

Iran Oil Industry

Pars Special Economic Energy Zone

(Reference: PSEEZ)



سایت انبارها WAREHOUSES SITE	سایت پتروشیمی PETROCHEMICAL SITE	سایت توسعه صنایع روغن و گاز INDUSTRIAL AND WAREHOUSES EXPANSION LANDS	سایت توسعه صنایع روغن و گاز EXPANSION OF UPSTREAM INDUSTRIES
فرودگاه AIRPORT	سایت پشتیبانی بندر PORT SUPPORTS SITE	سایت نفت و گاز پارس- 12 فاز PARS OIL AND GAS SITE- 12 PHASES	سایت صنایع مخلوط MIXED INDUSTRIES SITE
سایت صنایع پایین دست پتروشیمی PETROCHEMICAL DOWNSTREAM INDUSTRIES SITE	کریدور کمربندی UTILITY CORRIDOR	فاز 11 و 12 PHASES 11 & 12	سایت صنایع نیمه سنگین SEM-HEAVY INDUSTRIES SITE
سایت تجهیز کارگاه MOBILIZATION SITE	کریدور کمربندی ذخیره شده RESERVED FOR THE UTILITY CORRIDOR	فاز 9 و 10 PHASES 9 & 10	سایت پشتیبانی SUPPORTING SITE
سایت خدمات و اداری SERVICES AND ADMINISTRATIVE SITE	منطقه نظامی MILITARY AREA	فاز 2 و 3 PHASES 2 & 3	امکانات زیرساختی INFRA-STRUCTURAL FACILITIES
سایت اسکان موقت TEMPORARY HOUSING SITE	هتل و هتل آپارتمان HOTEL & HOTEL APARTMENT	فاز 1 PHASE 1	ترمینال TERMINAL
سایت نیروگاه آب شور و کربن POWER PLANT AND DESALINATION PLANT SITE	سد گندوز DETENTION DAM	فاز 6 و 7 و 8 PHASES 6 & 7 & 8	پایانه بار WHARF
سایت صنایع دریایی MARINE INDUSTRIES SITE	سد رسوب کوز DESILTING DAM	فاز 4 و 5 PHASES 4 & 5	خط راه آهن RAIL ROAD

Establishment

Pars Special Economic Energy Zone (PSEEZ) was established in 1998 for the utilization of South Pars oil and gas resources and encouraging commercial activities in the field of oil, gas and petrochemical industries.





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Objectives

Facilitating for the on-time execution of various oil and gas projects, providing the appropriate foundation to attract local and foreign partnership with the aim of developing oil, gas and petrochemical industries as well as inter-related and downstream industries, creating local job opportunities and attracting skilled and semi-skilled workforce from neighboring provinces with regards to its positive effects on economic prosperity in the provinces of Bushehr, Fars and Hormozgan.

Location

This zone is located the Persian Gulf coast and 300 Km. East of Port of Bushehr and 570 Km. West of the Port of Bandar Abbas and approximately 100 Km. away from the South Pars Gas Field (Continuation of the Qatar's Northern Dome).

Macro Grouping of Facilities and Services

- Central administrative and support: Central Local office, Industrial affairs, Infrastructural services, Customs. Employment office, Social Welfare office, Visa,
- Office and service centers: Banks head office, Post office, Police station, Driving & Vehicle licensing office, Property registrar office, ...
- Sports and recreational centers: Multi-Purpose gymnasium, enclosed swimming pools, Open grounds sports, Water sports, sailors club, ...
- Hygiene and medical centers: First aids emergency services, Polyclinic, General Hospital for daily operations, Drugstore, ...



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- Technical and vocational training centers: Special oil, Gas & Petrochemical institute, Research center, Applied university faculty, Library & Documents center, ...
- Religion, arts and cultural centers: Multi-Functional assembly halls, Exposition hall, chapel (Praying house) , ...
- Fair and commercial centers: Central & Specialty fair complex, Trade center & Stock exchange, Satellite information center ...
- Residential / Guest house center: Guest House, First & Second class & International hotels, Hotel apartment, ...
- Welfare center: Restaurants, Central kitchen, Coffee shop, supermarket, Bakery, Sanitary services, ...
- Technical services: Consulting engineering & Contracting services, support & procurement affairs, Transportation companies , ...
- Landscaping and parks: Public parks, Coastal & Roadside green spaces, Forestation, Plant nursery, Environmental Protection, ...
- Transport : Terminals, Car parks, Coastal & Roadside green spaces, Forestation, Plant nursery, Environmental protection, ...
- Infrastructural facilities: Port complex, Power plant, Electrical main & substation, Desalination plant, Water & Fuel tanks, Gas station, Telecommunications, Sewage treatment plant, ...
- Mobilization workshop: Consultants & Contractors camps, construction period sites, Construction period warehouses, Construction period workshop, Construction material depots, ...
- Warehousing: Transit and industrial warehouses (Enclosed, Covered, Open) for bulks & Pallets, Liquids tanks, Cold storage, ...
- Urban furniture: Propylaeum, Street lights, Traffic & Advertising signs, Telephone kiosks, Transport stations, Site beautification, ...

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Employed population & Workforce utilization

For the 10,000 hectares of developmental lands (6000 hectares industrial lands), based on an average of 5 industrially employed persons) oil & gas industries, petrochemical downstream, semi-heavy and mixed industries), there shall be 30,000 industrially employed persons, and the same of employed in related services are forecasted at the project (total 60,000 persons inside the zone during the development period).

- All employed issues shall be according to the client-laborer contracts.
- Laborer regulations at zone are based on “ILO” recommendations.



Legal Facilities for Investments

- Transit and export of all goods should be carried out under the authority of PSEEZ.
- All manufacturing and industrial investments are exempted from paying duties.
- Foreign investment and ownership (except for the land) is allowed up to 100 percent.
- Importing raw materials, machinery and spare parts are exemption from any customs duties and tariff payment.
- Cost of exporting any good produced in the PSEEZ to the main land equals to the amount of its generated added value.
- Purchase of land is only permitted to domestic investors, land is only available to foreign investors on lease.
- Easy issuance of entry visa for foreign citizens.
- Foreign investment and its profit are guaranteed.
- Full freedom of entry and exit of capital.
- Allocation from the Oil Stabilization Fund





Banking Facilities

- Banking regulations at PSEEZ conform to international standards.
- Banking transactions with the main land shall be in either IR. Rial or foreign currency of choice, and overseas transactions will be in the respected foreign currency.
- Foreign currencies shall not be controlled and the exchange of IR. Rial to any foreign currency is permitted.

PSEEZ Potential Investors

- Major oil, gas and petrochemical companies
- Major financial institutions (including banks and investment firms)
- Service related companies (including manufacturers of drilling and exploration equipment)
- Academic and educational institutions especially technical and vocational training centers
- Non-oil and gas companies engaged in the downstream and mixed industries
- Service providers including banks, insurance companies, warehousing firms, and transport companies, etc.

Boushehr Province at a glance

Boushehr province with an area of 27653 sq km is located on the south of Iran, lying on the northern coastline of the Persian Gulf. It is bordered by Khuzestan and Kohgiluyeh – va – Boyerahmad provinces to the north, by Fars province to the east, by Hormozgan province on its southeast, and by the Persian Gulf on the south and the west.

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The population of the province stands at 743,675 people (1996 census). Almost all the population of the province speak Farsi with southern accents. Some inhabitants at Shif, Kangan and Assaluyeh also speak Arabic.

The resistance of people of Boushehr, and brave warriors especially Tangestan, against foreign invaders,formed an important part of the Iran's contemporary history and has left lasting memories for the people.

Boushehr province with more than 600 Km border with the Persian Gulf, consists of 9 township and 22 cities. Its townships are Boushehr (province's center), Dashhtestan, Dashti, Tangestan, Genaveh, Kangan, Dayer, Daylam, Jam and Riz.



South Pars Gas Field

South Pars gas field is the largest independent gas reserve in the world which is shared by Iran and Qatar. The field is 105 kilometers away from the Pars Special Economic Energy Zone. The reservoir covers 9,700 square kilometers in total with 3,700 square kilometers blongingto Iran. According to latest



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figures, the field contains more than 51 trillion cubic meters of natural gas . It stands for about 48 percent of Iran's confirmed reserves.

Considering the vast area of this gas field, its development was planned in several phases. The aim of developing of South Pars is supplying the increasing demand for the natural gas required for the country's domestic consumption, injecting gas into the oil fields, and exporting gas and condensates. Supplying gas as feedstock for the petrochemical industry is on the agenda of the National Iranian Oil Company(NIOC).

The field is already being developed in different phases; so far 14 gas processing plants have been planned. With regards to the reservoir's capacity, the development phases can increase to 28 phases or even more to further develop the giant gas field. Meanwhile, 15 huge petrochemical complexes and a wide range of downstream petrochemical units, different related industries, semi-heavy industries, marine industries and considerable number of service related facilities are predicted in this zone.

Area and Boundaries

The zone is bounded on the north by the Zagros Mountains, on the south by the Persian Gulf, on the west by the village of Shirino and on the east by the village of Chah Mobarak.

The total area is approximately 14,000 hectares. Excluding the alluvial lands and environmentally protected territories, there will remain about 10,000 hectares of developmental lands.



Preserved Land

The Nayband Bay is one of the most unique protected areas in the south of Iran for the habitat and breeding of marine life as well as mangrove trees. Furthermore, the lands on the south of the Gavbandi River and south-east of the PSEEZ are declared as Preserved Lands by the Environmental Protection Organization of Iran.

Climate

- Located on the 27 Degree latitude and 52 degree longitude.
- Air temperature of between 5 to 50 degrees centigrade.
- Relative humidity of 59 to 88 percent.
- Mean annual rainfall of 80 mm.
- The natural slope of the land starts from %0.1 (On the coastline) and reaches to %8 (on the mountain foot).
- Ground water reservoir of – 1.0 to – 10.0 m.



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- Average and scattered vegetation with some densely covered palm and mangrove trees.
- Predominant wind due to the particular local topography is from northwest to southeast.

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South Pars Development Plan; Phase 1



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The contract for the development of this phase was awarded to the Iranian company Petro Pars as a general contractor in February 1998. Investment value on this project is USD910 million on buyback basis.

After completion of all offshore and onshore facilities, operation of its first unit has been started in April 2004. It took some more months for this phase to be fully operational in November 2004.

South Pars Development Plan; Phase 2 & 3

The development of these two phases were awarded to the consortium of TOTAL of France, Petronas of Malaysia, and Gasprom of Russia with the management of Total South Pars (TSP) on September 1997. Total investment value of these two phases is more than USD2 billion on buyback basis. This project was inaugurated in February 2003.

South Pars Development Plan; Phase 4 & 5

Development of this project started in August 2000 by investing about USD2 billion on buyback contract by the Italian Agip Company (a subsidiary of ENI of Italy) and Iranian company Petro Pars.

This project was officially inaugurated in April 23, 2005.

South Pars Development Plan; Phase 6,7 & 8

Development of the phases which aimed at injecting sour gas into oil wells at Aghajari oil field, was started in February 2004 by investing about USD 1,964 billion on buyback contract. The project was awarded to a consortium comprising of the Industrial Development & Renovation Organization (IDRO), Petro Pars of Iran, Toyo and JGC of Japan, and South Korea's Daelim. The phases started production in 2008.



South Pars Development Plan; Phase 9 & 10

The contracts for Phases 9 and 10 were signed in September 2002 with a consortium of GS, Oil Industries Engineering and Construction (OIEC) of Iran, and Iranian Offshore Engineering and Construction Company (IOEC). The investment value of these two phases were more than USD 2 billion.

Both phases started production in 2009, and produce 5.56 million cmd of gas.

South Pars Development Plan; Phase 11

Development of South Pars phase 11 aims at supplying sour gas for Iran LNG Plant. This project is awarded through a buyback contract to the CNPC of China.

South Pars Development Plan; Phase 12

Development of South Pars phase 12 is designed to produce 78 million cubic meters of gas daily. Nearly 56 million cubic meters of produced gas will be feed to NIOC LNG, and the sour gas will be injected to the oil fields. Rest of the production would be transferred for the country's domestic consumption.

South Pars Development Plan; Phase 13

Development project for South Pars phase 13 is designed to supply required sour gas for Iran LNG project.

South Pars Development Plan; Phase 14

Development project of this phase is under study. The Phase's production capacity is assessed at two billion cubic feet per day. A refinery would be constructed in this phase to produce 50 million cmd treated gas1 ,.1million



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tons annually of liquid gas for export ,77,000 bd of condensates for export, and one million ton of Ethan annually.

South Pars Development Plan; Phase 15 & 16

Development of South Pars phases 15 and 16 are designed to produce 50 millions cubic meters of natural gas, 80,000 barrels of condensate, 400 tons of Sulphur per day, and 1.05 million tons of LPG, and 1 million tons of Ethan annually to be supplied to petrochemical plants.

South Pars gas Development Plan; Phase 17 & 18

Development of South Pars phases 17 and 18 are designed to produce 50million cubic meters of natural gas, 80,000 barrels of condensate, 400 tons of Sulfur per day, and production of one million tons of Ethan and 1.05 million tons of LPG per year.

South Pars Development Plan; Phase 19

The production capacity of this phase is two billion cfd. A refinery also is planned to be constructed at this phase which would produce 50 million cmd of treated gas, 1.1 million tons of liquid gas annually, 77,000 bpd gas condensates, and one million ton of Ethan per year.

South Pars Development Plan; Phase 20 & 21

These two phases are planned to be awarded to domestic contractors through EPCCS contract. These phases aim to supply 50 million cmd of gas for domestic consumption, recycle one million ton of Ethan each year, recycle 1.05 million ton liquid gas per year, production of 75.000 bpd of treated sulfur, and recycle of 400 tons of sulfur per day.



South Pars Development Plan; Phase 22, 23 & 24

Total production capacity of these phases is two billion cfd. A refinery also is planned to be constructed at these phases which would produce 50 million cmd of treated gas, 1.1 million tons of liquid gas annually, 77,000 bpd gas condensates, and one million ton of Ethan per year.

Petrochemical

Industry

Petrochemical Industry plays a significant role in Iran's economy; it supplies feedstock and raw material to many local downstream industries, produces and exports petrochemical products, creates jobs and is an important source of generating foreign currency. Therefore, petrochemical units will be constructed in the PSEEZ.

A plot of land with an area of 920 hectares spanning for 5 km from the western side of the site, beside desalination and power plants, to entrance road of the port (borderline between phases 4 and 5) is allocated to establish petrochemical units.

The most important petrochemical projects in the PSEEZ are:

- 9th Olefin, 10th Olefin, 4th Methanol, 4th Urea and Ammonia, Ethane recovery, Styrene Monomer and Polystyrene, Petrochemical Port, central utilities, 6th Methanol and DME.
- 11th Olefin, 12th Olefin, 6th Urea and Ammonia, 8th Urea and Ammonia and HDP Assaluyeh.

9th Olefin Project (Arya Sasol)

Operator: Arya Sasol Polymer Co. (Private Joint Stock)



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Location: Pars Special Economic Energy Zone

Area: 72 hectares

Shareholders: Pars Petrochemical Company (%50), Sasol Polymers of Germany (%50)

Start of Project: 2003

Start of Production: 2006

Main Products:

Ethylene one million ton per year

Light poly-ethylene 300.000 tons per year

Heavy poly-ethylene 300.000 tons per year

10th Olefin Project (Jam)

Operator: Jam Petrochemical Co. (Private Joint Stock)

Location: Pars Special Economic Energy Zone

Area: 77 hectares ,22hectares in phase 2

Shareholders: The Social Security Organization (25.8%), The Civil Servants Organization (23%) ,National Retirement Investment Fund24).6% ,(Edalat Broker)15(% , Sata (9.2%) ,others)2.5(%

Start of project: 2000

Start of production: 2007

Main Products:

Ethylene 1.3 million ton per year

Propylene 305.000 tons per year

Light poly-ethylene 300.000 tons per year

Heavy poly-ethylene 300.000 tons per year

Poly-propylene 300.000 tons per year



11th Olefin Project

Operator: Kavian Petrochemical Co.

Location: Pars Special Economic Energy Zone

Area: 43 hectares

Shareholders: NPC (17.5%), Bakhtar Petrochemical Co. (26%), Lorestan Petrochemical Co, (6.5%), Kermanshah Polymer Co. (6.5%), Kordestan Petrochemical Co. (6.5%) and Mahabad Petrochemical Co. (6.5%)

Start of project: 2005

Projected production date: 2011

4th & 6th Methanol Project (Zagros)

Operator: Zagros Petrochemical Co. (Private Joint Stock)

Location: Pars Special Economic Energy Zone

Area: 31 hectares

Shareholders: Ghadir Investment Co. (34%), Alyaf Morvarid (18.8%), Pooshine Industrial (18.8%), Petroleum Industry's Employees' Pension & Welfare Fund (17%)

Start of project: 2000

Start of production: 2006

Main Products:

Methanol 1.6 million tons per year (phase one)

Methanol 1.6 million tons per year (phase two- 2008)

4th Aromatic Project (Nouri)

Operator: Borzuyeh Petrochemical Co. (Private Joint Stock)

Location: Pars Special Economic Energy Zone

Area: 61 hectares



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Shareholders: NPC) 76.5 (% , Tamin Petrochemical Industry Investment)17(% , National Retirement Investment Fund (6.5%)

Start of project: 2000

Start of Production: 2007

Main Products:

Paraxylene 750.000 tons per year

Benzene 430.000 tons per year

o-Xylene 100.000 tons per year

LPG 76.000 tons per year

Centralized Utility, Phase 2

Operator: Damavand Petrochemical Co. (Private Joint Stock)

Location: Pars Special Economic Energy Zone

Area: 90 hectares (included water intake & water treatment)

Ownership: NPC (100%)

Start date: 2010

Projected production date: 2014

4th Ammonia & Urea Project (Pardis)

Operator: Ghadir Urea / Ammonia Petrochemical Co. (Private Joint Stock)

Location: Pars Special Economic Energy Zone

Area: 26.2 hectares

Shareholders: NPC (49%), Ghadir Investment Co.

(%51) ,AlvandInvestment (31. , (5Petrochemical Commercial Co) .17(%

Start of project: 2001

Start of production: 2009

Main Products:



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Ammonia 680.000 tons per year

Granular Urea 1.07 million tons per year

6th Ammonia & Urea Project (Expansion of 4th Ammonia & Urea)

Operator: Ghadir Urea & Ammonia Petrochemical Co. (Private Joint Stock)

Location: Pars Special Economic Energy Zone

Area: 24 hectares

Shareholders: NPC (49%), Ghadir Investment Co. (%51)

Start of project: 2004

Projected production date: 2006

8th Ammonia / Urea

Operator: Lavan Chemical Co.

Location: Pars Special Economic Energy Zone

Area: 25 hectares

Shareholders: International Petrochemical Co (20%), Arak Petrochemical Co. (20%), and Melli Bank Investment Co. (5%), Sab Industries Ltd. (%55)

Start of project: 2010

Projected production date: 2013

12th Olefin Project

Operator: Under assessment

Location: Pars Special Economic Energy Zone

Area: 62.3 hectares

Shareholders: private sector (100%)

Start of project: 2011

Projected production date: 2014



Ethane, Styrene Monomer & Polystyrene (Pars)

Operator: Pars Petrochemical Co. (Private Joint Stock)

Location: Pars Special Economic Energy Zone

Area: 23 hectares +)14 hectares)

Shareholders: NPC (60%) ,Sata (40%)

Start of project: 1998

Start of production:-2006

Main Products:

Ethane 1.6 million tons per year

Propane 980.000 tons per year

Butane 570.000 tons per year

Styrene Monomer 600.000 tons per year

HDPE (Assaluyeh) Project

Operator: National Petrochemical Company (NPC)

Location: Pars Special Economic Energy Zone

Area: 7.2 hectares

Shareholders: NPC (40%), Thakland J.V (NPCT and CCC Companies)
and Japanese Itochu Co. (%60)

Start of project: 2004

Projected production date: 2008

DME Project

Operator: Zagros petrochemical Co. (Private Joint Stock)

Location: Pars Special Economic Energy Zone



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Area: 6 hectares

Shareholders: NPC (100%)

Start of project: 2004

Projected production date: 2008

Downstream Industries

Due to the availability of raw materials produced by petrochemical industries at the PSEEZ and supply of feedstock required by petrochemical downstream industries, a site with an area of 1000 hectares has been allocated for the construction and expansion of downstream industries such as polymers, rubber and plastic, synthetic fibers and textiles, industrial oils, resins and adhesives, paints and protective covers, pesticides, detergents and chemical fertilizers.

Marine Industries

In view of developing industrial requirements at PSEEZ, especially with respect to port structures and marine facilities, construction of large marine industry yards for the fabrication, installation and repair of various marine structures as well as onshore facilities and equipment related to port and shipping activities, a plot of land covering 100 hectares to the west of the zone has been allocated to this purpose.

Mixed Industries

An area of 250 hectares has been allocated to manufacturing of parts and equipment for oil, gas and petrochemical industries, metal industries,



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Electricity and electronic industries, instrumentations industries and chemical industries.

Semi-Heavy Industries

An area of 300 hectares to the east of mixed industries site and to the west of downstream industries site is considered for semi-heavy industries in order to build heavy metal structure industries, under pressure tanks, petrochemical refineries and power plants equipment, pipelines and metal industries.