



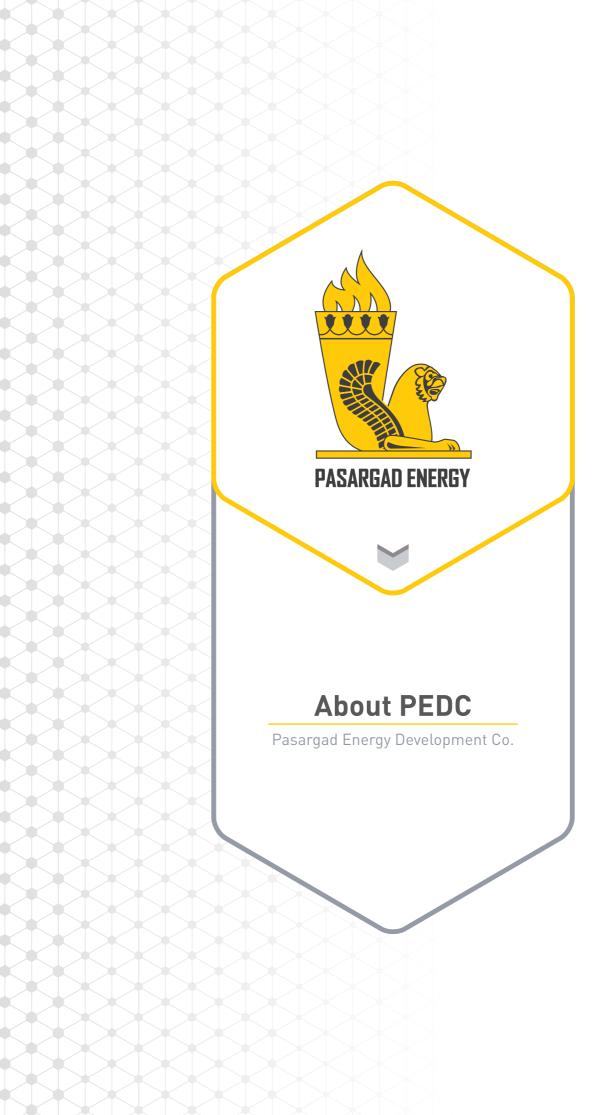
PEDC PROJECTS INNOVATIVE TECHNOLOGIES & DIGITAL TRANSFORMATION

RENEWABLE ENERGY

POWER AND UTILITY

UPSTREAM OIL AND GAS

PEDC BUSINESS





The Pasargad Energy Development Company (PEDC) is an independent and privately owned energy company located in Tehran, Iran. As a leading integrated energy company, PEDC has activities across the entire value chain of oil and gas, power and utility, infrastructure, commercial and trading, and high-tech venture capitalists.

In addition to providing competitive solutions in the energy field, PEDC also manages its asset portfolio effectively and strategically and plays a pivotal role in the development of a sustainable national economy while providing value creation to stakeholders.

One of the distinctive and unique features of PEDC is the effective and continuous activity in the entire energy value chain, which is expanded into six business areas:

- 1) Upstream Oil and Gas
- 2) Downstream Oil and Gas
- 3) Power and Utility
- 4) Renewable Energy
- 5) Infrastructure
- 6) Trading and Commercial

Based on the evaluation conducted by the National Iranian Oil Company PEDC has been ranked first place among Iranian Exploration and Production (E&P) companies and has the capacity to refer work up to 12 billion USD. Also, in the downstream sector of the oil industry, with diverse investments in the product chain from natural gas to polyolefins, PEDC is the only Iranian company that is the representative of a Methanol to Olefin (MTO) licensor in Iran.

In the field of Power and Utility and Renewable Energy, PEDC as the largest private company with the production of 3000 MW of electricity from its 6 thermal and renewable power plants contributes to 4% of country's total production.

PEDC is also involved in investing, construction and operation of 24 solar power plants construct and operate 24 solar power plants with a total capacity of 1500 MW across 12 provinces in Iran. with total investment of approximate 1 billion USD.

Pasargad Energy Development Company through its 28 subsidiary companies with distinctive capabilities and a

portfolio of diverse and unique solutions has managed to implement various successful plans and projects throughout Iran. We have successfully implemented wide range of projects throughout our country and these achievements extend across the vast spans of Iran from north to south and east to west.

Undoubtedly, this impressive performance and achievement is the result of adhering to noble and precious organizational values which are at the heart of each PEDC family member's activity:

1) Accountability and integrity

2) value creation for stakeholders

3) commitment to safety and society, and

4) excellence

Moreover, having expert and professional colleagues and expert and high-profile managers in the field of energy, diversified investment portfolio, taking advantages of the complete value chain in the upstream oil and gas sector, competitive market share of the country's electricity industry and benefiting from unique infrastructure in the downstream sector of oil and gas has placed this group in a position that surpasses its peers and establish its privileged position.

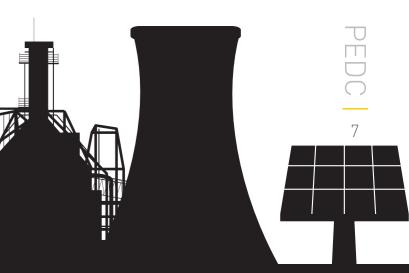
PEDC has invested more than 12.80 billion USD in the energy field, and besides creating value for shareholders through the implementation of Corporate Social Responsibility (CSR) projects has played its role as a committed member of society.

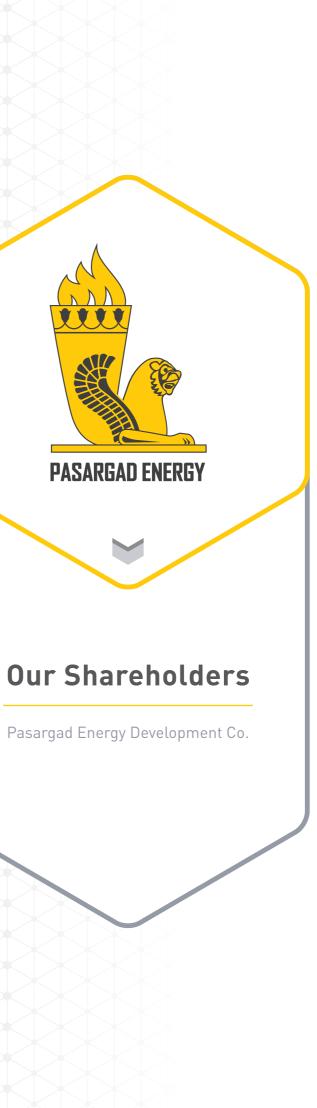
PEDC, by gaining valuable national experience and relying on the support and trust of its shareholders, intends to go beyond domestic borders and towards international markets through its operational and organizational excellence, diversify its products and services, and market development.

As one of the leading private companies actively engaged in sustainable development of large-scale energy projects in Iran, PEDC has successfully been qualified by the Iraqi Ministry of Oil as an Exploration and Production (E&P) company for the development of oil and gas fields in Iraq. PEDC is the first and only Iranian company to obtain a license for the development of oil and gas fields in Iraq from the Iraqi Ministry of Oil, enabling independent or collaborative investment and development in accordance with upstream contracts of the country.

In addition to being qualified as an E&P company in Iraq, PEDC has been qualified by the Basra Oil Company (BOC) and State Company for Oil Projects (SCOP), as a Developer and Contractor. Therefore, PEDC is authorized to participate in and execute major projects in the upstream and downstream sectors of oil and gas, petrochemical projects, infrastructure projects, and renewable energy projects independently or in collaboration with international oil and gas companies active in cooperation with subsidiary companies of Iraqi Oil Ministry.

PEDC, committed to maintaining its leadership in investment and participation in energy sector development in the friendly neighboring country of Iraq, will diligently pursue and implement expansion strategies for its international presence in other markets of regional countries until achieving desired and expected results.







As part of Pasargad Financial Group, PEDC is a key arm of Pasargad Financial Group in the oil, gas, and energy sector.

Pasargad Financial Group, a leading name in Iran's financial landscape since 1999, boasts a strong presence in diverse sectors such as financial services, mining, oil, gas, energy, IT, ICT services, building construction, and healthcare. With a portfolio of 60 companies, most publicly listed on the Iranian Stock Market, the group has earned a prestigious position in the country's financial sector.









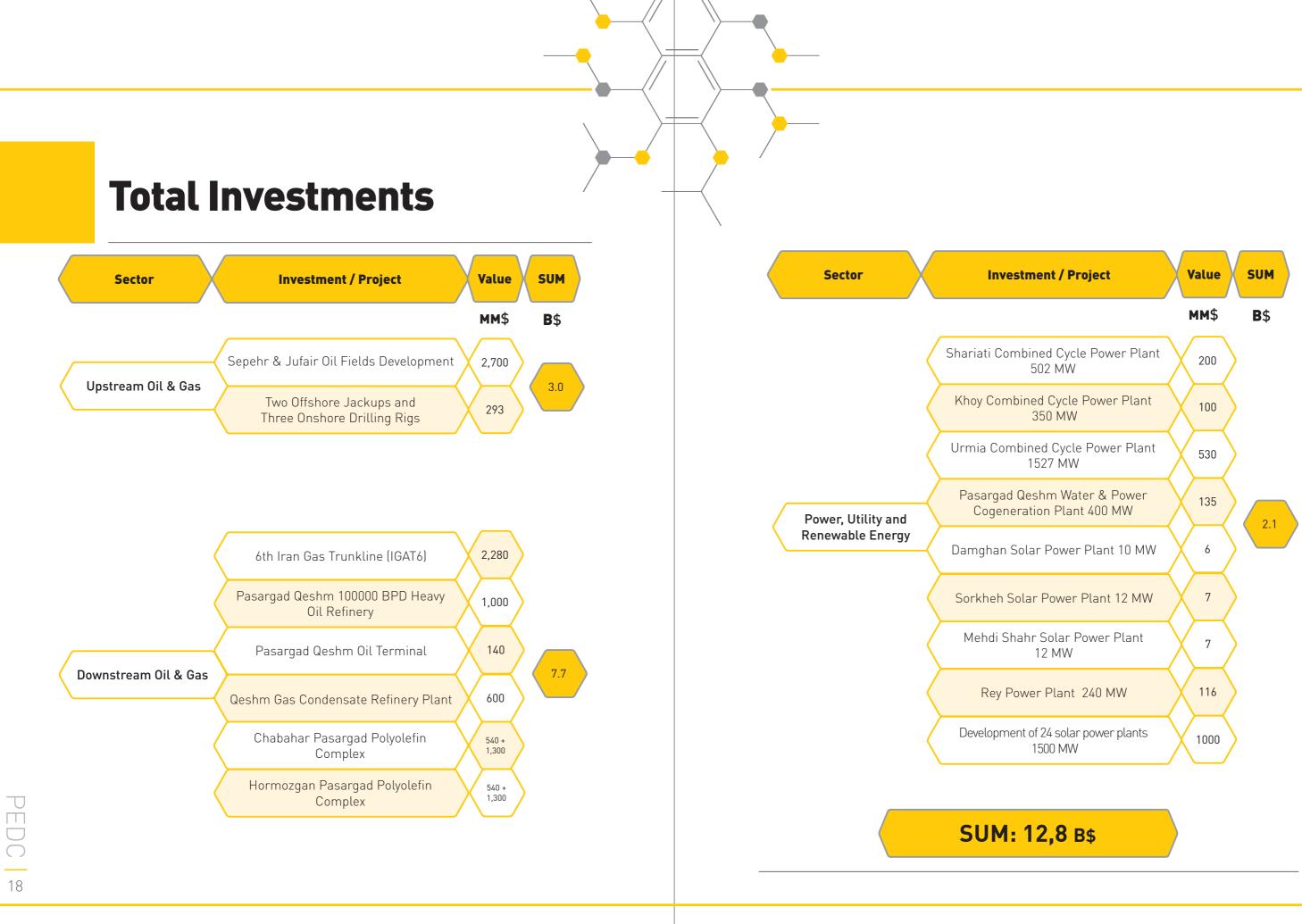
PEDC has invested more than 12.8 billion USD in the energy field, and besides creating value for shareholders through the implementation of Corporate Social Responsibility (CSR) projects has played its role as a committed member of society:

- Delivering 14,000 M<sup>2</sup> of new educational facilities nationwide
- Investing in cutting-edge research and university infrastructure
- Empowering children with autism across the country
- Inspiring students through specialized courses and academic field trips
- Bringing clean water to 35,000 islanders in Qeshm
- Bridging the educational gap for students in underprivileged regions
- Revitalizing coastal ecosystems by planting over 6,000 mangroves
- Building and equipping state-of-the-art healthcare facilities

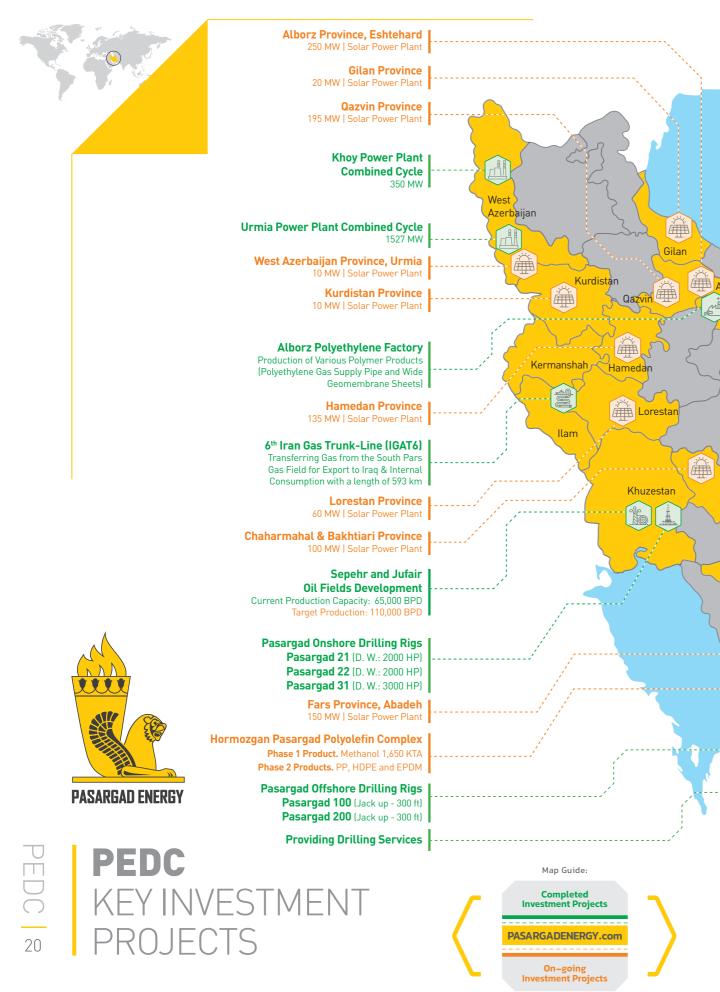


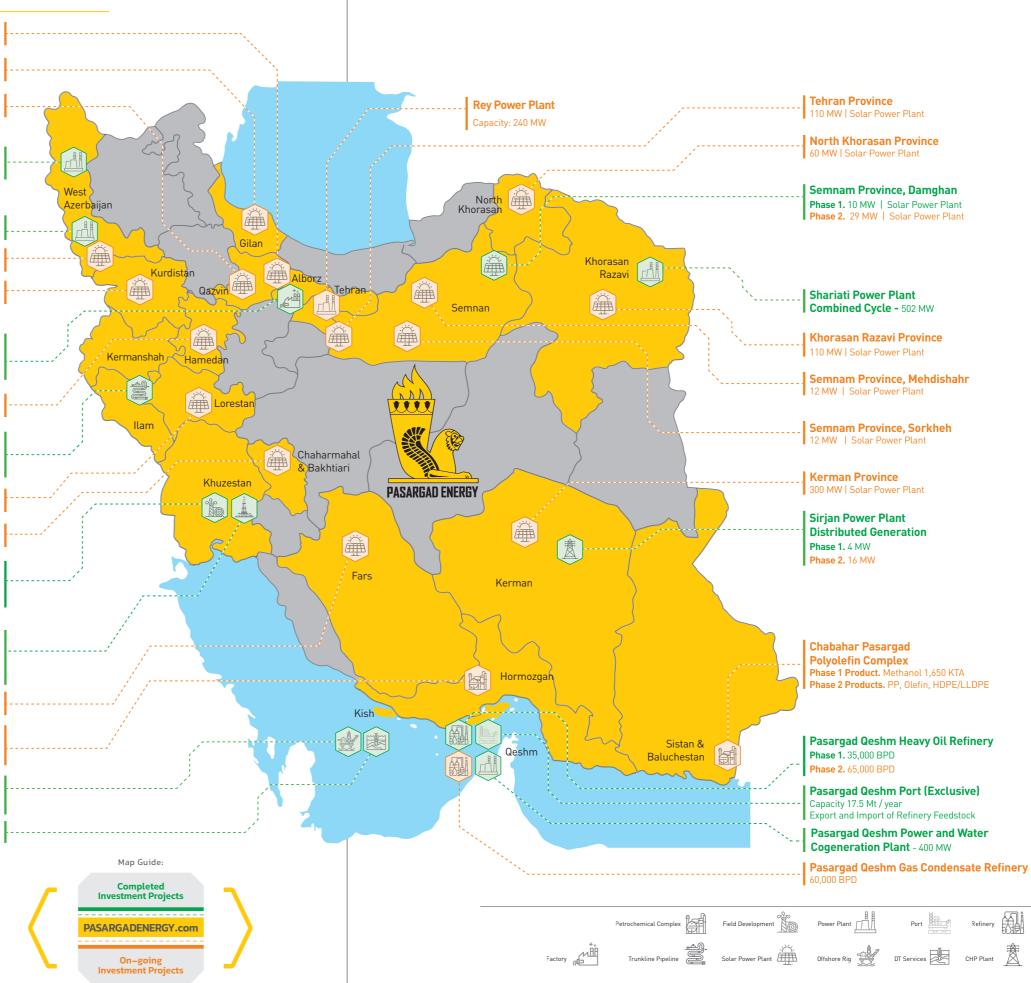












<b>Tehran Province</b> 110 MW   Solar Power Plant
 North Khorasan Provin

U EDC 21





#### Upstream Oil & Gas

- Exploration, development, and production of oil and gas fields
- Implementation of Integrated drilling services for oil and gas wells
- Management and operation of drilling rigs
- Integrated management of engineering, procurement,
- construction, and drilling projects
- Development of trademark software for modeling and simulation of oil and gas reservoirs

Trading and Commercial

- Refining and Petrochemical
   Products Marketing
- Marketing and Trading of Energy Carriers

• Operation & Maintenance (0&M) (Pipelines and Boosting Stations)





# **Upstream Oil and Gas**

Pasargad Energy Development Company (PEDC) is a leading entity in the upstream oil and gas industry, functioning as an Operator and also providing a wide array of services, including engineering, drilling, well services, operation and maintenance, and smart well, reservoir, facility management. As the main private company in Iran, PEDC has obtained qualification from the Iraqi Ministry of Oil as an Exploration and Production (E&P) company for oil and gas fields development in Iraq. PEDC is committed to expanding its presence in Iraq and other regional markets to further its leadership in the energy sector. Our goal is to maximize the value of our hydrocarbon resources through efficient and responsible field development.

In 2017, PEDC became the first Iranian E&P Operator Company to sign an IPC (Iranian Petroleum Contract) with National Iranian Oil Company (NIOC) for the development of Sepehr and Jufair onshore green oil fields in southwest Iran, for a total cost of 4 billion USD. This twenty-year contract aims to recover more than one billion barrels of oil equivalent and achieve the oil production plateau of 150000 barrels per day, as of 65000 barrels per day has been already achieved. This world-class contract has solidified PEDC position as the first rank qualified Iranian E&P Company by NIOC, that allows us to have a portfolio of exploration and development contracts valued at up to 12 billion USD.

We have a strong presence in upstream oil and gas activities through our subsidiaries. Our two offshore drilling rigs, named "Pasargad 100" and "Pasargad 200" as well as three onshore drilling rigs, named "Pasargad 21", "Pasargad 22" and "Pasargad 31" are manned by experienced and capable Iranian crew, providing professional offshore & onshore rig chartering and drilling services. We also offer a broad range of well-based and rigless services, including directional drilling to well intervention, coiled tubing services, mobile oil treatments (MOT), wireline services, well maintenance and repair, and operation services for oil and gas wells. Additionally, we have developed RETINA, a 3D reservoir simulation software that combines specialized knowledge in software and oil and gas engineering, providing state-of-the-art oil and gas reservoir modeling.

At PEDC, we are committed to excellence in execution, with a proven track record of delivering successful projects on time and on budget. Our experienced team of professionals is dedicated to maintaining the highest standards of safety and environmental stewardship throughout all stages of our operations.

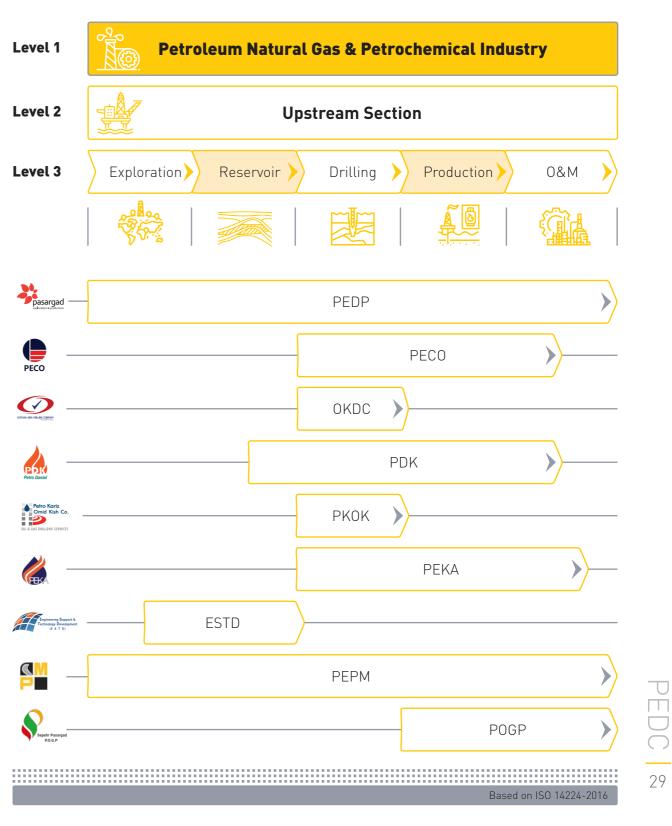
Our upstream oil and gas activities are guided by a long-term strategy that emphasizes value creation and sustainable growth.We consistently pursue new exploration and production opportunities, utilizing the latest technologies and best practices to improve operational efficiency and productivity.

PEDC 27





Upstream Value Chain







# **Downstream Oil and Gas**

Pasargad Energy Development Co. (PEDC) is a prominent role player in Iranian downstream oil and gas industries. It has been the most active investing company in quality refineries and petrochemical projects. So far, the total value of the completed investments have summed up to 4.4 Billion USD of which 2.63 Billion USD contributes to the completed downstream projects.

Considering the privileges and competitive advantages of oil and gas resources available in Iran, PEDC has defined the strategies to invest, develop, produce and maintain (0&M) the refinery and petrochemical plants to diversify the products services and completing the value chain of the related products and services towards the expanded downstream industries. A compound effect of downstream products with our trading and commerce competencies in addition to our own infrastructure such as Hara port in north area of Qeshm Island will lead to improved value creation for our shareholders and the increased market share as well.

PEDC manages development, production, operation and maintenance, sales and marketing and logistics of its completed or under construction investments via conducting subsidiary companies in downstream section.

Since March 2023 and concurrent with completion of its Heavy Oil Refinery with capacity refining of 100000 BPD, PEDC now is biggest supplier of the different grades of Bitumen which is 20% of market share in Iran. Also, PEDC is increasing its refinery capacity to 130000 BPD by adding 60000 BPD through construction of Qeshm Gas Condensate Refinery.

Moreover, as one of the most powerful and experienced Iranian contractor, PEDC successfully executed 6th Iran Gas Trunkline (IGAT VI) as one of the biggest infrastructure projects in Iran under a BOT contract with investment value of 2,28 Million USD. IGAT VI 56" gas pipeline with total approximate length of 593 Km and passes through five provinces to Iraq border to export.

PEDC is strategically positioned to enhance its presence in the petrochemical industry through the development of two state-of-the-art petrochemical plants located in the southern region of Iran. These advancements will establish PEDC as a prominent supplier of Methanol, with an impressive initial production capacity of 3300 KTA in the first phase. As part of our long-term vision, we are committed to expanding our product offerings in the second phase, focusing on the production of PE, PP, EPDM and HDPE/LLDPE, utilizing the innovative Methanol To Olefin (MTO) technology.

To ensure our technological excellence, PEDC has formed joint ventures with renowned world-class research institutes, solidifying our position as a leading technology supplier within the oil industry's value chain. As a result, PEDC has become a trusted provider of licenses, technical expertise, and invaluable know-how, particularly in the areas of catalysts and MTO technology for refinery and petrochemical units across Iran.



The completed investments which are currently under production and operation in downstream section are

## 6<sup>th</sup> Iran Gas Trunkline (IGAT VI)

- Undertaking Subsidiary: Naftanir Co. (General Contractor (GC) & Management Contractor (MC)
- Location: Passing through five provinces ending to export terminals to Iraq in the west and south west of Iran
- Investment Value: 2280 Million USD
- Pipeline Length: Total of 593 km
- Project Specification: Pipeline: 56", 48" and 30" Underground Carbon Steel Pipes; 5 Pressure Boosting Stations; 1 Metering Stations

### **Qeshm Heavy Crude Oil Refinery**

- Undertaking Subsidiary: Qeshm Pars Behin Oil Refinery Co.
- Location: Qeshm Island, Persian Gulf, Iran
- Investment Value: 1000 Million USD Phase 1 (completed) + Phase 2 (under development)
- Phase 1 Products:
  - Different Schedules of Bitumen (935000 ton/year)
  - Light Hydrocarbon Cut 620 KTA +Naphtha (150 KTA)
- Phase 2 Products:
  - Middle Distillate: 34000 bpd (1500 KTA)
  - Marine Fuel: 36000 bpd (1800 KTA)
  - Feed to Javid Gas Condensate Refinery: 30000 bpd (1200 KTA)

### HARA Qeshm Port

- Undertaking Subsidiary: HQIMD Co.
- Location: Qeshm Island, Persian Gulf, Iran
- Investment Value: 140 Million USD
- Port Specification:
  - Berthing of crude oil and refinery product carriers up to 70000 DWT (Northern Platform)
  - Berthing of bulk bitumen carriers up to 7000 DWT (Southern Platform)
  - Berthing of bulk bitumen and feedstock carriers up to 35000 DWT



The under construction investments in downstream section are

### **Qeshm Gas Condensate Refinery**

- Undertaking Subsidiary: Javid Energy Parto Co.
- Location: Qeshm Island, Persian Gulf, Iran
- Investment Value: 600 Million USD (including Phase 2 development)
- Final Products:
  - LPG: 271 ton/day
  - Middle Distillate: 707 ton/day
  - Gasoline:5345 ton/day

### Sina Petrochemical Plant

- Undertaking Subsidiary: Sina Chemical Industries Development Co.
- Location: Chabahar, Sistan & Balouchestan Province, South East of Iran
- Investment Value:
  - 1st Phase (Methanol Phase): 540 Million USD
  - 2nd Phase (MTO Phase): 1300 Million USD
- Final Products:
  - 1st Phase: Methanol: 1650 KTA
  - 2nd Phase: Olefin: 645 KTA, (including PP: 347 KTA and HDPE/LLDPE: 325 KTA)

### Pasargad Polyolefin Petrochemical Complex

- Undertaking Subsidiary: Soroush Energy Paydar Co.
- Location: Parsian Special Energy Zone, Hormozgan Province, South of Iran
- Investment Value:
  - 1st Phase (Methanol Phase): 540 Million USD
  - 2nd Phase (MTO Phase): 1300 Million USD
- Final Products:
  - 1st Phase: Methanol: 1650 KTA
  - 2nd Phase: PP: 310 KTA, HDPE: 250 KTA, EPDM: 50 KTA

 $\bigcirc$ 32

U

U 33



# **Power and Utility**

Since its establishment in 2008, PEDC has been actively involved in Iran's Power Generation industry. With a strategic focus on this sector, PEDC has made significant investments in power plants and currently owns and operates facilities that generate approximately 3000 MW of power, including renewable energy sources. This substantial contribution represents around 4% of the total power generation capacity in the country.

In addition to investment and ownership of the power generation facilities, our activities and investments encompass almost the whole value chain of the industry covering construction, power generation, operation and maintenance, supply of equipment and services, management and consulting related to various types of plants such as Steam and Gas Turbine Power Plants as well as Solar Panels.

Our businesses in power generation and utilities are also consisting of implementation and execution of the related development projects in the form of Turn Key, EPC and MC contracts as well as Operation and Maintenance (0&M) activities through the capabilities and the experiences of PEDC's specialized subsidiary companies.

In terms of power generation, PEDC's plants and facilities are now operative almost in whole across the country north to south of Iran. PEDC completed and under development power generation investments are:

#### **Completed Investment:**

- 1. Urmia Combined Cycle Power Plant: 1527 MW
- 2. Shariati Combined Cycle Power Plant: 502 MW
- 3. Pasargad Qeshm Water & Power Cogeneration Plant: 400 MW
- 4. Khoy Combined Cycle Power Plant: 350 MW
- 5. Sirjan Power Plant: 25 MW
- 6. Damghan Solar Power Plant: 10 MW

#### **Under Development Investment:**

1. Rey Power Plant: 240 MW

Furthermore, our investments in utilities are focused on meeting the needs of the Qeshm Heavy Crude Oil Refinery and the upcoming refineries within the North Qeshm Oil Site. The constructed utility facilities include an HRSG unit, MED and Polishing Plants, as well as auxiliary services for the refineries, such as supply of distilled water, demineralized water, potable water, low-pressure steam, and medium-pressure steam. The details of these facilities are as follows:

- 1. Three HRSG units with steam production capacity at 5 and 23 bars, totaling 230 tons per hour.
- 2. Four MED units with desalinated water production capacity of 680 cubic meters per hour.
- 3. One demineralized water production unit with a capacity of 155 cubic meters per hour.
- 4. One potable water production unit with a capacity of 660 cubic meters per hour.





# **Renewable Energy**

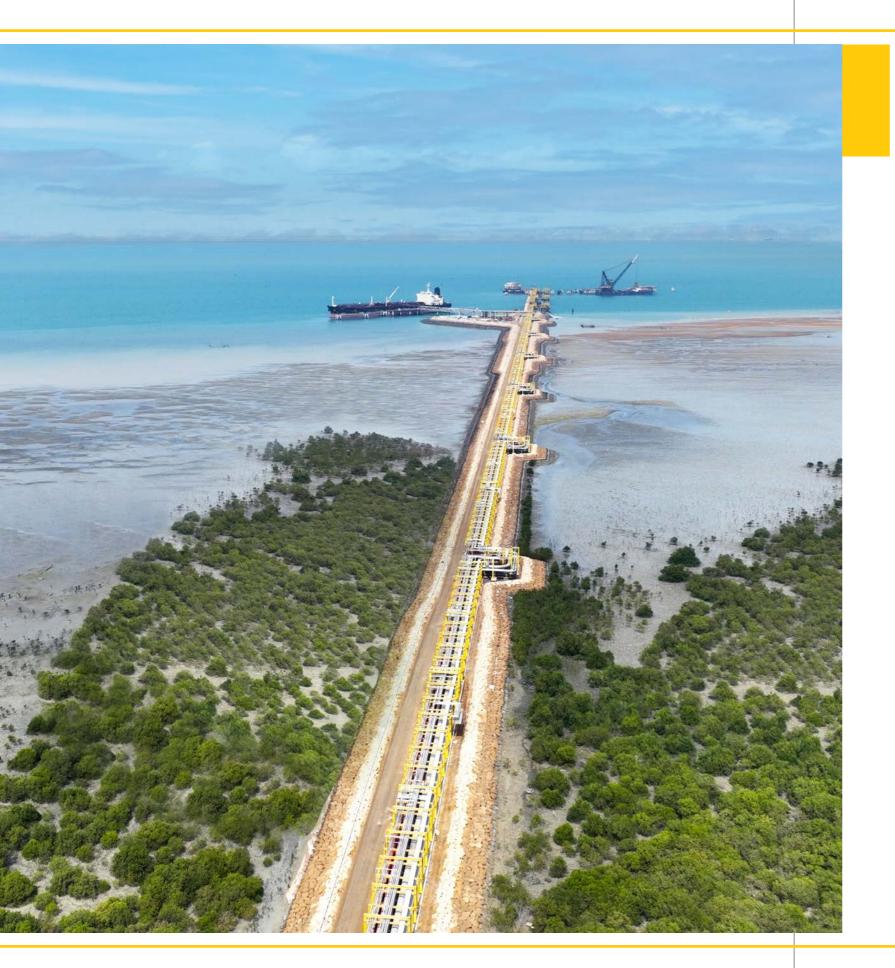
Aligned with our strategic objectives of becoming a key player in the renewable energy sector in Iran, PEDC has achieved a significant milestone with the successful launch of our first Solar Power project in Damghan. Situated in the central region of Iran, this project boasts a capacity to generate 10 MW of clean energy. Its operations commenced in early 2023.

In our unwavering commitment to promoting sustainable energy production, we are currently engaged in proactive planning to enhance our technological competitiveness and expand our investments in Solar Plants, both domestically and internationally. As part of this strategy, we have initiated additional investment in 26 new Solar Power Plants:

- 1. Solar Power Plants with total capacity of 1500 MW and investment of around 1 billion USD located in 24 site locations distributed in 12 provinces in Iran.
- 2. Sorkheh Solar Power Plant with capacity of 12 MW and investment of 7 Million USD
- 3. Mehdishar Solar Power Plant with capacity of 12 MW and investment of 7 Million USD

Undoubtedly, through the implementation of these expansion plans, our primary goal is to strengthen our position in the renewable energy sector as well as make significant contributions to building a sustainable future.



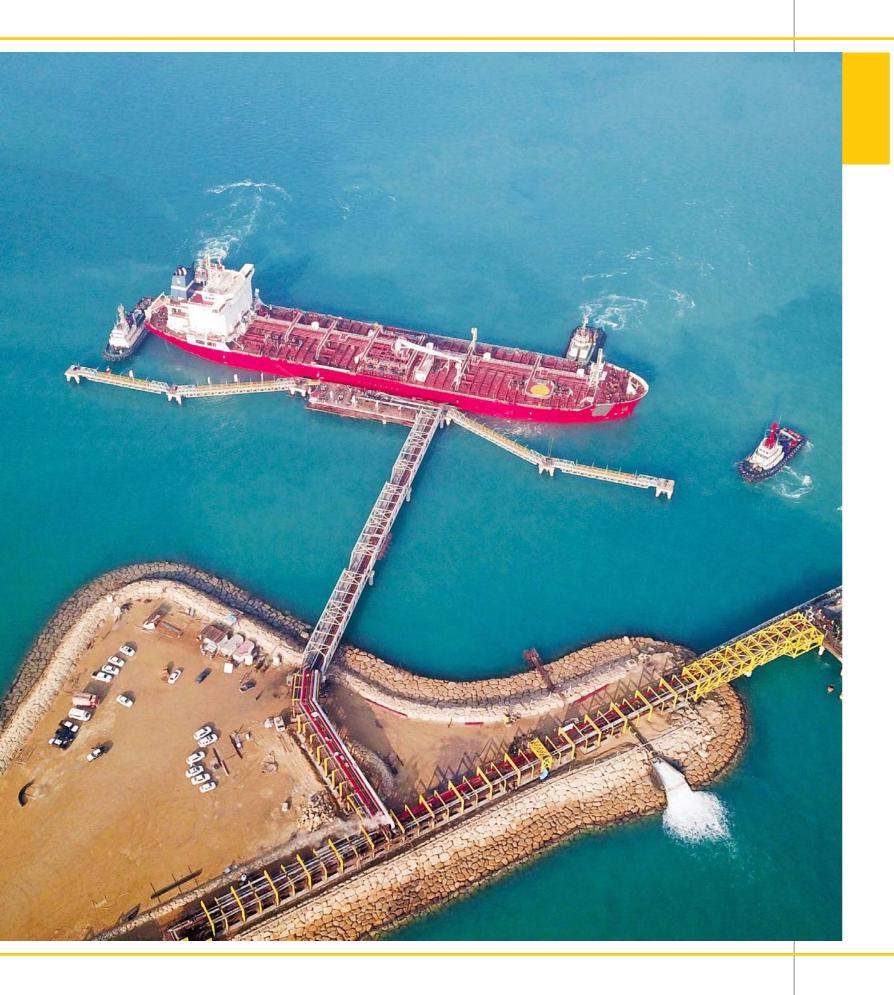


# Infrastructure

PEDC, in collaboration with the Qeshm Free Zone Organization, has being invested in the construction and operation of an oil jetty and terminal on Qeshm Island. The purpose is to create value through facilitate the import and export of feedstock and products from the existing Qeshm Heavy Crude Oil Refinery and the under-construction Qeshm Condensate Gas Refinery. Additionally, the project aims to provide sea water to the owned utilities plant by PEDC on Qeshm Island. As the sole private company authorized for this build-operate-transfer (BOT) venture, PEDC is responsible for the construction, operation, and ownership of the Oil Jetty located in the northern area of Qeshm Island.

The third berth of the Oil Jetty, with a capacity of 35000 DWT, has already been completed and is currently operational for exporting products such as bitumen from the Qeshm Heavy Crude Oil Refinery. The construction of the first and second berths is in its final stages. These berths will have varying berthing capacities ranging from 7000 to 70000 DWT and will include dolphins and mooring systems.





# **Trading and Commercial**

PEDC has created value chain of trading and commerciality in the oil and gas industry sector through:

- Production of refinery products from the Qeshm Heavy Oil Refinery and the under-construction Qeshm company's product portfolio and increases its competitiveness in the market.
- Access to storage facilities and Hara Jetty Oil terminal in the northern area of Qeshm Island provides trade and expand its market reach
- In addition to above assets and facilities, PEDC has a team of experts with extensive knowledge and streams.

Gas Condensate Refinery allow PEDC to produce a wide range of refinery products. Moreover, the under-construction petrochemical units further expand PEDC's product offerings. This enhances the

PEDC with a strategic advantage to facilitate the storage, import and export products. This ensures that the company can meet customer demands efficiently and enabling the company to engage in international

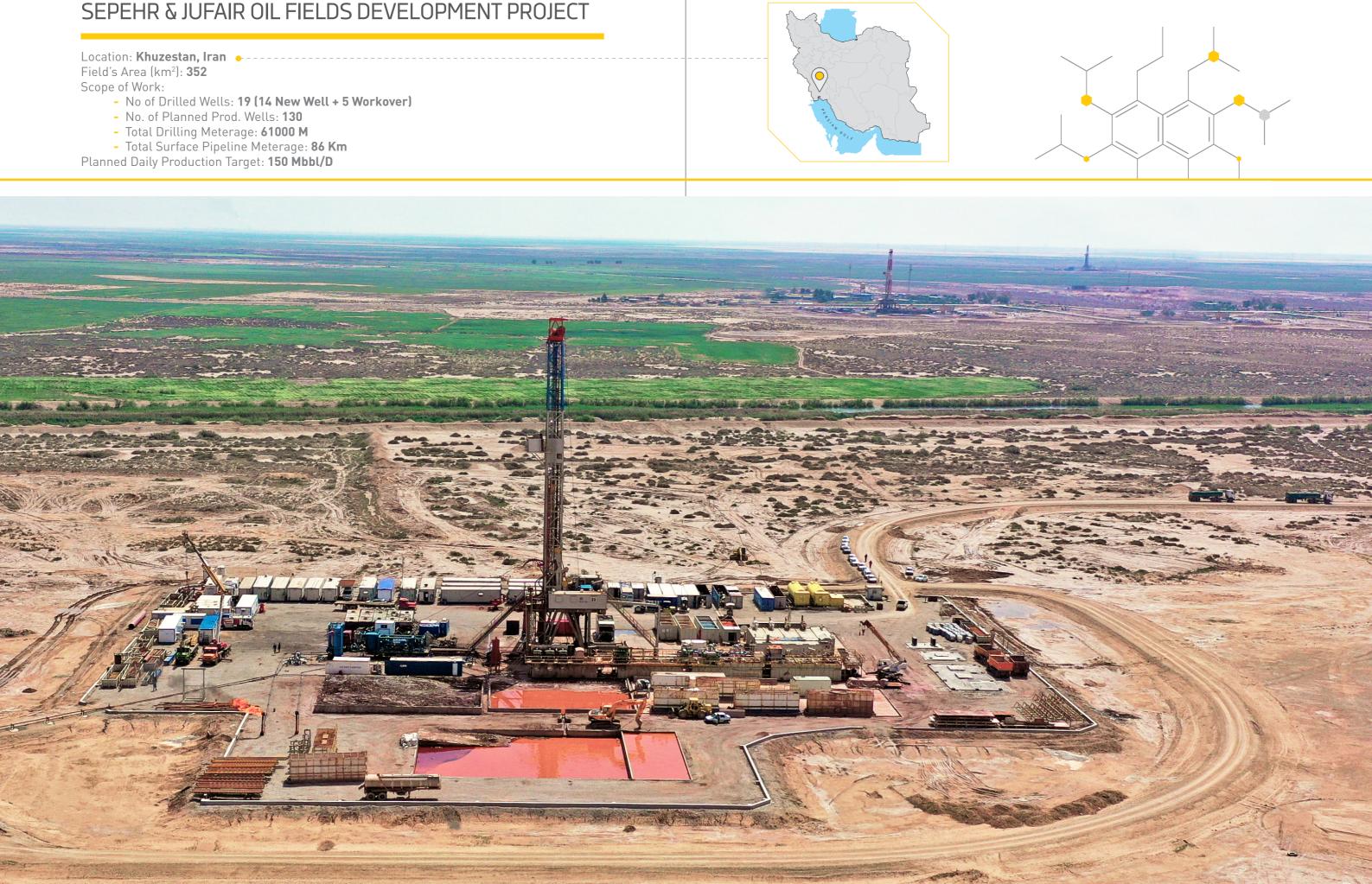
experience in the trading of oil and petrochemical products. So that, by leveraging these capabilities, infrastructure, and expertise, PEDC has established itself as one of the largest trading companies for oil, products, and petrochemicals in Iran. The company can not only trade its own products but also engage in the trading of products from other companies, further expanding its market presence and revenue





## SEPEHR & JUFAIR OIL FIELDS DEVELOPMENT PROJECT





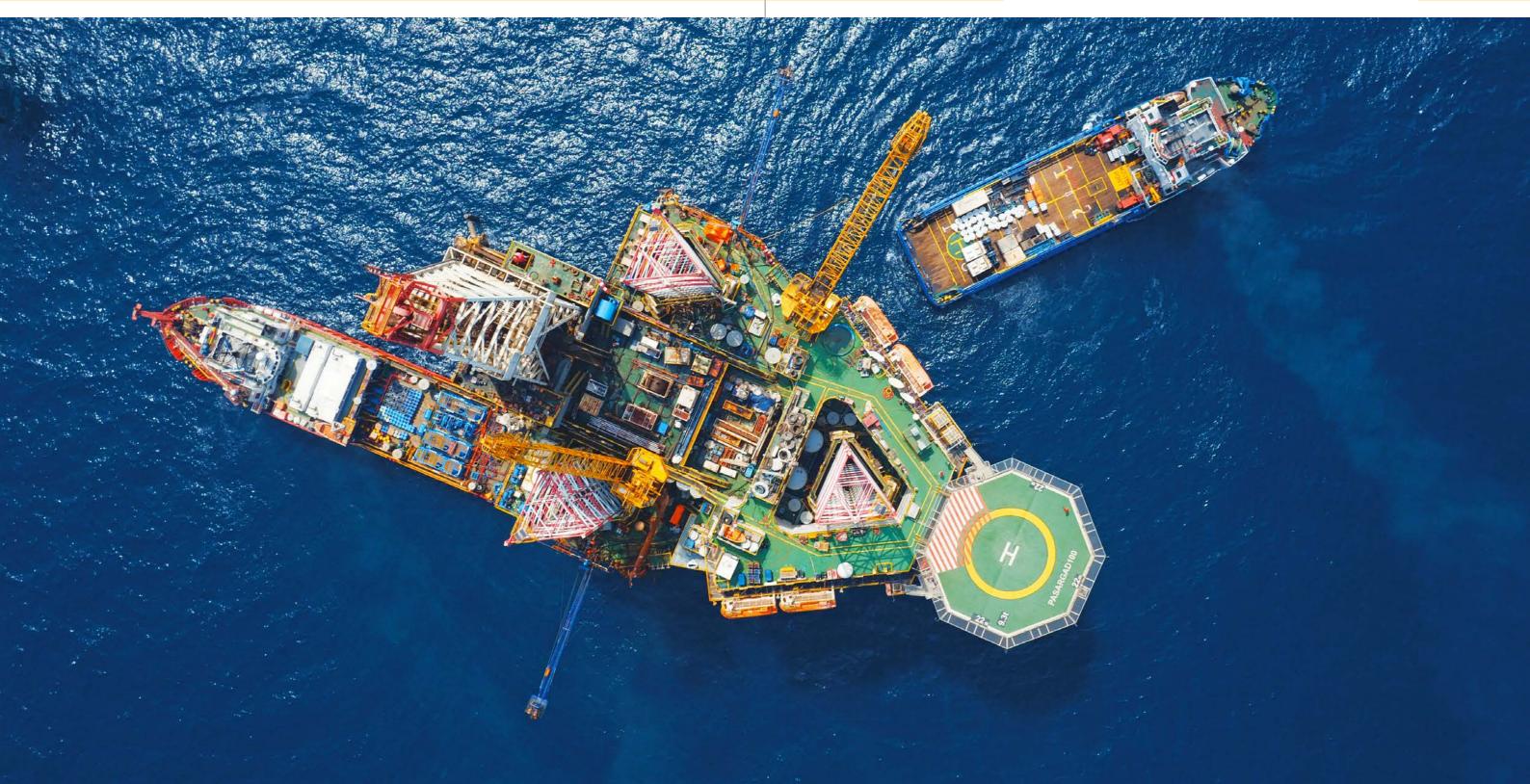
### PASARGAD 100 & PASARGAD 200 OFFSHORE DRILLING RIGS

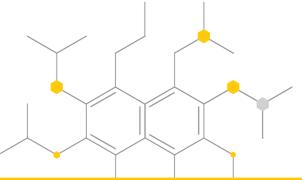
Location: Persian Gulf, Iran 🔶 ------

Specification of each offshore drilling rig:

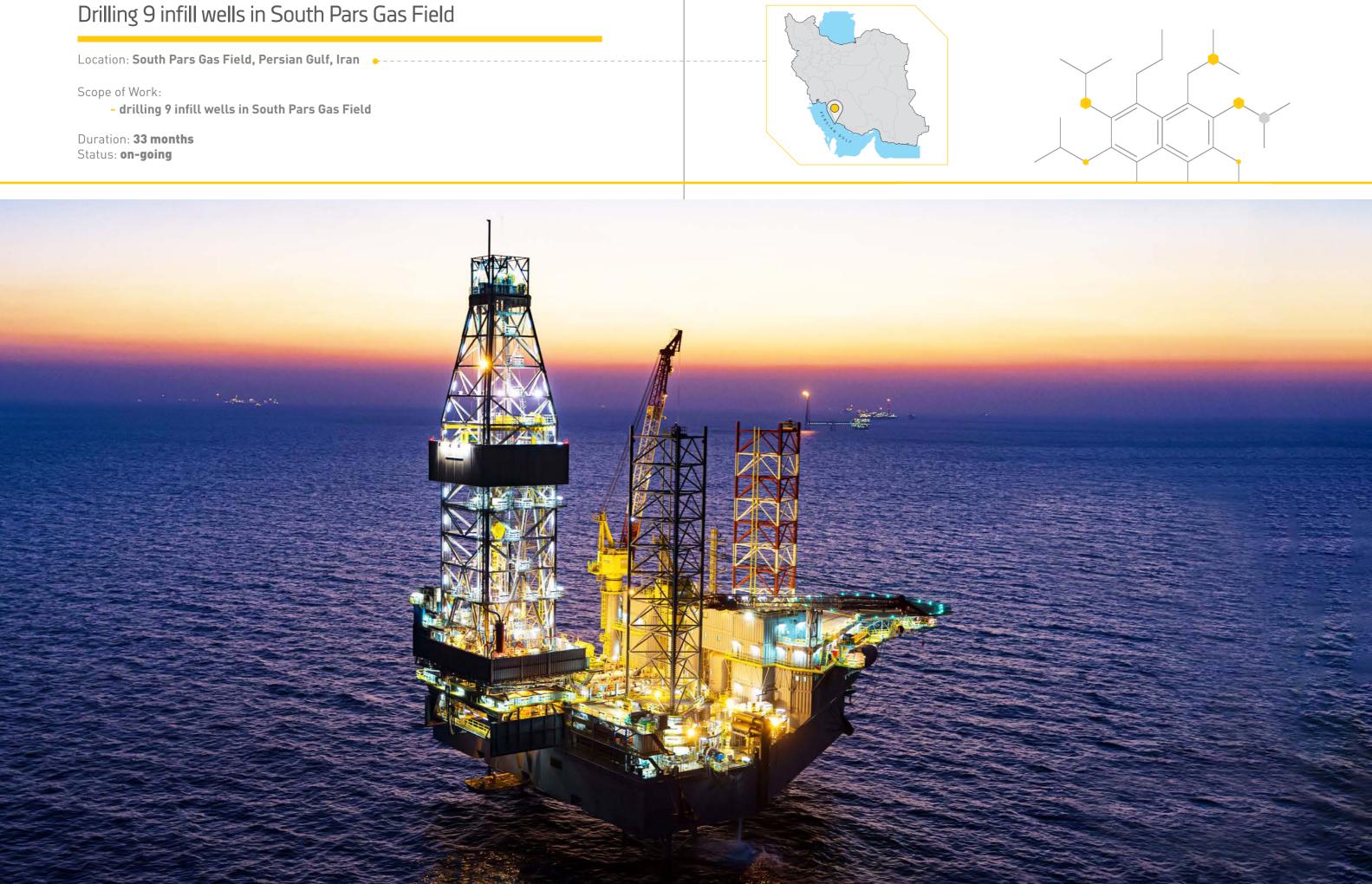
- 300 Ft Leg Below Hall
- 3000 Horse Power
- Appropriate For Drilling & Workover Operations











### PASARGAD 21, 22 & 31 ONSHORE DRILLING RIGS

Location: Khuzestan, Iran 🔶 -----PASARGAD 21 & 22:

Draw Works:2000 HP Rating, JC70DMud Pump:Three (3) F-1600-L LS-NOV, Rated at 1600 HP / 5000 PSI / 120 SPMTop Drive:Varco TDS 11-SA,37,500 ft-lb@ 120 RPM 500Ton Hoisting Cap. PASARGAD 31:

Draw Works:3000 HP VFD Drilling rigMud Pump:Two (2) F-2200-HL BOMCOTop Drive:Jinghong DQ-90BS 750 Ton



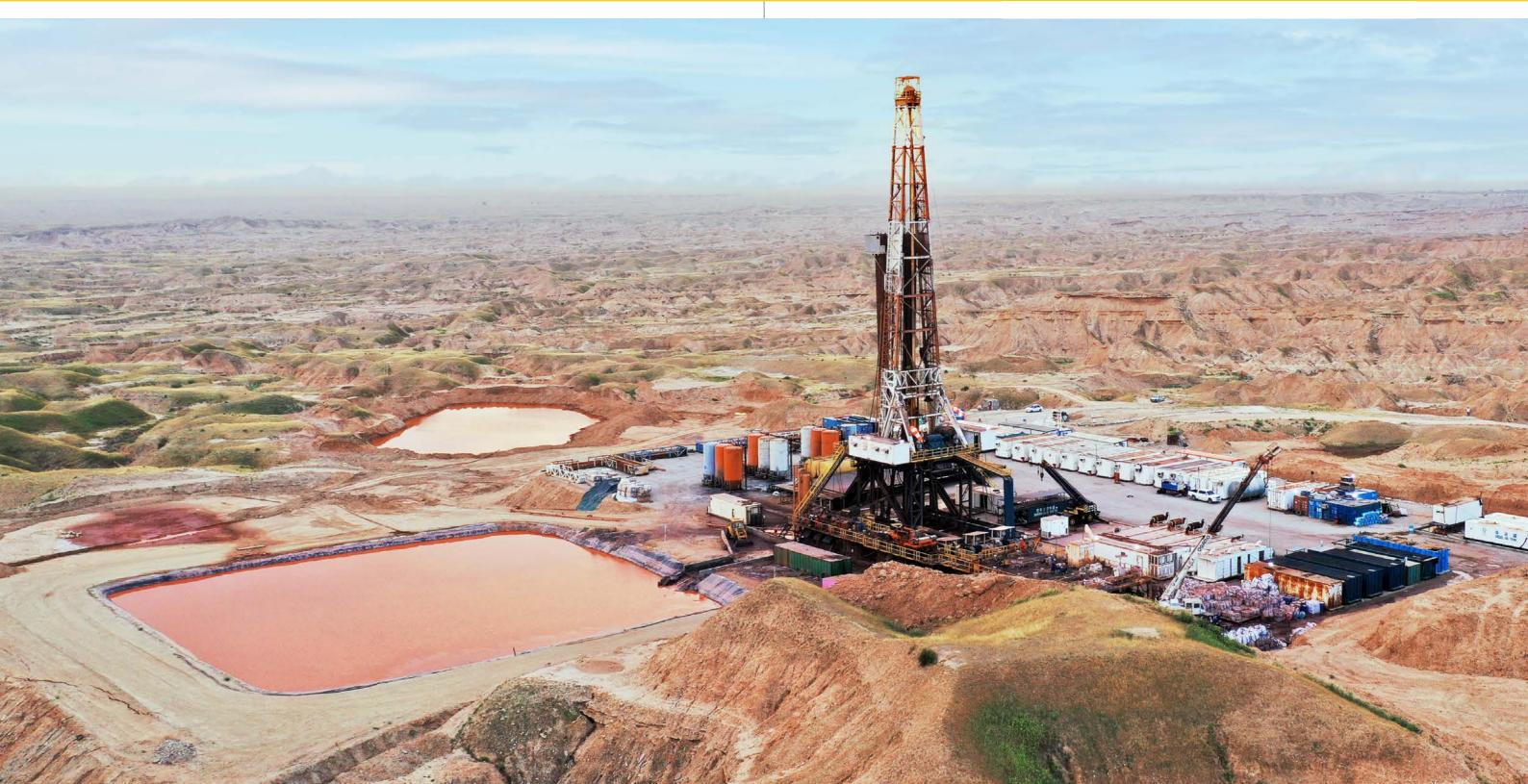




## SIAHMAKAN OIL FIELD DEVELOPMENT PROJECT

- Drilling 4 Wells As EPD
- Engineering, Procurement, Drilling and Completion of 4 new wells
- Design, Procurement, Construction and Commissioning Services for Separation Unit and Booster Cluster with 10000 bbl/d Capacity







## 6<sup>TH</sup> IRAN GAS TRUNKLINE PROJECT (IGAT VI)

Location: Bushehr, Khuzestan, Ilam, Lurestan and Kermanshah Provinces, Iran 🖕 -----

Specification:

- 593 Km Pipelines (56 48 &30 Inch) To Export The Gas To Iraq
- 5 Gas Compressor Stations Unit (Capacity: 5\* 110 Mcm/Day- Train 3+1)
- Gas Compression Facilities Area: 80 Acres
- Welding Volume in Gas Compression Facilities: 350000 Inch Día





mentation



- 5 Pressure Control Stations Unit
- 1 Metering Station Unit
- Area Of Non-Industrial Buildings: 11000 m<sup>2</sup>
- Cabling Length in Gas Compression Facilities:
   650 Km for Electrical And 780 km for Instru-
- Equipment Weight: 10000 Ton

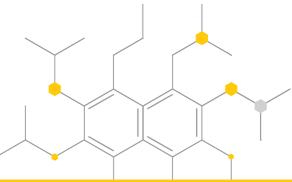
## PASARGAD QESHM SUPER HEAVY OIL REFINERY PROJECT

Location: North of Qeshm Island, Hormozgan Province, Iran 🖕 ------

Feed Capacity: 100000 bpd (By development of Phase 2; current capacity: 35000 bpd)
Phase I Products: Bitumen & Hydrocarbon Light Cut
Phase II Products: Middle Distillate, Marine Fuel, Feed to Javid Gas Condensate Refinery







## PASARGAD QESHM GAS CONDENSATE REFINERY PROJECT

Location: Qeshm Island, Hormozgan Province, Iran 🖕 ------

Feedstocks: 60000 Barrels Per Day of Gas Condensate

- Products: LPG 307 ton/ day
  - Middle Distillate: 2014 ton/day
  - Gasoline 4923 ton/ day





#### Gas Condensate Refinery Units:

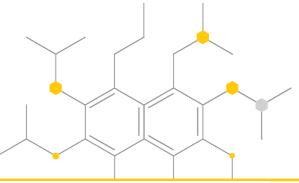
- Condensate Distillation Unit (CDU)
- LPG Treatment & LPG Recovery Unit
- Naphtha Hydro-Treating Unit (NHT)
- Dedicated Hydrogen Production Units (HPU)
- Amine Treatment Unit (AMN)
- Sour Water Stripping Unit (SWS)
- Sulphur Recovery Unit (SRU)
- Sulphur Solidification Unit (SSU)
- Continuous Catalyst Regeneration (CCR)
- Isomerization Unit

## PASARGAD QESHM OIL TERMINAL

- Berthing Of Crude Oil and Refinery Product Carriers, Up To 70000 DWT on Northern Platform.
- Berthing Of Crude Oil and Refinery Product Carriers, Up To 35000 DWT
- Berthing Of Bulk Bitumen Carriers, Up To 7000 DWT on Southern Platform.







## PASARGAD POLYOLEFIN PETROCHEMICAL COMPLEX PROJECT

Products:

- Methanol 1650 KTA
- High-Density Polyethylene (HDPE) 250 KTA
- Polypropylene (PP) 310 KTA Ethylene Propylene Diene-Monomer (EPDM) 50 KTA

Project Major Equipment:

- Waste Heat Boiler, Secondary Reformer, Methanol Reactors, Syn-Gas Compressor







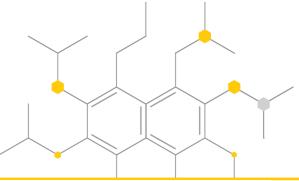
## SINA GTPO COMPLEX PROJECT

Location: Chabahar Free Zone (CFZ), Iran 🔶 ------Feedstocks: Natural Gas Products:

- Methanol 1650 KTA
- HDPE/ LLDPE 236 KTA
- Olefin 645 KTA - Polypropylene (PP) 420 KTA
- Project Major Equipment:
  - ASU, Syngas Compressor, Methanol Reactors, Primary Reformer







### PASARGAD QESHM WATER & POWER COGENERATION PLANT

Utilities: **3 Gas Unit, HRSG Unit and Steam Generation, Desalination Facilities** Key Activities:

- Construction and Operation of 420 MW Combined Cycle Power Plant
- Construction and Operation of 70 MW Gas Power Plant
- Construction and Operation of Steam and Desalination Utilities







## SHARIATI POWER PLANT COMBINED CYCLE PROJECT

Location: Khorasan Razavi, Iran 🔸 -----

Capacity: 502 MW







8 million Cubic Meters Per Year





## SORKHEH & MEHDISHAHR SOLAR POWER PLANT PROJECT

Location: Semnan, Iran 🖕 ------

Capacity: **Each One 12 Mw** Power Plant Area: **Each One 200000 M**<sup>2</sup> Saving Fossil Fuel Consumption: **Reduction of Fossil Fuel Consumption By 10 Cubic Meters Per Year** 





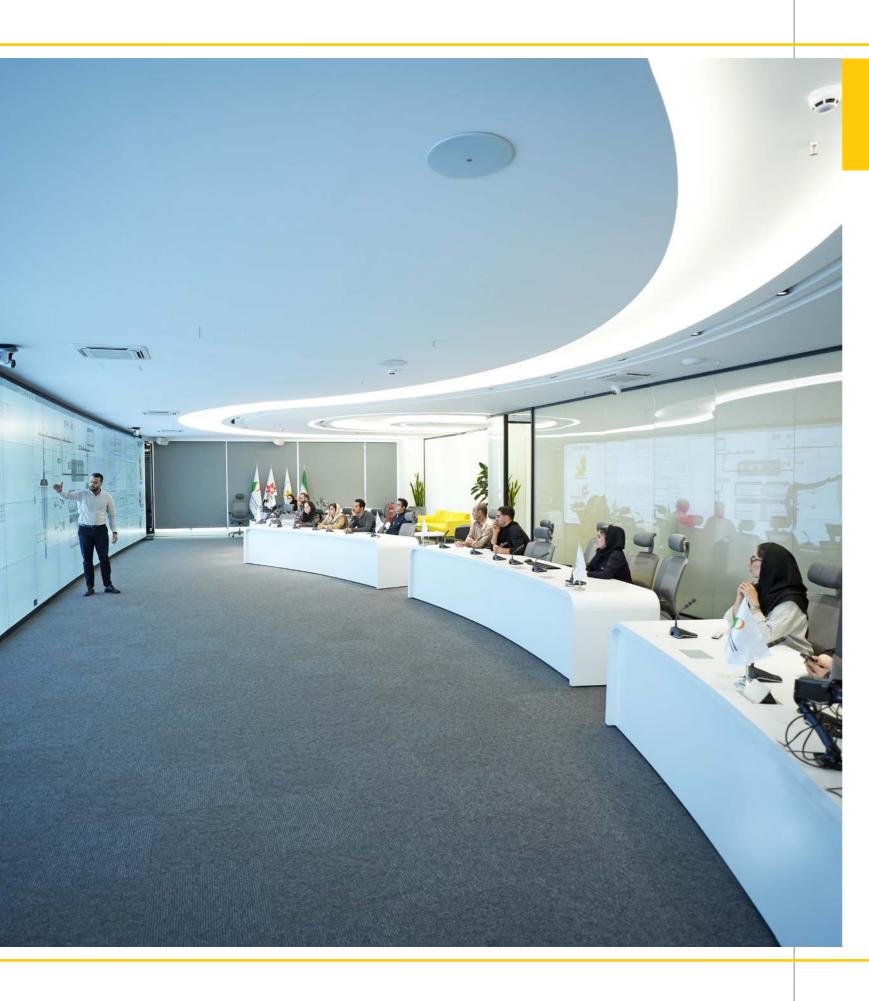


## URMIA COMBINED CYCLE POWER PLANT PROJECT









# **Innovative Technologies & Digital Transformation**

At PEDC, we are committed to driving progress in the energy and oil & gas sectors through continuous innovation and digital transformation. Our dedication to leveraging advanced technologies and fostering strategic partnerships ensures that we remain at the forefront of the industry, delivering sustainable growth and operational excellence.

### **Innovation and Digital Transformation:**

#### Smart Well, Reservoir, Facility Management (Smart WRFM)

We are proud to introduce the Pasargad Smart Well, Reservoir, Facility Management (Smart WRFM), a testament to our dedication to technological advancement.

Data gathering, storage, and analysis in real-time, along with access to up-to-date information and historical records, are essential components for effective business operations. Coupled with an integrated display system that allows for the observation of data patterns and trends, along with issuing necessary alerts, Smart WRFM plays a crucial role in this process. Such a system aids in making guick and timely decisions for developmental and production operations, thereby reducing operational risks. Ensuring the achievement of performance indicators is vital for maintaining efficiency and competitiveness. Moreover, providing access to company assets from any geographical location enables continuous optimization of asset value, further enhancing business efficiency and strategic capabilities.

#### **Innovative Technologies:**

#### **RETINA Reservoir Modeling Software**

RETINA is our proprietary software designed to revolutionize reservoir analysis and management. It offers advanced simulation capabilities, seamless data integration, and predictive analytics, enabling informed decision-making to enhance reservoir performance and optimize hydrocarbon recovery.

#### Additional Software Developments

Beyond RETINA, PEDC has developed several novel applications to enhance operational integrity and efficiency. These tools support our overall operational excellence, ensuring high standards of performance and reliability.

#### University Collaborations

PEDC actively invests in various research projects at top universities, aiming to develop breakthrough technologies, engage students through internships and collaborate on joint patents to further the industry's knowledge base.

### Specialized Hydraulic Fracturing Process Design Laboratory

PEDC has established the Specialized Hydraulic Fracturing Process Design Laboratory at Amirkabir University of Technology, the first of its kind in Iran. Supported by the National Iranian Oil Company, this state-of-the-art facility fosters collaboration between industry and academia, driving advancements in hydraulic fracturing technologies. Key features include:

- recovery and reduce costs.
- Skilled Team: Combines industry experts from PEDC with talents from the university.
- Technological Advancements: Utilizes advanced equipment and software for experiments and data analysis, contributing to significant improvements in the Sepehr and Jufair Oil Fields.

• Cutting-Edge Research: Focused on developing and optimizing hydraulic fracturing processes to enhance oil

