



COMPLEXES OF Iran's PETROCHEMICAL INDUSTRY

February 2022

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by regions

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INTRODUCTION

Petrochemical is a major industry in Iran. As an important source of non-oil revenues, it plays a significant role in the expansion of local industries, the development and indigenization of technologies and the growth of its downstream industries. It is also important for the industry's research and development activities. Diversity of feedstocks, access to international waters and availability of highly-qualified workforce are among the major advantages of the industry. The history of Iran's petrochemical industry goes back to 1963 when a fertilizer plant was built in the city of Shiraz. One year later, the state-owned National Petrochemical Company was established to spearhead the development and policy-making for the industry. During 1964-1977, Razi (ex-Shahpour), Abadan, Pazargad, Ahvaz Carbon Black (ex-Iran Carbon), Kharg, Farabi (ex-Iran-Nippon) and Shiraz expansion projects were implemented. During this period, a large portion of Bandar Imam Petrochemical Co. (ex-Iran and Japan Petrochemical Co.) was completed. This growth trend was, however, disrupted after Iraq invaded Iran in early 1980s. When the war came to an end, Iran implemented its first five-year development plan (1989- 1994) after the victory of Islamic Revolution. Under the plan, NPC reconstructed its war-damaged facilities and built two new plants in Isfahan and Shazand (Arak). In 1997, NPC's output reached 13 million tons and in 2021 it rose to 90 million tons.

Iran's Petrochemical Complexes

Based on the envisaged plans for 2020

Total number: 68

Region	No	Annual capacity (MT/Y)
Mahshahr	21	25.8
Assaluyeh	23	42.9
Other regions	24	21.5
Total output capacity	68	90.2 (MT/Y)

Including Bandar Imam 3rd NF 93 mt/y

Total Number of Mahshahr & Assaluyeh Complexes including Fajr, Mobin & Damavand Petrochemical utility Companies.



Petrochemical Special
Economic Zone
Mahshahr





Khuzestan Province

The southwestern Khuzestan province spreads over an area of 64,057km². It is bordered by Lorestan, Chaharmahal-va-Bakhtiari, Kohkiluyeh-va-Boyerahmad and Ilam provinces. Persian Gulf and Iraq are located in its south and west, respectively.

According to a 2016 census, This province had a population of over 4.710 million of which about 67 percent of the population lives in urban areas. In summer time, Khuzestan and its coasts are extremely hot. According to the census, the annual average temperature is 26.3° C and annual rainfall in the center of province is around 184.3 millimeters.

The census also showed that the majority of people in the province speak Farsi. Other ethnic dialects are including Arabic and Lori Bakhtiari; Dezfooli and Shoostari are also spoken. Khuzestan is home to one of the man's most ancient civilizations. About six thousand years ago, a civilization emerged in the city of Shoosh or Susa. Two thousand years later, it led to the formation of the powerful kingdom of Ilam. The kingdom was vastly developed under the Achaemenian,

Arsacides and Sassanids dynasties. Khuzestan is very important to the Iranian Economy. The province enjoys enormous oil and gas resources. Due to the availability of well-developed marine, air and land connections as well as access to the international waterways, Khuzestan offers lucrative investment opportunities. The province consists of 27 cities, 54 towns, 52 districts and 112 villages. Ahvaz is provincial capital of khuzestan.

Tourist attractions:

The most attractive historical and natural places of interest in Khuzestan are:

- **Abadan:** Museum, Minoo Island, Arvand Rood (River).
- **Andimeshk:** Dehloran mineral water springs, Eyn-e-Khosh Fountain and Karkhe protected zone.
- **Ahvaz:** Suspension Bridge (also known as White Bridge), Karoon River and its riverside parks.
- **Izeh and Bagh-e-Malek:** Eshkaft-e-Salman (Salman Chasm), Bard Nebeshteh (Stone Inscription), Kol Fareh Carvings and Hani Inscription.
- **Behbahan:** Zohre River, Jarahi (Marun) River, Arjan Castle, Tang-e-Tak Ab Inscription.
- **Khoramshahr:** Arvand Rood (River) and its riversides, Grand Mosque.
- **Dezful:** Dez Dam lake, Dezful Caravansary, The city's ancient bridge, Vazir (vizier) bath, Jondi Shahpour ancient city, Grand Mosque and Yaghoob-e-Leis Mausoleum.
- **Ramhormoz:** Jarahi (Maroon) River, Ghal-e-Dokhtar (The Girl's Castle).
- **Soosangerd:** Hoor-al-Azim marshland.
- **Shadegan:** Shadegan Lagoon.
- **Shoosh:** Choghazanbil Ziggurat, Apadana Palace, Acropol Castle, Karkh-e- Porch, Ardeshir Palace, Prophet Daniel's Shrine and Shoosh Museum.
- **Shooshtar:** Waterfalls, ancient water mills, Gorab mineral waters, Grand mosque, Shooshtar Caravansary, and Seyed Mohammad Mahroo Mausoleum.
- **Mahshahr:** Osk ancient city, Salak ancient village, Basif ancient castle.
- **Masjed-Soleiman:** Karoon Dam Lake, Ghal-e-Bardi (Stone Castle) and Bard Neshandeh (stone inscription) Temple.



Mahshahr port

Mahshahr port is located at the far-flung of Khuzestan province near the Mousa Estuary. It is bounded in the north by Ahvaz and Ramhormoz cities; in the east by the city of Behbahan; in the west by the city of Khoramshahr and in the south by the Persian Gulf. Mahshahr covers an area of over 7304 sq km and its altitude is 3m above the sea level. It consists of 3 districts: Central, Bandar Imam and Hendijan.

Its distance from Tehran is 1032km, from Ahvaz is 151km, from Abadan is 95km, from Aghajari is 72km and from the nearby Bandar Imam Khomeini is 18km. It has sultry weather and maximum summer temperature is as high as 50°C. The average annual temperature is about 25°C. Average humidity is 65% at 06:30am and 40% at 06:30pm. Average annual rainfall in Mahshahr is about 196mm.

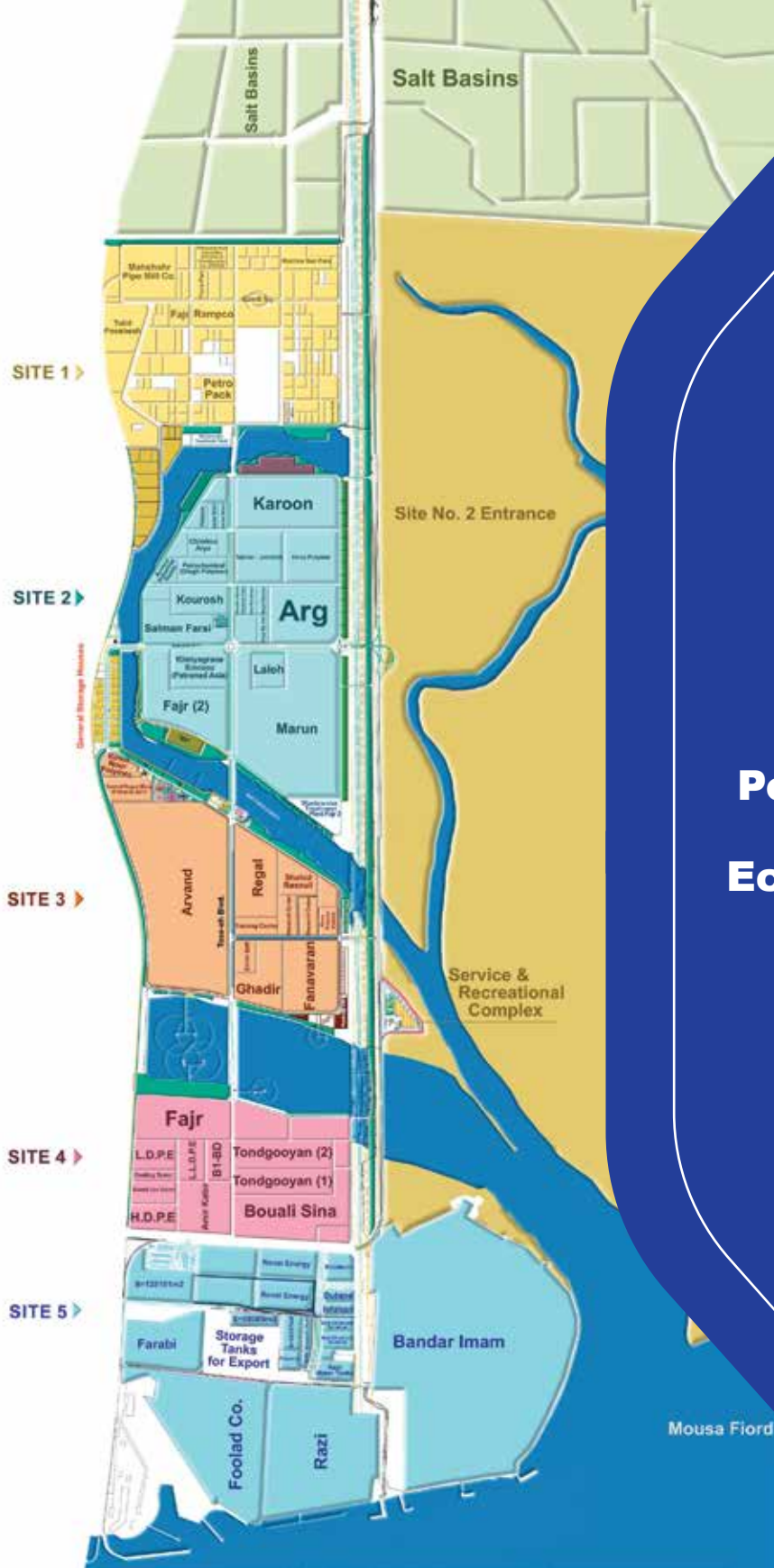
Zohreh and Jarahi (Marun) Rivers run through the city outskirts. Mahshahr, literally meaning 'the moon city', is one of the most ancient ports located on the Persian Gulf. Formerly called Mashoor, the city consists of two districts; the old and the new Mahshahr.

The new Mahshahr came into existence when an oil-exporting port was constructed. It was the country's largest oil-exporting port before the Kharg Island oil export terminal was built. The old section of the city, which is home to the majority of the population, is 3km from the new one. Most of the government organizations and institutions are located in this district.

In 1991, NPC unfolded a new development plan for the petrochemical industry in the region, which has boosted its economy. In addition to its oil and gas export facilities, Mahshahr is notably important for its petrochemical industry. Bandar Imam Khomeini, one of Iran's major ports, is located 20km from Mahshahr.

Imam Khomeini Port

The port lies at the far-flung part of the Persian Gulf. It is bordered in the east by the cities of Abadan and Khoramshahr and in the southeast by the provincial capital Ahvaz. Imam Khomeini Port is connected to the Persian Gulf via Mousa Estuary. It is one of the world's most important natural canals. Vessels of up to 100,000 tons capacity ought to pass through this canal en route the Bandar Imam Khomeini and Mahshahr. In 1973, the residents of Bandar Imam Khomeini were relocated to the nearby Bandar Imam City. Imam Khomeini Port is currently Iran's largest marine terminal. Annual loading/unloading capacity of this port is over 50 million tons. The development of the petrochemical industry in the region in the past recent years has culminated the considerable growth of the port.



Petrochemical Special Economic Zone (MAHSHAHR)

The Petrochemical Special Economic Zone is located in the southwest of Mahshahr city, in Khuzestan province, southern Iran, near the northern coast of the Persian Gulf. The Zone now covers an area of 2,600 hectares. When it was first established, it only encompassed an area of 1,700 hectares. The expansion came after Bandar Imam, Razi and Farabi Petrochemical Complexes were annexed to the Zone, which is linked to international waterways via Bandar Imam Port accessing Turkey, Europe and Central Asian countries via Iran's national railroad. The main reason behind establishing the Zone was to bring about industrial development especially in the petrochemical sector and its downstream industries. The zone offers a wide range of economic and social benefits at local and national levels which includes applying the state-of-the-art technologies and creating job opportunities. The Organization of Petrochemical Special Economic Zone, which is a subsidiary of NPC, is responsible for promoting and developing the Zone. This zone, began its activities in 1997 after receiving the respective authorization from the nation's High Council for Free Trade and Industrial Zones. Among its major activities are developing the infrastructural facilities with the aim of attracting domestic and foreign investors. It is an outstanding gateway to Iran's abundant oil and gas resources.



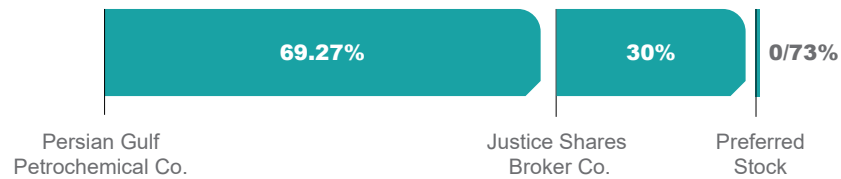
Nominal capacity (KT/Y): **6,555.5**

Bandar Imam Petrochemical Complex

- **Area:** 270 hectares
- **Founded in:** 1971 (two years later a joint venture with five Japanese companies was signed)
- **Management Structure:** In 2002, in line with non-centralized directorate, BIPC restructured its management organization by establishing five independent subsidiaries each responsible for a number of plants in order to boost its productivity and achieving a better improvement potentiality.



Ownership



- Located at an area of 270-hectares in southeast of Khuzestan province, BIPC is 160 km away from Ahvaz and 84 km from Abadan.

Production capacity (KT/Y)

Products	Nominal capacity	feedstock	Licensor	Start up date
* Ethane	565	NGL	Parsons	NF2 (1990) NF1 (1995)
Propane	1,090	NGL	Parsons	
Butane	908	NGL	Parsons	
C5+	768	NGL	Parsons	
Ethylene	411	Ethane, C5 ⁺	Lummus	1993
C4 Cut	80	Ethane, C5 ⁺	Lummus	1993
Pyrolysis gasoline	113.5	Ethane, C5 ⁺	Lummus	1993
Fuel oil	21.6	Ethane, C5 ⁺	Lummus	1993
Benzene	39	Naphtha	Engel Hard, UOP, HRI	1996
Mixed xylenes	140	Naphtha	Engel Hard, UOP, HRI	1996
Aromatic raffinate	241	Naphtha	Engel Hard, UOP, HRI	1996
Paraxylene	180	Mixed Xylenes	IFP	2000
HDPE	150	Ethylene	Mitsui	1994
LDPE	2*50	Ethylene	Tosoh Corp.	LD-1(1995), LD-2(1994)
**Polypropylene	50 **	(polymer grade)	Mitsui, Toatsu	1994
*** Propylene (polymer grade)	64	Propylene (Chemical grade)	Mitsui, Toatsu	1994
PVC	175	VCM	HULS (Germany)	1995
C4 raffinate	62.5	C4 cut	BASF (Germany)	1994
1,3 Butadiene	26	C4 cut	BASF (Germany)	1994
Synthetic rubber	40	1,3 Butadiene & Styrene	JSR (Japan)	1994
C9+	46			
Toluene	145			

* The 3rd NF plant of BIPC with annual production capacity 443,000 tons of Ethane, 870,000 tons of Propane, 688,000 tons of Butane, 649,000 tons of C5+ and 35,000 tons of gas fuel is onstream and will be used as a replacement for existing units

* According to National Petrochemical Company board of directors approval, production of this unit has been stopped from early 2006 and produced propylene were sent to Rejal Petrochemical Company.

*** The polypropylene unit was shut down due to economic concerns and because of that this is not included in nominal capacity calculations.

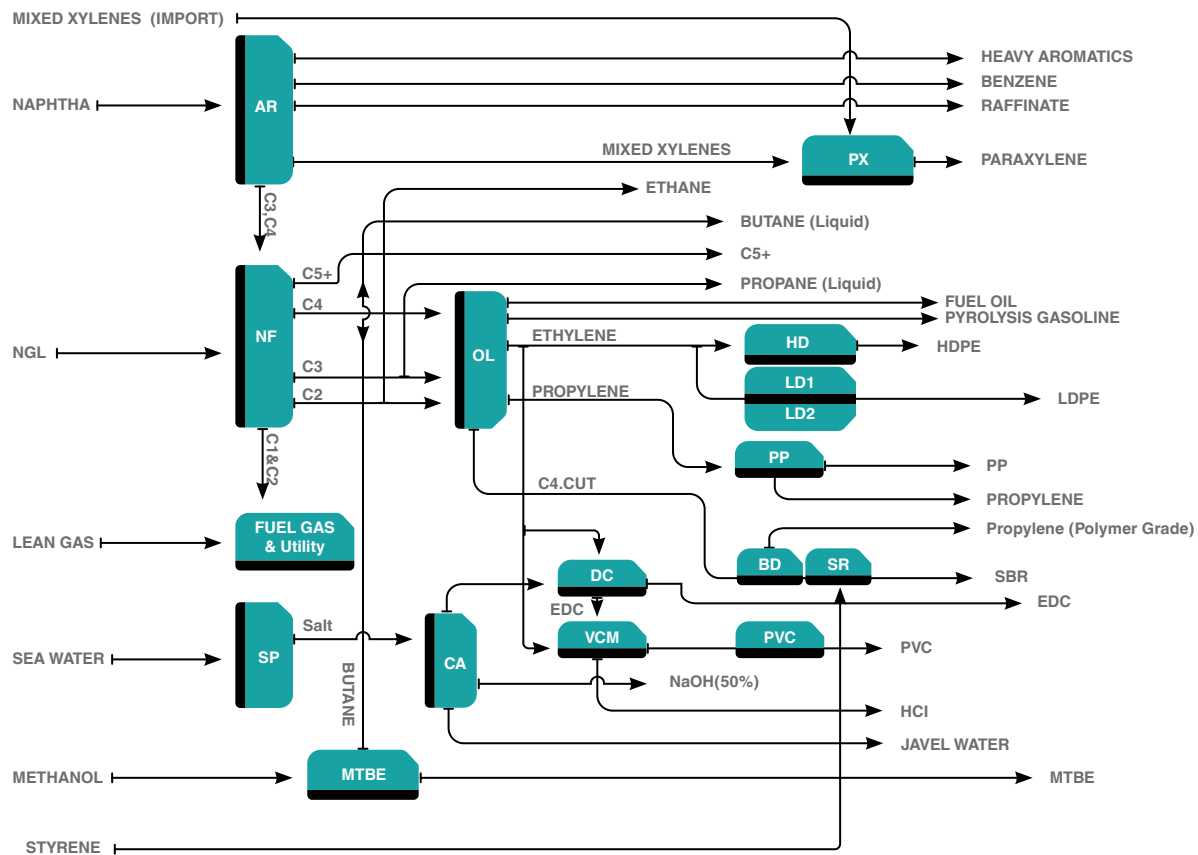
Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Caustic soda	250 *	Salt	Denora	1994
HCL (33%)	63.3	Chlorine / Hydrogen	Lorrian,Carbon+SGL	1994
Sodium hypochlorite	6.6	Chlorine, Caustic Soda	Denora	1994
EDC (DC)	300	Chlorine, Ethylene	Tosoh	1994
EDC (OXY)	140	HCL, Ethylene	Tosoh	1994
VCM	180	EDC	Tosoh	1994
MTBE	500	Methanol, Butane	UOP	2002

* The caustic soda units were shut down due to environmental concerns and because of that they are not included in nominal capacity calculations.

Input feed	Amount (KT/Y)	Source
NGL	3,200	NISOC
Naphtha	1,000	Abadan refinery
Mixed xylenes	72	Import
Methanol	176	Fanavaran petrochemical Co.
Styrene (SBR plant)	8	Pars Petrochemical Co.
Sea water	21,000,000 (M ³ /y)	Persian Gulf

Production Process Diagram



■ Products application

NF plant products such as C2, butane and C5 provide the feedstock for olefins & fuels. Output from the olefin plant provides the main feedstock for the BIPC's polymer plants. Output from Aromatic plants like benzene, mixed xylenes & paraxylenes are used in the production of paints and plastic industries as well as the production of PTA and chemical industries solvents.

Detergents, industrial solvents, PVC, sugar industry, paper industry, unleaded gasoline, water and sewage treatment

HDPE: pipes, cables, various plastic bags, food & chemical containers

LDPE: cable coatings, various nylon films, plastic bags, household appliances, pipes, sport goods and laboratory equipment

PP: kitchen ware, stationary, toys, food packing, auto parts, cereal bags, bottles

PVC: cable coatings, transparent films, pipes and joints, door & window panes, shoe industry, electronic industry

SBR: auto parts, tires, floor coatings, shoe soles, toys

Utilities for BIPC units

■ ISO Certifications



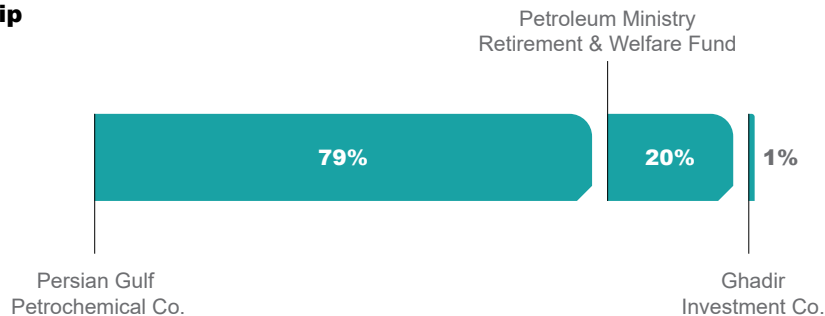
Arvand Petrochemical Co.

- **Location:** Petrochemical Special Economic Zone
- **Area:** 108 hectares
- **Founded in:** 2000

Nominal capacity (KT/Y): **2,834.2**



Ownership



Products application

Production of detergents, industrial solvents, paper & sugar industries, sewage and water treatment, antiseptic . . .

Production capacity (KT/Y)

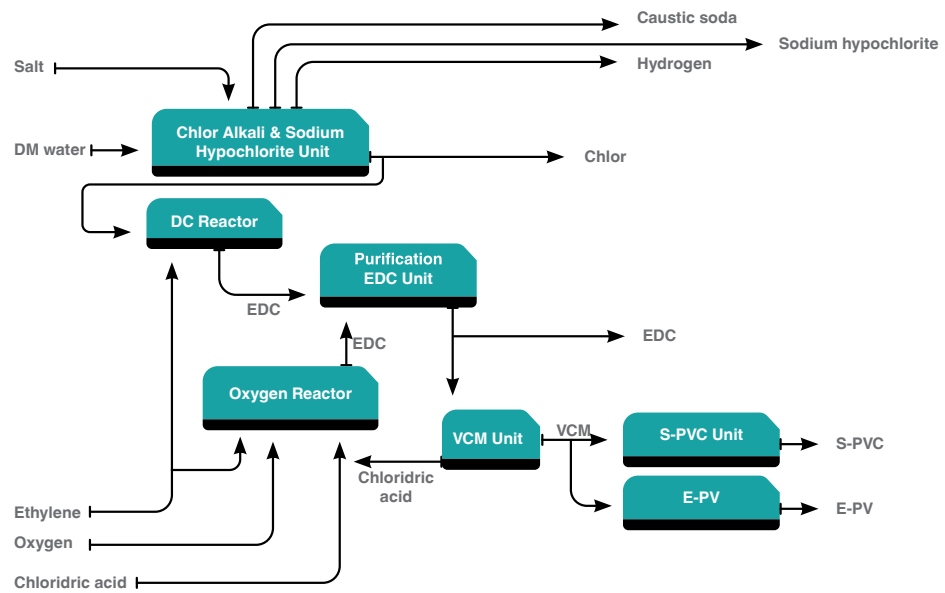
Products	Nominal capacity	feed	Licensor	Start up date
PVC (Suspension)	300	VCM	VENOLIT (GERMANY)	2011
PVC (Emulsion)	40	VCM	VENOLIT (GERMANY)	2011
EDC	890	Chlorine, ethylene	VENOLIT (GERMANY)	2010
VCM	343	EDC	VENOLIT (GERMANY)	2011
Chlorine	585	DM water, Salt	Udeh	2010
Caustic soda	660	DM water, Salt	Udeh	2010
Sodium hypochlorite	16.2	Chlorine, Caustic soda	Udeh	2010

Input feed	Amount (KT/Y)	Source
Ethylene	252	West Ethylene Pipeline
Salt	1,300	Local sources
Chloridric acid	50	Karoon Petrochemical Co.
DM water	1400	Fajr Petrochemical Co.

ISO Certifications



Production Process Diagram



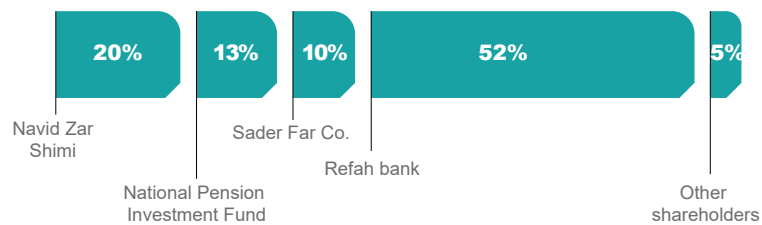


Nominal capacity (KT/Y): **1,757**

Amir Kabir Petrochemical Co.

- **Location:** Petrochemical Special Economic Zone (Mahshahr)
- **Area:** 55 hectares
- **Founded in:** 1998

■ Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Ethylene	520	Ethane/LPG Raffinate/ light ends Butane/ pentane	Linde	2005
Propylene	154		Linde	2005
C4 Cut	105		Linde	2005
Pyrolysis gasoline	134.2		Linde	2005
Fuel oil	23.5		Linde	2005
Hydrogen	34.4		Linde	2005
Butene-1	20		Ethylene	IFP
HDPE	140	Ethylene	Basell(Hoechst)	2002
LLDPE	260	Ethylene	B.P. (Innovene)	2005
LDPE	300	Ethylene	Basell	2010
Butadiene	51	C4Cut	Lurgi	2005
C4 Raffinate	52	C4Cut	Lurgi	2005

Products application

HDPE: pipes, cables, plastic bags, containers, barrels for holding chemicals and foodstuffs

LLDPE: packing, films, foodstuff container, water and sewage canals, oil, milk & juice packages, containers for holding chemicals

LDPE: cable coating, packing, films, general applications for different kinds of films

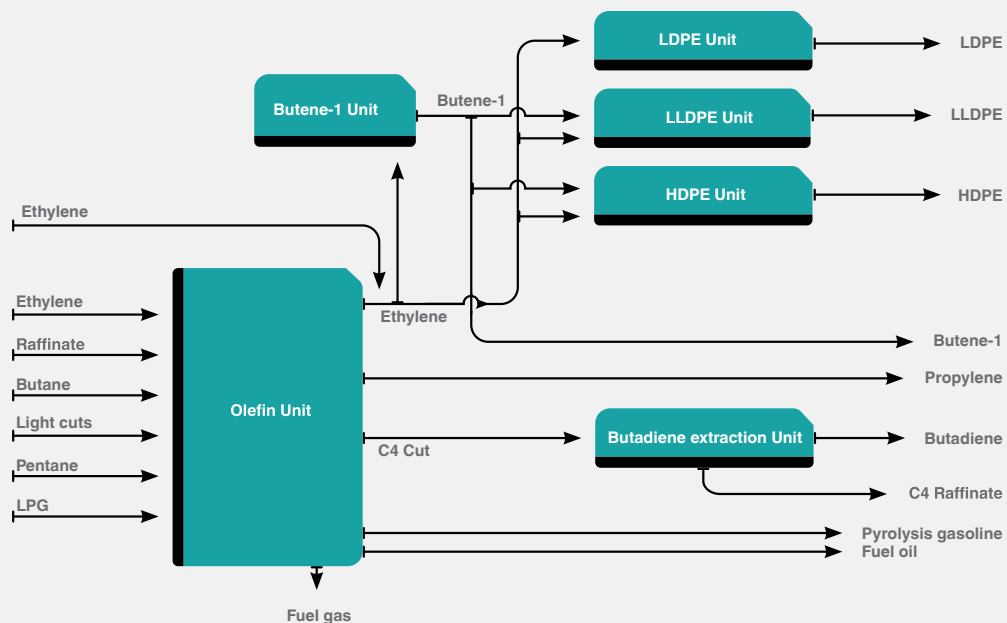
Butadiene: production of synthetic rubber and other resistant polymers

ISO Certifications



Input feed	Amount (KT/Y)	Source
Ethane	233	BIPC
C6 Raffinate	210	BIPC
Butane	117	BIPC
C6 Raffinate	199	Buali Sina Petrochemical Co.
Light ends	350	Buali Sina Petrochemical Co.
C5	21	Buali Sina Petrochemical Co.
Liquid gas	39	Buali Sina Petrochemical Co.
ethylene	210	Local ethylene ring & West Ethylene Pipe line

Production Process Diagram



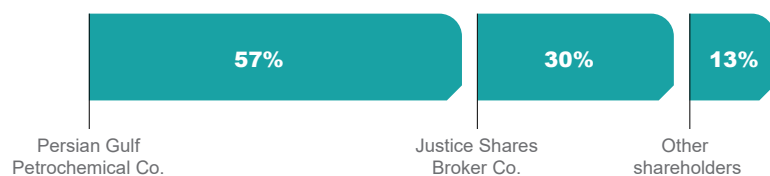
Buali Sina Petrochemical Co.

- **Location:** Petrochemical Special Economic Zone
- **Area:** 36 hectares
- **Founded in:** 1998

Nominal capacity (KT/Y): **1,740**



Ownership



Products application

Paraxylene: production of terephthalic acid or dimethyl terephthalic as well as intermediate material for polyesters and fibers.

Benzene: production of styrene, 2-decylbenzene for producing detergents, cyclohexene for producing nylons, phenol and nitrobenzene for producing aniline and solvents.

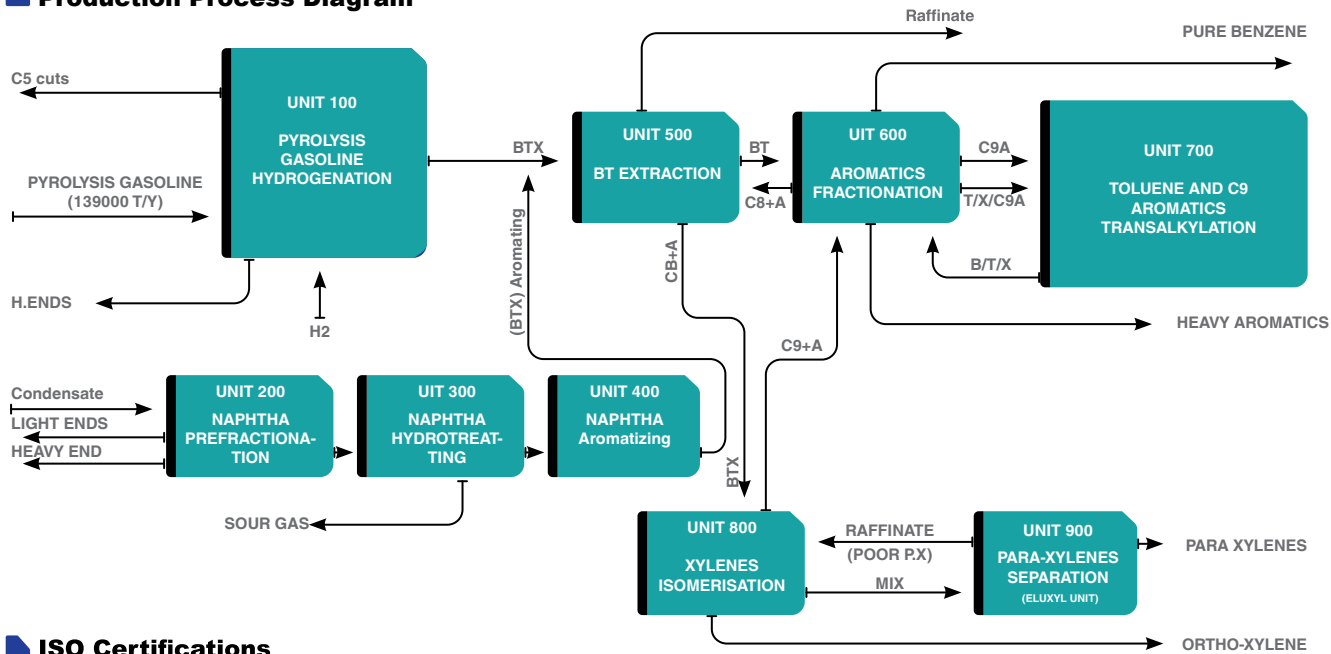
Orthoxylene: production of softeners, pharmaceuticals, pesticides, paints and phthalic anhydride (PA).

Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Benzene	179	Condensates,Pyrolysis gasoline	Axens, Uhde,Sinopec	2004
Paraxylene	400	Condensates,Pyrolysis gasoline	Axens, Uhde,Sinopec	2004
Orthoxylene	30	Condensates,Pyrolysis gasoline	Axens, Uhde,Sinopec	2004
Light cuts naphta	350	Condensates,Pyrolysis gasoline	Axens, Uhde,Sinopec	2003
Raffinate	199	Condensates,Pyrolysis gasoline	Axens, Uhde,Sinopec	2003
LPG	39	Condensates,Pyrolysis gasoline	Axens, Uhde,Sinopec	2003
C5 cuts	21	Condensates,Pyrolysis gasoline	Axens, Uhde,Sinopec	2003
Heavy cuts	499	Condensates,Pyrolysis gasoline	Axens, Uhde,Sinopec	2003
Heavy aromatics	23	Condensates,Pyrolysis gasoline	Axens, Uhde,Sinopec	2004

Input feed	Amount (KT/Y)	Source
Condensate	1,718	South oil fields (Pazanan)
Pyrolysis gasoline	139	Amir Kabir Petrochemical Co.

Production Process Diagram



ISO Certifications



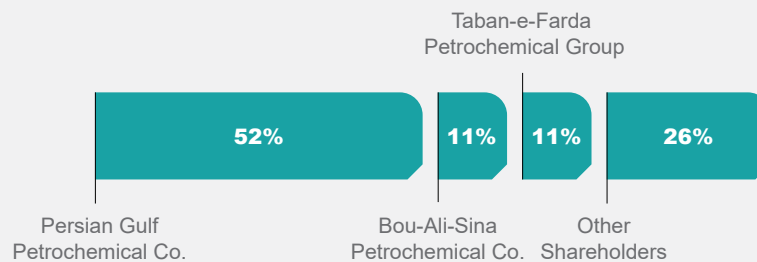
Shahid Tondguyan Petrochemical Co.

- **Location:** Petrochemical Special Economic Zone
- **Area:** 34 hectares
- **Founded in:** 1998

Nominal capacity (KT/Y): **1,587.7**



Ownership



Production capacity (KT/Y)

Phase - 1

Products	Nominal capacity	feed	Licensor	Start up date
PTA	350	Paraxylene, Acetic Acid	Tecnimont (Italy)	2005
PET-A (bottle grade)	60	MEG, PTA	Lurgi Zimmer (Germany)	2004
PET-B (fiber grade)	117.5	MEG, PTA	Lurgi Zimmer (Germany)	2005
PET-C (fiber grade)	117.5	MEG, PTA	Lurgi Zimmer (Germany)	2005
PET-D (bottle grade)	117.5	MEG, PTA	Lurgi Zimmer (Germany)	2005

Phase - 2

Products	Nominal capacity	feed	Licensor	Start up date
PTA	350	Paraxylene, acetic acid	MHI	2006
PET-F (bottle grade)	158.4	MEG, PTA	Noyvallesina	2007
PET-G (fiber & bottle grade)	158.4	MEG, PTA	Noyvallesina	2013
PET (staple & poy grade)	158.4	MEG, PTA	Noyvallesina	2011

Products application

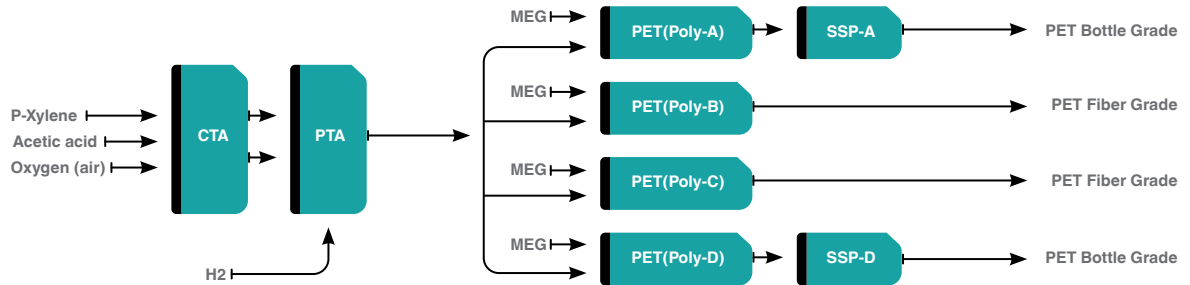
PET (bottle grade): production of various bottles (for mineral water and other beverages), cans, packing for food and pharmaceuticals, photography and radiology films, solid food packing.

PET (fiber grade): production of various fibers for textile, cotton and artificial thread.

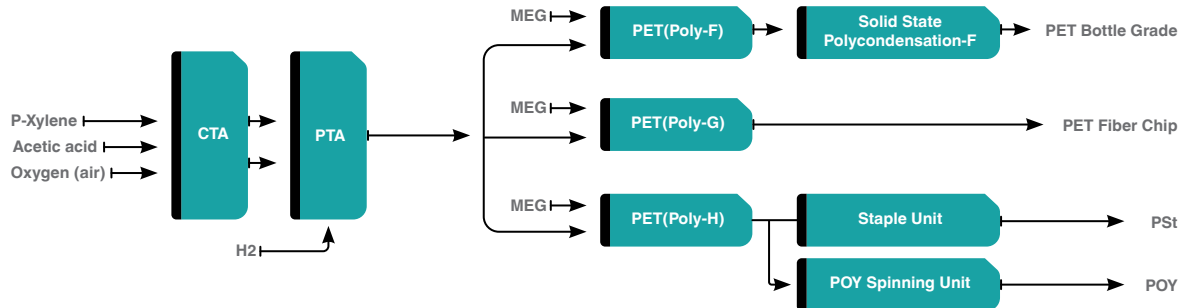
Input feed	Amount (KT/Y)	Source
Paraxylene	468	BIPC & Buai Sina Petrochemical Co.
Acetic acid	37	Fanavaran Petrochemical Co.
MEG	290	Marun Petrochemical Co.



Production Process Diagram . Phase 1



Production Process Diagram . Phase 2



ISO Certifications



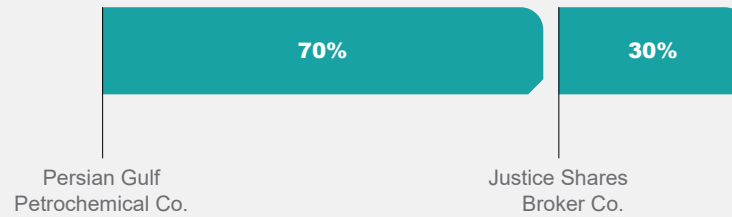


Nominal capacity (KT/Y): **35**

Khuzestan Petrochemical Co.

- **Location:** Petrochemical Special Economic Zone
- **Area:** 10 hectares
- **Founded in:** 1998

Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Liquid epoxy resin	5	Epichlorohydrin, Bisphenol A	Salzgitter	2003
Solid epoxy resin	5	Epichlorohydrin, Bisphenol A	Salzgitter	2003
Polycarbonates	25	Phosgene, Bisphenol A	Salzgitter	2007
* Bisphenol A	-	Phenol, Aceton	Salzgitter	2003

* Since Bisphenol internal production is not cost_effective, it is imported as a raw material for downstream units with a production capacity of 30,000 T/Y.

Input feed	Amount (KT/Y)	Source
Caustic soda (100%)	38	BIPC
Acetone	8.5	Imported
Phenol	26.7	Imported
Epichlorohydrin	5.2	Imported
Chlorine	10	Arvand Petrochemical Co.
Natural gas*	2.6 (mm ³ /y)	NIGC(from Fajr Petrochemical)

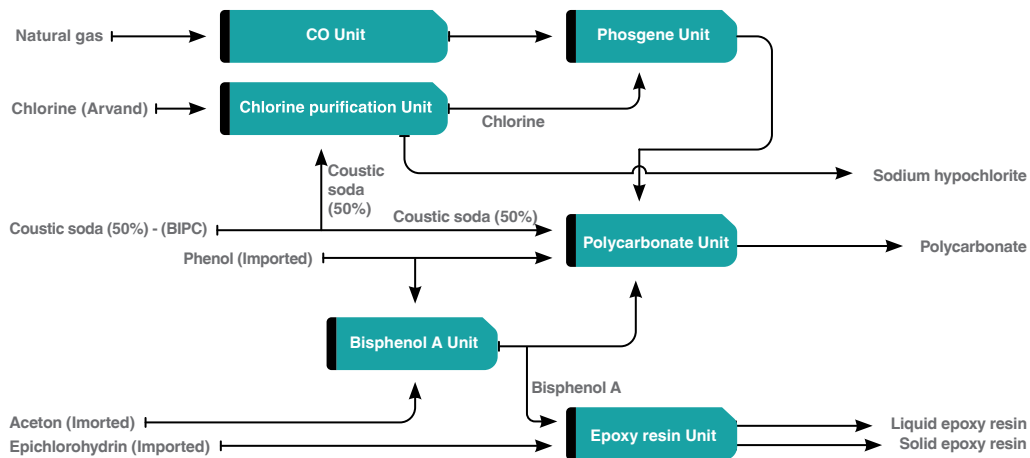
* It includes fuel and feed

Products application

Epoxy resin: Interior protective coatings of oil and gas pipes to prevent corrosion, in production of paints, adhesives, floor covering, reinforced containers and polymer cements used for buildings & bridges construction.

Polycarbonate: In auto industry, hygienic & pharmaceutical industry, medical & Industrial eye glasses, contact lens, dialysis equipments..., and electricity & computer industries.

Production Process Diagram



ISO Certifications

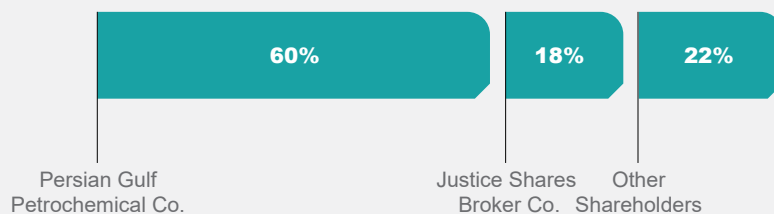


Persian Gulf Fajr-e-Energy Co.

- **Location:** 2nd & 4th sites of Petrochemical Special Economic Zone
- **Area:** 70 hectares
- **Founded in:** 1999



Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Electricity	1,483 MW-H	Natural gas, Gas oil	GE, MAPNA-Siemense	2003
Steam	1,788 t/h	DM water	Alstom, MAPNA	2003
Nitrogen (gas)	51,000 Nm ³ /h	Air	Air product, LINDE	
Nitrogen (liquid)	3 t/h	Air	(1st & 2nd train);	2002 (Train 1&2)
Oxygen (gas)	40,500 Nm ³ /h	Air	Air liquid	2006 (Train 3)
Oxygen (liquid)	42 t/h	Air	(3rd train)	
Instrument air	42,500 Nm ³ /h	Air	Air product	2002
Service air	31,500 Nm ³ /h	Air		
Argon (liquid)	375 kg/h	Air	Air liquid	2006
RO water	10,530 m ³ /h	Service water		
DM water	3,430 m ³ /h	RO water		
Service water	800 m ³ /h	Clarified water	Vatech	2006
Clarified water	16,800 m ³ /h	Karoon river		
Potable water	450 m ³ /h	Mixed RO+DM water		
Boilers water	2,784 m ³ /h	DM water		
Firefighting water	14,630 m ³ /h	Clarified water		

Sewage treatment capacity is 980 m³/h



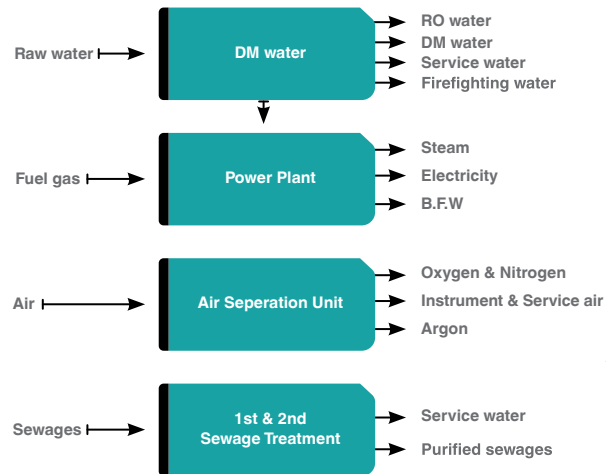
▀ Products application

Supply of utilities required by the producing complexes in Petrochemical Special Economic Zone.

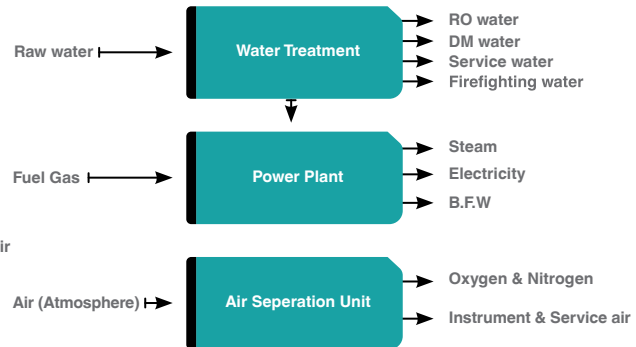
Input feed	Amount	Source
Raw water (Karooon river)	7,000 m ³ /h	Water Organization
Natural gas	13,6 Msm ³ /d	NIGC

Production Process Diagram

Phase 1



Phase 2



ISO Certifications



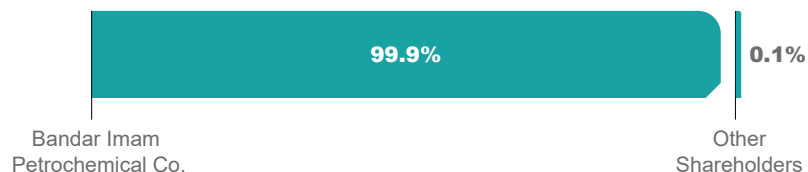


Nominal capacity (KT/Y): **368.6**

Karoon Petrochemical Co.

- ▀ **Location:** Petrochemical Special Economic Zone
- ▀ **Area:** 34 hectares
- ▀ **Founded in:** 2002

Ownership



Production capacity (KT/Y)

Phase - 1

Products	Nominal capacity	feed	Licensor	Start up date
TDI	40	Chlorine, CO, Hydrogen, Toluene, Nitric acid	Chematur	2008
Chloridric acid (33%)	116.3			
Sodium hypochlorite	4.2	Caustic soda, Chlorine		2011
Nitric acid	92.3	Ammonia		

Phase - 2

Products	Nominal capacity	feed	Licensor	Start up date
MDI	40	Benzene, Chlorine, Soda	Chematur	2016
Chloridric acid (33%)	73.2	Chlorine, Soda		
Sodium hypochlorite	2.6	Chlorine, Soda		

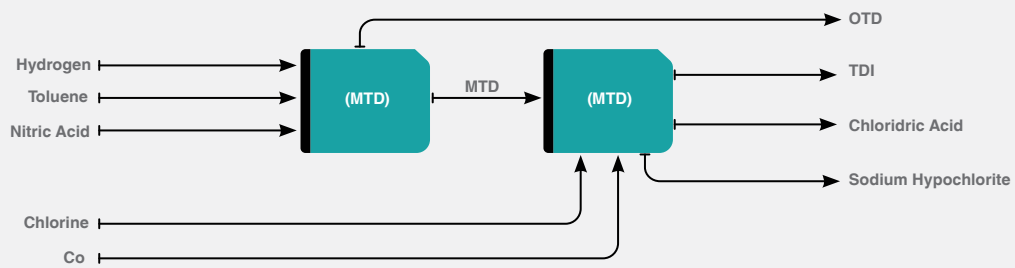
Products application

Raw material for production of various kinds of polyurethanes, construction industry, auto industry, insulations, false ceilings, sponges, adhesives, refrigerator parts.

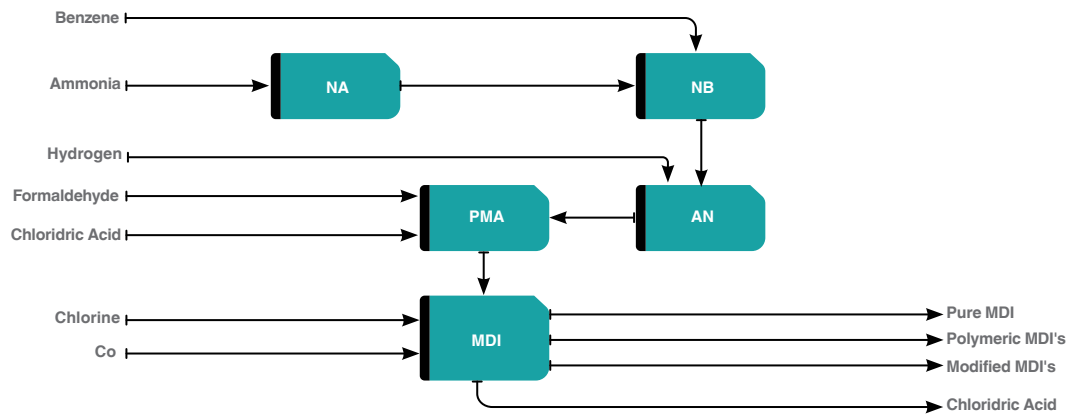
Input feed	Amount (κΤΥ)	Source
Toluene	25.2	BIPC
Chlorine	60.5	Arvand Petrochemical Co.
Hydrogen	8	Fanavaran Petrochemical Co.
CO	24.8	Fanavaran Petrochemical Co.
Ammonia	17.1	Razi Petrochemical Co.
Caustic soda (48.5%)	42.7	Arvand Petrochemical Co.
Formaldehyde (Formalin 37%)	14.8	Shahid Rasouli Petrochemical Co.
Benzene	28	Buali Sina Petrochemical Co.
Sulfuric acid	0.7	Razi Petrochemical Co.



Production Process Diagram Phase 1



Phase 2



Fanavaran Petrochemical Co.

■ **Location:** Petrochemical Special Economic Zone

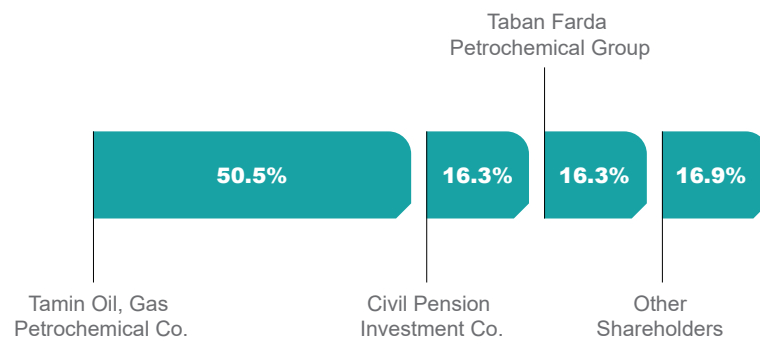
■ **Area:** 25 hectares

■ **Founded in:** 1998

Nominal capacity (KT/Y): **1,290**



Ownership



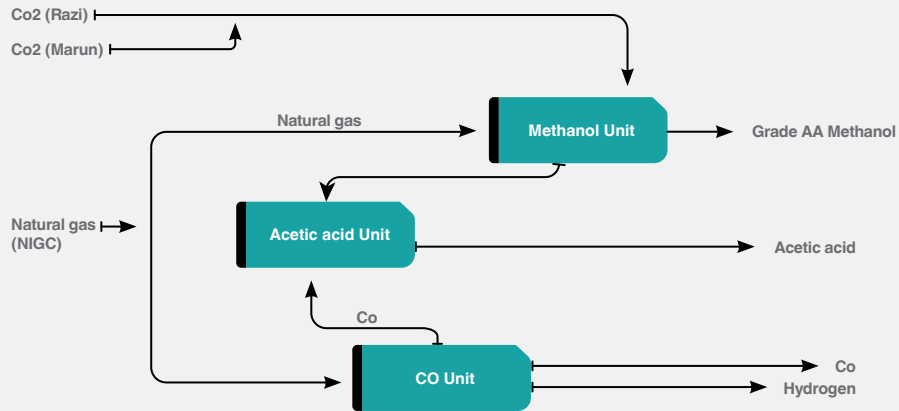
Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Methanol	1,000	Natural gas, CO ₂	Haldor Topsoe (Denmark)	2004
CO	140	Natural gas	//	2006
Acetic acid	150	Methanol, CO	Khimteknologija (Ukraine)	2006

Input feed	Amount	Source
* Natural Gas	991.7 Mm ³ /Y	NIGC
CO ₂	91.5 KT/Y	Razi Petrochemical Co.
CO ₂	175.7 KT/Y	Marun Petrochemical Co.

* Includes feedstock & fuel

Production Process Diagram



Products application

Methanol: Acetic acid, formaldehyde, MTBE, solvent for organic materials

CO: Acetic acid, phosgene

Acetic acid: VAM, purification of terephthalic acid, cellulose acetate, solvents, pharmaceutical products, paints

ISO Certifications



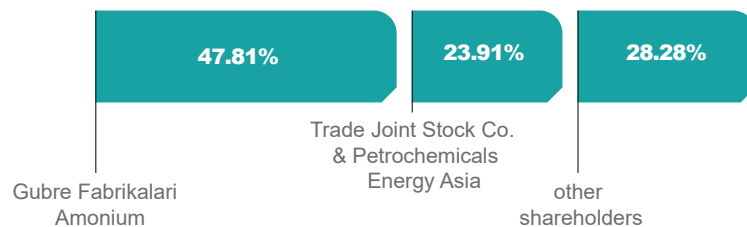


Nominal capacity (KT/Y): **3,336.2**

Razi Petrochemical Co.

- **Location:** Petrochemical Special Economic Zone
- **Area:** 87.84 hectares
- **Founded in:** 1965

■ Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Sulfuric acid(plant 1&2)	2×313.5	Liquid sulfur	Sim-Chem	1977
* Phosphoric acid	255	Sulfuric acid & phosphate rock	Prayon	1970
* DAP (plant 1)	210	Phosphoric acid & ammonia	T.V.A	1970
DAP (plant 2)	240	Phosphoric acid & ammonia	Stamicarbon	1990
Urea	594	Ammonia & CO2	H.F.T & Stamicarbon	1990
Ammonia 1 (plant 1)	330	Natural gas	Kellogg	1970
Ammonia 2 (plant 2)	330	Natural gas	Kellogg	1977
Ammonia 3 (plant 3)	676.5	Natural gas & Hydrogen	Ammonia Casale	2007
Sulfur	538.7	sour gas	Ralph Parsons	1970

*Since Phosphoric acid and Diammonium phosphate (DAP1) units are out of service so, they are not included in nominal capacity calculations.

Products application

Ammonia: production of fertilizers & refrigerant fluid

Urea: production of fertilizers, resins, formaldehyde urea and melamines

Sulphur: production of sulphuric acid and raw material for sulphuric productitons

Sulphuric acid: chemical industries & phosphoric acid production

Di Ammonium phosphate: fertilizers

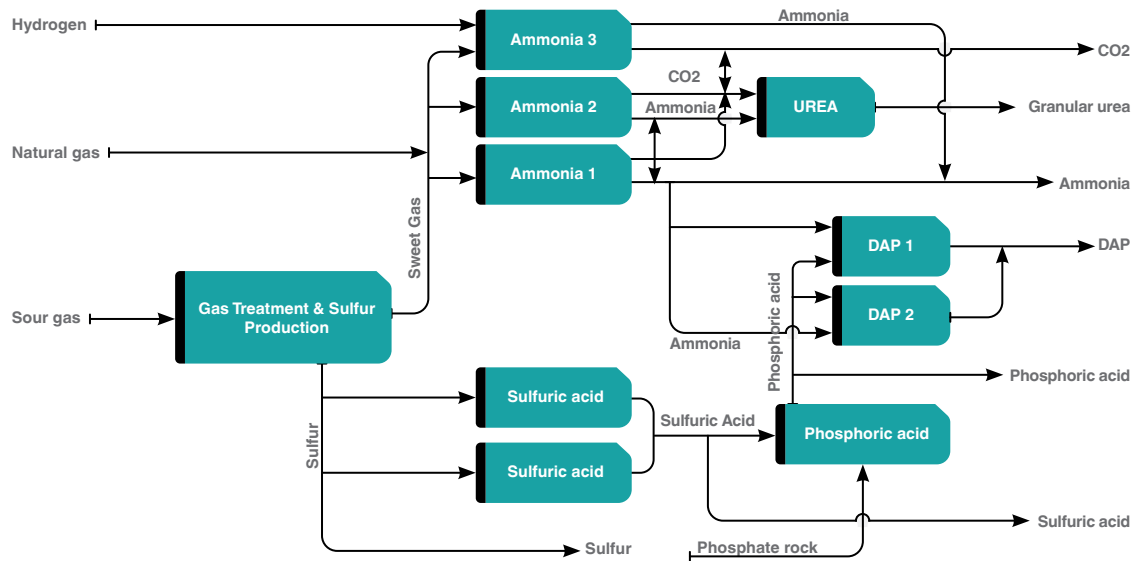
Phosphoric acid: production of di-ammonium phosphate fertilizer and industrial usages

Input feed	Amount (Mm ³ /y)	Source
Sour gas	1,695	Masjid-Soleiman Petroleum and Gas Company
* Natural gas	1,173	NIGC

* Includes feedstock & fuel

Input feed	Amount ('000 m ³ /y)	Source
Phosphoric acid	120	Arya Phosphoric Co. & Import
Hydrogen (for 3rd Ammonia)	90	Petrochemical Special Economic Zone

Production Process Diagram



ISO Certifications





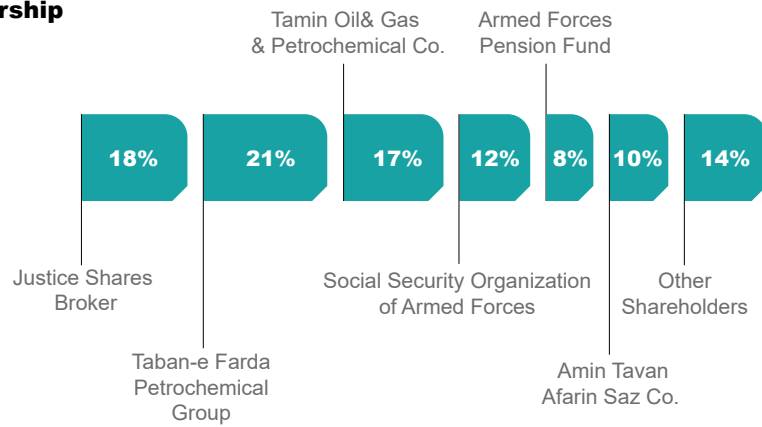
Nominal capacity (KTY): **4,655.6**

Marun Petrochemical Co.

- **Location:** Ahvaz & Petrochemical Special Economic Zone
- **Area:** 102.5 hectares (93 hectares in Petrochemical Special Economic Zone located in Site 2 and 9.5 hectares in Ahvaz located in Kritcamp area, 15 km far from Ahvaz)
- **Founded in:** 1998



Ownership



■ Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensors	Start up date
C2+	1,912	Rich gas	Linde (Germany)	2005
Ethylene	1,100	C2+	Linde (Germany)	2006
Propylene	200	C2+	Linde (Germany)	2006
C3+	168	C2+	Linde (Germany)	2006
Pyrolysis gasoline	83	C2+	Linde (Germany)	2006
Ethylene glycols	443	Ethylene & oxygen	Shell (Netherlands)	2006
HDPE	300	Ethylene	Basell (Germany)	2006
Polypropylene	300	Propylene	Basell (Germany)	2006
CO2	150	Ethylene & oxygen	Shell (Netherlands)	2006

* Marun Petrochemical Complex has a compounding unit with nominal capacity of 65,000 t/y.

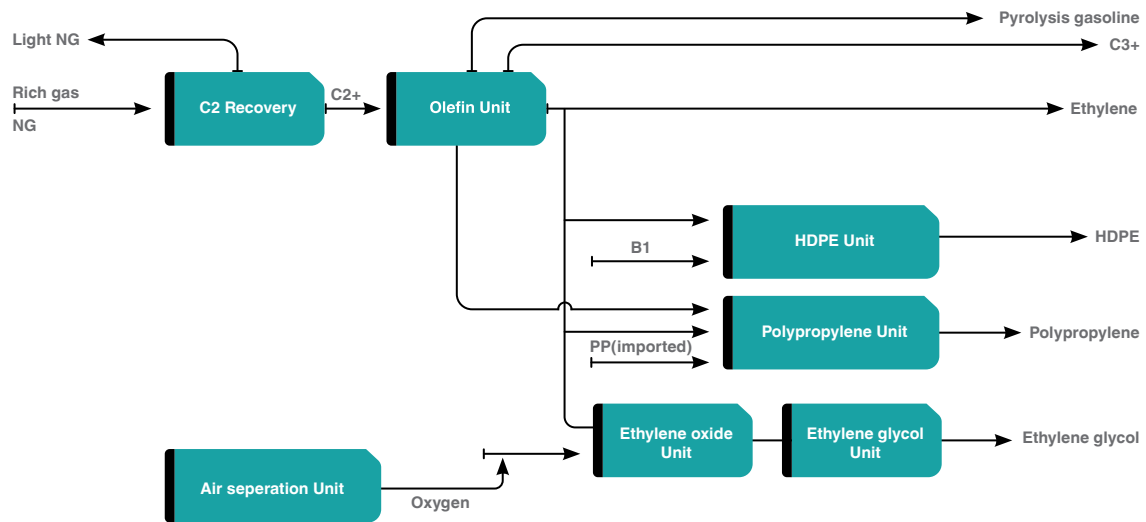
■ Products application

Production of plastics including; cable coating, films and tapes, bottle box, auto battery coating, liquid containers, pharmaceutical equipments, pipes, as well as feedstock for downstream industries, production of anti-oxide, anti-freeze, textile and synthetic fibers, adhesives, wire insulation, print ink & cosmetics.

Input feed	Amount (KT/Y)	Source
Butene-1	2	Jam Petrochemical Co., import
Oxygen	274	Fajr Petrochemical Co.
Propylene	100	Local sources, import
Rich gas	*1,900	National Iranian South oil Co.

* is net income

Production Process Diagram



ISO Certifications



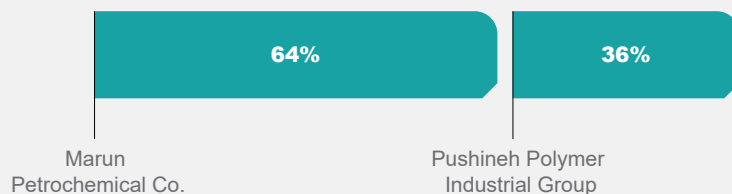


Nominal capacity (KT/Y): **300**

Laleh Petrochemical Co.

- **Location:** Petrochemical Special Economic Zone
- **Area:** 12 hectares
- **Founded in:** 2002

Ownership



Production capacity (KT/Y)

Product	Nominal capacity	feed	Licensor	Start up date
LDPE	300	Ethylene	Sabtec	2007

Products application

Various nylon films, plastic bags & packaging industries

Input feed	Amount (KT/Y)	Source
Ethylene	310	Marun Petrochemical Co.
Propylene/C3	6	Local sources

Production Process Diagram



ISO Certifications



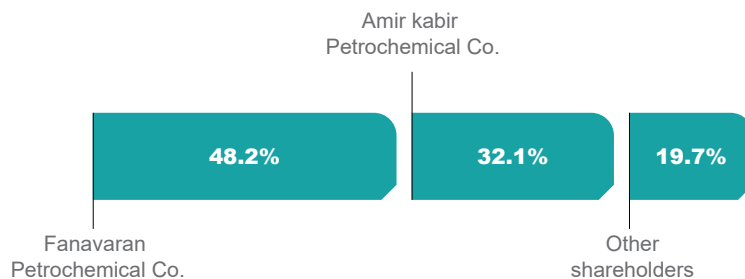


Nominal capacity (KT/Y): **94.5**

Farabi Petrochemical Co.

- **Location:** Petrochemical Special Economic Zone
- **Area:** 15 hectares
- **Founded in:** 1973

Ownership



Production capacity (KT/Y)

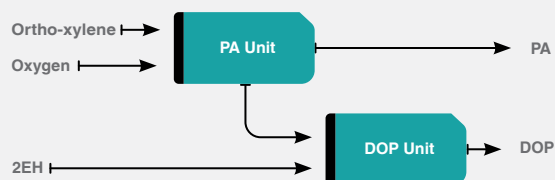
Products	Nominal capacity	feed	Licensor	Start up date
Diocetyl phthalate (DOP)	60	Liquid PA, 2EH	Von-Heyden	1977
Phthalic anhydride (PA)	34.5	Liquid PA	Lurgi	//

Products application

Production of plastics, resin & paints industry

Input feed	Amount (KT/Y)	Source
2EH	42	Shazand (Arak) Petrochemical Co./Import
OX	32	Isfahan & Buali Sina Petrochemical Companies

Production Process Diagram



ISO Certifications



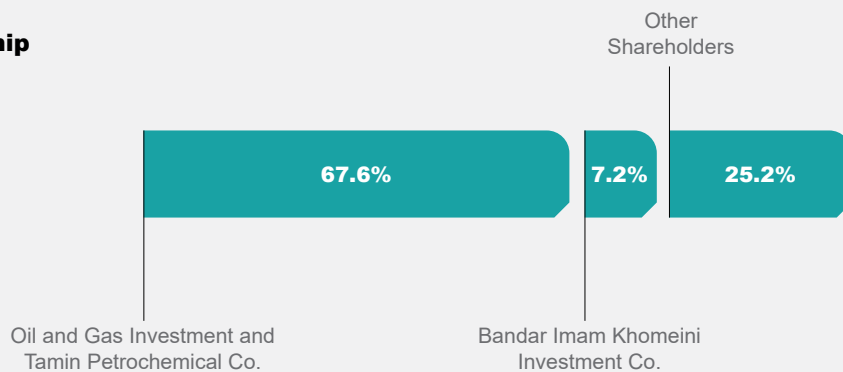


Nominal capacity (KTY): **270**

Ghadir Petrochemical Co.

- **Location:** Petrochemical Special Economic Zone
- **Area:** 15.2 hectares
- **Founded in:** 2001

Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensors	Start up date
PVC	120	Ethylene	BF-Goodrich	2009
VCM	150	Chlorine	Mitsui	2009

Products application

Raw material for hoses, pipes, auto, cabinet industries, ...

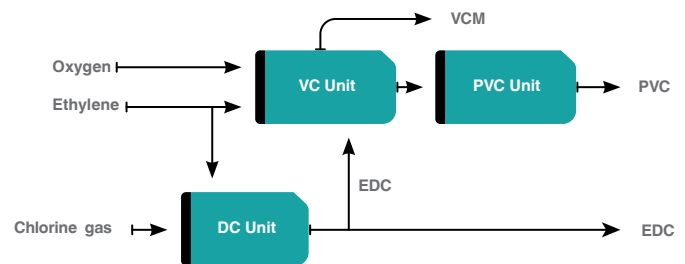
Input feed	Amount (KT/Y)	Source
Ethylene	70	Marun, West Ethylene Pipeline
Chlorine	90	Arvand Petrochemical Co.



ISO Certifications



Production Process Diagram



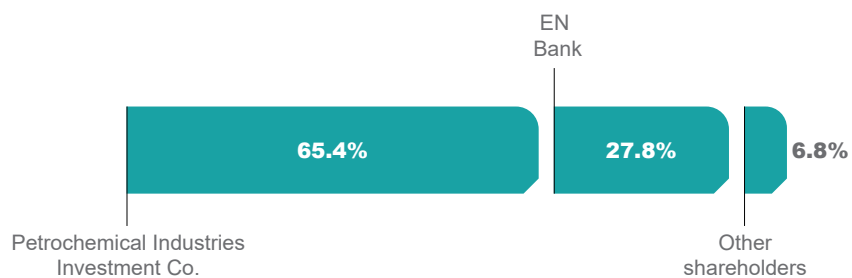


Nominal capacity (KT/Y): **150**

Shimi Baft Petrochemical Co.

- **Location:** Petrochemical Special Economic Zone
- **Area:** 5 hectares
- **Founded in:** 1999

Ownership



Production capacity (KT/Y)

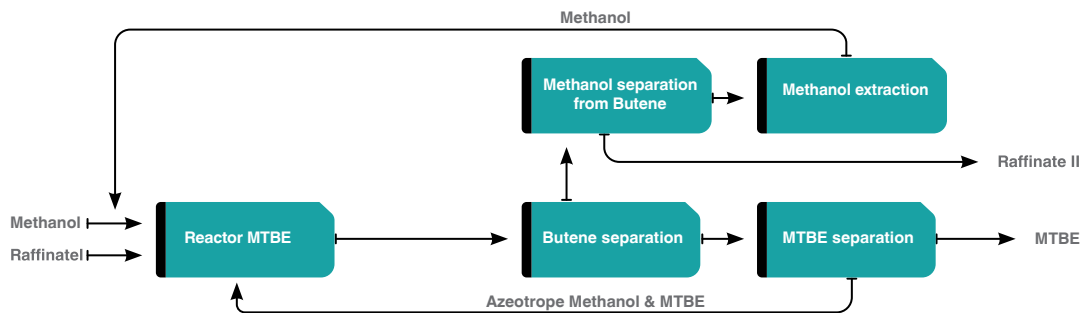
Products	Nominal capacity	feed	Licensor	Start up date
MTBE	90	C4 raffinate, methanol	Hulse	2002
C4 raffinate - 2	60	-	Hulse	2002

Products application

MTBE is used as additive in gasoline production (octane booster) C4 raffinate 2 is used as feed for MEK production.

Input feed	Amount (KT/Y)	Source
Methanol	32	Fanavaran Petrochemical Co.
Raffinate 1	115	Bandar Imam, Amir kabir, Tabriz & Shazand Petrochemical Co., Abadan Refinery

Production Process Diagram



ISO Certifications



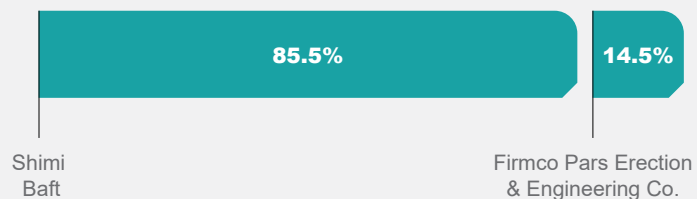


Nominal capacity (KT/Y): **8.636**

Shimi Baft Petrochemical Co.

- **Location:** Petrochemical Special Economic Zone
- **Area:** 3 hectares
- **Founded in:** 2006

Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Methyl ethyl ketone (MEK)	5	Raffinate-2 & sulphuric acid (98%)	Edeleanu (Germany)	2013
2- Butanol	3.18	Raffinate-2 & sulphuric acid (98%)	Edeleanu (Germany)	2013
Heavy alcohol	0.456	Raffinate-2 & sulphuric acid (98%)	Edeleanu (Germany)	2013

Products application

Commercial - industrial solvent with widespread use in base oil production refineries, resin industry, print & artificial leather.

Input feed	Amount (KT/Y)	Source
Raffinate-2	9.6	Shimi Baft Co.
Sulphuric acid (98%)	6.2	Razi Petrochemical Co.

Production Process Diagram



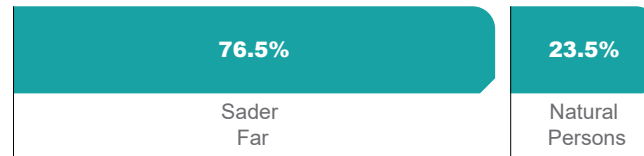


Nominal capacity (KTY): **160**

Navid Zar Shimi Co.

- **Location:** Petrochemical Special Economic Zone - Site 4
- **Area:** 5.7 hectares
- **Founded in:** 1999

Ownership



Production capacity (KT/Y)

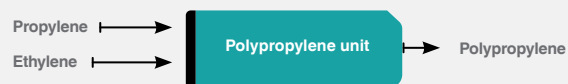
Product	Nominal capacity	feed	Licensor	Start up date
Polypropylene	160	Ethylene, propylene, butene-1, hydrogen	Basell	2004

Products application

Raw material for plastic, textile, auto parts, packing films, water pipes industries for domestic needs and export.

Input feed	Amount (KT/Y)	Source
Propylene	155	Amir kabir Petrochemical Co.
Ethylene	8	Amir kabir Petrochemical Co.
Hydrogen	0.05	Amir kabir Petrochemical Co.
Butene-1	1	Amir kabir Petrochemical Co.

Production Process Diagram



ISO Certifications



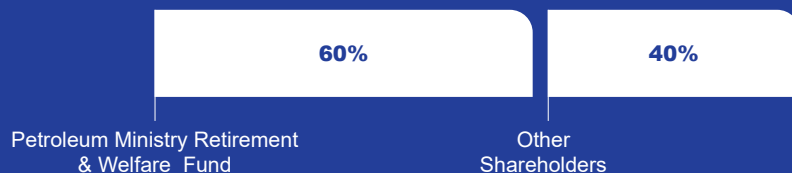


Nominal capacity (KTY): **66**

Nakhl Asmari Petrochemical Co.

- **Location:** Petrochemical Special Economic Zone - Site 2
- **Area:** 8.6 hectares
- **Founded in:** 2001

Ownership



Production capacity (KT/Y)

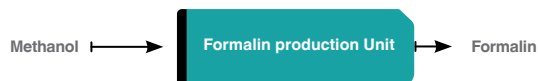
Product	Nominal capacity	feed	Licensor	Start up date
Formalin	66	Methanol	Wonjin	2006

Products application

Medical industry, adhesives & production of formaldehyde resins.

Input feed	Amount (KT/Y)	Source
Methanol	30	Fanavaran Petrochemical Co.

Production Process Diagram





Nominal capacity (KTY): **125**

Arya Phosphoric Jonoub Co.

- **Location:** Razi Petrochemical Co.
- **Area:** 7.8 hectares
- **Founded in:** 2004
- **Ownership:** Razi Petrochemical Co. (100%)

Production capacity (KT/Y)

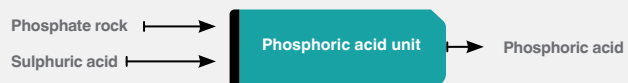
Product	Nominal capacity	feed	Licensor	Start up date
Phosphoric acid	125	Phosphate rock-Sulphuric acid	Parayon	2009

Products application

Phosphate fertilizer, livestock and poultry feed supplementaries, domestic and industrial detergents, paper, plating, loom and photography industries.

Input feed	Amount (KT/Y)	Source
Sulphuric acid	362.5	Razi Petrochemical Co.
Phosphate soil	437.5	Internal and external sources

Production Process Diagram



Rejal Petrochemical Co.

- ▀ **Location:** Petrochemical Special Economic Zone
- ▀ **Area:** 12.3 hectares
- ▀ **Founded in:** 2002
- ▀ **Ownership:** Natural Person (100%)

Nominal capacity (KT/Y): **180**





Production capacity (KT/Y)

Product	Nominal capacity	feed	Licensor	Start up date
Polypropylene	180	Propylene	Novolen technology	2006

Products application

Pipe, sack, disposable containers & film industries.

Input feed	Amount (KT/Y)	Source
Propylene	187	BIPC & other resources

Production Process Diagram



ISO Certifications



Calibration Laboratory Accreditation Certificate

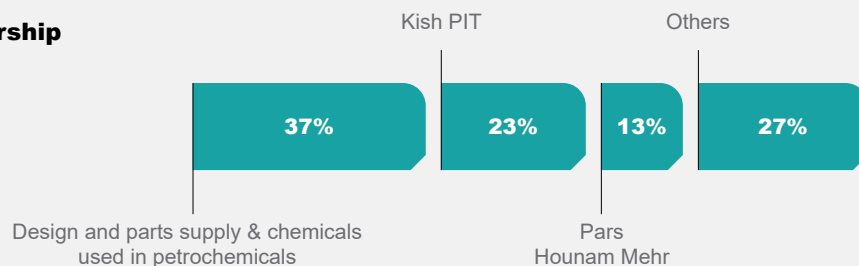


Nominal capacity (KTY): **92**

Takht-e-Jamshid Petrochemical Co.

- **Location:** Petrochemical Special Economic Zone
- **Area:** 6.9 hectares
- **Founded in:** 2006

Ownership



Production capacity (KT/Y)

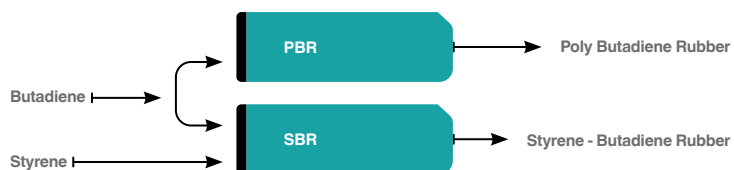
Products	Nominal capacity	feed	Licensor	Start up date
PBR1	12	Butadiene	B.F Goodrich	2015
SBR	30	Styrene/Butadiene	Good Year	2015
PBR2	50	Butadiene	B.F Goodrich	2019

Products application

Tires, wire/cable coatings, belts, conveyor belts

Input feed	Amount (KT/Y)	Source
Butadiene	82	Amir Kabir Petrochemical Co.
Styrene	6.5	Pars Petrochemical Co.

Production Process Diagram



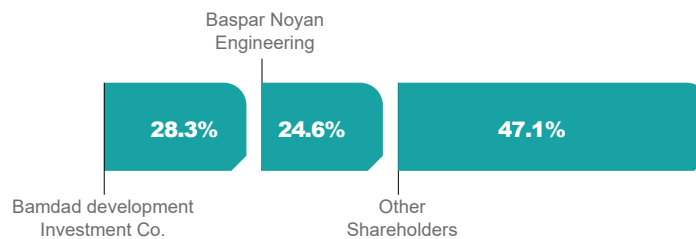


Nominal capacity (KT/Y): **103**

Ibn-e- Sina PetroKimiya

- **Implemented by:** Ibn-e- Sina PetroKimiya Co. (Private Joint Stock)
- **Location:** Petrochemical Special Economic Zone
- **Area:** 3 hectares
- **Founded in:** 2013

■ Ownership



Applications

Production of polyester resins, fumaric acid, auto and marine Industries, lubricant additives, electronic industry, filament fibers, elastic poly urethane fibers, copolyester - polyether elastomers

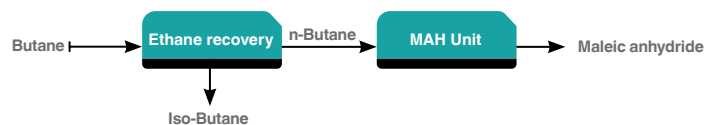
Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Maleic anhydride	23	Butane	Polioli (Italy)	2021
Iso-butane	22	Butane	Polioli (Italy)	2021
n-butane	58	Butane	Polioli (Italy)	2021
C ₅ +	2	Butane	Polioli (Italy)	2021

feedstock (KT/Y)

Input feed	Amount (KT/Y)	Source
Butane	80	Bandar Imam Petrochemical Co.

Production Process Diagram





Pars Special
Economic / Energy Zone
Assaluyeh



Bushehr Province

The Province of Bushehr is located at 27°16'-30°18' North, 50°06'-52°56' East. Situated on the southern coast of Iran, the province stretches over an area of 22,743sq km. It is bordered in the north by Khuzestan and Kohkiluyeh-va-Boyerahmad provinces; in the east by Fars province; in the northeast by Hormozgan province and in the south and the west by the Persian Gulf. The population of the province is about 1,163,000 of whom 620,772 are male and 542,678 are female. About 65% of the population is urban. Persian is the dominant language in the region. Some residents speak Arabic while the nomads speak Turkish. Average temperature is 23.1° C and average humidity stands at 67%-75% during 6:30 - 12:30 am. The history of Bushehr goes back to the ancient Ilam when the Elamite kings used it as a naval base and a port city. Having a 600km border with the Persian Gulf, Bushehr enjoys a strategic position. Resisting against the foreign invasion, constitutes a major part of the contemporary history of Bushehr. Hosting a different huge industrial projects underway in the province, including Bushehr Nuclear Power Plant and Pars Special Economic/ Energy Zone, it has attracted a large workforce from other provinces.

Major industries and economic sectors in the region

Oil, gas, petrochemical, fishing and agriculture (date palm groves) are the significant industries in the province. The geographical advantages of Bushehr including its vicinity to the Persian Gulf plus its fishing and date industry play an important role in its economy. But, its huge hydrocarbon reserves have considerably boosted the economy of this province. Bushehr consists of 9 cities, 29 towns, 22 districts and 43 villages. The major natural, archeological and historical places of interest in the province are as follows:

Bushehr: (in central region) the ancient Siraf region, Qavam ancient underground water reservoir, Malek building, Shaqab cemetery, Sheikh Sadoon mosque, Holy Christ church, (in Kharg Island) the Dutch castle, Pozeidon temple, Mir Mohammad Hanifeh mausoleum, Kharg ancient church

Tangestan: Ahrom, Mir Ahmad and Khanik hot springs, Zar Khezerkhan castle, Kalat castle and Rais Ali Delvari's house.

Borazjan: Dalaki, Borazjan and Khanik hot springs, Bardak Siah castle, Kooroush castle, Derakht underground water reservoir, Tooz ancient area, Telesmi and Khandaq hills, Forty-Houses cave

Bandar Dayyer (Dayyer Port): Bardestan mosque, Bardestan castle, islands and seashore, riverside park, Imamzadeh Seyyed Jamaludin shrine

Khormooj: Mand Fortress, Dokhtaar castle, Shirinou building, Shahzadeh Mohammad, Ganoyeh hot spring, Seyyed Mohammad Amin

Bandar Genaveh (Genaveh Port): Gonbad hills, Toodeev, Bi Mareh mausoleum, Khan Hosseiniyeh, Holleh lagoon, seaside

Bandar Deilam (Deilam Port): Imamzadeh Soleiman, Seeniz port, Imamzadeh Hassan, seaside

Kangan

Kangan port is the center of the Kangan town. It lies on the southwest of the province on the Persian Gulf coast nearby Bandar Dayyer. It covers an area of 3,083 sq km accommodating over 95,000 population. It has an ancient history which goes back to 350 BC. During the Safavids period, it was named Kugana. After the Safavids, the name was changed to Kangan. At the early Islamic period it was named Bandar (port) Siraf. In the sixteenth century, Kangan was divided in two regions. The division is still valid ever since despite some minor changes.

Poshtkooch region

Jam district is located in this region which consists of Jam and Riz villages with 129 small hamlets.

Sheibkooch region

The central section of the Kangan is situated in this region. The region covers the coast of Kangan and its suburbs. It consists of 70 villages and 3 hamlets namely Assalouyeh, Nai Band and Taheri. Taheri castle in Bandar Taheri, Mianloo hot spring and Seyyed Gharib mausoleum in Kangan, Jam palm trees and the beautiful Bandar Kangan and Bandar Taheri seashores are the most fascinating places of interest in the area. The exploration of huge gas reserves in Kangan has promoted the region's role in Iran's economy. Explorations of Kangan, Nar, South and North Pars fields have led to enormous investment in Kangan. Fajr Refinery in Kangan and South Pars refinery already under construction, are among the world's largest refineries. Pars region has attracted Iran's huge domestic investment.

Assaluyeh Port

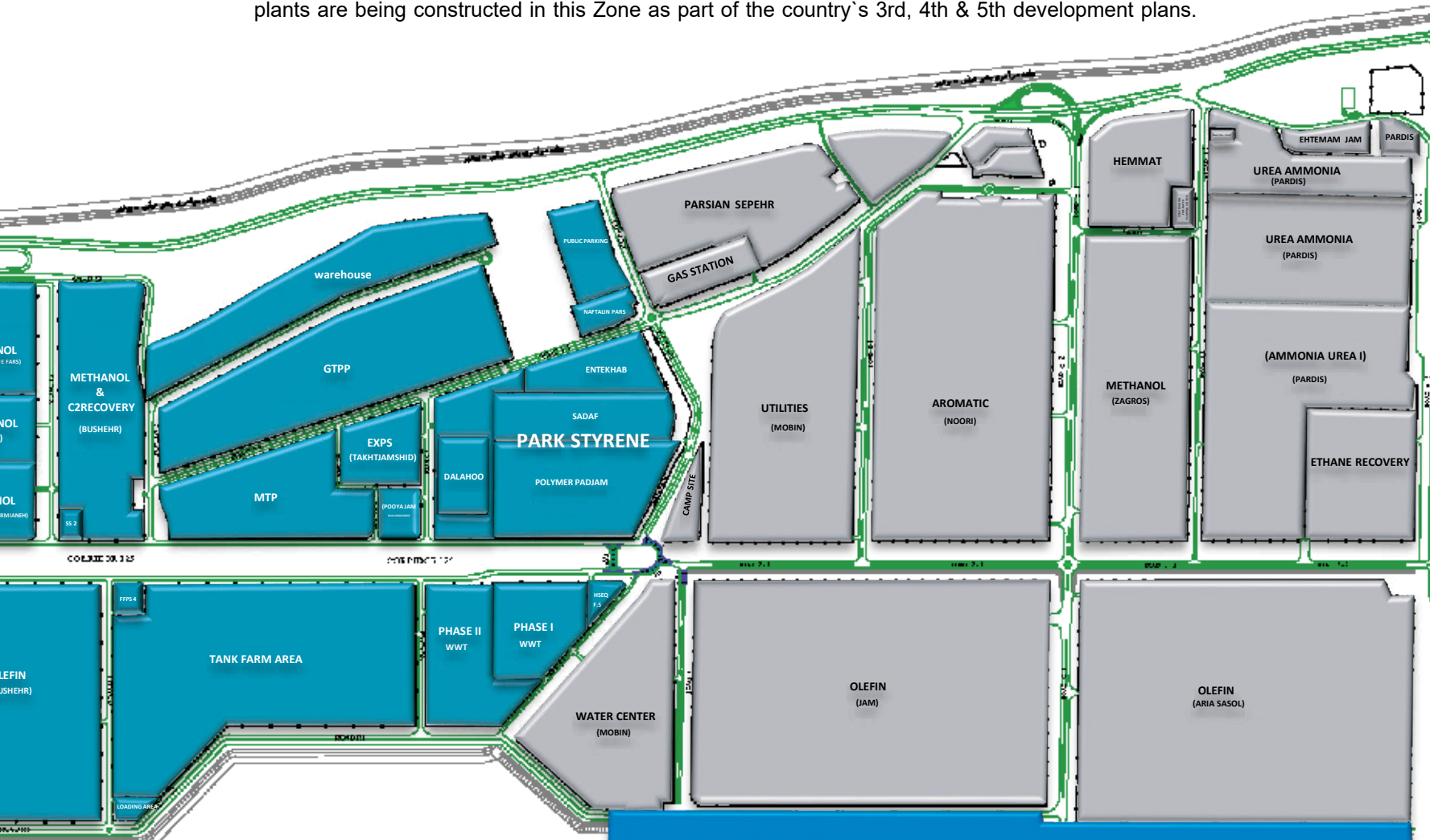
This port is located on the northern coast of the Persian Gulf, 70 km southeast of Kangan port. There is no consensus about the origin and the meaning of the word Assaluyeh. Some say that the fresh water that flew down from Bid Khoon to a nearby valley was very tasty and refreshing. As a result, the locals called it 'Asal', meaning honey in Farsi. Some others say the word has originated from the Elamite language and was written 'aslaviyeh' meaning port. And another interpretation is that the word has its roots in the word 'asl' which means 'pond'. In 1999, Pars Special Economic/Energy Zone was established based on a cabinet authorization to utilize the gas from the South

Pars field in a bid to develop the oil, gas, petrochemical and their relevant downstream industries. Covering an area of 30,000 hectares, the Zone lies on the east of Bushehr province. It is 105km far from the offshore South Pars Gas field. The Zone is bounded in the west by Shirino village, in the south by the Persian Gulf, in the north by the Zagros Range and in the east by Chah Mobarak village. Its temperature fluctuates between 5-50 degrees centigrade in the course of the year. The average humidity ranges between 59-88 percent. Average annual rainfall is about 180 millimeters.

Investment advantages and incentives

- Availability of abundant gas reservoir
- Access to international waters and markets in south of the Persian Gulf and the far east
- Availability of airport
- Deep navigable waterways
- Well-developed ports for export of petrochemicals and LPG with a loading capacity of 30 million tons per year, service port with an annual loading capacity of 10 million tons equipped with warehouses & other required services including customs clearance
- Availability of an independent power plant and a desalination unit
- Availability of both skilled and unskilled workforce
- Vicinity to tourist attractions and commercial and industrial facilities in Kish, Qeshm, Shiraz and Isfahan
- Availability of independent communication networks facilitating communications and data transmission
- Access to the mainland and central Asian markets via local transport networks
- Tax exemption for any industrial investment
- Free entry and exit of capital
- Exemption from customs duties & commercial interests for imports of raw material, machinery, equipment and spare parts
- Possibility of spending foreign reserves
- Up to 100% foreign joint investment and ownership
(with the exception of land)

the region an ideal place for local and foreign investors. Lying on the coast of the Persian Gulf, the Zone has access to the rich hydrocarbon resources in the region providing lucrative conditions for foreign investment. It is the hub of development activities underway at South Pars gas field. With its reserves estimated at 14 trillion cubic meters of gas and 18 billion barrels of condensates, the field is the world's largest gas field. It represents 6.8% of the global gas reserves. Given the field's capacity, 24 development phases and 3 giant LNG projects have so far been planned to be implemented in Assaluyeh and Kangan in an area of 30,000 hectares. Currently, the first ten phases are onstream. On average, \$1.5bn has been invested for each phase. The implementation work of phases 11 - 24 have been started and are underway. Several world-scale petrochemical plants are being constructed in this Zone as part of the country's 3rd, 4th & 5th development plans.



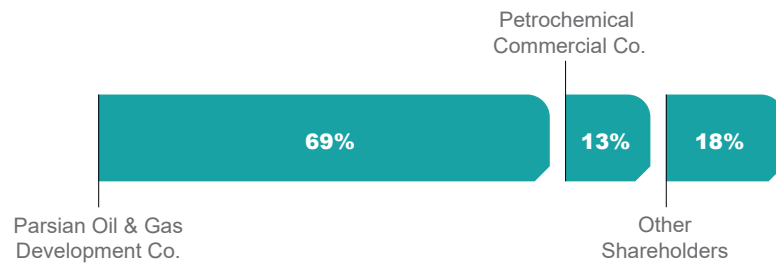


Nominal capacity (KT/Y): **5,265**

Pardis Petrochemical Co.

- ▀ **Location:** Pars Special Economic/Energy Zone
- ▀ **Area:** 64.6 hectares
- ▀ **Founded:** 2001

▀ Ownership





Production capacity (KT/Y)

Phase - 1

Products	Nominal capacity	feed	Licensor	Start up date
Ammonia	680	Natural gas	M. W. Kellogg	2009
Granular urea	1,075	CO ₂ , ammonia	Stami Carbon, H.F.T	2009

Phase - 2

Products	Nominal capacity	feed	Licensor	Start up date
Ammonia	680	Natural gas	M. W. Kellogg	2017
Granular urea	1,075	CO ₂ , ammonia	Stami Carbon, H.F.T	2017

Phase - 3

Products	Nominal capacity	feed	Licensor	Start up date
ammonia	680	Natural gas	M. W. Kellogg	2017
Granular urea	1,075	CO2, Ammonia	Stami Carbon, H.F.T	2017

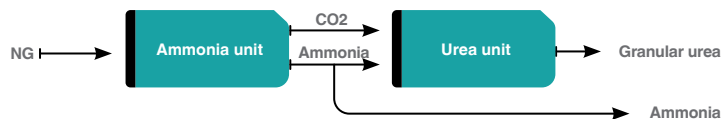
Products application

Urea: production of chemical fertilizers for agricultural purposes; raw material of melamine ammonia: raw material for industrial and agricultural purposes

Input feed	Amount (Mm ³ /d)	Source
* Natural gas	5.85	South Pars Gas Field (Through Mobin Petrochemical Co.)

* Includes feedstock & fuel

Production Process Diagram



ISO Certifications



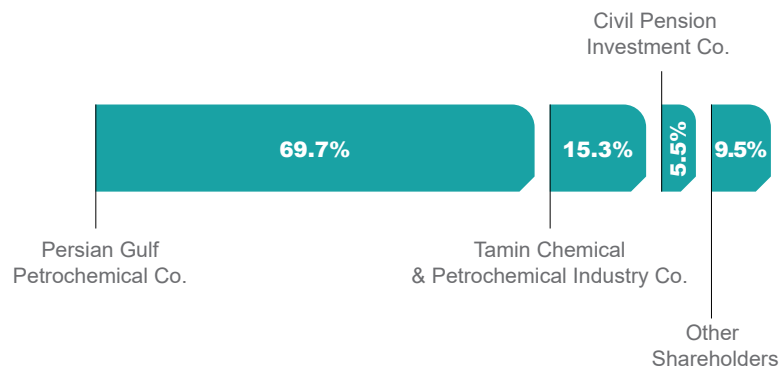


Nominal capacity (KT/Y): **4,479**

Nouri (Borzuyeh) Petrochemical Co.

- **Location:** Pars Special Economic/Energy Zone
- **Area:** 61 hectares
- **Founded in:** 2001

Ownership



Products application

Paraxylene is used in the production of PTA, DME as well as intermediate feedstock for polyester & fiber. Benzene is used in the production of styrene, dodecyl benzen for detergents, cyclohexene (for nylon), phenol and nitrobenzene (for anylene production) and solvents. Orthoxylene is used for the production of softeners & pharmaceuticals, pesticides, paints and anhydrid phthalic

Production capacity (KT/Y)

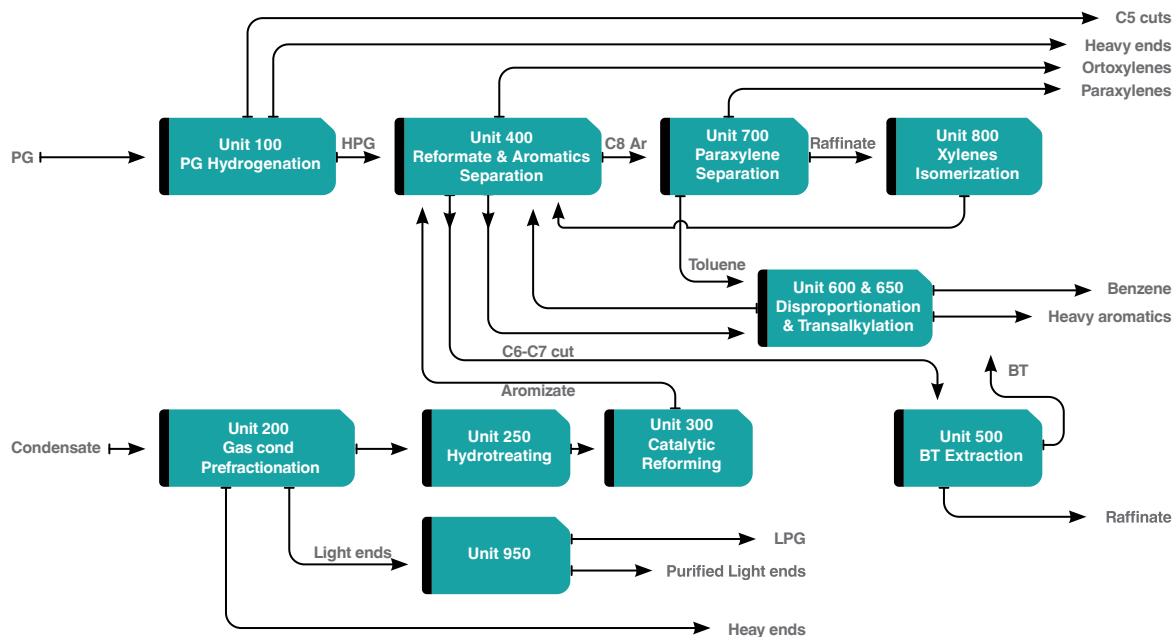
Products	Nominal capacity	feed	Licensor	Start up date
Paraxylene	750	Condensates, pyrolysis gasoline	IFP(France) Toray (Japan) Uhde (Germany)	July 2007
Benzene	430			
Orthoxylene	100			
Heavy ends	2,000			
Heavy aromatics	16			
Raffinate	380			
Light ends	680			
LPG	76			
C5 cut	47			

Input feed	Amount (KT/Y)	Source
Condensates	4,500	South pars phases
Pyrolysis gasoline	270	Jam Petrochemical Co.

ISO Certifications



Production Process Diagram



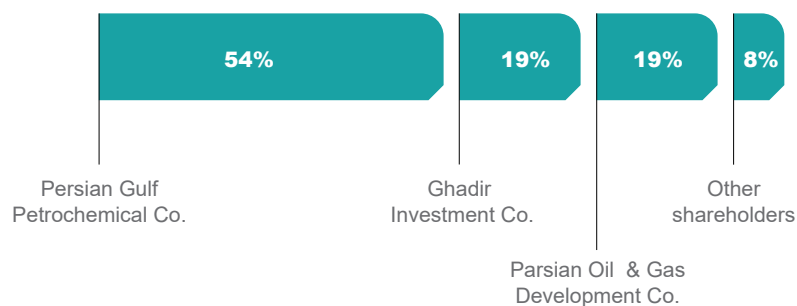
Pars Petrochemical Co.

- ▀ **Location:** Pars Special Economic/Energy Zone
- ▀ **Area:** 23 hectares + 14 hectares for EB/SM
- ▀ **Founded in:** 1998

Nominal capacity (KT/Y): **4,481**



Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Ethane	1,600	Rich gas	Linde (Germany)	2006
Propane	980	Rich gas	Linde (Germany)	2006
Butane	570	Rich gas	Linde (Germany)	2006
C5 ⁺	86	Rich gas	Linde (Germany)	2006
Ethyl benzene	645	Ethylene / Benzene	Snamprogetti	2009
Styrene monomer	600	Ethyl benzene	Snamprogetti	2009

Products application

Ethane: olefins & fuel

Propane: olefin units, raw material for industrial applications as well as refrigerant fluid

Butane: olefin units, main material for industrial usage & fuel

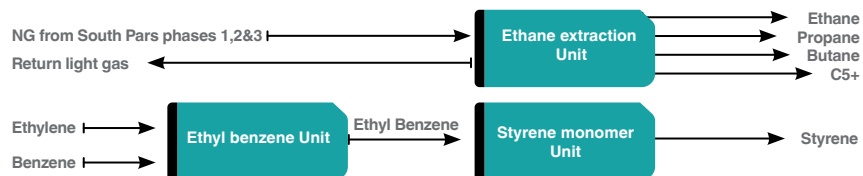
Pentane: olefin plants, main material for industrial usage & fuel

Styrene monomer: styrene, rubber, resins, adhesives, solvents, textiles, ABS, SBR, SAN

Input feed	Amount (KT/Y)	Source
Rich gas	*3,300	South Pars phases (1,2 & 3)
Ethylene	175	Arya Sasol Polymer Co.
Benzene	480	Nouri & Buali Sina Petrochemical Companies

* It is net income

Production Process Diagram



ISO Certifications





Nominal capacity (KT/Y): **1,744**

Arya Sasol Polymer Co.

- ▀ **Location:** Pars Special Economic/Energy Zone
- ▀ **Area:** 72 hectares
- ▀ **Founded in:** 2003

▀ Ownership



▀ Products application

LDPE: films, bags, containers, cable coatings and industrial parts

HDPE & MDPE: home appliances, films, industrial parts, containers, pipes, plastic bottles

Ethylene: feedstock for polymer units

▀ Production capacity (KT/Y)

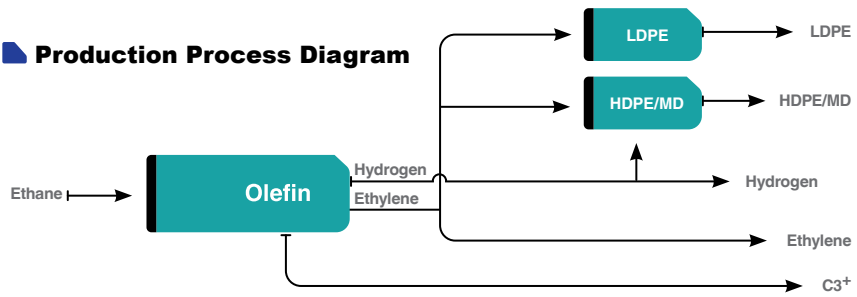
Products	Nominal capacity	feed	Licensor	Start up date
* Ethylene	1050	Ethane	Technip	2007
* C3+	94	Ethane	Technip	2007
LDPE	300	Ethylene	Sabtec	2008
HDPE/MDPE	300	Ethylene	Basell	2008

* Olefin unit has implemented the capacity increase plan in 2019.

Input feed	Amount (KT/Y)	Source
Ethane	1356	Pars Petrochemical Co.
Propane	90 t/y	Pars Petrochemical Co.
Hexene-1 (Co-monomer)	1.3	Import
Propylene	5.87	Jam Petrochemical Co.
Hexene	390 t/y	Import



Production Process Diagram



ISO Certifications



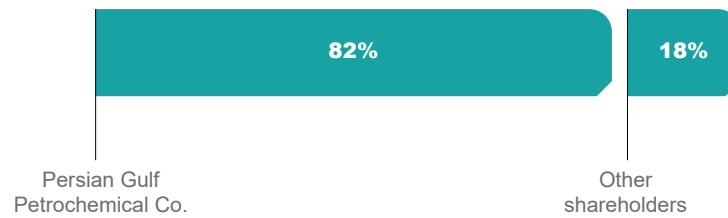


Persian Gulf Mobin Energy Co.

- **Location:** Pars Special Economic/Energy Zone
- **Area:** 84 hectares
- **Founded in:** 2000



Ownership



Production capacity

Products	Nominal capacity	feed	Licensor	Start up date
Electricity	986 MW	Natural gas	GE	2004 & 2009
Steam	2,865 t/h	DM water	Alestome	2005
Fresh water	1,560 m ³ /h	Sea water	Sidem	2004
DM & condense water	2,700 m ³ /h	Fresh water;Returned condense	Sidem/Comar	2004
Potable water	100 m ³ /h	Fresh water	Sidem/Comar	Ready for start-up
Oxygen (44 bar)	168,000 Nm ³ /hr	Atmosphere	Linde	2005 & 2009
Oxygen (29 bar)	50,400 Nm ³ /hr	Atmosphere	Linde	2005 & 2009
Nitrogen	96,000 Nm ³ /hr	Atmosphere	Linde	2005 & 2009
Service air	8,500 Nm ³ /hr	Atmosphere	Linde	2005 & 2009
Instrument air	44,000 Nm ³ /hr	Atmosphere	Linde	2005 & 2009
Service water	330 m ³ /h	Water	Bamag	2007
Cooling water	386,000 m ³ /h	Sea water	Sadra	2006

Products application

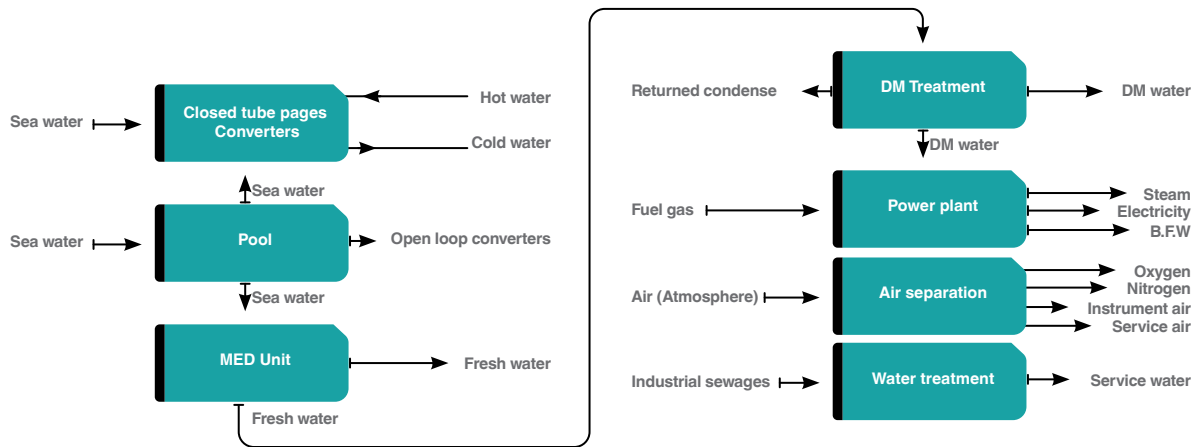
Supply of utilities for petrochemical complexes at Pars Special Economic/Energy Zone

Input feed	Amount (Mm ³ /d)	Source
* Natural gas	27.6	South Pars Oil & Gas Co.
Sea water	-	Persian Gulf

* Includes feedstock & fuel

Includes complexes of phase 1 in Asalouyeh region

Production Process Diagram



ISO Certifications



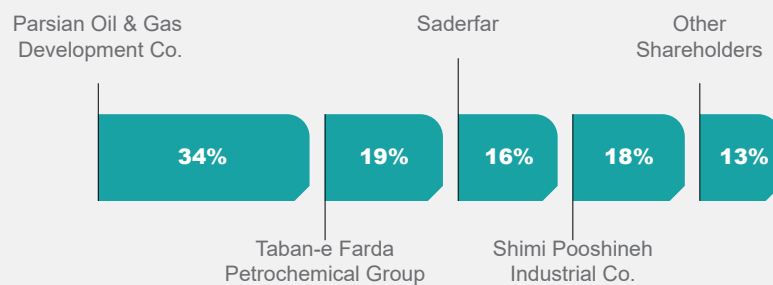


Nominal capacity (KTY): **3,300**

Zagros Petrochemical Co.

- **Location:** Pars Special Economic/Energy Zone
- **Area:** 31 hectares
- **Founded in:** 2000

Ownership



Production capacity (KT/Y)

Phase - 1

Product	Nominal capacity	feed	Licensor	Start up date
Methanol	1,650	Natural gas & oxygen	Lurgi	2006

Phase - 2

Product	Nominal capacity	feed	Licensor	Start up date
Methanol	1,650	Natural gas & oxygen	Lurgi	2009

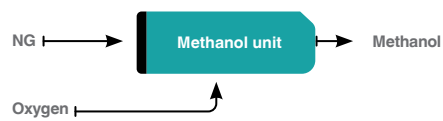
Products application

Production of MTBE, acetic acid, formaldehyde and as solvent in chemical industries

Input feed	Amount (Mm ³ /y)	Source
* Natural gas	2×1500	South Pars Gas Feild (through mobin petrochemical Co.)
Oxygen	2×664	Mobin Petrochemical Co.

* Includes feedstock & fuel

Production Process Diagram



ISO Certifications



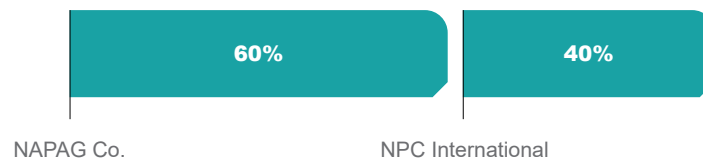


Nominal capacity (KT/Y): **300**

Mehr Petrochemical Co.

- **Location:** Pars Special Economic/Energy Zone (Site No. 2)
- **Area:** 13 hectares
- **Founded in:** 2005

■ Ownership



Production capacity (KT/Y)

Product	Nominal capacity	feed	Licensor	Start up date
HDPE	300	Ethylene	Mitsui(MCI)	2009

Input feed	Amount (KT/Y)	Source
Ethylene	310	Jam and other petrochemical complexes
Butene-1	2.5	import / Jam Petrochemical Co.

Products application

Production of plastics such as: pipes, cable coating, film, ...

Production Process Diagram



ISO Certifications



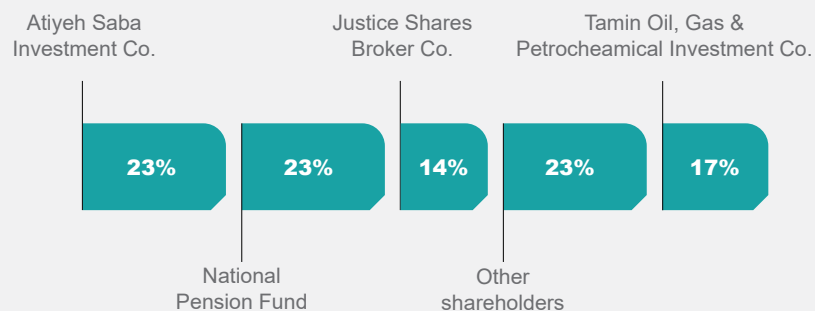


Nominal capacity (KT/Y): **3,079.5**

Jam Petrochemical Co.

- **Location:** Pars Special Economic/ Energy Zone
- **Area:** 77 hectares + 22 hectares in phase 2
- **Founded in:** 2000

Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Ethylene	1,320	Ethane, light cuts, C3+, C5+, LPG, heavy aromatics	Technip	2007
Propylene	305			
Raw pyrolysis gasoline	216			
CFO	40			
C4+	245			
LLDPE / HDPE	300	Ethylene	Basell	2008
HDPE	300	Ethylene	Basell	2007
Butadiene 1&3	115	C4 cut	BASF	2009
C4 Raffinates	130			
Butene-1	100	Ethylene	Axens	2012
C6 ⁺	8.5	Ethylene	Axens	2012

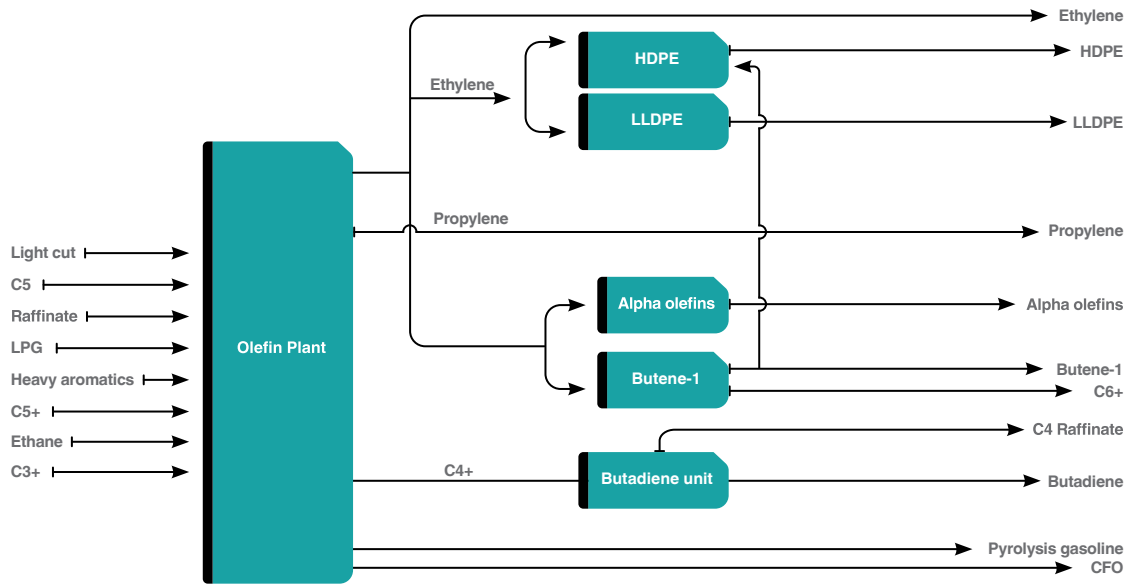
Products application

feedstock for acrylic rugs, fibers, acrylic, solvents, paints, lubricants, anti-freeze, textiles & adhesives as well as various plastic products such as cable coating, films, containers and pipes. Industrial parts such as: audio visual appliances, auto inner parts,...

Input feed	Amount (KT/Y)	Source
Light cuts	680	Nouri (Borzuyeh) Petrochemical Co.
Raffinates	380	Nouri (Borzuyeh) Petrochemical Co.
C5 cut	55	Nouri (Borzuyeh) Petrochemical Co.
LPG	83	Nouri (Borzuyeh) Petrochemical Co.
Heavy aromatics	16	Nouri (Borzuyeh) Petrochemical Co.
Ethane	707	South Pars Gas Field
Ethane	257	Pars Petrochemical Co.
C3+	87	Arya sasol-Kavian-Morvarid Petrochemical Cos.
C5 cut	91	Pars Petrochemical Co.



Production Process Diagram



ISO Certifications





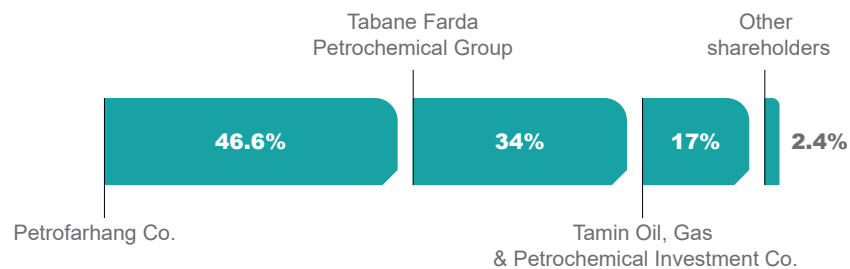
Nominal capacity (KT/Y): **1,106**

Morvarid Petrochemical Co.

- **Location:** Pars Special Economic/ Energy Zone (Site 2)
- **Area:** 17.29 hectares
- **Founded in:** 2005



Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Ethylene	500	Ethane	Technip	2010
C3+	47	Ethane	Technip	2010
Mono ethylene glycol	500	Ethylene/O ₂	Shell	2016
Di ethylene glycol	50	Ethylene/O ₂	Shell	2016
Tri ethylene glycol	3	Ethylene/O ₂	Shell	2016
Polyethylene glycol	5.9	Ethylene/O ₂	Shell	2016

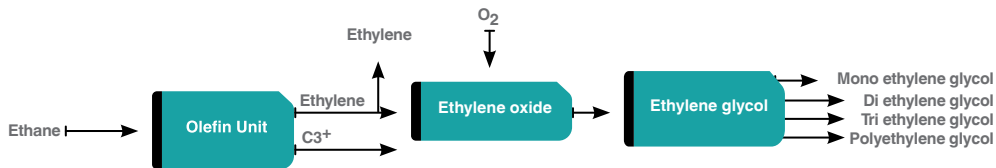


Products application

Raw material for production of polyethylene and ethylene glycols

Input feed	Amount (KT/Y)	Source
Ethane	650	Pars Oil & Gas Co.
O ₂	368	Damavand Petrochemical Co.

Production Process Diagram



ISO Certifications



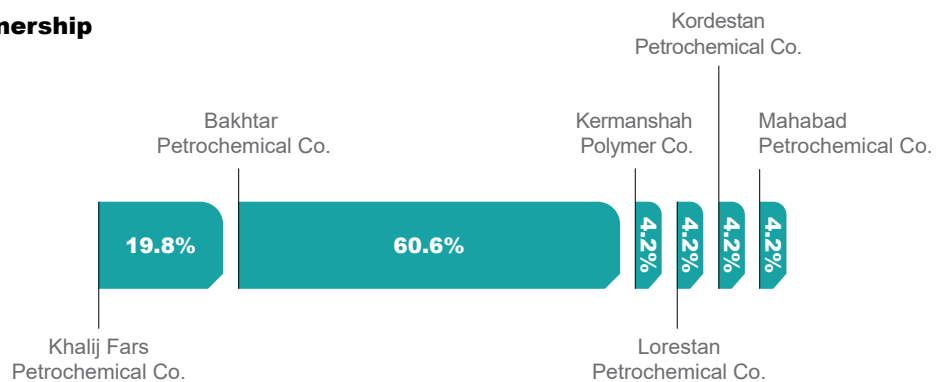
Kavian Petrochemical Co.

- **Location:** Pars Special Economic/ Energy Zone (Site 2)
- **Area:** 43 hectares
- **Founded in:** 2006

Nominal capacity (KT/Y): **2,178**



Ownership



Production capacity (KT/Y)

Phase - 1

Products	Nominal capacity	feed	Licensor	Start up date
Ethylene	1,000	Ethane	Technip	2012
C3 ⁺	89	Ethane	Technip	2012

Phase - 2

Products	Nominal capacity	feed	Licensor	Start up date
Ethylene	1,000	Ethane	Technip	2016
C3 ⁺	89	Ethane	Technip	2016

Products application

Raw material for production of polyethylene and ethylene glycols



Input feed	Amount (KT/Y)	Source
Ethane	1315*2	South Pars Oil & Gas Co.

Production Process Diagram





Nominal capacity (KT/Y): **443**

Farsa Shimi Co.

- **Location:** Pars Special Economic/ Energy Zone
- **Area:** 11 hectares
- **Founded in:** 2002
- **Ownership:** Natural persons (100%)

Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
MEG	400	Ethylene & Oxygen	Shell	2007
DEG	40	//	//	//
TEG	3	//	//	//

Products application

Production of polyester fibers, anti-freeze & solvents

Input feed	Amount (KT/Y)	Source
Ethylene	260	Jam Petrochemical Co.
Oxygen	300	Mobin Petrochemical Co.

Production Process Diagram



ISO Certifications



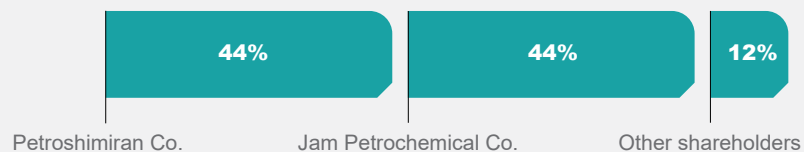


Nominal capacity (KT/Y): **300**

Jam Polypropylene Co.

- **Location:** Pars Special Economic / Energy Zone
- **Area:** 8 hectares
- **Founded in:** 2004

Ownership



Production capacity (KT/Y)

Product	Nominal capacity	feed	Licensor	Start up date
Polypropylene	300	Propylene	Basell	2008

Products application

Raw Material for plastic, textile, auto parts, packing films, water pipes, industries for domestic needs and export

Input feed	Amount (KT/Y)	Source
Ethylene	305	Jam Petrochemical Co.

Production Process Diagram



ISO Certifications





Nominal capacity (KT/Y): **48**

Jam Ehtemam Co.

- **Location:** Pars Special Economic, Energy Zone
- **Area:** 2 hectares
- **Founded in:** 2004
- **Ownership:** Natural persons (100%)

Production capacity (KT/Y)

Product	Nominal capacity	feed	Licensor	Start up date
Formaldehyde urea	48	Methanol, urea & soda	Alder(Italy)	2011

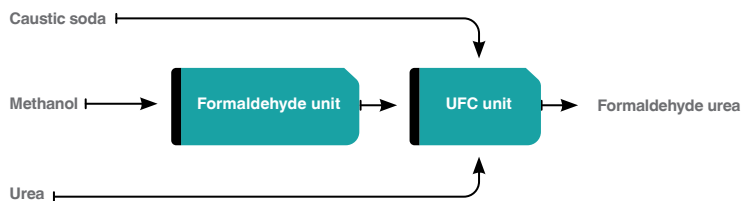
Products application

Formaldehyde: production of adhesives, auto and textile industry, sanitary & medical products, urea formaldehyde resins...

UFC: consists of 60% formaldehyde & 25% urea and is used in production of melamine resins& urea formaldehyde...

Input feed	Amount (KT/Y)	Source
Methanol	33.6	Zagros Petrochemical Co.
Urea	12	Pardis Petrochemical Co.
Caustic soda	0.4	Arvand Petrochemical Co.

Production Process Diagram



ISO Certifications



Entekhab Polystyrene Petrochemical Industries Development Co.

- **Location:** South Pars Special Economic / Energy Zone (phase 2)
- **Area:** 5.85 hectares
- **Founded in:** 2013
- **Ownership:** Entekhab Investment Development Co. (100%)

Nominal capacity (KT/Y): **250**



Production capacity (KT/Y)

Product	Nominal capacity	feed	Licensor	Start up date
Expandable polystyrene	250	Styrene monomer	B.P Investment	2016

Products application

Production of home appliances, electrical insulation, packing industry, food containers & toys

Input feed	Amount (KT/Y)	Source
Styrene monomer	238	Pars Petrochemical Co.
Normal-Pentane	22	PetroSanat Naftalyan Co. of Assaluyeh

Production Process Diagram



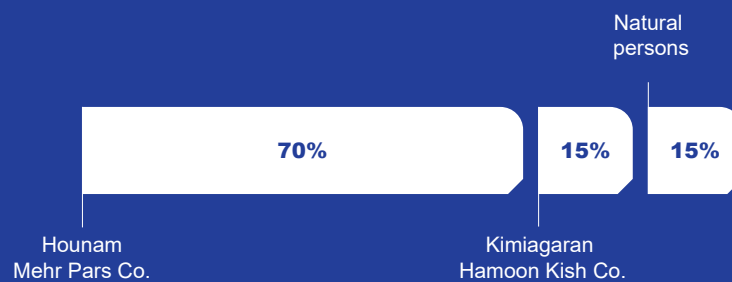


Nominal capacity (KT/Y): **65**

Takhte-Jamshid Petrochemical Pars Assaluyeh Co.

- **Location:** South Pars Special Economic / Energy Zone (Phase 2)
- **Area:** 5.3 hectares
- **Founded in:** 2014

Ownership



Production capacity (KT/Y)

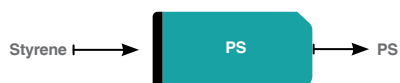
Product	Nominal capacity	feed	Licensor	Start up date
PS	65	Styrene	TOYO	2016

Products application

Production of home appliances, packing industry, electrical insulation

Input feed	Amount (KT/Y)	Source
Styrene	62.4	Pars Petrochemical Co.

Production Process Diagram

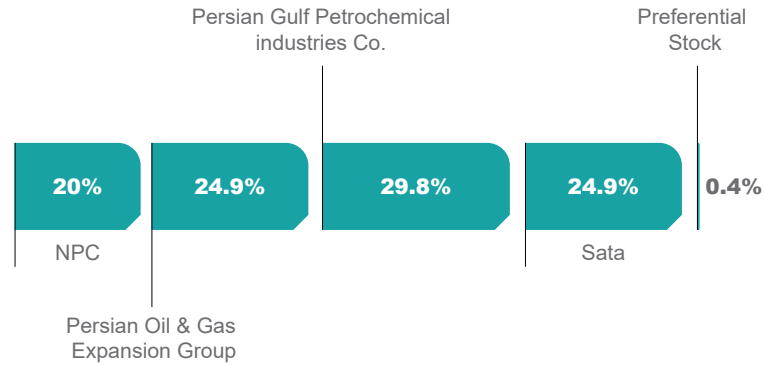




Damavand Petrochemical co. (phase 1)

- **Location:** Pars Special Economic Zone
- **Area:** 90 hectares
- **Founded in:** 2008

Ownership



Production capacity

Product	Nominal capacity	feed	Licensor	Start up date
Electricity	648 MW (Ultimate Capacity: 2,000 mw/h)	Natural gas	MAPNA Siemens	2015
Steam	780 t/h (Ultimate Capacity: 1,890 ton/h)	Sea water/Air	MAPNA Boiler	2015

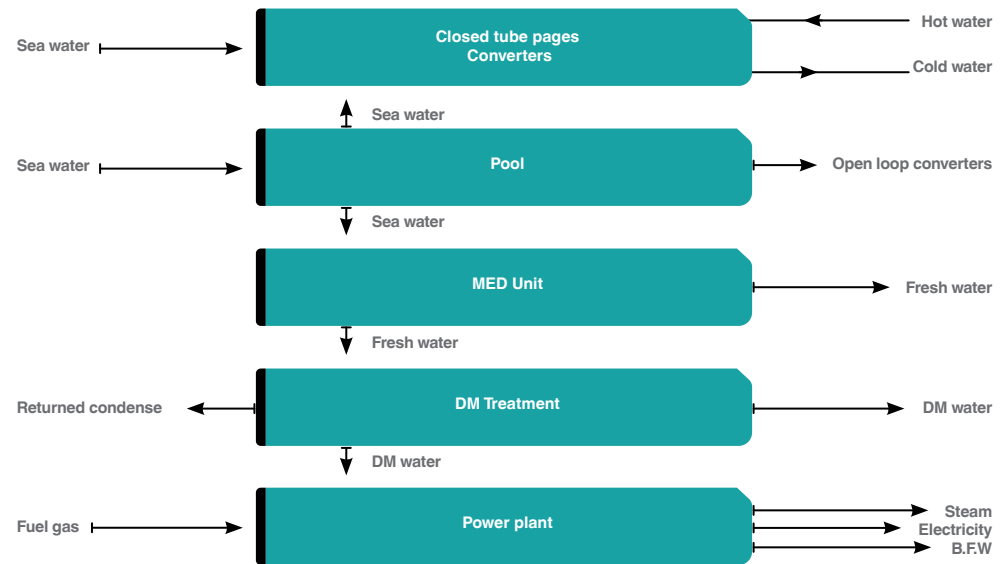
Products application

Supply of utilities and centralized for 24 petrochemical complexes envisaged in the second phase of petrochemicals

Input feed	Amount (Mm ³ /d)	Source
Natural gas	14.92	South Pars Oil & Gas Co.
Sea water	-	Persian Gulf

*Includes complexes of site 2 in Asalouyeh.

Production Process Diagram



ISO Certifications





Nominal capacity (KT/Y): **1,650**

Marjan Petrochemical Co. (7th Methanol)

- ▀ **Location:** Pars Special Economic / Energy Zone (Phase 2)
- ▀ **Area:** 7 hectares
- ▀ **Founded in:** 2011

Production capacity (KT/Y)

Product	Nominal capacity	feed	Licensor	Start up date
Methanol	1,650	Natural gas & Oxygen	Haldor Topsoe (Denmark)	2018

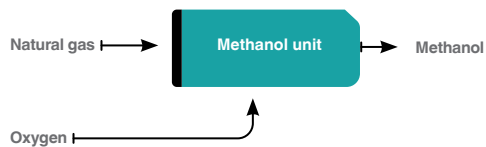
Products application

Production of MTBE, acetic acid, formaldehyde and as solvent in chemical industries

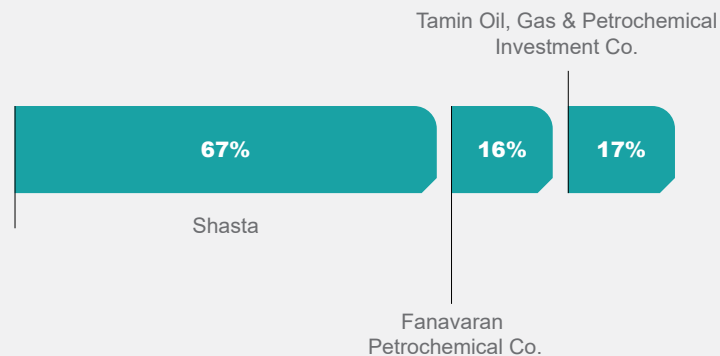
Input feed	Amount (Mm ³ /y)	Source
* Natural gas	1,485	South Pars Gas Feild (through Mobin petrochemical Co.)
Oxygen	511	Damavand/Marjan Petrochemical Cos.

* Includes feedstock & fuel

Production Process Diagram



Ownership



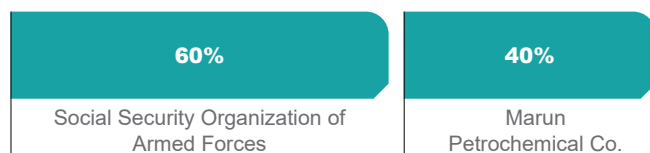


Nominal capacity (KT/Y): **4,111**

Bushehr Petrochemical Co.

- ▀ **Location:** Pars Special Economic / Energy Zone
- ▀ **Area:** 70 hectares
- ▀ **Founded in:** 2011

Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Sulfur	125	Sour gas	Technimont (Italy)	2020
Methane	1323	Rich gas	IPIP (Romania)	2020
Ethane	850	Rich gas	IPIP (Romania)	2020
Propane	130	Rich gas	IPIP (Romania)	2020
Butane	30	Rich gas	IPIP (Romania)	2020
C5+	3	Rich gas	IPIP (Romania)	2020
Methanol	1650	N.G	Casale	2019

Products application

Production of sulfuric acid, DME, phosphate production process, matches

Methane: feed for the Methanol unit

Ethane: feed for the Olefin units

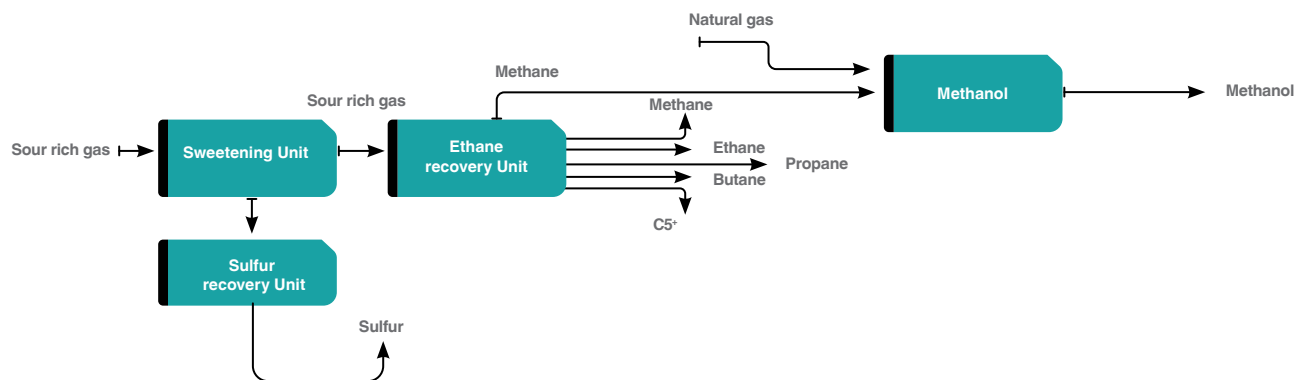
Propane: feed for the Olefin units

Butane: feed for the Olefin units

Pentane: Raw material in production of fuel and feed for the Olefin units

Input feed	Amount	Source
Sour rich gas	360 (t/h)	phase 6,7,8
N.G	81(sm ³ /h)	Damavand Petrochemical Co.

Production Process Diagram





Nominal capacity (KT/Y): **1,650**

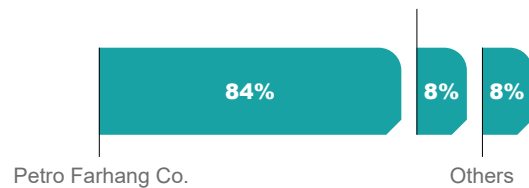
Middle East Kimiya-e-Pars Co.

- **Location:** Pars Special Economic/ Energy Zone (Phase 2)
- **Area:** 7.48 hectares
- **Founded in:** 2013



Ownership

Capital Development Management of Iranian Petrochemical Group



Production capacity (KT/Y)

Product	Nominal capacity	feed	Licensor	Start up date
Methanol	1,650	Natural gas & oxygen	Haldor Topsoe (Denmark)	2020



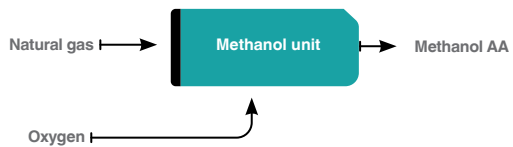
Products application

Production of gasoline octane booster (MTBE), acetic acid and also as solvent in downstream industries, resins, adhesives, formaldehyde, antifreeze, different types of plastics, DME production, propylene production (PTM) and olefins (OTM).

Input feed	Amount	Source
Natural Gas*	1,562 (MSM ³ /Y)	National Gas Co.
Oxygen	744 (KT/Y)	Damavand Petrochemical Co. (Currently Marjan Petrochemical Air and Boushehr units)

*Including feed and fuel.

Production Process Diagram



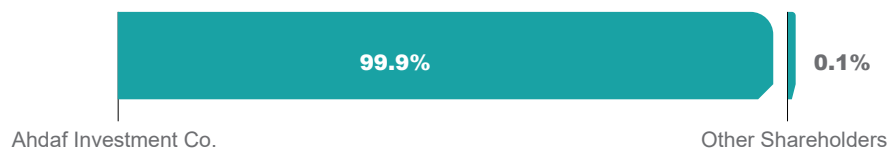


Nominal capacity (KT/Y): **3,462**

Kangan Petrorefinery Co.

- ▀ **Location:** Kangan
- ▀ **Area:** 98 hectares
- ▀ **Founded in:** 2015

Ownership



Production capacity (KT/Y)

Products	Nominal capacity	Licensor	Operation date
Ethane	1,727	Linde	2021
Propane	1,003	Linde	2021
Butane	512	Linde	2021
C ₅ +	220	Linde	2021

Complex feed	Projected capacity/ Y	Source
Rich gas	3,683 KT	South Pars phases (phase 12)

Products application

Feed for olefin and other petrochemical units

Production Process Diagram



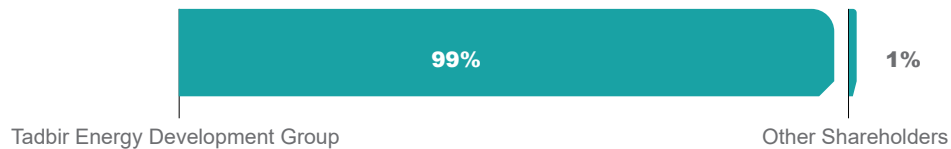


Nominal capacity (KT/Y): **3,332**

Parsian Sepehr Refinery Co.

- ▀ **Location:** Pars Special Economic Energy Zone
- ▀ **Area:** 25 hectares
- ▀ **Founded in:** 2014

Ownership



Production capacity (KT/Y)

Products	Nominal capacity	Licensor	Operation date
Ethane	1,300	Headco	2022
Propane	612	Headco	2022
Butane	450	Headco	2022
C ₅ +	970	Headco	2022

Complex feed	Projected capacity/ Y	Source
Rich gas	20,467 KT	Mohr Refinery

Products application

Feed for olefin and other petrochemical units

Production Process Diagram



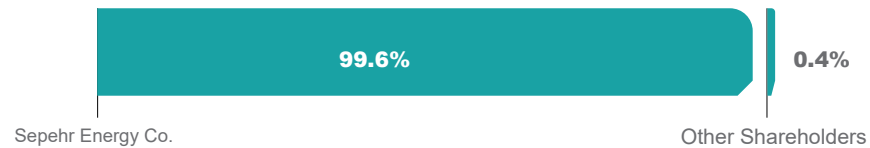


Nominal capacity (KT/Y): **1,650**

Sabalan Petrochemical Co.

- **Location:** Pars Special Economic Energy Zone
- **Area:** 7 hectares
- **Founded in:** 2012

■ Ownership



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PETROCHEMICAL
COMPLEXES



Production capacity (KT/Y)

Products	Nominal capacity	Licensor	Operation date
Methanol	1,650 KT	Haldor Topsoe	2012

Complex feed	Projected capacity/ Y	Source
Natural gas*	1,471 MCUM	National Gas Company
Oxygen	572 MCUM	Damavand Petrochemical Co.

* includes feed and fuel.

Products application

MTBE production, acetic acid and as a solvent in downstream industries, resins, formaldehyde, adhesives, antifreeze, different types of plastic, DME production, MTP and MTO.

Production Process Diagram



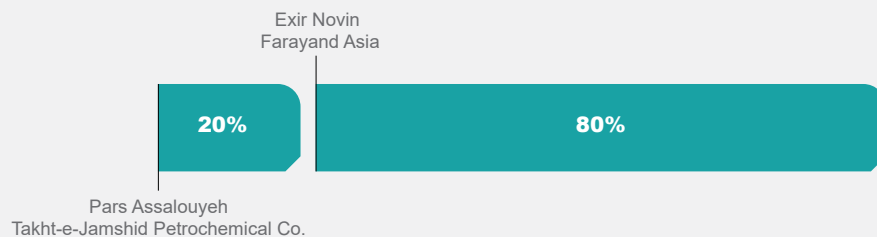


Nominal capacity (KTY): **50**

Assalouyeh Exir Hallal Co.

- **Location:** Pars Special Economic Energy Zone
- **Area:** 1 hectares
- **Founded in:** 2019

Ownership



Production capacity (KT/Y)

Products	Nominal capacity	Licensor holder	Operation date
Hexane	40	Exir Novin Farayand Asia Co.	2022
Pentane	10	Exir Novin Farayand Asia Co.	2022

Complex feed	Projected capacity/ Y	Source
Raffinate	260 KT	Nouri

Products application

Solvent in paint and adhesive industries, feed for olefin units and EPS production

Production Process Diagram



The image shows a large industrial facility, likely a refinery or chemical plant, with several tall distillation columns and a complex network of pipes and scaffolding. The scene is set against a backdrop of rolling green hills under a blue sky with scattered clouds. A semi-transparent blue overlay covers the left side of the image, where the text is located.

Other Regions



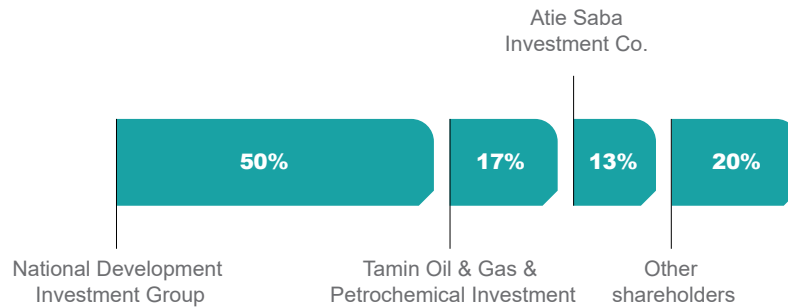


Nominal capacity (KT/Y): **1,558.7**

Shazand (Arak) Petrochemical Co.

- **Location:** Arak, 22km of Arak-Boroojerd Road
- **Area:** 523 hectares
- **Founded in:** 1984

Ownership



Products application

Production of plastic pipes, paints, adhesives, packing films, fibers, surgical threads, serum, polyester industries, solvents, detergents, anti-freeze, electrical insulation, shampoos, gas absorbents, pharmaceuticals, cosmetics, oil, gas & petrochemical industries, cement industry, antiseptics, plastic containers, toys, household appliances, bags, plastic sheets, water pipes, and anti-foams.



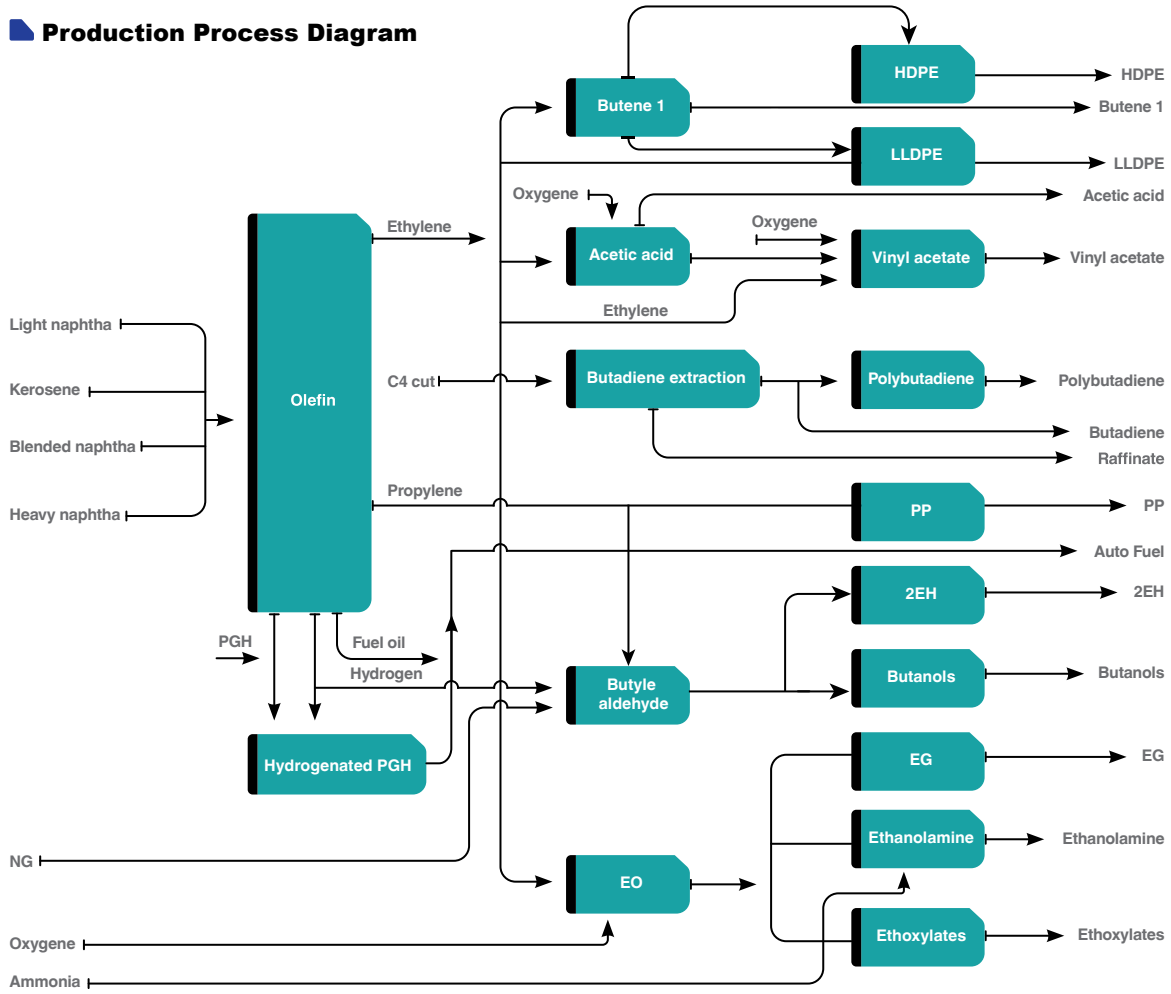
Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Ethylene	306.6	Naphtha	TPL, KTI	1993
Propylene	128	Naphtha	TPL, KTI	1993
C4Cut	79	Naphtha	TPL, KTI	1993
Fuel oil	65	Naphtha	TPL, KTI	1993
Hydrogen	5	Naphtha	TPL, KTI	1993
Hydrogen C4	63	Naphtha	TPL, KTI	1993
Hydrogenated hydrocarbon	169	PGH	IFP, UOP	1993
PP	75	Propylene	Himont	1993
Butene-1	7	Ethylene	IFP	1993
HDPE	85	Ethylene	Hoechst	1994
LLDPE/ HDPE	75	Ethylene	BP	1994
Butadiene	27.5	C4Cut	NIPPON, ZEON	1994
Raffinate	22	C4Cut	NIPPON, ZEON	1994
Polybutadiene rubber (PBR)	26	Butadiene	NIPPON, ZEON	1994
Ethylene oxide	113	Ethylene	Scientific Design	1994
EG	119	Ethylene oxide	Scientific Design	1994
AA	30	Ethylene	Hoechst	1995
Acetaldehyde	24	Ethylene	Hoechst	1995
VAM	30	Ethylene	Bayer	1995
2EH & butanols	55.7	Propylene	Davy Mckey	1995
Ethanolamines	30	Ethylene oxide, Ammonia	Oxiteno	1999
Ethoxylates	30	Fatialscohol, nonylphenol, ethylene oxide	Balestra	2003
C6 Hydrogenated	63	Pyrolysis gasoline	FP-UOP	1993

Input feed	Amount	Source
Light and heavy naphtha	927 (KT/Y)	Arak & Isfahan Refineries
Ammonia	6 (KT/Y)	Local sources
Propylene	6 (KT/Y)	Local sources
* Natural gas	420 Mm ³ /y	NIGC

* Includes feedstock & fuel

Production Process Diagram



ISO Certifications



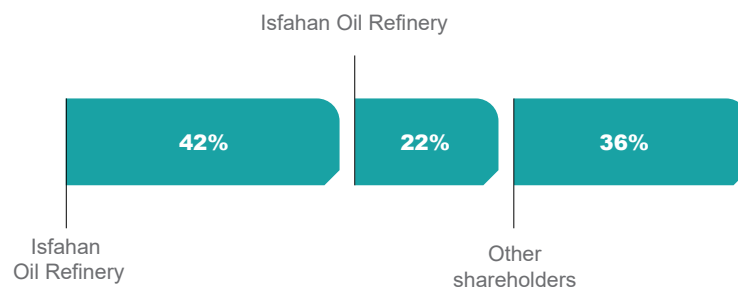
Isfahan Petrochemical Co.

- **Location:** 5th km Azadegan Highway, Isfahan
- **Area:** 165 hectares
- **Founded in:** 1989

Nominal capacity (KT/Y): **515.3**



Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Benzene	55.7	Platformate	UOP	1992
Toluene	72	Platformate	UOP	1992
Orthoxylene	22	Mixed xylenes	UOP	1992
Paraxylene	44	Mixed xylenes	UOP	1992
Mixed xylenes	75	Platformate	UOP	1992
Phthalic anhydride	40	orthoxylyene	Rollechim	2008
Aromatic raffinate	207	Platformate	UOP	1992

Isfahan Petrochemical Co.

It is Iran's first aromatics plant. It was brought onstream in 1992. The plant enjoys one of the world's state-of-the-art technologies and was the first plant in Iran which employed fully computerized DCS technology. It was privatized in 1997 and was subsequently listed on Tehran's Stock Exchange in 1999

Input feed	Amount (KT/Y)	Source
Platformate	363	Isfahan Oil Refinery Co.
Hydrogen	3.2	//



▀ Products application

Benzene: raw material for softeners, detergents, insecticides and paints.

Toluene: raw material for softeners and solvents.

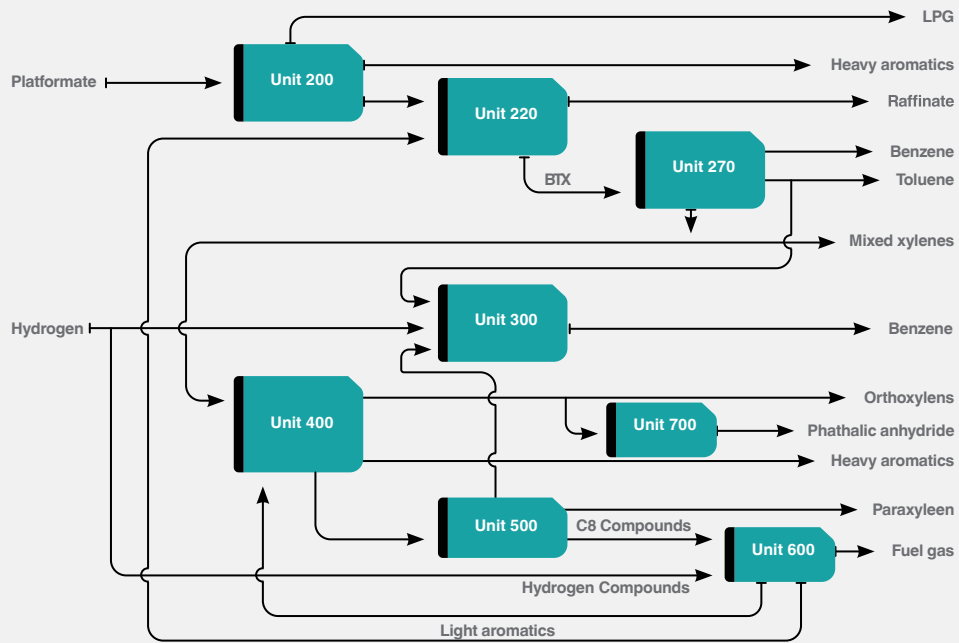
Orthoxylene: raw material for softeners, plastics and resins.

Paraxylene: production of resins, fibers, polyesters and polyacrylics.

Mixed xylenes: pesticides, paints, resins.

Phthalic anhydride: unsaturated polyester resins, plastics softener

Production Process Diagram



ISO Certifications





Nominal capacity (KT/Y): **1,135**

Kharg Petrochemical Co.

- Location: Kharg Island
- Area: 155 hectares
- Founded in: 1966

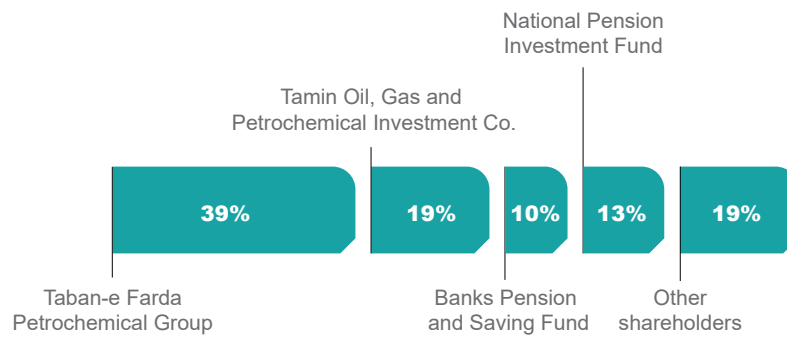
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PETROCHEMICAL
COMPLEXES



Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Methanol	660	Sweet gas	Lurgi	1999
Sulfur	170	Sour gas	Pritchard	1967
Propane	115	Sour gas	Pritchard	1967
Butane	120	Sour gas	Pritchard	1967
Gasoline (C5 ⁺)	70	Sour gas	Pritchard	1967

Products application

Methanol: raw material for producing MTBE, acetic acid, formaldehyde and industrial solvents

Sulfur: raw material for producing sulfuric compounds, sulfuric acid, fertilizers, electrical insulators, chemical and paper industries, rubber vulcanization, and medicine

Propane: raw material in production of olefins and fuel

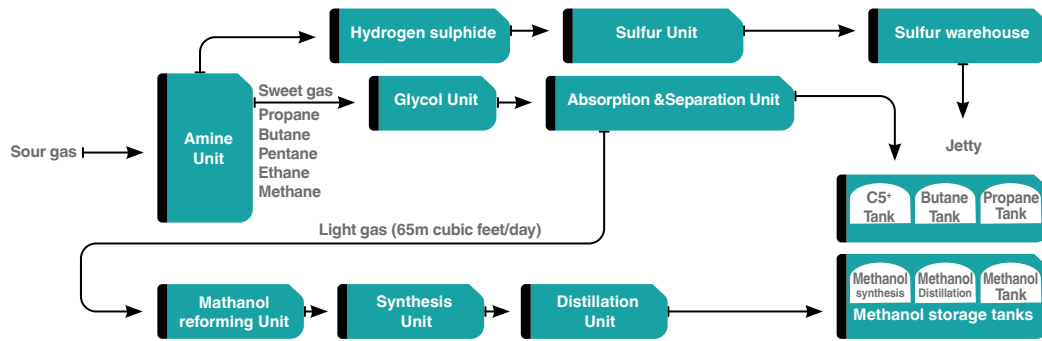
Butane: raw material in production of olefins and fuel

Gasoline: raw material in production of olefins and fuel

Input feed	Amount (Mm ³ /Y)	Source
Sour gases	1,402	Offshore oil wells



Production Process Diagram



ISO Certifications





Nominal capacity (KTY): **828.665**

Tabriz Petrochemical Co.

- **Location:** Southwest of Tabriz, West of Tabriz Refinery
- **Area:** 391 hectares
- **Founded in:** 1988

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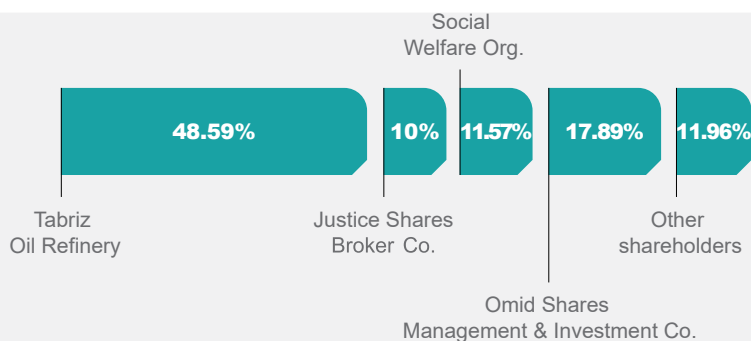


PETROCHEMICAL
COMPLEXES

Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Ethylene	136	Naphtha, LPG, ethane	TPL (Italy) KTI (Netherlands)	1997
Propylene	56	Naphtha, LPG, ethane		
C4Cut	34	Naphtha, LPG, ethane		
Butene-1	7	Ethylene	IFP (France)	1997
LLDPE/HDPE	100	Ethylene	BP (England)	1997
Benzene	55	PGH	IFP (France), Krupp Koppers (Germany)	1997
Ethyl benzene	100	Ethyl benzene	UOP, Lumms	1999
Styrene	95	Ethyl benzene	UOP, Lumms, Monsanto	1999
Toluene	2	Ethyl benzene		1999
Expandable polystyrene	15	Styrene, pentane	Sunpor (Austria)	1999
General-purpose polystyrene	25	Styrene, mineral oil	Elfatochem (France)	1999
High-impact polystyrene	40	Styrene, mineral oil, PBR	Elfatochem (France)	1999
High - Impact polystyrene2	54	Styrene mineral oil, PBR	Tabriz petrochemical complex(TPC)	2010
Butadiene	16.5	C4Cut	BASF (Germany)	2003
Raffinate C4	15	C4Cut	BASF (Germany)	2003
ABS	35	Styrene, BD, AMS, ACN	Samsung (South Korea) / Cheil	2003
CFO	11.4	Naphtha	TPL (Italy) KTI (Netherlands)	1997
Fuel oil	3	PGH	IFP, Krupp Koppers	1997
Non-aromatic C6 cut	6.5	PGH	IFP, Krupp Koppers	1997
Toluene 85%	2.4	PGH	IFP, Krupp Koppers	1997
C7-C9 Cut	15	PGH, C6 Cut	IFP (France) Krupp Koppers (Germany)	1997
Pentane	4.8	Light Naphtha	Tabriz Petrochemical Company	1997

Ownership



Products application

LDPE/HDPE: liquid containers, bags, plastic films, toys, home appliances

Expandable polystyrene: ice containers, insulation, packing

General-purpose polystyrene: pens, tooth brush, light bulb industry, refrigerators, automobiles, disposable containers

High-impact polystyrene: TV, radio and cassette player cases, refrigerators, washing machine and auto parts, home appliances and disposable containers

ABS: monitor and typing machine cases, electronic parts, refrigerators, telephone handset, auto parts

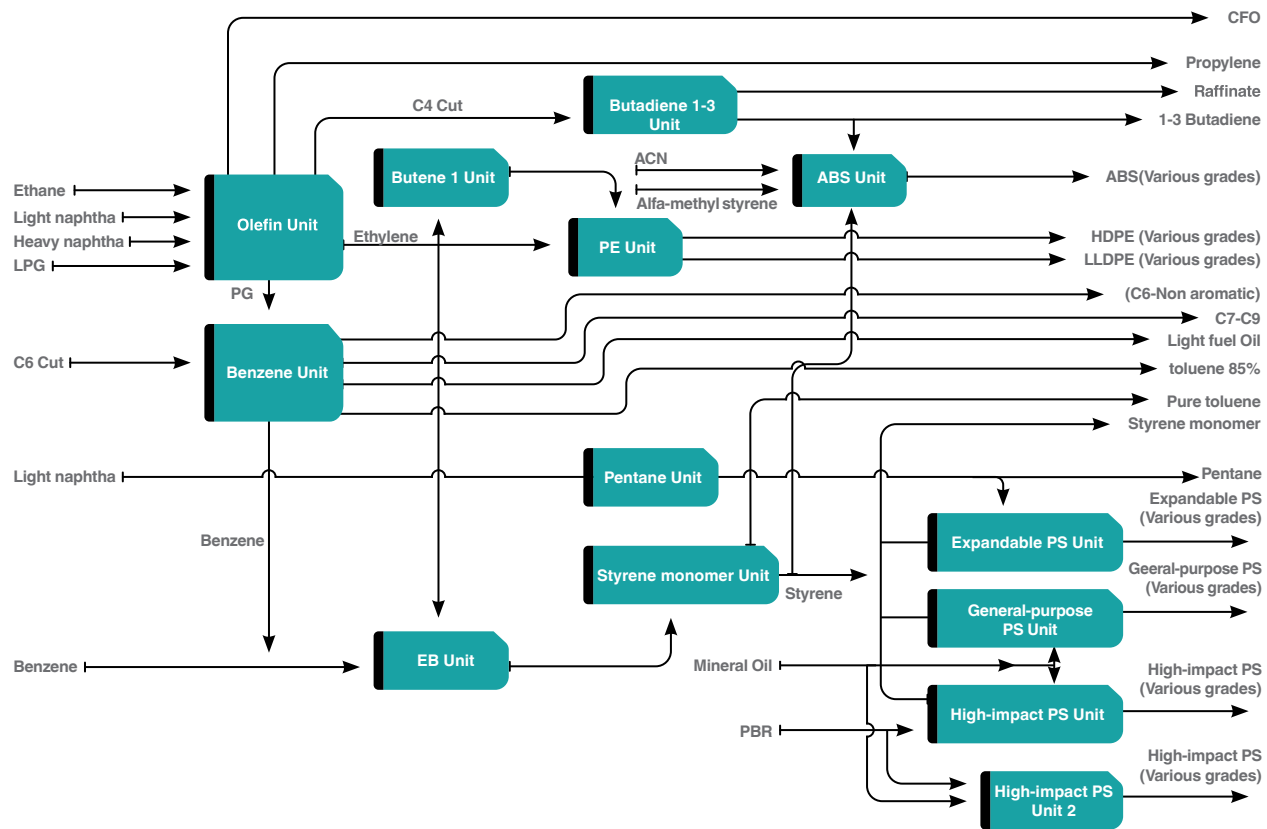
Propylene: feed for polymer plants

1-3 Butadiene: production of PBR, ABS

Toluene: various chemical solvents

Input feed	Amount (κΤ/Υ)	Source
LSRG(Light naphta)	245	Tabriz & Tehran Refineries
HSRG (Heavy naphta)	42.5	Tabriz & Tehran Refineries
LPG	54	BIPC / Tabriz Refinery
Ethane	8	Tabriz Refinery
ACN	8.3	Import
Mineral oil	4.7	Import
PBR	8.7	Import, Shazand Petrochemical Co.
AMS(Alpha methyl styrene)	1.1	Import
C6 cuts pyrolysis gasoline	37.5	Shazand Petrochemical Co.
Benzene	24	BIPC/Buali Sina Petrochemical Cos.
Styrene monomer	50	Pars Petchemical Co.

Production Process Diagram



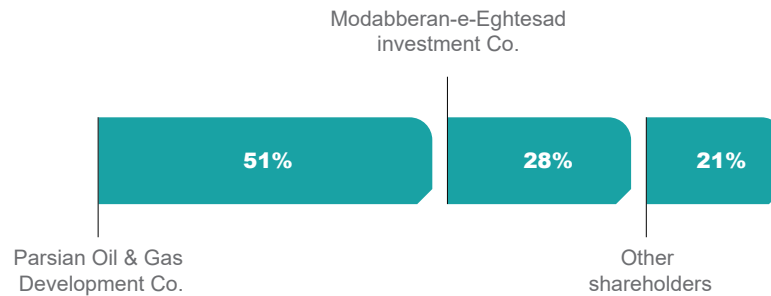


Nominal capacity (KT/Y): **3291.3**

Shiraz Petrochemical Co.

- **Location:** 45km North of Shiraz
- **Area:** 300 hectares
- **Founded in:** 1959

■ Ownership



■ Shiraz Petrochemical Co.

Shiraz Petrochemical Co. is Iran's first petrochemical complex which was brought onstream in 1963. It is located near Kor river. The complex lies in an area of 300 hectares of which 72 hectares are allocated to industrial sites. At the outset, the complex consisted 4 production plants including ammonia, urea, nitric acid and ammonium nitrate plus utility unit. Later, the complex underwent several expansion projects which included soda ash which was commissioned in 1973 and the complex's largest expansion project was launched in 1985.

■ Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Ammonia (unit-2)	396	NG, air	ICI (England)	1985
Urea (unit-2)	495	Ammonia, Co2	Stami Carbon(Netherlands)	2015
Ammonia (3)	676.5	Natural gas	Ammonia Casale	2015
Urea (3)	1,072.5	Natural gas	Toyo	2015
Nitric acid	341.2	Ammonia, air	Grand Paroise (France)	2015
Ammonium nitrate	221.1	Ammonia, nitric acid	Kalten Bach (France)	1965
* Light soda ash	80	Lime, salt	Industrial Export/Import (Romania)	1973
* Dense soda ash	66	Soda ash		
* Sodium bicarbonate	20	Soda ash		
Argon	5	Purge gas	Air liquid (France)	1994
* Chlorine	20	Salt	Denora (Italy)	1988
* Caustic	22.4			
* HCL	20			
* Sodium hypochloride	13.2			
* Perchlorine	5	CL2, NAOH, lime	Denora (Italy)	1993
Methanol	84	NG	Lurgi (Germany)	1990

*Alkali chlorine, perchlorine, light soda ash and dense soda ash are out of service from 2009 and because of that are not included in nominal capacity calculations.

Products application

Soda ash: production of glass and crystal, food and pharmaceuticals, paper industry, leather industry

Ammonia: feed for production of various chemicals and fertilizers

Urea: production of fertilizers, resins, formaldehydes & melamines

Nitric acid: explosives and dairy products

Ammonium nitrate: fertilizer to improve soil; also used in medical, mineral and military industries

Argon: welding, steel industry and electric light bulbs

Chlor alkali: food, sanitation, paper, aluminum, plastic industries as well as treatment of potable water, production of disinfectants

Methanol: production of acetic acid, MTBE, formaldehydes and organic solvents melamine

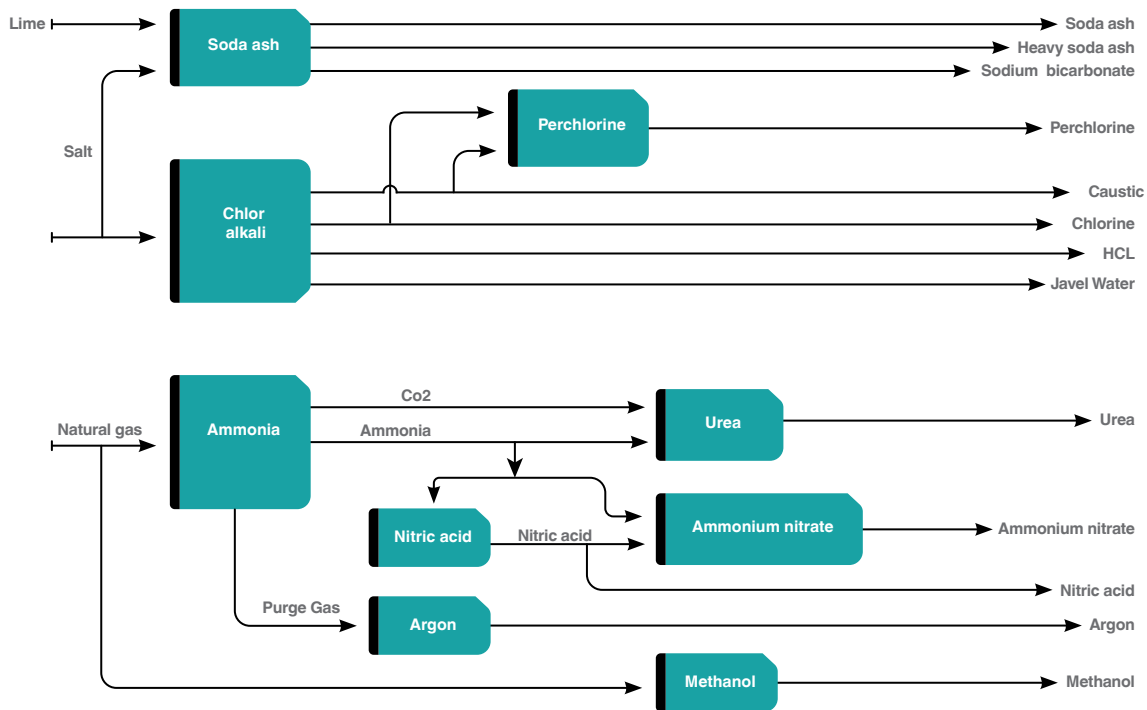
Perchlorine: production of disinfectants and antiseptics

Input feed	Amount (κ/γ)	Source
Salt	220	Maharlo Lake
Lime	120	Nearby limestone mine

Input feed	Amount (Mm ³ /y)	Source
* NG	1541	NIGC
Water	15.5	Fars Water Org

* Includes feedstock & fuel

Production Process Diagram



ISO Certifications





Nominal capacity (KTY): **845**

Khorasan Petrochemical Co.

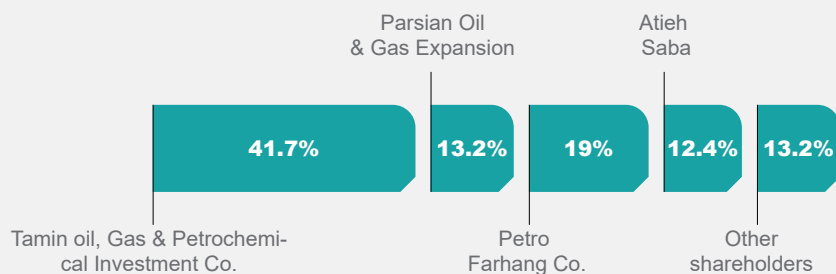
- **Location:** 17th km, Bojnurd-Mashhad Road,
- **Area:** 204 hectares
- **Founded in:** 1992

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**PETROCHEMICAL
COMPLEXES**

Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Ammonia	330	NG	MW Kellogg	1996
Prilled urea	495	Ammonia, Co2	Stami Carbon	//
Melamine	20	Ammonia & urea solution	Eurotechnica	2003

Products application

Ammonia: production of fertilizers, refrigerant fluid in refrigeration systems

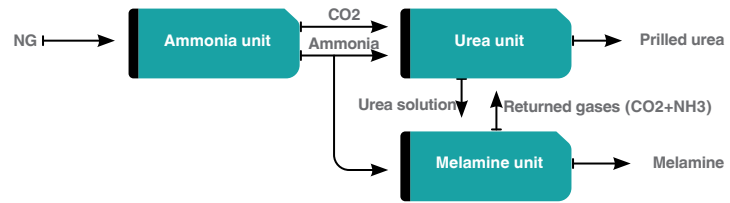
Urea: production of fertilizers, urea-formaldehyde resins and melamine

Melamine: production of resins

Input feed	Amount (Mm ³ /y)	Source
* NG	483	Khangiran-Sarakhs Refinery

* Includes feedstock & fuel.

Production Process Diagram



ISO Certifications





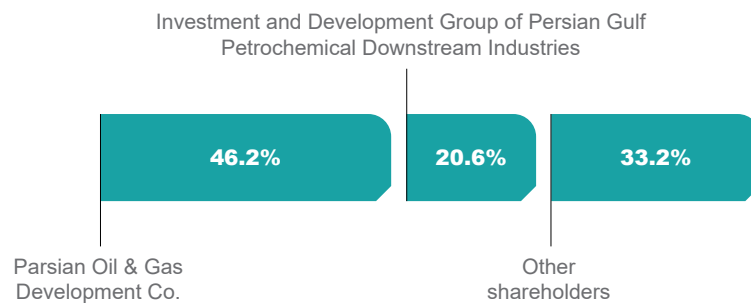
Nominal capacity (KTY): **1,056**

Kermanshah Petrochemical Industry Co.

- **Location:** Harsin Road, Kermanshah
- **Area:** 295.5 hectares
- **Founded in:** 1986



Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Ammonia	396	Natural gas	M.W. Kellogg	2007
Granular urea	660	Ammonia + CO ₂	Stamicarbon, HFT	

Products application

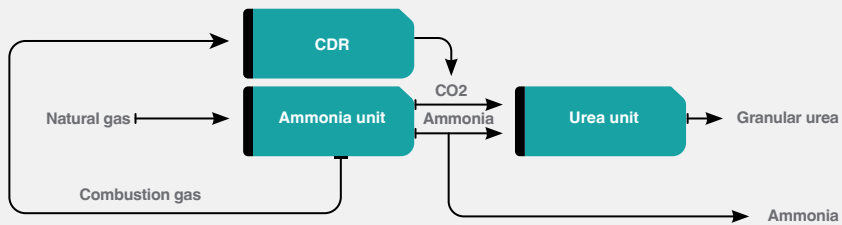
Ammonia: production of fertilizers and material fluid

Urea: production of fertilizers, resins, formaldehyde urea & melamines

Input feed	Amount (Msm ³ /y)	Source
* Natural gas	563,5	NIGC

* Includes feedstock & fuel.

Production capacity (KT/Y)



ISO Certifications



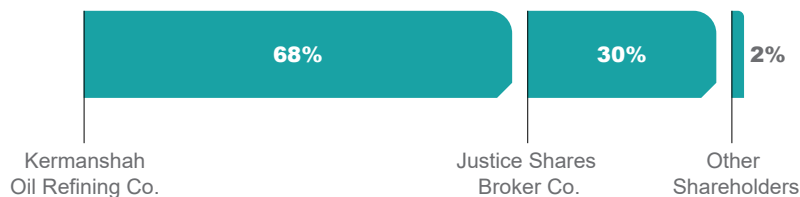


Nominal capacity (KTY): **56.5**

Bisotoun Petrochemical Co.

- **Location:** 8th km Kermanshah-Bisotoun Road
- **Area:** 63 hectares
- **Founded in:** 1999

Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
LAB	50	Benzene & Kerosene	IFP (Axens)	2004
HAB	6.5	Benzene & Kerosene	IFP (Axens)	2004

Products application

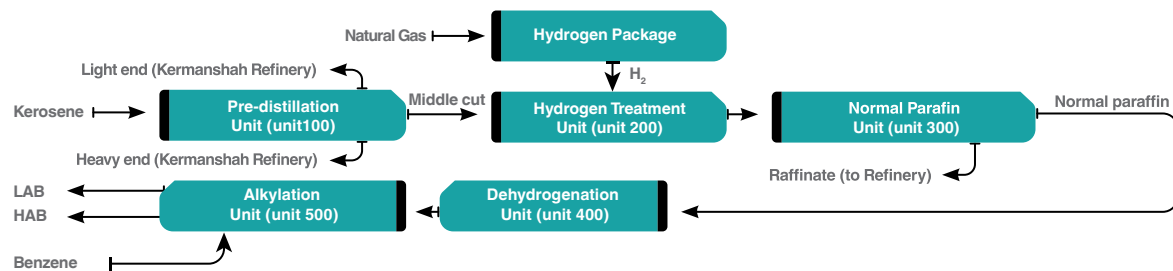
LAB: raw material for detergents **HAB:** production of industrial oils

Input feed	Amount (KT/Y)	Source
Kerosene	386	Kermanshah & Abadan Refineries
Benzene	19	Buali Sina & BIPC
* Natural gas	94.7 Mmm ³ /y	NIGC

* Includes feedstock & fuel



Production Process Diagram



ISO Certifications



Kermanshah Polymer Co.

- **Location:** Harsin Road, Kermanshah
- **Area:** 55 hectares
- **Founded in:** 1995
- **Ownership:** Bakhtar Petrochemical Co. (100%)

Nominal capacity (KT/Y): **300**





Production capacity (KT/Y)

Product	Nominal capacity	feed	Licensor	Start up date
HDPE	300	Ethylene	Basell	2012

Products application

Production of plastics, pipes, cable coatings, film ...

Input feed	Amount (KT/Y)	Source
Ethylene	305	West Ethylene Pipeline
Butene-1	3	local sources

Production Process Diagram



Orumiyeh Petrochemical Co

- **Location:** 30 km of Orumiyeh - Mahabad Road, Orumiyeh
- **Area:** 110 hectares
- **Founded in:** 1991

Nominal capacity (KT/Y): **184**



Ownership



Production capacity (KT/Y)

Products	Nominal capacity	feed	Licensor	Start up date
Crystal melamine	4	Ammonia, urea	CNCCC	1996
Ammonium sulfate	40	Sulfuric acid, Ammonium carbonate	CNCCC	1996
Potassium sulfate	40	Sulfuric acid, potassium chloride	CNCCC	2021
Hydrochloric acid	50	Sulfuric acid, potassium chloride	CNCCC	2021
Sulfuric acid	50	Sulfur	KSJ	2012

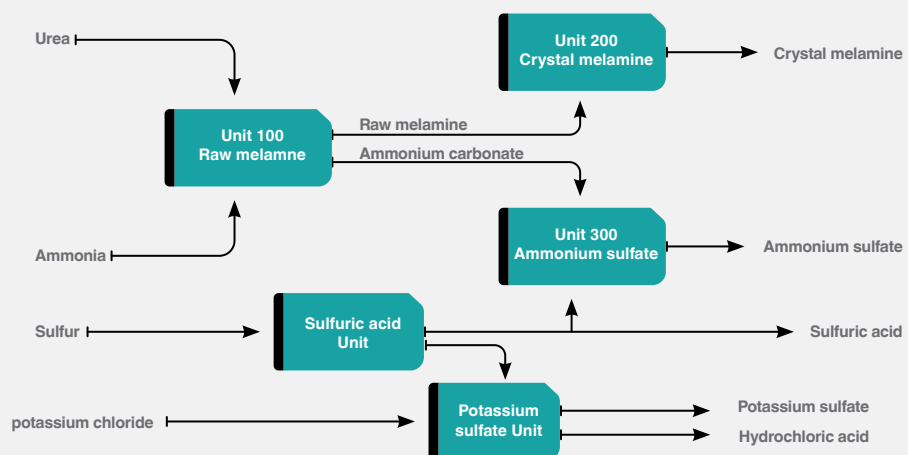
Products application

Production of plastics such as: pipes, cable coating, film, ...



Input feed	Amount (KT/Y)	Source
Urea	15.2	Urea units
Ammonia	9	Ammonia units
Sulfur	16.6	Kabudan Phosphate Co.
potassium chloride	34.4	internal resources

Production Process Diagram



ISO Certifications



Ilam Petrochemical Co.

- Location: Ilam
- Area: 122 hectares
- Founded in: Phase 1 (2005), Phase 2 (2008)

Nominal capacity (KT/Y): **300**



Ownership

Investment and Development Group of Persian Gulf
Petrochemical Downstream Industries

National Pension
Investment Co.



Production capacity (KT/Y)

Product	Nominal capacity	Licensor	Operation date
Ethylene	458	Stone & Webster	2021
Propylene	124	Stone & Webster	2021
Pyrolysis petrol	132	Stone & Webster	2021
Liquid fuel (Fuel oil)	33	Stone & Webster	2021
HDPE	300	Mitsuei	2014

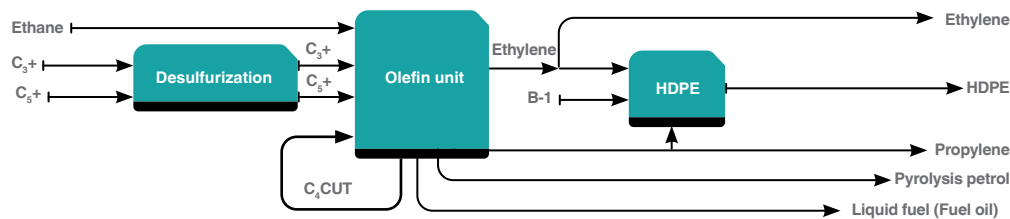
Products application

HDPE: Plastic uses such as pipe, cable coatings, film and ...

Olefin: feed for polyolefin production, ethylene glycols

Input feed	Amount (KT/Y)	Source
Ethane	233	Ilam Gas Refinery
C ₃ +	328	Ilam Gas Refinery
C ₅ +	391	Ilam Gas Refinery

Production Process Diagram



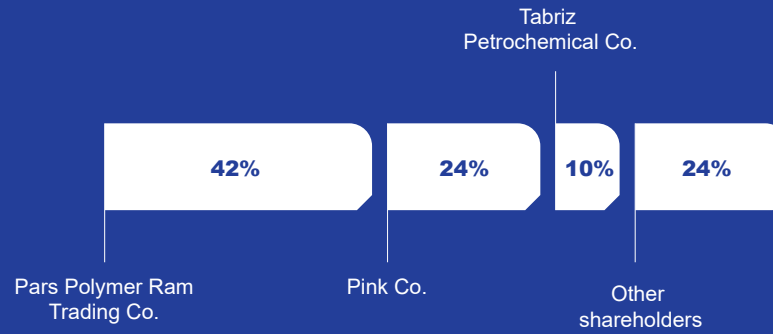
Poly Nar Co.

- Location: Tabriz
- Area: 19.5 hectares
- Founded in: 1992

Nominal capacity (KT/Y): **110**



Ownership



Production capacity (KT/Y)

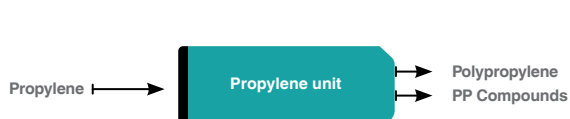
Product	Nominal capacity	feed	Licensor	Start up date
Polypropylene	80	Propylene	Hechst	2000
PP Compounds	30	Propylene	Hechst	2000

Products application

Production of carpet fibers, auto & home appliances, carpet, packing films...

Input feed	Amount (KT/Y)	Source
Propylene	85	Tabriz Petrochemical Co.

Production Process Diagram



ISO Certifications



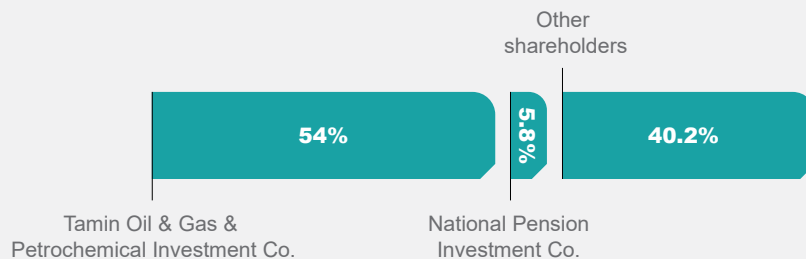
Abadan Petrochemical Co.

- **Location:** Motahari District, Abadan
- **Area:** 50 hectares
- **Founded in:** 1966

Nominal capacity (KT/Y): **149.7**



Ownership



Production capacity (KT/Y)

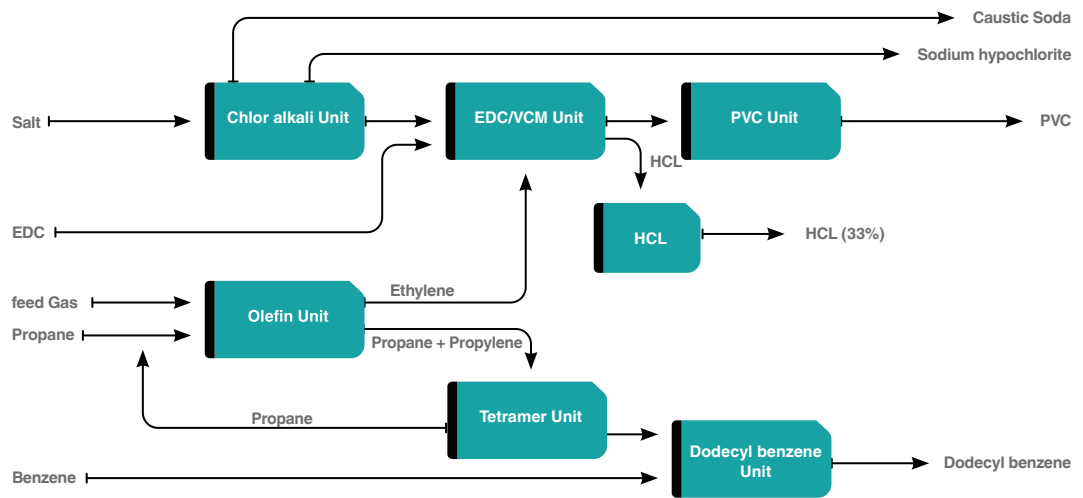
Products	Nominal capacity	Feed	Licensor	Start up date
PVC	110	Ethane,propane, butane	BF Goodrich,Chisso	1969
DDB	10	Ethane,propane, butane	Chevron Research	1969
Caustic soda	29.7	Salt	Denora	1993

Products application

Downstream plastic industries, detergents, hygienic industries, chemicals, refineries

Input feed	Amount (KT/Y)	Source
feed gas	82.2	Abadan Refinery
Propane	13.2	Petrochemical complexes
Benzene	4.5	Petrochemical complexes
EDC	27.4	Local Sources

Production Process Diagram



ISO Certifications



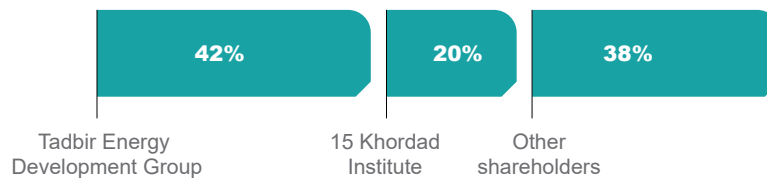


Nominal capacity (KT/Y): **36**

Ghaed Basir Petrochemical Co.

- **Location:** 10 km Golpayegan - Khomein road, Isfahan
- **Area:** 30 hectares
- **Founded in:** 1997

Ownership



Production capacity (KT/Y)

Product	Nominal capacity	feed	Licensor	Start up date
ABS	36	Styrene monomer Butadiene acrylonitrile	Kumho (South Korea)	2003





Input feed	Amount (KT/Y)	Source
Styrene monomer	22	Pars Petrochemical Co.
Acrylonitrile	7.2	Imported from (Taiwan-Turkey)
Butadiene	5.8	Tabriz & Amir kabir Petrochemical Cos.

Products application

Auto parts, appliances, electronic devices, ...

Production Process Diagram



ISO Certifications



Lorestan Petrochemical Co.

- ▀ **Location:** 12th km of Khoramabad - Koohdasht Road
- ▀ **Area:** 130 hectares
- ▀ **Founded in:** 2008
- ▀ **Ownership:** Bakhtar Petrochemical Co. (100%)

Nominal capacity (KT/Y): **332.7**





Production capacity (KT/Y)

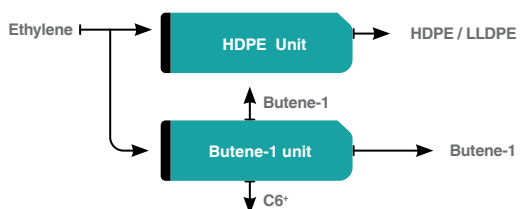
Products	Nominal capacity	feed	Licensor	Start up date
LLDPE / HDPE	300	Ethylene	Basell	2015
Butene-1	30	Ethylene	Axens	2015
C6+	2.7	Ethylene	Axens	2015

Products application

feedstock for downstream industries for production of various pipes, plastic parts, cables,...

Input feed	Amount (KT/Y)	Source
Ethylene	324	West Ethylene Pipeline

Production Process Diagram



Kordestan Petrochemical Co.

- ▀ **Location:** Sanandaj
- ▀ **Area:** 130 hectares
- ▀ **Founded in:** 2008
- ▀ **Ownership:** Bakhtar Petrochemical Co.(100%)

Nominal capacity (KT/Y): **300**





Production capacity (KT/Y)

Product	Nominal capacity	feed	Licensor	Start up date
LDPE	300	Ethylene	LyondellBasell	2017

Products application

Various nylon films, plastic bags & packaging industries

Input feed	Amount (KT/Y)	Source
Ethylene	310	West Ethylene Pipeline
Propylene	1.5	Tabriz or Ilam Petrochemical Co.

Production Process Diagram





Nominal capacity (KT/Y): **332.7**

Mahabad Petrochemical Co.

- **Location:** Mahabad
- **Area:** 185 hectares
- **Founded in:** 2015
- **Ownership:** Bakhtar Petrochemical Co. (100%)

196



PETROCHEMICAL
COMPLEXES

Production capacity (KT/Y)

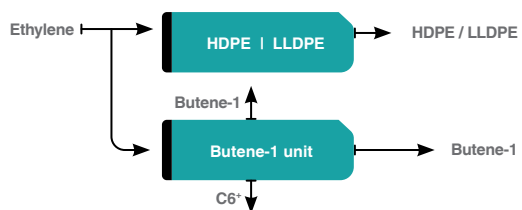
Products	Nominal capacity	feed	Licensor	Start up date
LLDPE / HDPE	300	Ethylene	Basell	2015
Butene-1	30	Ethylene	Axens	2015
C6 ⁺	2.7	Ethylene	Axens	2015

Products application

Production of various films, containers, plastic parts, pipes, cables,...

Input feed	Amount (KT/Y)	Source
Ethylene	324	West Ethylene Pipeline

Production Process Diagram





Nominal capacity (KT/Y): **2,310**

Kaveh Methanol Co.

- ▀ **Location:** Bushehr Province, Dayyer
- ▀ **Area:** 220 hectares
- ▀ **Founded in:** 2004
- ▀ **Ownership:** Kaveh Glass industry group (100%)

Production capacity (KT/Y)

Product	Nominal capacity	feed	Licensor	Start up date
Methanol	2,310	Natural gas & Oxygen	Casale	2018

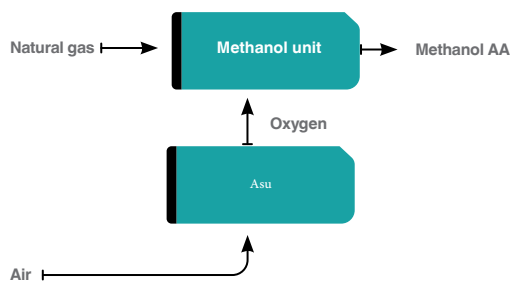
Products application

Production of MTBE, acetic acid, formaldehyde and as solvent in chemical industries

Input feed	Amount (Mm3/y)	Source
* Natural gas	2,675	IGAT 6

* Includes feedstock & fuel

Production Process Diagram



ISO Certifications





Nominal capacity (KT/Y): **140**

Miandoab Petrochemical co.

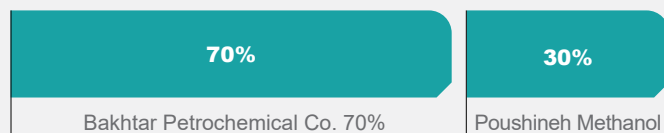
- **Location:** Miandoab county
- **Area:** 22 hectares
- **Founded in:** 2013

200



PETROCHEMICAL
COMPLEXES

Ownership



Production capacity (KT/Y)

Product	Nominal capacity	feed	Licensor	Start up date
HDPE	140	Ethylene, Butene-1	Mitsui, Japan	2020

Products application

Feed for pipe producers of downstream units, plastic parts, cable, etc.

Input feed	Amount (KT/Y)	Source
Ethylene	140	West Ethylene Pipeline
Butene-1	2	Petrochemical Complexes

Production Process Diagram



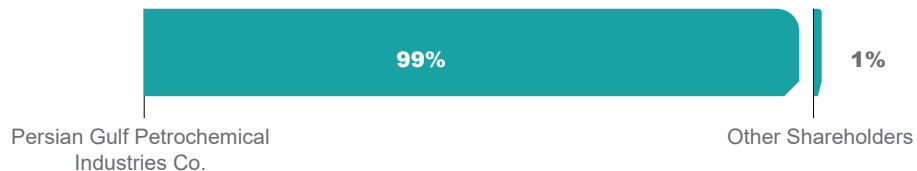
Persian Gulf Bid Boland Gas Refinery Co.

- Location: Behbahan
- Area: 244 hectares
- Founded in: 2000

Nominal capacity (KT/Y): **3,391**



Ownership



Production capacity (KT/Y)

Products	Nominal capacity	Licensor	Operation date
Ethane	1,496	Prosernat/RIPI	2021
Propane	1,005	Prosernat/RIPI	2021
Butane	490	Prosernat/RIPI	2021
C ₅ +	400	Prosernat/RIPI	2021

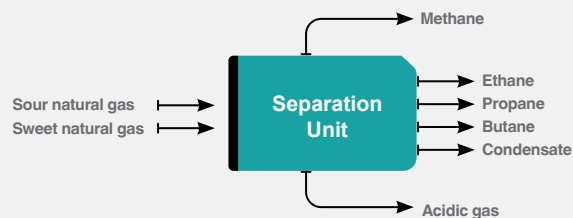
*Complex production capacity is 3,391 KT/Y

Complex feed	Projected capacity/ Y	Source
Sour gas	16,680 MCUM	NGL 900/1000
Sweet gas	2,945 MCUM	NGL 1200/1300

Products application

Feed to olefin and other petrochemical units

Production Process Diagram



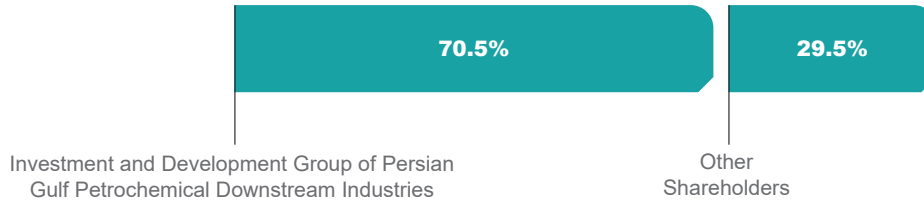


Nominal capacity (KT/Y): **1,755**

Lordegan Urea Fertilizer Co.

- **Location:** Chahar Mahal va Bakhtyari province, Lordegan county
- **Area:** 100 hectares
- **Founded in:** 2000

Ownership



Production capacity (KT/Y)

Product	Nominal capacity	feed	Licensor	Start up date
Ammonia	680	Natural gas	Casale	2021
Urea	1,075	Ammonia and CO2	Stamicarbon	2021

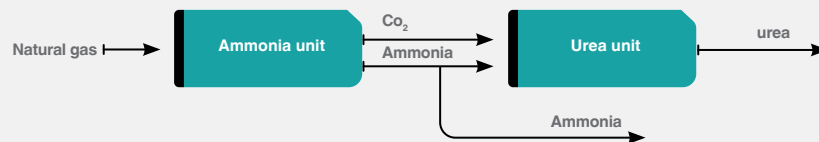
Products application

Agricultural purposes as fertilizer

Input feed	Amount	Source
*Natural gas	905 MCUM	National Gas Company

*Includes fuel and feed

Production Process Diagram



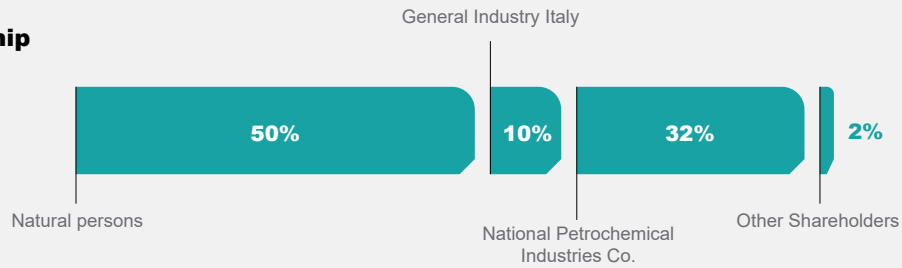


Nominal capacity (KT/Y): **40**

Hegmataneh Co.

- **Location:** Hamedan
- **Area:** 15 hectares
- **Founded in:** 2003

Ownership



Production capacity (KT/Y)

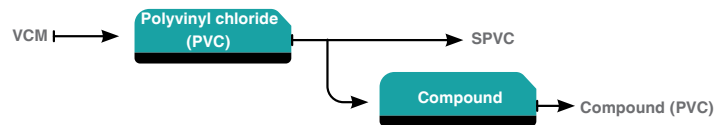
Products	Nominal capacity	Licensors	Operation date
PVC	40	IGS Italy	2021

Products application

Medical industry

Complex feed	Projected capacity/ Y	Source
VCM	40 KT	Arvand & Ghadir Petrochemical Co.

Production Process Diagram



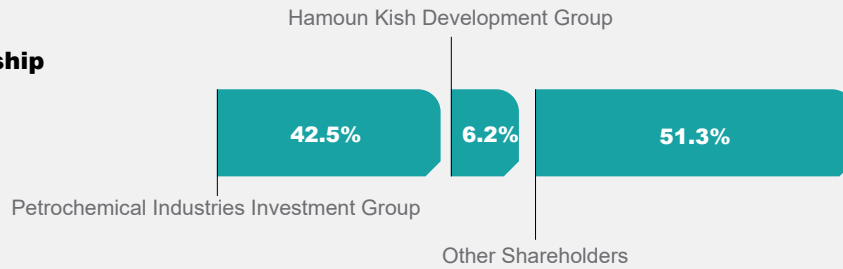


Nominal capacity (KT/Y): **36**

Iran Carbon Co.

- **Location:** Ahwaz- Karoun Industrial Region
- **Area:** 13 hectares
- **Founded in:** 1972

Ownership



Production capacity (KT/Y)

Product	Nominal capacity	Feed	Licensor	Start up date
Carbon black	36	Aromatic oils	CABOT	1975

Products application

Rubber industries (tire and rubber parts), paint and black plastic material

Input feed	Amount	Source
Heavy hydrocarbons (furfural and tar)	72 KT	Oil refineries and petrochemical complexes

Production Process Diagram



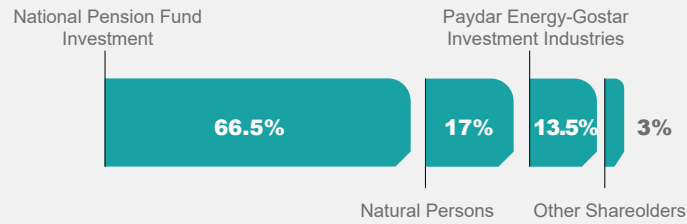


Nominal capacity (KT/Y): **1,755**

Masjid Soleyman Petrochemical Co.

- **Location:** 30 KM - Masjid Soleyman
- **Area:** 53.5 hectares
- **Founded in:** 2013

Ownership



Production capacity (KT/Y)

Products	Nominal capacity	Licensor	Operation date
Ammonia	680	Casale	2021
Urea	1,075	Toyo	2021

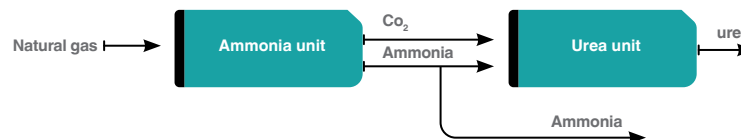
Applications

agricultural usage as fertilizer

Complex feed	Projected capacity/ Y	Source
Natural gas*	960 MCUM	National Gas Company

*Includes fuel and feed.

Production Process Diagram





Petrochemical
**Terminals
and Tanks**



Ports and petrochemical reservoirs

The National Petrochemical Company owns two ports in the Petrochemical Special Economic Zone and the Pars Special Energy Zone, as well as 19 reservoirs in the Petrochemical Special Economic Zone, which are managed by the Petrochemical Terminals and Reservoirs Company.

The general specifications of each port and reservoir site are as follows:

Pars Petrochemical Port

Total jetties: 15 jetties consisting 8 for liquid products, 4 for solid products and 3 for LPG

Commissioning date: the first phase was brought onstream in 2005; the port became operational in its entirety in 2009.

Total capacity: 43 million tons (37 million tons of liquids & LPG and 6 million tons of solid products)

Depth length: 15 to 32 meters

Berthing capacity: 70,000 tons

Total loading/ unloading capacity: 170- 2,250 tons per hour

Anchorage traffic: 800- 1200 vessels per annum

Major exports: Butane, propane, methanol, ammonia, ethylene, benzene, light ends, heavy ends, styrene, orthoxylene, paraxylene, polyethylene, urea, polypropylene, ...

■ **Mahshahr Petrochemical Port**

Total no. of jetties: 7 jetties consisting 5 for liquid products & LPG and 2 for solid products.

Commissioning date: 1969 (3 jetties), 1990 (2 jetties), one in 2004 and one in 2012.

Total capacity: 15 million tons

Depth length: 11- 13 meters

Berthing capacity: 50,000 tons

Loading/ Unloading capacity: 150- 1600 tons/ hour

Anchorage traffic: About 1000 vessels per annum

Major exports / imports: Propane, butane, heavy ends, methanol, ethylene, ammonia, C5+, benzene, paraxylene, light cuts, naphtha, pyrolysis gasoline, sulfuric acid, sulfur, orthoxylene, phenol, acetone, phosphate rock, phosphoric acid, caustic soda, MC, VCM, EDC,...

■ **Mahshahr Tank Yard**

No. of storage tanks: 19

Total storage capacity: 157,200 m³

Commissioning date: 2004

Storage capacity: 2,000m³- 20,000 m³

Tanks material: Carbon steel and stainless steel

Mounted equipment: Some tanks have cooling/ heating systems

Major exports / imports: Heavy cuts, naphtha, acetic acid, raffinate, phenol, acetone, VAM, DEG,...



West Ethylene Pipeline

— West Ethylene Pipeline
— Existing branches
- - - Organic branches
CS Compressor station

Company name	Product name	capacity (KTY)
OL	Online	
EDC	Ethylene Dichloride	
PVC	Polyvinyl chloride	
PE	Polyethylene	
EO	Ethylene Oxide	

- Current ethylene suppliers
- Current ethylene consumers
- Future ethylene suppliers
- Future ethylene consumers



West Ethylene Pipeline with a length of more than 1,660 KM extends from Assalouyeh to Tabriz. This pipeline with almost 550 KM of different branches has been able to provide part of the requirements for the development of the petrochemical industry within the country.

The aim of constructing this pipeline, with a capacity of 2,500 KT/Y, has been elimination of deprivation and economic development of western provinces of country as well as meeting the demand of ethylene by complexes along the pipeline route. The first phase of this pipeline was launched in December 2012.



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