



**ECCA - opi**

**انجمن شرکت های مهندسی و ساخت (صنایع نفت و نیرو)**

**Engineering & Construction Companies Association**

**(oil & power industries)**

**ECCA Members Capabilities**

**Jan 2021**

# Engineering & Construction Companies Association

(Oil and Power Industries)



ECCA has been founded in 1999 by members who were active in Oil, Gas and Petrochemical EPC Projects.

**In 1990s, by initiation of NPC in order to expand the potentials of the Engineering Companies to become EPC Contractors; among more than 60 engineering companies active in Oil & Gas sector, ECCA members planned to develop their capabilities to become EP / EPC Contractors.**

**Since then, ECCA members have performed most of the refineries, gas treating and petrochemical projects in Iran, either on stand-alone basis or in a joint venture with the international companies.**

**The ECCA members have performed:**

- **More than 80% of EP/EPC projects in Oil and Gas and Petrochemical by the end of 2020**
- **Most of the projects are Mega projects with production capacities which were the largest in middle east**
- **The contract price of the Projects are more than USD 50 Billion.**



**The ECCA members have more than 25,000 employees**

- **95% of them are full time employee**
- **75% of such employees are university graduates**

**At the moment, ECCA members are eligible to handle about USD 36 Billion projects.**



# Summary of Capabilities

- **General Contracting (GC)**
- **Project Management Contracting (PMC)**
  - Technology Evaluation and Selection
  - Licensor Selection
  - Finance and Insurance Arrangement

# Summary of Capabilities

- **Engineering, Procurement & Construction (EPC)**
  - Feasibility and Conceptual Studies
  - Basic Design and FEED Preparation
  - Detail Design and Engineering
  - Procurement Engineering Services
  - Supply of Material and Equipment
  - Field Engineering, Technical Services and Construction Supervision
  - Pre commissioning, Commissioning and Start-up Management

**ECCA members in cooperation with international engineering firms and technical institutes have been able to:**

- **Acquire and transfer several know-how**
- **Develop several licenses and know-how for different technologies in Oil, Gas and Petrochemical Industries**

# Collaboration With Foreign EP Contractors



Germany

←LINDE  
←LURGI/ Air Liquide -Lurgi  
←Thyssen Krupp (UHDE)  
←ZIMMER  
←BASF  
←Salzgitter  
←Basell

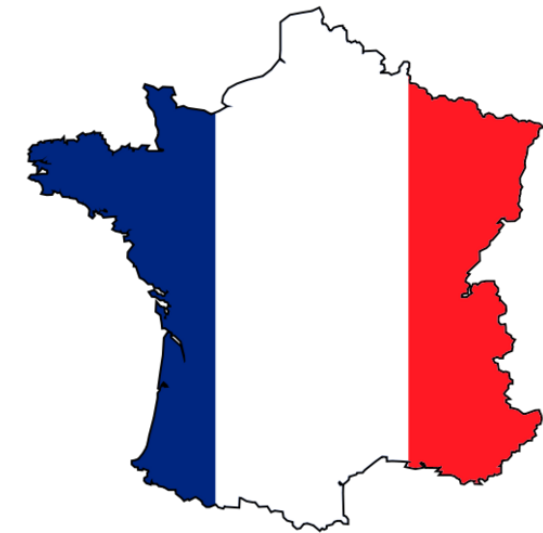
TECHNIP→

Sofregaz→

Axens→

Entrepose→

Prosernat→



France

# Collaboration With Foreign EP Contractors



Spain

← Dragados Industrial S.A

← Técnicas Reunidas (TR)

DAELIM INDUSTRIAL Co→

Samsung Engineering→

LG Engineering (GS, E&C)→

Hyundai Development Co→



South Korea

# Collaboration With Foreign EP Contractors



**U.K.**

- COSTAIN OIL, GAS & PROCESS
- Kaeverner/ John Brown
- Foster Wheeler/ Amec Foster Wheeler
- GSA
- Worley Parsons
- Simon Carves
- UOP
- KBR
- MW KELLOG
- Petrofac

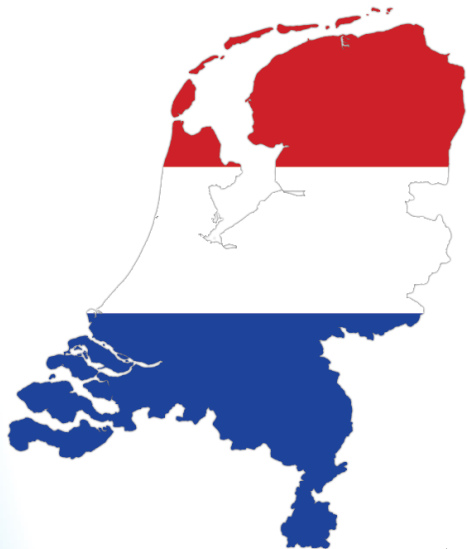
Mitsui Engineering and shipbuilding (MES)→

JGC Corporation→  
TOYO Engineering→  
CHIYODA→



**Japan**

# Collaboration With Foreign EP Contractors



*Netherlands*

← ABB Lummus/CD&I  
← Frames  
← Stamicarbon  
← Shell  
← MAN Ferrostaal

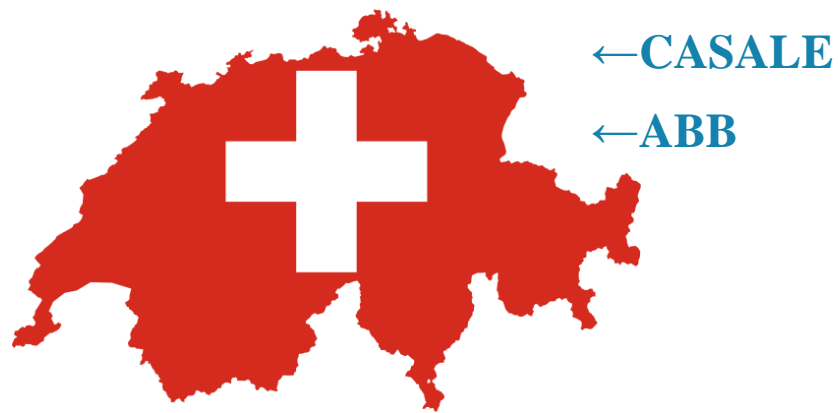
Snamprogetti →  
TPL SPA →  
TECHNIMONT KT/ →  
Maire Technimont →  
STP →  
GST →  
SAIPEM S.A →



*Italy*



# Collaboration With Foreign EP Contractors



Switzerland



Haldor Topsoe→



Denmark

# Collaboration With Foreign EP Contractors



Greece

←Asprofos



China

←NFC

←Sinopec

←CCEC

GULMAR→

Gulf Piping Co. (GPC)→



United Arab Emirates



# ECCA Members Capabilities

## ECCA Members Capabilities in *Oil , Gas Refinery & Petrochemical Projects*

All ECCA members have capability and know-how of perform feasibility study, PDP, basic engineering, detail engineering, procurement, construction Project management, and commissioning services for non licensed and non patented projects.

For those projects which require license, depending on the services provided by the licensor, ECCA members have the capability and in-house know how to receive the Process Design Package (PDP) from Licensor and complete the scope of work as described above.

Following tables are the type of the projects that the ECCA member's have already performed successfully.



# Engineering Capability









## Gas Refinery & Treating Units



Unit	PDP	Basic Eng. of units with a PDP from licensor	Basic Eng.	FEED	Detail Eng.
C2 Recovery	✓		✓	✓	✓
H2 and Liquid Hydrocarbon Recovery			✓	✓	✓
Slug catcher & Reception Facilities	✓		✓	✓	✓
aMDEA unit ( Process )					✓
Gas Treating / Absorption	✓		✓	✓	✓
MEG Regeneration And Injection			✓	✓	✓
LNG Recovery			✓	✓	✓
Gas Contaminates Removal			✓	✓	✓
Condensate Stabilization	✓		✓	✓	✓
C2 Recovery	✓		✓	✓	✓

## Engineering Capability Gas Refinery & Treating Units (Cont.)



Unit	PDP	Basic Eng. of units with a PDP from licensor	Basic Eng.	FEED	Detail Eng.
Gas Dehydration With TEG	✓		✓	✓	✓
Gas Dehydration with Molecular Sieve	✓		✓	✓	✓
CO2 Recovery / Removal			✓	✓	✓
Gas to Liquid - GTL					✓
NGL Recovery	✓		✓	✓	✓
HC Dew point Control	✓		✓	✓	✓
Export Gas Compression	✓		✓	✓	✓
Propane Refrigeration	✓		✓	✓	✓



## Engineering Capability Petrochemical Unit



Unit	PDP	Basic Eng. of units with a PDP from licensor	Basic Eng.	FEED	Detail Eng.
Acetic Acid		✓		✓	✓
Ammonia		✓		✓	✓
Urea		✓		✓	✓
Aromatics		✓		✓	✓
BTX Aromatics		✓		✓	✓
Butadiene		✓		✓	✓
Butene-1		✓		✓	✓
Carbon Black		✓		✓	✓
DME		✓		✓	✓
Ethers		✓		✓	✓



## Engineering Capability *Petrochemical Unit (Cont.)*



Unit	PDP	Basic Eng. of units with a PDP from licensor	Basic Eng.	FEED	Detail Eng.
Phosphoric Acid		✓		✓	✓
Crystal Melamine		✓		✓	✓
Phenol		✓		✓	✓
Polyesters		✓		✓	✓
Polyethylene		✓		✓	✓
Polypropylene		✓		✓	✓
Polystyrene		✓		✓	✓
Propylene		✓		✓	✓
PVC		✓		✓	✓

## Engineering Capability *Petrochemical Unit (Cont.)*



Unit	PDP	Basic Eng. of units with a PDP from licensor	Basic Eng.	FEED	Detail Eng.
Phosphoric Acid		✓		✓	✓
Crystal Melamine		✓		✓	✓
Phenol		✓		✓	✓
Polyesters		✓		✓	✓
Polyethylene		✓		✓	✓
Polypropylene		✓		✓	✓
Polystyrene		✓		✓	✓
Propylene		✓		✓	✓
PVC		✓		✓	✓

## Engineering Capability *Petrochemical Unit (Cont.)*



Unit	PDP	Basic Eng. of units with a PDP from licensor	Basic Eng.	FEED	Detail Eng.
Styrene		✓		✓	✓
VAM		✓		✓	✓
MEA / DEA / MDEA		✓		✓	✓
HDPE		✓		✓	✓
LDPE					✓
LLDPE					✓



## Engineering Capability Oil Refinery Unit



unit	PDP	Basic Eng. of units with a PDP from licensor	Basic Eng.	FEED	Detail Eng.
Alkylation		✓		✓	✓
Asphalt Blowing Unit			✓	✓	✓
Coking		✓		✓	✓
Crude Distillation	✓		✓	✓	✓
Catalytic Reforming		✓		✓	✓
Catalytic Cracking / Hydro-cracking		✓		✓	✓
Desulfurization / Hydro-treating		✓		✓	✓
Dewaxing		✓		✓	✓
Fluid Catalytic Cracking ( FCC )		✓		✓	✓

## Engineering Capability *Oil Refinery Units (Cont.)*



unit	PDP	Basic Eng. of units with a PDP from licensor	Basic Eng.	FEED	Detail Eng.
Gas Treating ( C1 / C2 ) - H2S Removal / Amine	✓	✓		✓	✓
LPG Recovery / Sweetening	✓		✓	✓	✓
MTBE		✓		✓	✓
Isomerization		✓		✓	✓
Lube and Wax Processing		✓		✓	✓
Mercaptan Removal		✓		✓	✓
Olefins Recovery			✓	✓	✓
Delayed Coker		✓		✓	✓
SO2 Removal		✓		✓	✓
Sour Gas Treatment	✓		✓	✓	✓

## Engineering Capability *Oil Refinery Units (Cont.)*



unit	PDP	Basic Eng. of units with a PDP from licensor	Basic Eng.	FEED	Detail Eng.
Sulfur Recovery		✓		✓	✓
Vacuum Distillation	✓		✓	✓	✓
Visbreaking		✓		✓	✓
Sour Water Stripper	✓		✓	✓	✓
Hydrogen Plant		✓		✓	✓
OCT / CCR		✓		✓	✓
Mild Hydrocracking		✓		✓	✓
PSA		✓		✓	✓
Spent Caustic / Treating			✓	✓	✓





# Capabilities of ECCA Members



## Capabilities of ECCA Members

### Refining Processes



Unit	PROJECT MANAGEMENT	LICENSE / NON LICENSE	BASIC ENGINEERING*	DETAIL ENGINEERING
Alkylation	✓	L	✓	✓
Asphalt Blowing Unit	✓	L	✓	✓
Coking	✓	L	✓	✓
Crude Distillation	✓	N	✓	✓
Catalytic Reforming	✓	L	✓	✓
Catalytic Cracking / Hydro-cracking	✓	L	✓	✓
Desulfurization / Hydro-treating	✓	L	✓	✓
Dewaxing	✓	L	✓	✓
Fluid Catalytic Cracking ( FCC )	✓	L	✓	✓
Gas Treating (C1 /C2 ) - H2S Removal / Amine	✓	L	✓	✓

## Capabilities of ECCA Members

### Refining Processes (Cont.)

Unit	PROJECT MANAGEMENT	LICENSE / NON LICENSE	BASIC ENGINEERING*	DETAIL ENGINEERING
LPG Recovery / Sweetening	✓	N	✓	✓
MTBE	✓	L	✓	✓
Isomerization	✓	L	✓	✓
Lube and Wax Processing	✓	L	✓	✓
Mercaptan Removal	✓	L	✓	✓
Olefins Recovery	✓	N	✓	✓
Delayed Coker	✓	L	✓	✓
SO <sub>2</sub> Removal	✓	L	✓	✓
Sour Gas Treatment	✓	N	✓	✓
Sulfur Recovery	✓	L	✓	✓



## Capabilities of ECCA Members

### Refining Processes (Cont.)

Unit	PROJECT MANAGEMENT	LICENSE / NON LICENSE	BASIC ENGINEERING*	DETAIL ENGINEERING
Vacuum Distillation	✓	N	✓	✓
Visbreaking	✓	L	✓	✓
Sour Water Stripper	✓	N	✓	✓
Hydrogen Plant	✓	L	✓	✓
OCT / CCR	✓	L	✓	✓
Mild Hydrocracking	✓	L	✓	✓
PSA	✓	L	✓	✓
Spent Caustic / Treating	✓	N	✓	✓
Sulfuric Acid Recovery Plant (SARP)	✓	L	✓	✓

## Capabilities of ECCA Members

### Petrochemical Processes



Unit	PROJECT MANAGEMENT	LICENSE / NON LICENSE	BASIC ENGINEERING*	DETAIL ENGINEERING
Acetic Acid	✓	L	✓	✓
Ammonia	✓	L	✓	✓
Urea	✓	L	✓	✓
Aromatics	✓	L	✓	✓
BTX Aromatics	✓	L	✓	✓
Butadiene	✓	L	✓	✓
Butene-1	✓	L	✓	✓
Carbon Black	✓	L	✓	✓
DME	✓	L	✓	✓
Ethers	✓	L	✓	✓

## Capabilities of ECCA Members

### Petrochemical Processes (Cont.)

Unit	PROJECT MANAGEMENT	LICENSE / NON LICENSE	BASIC ENGINEERING*	DETAIL ENGINEERING
Ethyl-benzene	✓	L	✓	✓
Ethylene	✓	L	✓	✓
Ethylene Glycol / MEG / DEG / TEG	✓	L	✓	✓
Ethylene Oxide	✓	L	✓	✓
MTP	✓	L	✓	✓
Methanol	✓	L	✓	✓
Methane Purification	✓	L	✓	✓
Olefins	✓	L	✓	✓
PET / PTA	✓	L	✓	✓
Phosphoric Acid	✓	L	✓	✓



## Capabilities of ECCA Members

### Petrochemical Processes (Cont.)

Unit	PROJECT MANAGEMENT	LICENSE / NON LICENSE	BASIC ENGINEERING*	DETAIL ENGINEERING
Crystal Melamine	✓	L	✓	✓
Phenol	✓	L	✓	✓
Polyesters	✓	L	✓	✓
Polyethylene	✓	L	✓	✓
Polypropylene	✓	L	✓	✓
Polystyrene	✓	L	✓	✓
Propylene	✓	L	✓	✓
PVC	✓	L	✓	✓
Styrene	✓	L	✓	✓
VAM	✓	L	✓	✓

## Capabilities of ECCA Members

### Petrochemical Processes (Cont.)

Unit	PROJECT MANAGEMENT	LICENSE / NON LICENSE	BASIC ENGINEERING*	DETAIL ENGINEERING
MEA / DEA / MDEA	✓	L	✓	✓
HDPE	✓	L	✓	✓
LDPE	✓	L	✓	✓
LLDPE	✓	L	✓	✓



## Capabilities of ECCA Members

### Gas Processes



Unit	PROJECT MANAGEMENT	LICENSE / NON LICENSE	BASIC ENGINEERING*	DETAIL ENGINEERING
C2 Recovery	✓	N	✓	✓
H2 and Liquid Hydrocarbon Recovery	✓	N	✓	✓
Reception Facilities	✓	N	✓	✓
aMDEA unit ( Process )	✓	L		✓
Gas Treating / Absorption	✓	N	✓	✓
MEG Regeneration And Injection	✓	N	✓	✓
LNG Recovery	✓	N	✓	✓
Gas Contaminates Removal	✓	N	✓	✓
Condensate Stabilization	✓	N	✓	✓
Gas Dehydration With TEG	✓	N	✓	✓

## Capabilities of ECCA Members

### Gas Processes (Cont.)



Unit	PROJECT MANAGEMENT	LICENSE / NON LICENSE	BASIC ENGINEERING*	DETAIL ENGINEERING
CO2 Recovery / Removal	✓	N	✓	✓
Gas to Liquid - GTL	✓	L		✓
NGL Recovery	✓	N	✓	✓
HC Dew point Control	✓	N	✓	✓
Export Gas Compression	✓	N	✓	✓
Propane Refrigeration	✓	N	✓	✓

## Capabilities of ECCA Members

### Utilities



Unit	PROJECT MANAGEMENT	LICENSE / NON LICENSE	BASIC ENGINEERING*	DETAIL ENGINEERING
Water System ( sea water , desalination )	✓	N	✓	✓
Steam Generation	✓	N	✓	✓
Fuel System ( fuel gas , fuel oil )	✓	N	✓	✓
Cooling and Machinery Water	✓	N	✓	✓
Plant and Instrument Air	✓	N	✓	✓
Nitrogen Generation Unit	✓	N	✓	✓
Fire Water	✓	N	✓	✓
Tankage and Interconnection	✓	N	✓	✓
Plant and Potable Water	✓	N	✓	✓

## Capabilities of ECCA Members

### Utilities (Cont.)



Unit	PROJECT MANAGEMENT	LICENSE / NON LICENSE	BASIC ENGINEERING*	DETAIL ENGINEERING
Flare System	✓	N	✓	✓
Power Generation	✓	N	✓	✓
Waste Water Treatment	✓	N	✓	✓

*\* Those licensed processes for which local reference plants are not available, PDP shall be made available enabling EPC contractors to develop Basic Engineering.*





# Members Of The Association

## *Members Of The Association*



### **JAHANPARS Group**

Managing Director: Kaveh Zahabi

Address: No.6, West 20<sup>th</sup> St., Northern Allameh Ave., Sadat Abad, Tehran  
1997977813 Iran

Tel: (+98 21) 276 24 000 / Fax: (+98 21) 22 14 18 30

Email: [info@jahanpars.com](mailto:info@jahanpars.com) / Website: [www.jahanpars.com](http://www.jahanpars.com)

Date of Foundation: 1975



### **CHAGALESH Construction Engineers**

Managing Director : Mohammad Reza Afshar

Address: No. 2 Madjlesi St. Larestan St. Ostad Motahari Ave. Tehran  
1595934615-IRAN

Tel : (+9821) 88 80 47 70 – 88 80 47 77 / Fax: (+9821) 88 80 47 78

E-mail: [info@chagalesh.com](mailto:info@chagalesh.com) / Web site: [www.chagalesh.com](http://www.chagalesh.com)

Date of foundation: 1981

## *Members Of The Association*



### **SAZEH Consultants Engineering & Construction**

Managing Director: Babak Amirani

Address: No. 31, sarafraz St., Dr. Beheshti Ave., Tehran 1587683133 – IRAN

Tel. : (+9821) 88507461-3 / Fax: (+9821) 88730750

Email: [info@sazeh.co.ir](mailto:info@sazeh.co.ir) / Website: [www.sazeh.com](http://www.sazeh.com)

Date of foundation: 1970



### **Energy Industries Engineering & Design (EIED)**

Managing Director: S.M.A. Ghaffarizadeh

Address: No.19, Golestan St., Golchin St., Ozgol, Emam Ali Hyw.,

Tehran 16993938611-Iran

Tel/ Fax: (+9821) 72385000/ Fax: (+9821) 26751130

Email: [info@eied.com](mailto:info@eied.com) / Website: [www.eied.com](http://www.eied.com)

Date of foundation: 1996



## *Members Of The Association*



### **PIDEC/Petrochemical Industries Design & Eng. Co.**

Managing Director: A. Mehraban

Address: PO. Box 71455-618 Shiraz- Iran

Tel/ Fax: (+9871) 32273148

Email: [inquiry@pidec.com](mailto:inquiry@pidec.com) / Website: [www.pidec.com](http://www.pidec.com)

Date of foundation: 1985



### **TARH O PALAYESH Engineering Co.**

Managing Director: F.Zorriasatain

Address: No.13, Azadegan St., Ghaem Magham Ave., Tehran 15875-3668 - Iran

Tel: (+9821) 88718944/ Fax: (+9821) 88712703

Email: [info@tarhopalayesh.com](mailto:info@tarhopalayesh.com) / Website: [www.tarhopalayesh.com](http://www.tarhopalayesh.com)

Date of foundation: 1980



## *Members Of The Association*



### **KAYSON Co.**

Managing Director: Giti Seyfollahi Moghaddam

Address: No. 18, 2nd st, (Abghari), Saadat Abad Ave.

Tehran 1998618871 -Iran

Tel: (+9821) 24801000 / Fax: (+9821) 22134992

Email: [info@kayson-ir.com](mailto:info@kayson-ir.com) / Website: [www.kayson-ir.com](http://www.kayson-ir.com)

Date of foundation: 1975



### **Nargan Co.**

Managing Director: Fereidoun Kayhani

Address: No. 211, Taleghani Ave., Tehran 1598917431- Iran

Tel: (+9821) 88914926-30/ Fax: (+9821) 88809839

Email: [info@nargan.com](mailto:info@nargan.com) / Website: [www.nargan.com](http://www.nargan.com)

Date of foundation: 1973

## *Members Of The Association*



### **NAMVARAN Consulting Engineers, Managers**

Managing Director: A. Attar

Address: No. 5, North Qeytariyeh Blvd. Tehran 1938913461 -Iran

Tel: (+9821) 22231620/ Fax: (+9821) 22231597

Email: [info@namvaran.com](mailto:info@namvaran.com) / Website: [www.namvaran.com](http://www.namvaran.com)

Date of foundation: 1979



### **HAMPA ENERGY Engineering & Design Co.**

Managing Director: M. Zomorodian

Address: PO. Box 71455-684 Shiraz- Iran

Tel: (+9871) 2263180-99 / Fax: (+9871) 2136527

Email: [info@hedcoint.com](mailto:info@hedcoint.com) / Website: [www.hedcoint.com](http://www.hedcoint.com)

Date of foundation: 2007

## *Members Of The Association*



### **CHAMAAN Engineering & Fabrication Co.**

Managing Director: H. Abbasi

Address: No. 5, Shab Afrooz Alley., In front of Qeytariyeh Park., Qeytarieh St.,  
Tehran- IRAN

Tel: (+9821) 79156000, / Fax: (+9821) 79156333

Email: [info@chamaan.ir](mailto:info@chamaan.ir) / Website: [www.chamaan.com](http://www.chamaan.com)

Date of foundation: 1994



### **BAMDEJ TARH**

Managing Director: Vahid Behzadi

Address : Apt. 3, 2<sup>nd</sup> Fl., No.4, 4<sup>th</sup> Street Gandhi Ave. Tehran  
1517716519, Iran

Tel: (+98 21) 88779139, 88672483/ Fax :(+98 21) 88672484

Email : [info@bamdej.com](mailto:info@bamdej.com) / Web site: [www.bamdej.com](http://www.bamdej.com)

Date of foundation : 1996

## Members Of The Association



### **Pars Kayhan Co.**

Managing Director: M. Halvaiy

Address: No. 10, 14th St., Ahmad Ghasir Boulevard, Tehran 15147-55411 -Iran

Tel: : (+9821)88505710 Fax: (+9821)88505711

E-mail: [info@parskayhan.org](mailto:info@parskayhan.org)

Web site: [www.parskayhan.org](http://www.parskayhan.org)

Date of foundation: 1991

### **Hirbodan Management**

Managing Director: E.M. Tavakoli

Address: No. 65, Khodami Ave., Vanak Sq. , Tehran 15147-55411 -Iran

Tel: : (+9821)88063320 Fax: (+9821)88063319

E-mail: [info@hirbodan.com](mailto:info@hirbodan.com)

Web site: [www.hirbodan.com](http://www.hirbodan.com)

Date of foundation: 2000





## **Engineering & Construction Companies Association (Oil & Power Industries)**

Chairman: F. Abdollahi

Address: Unit 18, 5<sup>th</sup> fl., No.2, Erfan St., Mirzaye Shirazi St.,  
Tehran 1586715647 Iran

Tel: (+9821) 86046342, 86046348, 86046354

Fax: (+9821) 86046359

Email : [ecca-opi@ecca-opi.com](mailto:ecca-opi@ecca-opi.com) / Web site: [www.ecca-opi.ir](http://www.ecca-opi.ir)