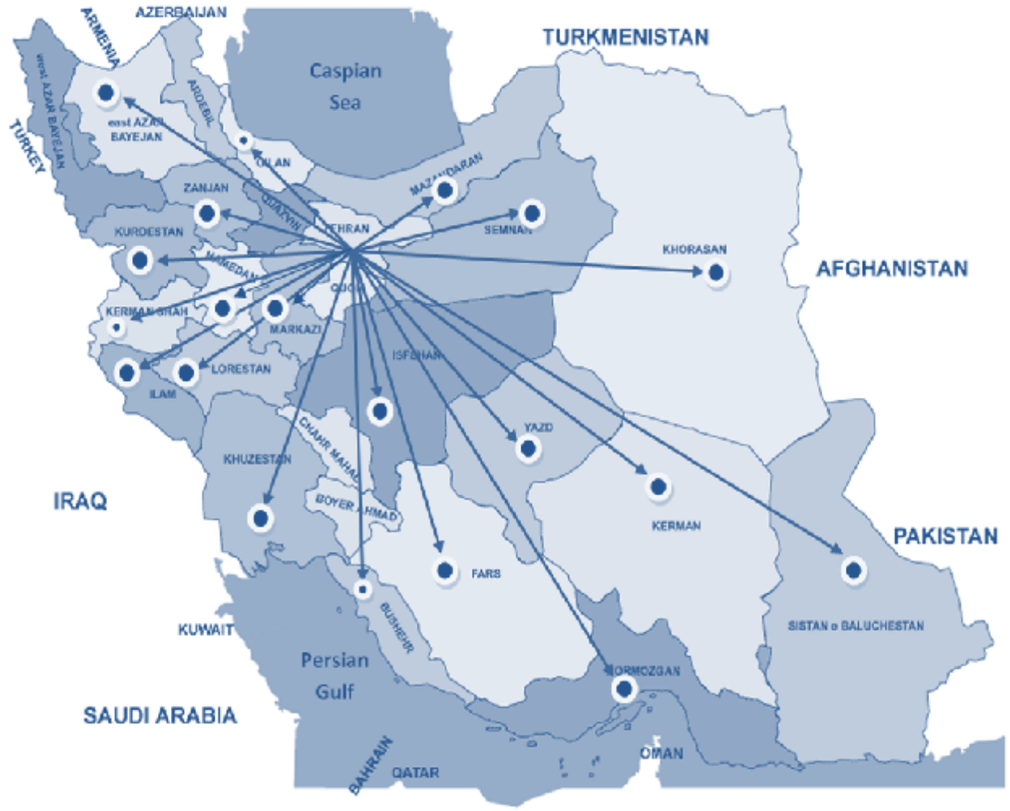


11. Main and Branch offices

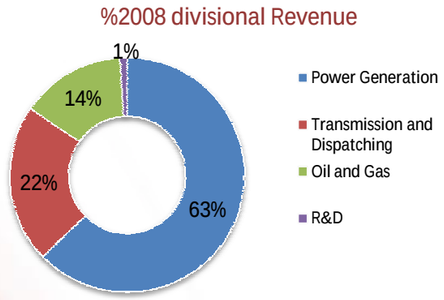
Main office:	No.20, 23rd St Gandhi Ave, Tehran, Iran
Other Offices:	
No.17, 23rd St Gandhi Ave.	Tehran, Iran
No.12, 23rd St Gandhi Ave.	Tehran, Iran
No.21, 23rd St Gandhi Ave.	Tehran, Iran
No.13, 17th St Gandhi Ave.	Tehran, Iran
No.51, Gandhi Ave, 1st Floor	Tehran, Iran
No.51, Gandhi Ave, 4th Floor	Tehran, Iran
Isfahan: 4th Floor, Goldis Building, Amadgah Ave,	Isfahan, Iran

Content:

Monenco Iran at a glance

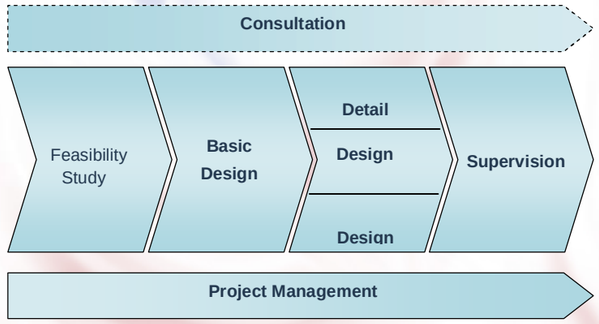
About us

Monenco Iran Consulting Engineers Co. (Monenco Iran) as one of the leading Consulting Engineers Companies in Iran was founded in 1973 as a joint venture company between the private sector of Iran and Montreal Engineering Co. of Canada.
In the late 1990s, MAPNA, a leading manufacturer and EPC contractor of power plant & heavy industry projects in the Middle East, AMEC, a distinguished international EPC contractor, and MIR Investment Co. (cooperation of Monenco Iran employees) became the major shareholders of Monenco Iran.



Our Services

Professional staff and modern management systems have enabled Monenco Iran to provide engineering and consultancy services across Iran and other countries.
Thermal Power Plants, Electrical Power Transmission, Oil & Gas infrastructure, System & Energy Studies, Renewable, Cogeneration, Dispersed Generation, Information and Communication, Dispatching & Control, Electrical Railways, Mining, Rehabilitation & Retrofitting and Feasibility Studies are Monenco Iran major fields of activities.



Vision

- An Excellent Company in providing Design, Engineering, Consulting and Supervision Services at Electric Power and Energy Industries
- The Progressive organization among Iran power industry's Engineering Consultants
- An Active Company in Oil, Gas, Petrochemical industries and other related industries
- The well-known company internationally, with technical knowledge and up to date standards
- Pioneer in optimizing applicable methods (procedures) and tools
- Pioneer in quality and productivity
- An organization with modern management systems
- Applied R&D

10. Key Personnel

AliReza Shirani
Member of the board - CEO
Shirani.Alireza@monenco.com

Bahman Masoudi
Oil & Gas Deputy
Massoudi.Bahman@Monenco.com

Ahmad Darafshdar
Engineering Deputy
Darafshdar.Ahmad@monenco.com

Hossein Sarrafpour
Power Generation Deputy
Sarrafpour.Hossein@monenco.com

Pooya Ansarimehr
System and Planning Deputy
Ansarimehr.Pooya@monenco.com

Faramarz Ghelichi
Transmission and Dispatching Deputy
Ghelichi.Faramarz@monenco.com

Elham Sadeghian
Productivity & Quality Manager
Sadeghian.Elham@monenco.com

Zabihollah Parvaneh
Administration Deputy
Parvaneh.Zabihallah@monenco.com

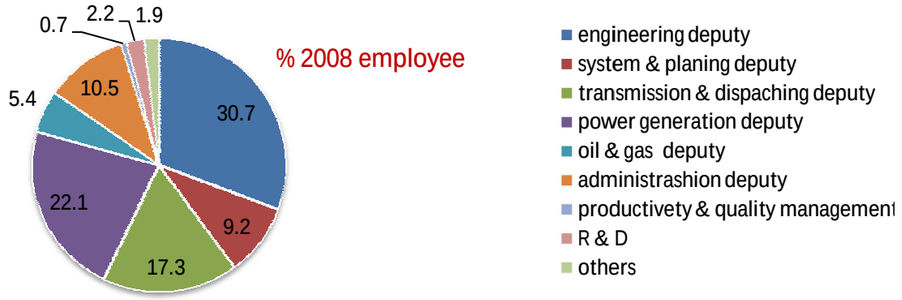
Mojtaba Noroozian
Energy & Systems Studies Manager
Noroozian.Mojtaba@monenco.com

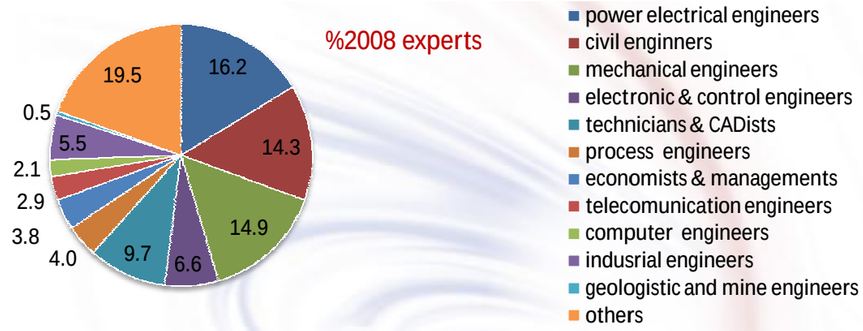
Ramin Khoshkho
Research and Development Manager
Khoshkho.Ramin@monenco.com

9. Balance Sheet
At 20 March 2009

Assests	1386/12/29		1387/12/30	
	Rial		Rial	
Current Assest:				
Cash ans Bank	7,245,115,346		7,429,748,630	
Short- term Investments	3,814,267,692		727,630,836	
Accounts Receivale	12,389,212,284		17,174,358,280	
Debit of Mapna Group	53,045,915,311		69,071,510,382	
other Accounts Receivale	15,044,384,890		32,762,639,138	
Project in progress	5,178,653,547		4,481,903,448	
Material & Goods Inventory	467,717,222		460,444,258	
Prepayments	5,061,971,277		8,415,953,368	
Total Current Assests		102,247,237,569		140,524,188,340
Fix Assest:				
Tangible Assests	39,795,883,662		224,926,138,755	
Long-term Investments	4,717,018,855		4,717,018,855	
Intangible Assests	2,800,000,000		1,400,000,000	
Other Assests	1,129,411,236		1,251,421,417	
Total Fix Assests		48,442,313,753		232,294,579,027
Total Assests		150,689,551,322		372,818,767,367

Liabilities and Equities	1386/12/29		1387/12/30	
	Rial		Rial	
Accounts Payable:				
Accounts Payable	1,266,114,332		1,553,516,901	
Credit for Mapna Group.	41,962,985,566		106,528,360,916	
Other Accounts Payable	39,329,259,656		69,101,773,882	
Advanced Received	1,796,022,878		7,203,618,153	
Tax Provision	706,532,294		69,373,698,630	
Portion of Borrowing				
Total Current Liabilities		85,060,914,726		253,760,968,482
Non-Current Liabilities:				
Long- term Acounts Payable	19,835,131,437		44,254,010,347	
Benefits Reservation for Employees Termination	3,019,323,628		6,915,522,212	
Total Non-Current Liabilities	22,854,455,065		51,169,532,559	
Total Liabilities		107,915,369,791		304,930,501,041
Equities:				
Capital	18,750,000,000		30,000,000,000	
Legal Reserve	1,875,000,000		3,000,000,000	
Other Reserve	7,173,531,912		7,173,531,912	
Accumulated Profit	14,975,649,619		27,714,734,414	
Total Equities	42,774,181,531		67,888,266,326	
Total Liabilities and Equities		150,689,551,322		372,818,767,367





Monenco Objectives:

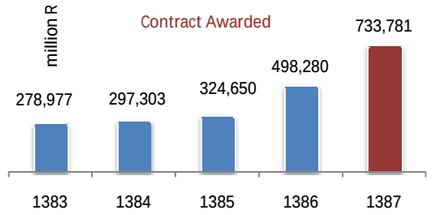
- Optimization of power and petrochemical plant designs with minimum impacts on environment
- Enhance of design procedures and Improve quality of the systems in order to cost optimization in power generation and transmission systems
- Increase of technical knowledge in basic and detail design activities, engineering, consulting, and supervision in the fields of electric, oil, gas and the other industries
- Research, development and improvement of design procedure in order to be economic and extending the ability to use renewable energy resources for power generation
- Increase capability of worldwide competition
- Improvement technical knowledge in basic and detail design
- Rehabilitation and retrofitting of existing power plants with minimum expenses and environmental impacts

Company's Partners and Clients

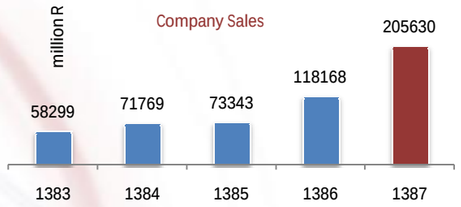
1. High light

* Iranian financial year starts on 20 March each year.

"Contract awarded has unexceptionally been twofold in last two years."



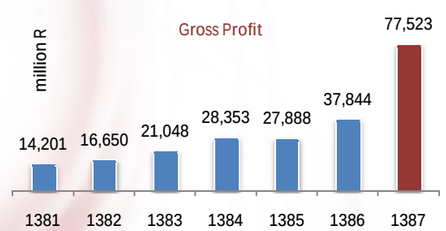
"Company's sales has been increased by 74% with respect to 1386 sales."



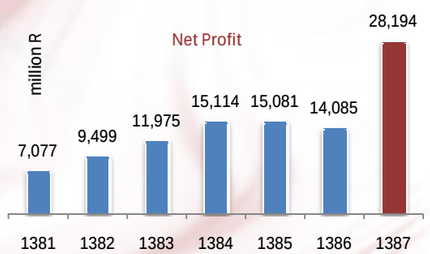
Key Performance Indicators (million R)

	1386 (20 March 2008)	1387 (20 March 2009)
Revenue	118,168	205,630
Cost	80,323	128,107
Gross Profit	37,844	77,523
Net profit	14,085	28,194

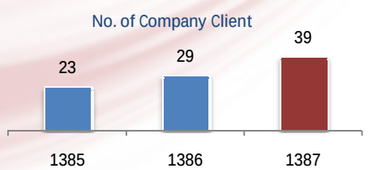
"Gross Profit increased about 200% from 1387 to 1386."



"Net profit has been twofold in 1387 compare to 1386."



"Monenco Iran has developed its business in new markets as well as new fields like Mining and Railway."



8. Profit (Loss) Statement Income at 20 March 2009

Monenco Iran (Private Joint Stock Co.)

	1386 (at 20 March 2008)	1387 (at 20 March 2009)	
Services Income	118,168,343,592	205,629,687,387	
Services Finished Price	-80,323,383,352	-128,107,177,023	
Gross Profit	37,844,960,240	77,522,510,364	
General and Administrative Costs	*-18,853,633,586*		*-38,072,842,263*
Other Operational Income (net)	140,600,000		168,000,000
	-18,713,033,586	-37,904,842,263	
Net Profit	19,131,926,654	39,617,668,101	
Financial Costs	–		-4,373,698,630
Accumulated Profit in the beginning	1,069,252,704		1,761,295,674
	1,069,252,704	37,005,265,145	
Profit Before Tax	20,201,179,358	37,005,265,145	
Tax on Income	-6,115,358,367	-8,811,180,350	
Net Profit	14,085,820,991	28,194,084,795	
Net Profit	14,085,820,991	28,194,084,795	
Accumulated Profit in the beginning	23,903,831,765		26,731,687,343
	-3,049,003,137		-11,756,037,724
Accumulated Profit in the beginning-modified	20,854,828,628	14,975,649,619	
Increase In Capital(1386&1387)	-11,250,000,000	-11,250,000,000	
Profit Distribution	23,690,649,619	31,919,734,414	
Appropriation of Profit:			
Legal Reserve	-1,125,000,000		-1,125,000,000
Dividend	-7,500,000,000		-2,800,000,000
Board Bonus	-90,000,000		-280,000,000
Allocable Profit	-8,715,000,000	-4,205,000,000	
Accumulated Profit in the Final Period	14,975,649,619	27,714,734,414	

7. System & Energy

System & Energy Study Center was established in Monenco Iran in response to increasing need for system studies in the field of production and utilization of energy and related industries in Iran and neighboring countries. The vision of this center is to expand its activity in a world-class level both for local and foreign markets. To achieve these goals, the center has employed the highly educated experts and getting use of the most advanced softwares in each field. System & Energy Study Center has focused on the following fields:

Transmission and Distribution Systems

- Transmission and Distribution Planning
- Reliability Assessment of Power System
- Utilization of FACTS Devices for Improving Power Systems Performance
- Static and Dynamic Stability Analyses
- Power Quality Analyses
- Power System Electromagnetic Analyses
- Protection and Relay Coordination Analyses

Energy Systems

- Distributed Generation Planning
- New and Renewable Energies Implementation Analyses

Power Plants

- Dynamic and Static Modeling and Analyses
- Efficiency Enhancement Analyses
- Emission Reduction Analyses

Industries

- Study of Electrical Energy for Industrial Plants
- Island Mode Analyses and Network Connection
- Power Quality Enhancement Analyses

Electric Railway

- Feasibility Studies
- Study of Electrical Energy for Electric Railways
- Power Quality Enhancement Analyses
- Reliability Enhancement Analyses

Projects, Year 2008

- Island Mode Analyses of Iran LNG and South Pars Utilities
- Tehran-Mashhad Electric Railway Pre-feasibility Studies
- SAVEX (SAVE For export) Project
- Supervision of SVC installation in Iran 230 kV grid

2. C.E.O. Overview

For reaching to the top, three essential steps must be undertaken. First the goals and objectives of the company must be well defined. Second qualified engineers and staff must be employed and finally the company management team must develop the management system with highest possible liquidity and transparency.

Last year Monenco Iran developed its strategic plan as well as the 5 years development plan. In the beginning of the year, its detail annual program was defined. Based on the strategic plan and detail program established its training courses and required employment as well as partnership and joint ventures.

Research and development office was followed to define the applied research projects related to the company scope of works and ISO and EFQM certificate followed in order to create the maximum liquidity and transparency in the system. Since it was needed to extend the scope of services of the company a reorganization plan of the company followed and new departments and divisions created. Since some tasks were finished some other merged departments.

Thanks to the management team and the well trained staff of the company and albeit supports of its major client and share holder , **MAPNA**, Monenco Iran stands in a position that not only has a very well suited infrastructure but also a sustainable market in Iran and neighboring countries.

Monenco's client's responses as well as the high growth of contracts awarded show that this strategy was successful in fulfilling the clients requirements. Clients response time is less than that one can imagine in a somehow restricted market like energy industries.

Locating in a country that not only has one of the highest reservoir of fossil energy in the world, but also is in the middle of high energy demand countries in the east, west, north and sought, makes the future of this company more fantastic. Of course Monenco can ,or must be one of the best for the consultancy services for these potential clients and this makes this believe stronger that Monenco still has too many tasks to follow but what is clear is that : its succeed is completely guaranteed .

Ali Reza Shirani
CEO and managing director

3. Quality and systems

The Quality and Productivity Office is in charge of managing company Productivity and Quality, including Productivity control, monitoring and analyzing the processes, continual improvement of the system and enhancing Customer Satisfaction.

In line with ISO 9001-2000 requirements, this department has developed procedures and policies to aid employee compliance with procedures being constantly enhanced and measured to ensure conformity to customer and applicable regulatory requirements and therefore total client satisfaction.

This office is responsible for control of the quality policy and aims internal audits, management review to assure the quality management system suitability, sufficiency and effectiveness of monitoring, measuring and controlling the quality of the processes.

Some of the improvement projects in 1387 (20 March 2008- 20 March 2009):

Improvement Project	start	finish
Integrated projects control systems	1386	1387
Performance evaluation system	1386	1387
Document and work flow management system	1386	-
Knowledge management	1387	-
Suggestion System	1387	1387

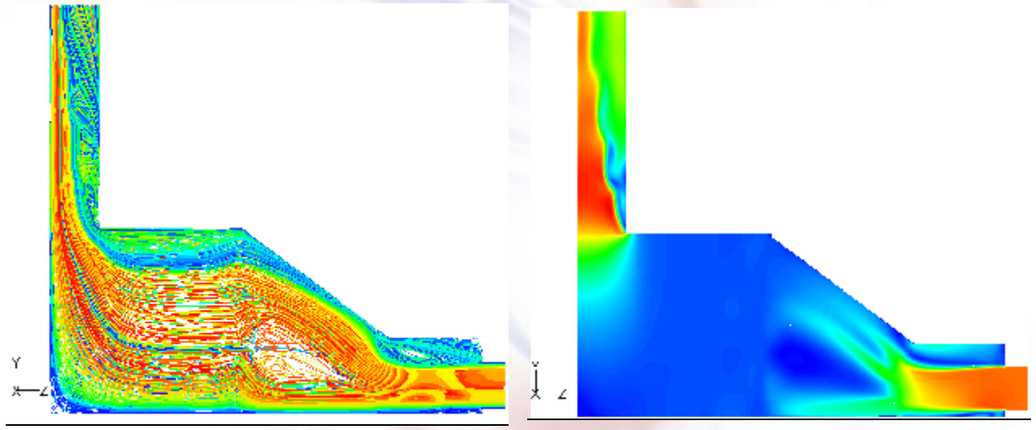
Main activities in 1387 :

- Design and implementation of Technical Assessment accordance technical checklists
- Definition of indicators and targets
- Implementation of performance evaluation and using its results for remuneration for personnel
- Checking the trends of indicators' results and what an organization plans to do and the reasons for it
- Benchmarking and comparing our performance results with others
- Identifying strengths and areas for improvement through self assessment and challenging the status quo
- Definition of improvement projects
- Effecting changes by utilizing learning to create innovation and improvement opportunities
- Managing and improving process in order to more satisfy and generating increase value for customers
- Review the strategies, goals and approaches effecting

"Monenco Iran passed the external assessment for Iranian National Productivity and Excellence Award (inpe – based on EFQM) in 1387 and has won the "committed to excellence" award in the category of large scope service sector."

R&D duties include:

- Developing technical software's for study, design, engineering and system rehabilitation of plants.
- Conducting technical and economy studies in order to maximize efficiency of systems and to minimize costs.
- Improvement of plant performances, development of engineering and design of equipment and parts for manufacturers.
- Obtaining technical know how of new design and engineering and solution for optimization of plants.
- Modifying the procedures of operation, maintenance, protection and utilization of plants.
- Helping the clients to apply updated and high technology equipment in plants in order to achieve more reliable out puts and products.
- Design and engineering of renewable and new energies power plants due to their large potential in the country and in the world.
- Creating new methods to control the air, water and solid pollutants more efficiently and to reuse and recycle wastes.



Goals of R&D Department:

- Exploring research capabilities and capacities in different Monenco Disciplines and help them to use the capabilities in their engineering works.
- Coordination between Monenco and MAPNA groups as major manufacturers in order to compile executive approaches in order to choose suitable technology.
- Seeking for the improved approaches to attract and naturalize the selected technologies.
- Guiding the planning and design disciplines to identify useful research projects and allocate financial supports for the projects.
- Providing required facilities for especial scientific training of the engineers in order to update their engineering and technical knowledge.
- Communication with academic and research centers inside and outside the country in order to activate necessary research projects.

6. Research and Development

Research and Development (R&D) in Monenco Iran aims to increase efficiency and improve quality of products. Improvement of design, manufacturing procedures and engineering methods cause increase of efficiency and reliability and decrease of expenses and wastes and finally cause increase client's satisfaction.
Research groups of Monenco Iran work closely with manufacturers, universities and clients to develop the systems and products to meet future requirement by using new technologies. R&D of Monenco steps up the challenge of creating the pioneer systems and engineering services that enhance energy efficiency, reliability and productivity.
Monenco meets the present and future demands of industries, while helping clients to make a better use of available resources, preserves the environmental impact and maintenance costs as low as possible.
R&D Office is involved in the Following Projects:

HRSG of 6CC Project

This project is intended to repower the Old CCPP in Iran. In summer time the power output of CCPP decreases due to the reduction in air density. To recover this reduction, additional combustion in HRSG by duct burner is investigated. Result shows an increase in steam turbine power output with duct burner. This increase is limited to the cooling system capacity and HRSG characteristics.

CFD of HRSG in Rajaei CCPP

This project followed Rajaei CCPP Repowering Project. Present project, consiered the influences of heat distribution pattern in HRSG by Fluent code. As the major result gas temperature and velocity distributions on the third super-heater is studied carefully. Finally, based on temperature restriction of heat exchanger materials and uniform heat flux distribution on the third super-heater, duct burners configurations are decided.

TOT of ACC

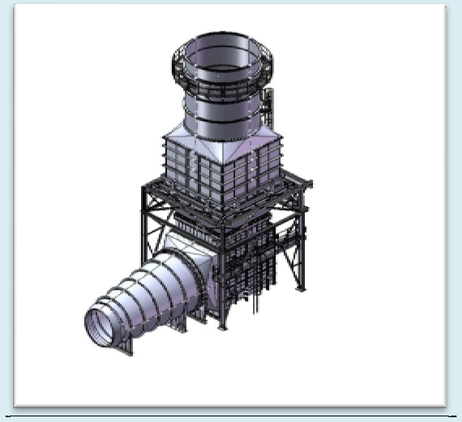
The project called TOT of ACC deals with Technology Transferring of Air Cooled Condenser's Design, Engineering and Construction Know-How from Swiss company, INNOSPIN, to Monenco Iran. This includes acquisition of design and construction know how of ACC cooling system. This objective is supposed to be completed sequently over four different combined cycle power plant projects namely, Isfahan II, Abadan I & II and the fourth project to be determined later. Currently, a portion of documents corresponding to two of these projects have been received and are under inspection of Monenco's experts. The know-how of Tube Bundles manufacturing for ACC system is also under transferring.

Updating of the Thermal Power Plant Technical Specification

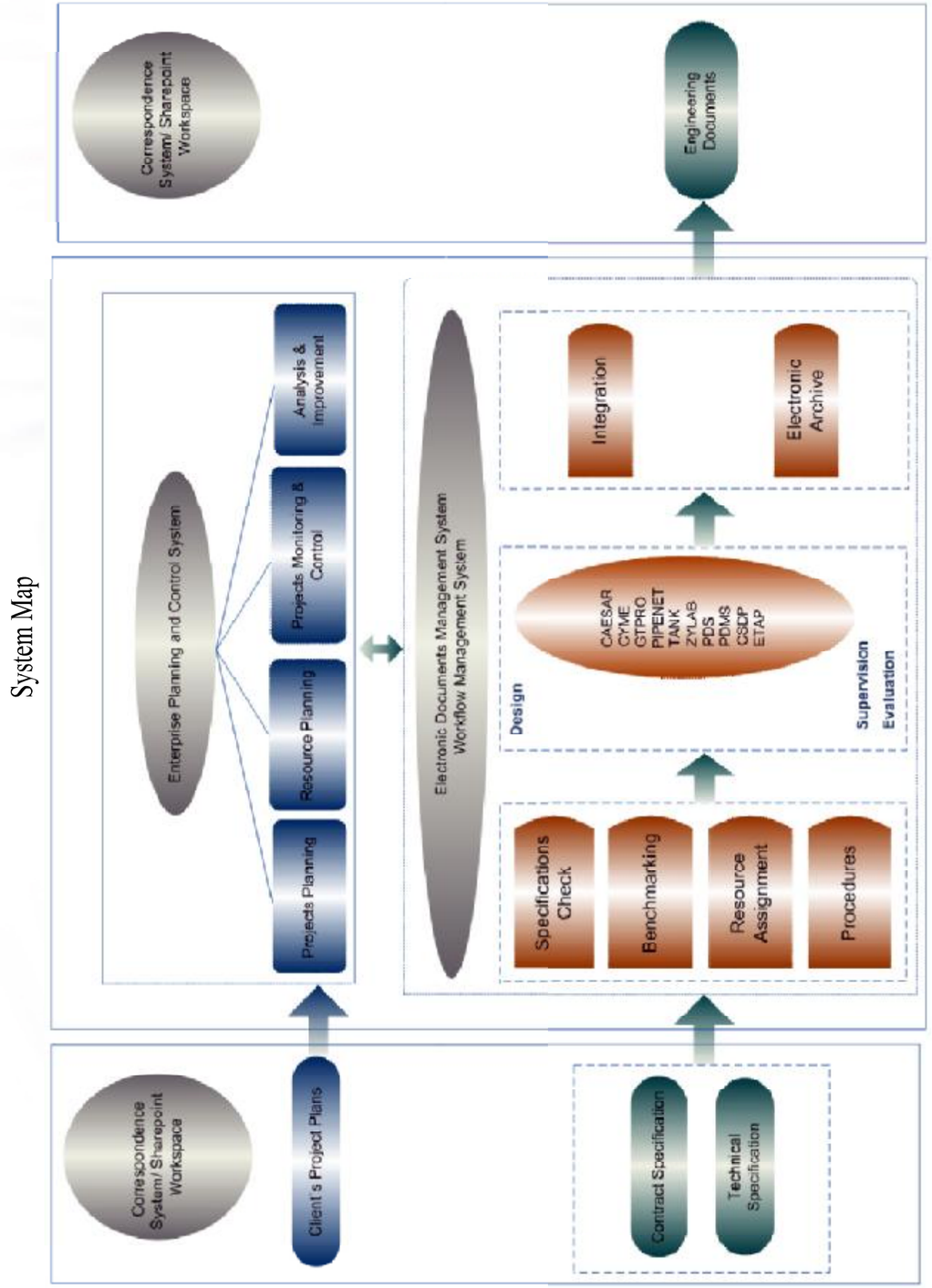
The goal of this project is preparing an updated version of the thermal power plant technical specification of the IPDC Tender Documents. The scope of the project is Steam Turbine, Gas Turbine and Combined Cycle Power plant. Currently, related documents of combined cycle technical specification have been revised and updating of Steam and Gas Turbine power plant documents are in progress.

structural and fluid dynamics analysis of air intake and exhaust gas systems

This project mainly deals with structural and fluid dynamics analysis of turbine V. 94 air intake and exhaust systems. This includes geometrical modeling, mesh generation and Fluid and structural solid analysis of the systems in GAMBIT, FLUENT, Solid Works and ANSYS software. Currently, the geometrical modeling and mesh generation are investigated.



System Map



4. Power Generation

2008 was a busy year for power generation department. While Iran ministry of energy festinated its requirements for new power plants; some additional projects in Syria and Iraq added to our portfolio and so compared to previous years of Monenco, 2008 was a unique year for our engineering services.

The installed capacity of Iranian power plants is around 52000 MW and proudly it can be said that till now around 60 percents of these power plants were designed by Monenco power generation division.

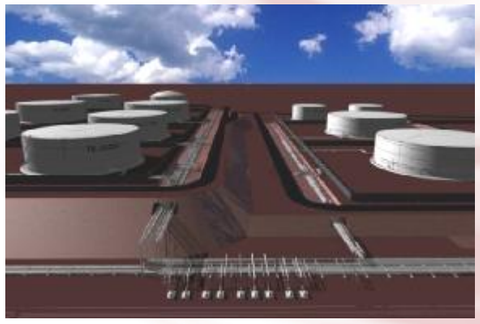
It is assumed that this share increases to 70 percent in 2009 while some of ongoing projects completed and came into operation in that year. In the year 2008 Monenco power generation division was also successful in design standardization and implementation of ISO 15926 in its design procedures.

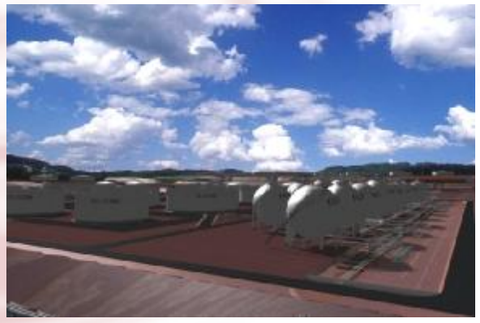
In this process Monenco was selected as the one to prepare the standard tender documents for gas, steam and combined cycle power plants for Iran ministry of energy and also was awarded a contract to develop MAPNA standard combined cycle power plant.

Table 1 New power plant contracts awarded to Monenco

Name	Type	Capacity Mw	Location
Tishreen	Combined cycle	2x162+1x160	Syria- Damascus
Aliabad	Gas Turbine	6x 162	Mazandaran -Iran
Shirvan	Combined cycle	320	Khorasan - Iran
Iran LNG	Combined cycle	6x162+2x160	Hormozgan Iran
Ahwaz	Combined cycle	320	Kozestan- Iran
Khoramshahr	Gas Turbine	2x162	Khozestan - Iran
Esfahan	Combined cycle	2x162+1x160	Esfahan- Iran
Jahrom	Combined cycle	480	Khorasan Iran
Pars	Utilities	2x162	Asaloyeh- Iran
Semnan	Gas Turbine	4x162	Semnan - Iran
Najaf	Gas Turbine	2x162	Najaf- Iraq
Zanjan	Gas Turbine	4x162	Zanjan- Iran
aramjen	Gas Turbine	2x162	Azarbayejan Iran
Corsavch	Combine cycle	2x162+1x160	Fars - Iran
Kahnoj	Combined cycle	2x162+1x160	Khorasan- Iran
Kermanshah	Gas Turbine	2x162	Kermanshah - Iran

Thanks to the engineering methodologies as well as powerful tools of Monenco, not only Monenco could follow the requirements of these projects but also is going to make itself ready for some additional projects of renewable and coal fired power plants in near future. Another important challenge of power generation department was the extraction of oil and gas projects from this department and formation of a new section for Monenco. This new section as the oil and gas department will work under the supervision of the CEO and will be responsible for engineering services in downstream oil and gas projects.





5. Power Transmission and Dispatching

There are five groups under supervision of this deputy management. These Groups are responsible for all projects in Power transmission networks, Substations, Transmission Lines, Automation & Dispatching, and Telecommunication networks; These Engineering services are provided for all voltage levels. Recently, engineering services associated with Geology and Mining, Distributed Generation (DG), and renewable energy resources are added to the activities of this division.

Although financial crisis, economical shocks, and petroleum price reduction had extreme effects on different global and regional projects' budget and progress, this deputy management succeeded to meet the year target. In 2008, it is worth to note that our income increased 46% compared with that of 2007.

Compared with 2007, signed contracts had more than 51% increase and number of clients increased from 24 to 30 which shows 25% increase in 2008. These progresses were great because of Clients' satisfaction.

Special consideration on quality improvement, increasing activities' speed in contracts and projects, training programs and workshops for personnel, exploiting new and up to date software packages and technologies, and outstanding take part in international and national seminars and symposiums as a leading engineering company, resulted in 11 papers presented at national conferences and journals and 12 technical reports for introducing new technologies which are of a high importance and benefits to be exploited in power systems. It should be noted that 90% of these technical reports resulted in engineering service contracts. Also, this part of activities has a major effect on improving clients' satisfaction and projects' progress.

Compared with our competitors who faced a financial crisis, we had a great financial improvement. Politics and strategic planning of the company, the realistic predictions, and reliable personnel are the important parameters to reach this outstanding place and improving.