

International experience and reformed engineering system



1990s

Competing in international market and forming an international engineering company



Since the 21st century

Maintained the top position in China with high international competitiveness



2012

Reorganized into SEG; focusing on further development in global market



2013

Listed on Hong Kong Stock Exchange; entering into international capital market.

[☆] Concrete and rapid growth along with development of China's oil refining and petrochemical industry





ENR Ranking



Top 225 International Design Firms

SEG

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

99th 94th 80th 65th 59th 70th 81st 83rd 88th 109th **96th**

International



Top 250 International Contractors

SEG

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

88th 84th 75rd 53rd 55th 65th 70th 86th 90th 100th 92nd

International Overseas Revenue Only



Top 150 Global Design Firms

SEG

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

9th 36th 43rd 47th 46th 43rd 47th 38th 33rd 47th **45th**

Global



Top 250 Global Contractors

SEG

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

1st 40th 46rd 53rd 68th 50th 51st 44th 47th 55th 46th

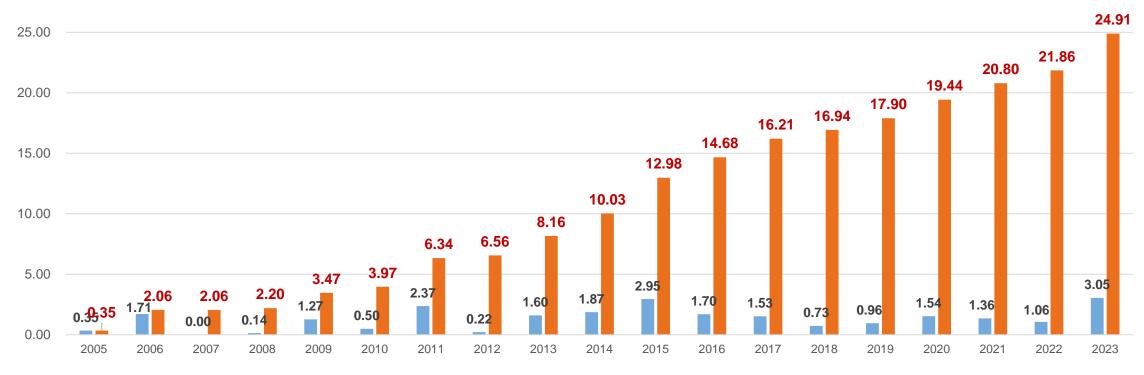
Global

Domestic + Overseas Revenue









■ Yearly Signed Int'l Contract Value (billion USD)

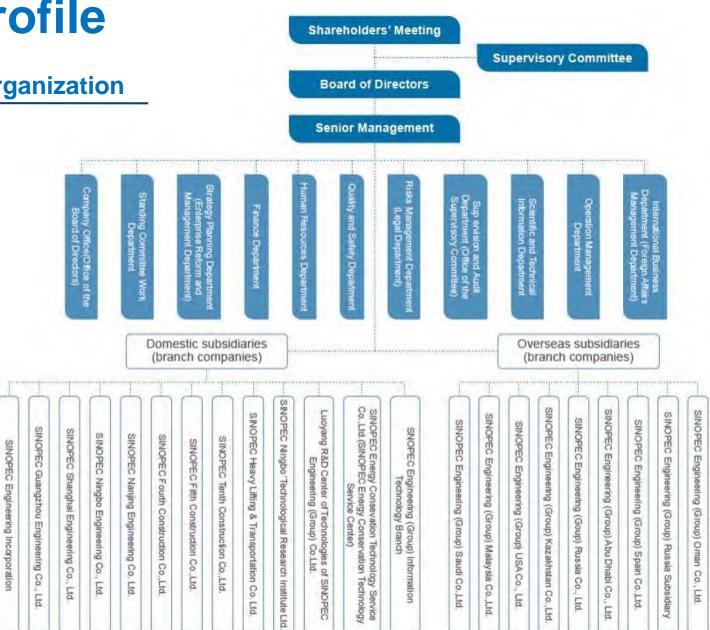
Accumulation(billion USD)

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Number of Contracts	1	4	2	9	6	17	15	10	8	9	10	30	36	26	38	37	38	55	54
Yearly Signed Int'l Contract Value (billion USD)	0.35	1.71	0.00	0.14	1.27	0.50	2.37	0.22	1.60	1.87	2.95	1.70	1.53	0.73	0.96	1.54	1.36	1.06	3.05
Accumulation (billion USD)	0.35	2.06	2.06	2.20	3.47	3.97	6.34	6.56	8.16	10.03	12.98	14.68	16.21	16.94	17.90	19.44	20.80	21.86	24.91





Company Organization





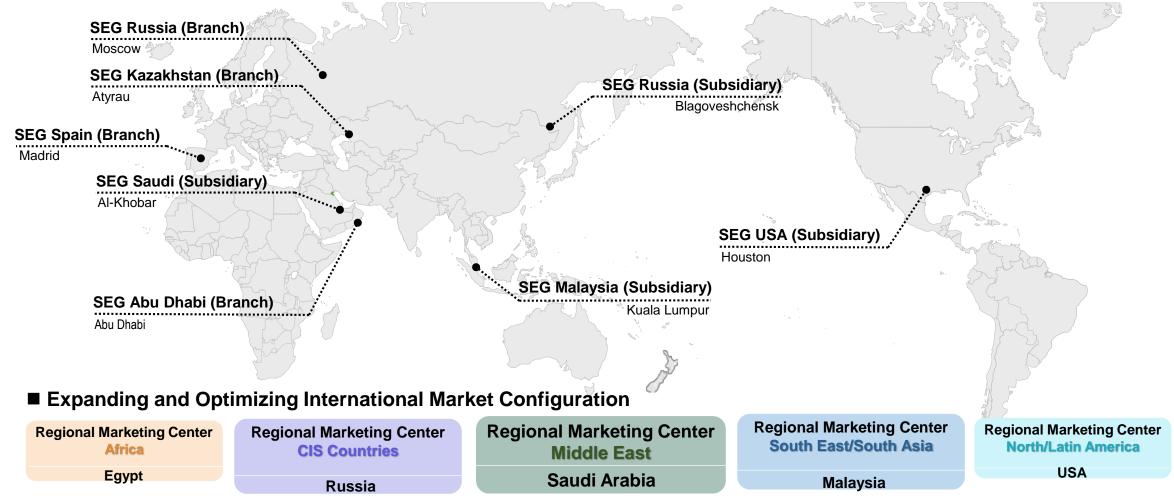




Overseas Subsidiaries/Branches



SEG has 34 overseas Subsidiaries & Branches in 15 countries, in which 8 are directly owned by SEG Head Office and 26 are owned by SEG domestic subsidiaries.







Board and Senior Management















中石化炼化工程(集团)股份有限公司 SINOPEC ENGINEERING (GROUP) CO., LTD.

SINOPEC Engineering (Group) Co., Ltd. ("SEG") represents the best engineering and construction practice in China, focusing on oil refining, petrochemical, new coal chemical, natural gas treatment/chemical and other relevant sectors. SEG own full industry chain engineering and construction capabilities, committed to providing global clients with full lifecycle services.



Reorganized in September 2012



Certified by Lloyds Register Quality Assurance



Listed on Hong Kong Stock Exchange in May 2013; Code: 2386.HK



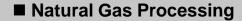
Obtained and maintained Moody's Issuer Rating A2 since December 2013

Main Business Sectors









■ Natural Gas Chemical

■ Onshore Oil & Gas Facilities



■ Tankage & Pipeline

■ Ammonia & Fertilizer

■ Utility & Infrastructure

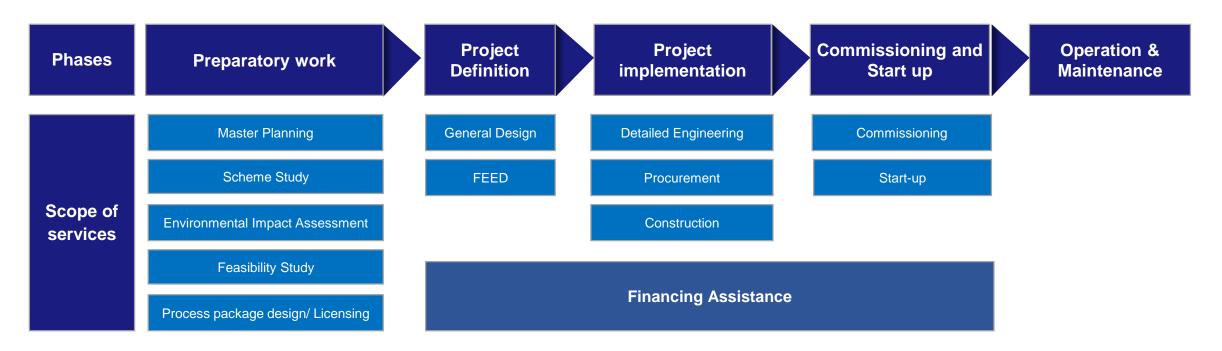






Integrated Service Chain

One-stop solution with services including consulting, licensing, FEED, EPC Contracting, financing assistance construction, commissioning, start-up, operation and maintenance, etc.







Technical Excellence









Prestige National Awards

National Award for Science & Technology Progress

Patents

Proprietary Technologies

129

3900+

596



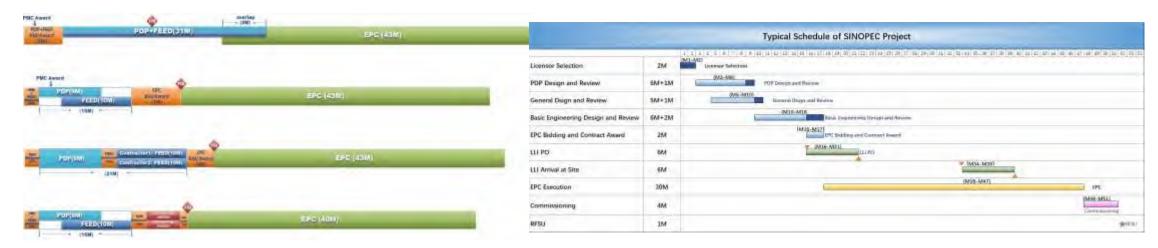
2 Chinese Academicians





Technical Competence

Strong Capability of Optimization in Engineering, Procurement and Construction schedule and efficiency













Technical Competence

Modularization

SEG has successfully implemented modular design, construction, transportation, and lifting in projects in China as well as overseas.

Example: Tianjin Nangang Ethylene Project (1.2 mtpa)

- Six large towers were successfully pre-dressed, lifted and installed in a period of only 59 days, with each tower fully equipped and illuminated.
- Asia's largest three-dimensional warehouse has successfully pre-assembled, and achieved the overall lifting and completion of polyolefin products.
- A single large loop reactor (657 tons) designed, pre-assembled, transported, and installed using an overall modular approach.









Example: Heating furnace module for projects in Middle East

■ Heating furnace is manufactured, pre-assembled and transported in an overall modular approach.

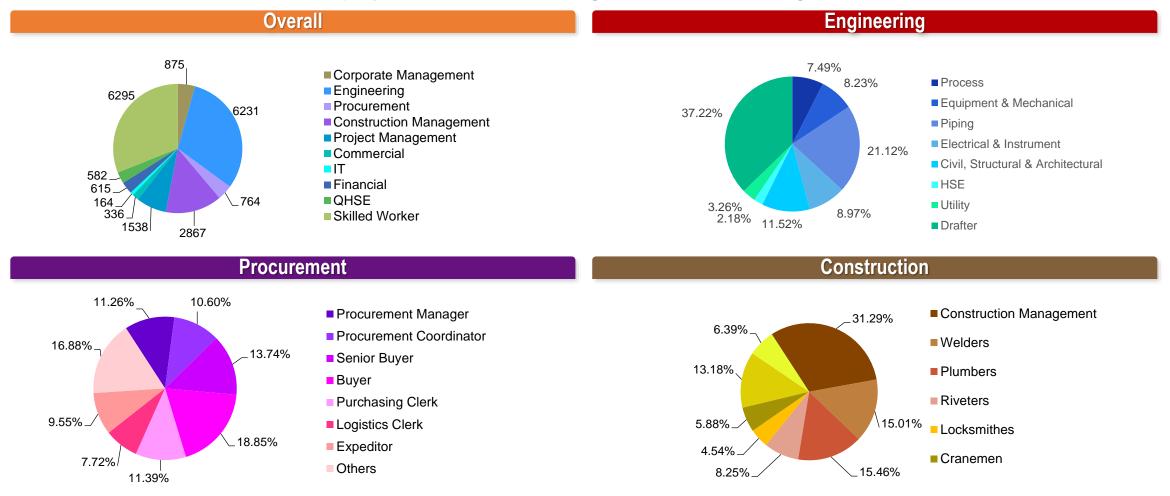






Human Resource

SEG has around 20,000 employee which can be categorized and sub-categorized as shown below:







Financing Assistance

Supported by Chinese governments' export-oriented policies, SEG can assist Clients to attain the most favorable financing or loan from Chinese ECAs/commercial banks and related financial institutions to meet Clients' requirement.

Ministry of Finance of China

Ministry of Commerce of China











Successful Financing Cases in International EPC Projects

Atyrau Refinery PX Project, Kazakhstan

Owner: KazMunaiGasContract Type: EPC

Contract value: USD 1.04 billion

- SEG assisted the client on ECA financing from China Exim Bank.
- The project includes one 1 Mt/a CCR unit, one 500 Kt/a PX unit and two auxiliary systems.
- Contract schedule: 39 Months from 2010

Atyrau Refinery Deep Oil Conversion Project, Kazakhstan

- Owner: KazMunaiGas
- Contract Type: EPC (consortium of SEG + KSS + Marubeni)
- Contract commenced on Dec., 2012, the project includes 13 process units and supporting system.
- Contract value: USD 1.68 billion
- Joint Financing from China and Japan.
- Contract schedule: 41 Months from 2012

Jumbo PTA/PET Project, USA

- Owner: M&G Resins USA LLC
- Contract Type: EPC
- Location: Corpus Christi, Texas, USA
- The project includes 1.2 Mt/a PTA and 1 Mt/a PET units and auxiliary facilities
- Contract value: USD 1.15 billion
- SEG assisted the client on ECA financing from ICBC
- Contract schedule: 36 Months starting from 2013







Representative Domestic Projects



Shenhua Direct Coal Liquefaction Project (EPCM)

World's first commercial pilot project to produce refined oil products with direct coal liquefaction units



Shenhua Erdos Indirect Coal Liquefaction (ICL) Project (EPC)

One of China's earliest pilot projects involving indirect coal liquefaction



Shenhua Baotou MTO Project

World's first commercial olefin production project that uses coal-based methanol



Yueyang Coal Gasification Plant (EPC)

World's first coal gasification project with daily processing capacity of 2,000t



Sichuan Puguang Natural Gas Purification Project (EPC)

China's first large-scale high-sulfur natural gas purification project, ranked the largest in Asia and the second-largest globally

Participated in 30 oil refining projects of 10 mtpa+ capacity in since the year 2000 in China

Undertook 15 projects with 1mtpa+ ethylene producing capacity since the year 2000 in China

Undertook China's first direct coal liquefaction facility, as well as the world's first commercial olefin production project that uses coal-based methanol

Oil refining project

Petrochemical project

New coal chemical project A Natural gas purification project



China's first single-train oil refinery with a processing capacity of 10 Mtpa



Dalian West Pacific Hydrocracking and Hydrogen Production Project (EPC)



Gold Award for National Management



Yangtze-BASF Petrochemical Project

Outstanding Award for National Project Management, 900 kta Ethylene



Shanghai SECCO 900 kta Ethylene Plant and 260 kta Acrylonitrile Plant (EPC)

Awarded "Golden Key EPC Project" for acrylonitrile plant





Zhenhai 450 Ktpa Polyethylene Project (EPC)

World's first 450 Ktpa polyethylene plant



Zhenhai 1 Mtpa Ethylene Project (EPC)

Gold Award for National Premium Project



Fujian Refining and Ethylene Complex (EPC)

First Prize in the Award for Outstanding Project Management and Outstanding EPC Contractor in Petrochemical Industry







Ex/onMobil



Single-series refinery project with the largest processing capacity in China currently

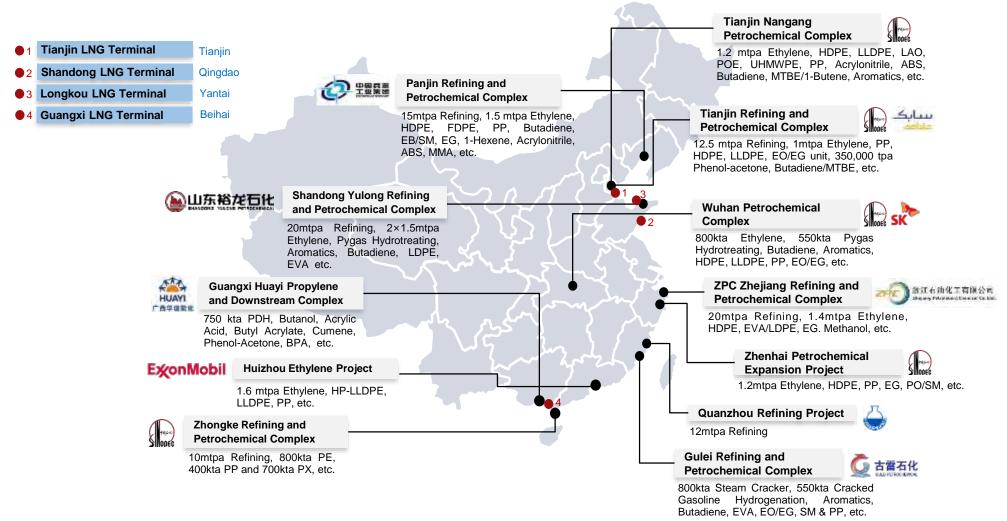








Representative Domestic Projects – Recent Years







ExxonMobil Huizhou Chemical Complex

ExxonMobil's mega investment project in China

Highlights:

- All processing units constructed by **SINOPEC** construction Companies.
- > Equipment and Materials 90% purchased in **CHINA**.
- Referred Chinses GB Standards as Design Basis.

Owner: ExxonMobil

Location: Huizhou, Guangdong Prov., China

Status: Under ConstructionContract Type: FEED+EPC

■ Contract Value: ~USD 3 billion

■ **Project Involvement:**: 1.6 MTA Ethylene, 2 x 480 KTA PP, 500 KTA LDPE, 730 + 500 KTA GPPE,

270 KTA Butadiene, etc.

ExonMobil







Huajin Fine Chemicals and Raw Materials Project

Saudi Arabia's biggest investment project in China







Owner: JV of Saudi Aramco, Norinco Group & SINCEN

■ Location: Panjin, Liaoning Province

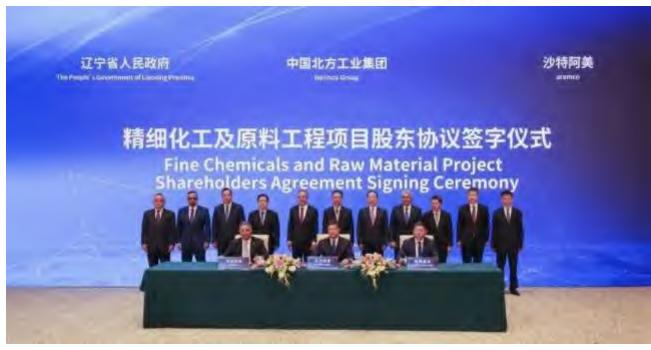
■ Status: Detailed Engineering

■ Contract Type: FEED +EPC

■ **Project Involvement:** 15 MTA CDU, 4.2 MTA

RFCC Petrochemical: 1.65 MTA Ethylene, 450 KTA

FDPE, 1 MTA C4 Unit etc.

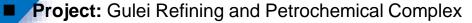






Gulei Refining and Petrochemical Complex

Landmark project that constitutes the world class green ecological petrochemical base.



Location: Zhangzhou, Fujian Prov., China

■ Client: Fujian Gulei Petrochemical Co., Ltd.

■ Contract Type: EPC

■ Total Investment: USD 4.2 bn

■ **Duration:** 2017.12 - 2020.12

Project Involvement: 800kta Steam Cracker Unit, 550kta Cracked Gasoline Hydrogenation Unit, 350kta Aromatics Extraction Unit, 140kta Butadiene Extraction Unit, 300kta EVA Unit, 100kta/700kta EO/EG Unit, 600 kta SM Unit, 350kta PP Unit, etc.











ZPC Zhejiang Zhoushan Refining and Petrochemical Complex

Landmark mega project with biggest refining (40 mta), ethylene (4.2 mta) and aromatics (11.8 mta) capacities in China.



Project: ZPC Zhejiang Zhoushan Refining and

Petrochemical Complex

■ Location: Zhoushan, Zhejiang Prov., China

Client: Zhejiang Petroleum & Chemical Co., Ltd.

■ Contract Type: EPC

■ Total Investment: USD 24.1 bn (Two Phases)

■ **Duration: Phase I:** 2016.9 - 2019.12; Phase II: On-going

Phase II: 20 mtpa Refining (CDU & VDU), 5mtpa Residue Hydrotreating Unit, 3mtpa Coking Unit, 3mtpa Light Hydrocarbon Recovery Unit, 4.2mtpa Heavy Oil Catalytic Cracking Unit, 2×4mtpa Diesel Hydrocraking Unit, 2×4mtpa Continuous Reforming Units, 3.2mtpa Naphtha Hydrotreatin Unit, 2×2.6mtpa Aromatics Units, 3.8mtpa Wax Oil Hydrotreating Unit, 1.8 mtpa S-Zorb Unit, 1.1mtpa C3/C4 Separation Unit, 300/400kta C1/C2 Separation Unit, PSA Unit, 1.4mtpa Ethylene Unit, 300kta HDPE Unit, 100/300kta EVA/LDPE Unit, 750kta EG Unit, 400kta Methanol Unit, etc.







Zhongke Refining and Petrochemical Complex

Landmark project solely invested by SINOPEC, located in Zhanjiang, Guangdong Province, energy and logistics hub in southern China.



■ **Project:** Zhongke Refining and Petrochemical Complex

Location: Zhangjiang Guangdong Prov., China

■ Client: SINOPEC

■ Contract Type: EPCC

■ Total Investment: USD 5.8 bn

■ **Duration:** 2016.4 - 2019.12

10 mtpa refinery including: CDU/VDU, CCR, Residue Hydrotreating Unit, KHU, DHU Catalytic Cracking Unit, Paraffin Oil Hydrocracking Unit, Hydrogen Production Unit and 800,000tpa of polyethylene (PE), 400,000tpa of polypropylene (PP) and an aromatics complex producing 700,000tpa PX.







Representative Domestic Projects – Refining & Petrochemical

During last 10 years, SEG successfully completed 30 projects of 10 mta+ refineries: Including:

- Hengli Petrochemical Co.: 20 mta refining in Dalian City
- Zhejiang Petrochemical Co.: 40 mta refining in Zhejiang Province
- Shenghong Petrochemical Co.: 16 mta refining in Jiangsu Province(Aramco Investment)
- Yulong Petrochemical Co.: 20 mta refining in Shandong Province (Aramco Investment)
- Huajin Petrochemical Co.: 15 mta refining in Liaoning Province (Aramco Investment)
- Sinopec Maoming: 23 mta refining in Guangdong Province
- Sinopec Zhenhai.: 27 mta refining in Zhejiang Province

. . .

During last 10 years, SEG successfully completed 15 projects of 1 mta+ ethylene complex: Including:

- China-Saudi Petrochemical Co.: 1.3 mta ethylene in Tianjin, with SABIC
- Huizhou Exxonmobil Co: 1.6 mta ethylene in Guangdong Province
- Yu Long Petrochemical Co.: 3 mta ethylene in Shandong Province (with Saudi Aramco Investment)
- Huajing Co.: 1.6 mta ethylene in Liaoning Province (with Saudi Aramco Investment)
- CNPC Jilin Co.: 1.2 mta ethylene in in Jilin Province
- Sinopec Maoming Co.: 1.6 mta ethylene in Guangdong Province







- -































































Representative Domestic Projects – Natural Gas Treatment

Sichuan Puguang Natural Gas Treatment Project

Processing Capacity: 15 billion cubic meters/year Project Contract Value: around 2.3 billion USD

Service Scope: FS+FEED+EPC

- LNG Liquidation, storage and transportation;
- · Desulfurization;
- · Steam Natural Gas Reforming;
- Natural gas to produce synthetic ammonia etc.

Sichuan Yuanba Natural Gas Treatment Project

Processing Capacity: 4 billion cubic meters/year

Project Contract Value: USD 442 million

Service Scope: EPC

- Desulfurization;
- Dehydration;
- Sulfur Recovery;
- Off-gas Treatment;
- Sulfur Forming:
- Acid Water Stripper.











Representative Domestic Projects - Coal Chemical







Representative Domestic Projects – LNG Terminals

Tianjin LNG Terminal Station

LNG Tank Capacity:

Phase 1: 4×160,000m³, Phase 2: 5×200,000m³



Qingdao LNG Terminal Station

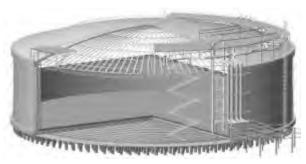
LNG Tank Capacity: 4×160,000m³



LNG Terminal includes:

Unloading System, LNG Storage System, BOG Treating System, LNG Gasification System, NG Metering and Transportation System, Truck Loading System and Flare System.

LNG Tank







Representative Domestic Projects – Green Low Carbon Energy

Kuche Photovoltaic-Electrolysis (PV-E) Green Hydrogen Project

Client: SINOPEC; **Location:** Kuche, Xinjiang AR, China **Capacity:** H₂ Production: 20 ktpa, H₂ Storage: 210,000m³

H₂ Transportation: 28,000m³/h







Inner Mongolia Ordos Wind-PV Green Hydrogen Project

Client: SINOPEC Star Co., Ltd.;

Location: Wushen Banner, Inner Mongolia

AR, China

Capacity: Hydrogen Production: 30,000 tpa;

When completed it will become the world's

largest green hydrogen plant.



SINOPEC Qilu CCUS Project

Client: SINOPEC Qilu Petrochemical Co., Ltd. Location: Zibo, Shandong Province, China Max. CO₂ Transportation Capacity: 1.7 mtpa;











Representative Domestic Projects – Other Sectors

Ammonia / Fertilizer



Hubei Fertilizer Project



Dazhou Fertilizer Project

Power / IGCC



IGCC Project in Fujian Refining & Petrochemical Complex



Cogeneration Power Plant in Wuhan
Ethylene Project

Sulphur / Phosphorous Chemical



Yunnan Hongxiang Sulphuric Acid & Phosphoric Acid Project



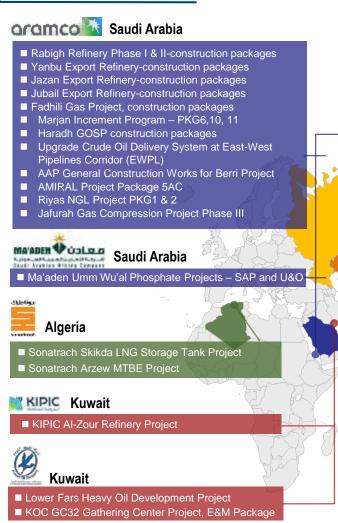
Sichuan Meifeng NPK Project



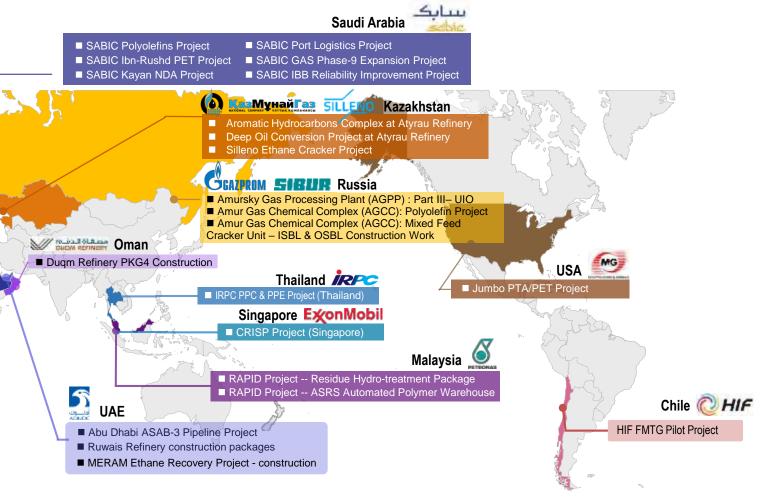




Overall Glance



Since establishment, SEG has executed over 220 international refining and petrochemical as well as onshore oil and gas projects in which some representative projects are shown as below:







Key overseas projects undertaken from 2023 to 2024

Vapor Handling Facilities at Ras Tanura Sea Islands (VHRT) Project – FEED+PMC

- Owner: Saudi Aramco
- Contract Type: EPCC
- Contract Signing date: June 2023
- Location: Jubail, Saudi Arabia
- Main Scope of Work: VOCs Collection System, Vapor Compression System, Subsea Pipeline, Slug Catcher, Vapor Treatment Facility, etc.
- Project schedule: 65 months

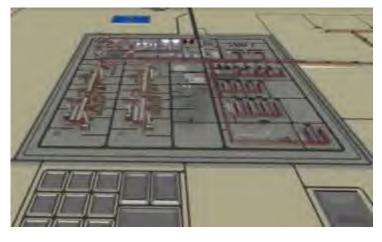
Riyas NGL Fractionation Facilities PKG1 & 2



- Owner: Saudi Aramco
- Contract Type: EPC
- Contract Signing date: January 2024
- · Location: Riyas Area, Saudi Arabia
- Contract Value: USD 3.35 billion (SEG portion: USD 1.17 billion)
- Main Scope of Work: NGL Fractionation Trains, NGL Utilities, Storages and Export Facilities.
- Project schedule: 41 months







EPCC Contractor: TR & SEG





Key overseas projects undertaken from 2023 to 2024

AMIRAL Project – PKG 5AC





- Owner: SATORP (Saudi Aramco + TotalEnergies)
- Contract Type: EPCC
- Awarded in: Jun 2023
- Location: Jubail, Saudi Arabia
- EPCC Contractor: SEG
- Contract Value: USD 726 million
- Main Scope of Work: Tank Farm and SATORP Integration
- Project schedule: 38 months

Jafurah Gas Compression Plants - Phase III



- Owner: Saudi Aramco
 EPCC Contractor: TR & SEG
- Contract Type: EPC
- Contract Signing date: Jun 2024
- Location: Jafurah Area, Saudi Arabia
- Contract Value: USD 2.24 billion (SEG portion: USD 0.9 billion)
- Main Scope of Work: Expansion of GCPs (HZEM-6、THRY-9、 THRY-5) with revamping works in JFGP.
- Project schedule: 42 months











Skikda LNG Storage Tank & Arzew MTBE Project, Algeria

Skikda LNG Storage Tank Project

- Owner: Sonatrach EPCC Contractor: SEG & SIPSC
- Contract Type: EPCC
- Contract Signing date: Feburary 2022
- Location: Skikda, Algeria
- Contract Value: USD 183.7 million
- Main Scope of Work: Demolition of two existing LNG storage tanks and construction of a new 150,000 m³ LNG tank with related pumping, substation and interconnection facilities.
- Project schedule: 40 months

Arzew MTBE Project



- Contract Type: EPCC
- Contract Signing date: June 2022
- Location: Arzew, Algeria
- Contract Value: USD 315 million
- Main Scope of Work: 200 kta MTBE, 160 kta Isomerization, 330 kta Isobutane Dehydrogen Units and affiliate facilities
- Project schedule: 36months













Amur Gas Chemical Complex Projects, Russia

AGCC Polyolefin Project



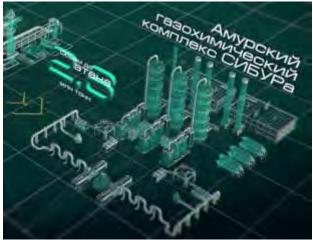


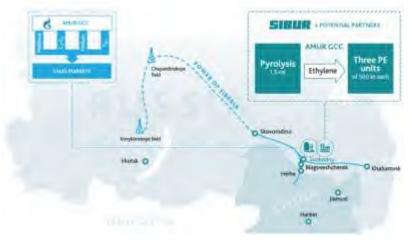
AGCC Mixed Feed Cracker Project

- Owner: Amursky GCC LLC (Sibur + Sinopec)
- Contract Type: EPSS
- Contract Value: USD 256 million
- Contract signing date: May 2020
- Location: Svobodny, Amursky, Russia
- Main Processing Units: PE/PP/LAO Units
- Project schedule: 39 months

- Owner: Amursky GCC LLC (Sibur + Sinopec)
- Contract Type: C (General Construction)
- Contract Value: USD 1,011 million
- Contract signing date: Mar 2021
- Location: Svobodny, Amursky, Russia
- Main Scope of Work: ISBL(LOT1) and OSBL(LOT2)
 Construction Works
- Project schedule: 39 months











Marjan and Berri Projects, Saudi Arabia

Berri Project – PKG1

- Owner: Saudi Aramco
- EPC Contractor: Saipem
- Contract Type: C (MEI Works)
- Contract Value: USD 350 million
- Contract signing date: Nov 2020
- Location: Abu Ali Island, Saudi Arabia
- Project schedule: 42 months

Marjan Increment Project – PKG6

- Owner: Saudi Aramco
- EPC Contractor: HDEC
- Contract Type: C (MEI Works)
- Contract Value: USD 45 million

Marjan Increment Project

• Owner: Saudi Aramco

- PKG10

- EPC Contractor: Saipem
- Contract Type: C (MEI Works)
- Contract Value: USD 155 million

Marjan Increment Project – PKG11

- Owner: Saudi Aramco
- EPC Contractor: TR
- Contract Type: C (MEI Works)
- Contract Value: USD 204 million

• Location: Tanajib Area, Saudi Arabia











Upgrade Crude Oil Delivery System at EWPL, Saudi Arabia

Upgrade Crude Oil Delivery System at East-West Pipelines Corridor (EWPL)



Contract Type: EPC

• Contract signing date: Jan 2020

• Contract value: USD 386 million

• Location: From Yanbu to Abqaiq, Saudi Arabia

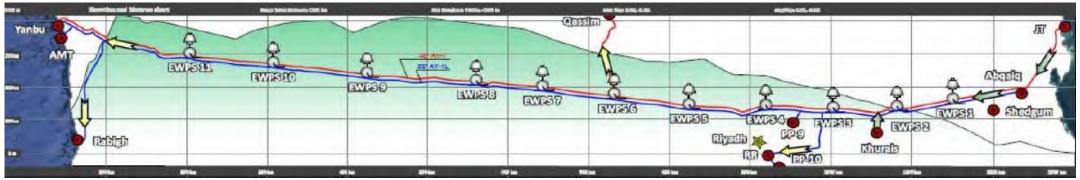
• EPC Contractor: SEG

• Main Work: Installation of new combustion gas turbine and pump trains, new instrument air compressor packages, upgrading surge relief stations and warehouse buildings, etc.

• Project schedule: 43 months











SABIC GAS Phase-9 Expansion and IBB Ammonia Project – Saudi Arabia

SABIC GAS Phase-9 Expansion Project

• Owner: SABIC (GAS)

Contract Type: EPC

• Contract signing date: Mar 2018

• Contract value: USD 280 million

• Location: Jubail, Saudi Arabia

• EPC Contractor: SEG

 Main Work: - Gaseous Oxygen (GOX) Unit: 3600
 MTPD / - Gaseous Nitrogen (GAN) Unit: 3500 MTPD /-Argon Unit: 100 MTPD

• Project schedule: 30 months

IBB Reliability Improvement Project

• Owner: SABIC (IBB, now SAFCO)

Contract Type: EPC

• Contract signing date: Aug 2018

Contract value: USD 100 million

• Location: Jubail, Saudi Arabia

EPC Contractor: SEG

• Main Work: Ammonia Unit reliability improvement to

reach capacity of 1,650 tpd

• Project schedule: 26 months













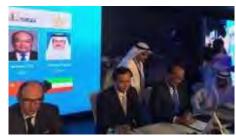
KIPIC Al-Zour Grassroot Refinery Project, Kuwait

- Owner: KIPIC
- Contract Type: EPCC
- Bid Awarded: July 30th 2015
- Contract signed date: October 2015
- Consortium: TR-SEG-Hanwha
- Location: Al-Zour, Kuwait
- Contract Value: USD 4.24 billion (SEG portion USD 1.7 billion)
- Processing Capacity: 30 mtpa Grassroot Refinery
- Project schedule: 45 months





DHT

















Petronas RAPID Project, Residue Hydrotreating Package, Malaysia

Owner: Petronas

■ Contract Type: EPCC

■ Contract signed on Aug 28th 2014,

■ Contract value: USD 1.3 billion

■ EPCC Contractor: SEG

■ Location: Pengerang, Johor, Malaysia

 Scope of Work: 15 MTA CDU, 8.8 MTA ARDS, HCDU and FOS

Project schedule: 52 Months













Deep Oil Conversion Project at Atyrau Refinery, Kazakhstan

- Owner: KazMunayGas
- Contract Type: EPC (consortium of SEG + KSS + Marubeni)
- Contract commenced on Dec., 2012, the project includes 13 process units and supporting system.
- Contract value: USD 1.68 billion
- Financing from China and Japan's ECAs.
- Contract schedule: 41 months (including local gov. approval and acceptance)





Contractor (Consortium):

Financing & Insurance Provided by:



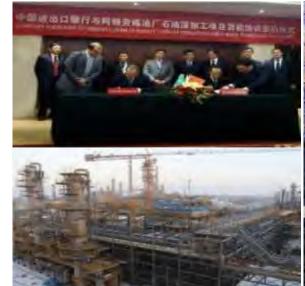






















Deep Oil Conversion Project at Atyrau Refinery, Kazakhstan

Owner: KazMunayGas

■ Contract Type: EPC

Contract value: USD 1.04 billion

■ EPC Contractor: SEG

- SEG assisted the client on ECA financing.
- The project includes one 1 mta CCR unit, one 500 kta PX unit and supporting system.
- Contract schedule: 39 Months (including local gov. approval and acceptance)





EPC Contractor	Mari SEG
Financing Bank	CHINA EXIM BANK THE EXPORT-IMPORT BANK OF CHINA
Guarantor	SAMRUK







SABIC Yansab Polyolefin Project, Saudi Arabia

- Owner: SABIC (YANSAB)
- Location: Yanbu, Saudi Arabia
- Contract Type: EPC (Consortium of SINOPEC and Aker Kvaerner), Awarded in 2005
- Plant Involvement: 500kta LLDPE Plant, 500kta PP Plant and 1400kta Polymer Handling Plant;
- Contract value: USD 750 million (SEG portion: USD 345 million)
- Project Duration: 46 months
- Peak manpower: 3000+

























Saudi Arabia Projects



Saudi Kayan NDA (Natural Detergent Alcohol) Project

■ Owner: SABIC (Saudi Kayan)

■ Location: Jubail

■ EPC Contractor: SEG ■ Contract Scope: EPC

Contract Value: USD 130 millionProject Duration: 2011.8 to 2013.12

■ Peak manpower: 1800+

Saudi Kayan EO/EG Project

■ Owner: SABIC (Saudi Kayan)

■ Location: Jubail

■ EPC Contractor: CTCI

■ Contract Scope: Construction and CM

■ Contract Value: USD 96 million

■ Project Duration: 2006.11 to 2009.7

■ Peak manpower: 1400+















Saudi Kayan Port & Tank Farm Project

Saudi Kayan No.4 Pipe Rack Project

Saudi Kayan K80 (U&O) Project

(Furnace, Air Compression Station, Piping, etc.)

Saudi Kayan Crude Furnace Project Saudi Kayan Flare System Project

Saudi Kayan Amine Project

Saudi Kayan LDPE Project





Saudi Arabia Projects

Rabigh Refinery Development Project

■ Owner: PetroRabigh

■ EPC Contractor: Tecnicas Reunidas

■ Project Duration: May 2006 to June 2008

■ Peak Manpower: 3200+





Hawiyah Natural Gas Expansion Project

■ Owner: Saudi Aramco

■ EPC Contractor: Tecnicas Reunidas

■ Project Duration: Oct 2006 to June 2008

■ Peak Manpower: 2000+

















Saudi Arabia Projects

SATORP JERP (Jubail Export Refinery Project) P1-MS1

■ Owner: Satorp (Total/Saudi Aramco)

■ Location: Jubail, Saudi Arabia

■ EPC Contractor: TR

■ Plant Involvement: Construction Work for CDU & VDU Units:

■ Contract Value: USD 185 million

■ Project Duration: 2010-2013

■ Peak manpower: 1800+

SATORP JERP (Jubail Export Refinery Project) 2A-1 & 2A E&I

■ Owner: Satorp (Total/Saudi Aramco)

■ Location: Jubail, Saudi Arabia

■ EPC Contractor: Technip Italy & Daelim

■ Plant Involvement: Construction Work for two Hydrocracking Units

■ Contract Value: USD 88.5 million + 15 million

■ Project Duration: 2010-2013

■ Peak manpower: 1600+











Saudi Arabia Projects

SABIC Ibn Rushd PET Project

■ Owner: Ibn Rushd (SABIC Affiliate)

■ Location: Yanbu, Saudi Arabia

■ Contract Type: EPC

■ Plant Involvement:

PET unit expansion to 420,000 tpa

■ Contract value: USD 177 million

■ Project Duration: 2010 to 2013

■ Peak manpower: 1800+

SABIC Portside & Logistics Project

■ Owner: SABIC

■ Location: Jubail, Saudi Arabia

■ Contract Type: EPC

■ Plant Involvement: Portside and Logistics

Facilities

■ Contract Value: USD 184 million

■ Project Duration: 2011-2014

■ Peak manpower: 1300+





















Saudi Arabia Projects

Ma'aden Umm Wu'al Phosphate Project

- Sulphuric Acid Plant (SAP)
- U&O and Infrastructure
- Owner: Ma'aden
- Location: Turaif, North Border Province, Saudi Arabia
- **■** EPC Contractor:
 - SAP Project: Consortium of SNC Lavalin & SEG
 - U&O Project: Jacobs (EPCm)
- Plant Involvement:
 - SAP Project: a three-line,15,150 tpd sulfuric acid plant and two 75-MW power plants;
 - U&O Project: Pipe Rack, Buildings, Units Area, etc.
- Contract Value:
 - SAP Project: USD 764 million (SEG: USD 238m)
 - U&O Project: USD 448 million
- Project Duration:
 - SAP: 2014-2017
 - U&O: 2015-2017
- Peak manpower:
 - SAP: 1600+
 - U&O: 4600+

















Saudi Arabia Projects

Jazan Refinery – Construction Subcontract Packages

■ Owner: Saudi Aramco

■ Location: Yanbu, Saudi Arabia

■ EPC Contractor: TR

■ Plant Involvement: Hydrocracking & H2

Generation Units

■ Contract Value: USD 194 million

■ Project Duration: 2014-2017

■ Peak manpower: 3700+

Jazan IGCC Project – Construction Subcontract

■ Owner: Saudi Aramco

■ Location: Yanbu, Saudi Arabia

■ EPC Contractor: TR

■ Plant Involvement: Pipe Rack & Water

Treatment Units

■ Contract Value: USD 292 million

■ Project Duration: 2015-2017

■ Peak manpower: 3300+















Saudi Arabia Projects

Sadara EO/EOD/POD Project

■ Owner: Sadara (Saudi Aramco & Dow)

■ Location: Jubail, Saudi Arabia

■ EPC Contractor: TR

■ Plant Involvement: EO 360kta/EOD 200kta /POD 400kta Units

■ Contract Value: USD 181 million

■ Project Duration: 2013-2016

■ Peak manpower: 3500+

Sadara Waste Processing Project

■ Owner: Sadara (Saudi Aramco & Dow)

■ Location: Jubail, Saudi Arabia

■ EPC Contractor: Fluor

■ Plant Involvement: Construction Work for Waste Water Treatment, Solid Waste **Processing and Heat Treatment Units**

■ Contract Value: USD 76.6 million

■ Project Duration: 2013-2015

■ Peak manpower: 1500+





















Saudi Arabia Projects

Fadhili Gas Project

■ Owner: Saudi Aramco

■ Location: Fadhili, Saudi Arabia

■ EPC Contractor: TR

■ Contract Value: USD 320 million

■ Plant Involvement: Electro-Mechanical Works

■ Project Duration: 2016-2019

■ Peak manpower: 5000+

















Representative Projects:

- 1. SABIC Polyolefin Project (EPC)
- 2. Rebigh Refinery Project (C)
- 3. Saudi Kayan EO/EG Project (C)
- Satorp Jubail Export Refinery Project, P1-MS1 (C)
- 5. Satorp Jubail Export Refinery Project, P2A-1 (C)
- Ibn Rushd PET-II Project (EPC)
- 7. SABIC Portside & Logistics Project (EPC)
- Saudi Kayan NDA Project (EPC)
- Sadara RTIP U&O Interconnecting Facilities (C)

- 10. Petrokemya ABS Project (C)
- 11. Sadara EO/EOD/POD Project (C)
- 12. Umm Wu'al Phosphate Project SAP & Power Plant (EPC)
- 13. Jazan Refinery Hydrocracking & Hydrogeneration Unit (C)
- 14. Jubail Bulk Plant Interface Supply Facilitie ISF (PC)
- 15. Umm Wu'al Phosphate U&O and Infrastructure Project (PC)
- 16. Jazan IGCC Project Construction Sub-contract (C)
- 17. Fadhili Gas Program Electro-Mechanical Works (C)

- 18. GAS Phase-9 Expansion Project (EPC)
- 19. IBB Reliability Improvement Project (EPC)
- 20. Various In-Plant Construction and Procurement Services in Ras Tanura Refinery and Jua'aymah NGL Fractionation Plant (PC, C, SS) ongoing
- 21. Marjan Increment Project PKG-6, 10, 11 (C) ongoing
- Upgrade Crude Oil Delivery System at East-West Pipelines Corridor (EWPL) (EPC) - ongoing
- 23. Berri Development Project PKG-1 (AAP East Gen. & West MEI) ongoing
- 24. AMIRAL Project Package 5AC (EPC) 25. Riyas

25. Riyas NGL Project PKG1,2 (EPC)







Other Overseas Projects



RAPID Package 12A - ASRS Warehouse, **Malaysia**



Petrokemya Power Station Project, **Saudi Arabia**



MEI Work for PKG 4 – EPC P2 – U&O Duqm Refinery Project **Oman**



GC32 Gathering Center Project – Electrical & Mechanical Package **Kuwait**

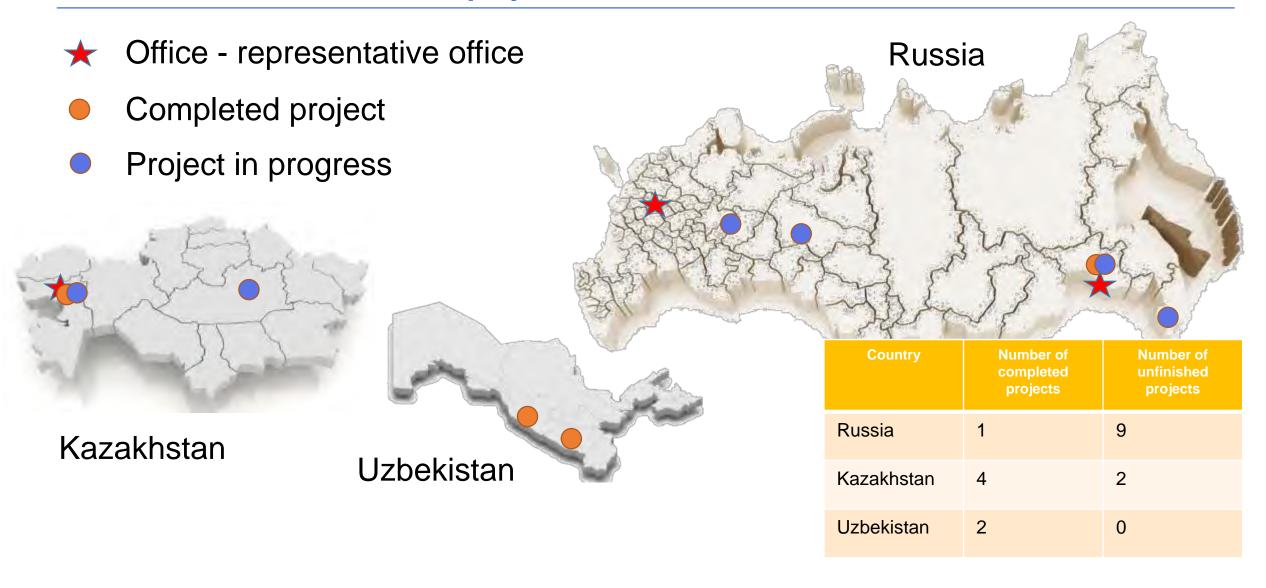


IRPC PPC & PPE Project, **Thailand**



Lubricant Project, **Singapore**

4. Major Overseas Experience (projects in Russia and Central Asia)



Project name	Date of signing the contract	Project Description	Customer	Type of service	Contract value (mln. dollars)	Status - Completio n Date	Contractor
Construction of off-plot facilities	02.06.2017	Construction of a water treatment plant and a chemical water treatment facility	Gazprom – Amur Gas Processing Plant	EPSS	165	Completed	SNEC
Construction of HDPE unit	30.04.2020	Construction of a high-density polyethylene production unit with a capacity of 500 thousand tons per year	SIBUR & SINOPEC - AGCC	EPSS	270	In progress 09.2026	SEI
Construction of Mixed Feed Cracker Unit ISBL	03.03.2021	Construction of pyrolysis main process units with misaligned feedstock feeding with a capacity of 2.7 million tons per year	SIBUR & SINOPEC - AGCC	С	726	In progress 05.2026	Sinopec 4 th
Construction of Mixed Feed Cracker Unit OSBL	03.03.2021	Construction of off-plot facilities for a Mixed Feed Cracker Unit with misaligned feedstock feeding with a capacity of 2.7 million tons per year	SIBUR & SINOPEC - AGCC	С	488	In progress 05.2026	Sinopec 10 th
Lifting of the large-sized equipment in the polyolefin area	21.08.2023	Lifting of 40 units of large-size equipment	YAMATA	С	3.6	In progress 12.2025	SLT
Construction of a polypropylene production unit	13.07.2023 27.09.2023 30.04.2024	Construction of a polypropylene production unit with a capacity of 400 thousand tons per year	SIBUR & SINOPEC - ΑΓΧΚ	Licensing Basic Design EPSS	2.7+69+270	In progress 09.2026	SEI

Project name	Date of signing the contract	Project Description	Customer	Type of service	Contract value (mln. dollars)	Status - Completi on Date	Contractor
Construction of ethylbenzene and styrene production unit	24.04.2024	Construction of ethylbenzene production unit with capacity of 350 thousand tons per year and styrene production unit with capacity of 250 thousand tons per year	SIBUR- Nizhzhekamskneftekhi m	EPSS	221	In progress 09.2028	SSEC
Construction of polystyrene production unit and off-plot facilities	24.04.2024	Construction of a polystyrene production unit with a capacity of 250 thousand tons per year and off-plot facilities	SIBUR- Nizhzhekamskneftekhi m	EPSS	337	In progress 02.2028	SSEC
Construction of the UHMWPE unit	24.04.2024	Construction of an ultra-high molecular weight low pressure high density polyethylene production unit with a capacity of 20 thousand tons per year	SIBUR- Kazanorgsintez	PDP+Earl y works	1.8+2.58	In progress 03.2025	SSEC
Construction of a polypropylene production unit	18.06.2024	Construction of a polypropylene production unit with a capacity of 570 thousand tons per year	SIBUR- ZapSibNeftekhim	С	151	In progress 05.2026	Sinopec 4th
Construction of a polypropylene production unit	20.06.2024	Construction of a polypropylene production unit with a capacity of 570 thousand tons per year	SIBUR & SINOPEC - AGCC	С	172	In progress 09. 2026	Sinopec 10 th
Lifting of the large-sized equipment	22.06.2024	Lifting of the large-sized equipment at the construction site of Nakhodka Methanol Plant	Nakhodka methanol plant	С	6.8	In progress 12. 2025	SLT

4. Major Overseas Experience (projects in Central Asia)

Project name	Date of signing the contract	Project Description	Customer	Type of service	Contract value (mln. dollars)	Status - Completio n Date	Contractor
Construction of aromatic hydrocarbons production unit at Atyrau Refinery	29.10.2009	Reforming unit with capacity of 1 million tons per year, aromatic hydrocarbons unit with capacity of 500 thousand tons per year, off-plot facilities	KazMunaiGas – Atyrau Refinery Kazakhstan	EPCC	1 040	10.2015	GPEC
Construction of PDH and PP unit	20.03.2010	Propane dehydrogenation unit with a capacity of 1 million tons per year, propylene production unit with a capacity of 500 thousand tons per year, off-plot facilities	Kaz Petrochemical Industries (KPI) Kazakhstan	FEED+O BE	22	04.2022	SSEC & SNEC
Construction of a deep oil refining complex	29.12.2011	Catalytic cracking unit with annual capacity of 2.43 million tons, off-plot facilities	KazMunaiGas – Atyrau Refinery Kazakhstan	EPCC	1 678	10.2018	GPEC
Construction of a phosphate fertilizer plant	19.09.2019	Plant for production: 800 thousand tons of sulfuric acid per year, 280 thousand tons of phosphoric acid per year, 540 thousand tons of NPK per year, 370 thousand tons of phosphate per year of (MAP)	Enter Engineering Uzbekistan	EBD	4	12.2020	SNEI
Construction of the MTO unit	30.09.2020	Methanol to olefins conversion unit using S-MTO technology	Enter Engineering Uzbekistan	Licensing + PDP+EP	5+33	05.2023	SEI
Construction of PTA & PET unit	15.12.2023	Installation for the production of PTA with a capacity of 650 thousand tons per year and PET 735 thousand tons per year	KazMunaiGas Kazakhstan	FS	2	5.2024	SSEC
Construction of a pyrolysis unit	19.09.2024	Pyrolysis unit with capacity of 1.25 million tons per year	SILLENO	EPCC	12 500	12.2028	SEI



Project Name: Construction of Wastewater Treatment and Chemical Water Treatment Facility

Project Location: Amur region, Svobodny city

Customer: Gazprom - Amur Gas Processing Plant

Contractor: Sinopec Ningbo Engineering Company

Form of contract: EPSS

Contract signing date: June 2017

Completion date: December 2021

Contract value: 165 million euros







Project Name: construction of a high-density polyethylene (HDPE) plant

Project Location: Amur region, Svobodny city

• Plant capacity: 500 thousand tons per year

Customer: Amur Gas Chemical Complex (joint venture – SIBUR & SINOPEC)

Contractor: Sinopec Engineering Incorporation

Form of contract: EPSS

Contract signing date: April 2020

Completion date: expected in May 2026

Contract value: 230 million euros













Project Name: construction of a Mixed Feed Cracker Unit (ISBL)

• **Project Location:** Amur region, Svobodny city

• Plant capacity: 2.7 million tons of ethylene per year

Customer: Amur Gas Chemical Complex (joint venture – SIBUR & SINOPEC)

Contractor: Sinopec 4th Construction Company

Form of contract: C

Contract signing date: March 2020

Completion date: expected in November 2025

• Contract value: 726 million dollars













Project Name: construction of a Mixed Feed Cracker Unit (OSBL)

Project Location: Amur region, Svobodny city

• Plant capacity: 2.7 million tons of ethylene per year

Customer: Amur Gas Chemical Complex (joint venture – SIBUR & SINOPEC)

• **Contractor**: Sinopec 10th Construction Company

Form of contract: C

Contract signing date: March 2020

Completion date: expected in November 2025

• Contract value: 488 million dollars











- Project Name: construction of polypropylene unit
- Project Location: Amur region, Svobodny city
- Plant capacity: 400 thousand tons per year
- Customer: Amur Gas Chemical Complex (joint venture SIBUR & SINOPEC)
- Contractor: Sinopec Engineering Incorporation & Sinopec 10th Construction Company
- Form of contract: Licensing + PDP+ Basic Design + EPSS + C
- Contract signing date: November 2022
- Completion date: expected in May 2027
- Contract value: 2.7+69+270+172 million dollars







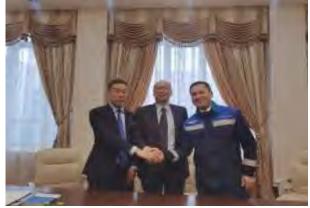






- **Project Name:** construction of ethylbenzene and styrene unit
- **Project Location:** Republic of Tatarstan, Nizhnekamsk
- Plant capacity: ethylbenzene 350 thousand tons per year, styrene 400 thousand tons per year
- Customer: SIBUR NizhnekamskNeftekhim
- Contractor: Sinopec Shanghai Engineering Company
- Form of contract: Licensing + Pre FEED + EPC
- Contract signing date: July 2023
- Completion date: expected in September 2028
- Contract value: 1.75 + 221 million dollars













- **Project Name:** construction of polystyrene unit + OSBL
- **Project Location:** Republic of Tatarstan, Nizhnekamsk
- Plant capacity: polystyrene 250 thousand tons per year
- Customer: SIBUR NizhnekamskNeftekhim
- Contractor: Sinopec Shanghai Engineering Company
- Form of contract: Licensing + Pre FEED + EPC
- Contract signing date: September 2023
- Completion date: expected in February 2028
- Contract value: 4.55 + 377 million dollars











• **Project Name:** construction of polypropylene plant

• **Project Location:** Tyumen region, Tobolsk

• Plant capacity: 570 thousand tons per year

• Customer: SIBUR - ZapSibNefteKhim

Contractor: Sinopec 4th Construction Company

Form of contract: C

• Contract signing date: July 2024

Completion date: expected in May 2026

Contract value: 151 million dollars











4. Major Overseas Experience (main projects in Kazakhstan)

Major overseas projects - Project for construction of aromatic hydrocarbon production complex at Atyrau Refinery, Kazakhstan

Project Name: KazMunaiGas

Contract: EPC

Project Location: Atyrau Refinery, Kazakhstan

Contract value: 1.04 billion USD

SEG assisted the Customer in obtaining financing from the

Export-Import Bank of China (EXIM)

Main Objects: Continuous Catalytic Reforming Unit (CCR) with annual capacity of 1 million tons, aromatic hydrocarbons production complex (PX) with annual capacity of 500 thousand tons, off-plot facilities

Contract completion period: 39 months



General Contractor (EPC)	onec SEG
Bank that provided the financing	CHINA EXIM BANK THE EXPORT-IMPORT BANK OF CHINA
Guarantor	SAMRUK K A Z Y N A











4. Major Overseas Experience (main projects in Kazakhstan)

Major overseas projects - Project for construction of a deep oil refining complex at the Atyrau Refinery, Kazakhstan

Customer: KazMunaiGas

■ Contract: EPC (SEG+Marubeni+KSS)

■ **Project Location:** Atyrau Refinery, Kazakhstan

■ Contract signing date: December 2012

■ Contract value: 1.68 billion USD

■ Plant capacity: 2.43 million tons per year (FCC)

■ Contract completion period: 41 months



General Contractor (consortium) **EPC**



Financing and insurance

















4. Major Overseas Experience (main projects in Kazakhstan)



• **Project name:** construction of a pyrolysis unit

Project Location: Atyrau region, Karabatan

• Plant capacity: 1.25 million tons of ethylene per year

Customer: SILLENO

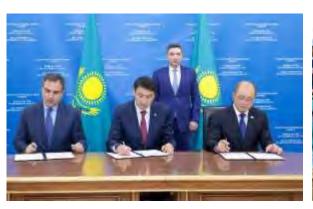
Contractor: Sinopec Engineering Incorporation (with TR in Consortium)

Form of contract: EPCC

• Contract signing date: September 2024

Completion date: December 2028

• Contract value: 1.25 billion dollars











4. Major Overseas Experience (main projects in Uzbekistan)

• Project Name: Construction of a plant for production of sulfuric acid and phosphate fertilizers

Project Location: Samarkand region

• Plant capacity: 800 thousand tons of sulphuric acid, 280 thousand tons of phosphoric acid, 540 thousand tons of NPK,

370 thousand tons of phosphate (MAP)

• Customer: Enter Engineering / Contractor: Sinopec Nanjing Engineering Company

Form of contract: EBD

Contract signing date: October 2019

Completion date: December 2020

Contract value: 4 million dollars











4. Major Overseas Experience (main projects in Uzbekistan)

Project Name: construction of an MTO unit (methanol to olefin)

Project Location: Bukhara region

• Plant capacity: 230 thousand tons of ethylene, 270 thousand tons of propylene

Customer: Enter Engineering

Contractor: Sinopec Engineering Incorporation

Form of contract: Licensing + PDP + EP

Contract signing date: September 2020

Completion date: May 2023

Contract value: 5+33 млн долларов











SEG's Clients Worldwide







































































SEG's Partners Worldwide



















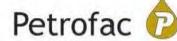




















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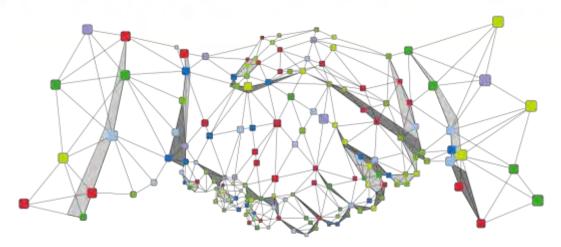












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