

Global Reporting Initiative



MAPNA GROUP

MAPNA Boiler & Equipment
Engineering & Manufacturing Co.

Value Creation for All:
A 360-Degree Approach

2018



GR
Report

About the Report

The Sustainability Report for 2016, « Value Creation for All: A 360-Degree Approach,» is the first of its kind report by MAPNA Boiler & Equipment Engineering and Manufacturing Co., which is based on the 2016 GRI standard and at Comprehensive Requirements level. The set of indicators considered by the report is available in the table of indicators in the appendix. There is no external warranty for this report; it has been prepared in a completely volunteer manner and was made publicly available on the Corporate Responsibility page of the Mapna Boiler Co. website (www.Mapnabe.com).

Value Creation for All: A 360-Degree Approach

This report is bi-annual and each report focuses on strategic areas of MAPNA Boiler's social responsibility during the reporting period to reflect on the achievements and changes made over that period in comparison with the previous period. The present report describes the approaches taken by the company towards social responsibility during the period 2015-2017. The first year of systematic social responsibility practices at Mapna Boiler Co. was 2015, when strategies and strategic plans for social responsibility were first devised to create a broader approach to value creation for all. Although the value creation approach for all stakeholders has always been the focus and support of corporate executives, in the past two years, systematic and strategic view of stakeholders and the values they create has been in the focus of the company, which is to be addressed in the current report. In the preliminary chapters of this report, MAPNA Boiler

Co. introduces and outlines the strategic process of establishing a systematic approach to social responsibility in the company, and then discusses one of the values related to stakeholders. Then, each individual chapter is devoted to one of the approaches and actions taken by the company. The next version of this report will be based on the company's practices focused on social responsibility for the period 2017-2019 and will be presented in the first quarter of 2020.

In case of any question, suggestion or criticism about the report, please feel free to contact us via CSR@Mapnabe.com or 982127583304+.

MAPNA Boiler & Equipment Engineering & Manufacturing Co.

MAPNABE
Sustainable Development Goals



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CEO statement

It is my pleasure to announce the first Social Responsibility Report for MAPNA Boiler & Equipment Engineering & Manufacturing Co., which is, indeed, a reflection of our profound beliefs in ethical and responsible business. Today, in our country, environmental and social challenges such as air pollution, water scarcity, and social damage such as poverty and addiction have become major problems whose solution calls for responsible treatment on the public part. At the same time, as citizens, businesses are also required to act responsibly and as a member of society to control their negative impacts on society and the environment and to take steps towards sustainable economy, social and environmental growth and development.

As the several-decade history of development shows, the impacts of businesses on communities and the living environment of individuals in the society have far greater impacts than personal effects; hence, businesses' responsibilities are more critical than in the past. In addition, organizations and businesses can significantly influence the personal behavior of their employees as members of society. Therefore, reporting corporate social responsibility can be considered as an important and forward step towards this

responsible behavior; the report which is to be made public is the highest symbol of accountability to the public and feeling responsible against them.

MAPNA Boilers & Equipment Engineering & Manufacturing Co. is one of the organizations which are part of the green industry through their main product: power boilers and power generation from heat and smoke output of power turbines and emission reductions, as well as its products concerning water. Although it does not have significant negative and sensitizing effects on the nature and the environment, it goes beyond its social responsibility. MAPNA BOILER Co. has embarked on a journey with the belief that commitment to ethical requirements is not only an important task, but an ethical and sincere action as the biggest investment which, in the long term, will also increase profitability by creating a trustworthy positive image of the organization. From its establishment until its 18th anniversary this year, MAPNA BOILER has always strived to have a broad perspective on the benefit of all its stakeholders; an effort that has been designed and implemented systematically since 2015 in its practices, through which the organization systematically entered another phase so that the company could take a strategic approach to its social responsibility and be able to place this important business theme as its main focus.

The main focus of this report is Value Creation for All Stakeholders, which attempts to outline the organization's strategic approach to social responsibility and stakeholder value creation. Although we are in the early stages of such a journey, we hope to be able to achieve continuous improvements every year with our intelligence and self-reform approach, and in our initiated discourse, together with action, make a better tomorrow for all.

Profile of MAPNA Boiler & Equipment Engineering & Manufacturing Co.

Chapter 1

Sustainable Development Goals



Report
Value Creation for All
A 360-Degree Approach

MAPNABE

MAPNA Boiler & Equipment Engineering & Manufacturing Co., briefly called MAPNA Boiler, is a subsidiary of MAPNA Group's manufacturing sector. Mapna Group is an Iranian economic holding company which, with its 41 subsidiary companies, under the tile of Mapna Group Company, acts in the field of development and construction of thermal power plants, as well as executing oil, gas and rail transportation projects as key contractors (EPC) and Private Investment (IPP) in Iran and the region.

Since its establishment in 1992, MAPNA Group has recorded nearly one hundred ultra-projects worth more than € 30 billion. In addition, it offers its customers 60 different products and 85 different services. The Formation of the MAPNA Group began with the establishment of the «Iran Power Project Management Company» or MAPNA in 1993 by the Ministry of Energy of the Islamic Republic of Iran. Prior to the establishment of MAPNA, all of Iran's thermal power plant projects were carried out by foreign companies, so the company was founded with the motto «MAPNA Symbol of Self-Confidence» with the aim of improving dependency on domestic capabilities, which was originally a general contractor for power plant projects.

Main areas of MAPNA Co.'s business

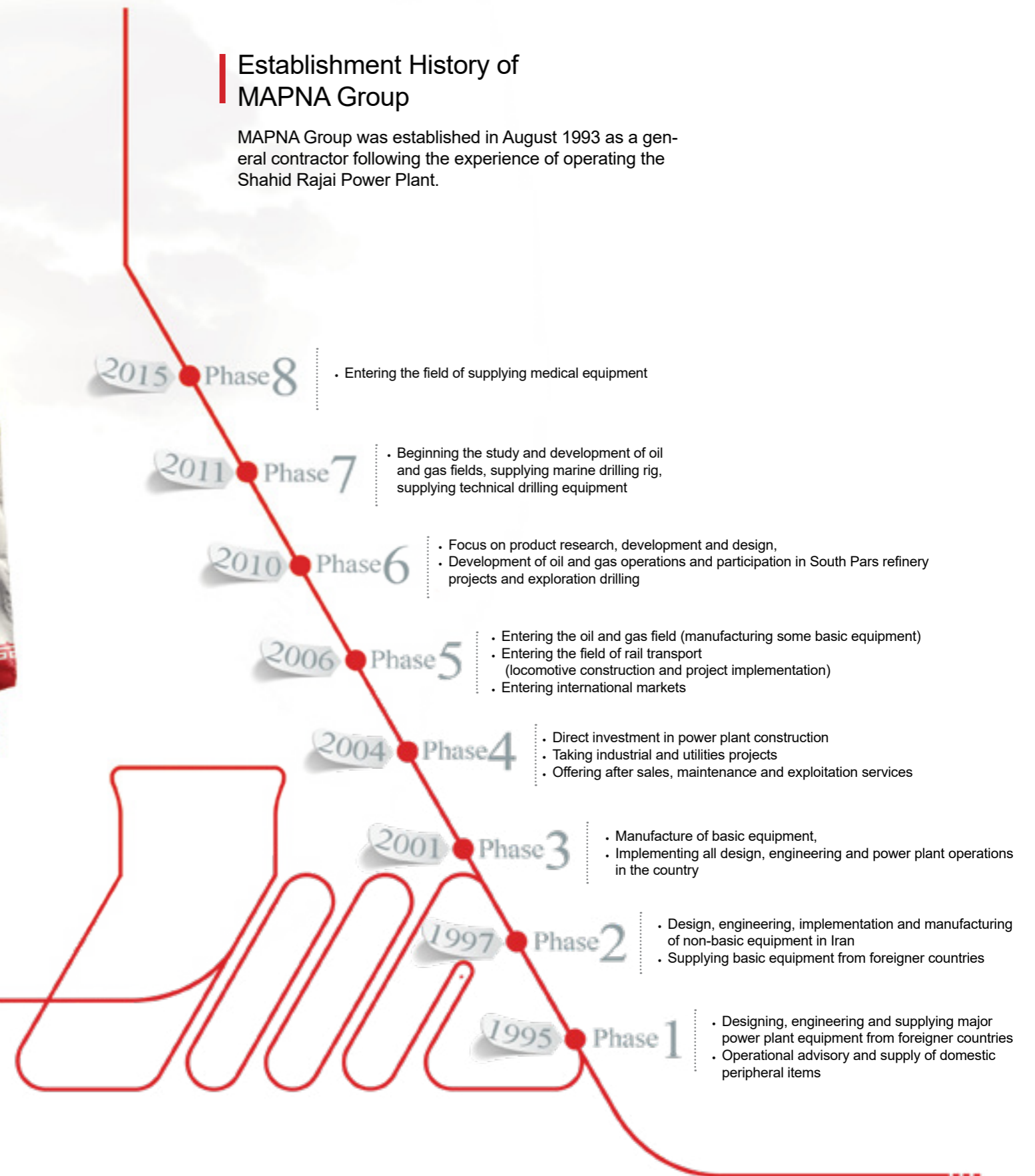
The R&D process continued until MAPNA's principal position is now as outlined in the following:

- The first and largest power plant general contractor in the Middle East and Western Asia
- The first and largest manufacturer of all major power plant equipment in Iran
- The first and largest Iranian investor in private power plant projects in the country
- General contractor for upstream and midstream projects in the oil and gas industry
- Locomotive manufacturer and executor of various rail transportation projects in the country



Establishment History of MAPNA Group

MAPNA Group was established in August 1993 as a general contractor following the experience of operating the Shahid Rajai Power Plant.



The subsidiaries of this group are as follows, whose main mission, like Mapna Boiler, is to complement the value chain of the holding's practices.

Investment Projects	Production	Power	Railroad Transportation	Oil and Gas	Healthcare	Other
MAPNA QESHM WATER AND ELECTRICITY GENERATION COMPANY	MAPNA Operation and Maintenance Company (O&M Co)	MAPNA Power Plants Construction & Development Company (MD-1)	MAPNA Locomotive Engineering & Manufacturing Company	MAPNA Oil & Gas Development Company	MAPNA Healthcare Company	MAPNA Indonesia
MAPNA RENEWABLE ENERGIES GENERATION COMPANY	MAPNA STS Company	MAPNA Combined Cycle Power Plants Construction & Development Company (MD-2)	MAPNA Railway Construction & Development Company	MAPNA Drilling Company		Algeria Office
MAPNA PAREHSAR POWER PLANT COMPANY	MAPNA Electric & Control Engineering & Manufacturing Company (MECO)	MAPNA Special Projects Construction & Development Company (MD-3)	MAPNA Railway Operation Development & Maintenance Company	Tehran Energy Consultants Neyrperse Company		Iraq Office
MAPNA Tous Power Generation Company	MAPNA Boiler and Equipment Engineering and Manufacturing Company	Monenco Consultancy Services Company	MAPNA Rail Technologies Company			MAPNA Management Consulting Company
MAPNA Khuzestan Power Generation Company	Alborz Turbine Company	Nasb Niroo Company				
MAPNA Sanandaj Power Generation Company	MAPNA Turbine Engineering and Manufacturing Company (TUGA)					
MAPNA Asaluyeh Power Generation Company	MAPNA Generator Engineering & Manufacturing Company (PARS)					
MAPNA West Karun Power Generation Company	MAPNA Parand Power Generation Company					
MAPNA Genaveh Power Generation Company	MAPNA Turbine Blade Engineering and Manufacturing Company (PARTO)					
AZARAKHSH POWER PLANT COMPANY						
SOUTH ISFAHAN POWER PLANT						
FARS GAS POWER PLANT F. Z. CO.						



Mapna Boiler CEOs



Abdolmajid Rajabi
2004 -2007
2010 -Now



Mohammad nabi Faraji
2007 -2010



Javad Aminian
2002 -2004



Mohammad ali Borhani
Dayani
2000 -2001



Seyed Morteza
Tahani
1999



MAPNA Boiler at a glance:

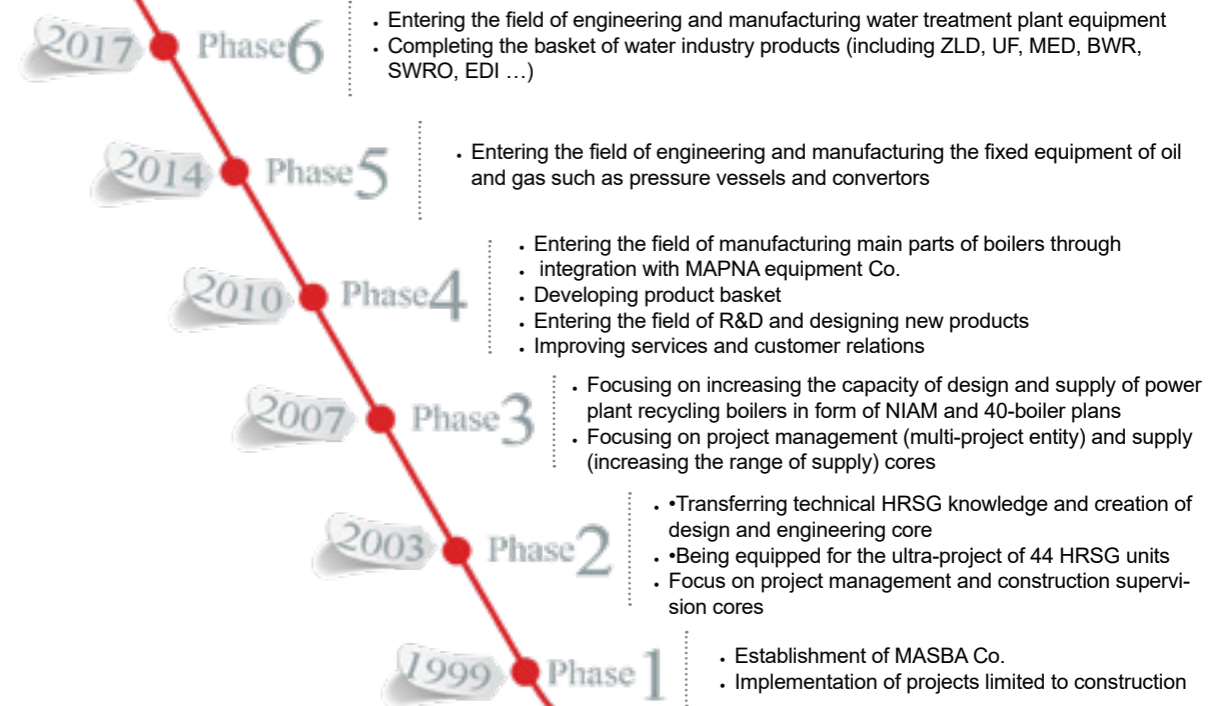
MAPNA Boiler & Equipment Engineering and Manufacturing Co., hereinafter referred to as MAPNA Boiler, was established in 1999 with the aim of developing the country's energy industries in the boiler field by MAPNA Group Company. During its early years, the company implemented four thermal and industrial recycling boiler projects with the participation of internationally renowned companies such as Hanjung, CCT and Si Fang, which provided customer satisfaction in the power plant and petrochemical industry. Following these successes, in 2003, through a consortium with Dosan, South Korea, it was able to design and build 44 Heat recovery steam generator steam generator Boiler (HRSG) plants for multiple power plants nationwide, transferring technology and receiving License from Dosan Company to become a credible supporter of the design, manufacture, installation and commissioning of thermal recycling boilers in the country's electricity generation chain.

Since 2010, in line with the company's strategies to improve the supply chain and capacity building of boiler equipment, MAPNA has utilized the full capacity of MAPNA Engineering and Manufacturing Company in the form of boiler plant and equipment.

MAPNA BOILER has had an acceptable performance in the field of boiler products, so that McQueen magazine's acclaimed magazine, which ranks companies in the boiler industry, ranked MAPNA Boiler in its 1396 rankings in terms of technology in thermal recycling boilers. Seventh and in terms of builders ranked second.

The company has also entered new markets in recent years, the most important of which is the water industry, which has entered the country according to the needs of the country and intends to become one of the influential players in the industry in the coming years.

MAPNA Boiler Evolution Path



Orientation Elements of MAPNA Boiler Co.

Mission

As one of the MAPNA Group companies, we act towards creating sustainable value for our customers, shareholders and other stakeholders through the design, supply, construction, installation, commissioning, financing, service delivery and project management of all types of boilers and power plants, oil, gas, petrochemicals and other industries.

Vision

Being the leader in Iran boiler industry, capable of designing and manufacturing equipment well known in international markets by 2022

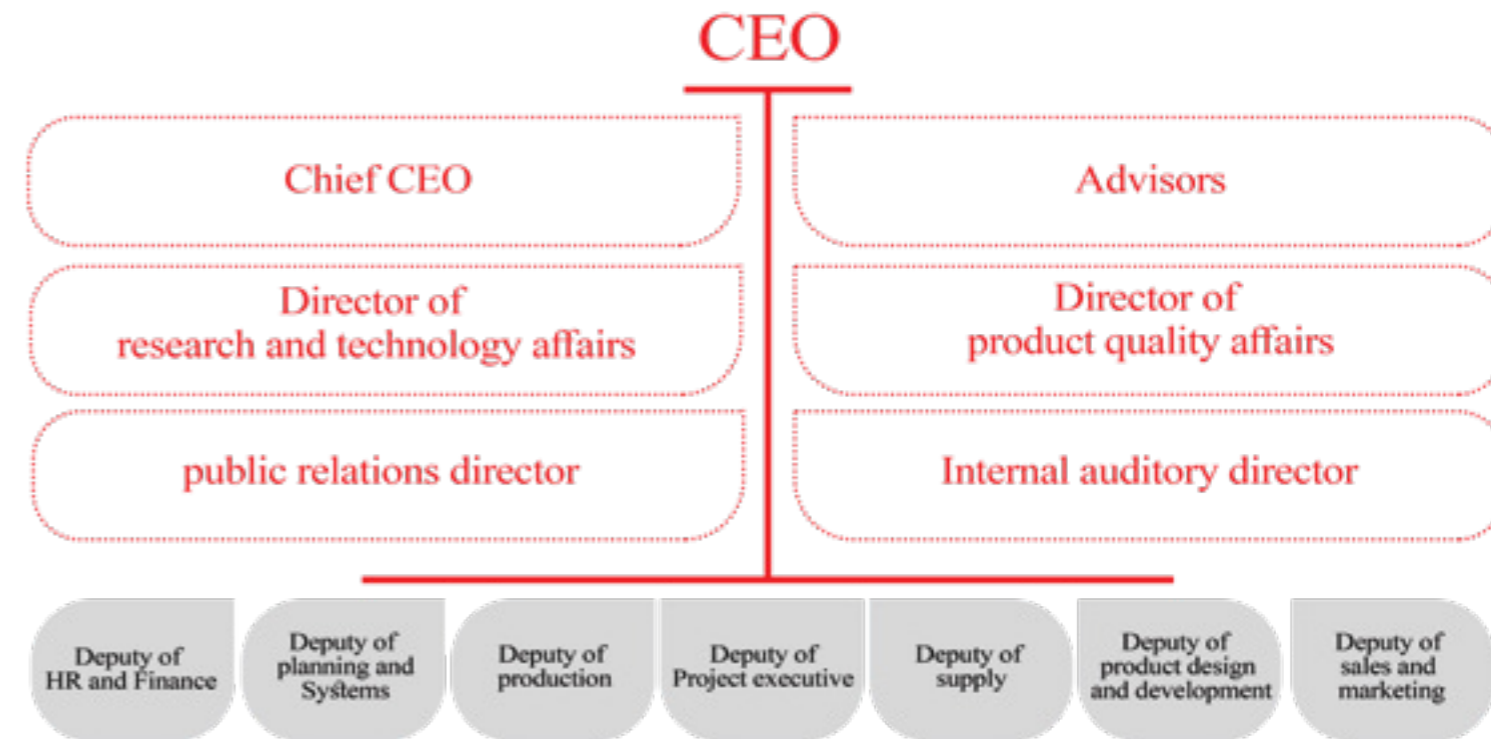
Values

- Customer (being customer-oriented)
- Innovation
- Excellence (Organizational Excellence and Outcome-oriented)
- Safety (safety and environmental friendliness)
- Responsibility (teamwork, responsibility and knowledge sharing spirit)
- Ethics (Business Ethics)

MAPNA Boiler Sustainability Charter



Organizational Structure



Sites and offices



1. Factory:
Kavosh BLVD., Karaj-Qazvin Highway, 12th kilometer, Karaj, Iran

Consisting of an area of 10 Ha with nearly 35000 m2 of closed salon equipped with machinery and preparatory and manufacture equipment, machining process lines, welding and assembly lines



2. Tehran Building:
No.7, Golkhaneh St., Nelson Mandela AVE, Tehran, Iran

Consisting of 4500 m2 useful area



3. Elahiye Complex:
MAPNA Boiler Co., Elahiye Complex, Delpazir AVE., 20th ST., Rezvanieh, Kamalshahr, Karaj, Iran

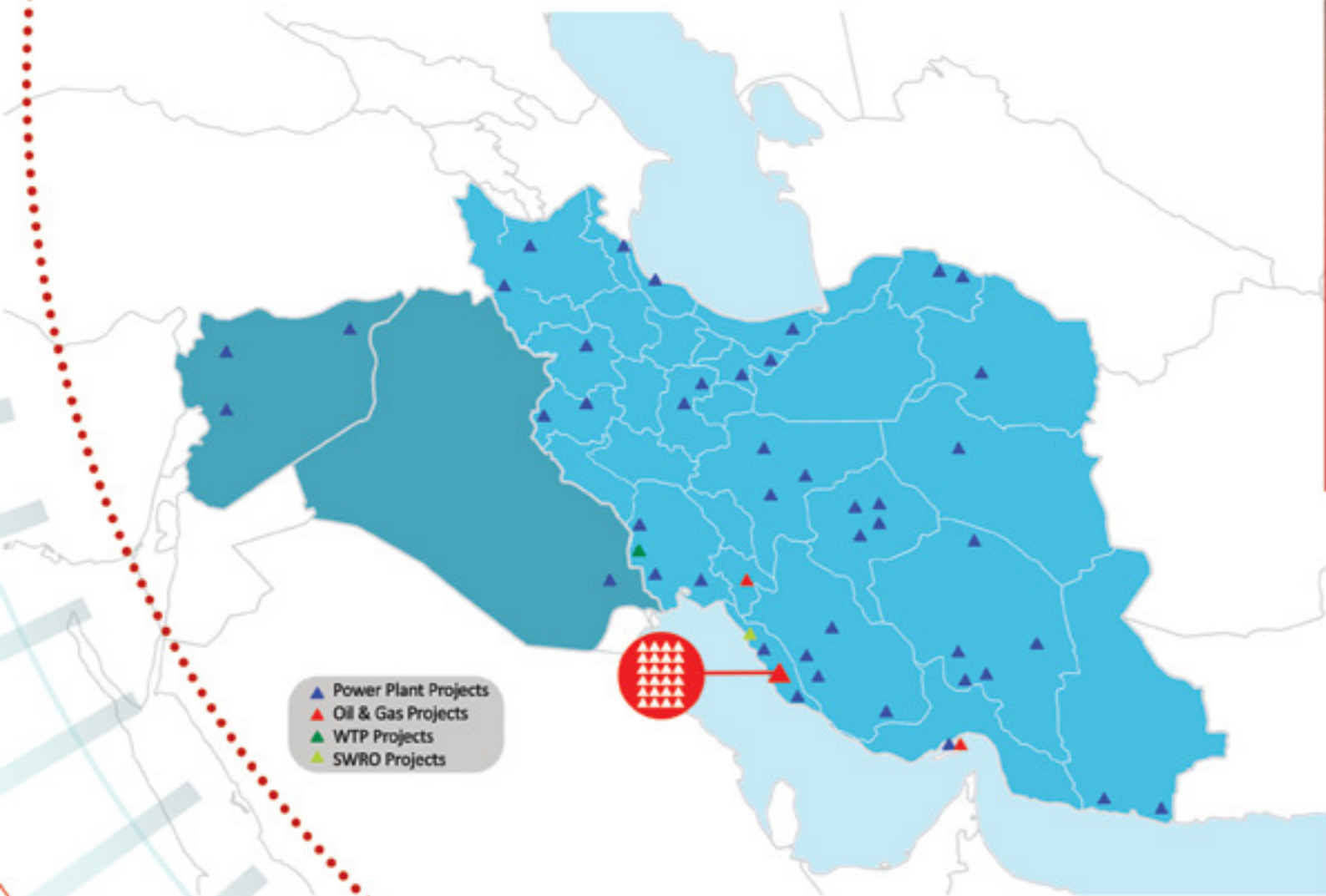
Consisting of an area of 22 Ha with 27000 m2 of closed salon



Project Type	Project Name	Project characteristics	
		Taskmaster	Description
Power Plant	Ahmad Kazemi combinatory-cycle Power Plant (Gol Gohar Sirjan)	Gol Gohar industrial and mining Co.	design, supply and manufacturing 2 Heat recovery boiler units Weight of the manufacturing equipment: 3980 Tons Technical characteristics of each boiler: 241.2 t/h, 520 °C, 90 bar.a (HP Steam) 32.4 t/h, 230 °C, 8.5 bar.a (LP Steam)
Power Plant	Parand combinatory-cycle Power Plant	MAPNA Parand power production Co.	design, supply and manufacturing 6 Heat recovery boiler units Weight of the manufacturing equipment: 13077 Tons Technical characteristics of each boiler: 241.2 t/h, 520 °C, 90 bar.a (HP Steam) 32.4 t/h, 230 °C, 8.5 bar.a (LP Steam)
Power Plant	Karoun-e-Gharb combinatory-cycle Power Plant	Iran Oil Engineering and Development Co.	design, supply and manufacturing 2 three-pressure Heat recovery boiler units Weight of the manufacturing equipment: 4270 Tons Technical characteristics of each boiler: 180 t/h, 532 °C, 130.5 bar.a (HP Steam) 48 t/h, 532 °C, 32 bar.a (IP Steam) 28.4 t/h, 234 °C, 4.7 bar.a (LP Steam)
Power Plant	Ferdowsi combinatory-cycle Power Plant	MAPNA Toos power Co.	design, supply and manufacturing 6 Heat recovery boiler units Weight of the manufacturing equipment: 13140 Tons Technical characteristics of each boiler: 241.2 t/h, 520 °C, 90 bar.a (HP Steam) 32.4 t/h, 230 °C, 8.5 bar.a (LP Steam)
Power Plant	Asalouyeh combinatory-cycle Power Plant	MAPNA Asalouyeh power Co.	design, supply and manufacturing 6 Heat recovery boiler units Weight of the manufacturing equipment: 13090 Tons Technical characteristics of each boiler: 241.2 t/h, 520 °C, 90 bar.a (HP Steam) 32.4 t/h, 230 °C, 8.5 bar.a (LP Steam)
Oil & Gas	Kangan Petro-refinery	Kangan Petro-refinery Co.	design, supply, manufacturing and installing 4 boiler units Weight of the manufacturing equipment: 2040 Tons Technical characteristics of each boiler: 140 t/h, 420 °C, 43 bar.a (HP Steam)
Steel	Mobarakeh Steel	Mobarakeh Steel Co.	design, supply, manufacturing and installing 1 heat recovery boiler unit Weight of the manufacturing equipment: 2100 Tons Technical characteristics of each boiler: 200 t/h, 467 °C, 64 bar.a (HP Steam)
Power Plant	Kashan combinatory-cycle Power Plant	Sbanovin Co.	design, supply, and manufacturing 2 heat recovery boiler units Weight of the manufacturing equipment: 3970 Tons Technical characteristics of each boiler: 241.2 t/h, 520 °C, 90 bar.a (HP Steam) 32.4 t/h, 230 °C, 8.5 bar.a (LP Steam)

Project Type	Project Name	Project characteristics	
		Taskmaster	Description
Power Plant	Sabalan combinatory-cycle Power Plant	Omid Sabalan Power Co.	design, supply, and manufacturing 6 heat recovery boiler units Weight of the manufacturing equipment: 13190 Tons Technical characteristics of each boiler: 241.2 t/h, 520 °C, 90 bar.a (HP Steam) 32.4 t/h, 230 °C, 8.5 bar.a (LP Steam)
Power Plant	Uremia combinatory-cycle Power Plant	Tadbir sazan Saramad Co.	design, supply, and manufacturing 4 heat recovery boiler units Weight of the manufacturing equipment: 6540 Tons Technical characteristics of each boiler: 241.2 t/h, 520 °C, 90 bar.a (HP Steam) 32.4 t/h, 230 °C, 8.5 bar.a (LP Steam)
Power Plant	Romaileh combinatory-cycle Power Plant	Shamara Co.	design, supply, and manufacturing 12 heat recovery boiler units Weight of the manufacturing equipment: 26154 Tons Technical characteristics of each boiler: 241.2 t/h, 520 °C, 90 bar.a (HP Steam) 32.4 t/h, 230 °C, 8.5 bar.a (LP Steam)
Power Plant	Chabahar combinatory-cycle Power Plant	Jonoob-e-Shargh-e-Saba Power Production Co.	Weight of the manufacturing equipment: 4359 Tons Technical characteristics of each boiler: 241.2 t/h, 520 °C, 90 bar.a (HP Steam) 32.4 t/h, 230 °C, 8.5 bar.a (LP Steam)
Petrochemical	Makran Power and Steam	Makran Water Force Co.	design, supply, and manufacturing 2 heat recovery boiler units Weight of the manufacturing equipment: 3970 Tons Technical characteristics of each boiler: 345 t/h, 430 °C, 45 bar.a (HP Steam)
Power Plant	Gharb-e-Roud-e-Shour combinatory-cycle Power Plant	Amirkabir Power and Energy Production Co.	design, supply, and manufacturing 3 F-Class heat recovery boiler units Weight of the manufacturing equipment: 10817 Tons Technical characteristics of each boiler: 219.7 t/h, 560 °C, 140 bar.a (HP Steam) 49.2 t/h, 560 °C, 34 bar.a (IP Steam) 40.7 t/h, 235 °C, 4.97 bar.a (LP Steam)
Petrochemical	Hengam combinatory-cycle Power Plant	Heat Power Plants Holding Co.	design, supply, and manufacturing 2 F-Class heat recovery boiler units Weight of the manufacturing equipment: 7240 Tons Technical characteristics of each boiler: 340.2 t/h, 541 °C, 118 bar.a (HP Steam) 38 t/h, 540 °C, 31 bar.a (IP Steam) 30.7 t/h, 365 °C, 9 bar.a (LP Steam)
Water	Water Production Complex of Bushehr	Bushehr ABFA Co.	Design, engineering, supply and manufacturing a water desalination plant with a capacity of 35000 m3 per day

Operational Sites where the Company has been active:



- ▲ Power Plant Projects
- ▲ Oil & Gas Projects
- ▲ WTP Projects
- ▲ SWRO Projects



Main Industries in which the company has been active:



Products Perspective

- Heat Recovery Steam Generator Boilers(HRSG)
- Industrial Water Tube Boilers
- Conventional Steam Power Plant boilers
- Combined heat and power Boilers(CHP)
- Shell & Tube Converters
- Defrost
- Pressure vessels and distillation towers
- Desalination, water purification systems
- Trash-burning boilers

Service Perspective

- Boiler maintenance services
- Project Management Services
- Laboratory services of metallurgy and calibration
- Monitoring the installation and commissioning process
- Upgrading and development of steam generating units
- Conducting periodic inspections
- Supplying materials and equipment (boiler area)
- Supplying spare parts (boiler area)
- Product support in form of long-term service contracts
- Troubleshooting Boiler Defects and Boiler Periodic and Case Repairs
- Providing specialized training concerning boiler and accessories
- Engineering consulting and fault analysis

Types of Projects

Power Plant Projects (Recovery Boiler, Steam Boiler, CHP)
Petrochemical Projects (water-tube boilers)
Oil & Gas Projects (Reservoir, Converter, DE lubrication, Distillation Tower, Storage Tank)
Water projects (industrial and urban water treatment plant, water desalination with RO method)

Recovery Boiler Projects(HRSG)

- 147 heat recovery boiler units
- 43 projects in field of oil, gas, petrochemical and power plant
- 39904 tons of steam per hour

Water Tube Boiler Projects (industrial)

- 40 industrial water tube boiler units
- 11 projects in field of oil, gas, petrochemical and power plant
- 6240 tons of steam per hour

Boiler Projects (conventional)

- 2 conventional boiler units
- 1 project in field of power plant
- 2080 tons of steam per hour

Water Projects (Packages)

- 1 water desalination project with SWRO method with a capacity of 35000 m3 per day
- 1 WTP project in field of power plant with RO+CE DL method with a capacity of 33 m3 per hour

Domestic Target Markets

Mapa PG section (including development 1, 2 and 3)
Mapna O&G section (including Neyr pars)
Mapna Manufacturing Companies (TUGA, PARS ...)
Mapna IP section
Power Generation Companies
Oil, gas and petrochemical companies
Non-Mapna GC Companies
Investment companies
Steel companies
Other Mining Companies (Iron, Copper, Cement, etc.)
Municipalities Organization
ABFA Organization
Thermal electricity

Foreigner Target Markets

Iraq
Syria



Awards & Achievements

- Certificate of Quality Management System according to ISO9001: 2008 standard
- Certification of Environmental Management System according to ISO14001: 2004 standard
- Occupational Health and Safety Management System Certificate according to on OHSAS 18001: 2007 Standard
- ISO / IEC 27001: 2005 Management System Certificate
- ISO 17025 Laboratory Verification Certificate
- Safety Verification Certificate

Company Certificate Of Appreciation

- Crystal Statue of National Organization Excellence
- Silver statue of national green industry
- The first rank and the golden statue of the country's top safety workshop for safety performance
- Elite Worker of the Year Award from the President (Dr. Mehdi Shahabi) (2016)
- Silver Statue National Award of Iranian Premier Project in South Pars Phase 15 and 16 Projects
- Alborz Province Elite Industrial Employer (AbdolMajid Rajabi)
- ISO9001: 1, ISO14001: 1, and OHSAS18001: 1 certifications
- Laboratory Verification Certificate (ISO17025)
- ISO 27001 Certificate for Information Security Management System
- Certificate of Appreciation from Iranian Oil Industry Equipment Manufacturers Association
- Receiving a statue and a certificate of appreciation as a sample engineering unit
- Elite Statue of the Fourth Conference of Users of Kerman Hybrid and Gas Cycle Units
- The Statue of the First International Conference on Welding and Non-Destructive laboratories
- Certificate of Elite Supporter at the 39th Power Plant Chemistry Conference in Isfahan
- Proficiency Certificate in Impact and Hardness Testing
- National Prize for Industry and Mining
- Golden Rank in Business Card Ranking Plan

Foreigner Corporations and Commercial Partners

Sulzer Co.
Designing various industrial, power plant, oil and gas pumps

Tubos Co.
Manufacturing various pipes and tubes

CNIM Co. (France)
Designing trash-burning boiler

Veolia Co. (France)
Designing water desalination equipment

CMI Co. (Belgium)
Transferring technical knowledge on designing F and H- class recovery boilers, and engineering service projects



Tenaris Co. (Italy)
Manufacturing various pipes and tubes

Macchi Co. (Italy)
Designing industrial boilers

AST Co. (Italy)
Designing and manufacturing various safety valves

Hyflux Co. (Singapore)
Designing water desalination equipment

Doosan Co. (South Korea)
Transferring technical knowledge on designing E- class recovery boilers of horizontal type

Workforce Perspective



Total number of human resources: 1228

Diagram of human resources based on job experience

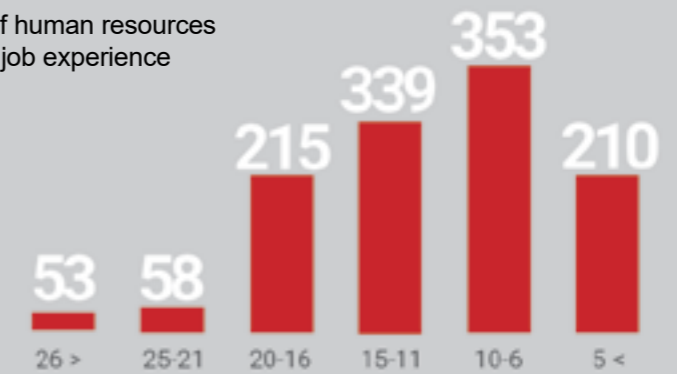
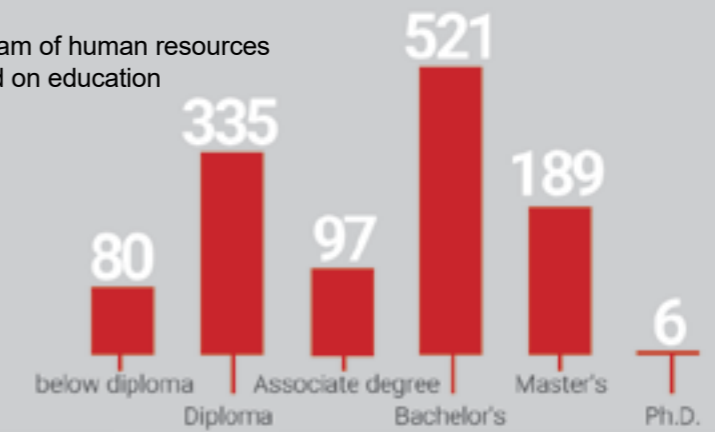


Diagram of human resources based on education



Financial Perspective

Latest Stakeholders Status

MAPNA Group	61.72%
NEYR PARS Co.	32.49%
MAPNA Turbine Engineering and Manufacturing Co. (TUGA)	5.79%

1057 Capital Investment (Billion RLS, 2017)

760 Net Profit (Billion RLS, 2017)

1514 Gross Profit (Billion RLS, 2017)

Organization Performance at a glance

customer satisfaction (2017) %81

Employees Satisfaction (2017) %66/51

Society satisfaction (2017) %68/5

Suppliers' satisfaction (2016) %58/66

Operational revenues (Billion RLS, 2017) 6038



Social Responsibility Strategy

Chapter 2

Sustainable Development Goals



MAPNABE

Financial Perspective

MAPNA Boiler Co. has always been involved in macro planning since its establishment and has considered all its practices in this regard. Also, the company has always strived to keep its management style up to date. The Strategic Planning Unit, as a subsidiary of the Planning & Systems Deputy, is responsible for planning and executing the organization's strategies. Due to the importance of strategic management in the company, a committee called the Strategic Management Steering Committee directs the affairs related to this area and is accountable to the CEO of the organization for deviating from

the program by evaluating strategic indicators. The members of the committee include the CEO and all deputies and immediate managers as senior managers of the organization and the strategic planning manager of the organization, who pursue the following missions:

- Determining the company's macro policies and goals
- Revising the business level strategy
- Controlling the realization of business-level strategic goals and programs
- Issuance of task strategies

Programming and strategic performance history in the company is as follows:

2008-2009

- Establishment of Strategic management process (based on David's model), formulating and communicating the first edition of the strategic plan
- Creating strategic management dashboards using QPR-BSC software

2010-2012

- A fundamental revision of the strategic plan with regards to changes in environmental conditions (such as stopping development projects in the field of power plants, changing group marketing policies, increasing equipment capability) and announcing a second revision of the strategic plan.
- Collaboration with Palladium Co. to implement the Mapna Group Strategies and partially editing of the company's strategy map to align with the Group's strategy and to announce the Third Edition of the Strategic Plan
- Implement strategic plans (such as establishment of SAP, product development projects, service development plans, sales and marketing development, marketing and sales activities)

2013-2014

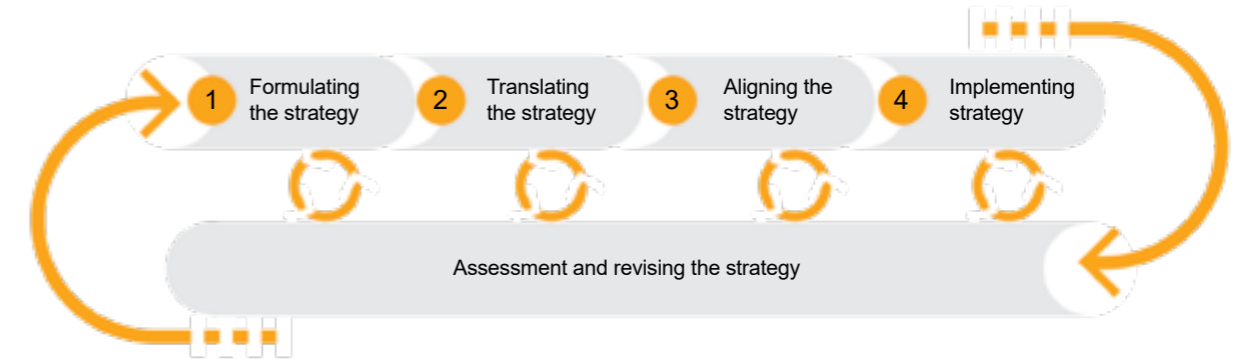
- Establishment of an independent strategic planning unit with OSM approach and annual strategic readiness assessment of the company with SFO model
- Strategic Management Process Review Based on the Kaplan-Norton Comprehensive Process (Figure 2c-1)
- Establishment of the annual strategic plan review approach and announce the three-year horizon plans
- Implementing strategic plans (such as establishment of standard PMBOK, design and establishment of marketing and sales structures and processes, product development projects to reduce current product technology gaps and new product creation, technology management process deployment projects)
- Implementing scenario planning and risk management of strategic goals
- Developing activities to increase employees' strategic awareness, such as holding conferences and competitions

2015-2017

- Establishment of a strategic task planning approach
- Establishment of backup strategies in the areas of marketing and sales, technology, supply, human resources, knowledge and ...
- Development of scenario planning
- Improving strategic management dashboards with Qlik View software...



Mapna Boiler is currently using Norton and Kaplan's model in strategic management for its strategic direction and therefore follows the steps below. These steps are implemented in the strategic management system of the company:

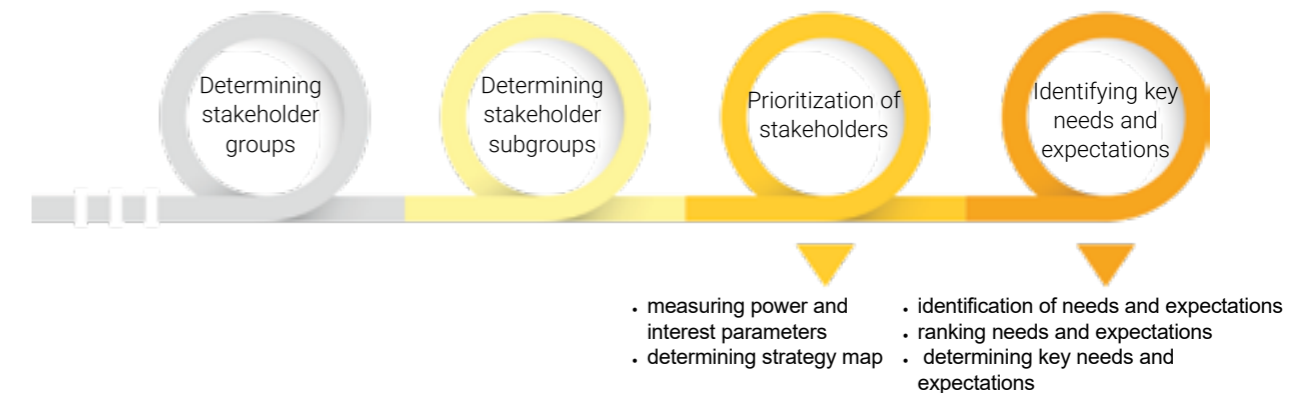


1) Formulating the strategy

In this step, the company begins to formulate or revise the strategies. At this point, the following steps will be taken:

Analyzing stakeholders' expectations

Stakeholders are individuals, groups or organizations that have a direct or indirect stake or interest in the organization because they can influence the organization. Investigating the Needs and Expectations of Stakeholders in Mapna Boiler includes the following steps:



Organizational stakeholder groups are as follows. Each may have its own subgroups. After determining stakeholder groups, their needs and expectations are identified and key expectations are categorized. The process of identifying and prioritizing stakeholders' desires, the expectations, feedback, surveys of some of them, and experiences of day-to-day interactions with stakeholders are considered:



Mission, Vision and Values:

In this step, the orientation elements of the company are formulated and revised based on the key expectations of the stakeholders and the future of the company with the consensus of senior managers in the Strategic Management Committee.

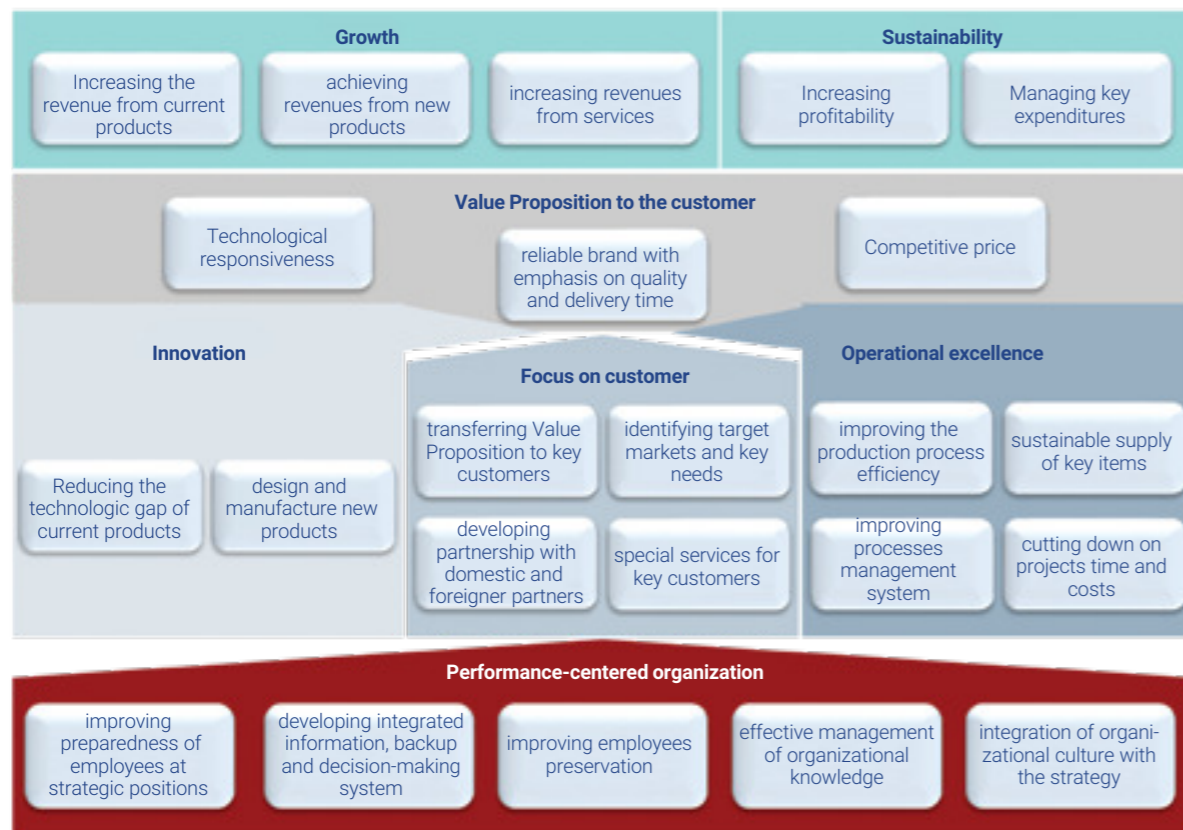
Analysis of macro environment, industrial environment and internal environment:

These analyses examine the opportunities, threats and strengths and weaknesses of the key macro, industry and internal environments of the company.

Strategy formulation:

After the environmental analysis, the strategies of the company are formulated and presented in form of a macro plan of the strategies of the company. The strategic plan of the macroeconomic domain in 2016 to 2018 Vision is as follows:

Strategic plan (2016-2018)



2) Translation, Integration and Implementation of strategy:

After formulating the strategies and the organization's macro plan, the organization's task strategies are formulated and implemented for the different parts of the organization; then, action plans are implemented. Afterwards, key performance indicators for program assessment are compiled and measured annually, and so the implementation of strategies is evaluated.

Strategic plan (2016-2018)



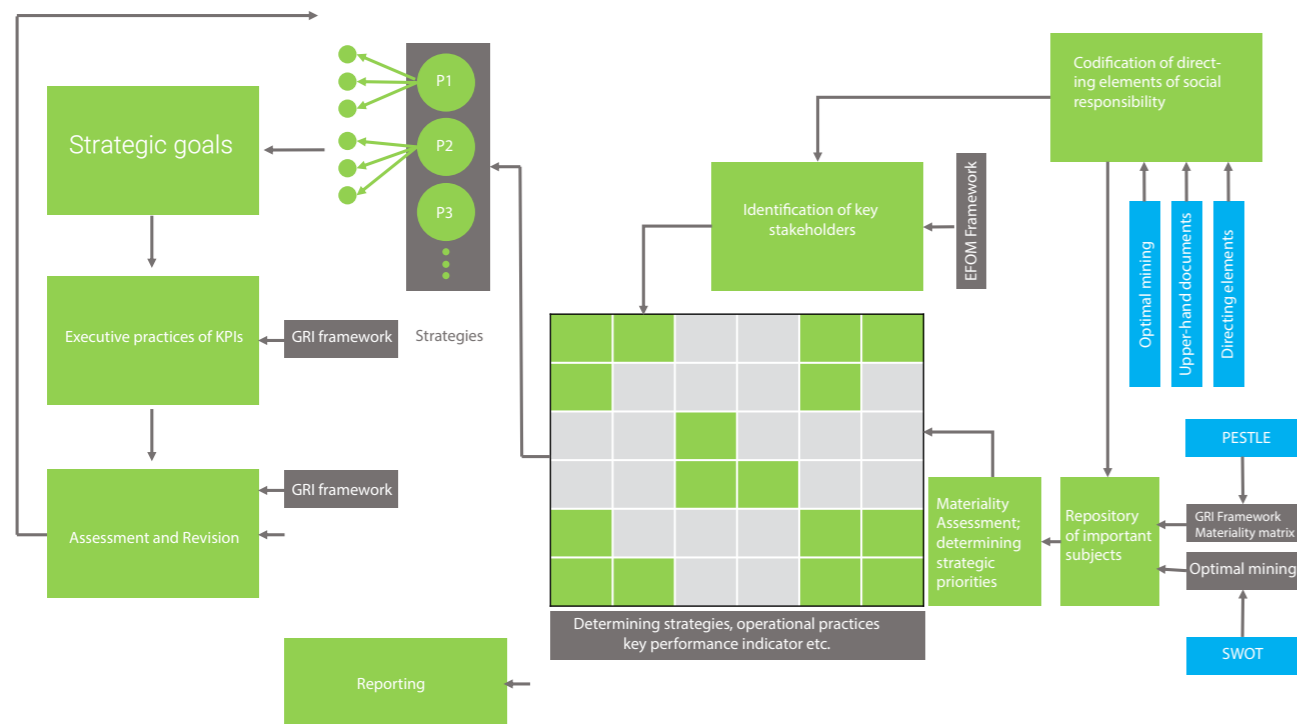
Method of formulating goals, strategies and social responsibility plan

Social responsibility is a topic of concern for managers and staff at MAPNA Boiler & Equipment Engineering and Manufacturing Co. The company has always held itself accountable to all stakeholders such as the community, and has strived to keep this responsibility.

The company has defined a comprehensive system for establishing its social responsibility by utilizing internationally-accredited standards and modeling top companies. Mapna Boiler also defines its social responsibility goals, objectives and mission statement along with its business goals. The company

strives to take a step towards responsible corporate citizenship based on the model developed.

In this regard, Mapna Boiler Company develops the elements of social responsibility and its goals and strategies in line with business strategies of the company. The company uses the approach of implementing the strategic plans of the organization, namely the Norton-Kaplan scorecard approach, in the implementation of the corporate processes management system. The developed model of MAPNA Boiler's social responsibility is as follows:



Based on this systematic approach, the orientation elements of social responsibility were firstly formulated based on such issues as the orientation elements of the organization, and the content of Strategic documents such as the Charter of Sustainability and Benchmarks. Then, key stakeholders were identified and their needs and expectations were extracted in terms of issues through GRI framework, Benchmark, environmental analysis and case studies and were prioritized by stakeholders on the basis of two importance indicators for the beneficiary and importance for the organization in the Materiality Matrix. Next, the social responsibility plan and strategies and related operational plans were formulated and were put within the frame of the organization's social responsibility plan and were implemented since the beginning of 2015.



Orientation elements of social responsibility plan of the organization:

Social responsiveness Economical dynamicity Environmental sustainability

Being recognized as the role-model in field of social responsibility among Iranian organizations by 2025

Achieving this vision is considered by the company through adapting more of the organization's activities to GRI standards and continuous improvement in this area and reporting activities at the company's two-year timeframe.

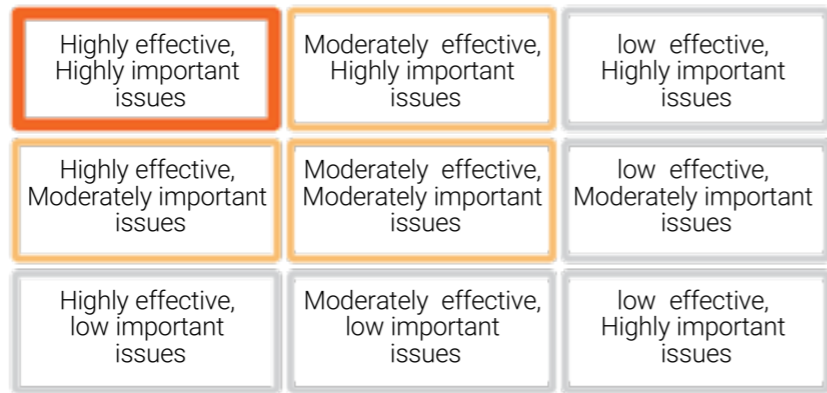
- 2025 submitting the social responsibility report guaranteed by GRI Organization
- 2023 submitting the social responsibility report with national guarantee, and being ranked among top five companies
- 2021 submitting the social responsibility report with national guarantee, and being ranked among top ten companies
- 2019 submitting the social responsibility report with national guarantee
- 2017 submitting the first social responsibility report
- 2015 Formulating the organization's social responsibility model



Identifying Material Topics

In order to define the goals and macro-strategies of social responsibility based on the aforementioned model, after formulating the mission and vision of social responsibility, the company has prepared an information bank of various material topics on the basis of optimal GRI framework and environmental reviews considered by targets stakeholders. On the other hand, the organizational stakeholder groups identified in the firm's strategic management model are extracted and prioritized for sustainability issues and are placed in the Materiality Matrix, which expresses the

importance of the issues to different stakeholders. These stakeholder sustainability issues are prioritized in meetings with stakeholder supporters. These supporters have been selected so that they have both an adequate understanding of the issues that are important to the company and experience of working with stakeholders. Hence, in the meetings held, the importance of the issues for the company and each stakeholder is identified, and then the issues that are of high priority to both are identified as strategic priorities in social responsibility.



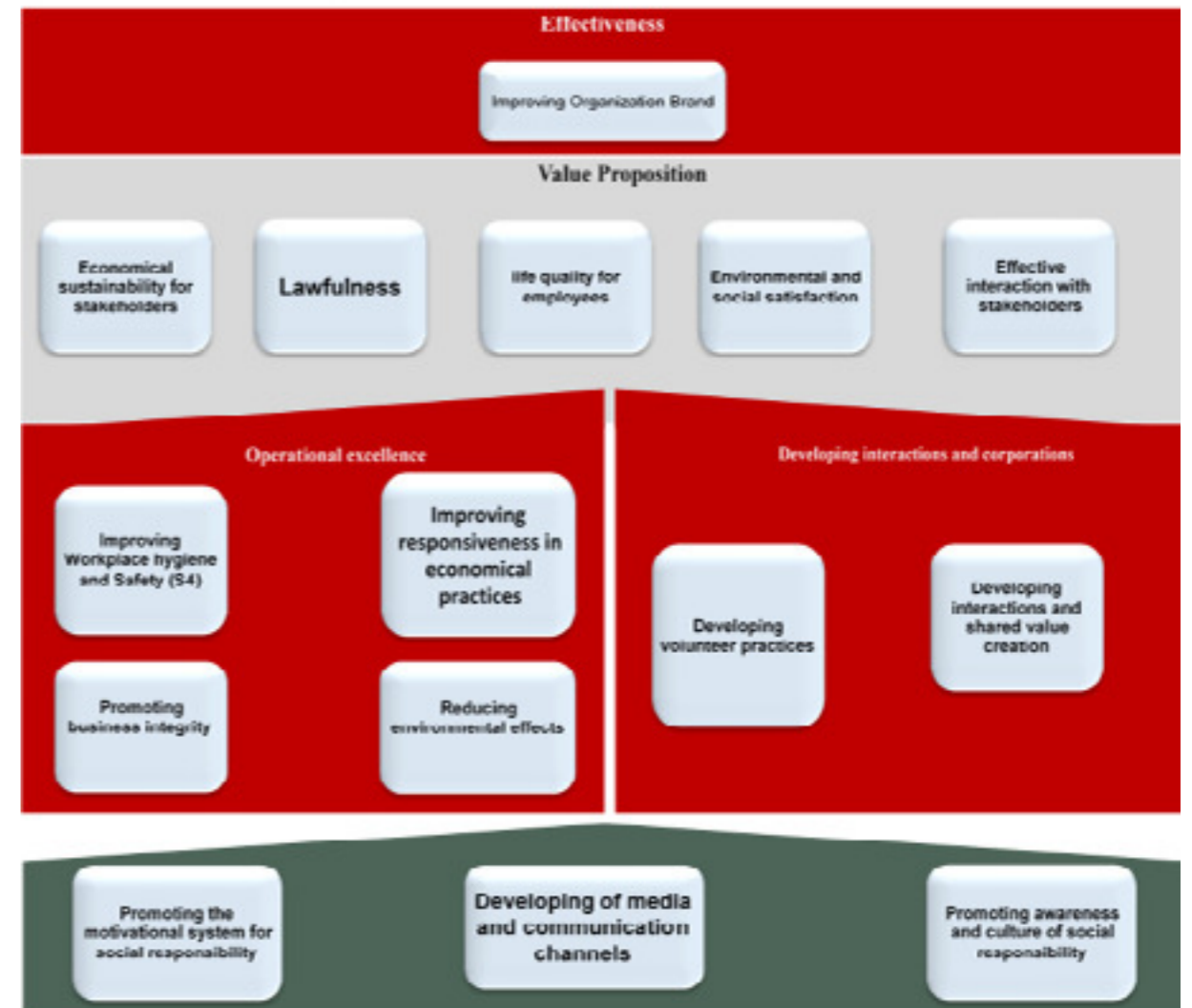
In this way, the strategic priorities of MAPNA Boiler Engineering & Manufacturing Company are as follows:



Formulating the strategic CSR plan

In the strategic management approach of the company, which also uses social responsibility to streamline and monitor its practices, it is important to formulate a strategic plan. To this end, a map of the organization's social responsibility strategy has been prepared by examining the stakeholders and their strategic issues, and linking them:

CSR Strategic plan



Formulating the strategic CSR plan

Measures and programs are defined to achieve each of the above strategic goals in the field of social responsibility. These programs as well as their relevance to strategic priorities and strategies are as follows:

To implement social responsibility strategies based on what has been stated, MAPNA BOILER provides the appropriate infrastructure and platforms, and establishes and reinforces processes within the company. It also defines actions in the organization in order to achieve these goals. The complexity of these infrastructures, processes and activities leads to the creation of five priority values for the organization's stakeholders that can be seen below.



Strategic priorities (Materiality Topics)	Strategy related to materiality topics	Action
Comprehensive Awareness, Informing and Culturally constructiveness (M1)	Developing of media and communication channels (S1)	Systematic management of communication channels (A1)
	Developing Interactions and Creating Shared Value with Stakeholders (S2)	- Implementation of Comprehensive Communication Project (A2) - Development of marketing promotion document (A3) - Development, implementation and management of social responsibility reporting system (A4)
	Promoting the social responsibility motivation system (S3)	- Developing social responsibility motivation system (A5)
Shared Growth (M2)	Developing Interactions and Creating Shared Value with Stakeholders (S2)	- Developing joint actions with stakeholders in the form of implementing a communication project (A6)
Safe environment Facilities and conditions (M3)	Improving Workplace hygiene and Safety (S4)	Reference to HSE
Environmental Impact Management of Products and Processes (M4)	Reducing environmental impacts (S5)	Reference to HSE
Business and Human integrity (M5)	Promoting business integrity (S6)	- Developing and implementing an organizational transparency document (A7) - Promoting strategic Behavioral Codes (A8) - Developing Complaint Procedures (A9)
Volunteerism for Community Development (M6)	Developing volunteer practices (S7)	-Organization's volunteer practices model Based on social marketing (A10)
Economical dynamicity (M7)	Improving responsiveness in economical practices (S8)	- Developing a social Responsibility document attached to all practices (A11)

In MAPNA Boiler, various sectors are involved in social responsibility strategies; hence, the implementation of these strategies is under the responsibility of the Higher Committee for Social Responsibility, chaired by the CEO and Vice Presidents and Senior Managers of the sectors involved in social responsibility. The committee is responsible for policymaking and overseeing the formulation and implementation of social responsibility strategies and programs and their evaluation and compilation and approval of the CSR report.

The CSR engages various units of the company in social responsibility issues and programs, most notably public relations as a social responsibility and its macro planning officer, as well as being valuable in effectively interacting with all stakeholders, community satisfaction and law; also the deputy of human and financial resources as the main responsible for enhancing the quality of life of employees and their well-being, and the deputy of planning & Systems,. The main task units involved in social responsibility in the organizational chart are as follows:



The members of the High Committee on Social Responsibility as the highest management body in the field of social responsibility are suggested by the Director of Public Relations as the Head of Social Responsibility in consultation with the CSR consultants and approved by the CEO. The role of the members of this committee is as follows:

Status	Role in the committee
Public Relations Manager	Leader of the process of social responsibility and its trustee in the organization, supportive of the community and responsible for the social and environmental impacts of the organization
Deputy of Planning & Systems	Strategic Supporter of Social Responsibility and Macroeconomic Policy Debate (representing the Managing Director)
Human resources manager	Advocating the staff and responsible for welfare, education, legal rights, work-life balance, equality and discrimination
Deputy of Sales and Marketing	Advocating the staff and responsible for welfare, education, legal rights, work-life balance, equality and discrimination
Deputy of Product Design and Development	Responding the customers and the community for the impact of products on them
Deputy of Supply	Supporting suppliers for being dealt with in a fair, transparent and accountable manner

In addition to the Social Responsibility Committee which is responsible for macro planning in the field of social responsibility, other committees are also effective in promoting social responsibility programs within the organization, who work under the subcommittee on social responsibility and provide the committee with the necessary reports. The names and brief descriptions of these committees are as follows:

Committee Name	Function
Committee for the content of communicative hannels	The committee is responsible for planning and preparing the content of the company's communication channels from the organizational units and disseminating them in order to satisfy the stakeholders and to achieve organizational transparency. It will be a subcommittee on social responsibility.
Mapna Eco	Establishing Volunteer corporations with Partners, Families, and Mapna community for Cultivating Social and Environmental Behavior Patterns for Corporate Social Responsibility
Poll and survey	Conducting poll and Thought Survey of All Stakeholders to Monitor Their Satisfaction
Stakeholders' satisfaction and complaints	The committee is responsible for reviewing stakeholders' satisfaction and reviewing their complaints and organizational legislation.
HSE	Determining and formulating strategic policies of HSE and energy consumption management and providing solutions to improve the safety, hygiene and health conditions of the company
EVC	Promoting organizational culture, ethics and values

All of the key issues and issues that come up in the strategy and program are monitored by these committees. If the critical issue falls outside the domain of these committees, the issue is referred to the CSR as the highest body responsible for the social responsibility of the organization and it adopts appropriate decisions and strategies to smooth it out.

Assessment of Social Responsibility Approaches

Having set and implemented the plants in form of defined structures, certain criteria are determined to annually examine the effectiveness of implementing these plans. Some of these criterial were referred to over the report and some others are as follows:

No. of sews against the company in legal organizations	0	No. of news published in media	115	Total number of visits to the company	43
No. of employees participating in volunteer practices	657	Percentage of issues clarified in organizational operations	85/7	Percentage of realization of plans	73/33
Lack of environmental compliance index	0	HSE atmosphere (%)	60/68		

Effective Interaction with Stakeholders

Chapter 3

Sustainable Development Goals



MAPNABE

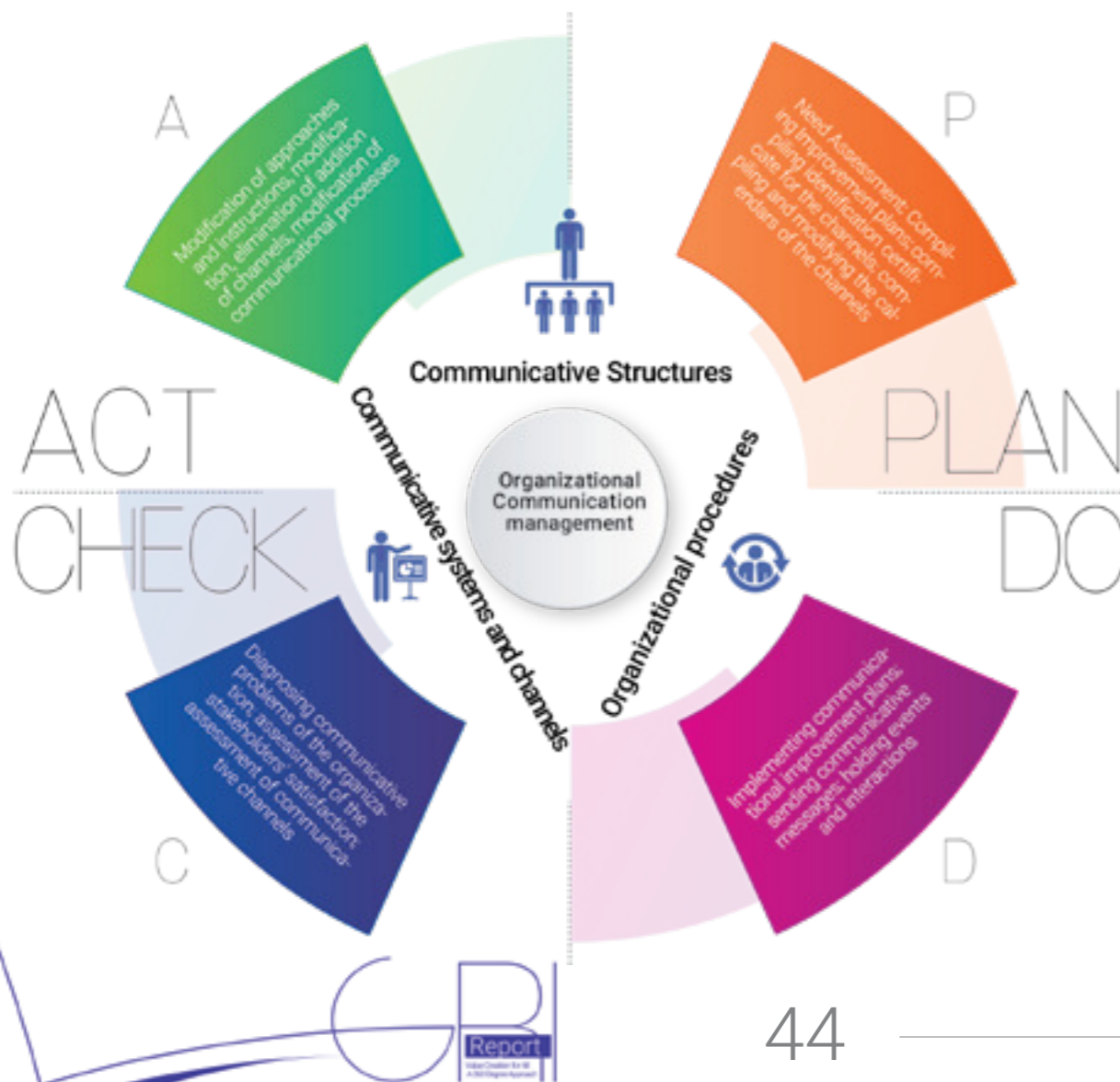
The first value created by the social responsibility of the organization is effective interaction with all stakeholders.

The organization, as a social institution, requires communication and effective interaction with stakeholders; hence, understanding their motivations is a key factor in achieving the intended goals of the organization. Communicating and interacting with all stakeholders is one of their most important expectations, which are addressed in Mapna Boiler's social responsibility. In this regard, Mapna Boiler Company has tried to have a systematic way of interacting with its stakeholders.

Systematic management of stakeholder relations

MAPNA Boiler and equipment Engineering and Manufacturing Company has provided the appropriate infrastructure to enable effective interaction with all stakeholders in order to manage the processes associated with these interactions. After creating the necessary infrastructure for the communication management process in form of the PDCA cycle, the company plans, executes, monitors and improves the system.

The MAPNA Boiler's systematic communication channel management is implemented as follows:



1. Communication channel management infrastructure

In order to function properly, every organizational system needs the infrastructure which should be upgraded before any implementation of the plan. MAPNA boiler has well established these structures within the organization. The types of these infrastructures can be described as follows:

1.1 Organizational processes:

Organizational processes, as the source of operations, are one of the most important infrastructures for communication since all systematic interactions are based on a system of processes. MAPNA Boiler also has a systematic process system based on the needs of the company and process management models such as APQC. The system of processes in companies enables units to be connected based on related processes, thereby contributing to the systematic interaction of employees. However, the impact of processes is not limited to employees, and the types of organization processes that can be seen in the following table affect the stakeholders of the organization.

	customers	Stakeholders and partners	suppliers	Banks and financial institutions	government	environment	community	Mapna Group
Obtain group strategies, credit feasibility, supplier technological capability	•	•	•	•	•	•	•	• Strategies management
Interacting with partners to gain market share, and meet market and customer needs	•	•			•		•	• Products and services sales and marketing
Technological Alignment with other products categories, national and customer requirements	•	•	•	•	•			• Design and development
National and international constraints and regulations, quality approval of parts and equipment by the customer	•	•	•	•	•	•		• supply
Mapna Group Requirements, Obtaining Quality Approval from Customer	•							• production
Mapna Group Requirements, Obtaining Quality Approval from Customer	•							• Project management
Mapna Group Requirements, Obtaining Quality Approval from Customer, local supply of parts and services, supervision	•	•						• Installation and delivery
Group assessment focus					•			• HR management
Supplying the credits				•				• Infrastructure and properties management
Educational interactions with the group, community surveys, environmental requirements					•	•	•	• HSE EN
National and international, customer, partners, environmental requirements	•	•	•	•	•	•	•	• Management and development of business capabilities
Government licenses, information security laws			•		•			• IT management
Updating laws and regulations, sharing knowledge and information	•	•	•	•	•	•	•	• External relations management
Receiving and paying funds, financing, budgeting	•	•	•	•	•			• Financial resources management

1.2 Communication Channels and Systems:

These are the organization's communication hardware on the base of which organizational interaction is formed. MAPNA Boiler Co. manages various communication channels for interacting with all its stakeholders, as follows:

- 1) Outlook
- 2) Portal
- 3) Desktop
- 4) SMS
- 5) Website
- 6) Banner and billboard
- 7) Mapna newsletter
- 8) Catalogues and brochures
- 9) Company's social channel
- 10) CEO's social group
- 11) Face-to-face talk with the CEO
- 12) Emails to foreigner stakeholders
- 13) Social channels of the project sites

1.3 Communicative structures:

All processes and activities of the organization require structures for management and planning for them. Since organizational communications are comprehensive tasks throughout the organization, the structures related to management of relations in MAPNA Group are in form of a committee. Content committee, consisting of representatives of different units of the organization, provide the content for communicative channels and make decision on planning and modification of the channels. Satisfaction evaluation committee identifies communicative needs of stakeholders, assesses the communicative bugs and plans for the concerned improvements

2. Planning phase

At this stage communication planning is being formed. In the planning phase, actions are defined to suit communication needs and improvement. In addition, for each existing channel, the relevant communication needs, channel issues, audience, and authority are identified. An annual calendar is also created for each channel to communicate the information needed and to update the information regularly. The types of communication needs in Mapna Boiler are as follows, based on which Different communication planning can be performed.



3. Implementation

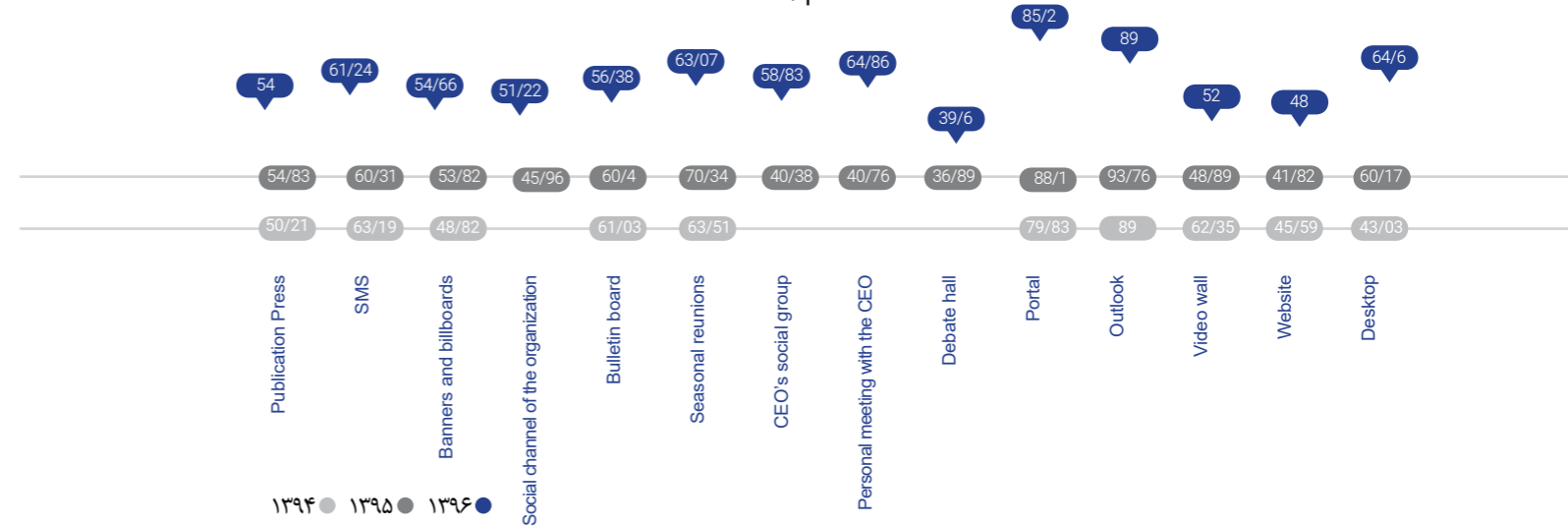
At this stage, defined actions are generated and sent to create and improve communication channels and planned interactions. Moreover, messages needed for a variety of organizational channels are generated and sent. Some of the channels planned for the year 2017 include social channel for customers (Telegram), LinkedIn etc.

4. Assessment

At this stage, the organizational communication is annually debugged and the performance of the communication channels and their weaknesses are identified. Some of the components of this assessment are as follows: Desktop/ website/ video wall/ outlook/ portal/ debate hall/ face-to-face talk with the CEO/ CEO's social group/ seasonal gathering/ bulletin board/ organization's social channel/ banner and billboard/ SMS/ publication

5. Corrective Action

At this stage, corrective actions are taken following the evaluation of the channels and the disruption of the communication, which may lead to deletions, additions or modifications to the relevant guidelines and instructions.

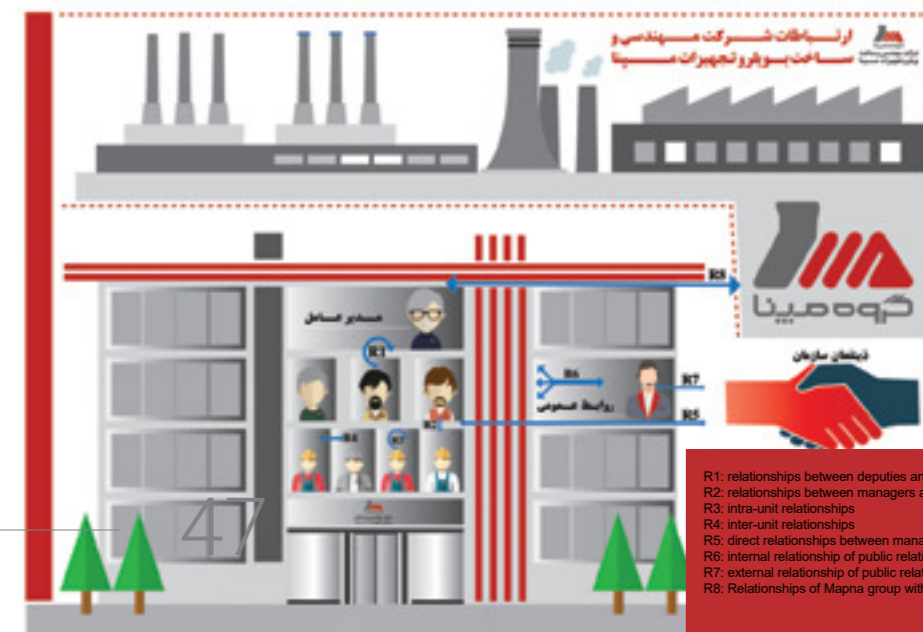


Various types of organizational communication

Based on the communication system mentioned above, the company has formed various interactions with its stakeholders so far, some of which include:

1. Employees

MAPNA boiler and equipment engineering and manufacturing company has 8 communication levels in its structure, in which the communication needs are evaluated and programs are implemented to suit the organization's communication model. These levels are as follows:



- R1: relationships between deputies and senior managers
- R2: relationships between managers and unit personnel
- R3: intra-unit relationships
- R4: inter-unit relationships
- R5: direct relationships between managers and external stakeholders
- R6: internal relationship of public relations with managers and personnel
- R7: external relationship of public relations with external stakeholders
- R8: Relationships of Mapna group with Senior Managers of the organization

In addition to formulate a comprehensive communications document based on the above levels, MAPNA Boiler identifies the communication needs of its employees and in order to meet these needs, has designed various communication channels within the company. Some of the communication needs and corresponding communication channels are as follows:

Identified communicative need	Communication channels	Type of communication	Systematic components	Achieved optimizations
Transferring ideas and problems to organization management	Communication with CEO and Senior Managers (in-person meeting with CEO -; CEO's Telegram channel)	down to up	Preparing a calendar for staff meetings with the CEO and other senior managers	in-person meeting with CEO -; CEO's Telegram channel
Business communication and receiving and sending internal and external correspondence	OUTLOOK/ E-mail	two way	Correspondence Execution Procedure (P11)	Periodic promotion of Out Look
Knowledge of staff performance and personal training records	Personnel's attitude software and opinion training software	two way	Defined mechanism processes	Upgrading attitude Software and changing training software
Receiving external information and informing outside the organization	Website- telegram channel	Up to down	Managing the Telegram Channel and Site through the Public Relations Unit	upgrading the company's website and creating a systematic framework to keep it up to date
Transferring strategies, goals, plans, business conditions and management systems	Portal - Seasonal and annual gatherings such as HSE Day and Worker's Day Business Breakfast	Up to down	Seasonal gatherings of managers and employees	Intra-deputy meetings in the form of business breakfasts focusing on single goals
Information on documentation, rules, regulations and instructions	Portal	Up to down	Portal/ integrated documents	Announcing administrative rules and regulations through the forum
Keep up with local news, projects and views	Bulletin board p portal- banner - Video wall-	Up to down	Management through public relations unit	Creating a portal for meetings
Transferring staff's opinions and perceptions	Employers' poll	two way	Preparation of staff poll calendar / verified survey questionnaire	Reviewing the questionnaires in the forum
Knowledge transfer and promotion of science	Publications (Journals, magazines, brochure)	two way	Publishing scientific papers at Mapna newsletter	-

Mapna Boiler's leaders also encourage the development of communication and participatory management at all levels; they have always been available to employees, attentive to their wishes, and responsive to company requirements and regulations. Ease of access and interaction with company leaders has always been emphasized and has never been subjected to special conditions.

Some approaches to mutual relationship with employees

- Staff meeting with CEO and Vice President
- Presence of the CEO and Assistants in Organizational Units, Public Places (Restaurant, Prayer Room, etc.) and various occasions
- open communication between staff and leaders through Outlook
- Communication with CEO through the Telegram Channel
- Public seasonal meetings in presence of the CEO and the staff, as well as national ceremonies and religious rituals
- Deputies and managers' meetings with the staff (such as working breakfast)
- Academic conferences in presence of the managers and the staff, together with questions and answers

2. Costumers

According to Mapna Boiler's overall communication pattern, due to the necessity of effective relationships with customers, according to their communication needs, several channels have been identified and created with numerous improvements being made in these methods and channels over the years. The effectiveness of these communication channels is evaluated through customer surveys (components of speed and accuracy of customer response). The types of communication channels the company has with customers are as follows:

Identified communicative need	Communication channels	Year created/ improvements	Long-term/ short-term	responsible
Interaction with employer groups through attending meetings and gatherings	Membership in trade unions (such as OPEC, SETSA, ESTESNA, etc.), chambers of commerce, etc..	Since 2013: Reviews to cancel or renew membership	Long-term	Market research and development manager
Company history, list and specifications of terminated and ongoing projects, company contact, products and services introduction	website	2003	Long-term	Public relations manager/ market development manager
Introducing company records as well as current products and services, receiving feedback from company clients	Participation in exhibitions	Since the establishment	Short-term	Market research and development manager
Reference to customers' sites, introducing company capabilities and troubleshoot equipment	Periodic visit to customers' sites	2011: preliminary phase Since 2014: advanced phase (systematic and objective)	Short-term	Deputy of sales and market development
Introducing the capabilities of the company in response to customers' needs	Invitation to visit the company	Since the establishment	Short-term	Deputy of sales and market development
Technical and commercial clarification at tender stage	Clarification Meeting	2010: creation of communication channel	Short-term	Technical offer/ products sale/ service sales manager
Introducing project managers and 1.2 Communication channels to the employer	Kick off meeting	2004: creation of Kick off meeting 2005: creation of communication channel (E-mail)	Long-term	Sales/project managers
Project-related affairs Introducing Design, Supply, Manufacturing, Installation and Planning Coordinators / Submission of Regular Project Planning and Control Reports/ Creating Email Channels and Official Correspondence	Commercial correspondence through email and telephone, Coordination meeting	Since the establishment 2005: creation of communication channel (E-mail) 2008: beginning coordinating meetings 2009: introducing representatives to employers	Long-term Short-term	Project manager
Conduct periodic / case sessions with the employer to review the parties' requirements	Pre Inspection Meeting	Since the establishment	Short-term	Project manager
Determination of channels and procedures for inspection and delivery of products	Pre Inspection Meeting	2009: beginning meetings	Short-term	Project/quality control managers
Informing and announcing	Social networks and SMS	2017	Short-term	Public relations/ sales and market development

3. Suppliers

Suppliers are another group of key stakeholders with whom the company has been contacting through various channels, and based on feedback strategy, different approaches have been considered to such relationships:

Suppliers and partners	invite to conferences	invite to visit the company	visiting the suppliers and partners' sites	meeting	correspondence
Market development partners	•	•	•	•	•
Key domestic contractors (construction)			•	•	•
Key domestic manufacturers of materials and equipment			•	•	•
Foreigner contractors (manufacture and installation)			•	•	•
Foreigner vendors of materials and equipment			•	•	•
Transactional banks		•	•	•	•
Foreigner manufacturers of equipment			•	•	•
Foreigner manufacturers of materials			•	•	•
Foreigner suppliers of licenses and engineering services			•	•	•
Suppliers of general advice				•	•
Suppliers of transportation services				•	•
Suppliers of release services				•	•
MAPNA Group companies	•	•	•	•	•
Domestic contractors (Manufacture and installation)			•	•	•
Domestic vendors of materials and equipment			•	•	•
Domestic manufacturers of equipment			•	•	•
Domestic manufacturers of materials			•	•	•
Manufacturing contractors				•	•
Domestic suppliers of engineering services				•	•

4. The Community

MAPNA Boiler Co. has considered the following channels to communicate with the community:

Communication needs	Communication channel	Year created/improvements	Long-term/short-term
Introducing the company practices	Website	Since the establishment	Public relations
Controlling the impacts of the company practices on neighbors	Periodic meetings	2015	Public relations
Controlling environmental - social impacts and efforts to improve a sustainable environment together with relevant organizations	Periodic meetings	2015	Public relations
General interaction with universities	Conferences and exhibitions	Since the establishment	Public relations
Academic interaction with universities	meetings	--	Product design and development deputy
Informing the company's practices regarding the community	Website, local media, social responsibility report	2015	Public relations
Interactions with the elite	Organizational telephone and email	Since the establishment	HR
Familiarization of the elites with the company capabilities	Visiting the company/ advisory meetings	Since the establishment	Public relations
Request to visit the company by local communities	Organizational telephone and email	2011	Sales and market development/ public relations
Familiarity of the staff family with the company	Organizational publication/ visiting the company	2013	Sales and market development/ public relations

Stakeholders' engagement in organization processes

MAPNA Boiler Co. has always tried to benefit from stakeholders' engagement in its processes with economic, social and environmental subjects, thereby creating win-win and value-creating interactions with them. Some examples of this approach can be seen in the following table:

Stakeholders	Subject	Approach	Examples
Factory contractors	Economic	Suggesting system	Providing creative ideas and opinions, such as installation of plug sockets on welding machines, use of semiconductor electrodes for single-stroke, anti-ignition and washable tube replacement instead of welding mask glass.
Suppliers	Economic	Localization and domestication of manufacturing equipment	Using ideas and capabilities of domestic suppliers to localize the domestic production (such as Mist Extractor with Euro Slot Pars, Spray Valve with Farayand Bokhar, RDLI with Kian Equip Spadana and Saman Energy)
Technology suppliers	Economic	Design and development of new products	Collaboration with Doosan, Macchi, IPS, CMI, NEM, etc. to develop new products (such as HRSG behind E, F and H class turbines, package boilers, CONVENTIONAL steam power boilers)
Customers	Economic	Attracting customer participation in product design and improvement	Niam plan, removing the tank and the Dumping line control valve in the Iran LNG project, eliminating the Purge stage in the boiler setup which shortens the startup time.
Community	Economic	Research collaboration with universities and research centers	Collaboration with the University of Tehran to simulate the Water Tube Boiler Furnace and the Coal Boiler Furnace 325MW, in collaboration with the MAP-FAN Research Institute for the Detection of Shazand Steam Boiler Defects, in collaboration with the Oil Industry Research Institute to build the SRU pilot
Employees	Environmental-social	Holding volunteer campaigns	Clearing Kavosh Boulevard Planting trees on the day of planting Fundraising
local organizations	Environmental-social	Holding volunteer campaigns	Inviting Blood Transfusion Organization forces to collect blood from volunteer staff Cooperation with the Red Crescent and Fire Department to provide staff training and maneuvers

Evaluation of communication and interactions, and corrective actions

In the field of evaluating its communication and interactions, the company performs various assessments as follows:

Evaluation of communication and interactions



1. Evaluating communicational channels

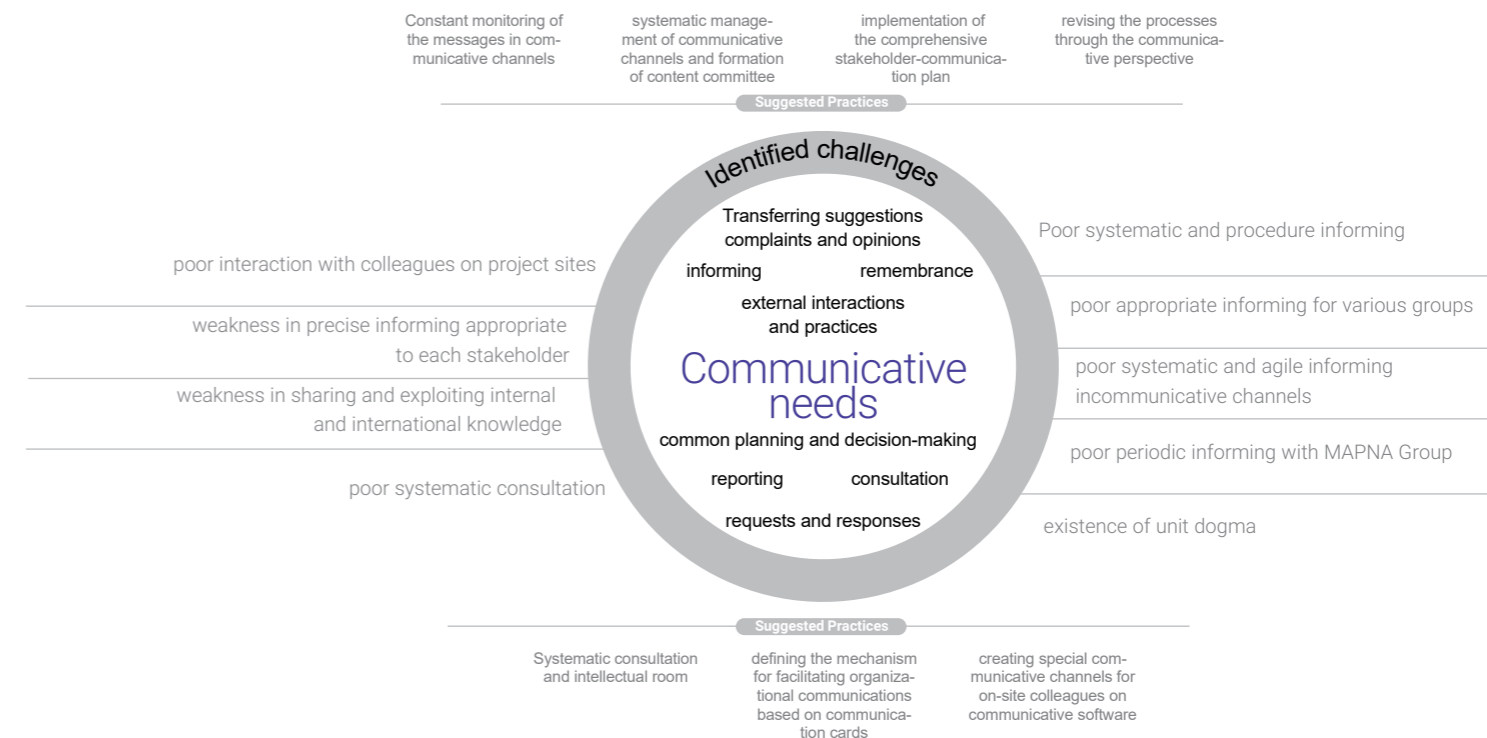
The report annually reviews the satisfaction of the organization's communication channels in general and their use and effectiveness separately. Channels whose indicators do not meet the set goals are reviewed and corrective actions will be defined.

Satisfaction rate with communicational channels



2. Detecting the bugs in organization's relationships

This type of communication assessment will identify and prioritize the organization's communication deficits in collaboration with the representatives of all units and corrective actions will be taken to remove these bugs. The following image shows some of these issues and corresponding corrective actions.



Results of 2017

Components of satisfaction

Community

Satisfaction with the organization 68/4

Law compliance and lawfulness 77/27

Responsible, accountable and serving citizen 70/89

Consideration of national interests and their dignity and authority 80/95

Justice and equal opportunities 64/2

Reflection in the media 61/11

Image in public opinion 75/44

Transparency and accountability 71/67

Respect for the next generation and the people 79/02

Environmental consequences 70/27

Social consequences 72/07

Consequences of the workplace and life cycle of the product 47/06

Supporting charitable foundations and the NGOs 74/59

Respect for ethical values 75/78

Impact on the local economy 76/67



Results of 2017

Components of satisfaction

Staff

66/51 Overall satisfaction of employees with the organization

88/33 Willingness to stay in the organization

57/1 Satisfaction with welfare

56/2 Satisfaction with sports facilities

54/2 Satisfaction with health care services

Customers

81 Overall customer satisfaction

81 Overall satisfaction with quality

78 Overall Satisfaction with Delivery Time

83 Satisfaction with optimal and timely response to customers' needs

85 Satisfaction with responding to client complaints

Suppliers

58/66 Overall supplier satisfaction (2016)

72/70 Average Supplier Rating Score Percentage

Employees' life satisfaction

Chapter 4

Sustainable Development Goals



MAPNABE

The Second value created by the social responsibility of the organization is Employees' life satisfaction.

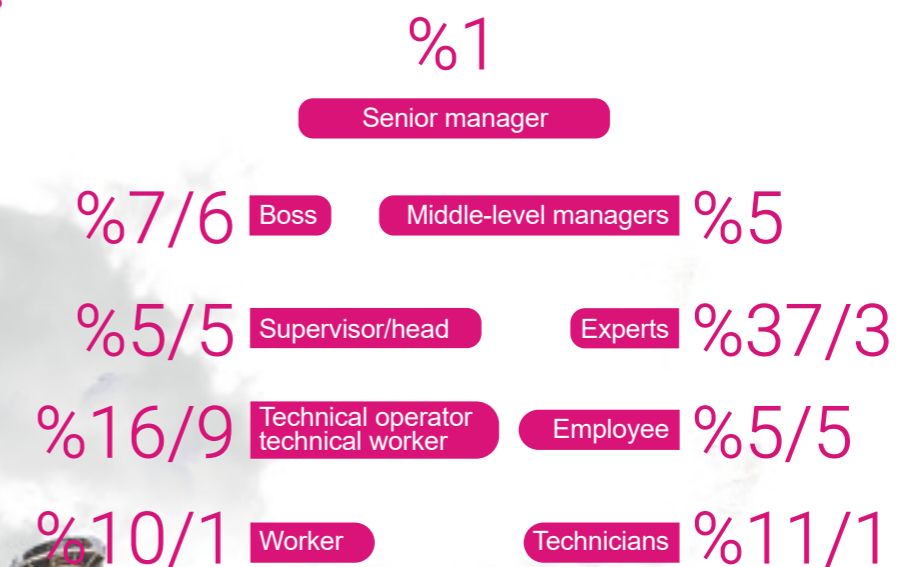
Mapna Group's ethical policy towards human resources

- We consider respect for distributive and procedural equality and justice in all professional respects, and non-discrimination towards all human resources as pleasing to the Lord of the Worlds. Also we have found it as a responsibility set by God to consider justice and neutrality in all decisions, regulations, donating opportunities, and professional systems.
- Good manners and respect for the dignity of colleagues in all working conditions are the principle governing all practices and regulations. We manage the business environment so that a sense of value is a constant gift to the employees.
- Being aware of everything related to the material and spiritual rights of colleagues is a human right; hence, transparent, timely, accurate and complete information is the ethical duty of the organization.
- Human resources, their interests and secrets are divine trust in the organization; hence, trustworthiness and secrecy are our moral duty.
- Scientific advancement and professional advancement is the human resource right. By creating equal educational opportunities, we provide the path to career advancement for all partners. The road to progress in MAPNA is not closed to anyone.
- Promoting job security, spiritual well-being, and spiritual excellence of our colleagues is our moral concern.
- Consideration of the employees' privacy and a system for protecting their privacy is our organizational character.
- Keeping a balance between responsibilities, powers, and facilities is one of the most prominent examples of fairness in the profession.
- We consider being honest and open in dealing with employees, responding to them, and noticing their opinions as significant for the sustainability of MAPNA group.
- It is the right of the employees to enjoy fair and proportionate labor market rights and we commit ourselves to ensuring the security of our employees' livelihoods at all levels.
- Appreciating the employees' good cooperation, cautioning and giving opportunity to colleagues who failed to carry out their duty in an accepted manner to change their ethical manner are the ethical foundations of a well-established reward-punishment system.
- Correcting and facilitating the relationship of human resources with managers and promoting a model of authority-based communication behavior in keeping with our commitment.

Employees profile

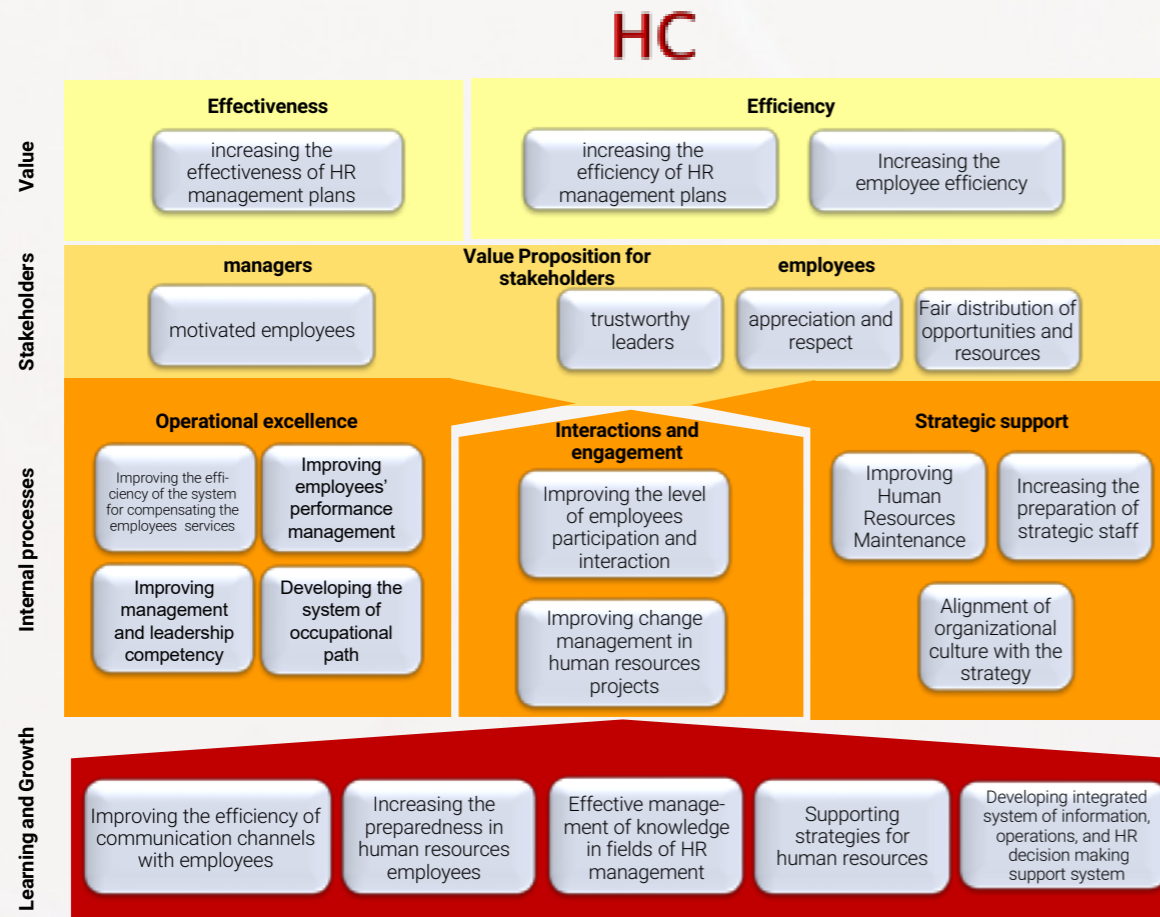


Percentage of employees based on organizational level



Strategic approach towards human resources

MAPNA Boiler Co. regards its employees as their human capital and aims to improve the quality of life beyond their working life. In this regard, the company is engaged in various activities to improve the safety, welfare, health, hygiene and work-life balance, and to increase the awareness and behavior of its employees and to the extent possible to improve their quality of life. The company uses a variety of approaches in this regard. The company has developed a task strategy map in its human resources field. The employee-related strategy map is as follows:



Numerous guidelines, constraints and procedures have been developed and implemented in order to systematically manage human resources, a brief list of which is as follows:

Type of systematic documentation	Name of systematic documentation
Instructions	Employees' employment Conversion - Socialization - Apprenticeship Recruitment - Paying Medical Expenses - Issuance of Certificate and Business Card - Employee Relocation - Salary and wages
Implementation manner	Recruitment- education and training- suggestions
Regulations	Promotion- discipline- cooperation termination- attendance- mission- employees appreciation and motivation system- employees' welfare affairs- commute services

Compensation system

The Employee Compensation Approach at MAPNA Boiler is designed based on new payroll models, centered on experience and in line with MAPNA Group policies. The employee promotion system is also adjusted based on the results of the attitude assessment and in accordance with the strategic HRM program using the MERCE model.

Salary and wage, as one of the most important elements of compensation system, is inspired by 3P model including three different types of payment for position, person and performance.

This considers different factors such as occupation category based on MERCE model, job experience, education level, ranking in the organization etc. Service appreciation system in Mapna Boiler Co. is designed and implemented in respect with planning, recruitment, development and maintaining employees regarding

the policies of MAPNA Group in both financial and non-financial sectors and in accordance with motivational needs of the employees. Moreover, job development path (professional promotion) has been designed as integrated with employees' performance management system, suggestion system and organizational commitment and has been compiled in form of promotion instructions and appreciation system implementation. It has been announced to the employees through the integrated management system and consultation meetings output.



Based on its system of appreciation, Mapna Boiler has defined various rewards, the most important of which are listed below:

Various rewards and appreciations at Mapna Boiler

Type of reward	Details	Coverage
Signing new contracts and taking new projects	Employees will be awarded percentages (commission) if they sign new contracts for new markets and products as well as execute projects at different development stages.	All employees
Strategy and improvement projects	In this type of reward, a defined reward will be paid for defining and implementing improvement and strategy projects at the organization level.	Project team
Selection of elite employees	In this type of reward, elite employees are selected and honored annually in different fields based on defined. These areas include top executives in the offer system, training, organizational culture, HSE, quality systems, organizational creativity, communication and social responsibility. They are also recognized and honored each year on the basis of the defined indices of the top workers in the manufacturing sector.	Elite employees
Motivating key employees	To improve retention and motivation, benefits are allocated to key staff as employees who have a greater impact on organizational goals.	Key employees
Privileges of job promotion	Employees in expertise and master levels will enjoy the anticipated benefits along the career path.	Occupational and expertise class
Implementation representatives/ internal auditors	Representatives and executives are employees who, in addition to their job duties, work with other committees and systematic areas in other units, which are annually honored to keep motivated.	Representatives and auditors
Organizational competitions	To motivate the employees to participate in cultural, sports and systematic competitions, winners are rewarded and honored.	Winners of the competitions
Case rewards	To motivate the employees to participate in cultural, sports and systematic In this type, certain rewards are given to individuals according to guidelines developed in the specialized field. In such cases, bonuses are also awarded to managers based on the special performance of the staff.	All employees
End of year rewards	This type of rewards will be paid to the MAPNA team at the end of each year based on the performance evaluation of the units.	Winners of the competitions
General council rewards	This type of reward is approved annually by the board of directors and paid to the employees after the general meeting.	Winners of the competitions

Ethical Code 161

In MAPNA Group, we set the type of rewards in a fair manner appropriate to performance expectations and differences, having no emphasis on periodic and regular rewards.

Various rewards and appreciations at Mapna Boiler

Type of reward	Details	Coverage
Implementation representatives/ internal auditors	Representatives and executives are employees who, in addition to their job duties, work with other committees and systematic areas in other units, which are annually honored to keep motivated.	Representatives and auditors
Organizational competitions	To motivate the employees to participate in cultural, sports and systematic competitions, winners are rewarded and honored.	Winners of the competitions
Case/unit rewards (Particular practices)	In this type, certain rewards are given to individuals according to guidelines developed in the specialized field. In such cases, bonuses are also awarded to managers based on the special performance of the staff.	All employees
End of year rewards	This type of rewards will be paid to the MAPNA team at the end of each year based on the performance evaluation of the units.	All employees
General council rewards	This type of reward is approved annually by the board of directors and paid to the employees after the general meeting.	All employees

In order to improve employees' motivation to show social responsibility behaviors, the above-mentioned guidelines call for a corporate citizen in the top staff to consider responsible employee behaviors and those with relevant behaviors are annually appreciated.

Employees' welfare and honoring them

In addition to staff salaries and bonuses, a committee known as the Work and Family Welfare pursues the related affairs to increase the desirability of service compensation and employee satisfaction, as follows:

- Deciding on the implementation of welfare policies
- Propose a welfare budget to the CEO to be reviewed and approved
- Determining types of welfare items for employees

The welfare portfolio (basket) covering all organizational levels, is designed and implemented based on the decision of the committee, as follows:

1. Welfare and product baskets: In various occasions such as Ramadan, Eid al-Adha, the new school year, the organization offers family welfare baskets for health, cultural, educational and encouraging to be used by employees and their families. Moreover, their credit cards are also recharged for purchasing products on various occasions, such as holidays, worker days and anniversary of company opening.

2. Transportation Services: The Organization provides daily transportation services to all personnel to facilitate the movement of personnel on a daily basis.

3. Allowances: The Organization has allocated travel and restaurant allowances to staff to increase the companionship of staff and their families, and has also allocated staff sporting allowances to enhance their health.

4. Contracts with Sport Centers and Teams: The Organization has entered into numerous contracts with Sport Centers for staff use for personnel use. There are also numerous teams such as the futsal, volleyball, tennis and swimming teams, which are supported to take part in various competitions; so far, they have won some titles and trophies as well.

Sport	Year	Title/Trophy
Futsal	2015	Champion of Mapna Group futsal competitions/ 4th rank in AlBorz Workers competition
	2016	Champion of Savojbolagh workers league/ 4th rank in AlBorz Workers competition/ Champion of Hashtgerd workers league
	2017	2nd rank in AlBorz Workers competition
Volleyball	2015	5th rank in Mapna Volleyball competitions
	2016	3rd rank in Mapna Volleyball competitions
Table Tennis	2015	4th rank in Mapna Table-Tennis competitions
	2017	Champion of Mapna Table-Tennis competitions
Hiking	2015	Climbing Shah Karam Mount in Taleghan with a height of 4100 m



Moral Code No. 153

We do overlook in our relationships (relationships between managers and employees); rather, we respect employees and care about staff issues (whether welfare, job, training, etc.).

5. Housing Corporation and Loan Fund: MAPNA BOILER has set up a housing corporation and loan fund for the well-being of its employees, and a committee called the Loan Committee examines the staff demand and lends them money.

6. Employee consumption corporation: One of the centers established for employee welfare is consumption corporation. In this corporation, various consuming goods will be offered with high quality at lower prices than the markets, and the expenses will be reduced from future employees' salaries.

7. Purchase of Home Appliances in installments: Mapna Boiler is contracting with reputable brand sales centers to buy some of the home appliances needed by its employees so that employees can purchase essential goods in installments.

8. Social Security and Complementary Health Insurance: To improve the hygiene and health coverage of its employees, the company insures them in the form of Social Security and Complementary Health Insurance by paying a 50% supplemental premium to their employees and their families. This supplementary insurance covers all outpatient and hospital health services provided that franchise cost is deducted.



Based on the instructions for appreciation and motivation of the employees, Mapna Boiler has defined various types of rewards which are outlined in the following table

	2016	2017
Salary, wage & rewards (Billion RIs)	863	1066
Welfare service per capita (Million RIs)	59	68
Education per capita (Hours)	27/6	25/13
Personnel annual absence per capita (day)	0/81	0/72
Job security (%)	58/31	54/46
Satisfaction with welfare services and facilities (%)	55/8	55/8
Sporting allowance budget per capita (million RIs)	5	7/5
Travel allowance budget per capita (million RIs)	12/7	18
End of service rewards (Billion RIs)	27/69	38/22
Insurance costs (Billion RIs)	59	71

For the purpose of setting equal recruitment opportunities and conditions, the company has established a unit and unique approach to recruit new employees. In this regards, favoritism and discrimination (ethnic, religious, gender) have strictly been avoided and the company has tried its best to employ the most competent workforce.



Knowledge development and empowering the employees

Developing staff knowledge and empowerment in a variety of ways has always been a goal of Mapna Boiler. The company has developed a competency profile for all its organizational positions and tries to empower employees to achieve the desired competencies in their position. Based on this model, employee competency is increased through the use of development programs, and the effectiveness of this approach is assessed through the component of employee competency assessment questionnaire and employee periodic performance. The effectiveness of the above approaches for employees is done through periodic performance appraisal.

Development of career path and succession

One approach to empowering employees is career path development. In order to develop the employees' skills, Mapna Boiler has developed a career path. Employees of the company, during their journey in each position to acquire their next post, are empowered based on the perspective of succession in the company.

In-service training

Another approach to empowering employees is to train them. The company aims to train employees on the spiritual growth, skills and abilities they need. In this regard, the company measures educational needs, planning and implementation and measuring its effectiveness. The managers of the units, according to the defined goals and strategies and by holding intra-unit meetings with the employees, identify their educational needs. Another educational approach of the company in the field of employee capacity development is the implementation of the socialization process, which is held according to the instructions of the community, recruitment of new employees and training at the beginning, by holding explanatory courses and introducing new employees to the company. Pre-employment training courses include introduction of Mapna Group and Mapna Boiler position in the group, organizational chart, Organization business model, models and activities of social responsibility of the organization, Familiarity with company processes, Familiarity with safety and occupational health issues, Welfare, human resource systems and touring to visit the production line and sites.

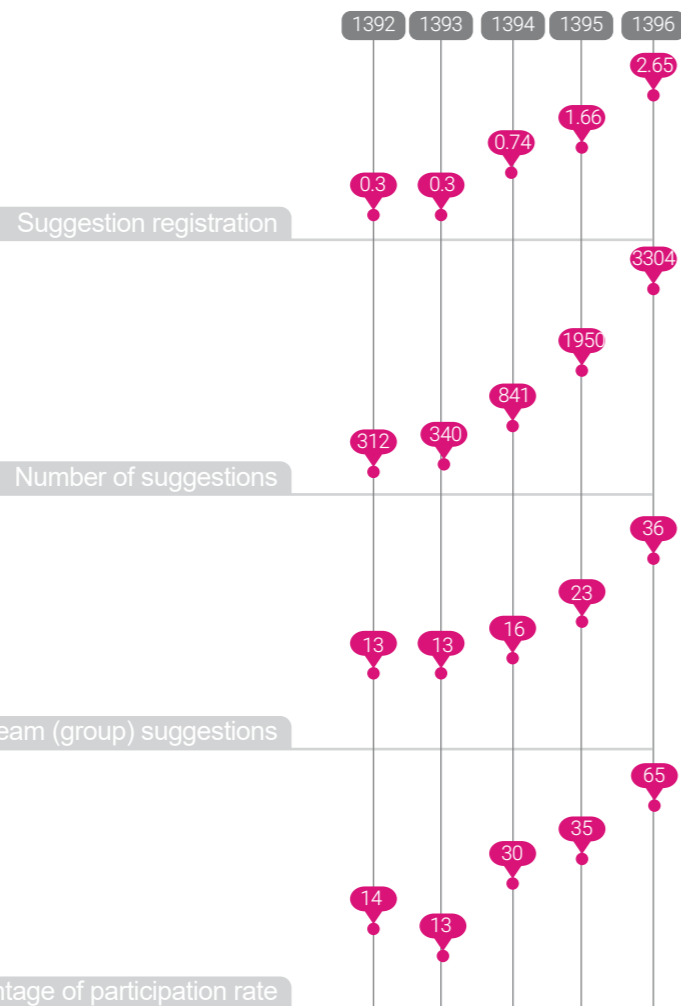
In addition, in order to develop spiritually and develop individual skills, the company has held training seminars entitled Mental Health with the aim of improving the mental health of all staff. Also, in order to improve the skills of the personnel, the training unit has defined general courses such as emotional intelligence, stress management, communication skills, etc. in different years, according to different organizational levels.

Type of training	Course	Hour-person	description
Training on organizational behavior and ethical codes	EVC	512 36 50	Senior and middle managers Officials and secretaries Socialization courses for new employees
Internal training	--	31085	
External Training	CMI Course	4080	

• Participatory management and the use of Ideas

Another key factor in empowering MAPNA Boiler employees is participatory management approaches and the use of employee Ideas and feedback in decision-making and informing employee-related goals and strategies and procedures. One of the embodiments of participatory management is the variety of working committees defined in the company by defining specific missions and goals, whose members of are selected from different organizational levels with respect to roles, organizational positions, and individual skills. There are a total number of 40 active committees and about 25% of the organization's members are involved in these committees.

In addition, MAPNA BOILER uses a variety of employee ideas to manage the organization. The organization's Opinion Poll system is one of the systems of employee participation in corporate affairs. MAPNA BOILER has implemented a comprehensive system of suggestions aimed at developing a culture of partnership and innovation among employees. In this system, all employees' suggestions on all subjects related to the organization are obtained and reviewed, and in addition to executing valuable propositions of the organization, employees are paid certain rewards for their suggestions. Another way of attracting employees to participate in corporate affairs is to select representatives of organizational systems such as process systems, knowledge management, communication systems, etc. in different units of the organization where employees can comment on the systems in question. These comments are passed on to system administrators.



Discussing the strategic orientation of the organization with employees

MAPNA Boiler uses a variety of approaches and actions to ensure the transfer and understanding of values, missions, visions and goals by employees. The most important approaches to announce the orientation elements of the organization are as follows:

1. Holding public meetings: including meetings of CEO and staff at the beginning of each year, annual conference of strategic management, quarterly conference of CEO with all company personnel, holding various meetings of deputies with managers and employees such as working breakfasts, organizational excellence committee and so on.
2. ICT-based information ports: including informing through websites, internal portals, computer desktops and texting
3. Audio and video tools: including informing via video, billboards, banners and brochures, company catalog and Mapna Boiler Calendar
4. Training: Includes strategic planning and organizational excellence training at all levels of the organization as well as training on staff recruitment
5. Incentive tools: include holding employee strategic awareness competitions and employee performance management system
6. Personal meetings of the CEO with the employees: including weekly meetings of the CEO with the staff, which are planned based on the employees' request.
7. Employees' voice meetings: including meetings held in presence of HR manager in order to consider the employees' suggestions and the practices planned in this respect.



Retirement System

In order to appreciate the employees who are just about to be retired, Mapna Boiler Co. has considered a cultural system to appreciate them materialistically and spiritually. This system includes holding retirement ceremony in presence of senior managers, families and colleagues, and giving awards and bonuses to the retired employees. Also short-term contracts may be signed with the retired employees to transfer their knowledge and expertise to young employees in form of training and practice.

Ensure responsible work-life balance for employees

Establishing a work-life balance for the employees is one of the greatest goals of MAPNA Group. In this regard, the company has taken various actions including:

- Restricting overtime and holiday working hours and making Thursdays off to increase family attendance
- Payment of travel allowance in case of family travel provided that the leave is recorded
- Donating restaurant card to staff for family use
- Organizing cultural and recreational events and activities for employees and their families
- Allowing the employees' families to visit company activities
- End of year celebrations and festivities in presence of families
- Offering sports services for staff's children
- Page allocation in company newsletter to staff families to inform staff and families
- Holding contests and awarding special prizes to staff families
- Donating gifts for marriage
- Allocation of leave to staff at family events such as marriage, childbirth and illness and death of relatives
- Changing the working shift of the stewards from 24-24 to 12-24
- Considering flexible working hours in Tehran office

Type of leave	Length of leave	Coverage
Marriage	3 days	All employees
Childbirth	6 months	Female employees
Death of parents and close relatives	3 days	Male employees
Illness of relatives	Determined by managers	All employees

Individuals who used various leaves in 2017 and their return to job rate:

Type	Male	Female
Childbirth	26	5
Child death	1	0
Return to job	27	5

Engaging employees in related programs

The company has used various approaches such as surveying employees, forming committees in various areas such as recruitment and employment, welfare, training, and the system of recruitment and utilizing their views in formulating and improving employee-related programs to prevent monopolizing decision-making. Most staff programs (such as formulating HR strategy and payroll) include representatives of organizational units in the form of committees or working groups such as the Council of deputies, the Welfare and Labor affairs Committee, the Disciplinary Committee, Training committee, suggestion system committees, recruitment committees, etc.

Some approaches to receive ideas	
Method of receiving Feedback	Application of feedback results
Measuring employees' attitudes	Designing strategies and plans for improving HR processes
Welfare poll	Increasing the diversity, quality and facilities
Internal gatherings and seminars	Optimizing HR processes
HSE and supporting poll	Improving HSE processes
Personnel leave interview	Feedback to managers and designing corrective actions
Consultation meetings with deputies	Identifying needs of HR programs
Meetings for listening to employees' voice	Improving the efficiency of corrective actions

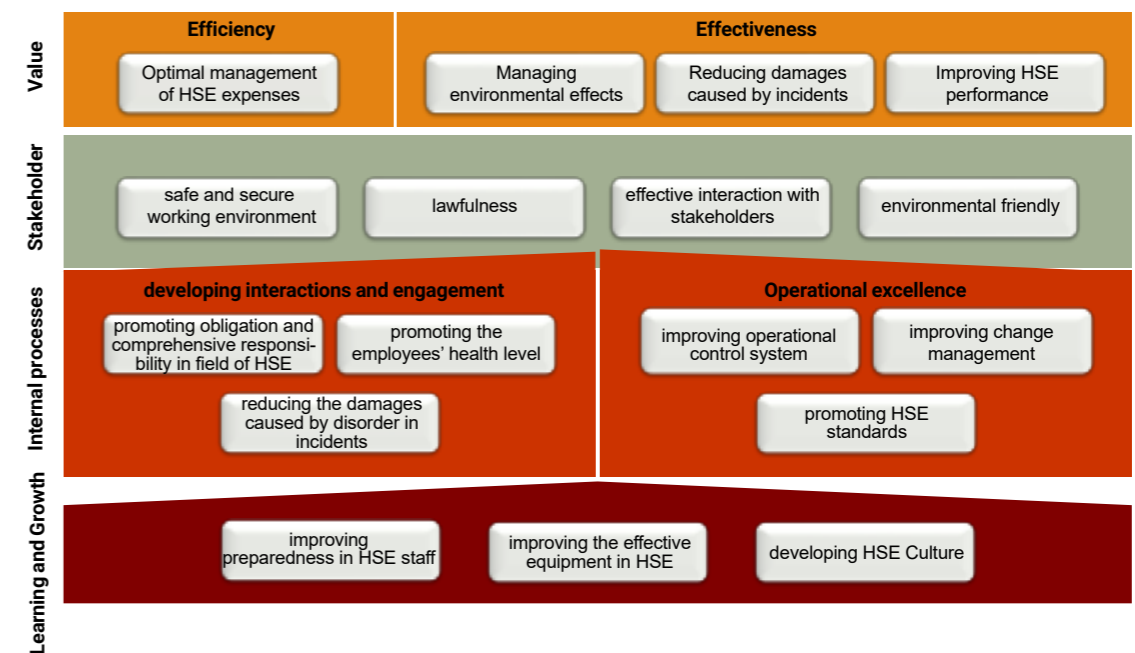
Based on feedback from various employee surveys, the company modifies various approaches to employees such as payroll, human resources, and HR processes and in this way benefits from the opinions of its employees.

Improving health and safety at work environment

Preservation of the safety and health of our employees is one of Mapna Boiler's top priorities. The company has defined and implemented several approaches to maintain and improve the safety and health of the workplace and its employees since its establishment regarding the nature of its projects and production activities. In this regard, the company has implemented OHSAS18001 and ISO14001 standards within the HSE process and has been able to maintain and improve the systems so far. Strategically discussing safety, the company has compiled a safety task plan and linked it to the corporate social responsibility map so that it can implement and track safety-related measures in the company's strategic management system. MAPNA BOILER has always tried to institutionalize the safety and health debate in the company by cultivating and creating awareness among employees as well as the creation of related motivational systems.



HSE



HSE Policy

The HSE unit, as a task unit at Mapna Boiler, is pursuing health, safety, and environmental issues. In addition, due to the importance of the issue, the HSE Committee is monitoring safety, health and environmental affairs in the manufacturing and operating sites of the company and those of its contractors. The committee consists of directors and specialists in safety, health and environment, and because of the importance of the subject, the director or his representative is a member of the committee. The mission of this committee is as follows:

- Determining the HSE Strategic Policies and Energy Management
- Providing solutions to improve safety, health, environment, energy and organizing spaces in the company
- Examining the major events and problems of the HSE, energy management and the 5S system



The Emergency Response Team is also a multifunctional structure composed of representatives of different units, which is defined to deal with special events and situations.

Emergency Response Team: the team attempts to deal with natural hazards and crises, and protects the health of employees in the event of emergencies. The team pursues the following goals:

- Preventing emergencies as much as possible
- Identifying the risks involved in disasters and preparedness against them
- Reducing potential loss to the company
- Increasing preparedness of crisis management team members during emergencies
- Increasing the awareness of emergency personnel on emergency preparedness

5S policy committee

One of the environmental health systems in Mapna Boiler is the 5S organizing System. 5S is a management system which aim is to reduce the aspects and consequences of operations by eliminating losses, reducing waste etc. systematically by following the schedule. This system is designed according to the needs of the various units of the company through the compilation of relevant documentation, Extensive cultivation, formation of working groups, auditing, defining and implementing projects and preventive and corrective actions are planned and implemented. Implementation of this system is a step towards creating a better environment for improving the health of employees. Some of the activities of this system are as follows:



- Defining standard workplace organizing policies in manufacturing and office spaces
- Employee awareness and definition of relevant incentives to implement a wellness system
- Defining standard coverage for all employees and contractors of the organization
- Construction of resting areas for the employees at manufacture lines (Tea Room)
- Organizing production line items by making pallets in different colors
- Standardizing the method of document removal
- Waste management in the company
- Controlling the equipment for production lines with label mounting
- Supervising cleanliness equipment and affairs to increase work environment safety coefficient

Some of the things are done by the safety management in the company for safety, hygiene and employee health are as follows:

1. Implementation of Ergonomic principles in the Company

One of the executive plans defined to identify and prevent occupational diseases and reduce the dissatisfaction of colleagues, in line with the strategic goals of the company, is the "Job Posture Evaluation and Modification" approach. Participatory ergonomics begins with the formation of work teams and, after identifying workstations, assessing and managing risk, according to the nature of each job, offers appropriate corrective or preventive intervention plans in form of engineering and management plans. In the first phase of the process, Harp construction was modified by optimizing the chair design for welders and then by building the experimental platform.

2. Recruitment and periodic examinations

In order to ensure that the type of job is appropriate to the physical features of the individual, applicants must undergo a pre-employment examination before commencing employment, and the commencement of employment is subject to review and confirmation of their health. Periodic examinations are also conducted annually to maintain and improve the health of the workforce and prevent occupational diseases, and their effectiveness is monitored by comparing the results obtained with those of the previous year.

3. Monitor company meals to keep healthy

One of the things that is monitored by the company for the health of the employees is the metabolic health index of the company which is measured and analyzed with regard to the metabolic abnormalities caused by the nutrition and lifestyle of the employees of the company. The company's nutrition consultants monitor the type and serve of food and its accompanying items, and work on controlling the type and method of cooking to improve metabolic health indicators. These consultants also provide appropriate diets for staff if needed.

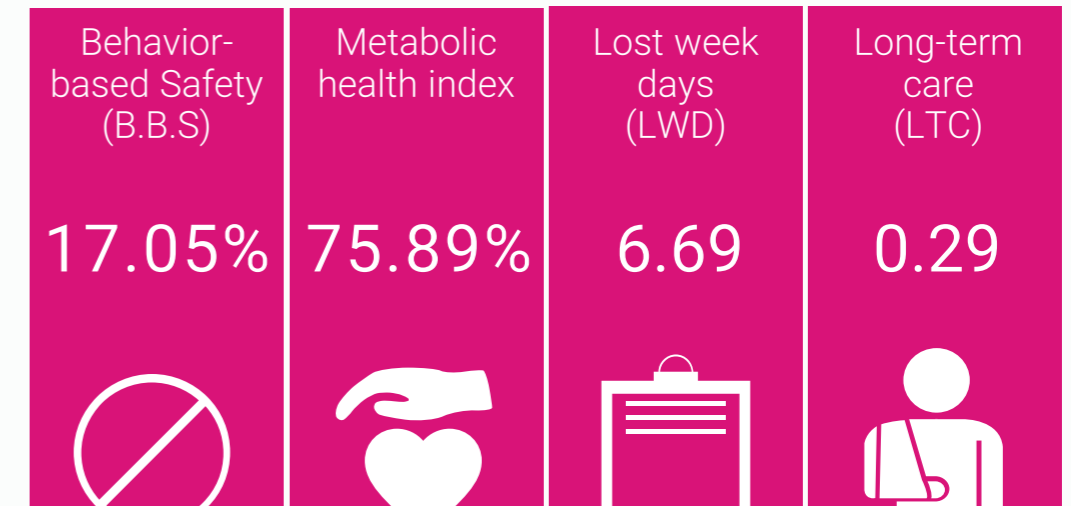
4. Hygiene and treatment

MAPNA BOILER is committed to protecting the health of its employees against diseases by paying them a social security premium, and in addition to its organizational law, it covers all employees with complementary health care that covers half the costs of this insurance. The other half is paid by the staff themselves. There is also staffing emergency unit available to tackle diseases in the company and a physician based in the company who can use all the health services if needed. The company also has an ambulance to send emergency patients to treatment centers in special cases.

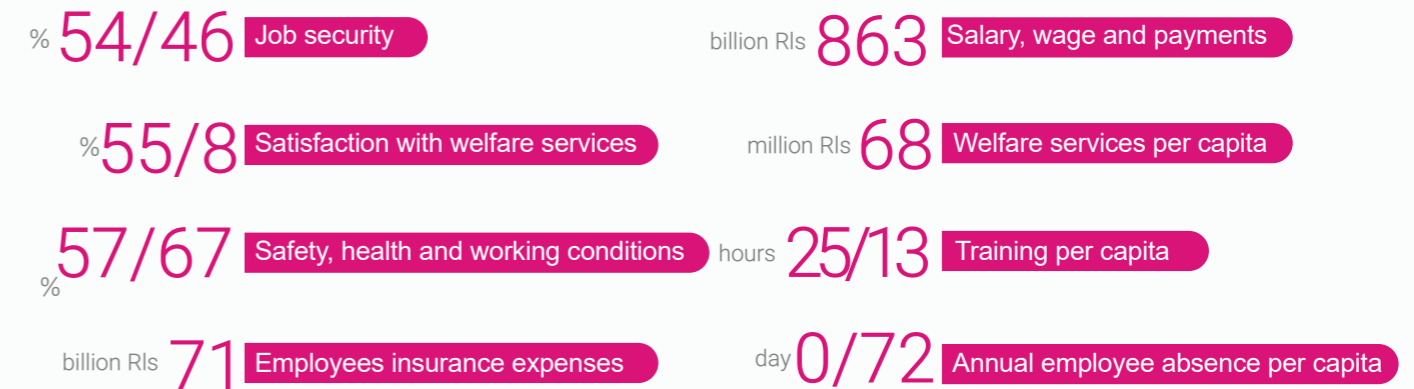
Career	Associated risks	Practices already done	Considerations
Industrial Radiography	Risks of radiations	Radiography is carried out in special rooms/ radiography is carried out at night when the manufacturing sector is closed/ determining forbidden and under control areas/ allocating a dosimeter device to the steward to check radiations while patrolling	Practices have been effective and no problem has been reported in this regard so far
Work at height (wending, net crane, etc.)	Falling off the height	Building reliable stall and platforms for the wending and assembly sectors/ giving helmet and belt to net staff	There have been some cases in the past but fortunately no incident has been recorded after building the stalls and platforms
Loading and transporting parts	Risk of accident between the staff and equipment while transporting/ risk of dropping the parts	Purchasing standard loading equipment (chain, towing wire, etc.)/ training crane operators/ monitoring the integrity of cranes and lift trucks	No human incident case has been reported regarding loading
Painting	Risk of accident between the staff and equipment while transporting/ risk of dropping the parts	Preparing filtered masks/ in-service training on occupational health and the use of safety equipment/ increasing the proportion of work uniforms	Spirometry tests are carried out annually
Electricity technician	Electric shock	Preparing electrical insulation gloves/ supplying standard and up-dated equipment (fuse, switch, etc.)/ obtaining the earth system health license	Electric shock has never been reported
Stone crushing machine	Physical injury/ chip fly	Obligatory use of machine guard/ associated training	No related incident has been reported
Guillotine operator	Physical injury	Installing guard on the machine/ associated training	No related incident has been reported

Instances of safety, hygiene, and environmental approach

Practices	Outcomes
Designing and building platforms for work at height in production salons	Promoting the staff safety and reducing the risk of falling off
Purchasing CNS plasma shear device and discarding the traditional device	Reducing air pollution to promote staff health
Increasing the number of axial, wall and ceiling ventilators	Reducing air pollution to promote staff health
Building and installation of personnel traffic for effective emergency exit	Promoting safety level and improving emergency exit
Optimizing the furnace and installing equipment for effective work up to 1200 degree	Improving the safety of hot rolling operation
Monitoring and improving the earth system of the factory, and fining and forming workshops	Reducing the risk of electric shock
Developing HSE etiquette via pamphlets and leaflets and tests	Improving the awareness and changing the attitudes of the employees
Installing UV and IR radiation adsorbing labels for all conexas of manufacture unit	Reducing contact between personnel and radiations
Improving the manufacture unit stands and postures	Preventing skeletal and muscular diseases to the personnel
Installing fire detection and extinguishing system in power room, UPS and server room	Improving preparedness for extinguishing fire
Installing sand filtration system	Improving the quality of filtrated water



Results relevant to the employees' life satisfaction (2017)



Environmental and social satisfaction in the community

Chapter 5

Sustainable Development Goals



Report
Value Creation for All
A 200 Degree Approach

MAPNABE

The third value created by social responsibility of the organization is the environmental and social satisfaction in the community.

Protecting the environment, participating in environmental practices, safeguarding the interests of future generations and working towards the well-being of society are important principles stressed by Mapna Boiler. The company tracks its environmental requirements through health, safety and environmental management and related committees, including the HSE Supreme Committee and its subsidiaries. The organization's voluntary activities in the field of environment and social welfare are also carried out as part of the activities of MAPNA ECO Committee. As mentioned earlier, the committee's mission is to engage the colleagues, families, and MAPNA community to volunteer and to cultivate social and environmental patterns of social responsibility for the organization.

Mapna Boiler's Model of volunteer practices

Employee Volunteer Action Plans are the organization's efforts to motivate and empower employees to serve the community through their leadership. This plan is one of the social responsibility programs of the organization that has several benefits including:

- Promoting the organization's brand through taking social and environmental roles in the community
- Promoting social responsibility culture and awareness through engaging individuals in practices
- Improving the community's social and environmental satisfaction through volunteer practices
- Reinforcing the employees' internal satisfaction through offering volunteer help to others
- Improving the employees' life quality through receiving volunteer help from other individuals

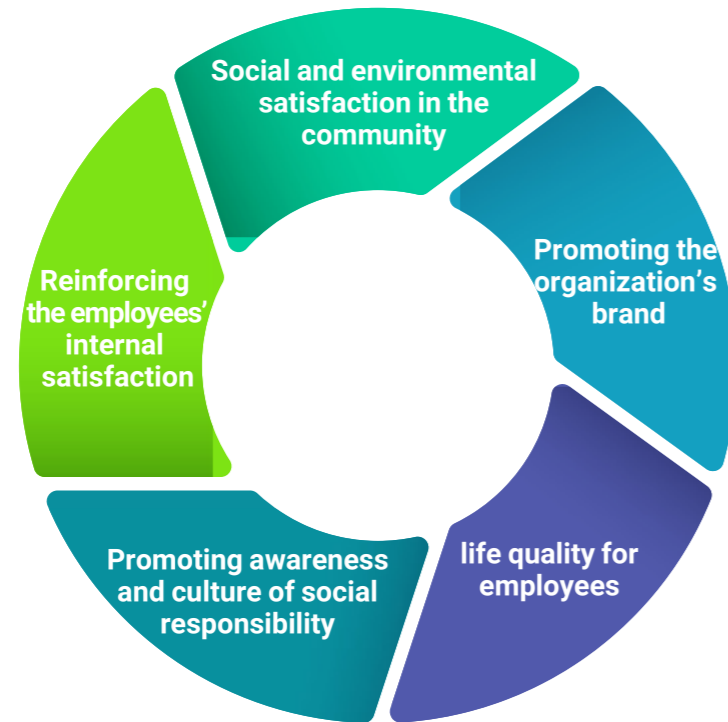
Mapna Eco Committee designs and implements a model, as outlined in the following, to lead volunteer practices. This model consists of three levels:

- Anticipated values of volunteer practices
- Infrastructures required for the volunteer practices
- Implementation based on PDCA cycle



1. Anticipated values of volunteer plans

These are the values that MAPNA BOILER strives to achieve through its volunteer activities. These values are consistent with the values of corporate social responsibility in the strategic map of social responsibility. The company evaluates its suggestions for voluntary practices based on these values and prioritizes the activities that are most valuable to the organization. These anticipated values are as follows:



2. Required infrastructures for volunteer practices

- **Appropriate organizational structures:** One of the requirements for implementing a voluntary system is the establishment of an appropriate structure in the organization to guide the system. MAPNA ECO and Social Responsibility Committees are structures that guide the organization's voluntary activities.

- **Employee empowerment and culture:** Employee empowerment is one of the prerequisites for volunteering, and is considered as an important infrastructure in the system. Therefore, MAPNA Boiler is trying to increase these capabilities through training and participation in various activities.

- **Motivational System:** MAPNA BOILER'S volunteer practices should provide incentives for employees to engage in voluntary activities in the

area of its motivational system. Volunteer behaviors are also included in this guideline.

- **Committee and system of suggestions for social responsibility:**

One of the infrastructures of the voluntary system is the platform for collecting proposals related to the voluntary campaigns of company employees. These suggestions are collected following the announcement of calls through the company's suggestion system and are then evaluated and selected based on the values expected to be implemented.

- **Volunteer Funding:** Funding is another part of the context for volunteer campaigns. Part of this funding, including social-financial assistance, is provided by volunteer staff and the other part through corporate support and funds allocated to social responsibility activities

3. Implementation

This phase consists of four stages as follows:

Annual Planning, including:

- Identifying and prioritizing the organizational values of volunteer practices
- Search and prioritizing subjects for volunteer practices
- Identifying the volunteers and their abilities
- Set the calendar and seasonal schedule
- Set up awareness programs

Campaign planning:

- Designing motto and advertisement messages
- Determining the budget
- Allocation of volunteer forces
- Planning on preparation of required items

Implementation:

- Preparing the items
- Informing the action/campaign
- Timing and implementation
- Publishing in channels and media
- Reporting to Mapna Group

Assessment and correction:

- Evaluating the so-far formed campaigns
- Investigating the challenges
- Reviewing the infrastructures
- Reviewing motivational plans
- Reviewing model of volunteer practices



Mapna Boiler & Green Industry

Mapna Boiler's moral policy towards the environment:

- 1 Legislation and commitment to environmental standards, the use of environmentally friendly systems, active collaboration with environmental organizations and efforts to raise the standards are our professional and ethical responsibility.
- 2 Educating and promoting environmental protection culture in Mapna Group's human resources, especially staff and contractors, public encouragement of environmental activities and promoting a culture of non-use of high-pressure electricity flows in the human environment are our priorities.
- 3 We consider creating Green Space in the Environment Projects and participation in green national development as a step towards environmental protection.
- 4 The moral, financial and scientific support of nature lovers and environmentalists is our moral duty.
- 5 Institutionalizing environmental concerns in project management, prioritizing prevention over treatment in environmental degradation issues, and continuous efforts to reduce environmental pollution and invest in optimal management of oil, chemical and human waste is our ethical policy.
- 6 We consider saving resources and developing recycling programs as an important step in protecting the environment.

MAPNA BOILER constantly tries to control its environmental impacts in the working environment and beyond it, the company tries to implement its volunteer practices to protect the environment. The company also strives to raise environmental awareness among all its stakeholders and encourage them to commit to the environment.

Green Products

One of the important goals of MAPNA BOILER, which is one of the core values of the organization and is included in the corporate sustainability charter, is the green industry and environmentally friendly product delivery. The company has always strived to take this into account in the manufacture of its products as well as in its technology transfer contracts. Some examples of this approach are as follows:

1. Increasing the level of technology and operating efficiency of recovery boilers

Recovery boiler is one of the main products of MAPNA Boiler Engineering & Equipment Company which is installed below gas turbines in various power plant, oil and gas and petrochemical projects. This contributes to the atmosphere as well as increase efficiency by reducing the heat output of the gas turbine, reducing the smoke delivery temperature, reducing consumption Fuel and gaseous pollutants. The following tables illustrate the role of the recovery boiler below different gas turbines and compares two simple and hybrid recovery modes:



E-class Turbine MGT-70

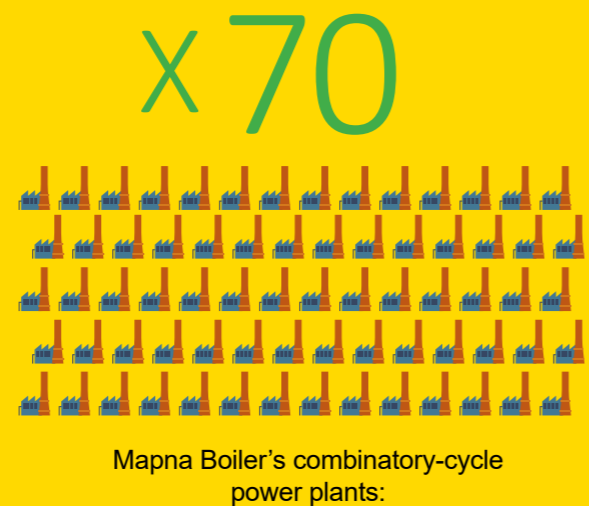
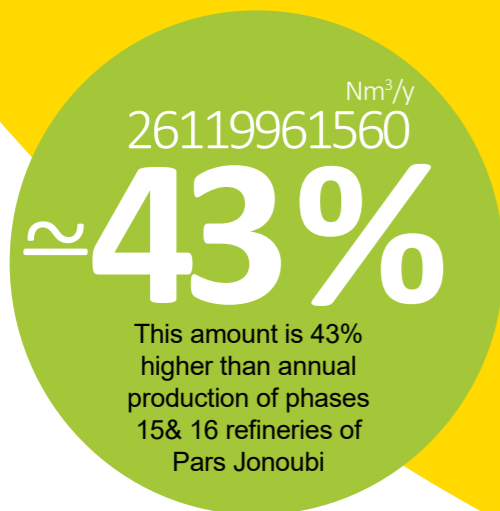
Compared parameters	Open cycle a gas turbine	Combinatory cycle an HRSG and a gas turbine
Outlet smoke temperature to the environment	550 C°	115 C°
The amount of power produced	160 MW	240 MW
NOx input to the environment per one megawatt of electricity	4072 kg/year	2715 kg/year
CO input to the environment for one megawatt of electricity	1519 kg/year	1013 kg/year
Increase the efficiency resulting from the conversion of the gas cycle to a combinatory cycle		18 %
The amount of fuel consumed per one megawatt of electricity	225 kg/hr	150 kg/hr

F-class turbine MGT-80

Compared parameters	Open cycle a gas turbine	Combinatory cycle an HRSG and a gas turbine
Outlet smoke temperature to the environment	579 C°	104 C°
The amount of power produced	307 MW	445 MW
NOx input to the environment per one megawatt of electricity	3258 kg/year	2247 kg/year
CO input to the environment for one megawatt of electricity	1215 kg/year	838 kg/year
Increase the efficiency resulting from the conversion of the gas cycle to a combinatory cycle		18.7 %
The amount of fuel consumed per one megawatt of electricity	180 kg/hr	124 kg/hr

It is also possible to install a continuous monitoring system of pollutants in the exhaust for the purpose of monitoring the level of pollution in the combustion cycle resulting from combustion in the gas turbine as well as the ancillary burner (the major share of pollution is produced by the gas turbine rather than the ancillary burner).

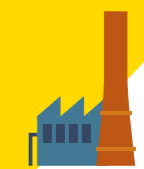
Energy Savings by MAPNA Group boilers



Annual savings in consumption of CH₄ in each combinatory power plant:
 X365
 373142308



Savings in consumption of CH₄ in each combinatory power plant per day:
 1022307/7 Nm³/d



In E-type cycles, assuming the production output of each gas turbine to be 160 MW, practically 10 Kg/S fuel is consumed. In this manner, for a simple cycle consisting of 2 gas turbines, 20 Kg/s of fuel is consumed to produce an output of 320 Kw. In such cycles, the exhaust smoke is outlet unrecycled with a temperature of 550 C. this, in addition to heat loss, causes various destructive effects on the environment. By converting simple cycles into combinatory ones, het recovery is carried out on combustion outlet. Combinatory cycle powerplant blocks in Iran are mainly characterized with an array of 2*2*1 consisting of 2 gas turbine, 2 recovery boilers and 1 steam turbine. Under ISO conditions, by installing a recovery boiler at the exit of each 160 MW gas turbine, it is possible to produce 160 KW of power at the steam turbine. To produce this output without a recovery boiler, one requires an additional 160 MW gas turbine and combustion of 10Kg/S of additional fuel. Hence via the combinatory method, as much as the output of a gas turbine, energy consumption is reduced. In addition to minimizing the energy consumption, the outlet smoke is released with a temperature of 110 C, which is followed with less destructive environmental effects.

Moreover, in a simple cycle, with the combustion of 20 Kg/S = 10 Kg/S * 2 fuel, an output of 320 MW= 160MW * 2 is acquired by the gas turbines. In the new combinatory manner, an additional output of 160 MW is acquired from the steam turbine, resulting in a total output of 480 MW. This means a 52% increase in the output. In combinatory manner, 10 Kg of fuel is saved per second (1183 Nm³). Hence, the daily saving is almost 1 million Nm³, which means an annual saving of 373 million Nm³. Assuming a total number of 70 combinatory cycles being established by Mapna since its foundation, 2.6 billion Nm³is saved annually. In respect with pollution, a simple cycle consisting of 2 gas turbines is responsible for the emission of 1.3 million Kg NO and 486000 Kg Co each year. This is to reach an output of 320 MW. This means that for each MW, 4072 Kg of NO and 1519 Kg of Co is released into the environment. In combinatory cycle, the pollution is the same while the output is much more increased. In this way, for each MW, 2715 Kg of NO and 1013 Kg Co is released. The figures obviously show a significant decrease in environmental pollution.

Green Building

Green and sustainable approach to building design is one of the ways to protect the environment by preserving natural resources, using clean and renewable energy instead of polluting the environment, using recycled materials, extending the useful life of the building and the possibility of future changes without damaging the environment. In general, green construction is a way to increase the efficiency and efficiency of resources, energy, water and materials by selecting, designing, constructing, operating and maintaining a building that minimizes the harmful effects on human health and Environment.

Tehran office of Mapna Boiler Company is also one of the green buildings. In designing this building, the LEED guide (Leadership in Energy and Environmental Design) has been used. Tips for following this guide at Mapna Boiler Green Building are:



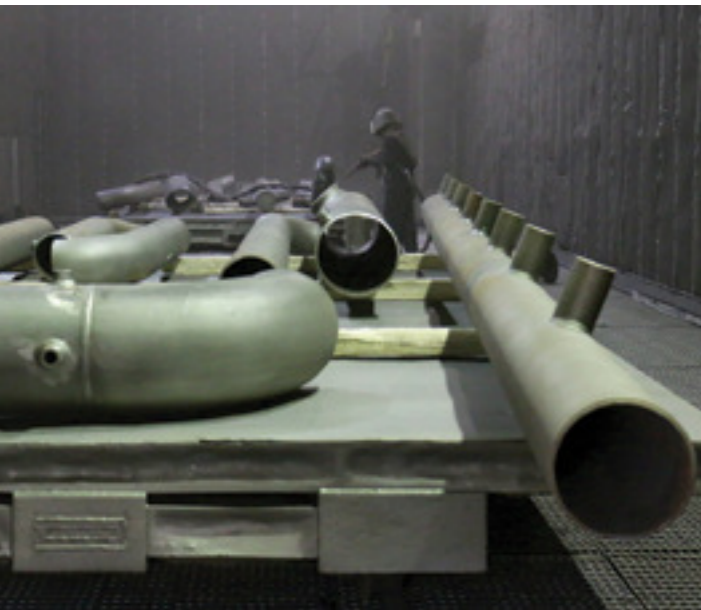
- Ice Bank's Cooling Energy Storage System
- Use of renewable energy sources such as solar cells and solar panels
- Use of thermal recycling system by receiving energy from the exhaust air
- Use of variable frequency drives for pump motors and fans
- Insulation of the side walls of the building
- Use of pre-insulated ducts
- Using Intelligent Building Management System (BMS)
- Use of special valves to reduce water consumption
- Use of aluminum reflectors on the facade to guide and use daylight
- Use of Lighting Management system (LMS)
- Using high-efficiency lights and low ductility
- Using prefabricated structures or bolt joints
- Use of recyclable materials in walls, ceilings, floors and joinery
- Use of water-based and recyclable paints
- Allocation of the lower floors of the building to public spaces such as restaurants and meeting rooms
- Using special profiles and glass to prevent heat exchange between indoors and outdoors
- Minimizing outdoor pop-ups
- Predicting green space on the roof

Alternative ways to protect the environment

One of the most important approaches the company has always taken in environmental assistance is to improve the environmentally friendly methods and processes. Some examples of this approach are as follows:

Use of Shot blast instead of Copper blast

Previously, Mapna Boiler used to employ the old Copper blast method to clean metal surfaces before applying paint, which posed a number of environmental problems. Some of the problems with the Copper blast method are as follows:



- Abrasives are crushed after they hit the surface, which creates dust and air and soil pollution
- Low effluent filtration efficiency and problems with stopping and discharging sludge collecting tanks
- Disposal of Copper Slag and identifying it as special waste after some time (in this case disposal is under the supervision of the Environmental Agency at a high cost).
- Significant increase in dust return due to separation of dust segregation on the environment from Copper Slag grains
- Therefore, in order to fulfill social obligations and responsibilities and commit to the principles of environmental protection since 2014, the shot blast method was replaced by the creation of a standard work environment. The advantages of the shot blast method are as follows:
- Easy disposal of residual material resulting from this operation
- Reduced environmental impacts (very low dust production during blasting operations)
- Outlet air purification and maximum dust absorption using a scrubber and water spray system
- Multiple use of steel shots

Use of Ultrasonic waves instead of Radiography to test the tanks and reservoirs

MAPNA BOILER used to apply radiography to test heavy tanks, which would cause the following environmental problems:

- The risk of harm to living creatures exposed to radiation.
- Use of chemicals which are harmful to the environment for the emergence and registration of radiographic films

Supply and use of plasma cutting machine (CNC)

Mapna Boiler Co. used to employ a ARSH Model turning machine to shear the sheets used, which resulted in air pollution caused by the cutting fumes. Therefore, to control this pollution, a plasma cutting machine equipped with a smart ventilation system was replaced to dramatically reduce environmental pollution in the production hall.



Control measures to protect the environment

MAPNA BOILER constantly monitors its environmental status, and defines relevant measures to control its impacts and to keep committed to its social obligations and responsibilities. Following is a list of related efforts in this regard:

Water

Water is one of the most important elements in the ecosystem that is referred to as the source of life, and the lives of humans and other organisms in nature and the function of many industries and systems depend on it. The importance of water and its use in a dry region like Iran is doubled. Mapna Boiler, therefore, recognizes the

importance of always reducing water consumption through system optimization. In this regard, in order to reduce water consumption and modify the consumption pattern in the manufacturing sector, it has modified processes such as water recirculation in the hydrotest process. Here are some ways to improve water and wastewater productivity in the company.

Management of optimal water consumption

In order to reduce water consumption, Mapna Boiler has carried out the followings:

- Purchase and replacing smart water taps in all bathrooms
- Circulating water consumed in hydrotest process
- Applying the wind system to increase the efficiency of cooling of the induction bending machine beside the consumed water
- piping and use of purified water in irrigation of the green space of the complex as well as the surrounding plants

Sewage treatment system

One of the most popular water efficiency improvement practices in companies committed to water consumption reduction is the establishment of water treatment systems. In these companies, based on water functions, water purifiers are created in different dimensions to increase the final volume of water consumption by increasing purification and recirculation.

MAPNA Boiler has also set up a wastewater treatment plant to reduce the environmental impacts of wastewater production and aims to improve the efficiency of the treatment plant in the future. Presently, Mapna Boiler has a wastewater treatment plant with a capacity of 120 m³, which is used for irrigation.

Moreover, the organization has an online monitoring system at the refinery outlet, where instant monitoring information is directly visible through the online monitoring system.

In order to improve the sewage treatment system and to reduce the leakage of wastewater to underground layers, also to prevent soil contamination, the project for improvement of sewage pipelines was carried out in 2016 and all the old sewage lines were replaced. In addition, in order to improve the quality of the water output of the treatment plant and to use it for irrigation as a spray, a corresponding filtering and plumbing installation was carried out in 2017 to achieve the highest quality of treated water for green space.

Water filtration system in the factory

Regarding the considerable amount of water consumed in the factory and the significance of consumption management and optimal use of filtrated sewage, complete filtration project has been suggested and is under operations. In this system, the filtrated sewage in the current refinery is filtrated again and reaches the required standards to be reused. Through the implementation of this project, the amount of water consumption in the factory will considerably decrease, and the filtrated sewage will be optimally used with required standards.

Ethical Code 201

we conserve water, raw materials and other natural resources; in fact, we act in a way as to save energy and natural resources.

Boilers Blowdown recycling system

The aim of this project is maximal reduction of water waste resulted from boilers blowdown at normal working state. In normal projects, the water resulting from the blowdown drums is continuously directed to an atmospheric reservoir. After releasing the vapor into the atmosphere, the remaining liquid is transferred to the drain system after addition of drinking water-cooling agent. This is not appropriate for further use in water filtration unit of the factory due to its high temperature (70 degrees). In Blowdown design, the blowdown water is directed to the reservoir under continuous pressure, which is connected to the air remover, some of which is converted into steam and transferred to the air remover; as a result, its wasting into the atmosphere is prevented.

Later, the remaining water is cooled down up to a desirable degree and will be suitable to be used in the water filtration unit. The system is equipped with controlling valves and other necessary tools to ensure proper and automatic performance.

Furthermore, an atmospheric blowdown tank, with non-continuous usage, is also considered to carry out draining of the boilers at the times of beginning the process. This will be of no further use once the boiler begins its normal function, as the blowdown water is transferred to the recycle system and the reservoir. Moreover, the blowdown tank which is under pressure is connected to the non-continuous atmospheric tank via a control valve to allow emergency drain in case if the water level inside the tank under pressure goes critically high.

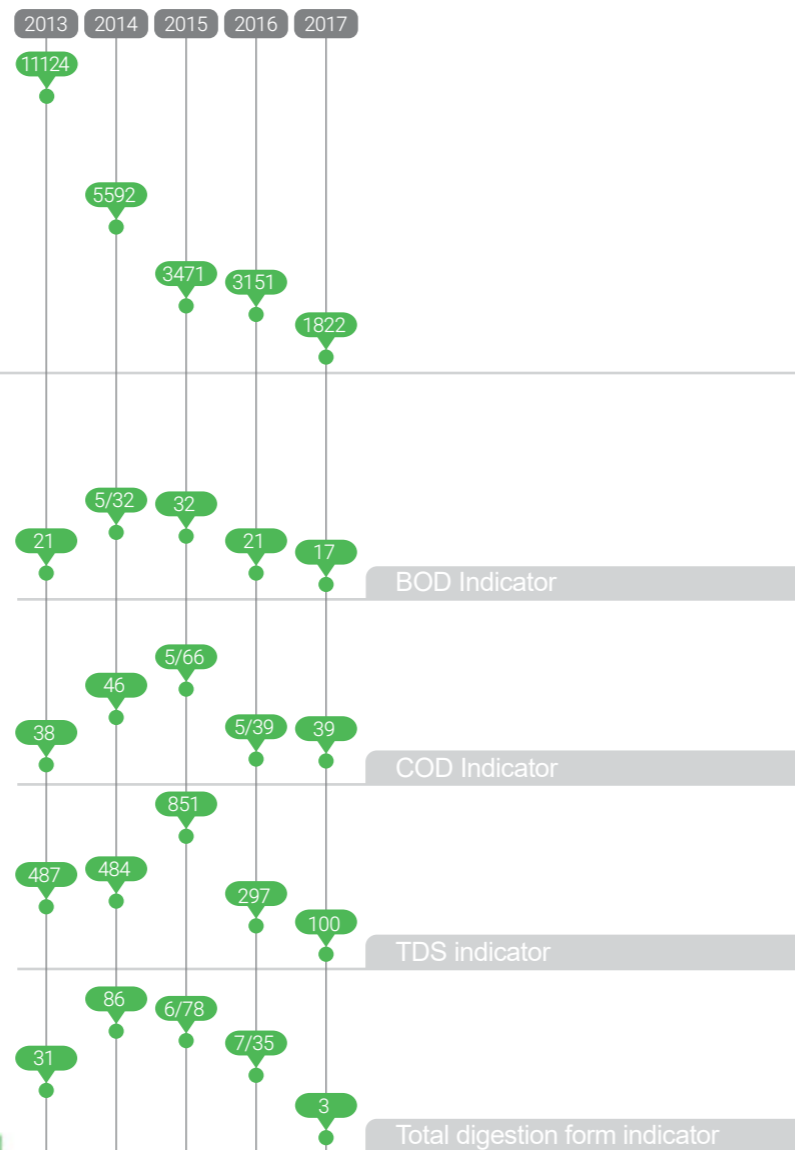
As an example, in a combinatory cycle power plant with 2-2-1 orientation, 5 to 21 m³ is saved using this new technology depending on the blowdown in boilers. So far, this plan has been carried out in various projects including Fajr petrochemical site, Damavand petrochemical center, and Chadormaloo and Kahnooj Power plants.

Water Conservation Culture

In addition to streamlining processes, the company also informs the personnel through the dissemination of environmental messages in order to cultivate and refine staff behaviors.



The amount of the company's water consumption in recent years is as follows, which indicates a declining trend.



Wastewater disposal

At MAPNA Boiler Engineering & Equipment Co., all wastewater is transferred to the wastewater treatment system, and the effluent from the sanitation plant is used for irrigation of green space and agriculture. According to environmental monitoring self-reports, parameters are in a 100% compliance with the standards of the Environment Protection Agency (EPA). There are some indicators for standard monitoring of wastewater such as BOD, COD, TSS, TDS. All wastewater indices at Mapna Boiler are measured and monitored, and all were determined to be within the standard range.



Waste and recycling

MAPNA Boiler Company has a comprehensive waste management program with the supervision of the EPA, with all waste in the company being separated from the source. The company has systematized how to manage its waste. MAPNA BOILER has contracted with the trusted environmental companies to fund its waste management, and seasonally submits a report to the Environmental Agency detailing how the waste is disposed.

The types of company waste are as follows:

- Normal / Household Waste: This type of waste is transported and disposed of under contract with Waste Management Agency.
- Recyclable Waste (Waste): Recyclable waste produced in the company is considered by the Waste Committee and is then sold.
- Special and hazardous waste: In accordance with the environmental requirements of the EPA, special waste will be disposed of through the EPA. The company also delivers this type of waste to the EPA.

Waste Management Manner in Mapna Boiler

Type of waste	Removal method	Types of wastages	Production process
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Industrial/special waste	Deliver to the company trusted by the environmental organization (recyclable and can be sold again)	Paper, boardcard	Offices
		Metals	All production processes
		Slash	Turning process
		Steel	Welding
		Wood	--
		Wire and cable	--
		Plastic	--
		Aluminum	--
		Fin tube cap	--
		Hydraulic oil	All production processes
Normal/domestic waste	Burial in landfills under the confirmation of waste management organization	Cotton/oil cloth	All production processes
		Electrode residue	Welding
		Cotton string	Hydrostatic test
		Filtration sludge	Refinery
		Plastic and paper	Offices and departments
		Food residue	Restaurants and offices
		plastic	restaurant

The amount of produced waste in recent years is as follows:



The amount of produced waste (tone)

Air Quality and emission of gasses

Air quality is one of the issues MAPNA Boiler focuses on in its operations, and seasonally measures and monitors related parameters through self-reported seasonal measurements. For environmental purposes, the company controls its emissions as minimally as possible, and measures and monitors greenhouse gas emission indices, which are always within the standard range or even below it.

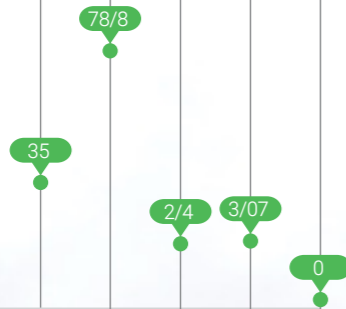
Moreover, the company has been offering service for over ten years in field of online monitoring of pollution at power plants. These systems can be designed in two main types; in-situ and extractive. The parameter they measure are different and depend on the type of fuel used and combustion parameters, and include flow rate, NOx, Sox, CO, O2.

The company has conducted the following to keep up with the latest standards in this respect:

- Supplying pollution monitoring system according to the latest instruction of EPA
- Offering consultation services to purchase the best appropriate pollution monitoring system
- Calibration and periodic maintenance required
- Installation of the above mentioned systems.

2013 2014 2015 2016 2017

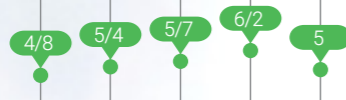
SO₂ Indicator



NO_x indicator



CO₂ indicator



CO indicator

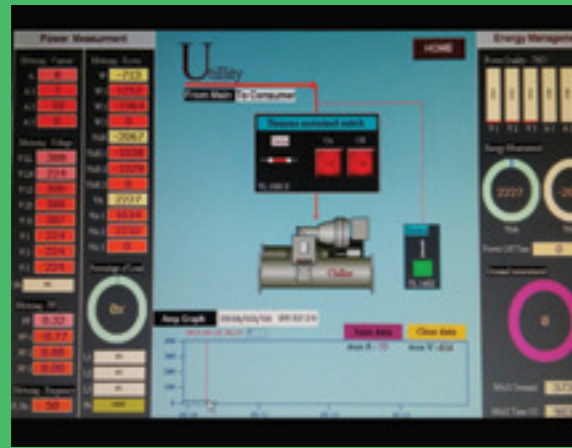


Energy

Mapna Boiler has established a systematic approach for managing energy consumption within it. In this regard, based on the overall goals of the integrated management system (optimum use of materials, natural resources and energy), the energy management approach is based on ISO 50001 and the relevant certification was obtained in 2014. In this approach, by setting up an energy task force (with the aim of implementing relevant policies) under the supervision of the HSE committee, all energy consumption metrics, consumption points and potentials for consumption reduction are determined. Currently, with the instal-

lation of the metering system, the energy consumption of the equipment is recorded over defined time intervals and the results are analyzed. Based on a systematic approach, energy management policies and goals are formulated and reviewed, and the Energy Management Policy and Policy Working Group manages the energy consumption based on the developed plans. In order to improve the energy consumption of the relevant workgroup, it develops and implements corrective and preventive measures for energy management machinery and equipment, some of which are as follows:

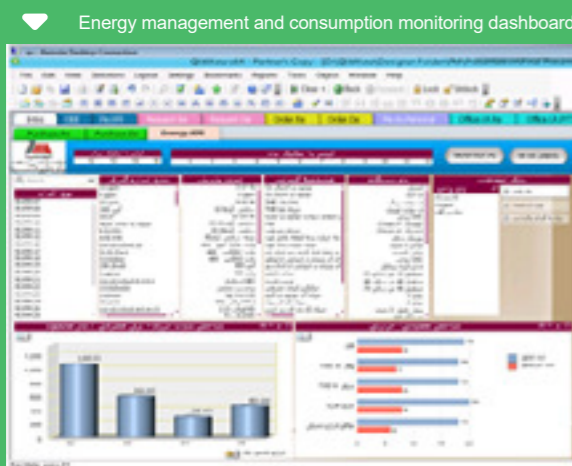
- Design and installation of monitoring and measurement systems to identify opportunities for energy conservation, monitoring system within the office, operational heat furnace, hydrostatic testing, CNC machinery etc.
- Offering solutions to energy conservation based on data from monitoring systems
- Modification of capacitive bank stairs for optimal reactive power control
- Implementation of modifying practices based on the energy policy
- Installing a drive for motors and high-power blowers
- Modification of lightning within the production halls
- Call for papers and ideas on how to save energy more efficiently
- Reviewing energy management policies
- Reviewing the energy base line
- Identification and analysis of obvious aspects of energy
- Compiling instructions for energy management culture
- Creating consumption performance monitoring dashboard and energy management



Monitoring system of consumption management of over-head cranes



Stages in formation of energy management project

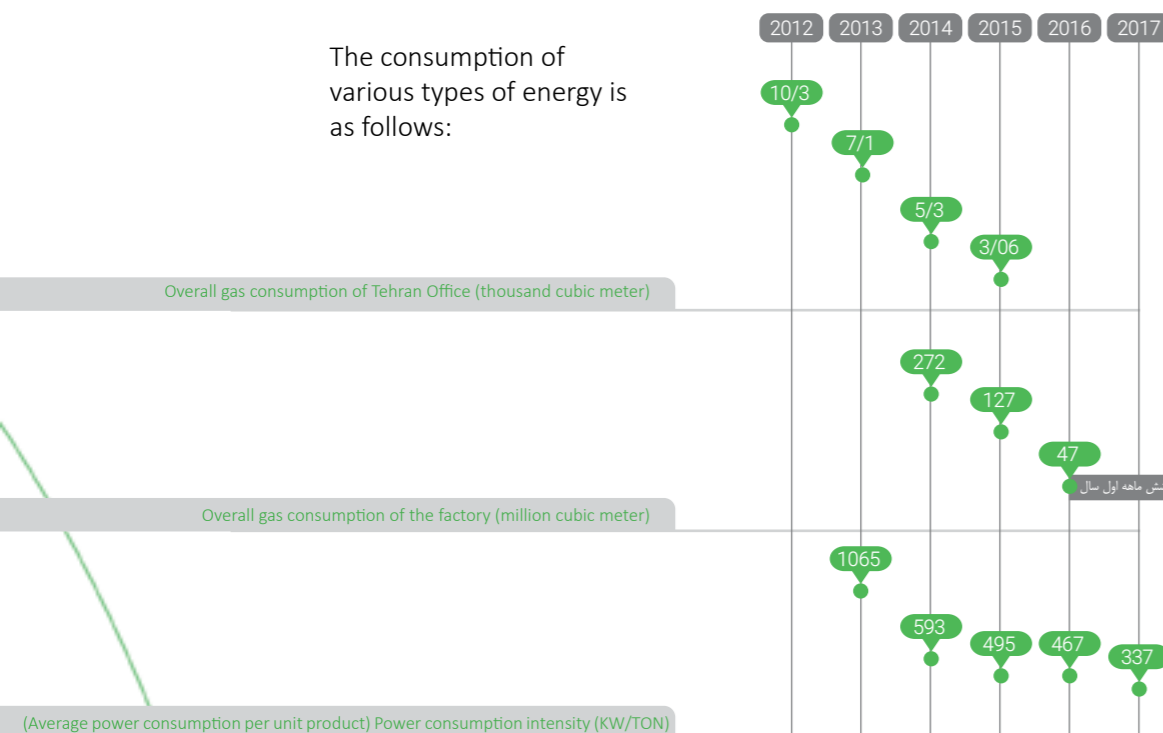


Energy management and consumption monitoring dashboard



Monitoring system for consumption management of Ashkoda boring machinery

The consumption of various types of energy is as follows:



Product effects

MAPNA BOILER always strives to take responsibility for managing the effects of its products throughout their lifecycle. In order to effectively manage the business, the company will implement all relevant health, safety and environmental implications using Hazard Identification Approaches (HAZOP Study) and environmental risk / opportunity management and standards-based approaches, ISO 14001: 2015 and ISO 45001: 2018. Some examples of the above approaches can be found at the following stages of product development.



Instances and approaches to effective management of products in their lifecycle

Stages	Health / Safety / Environmental Outcome	Instances and practices carried out
Production	Gases and metallic vapors resulted from welding, dust, noise, ergonomic issues, non-ionizing and ionizing radiation, vibration exposure, skin and respiratory contact with a variety of solvents, chemicals, electrical hazards, falling objects, Fire hazard, explosion hazard, contact with sharp surfaces, contact with rotating machines (lathe, etc.), production of ordinary, special and industrial wastes, sanitary effluent, industrial effluent, environmental noise pollution, waste Resources and energy, soil pollution, energy consumption costs	Application of ventilation systems, use of PPE, HSE training, installation of electronic and eye protection system, audits of production halls, development of work safety licensing guidelines, formation of HSE specialized committees, incentive system and Punishment, observance of chemicals SDS provisions, environmental measurements in the form of self-declaration, waste management from source to disposal based on comprehensive waste management plan, construction of Blast Shot Hall, identification of environmental rules and requirements, implementation of treatment system Wastewater and Use of Purified Water for Irrigation, Periodic Equipment PMs to Reduce Energy Consumption (Periodic measurement) of energy, formation of emergency response teams, use of end-product energy management solutions and product production process.
Transportation	Crane collapse and overturning during loading and unloading, road accidents, severe damage to parts and their collapse, canal collapse due to non-compliance with safe intervals, environmental pollution caused by leakage of chemicals to the workshops, Product waste and packaging, energy consumption during shipping	Compliance with product loading and shipment requirements, operator certification of machinery documentation, load chart control and crane health certification, preparation of high risk operations Lifting Plan and Method Statement, formulation and notification of contractor requirements of freight contractors, compliance with SDS chemicals management, Waste, provision of appropriate lifting equipment and equipment, compliance with environmental requirements in transportation
Installation	Gases and metallic vapors resulting from the welding process, increased air pollutants from the use of worn machinery, scaffolding, dust, noise, ergonomic issues and musculoskeletal disorders, non-ionizing and ionizing radiation, vibration exposure, vibration exposure, Solvents, chemicals, hazards of electric shock, falling objects during displacement, fire and explosion hazard, contact with sharp surfaces, contact with rotating machines (stone etc.), hot surface burns, Falling from altitude, waste generation, waste of resources, waste product, environmental noise pollution, eating disorder due to unsafe surfaces Cases, creating heat and cold stress	Implementing HSE standards, requiring contractors to comply with HSE and monitoring their activities, setting up an HSE inspection and management team on site, measuring the system and obtaining its approval, conducting expert interviews on critical business selection, conducting training courses. Specialized in Height Work (IRATA1), Obtaining a Certificate of Health for High Risk Systems (Cranes, ...), Preparing Lifting Plan and Method Statement High Risk Operations Developing Safety Authorization Guidelines, Purchasing Appropriate Safety Equipment, Installation of protection systems to prevent electrocution, installation of fire alarm system, purchase of environmental protection equipment. Machinery with technical examination and year of manufacture, general and specialized on-the-job training, leveling of traffic routes and equipment by grader and loader, establishment of incentive systems and punishing personnel
Establishment	Detergents used before operation Working at high altitudes and elevation, contact with hot surfaces and electrically conductive steam pipes, fire, industrial wastewater, heat and cold stress	Implementation of HSE standards at pre-establishment phase, purchase of appropriate safety equipment to work at altitude, installation of protection systems to prevent electric shock, installing detectors and equipping all locations with fire extinguishers, preventing leakage and disposal according to standards Providing standard and appropriate PPEs for activities, controlling personnel nutrition to prevent thermal weakness, conducting general training
Exploitation	Boiler exhaust gases, water consumption, hot air outlet Oils and consumables, environmental noise, waste of energy and resources, creation of heat/cold stress	Providing operating and maintenance and repair instructions to operators, including safety and environmental and energy guidelines in operating instructions, thermal recovery through harp outlet vapors and re-use of drum outlet water as Blowdown Boiler, New systems in products such as sulfur detergent (FGD), value engineering, weight loss and harp efficiency enhancement, personnel nutrition control to prevent thermal weakness, training

To make the customers familiar with safety considerations and how to operate with the machinery, in each project instructions on installation, usage and maintenance of the products are delivered to the customers in form of Final vendor book, or in case of recovery boilers, in form of commissioning & operating & Maintenance Manual (C.O.M).

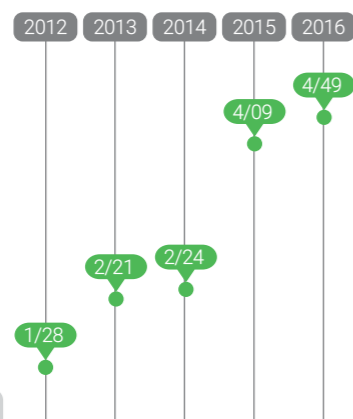
Volunteer environmental practices

One of the key activities of the MAPNA ECO Committee is to address priority environmental volunteering within the company and the local community. The Committee on Environmental Affairs conducts relevant trainings at the regional level, implementing environmental programs and actions on environmental occasions (clean air, clean land, tree planting, etc.) and environmental protection and Cultivation measures in this regard. Following is some examples of such practices:

• Planting trees on environmental occasions

Mapna Boiler is sensitive to cutting down trees as environmental symbols and is planting trees on numerous occasions each year. As you know, about 24 stump trees are cut for each tone of paper. The company feels to be responsible for a move to compensate for the environmental damage caused by the use of paper and paper napkins by at least planting more trees than the number of trees cut per the amount of paper it uses.

The company annually plants trees as many as the childbirth to the personnel through the year and in their newly-born children's name. This is to respect the environment and future generation. Through this plan, titled "birth and planting", over 170 trees were planted inside the company and in its vicinity during 2016 and 2017.



Moreover, due to space limitations, Mapna Boiler Co. attempts to plant trees on various occasions outside the company site.



• **Environmental cleanup campaigns**

Environmental cleanup is another of the volunteer programs the company is pursuing. For the past year, company employees have been cleaning the streets and the environment around the company to mark Clean Air Day and Clean Earth Day.

• **Environmental education and awareness at the staff family and the local community level**

MAPNA BOILER has undertaken various activities such as disseminating environmental messages on the organization's communication channels, holding environmental contests for children, teaching planting to staff children, donating flowers and plants to colleagues and neighbors.

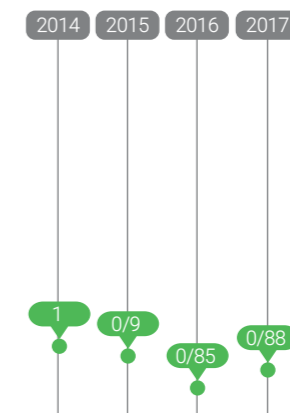


• **Automobile Debug**

On this occasion, MAPNA Boiler Company, on the occasion of Clean Air Day, reduces air pollution to employees' cars and provided appropriate recommendations to troubleshoot these vehicles to improve related performance. The move was aimed at identifying potential problems for personal cars and then fixing existing problems to help reduce air pollution. Lots of cars were debugged at the MAPNA Boiler plant site.

• **Replacing environmentally friendly appliances and materials**

Mapna Boiler is trying its best to reduce environmental harmful waste. Measures such as donating a fabric shopping bag to replace plastic bags, collecting plastic bottle lids, and equipping the toilet with electric towels are among the things that have been done so far to reduce the harmful impact on the environment. Consuming materials such as paper and paper towels that produce environmental damage are some of the ways in which the company continually strives to reduce their consumption. The graph below shows the reduction in paper consumption per company.




Paper consumption per capita (package)

Environmental certificates

MAPNA BOILER has been awarded numerous environmental awards, certificates and licenses for its good environmental performance. The ISO 14001 Environmental Management System Requirements Standard is one of the items the company has implemented to obtain its environmental certification.

Moreover, due to the environmental measures and the absence of environmental pollution, the company has been awarded the Green Industry Certificate in 2014, and also obtained the silver statue of Green Industry by the Environmental Protection Organization in 2017. At the event, the criteria for selecting green industrial units are environmental measures such as air pollution, water and noise pollution, waste and wastewater management, green management system, effective maintenance of ISO 14001 certification, green product production, green space, HSE training and performance. It includes the role of promoting environmental culture in line with social responsibilities. It is noteworthy that Mapna Boiler Company did not have any environmental mismatches in soil, air, sound, water and wastewater pollution in the years 2016 and 2017.





MAPNA Boiler; the responsible organizational citizen

Mapna Group's ethical policy towards the citizens and national interests:

- 1.** Respect for good neighborliness and respect for the rights of neighbors, such as the right to privacy, the protection of the comfort and mental well-being, sensitivity to the neighbors' financial and intellectual interests, and the safeguarding of their property, confidentiality and accountability based on interaction are among our most important responsibilities.
- 2.** National interests and the well-being of citizens are central to our professional activities while participating in productive employment, the production of goods and services. Social justice is one of MAPNA's most important ethical values when it comes to providing employment opportunities and creating opportunities for citizens to benefit from goods and services.
- 3.** It is our moral duty to lead the charity and to help the needy, especially in times of crisis and to contribute to raising the general welfare of society.
- 4.** Trusting people, responding to citizens' criticisms and challenges, paying attention to public viewpoints, and dealing honestly and explicitly with the mass media are our moral code.
- 5.** Participating in promoting a culture of vitality, happiness, hope and citizenship is one of the principles of our social responsibility.
- 6.** Participation in upgrading industry-related standards and promoting product quality with the aim of increasing product durability, saving resources and avoiding duplication of existing resources are known as our duty.
- 7.** We strive for national dignity in the development of knowledge and promotion of industry to get rid of any dependency and achieve self-sufficiency.
- 8.** We consider law-compliance as respect for the rights of citizens and emphasize the rulership of law and regulations on all professional matters, especially in the exercise of national rights and demands. We consider honest and effective cooperation with regulatory agencies as a contribution to the preservation of national interests.
- 9.** Respect for social norms, values, and divine practices is our moral code.
- 10.** We care about the beauty of the environment as the right of our neighbors and citizens.
- 11.** We emphasize the support of academic centers and cultural institutions and participation in the cultural development of the country.
- 12.** According to the slogan of Halal Business, we will never trade with individuals or organizations working against the interests of humanity.

As an organizational citizen, Mapna Boiler Co. finds itself responsible against the community and tries to take an active role in various events regarding the community interests.

Relationship with social organizations and institutions

One of the most important issues in relation to society is to connect with and support social organizations and institutions. In this regard, MAPNA BOILER liaises with and supports scientific and business associations. In the future, the company plans to expand its communications with social forums.

Some of the social organizations and institutions interacting with Mapna Boiler are as follows:

- Membership in Iranian Informatics Society
- Association of Engineers and Contractors of Oil, Gas and Petrochemicals (Apec)
- Oil Industry Equipment Manufacturers Association (Estesna)
- Iranian Industrial Equipment Manufacturers Association (SETSA)
- Iranian, Tehran Chamber of Commerce, Industries, Mines and Agriculture
- Industrial Management Institute
- Sponsoring exhibitions and conferences
- Collaboration of executives and experts with the National Excellence Awards Secretariat
- Membership in Tehran Chamber of Commerce with Iraq

Social Volunteer Activities

MAPNA BOILER always strives to have positive social impacts through volunteer activities led by the MAPNA ECO Committee. The company carries out its social activities with the priority of employees, the local community and then the whole community. Some of the volunteer activities of the organization are as follows:

Boiler MehrAfarinan Funding

This funding institution was established by the MAPNA ECO Committee in August 2017 with the aim of reaching for the needy with the priority of its internal partners. In this plan, all employees voluntarily make a donation to help those in need, and the amount they receive is deducted monthly from their salaries and deposited in the funding institution account. At the establishment of the fund, 425 contributors participated in the project. According to the fund's policies, those in need are identified with the highest priority within the company by maintaining confidentiality, and assistance is provided as needed in form of donations or interest-free loans.

Measures taken since its inception have been as follows:

- Housing rental allowance
- Mortgage loan
- Treatment allowance
- Allowance for preparing housing containers for victims of Kermanshah earthquake
- Accident compensation allowance
- Shopping food for charity rehabilitation
- Establishing Dana insurance for four individuals

Group Benefit Plan (Infaq)

In addition to the MAPNA Boiler Plan for financial aid, another plan is defined in the MAPNA Group Benefit Plan (Infaq), which includes all MAPNA Group affiliates and subsidiaries. The project, in the form of a committee of the same name, collects contributors' monetary aids through the withdrawal of volunteer staff accounts, distributed pigs (money boxes), call-outs, charity, etc. and is spent in activities such as school building, charity donations, vows, charity auction, and sheep sacrificing. It also organizes exhibitions and charities for the benefit of disadvantaged people. MAPNA Boiler employees also participate in the charity.

The previous year, 380 million Toman was collected through the plan.



The amount of monetary donations in the previous year:

380 Million Tomans

Settling assistance Team for the Plasco building event

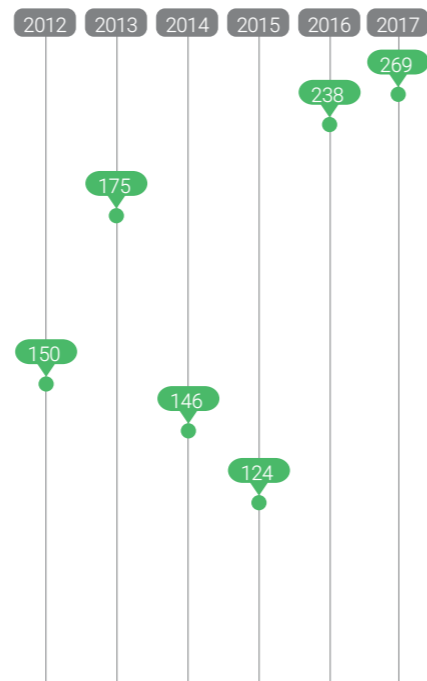
In times of emergency, MAPNA BOILER uses equipment and trained personnel to assist. In case of Plasco's collapse, from the early hours of the incident and the mass testimony of firefighters, Mapna Boiler Co., in line with its social responsibilities, dispatched an initial 15-equipped team of dedicated specialist forces, managers and officials to the scene, Participating in relief operations and resettlement. Several 24-hour teams of experts were involved in the incident, working with other agencies, with more than 1500 hour-per-person working until the last minute of displacement of ruins.

In this operation, due to the complexity and severe involvement of high volume of iron, MAPNA BOILER partners worked in two phases of cutting (removing iron from the rubble in order to start the rubble) and crush the iron coming down from the rubble and Carrying them.



Blood Donation

One of MAPNA Boiler's activities to develop partnerships between staff, production partners and organization-based contracting groups in responsible activities is the six-month voluntary blood donation program. In this program, which is conducted twice a year in February and July in collaboration with the Blood Transfusion Organization and with the guidance of the HSE Unit, Blood Transfusion Organization-based groups take blood donations from volunteer staff.



Average of annual blood donation-150litr



Assistance to earthquake victims in the west of the country

Following the 7.3 Richter earthquake of November, 2016 in Kermanshah province, MAPNA Boilers assisted in collecting and sending donations to its affected compatriots. In collaboration with regional agencies and responding to the urgent needs of our compatriots in earthquake-hit areas, these donations include food, sanitation, clothing, heating and tents with a value of over 400 million RIs. After sending the first consignment of aid, the company raised funds to temporarily resettle the earthquake-stricken countrymen by refinancing cash and allocating funds from the Boiler Mehrafarinan Fund.



Supportive purchase and charity market

MAPNA BOILER strives to allocate part of its products and services to charity providers or vulnerable individuals to support vulnerable groups in the community and promote employment. Some examples of these support purchases include:

- Purchasing a fabric shopping bag for all employees from the Ra'ad-al- Ghadir Charity Institute to support the handicapped,
- Purchasing corporate promotional gifts from the charity fund Raad-al-Ghadir to support the handicapped
- Purchasing shoe bags from Shahid Kachui Prison Organization to support prisoners
- Purchasing steel pallets produced by Alborz Prisoners' Cooperative Foundation to support prisoners
- Purchasing the female staff clothing from I-Tak Co to support women head of household
- Purchasing gift cards from Behnam Deheshpour Organization to support cancer patients

One of the charity events in support of the charity market is a charity event held on March, 2017 in collaboration with the donors of the Raad-al-Ghadir Charity Institute at the MAPNA Boiler Engineering and Manufacturing Company plant. The market, organized by the Institute's clients, presented items including handicrafts and accessories made by the handicapped covered by the Institute. The purpose of the event is to support the handicapped and the needy in the community.



Buying and sending food to Mehr-e-Madar

Rehabilitation Centers In this event, MAPNA BOILER has provided rice and oil and a luncheon for the Boys sector of Mehr-e-Madar Rehabilitation Center to commemorate the start of the holy month of Ramadan.



Ethical code 178

We proudly participate in charitable and humanitarian practices (helping orphans, earthquakes / floods victims, sick and special patients, fundraising, blood donations, building schools and mosques, charity events, etc.) that represent part of social responsibility.

Addiction recovery Plan

Addiction is one of the disasters with really negative impacts on the life quality of employees and their families. MAPNA BOILER recognizes addiction as a disease and identifies a limited percentage of the staff involved in this social problem and has taken steps to improve the health of these people by providing them with the necessary facilities and treatment costs.



Family visits and Educational Basket

One of the major stakeholders in Mapna Boiler is employees' families. The company always owes itself to these stakeholders and plans to engage with them. One of these programs is to visit the company and receive a basket for the occasion of the beginning of the school year. In this event, the last of which was held in September 2017, the families of the employees visited the production lines in order get familiar with their parents' working environment. Also included in this visit are recreational-cultural activities for families and a gift basket to commemorate the start of the school year is donated to staff children and spouses.



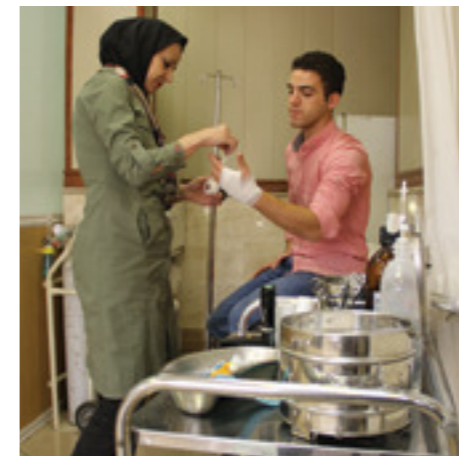
Safe Driving Conference

The seminar on Safe Driving is a voluntary activity of the company that was organized to improve the service for 130 transportation system drivers who are corporate suppliers, and outlined safe driving strategies for drivers. During this course, topics including defensive driving, technical and safety inspection, driving in special situations, causes of accidents, accident prevention, 5S and ergonomics were taught in 4 hours in two parts and were taught by service drivers, many of whom had many years of driving experience. The event was greatly welcomed.



Emergency Management and Emergency Response Team

One of the activities organized in the company is to establish and lead an emergency response team to serve and protect the safety in the event of an incident inside and outside the company. Crises are situations that occur unexpectedly or uncontrollably as a result of natural or man-made disasters, causing hardship and suffering for those exposed, and requiring a series of emergency actions to control them. The company has set up an emergency response team and trained them to help when needed. The team is organized with the priority of serving within the company, but can also be sent to the affected areas when needed in community events. MAPNA BOILER has also put in place a comprehensive training program for its staff to enhance its safety culture.



Sponsorships and financial support

In addition to the staff's volunteering aids, one of the company's social responsibility activities is to provide donations to associations and social institutions. Some of these aids are:

- Equipping Kahrizak Charity Pharmacy at one time
- Imam's shrine allowance in Savojbolagh County Governor's Office
- Funding for the Asian Productivity Organization training course
- Support the printing and distribution of environmental books printed in local community schools

Encouraging stakeholders to participate in social and environmental activities:

MAPNABWILL encourages its stakeholders to participate in environmental and social activities. Some approaches and actions are as follows:

Instances of the participation of stakeholders in environmental practices

Stakeholders	Practices carried out
Employees	Encouraging the employees to participate in humanitarian practices (e.g. Infaq plan of Mapna Group, Mahak charity box, Buying gift cards from Behnam Deheshpour Organization, helping the earthquake victims, orphans, special patients, blood donation) Encouraging the staff to volunteer to clean the environment. Planting a tree for each newborn baby in the company, Paper consumption index information based on the number of trees with the aim of informing the staff to manage consumption, culture and environmental awareness
Customers	Recommending responsible use of the product to customers such as (need to neutralize wastewater from chemical leaching to maintain environmental requirements, perform cascade blow-down for energy saving and reduce water losses, need Purge in case of gas turbine trip or Dock Brenner Safety and ... these are reflected in the documentation provided to the employer).
Suppliers and contractors	Requirements for Installation and Commissioning Contractors to Provide HSE Plan, HSE Contractors Evaluation, HSE Training Courses for Contractor Personnel, Suppliers Environmental Assessment
Community	Encouraging the neighbors' participation in environmental remediation, information and cultural outreach to the community, such as media and staff families, through brochures and catalogs on the importance of environmental issues, cooperation and partnerships with environmental organizations in the community

Certificates of Appreciation from Social Organizations:

Through its environmental and social activities, the company receives various awards from various entities, some of which are as follows:



Title	Year
Receiving a Certificate of Appreciation from the Blood Transfusion Organization for Social Responsibility	2016
Receiving a Certificate of Appreciation from the Environmental Protection Agency of the city for its good environmental performance	2017
Acknowledgment from Savojbolagh Health Network for HSE unit performance	2016
Being selected as the Superior manufacturing sector from the HSE perspective	2013
Acquiring the first rank and the golden statue of the country's top safety workshop because of its safety performance	2015
Alborz Provincial Industries Employer Certificate	2015
Acknowledgment from Alborz Health Network for excellent performance in occupational health	2015
Obtain a green industry certification from the Environmental Protection Agency	2014
Certificate of Appreciation from Savojbalagh Health Network (Excellent Performance in Occupational Health)	2013-14

Risk Management in field of Health, Safety and Environment

Investigating and managing risk in the organization is important in all areas of business. MAPNA Boiler also recognizes the importance of this issue and is developing a comprehensive project for establishment of a risk management system in all areas of health, safety, and environment. Apart from the mentioned project, some of the risks were identified and their associated environmental and social responses have been deployed in accordance with OHSAS18001 and ISO 14001 in the framework of safety and health processes. The risk management system of the company was changed to HEMP model evaluation method in 2017. In This method, in addition to the human and environmental dimensions, equipment and reputation of the organization are also considered. Reviewing the Emergency Response Procedure, reviewing the method to record, Inform, Investigate and Analyze Events, and Revision of Executive Procedure of Monitoring and measuring hazards, pollutants and energy are among the improvements that have been made to this approach.



Indicators of Community satisfaction with the company practices

In order to measure community satisfaction with the organization, annual perception indicators are assessed as follows:

Indicator	Rate in 2017
Satisfaction with organization	68.5%
Satisfaction with environmental effects	70%
Satisfaction with respect to future generation	79%
Satisfaction with social consequences	72%
Reflection in media	61%
Positive image in public mind	75%

In line with its social responsibilities, Mapna Boiler Group defines indicators of disaster incidents and the number of days lost according to international standards, which are recorded and controlled in the Qlick View management dashboard. These indicators include:

LOST TIME CASE = LTC

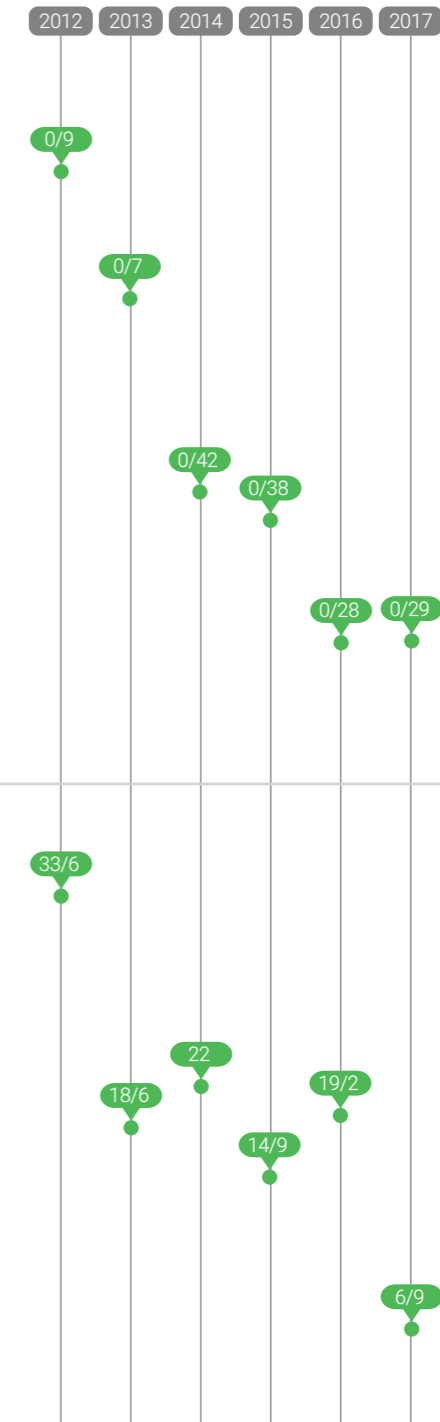
The frequency of occurrences of accidents according to the OSHA standard is the number of incidents per month per month divided by the total useful hours of the same month.

LTC Indicator

LOST WORK DAYS RATE =LWD

The number of days lost by OSHA standard is the number of days lost due to disaster events per month, multiplied by 200000, divided by the total number of useful hours in the same month.

LWD Indicator



Law-Compliance and promoting business integrity

Chapter 6

Sustainable Development Goals



The fourth value created by the organization's social responsibility is law-compliance and promotion of business integrity.

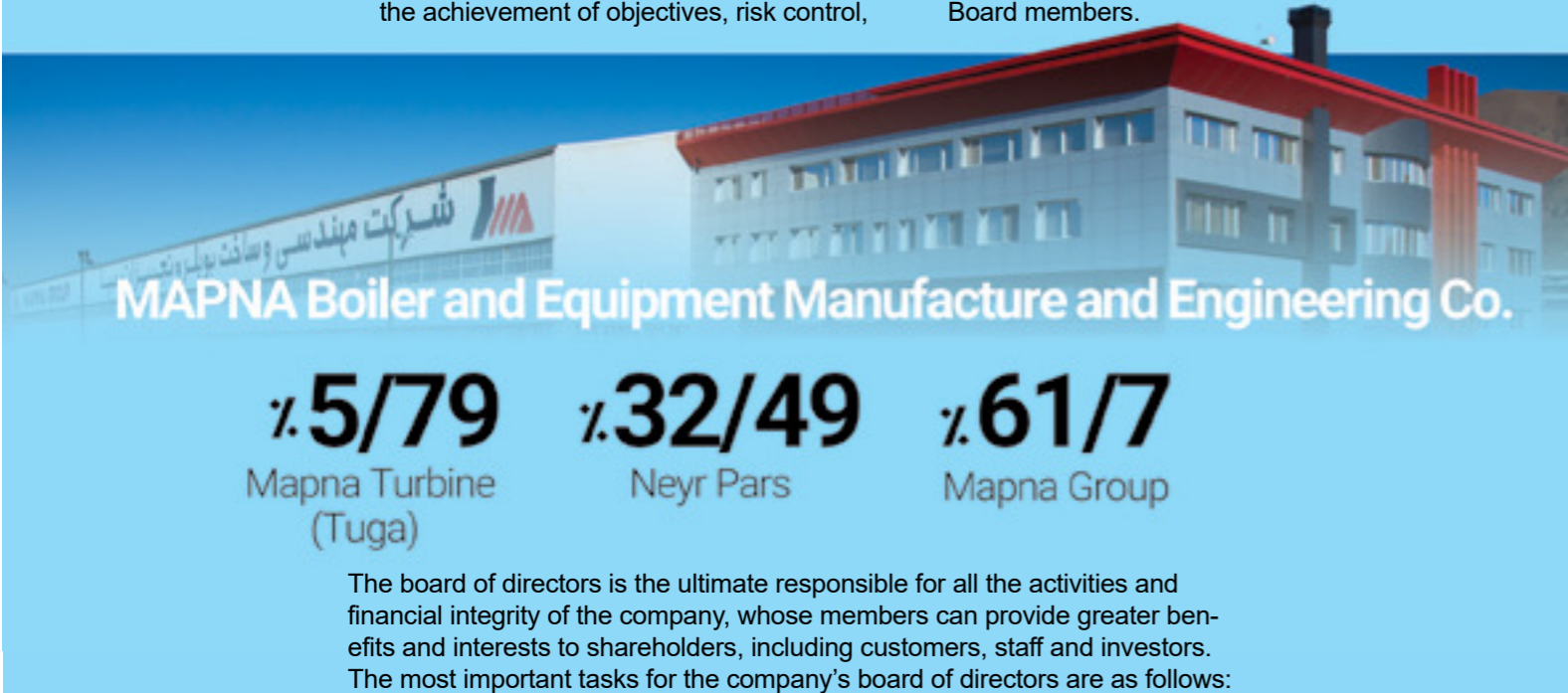
Legal structure of the organization

MAPNA's Boiler Co. has always paid special attention to the integrity of business and ethical activities and has always strived to place the law as a minimum of citizens' rights, and ethics and human standards as a basis for the rights of stakeholders. In doing so, the company has a clear legal structure for running its business, and strives to implement its programs and activities within an ethically-sound culture, thereby promoting and institutionalizing business integrity.

Corporate Governance Structure includes responsibilities and practices used by the board of directors and executives with the aim of identifying a strategic path that ensures the achievement of objectives, risk control,

responsible use of resources, and business integrity. Corporate governance structure passes and guides the Laws, regulations, structures, processes, organizational culture, and systems of the organization in terms of accountability, transparency, fairness, and the creation of strategies for achieving stakeholder satisfaction.

As previously mentioned, MAPNA Boiler is a subsidiary of MAPNA Group with a separate board of directors. MAPNA BOILER'S general policies as a privately-sector corporation are announced and notified by MAPNA Group and the General Assembly to this company. MAPNA Group's General Assembly reviews its annual report, and dismisses and appoint Board members.



The board of directors is the ultimate responsible for all the activities and financial integrity of the company, whose members can provide greater benefits and interests to shareholders, including customers, staff and investors. The most important tasks for the company's board of directors are as follows:

- Review of annual strategic plans and adjustment of company policy and operational plans with the approval of the board
- Monitoring and approving company transactions (within the limits specified in the Trading Code, etc.)
- Company Activity Reporting (Company Project Status Report, System Project Report)
- Examining and providing licenses to purchase equipment and machinery for plant and development plans
- Review of suggestion reports outside the group
- Preparing and arranging financial statements for presentation to the General Assembly
- Implementation of all Assembly approvals
- Examination and charting, trading, administrative and employment finance regulations and submitting proposals to the Assembly
- Review of annual and corrective budgets for corporate governance
- Filing and pursuing any lawsuit or defense against any lawsuit against participating in administrative, law, order, judicial, and referral cases to arbitration, both domestic and international, at all stages of enforcement and prosecution, and the right to reconciliation and extradition.
- Set up a summary of the company's assets and liabilities every six months and submit it to the auditor
- Elect or dismiss the CEO on the proposal of the Board of Directors and approval of the Assembly

The members of the Board of Directors are as follows:

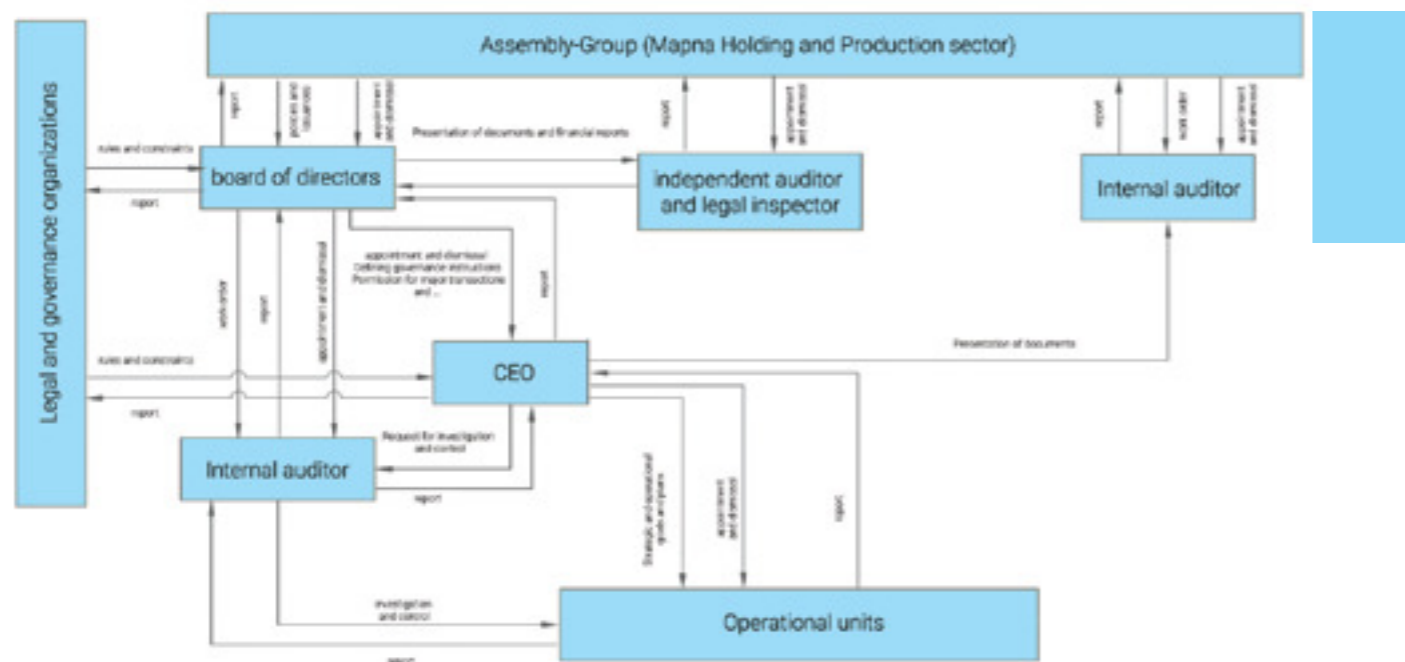
Abbas Ali Abadi	CEO
Abdolmajid Rajabi	Vice President and Senior Manager
Mohammadreza Roshani Moghadam	Member
Mohammad Nabi Faraj	Member
Behrouz Jabari	Member

The Board of Directors appoints the CEO to manage the organization and delegate the task of managing the organization and answering to the auditors and the board. The independent auditor of the board and the internal auditor of the MAPNA Group are responsible for reviewing the financial statements of the company and providing the required reports to them. Presenting these reports to the auditors is the duty of the CEO, as the representative of the board of directors.

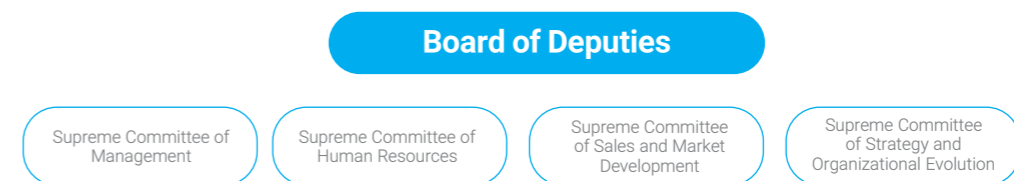
Here is a list of the responsibilities of the CEO:

- Implementation of Board approvals
- Approval of Financial and Administrative Regulations (Mission / Loan / Claims / Fixed Assets etc.)
- Appointing managers
- Control and management of corporate affairs
- Performing all the tasks of recruiting, hiring and staffing to provide the necessary human resources
- Representing the Company in all judicial, law, administrative, governmental, non-governmental bodies; and in relation to all natural and legal persons
- Signing all administrative correspondence
- Conducting any transaction with all real and legal parties within the framework of Board of Directors approvals

Organizational governance model in MAPNA Boiler is as follows:



The CEO of Mapna Boiler has defined organizational committees at the highest and most operational levels in order to effectively govern the company, with all the evolving and current affairs of the company in all economic, social and environmental matters being assisted by these committees and operating units in the company. The structure of the grouping of company committees is as follows:



The board of deputies involves in resolving issues in different subjects, as the highest executive entity in the organization. All the deputies of the organization refer their economical, social and environmental challenges and issues to this committee, where the issues will be discussed and resolved. Majority of issues referred to this committee during the past year have been concerned with human resources and environmental crises regarding economic sustainability. Other committees of the organization work under the supervision of this committee.

The organizational committees' attitudes at Mapna Boiler are divided into three categories: Evolution, operation and social responsibility. The Supreme Committee on Strategy and Development, Organizational Development and Improvement, and their subcommittees, are among the organizational development committees. Operational committees, including sales and market development committees, human resources and project oversight and related sub-committees lead the organizational processes in form of multi-unit committees, and issues related to these processes are resolved in the relevant committees. The tasks of the Supreme Committee on Social Responsibility and its subcommittees have been discussed earlier.

Ethics-orientation and human dignity

MAPNA Boiler is committed to creating an ethical environment with respect for human dignity, ensuring that justice, equality of opportunity, diversity (ethnic, religious, cultural, etc.), meritocracy, respect for human dignity and ethics are defined as ethical or moral codes of conduct in the organization. In this regard, Mapna Group officially published its comprehensive ethical document in 2013 and extracted more than 1200 codes of ethics in 95 titles and announced it to its subsidiaries. MAPNA Boiler Co., as one of the subsidiary companies, has committed to these codes and prioritized these codes of ethics and focused on promoting key codes in the organization's agenda. These codes of conduct describe how to interact with different stakeholders based on the values of the organization. A committee called the EVC (Ethics, Values and Culture) Committee is in charge of pursuing culture cultivation in the organization.



In Mapna Group, I am committed to ethical codes under every conditions



Act upon Mapna Codes

- We tell the truth and realities
- we do the right



What to do if we observed violation of the codes?

- Direct refer to the CEO
- Refer to the EVC expert in the company

Organizational Culture and Denison's culture Assessment Model

Organizational culture, as a set of shared beliefs and values, influences the behavior and insights of the members of the organization and can be either a starting point for movement or an obstacle to progress. MAPNA BOILER Human Resources Management has been evaluating its dimensions based on the Denison model since 1994, in two-year periods, to evaluate and enhance its organizational culture. This model takes into account four characteristics, which are interpreted as follows:



1. Involvement in affairs

This dimension places the emphasis on the extent to which employees are involved in activities and decision making in organizational culture. This involves the voluntary commitment of individuals to engage in organizational practices without the need for external control, which includes empowering, teaming, and developing organizational collaborative capabilities.

2. Adaptation

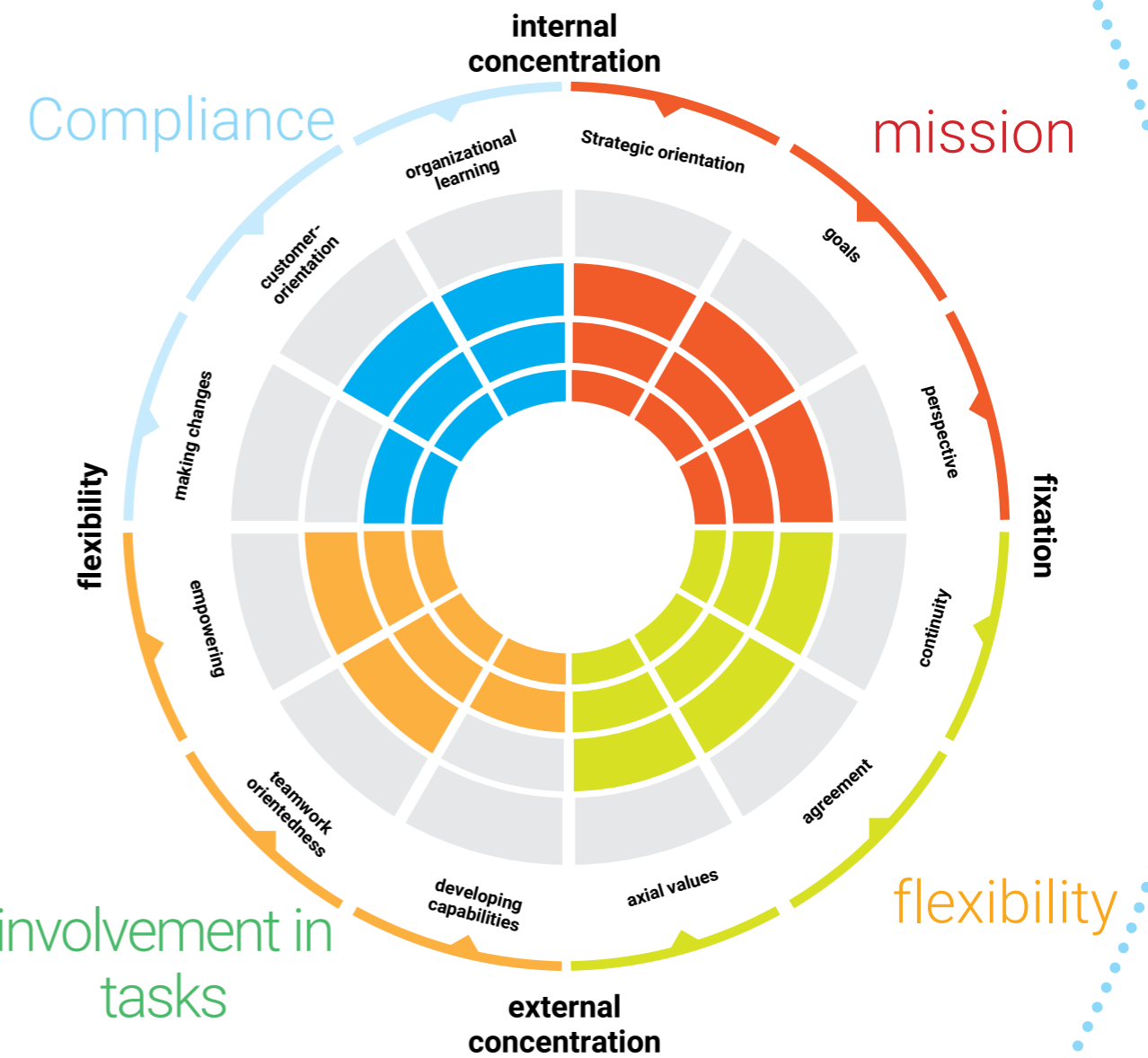
This dimension stresses on the extent to which organizational values are internalized. This internalization results in a high degree of internal commitment and adaptation of individuals to the organization without the need for external control, which includes harmony, coherence, agreement, and fundamental values.

3. Compatibility

This dimension emphasizes the degree of flexibility of organizational culture in adapting to the external environment. This adaptability enables the organization to better respond to environmental changes, including organizational learning, customer orientation, and change.

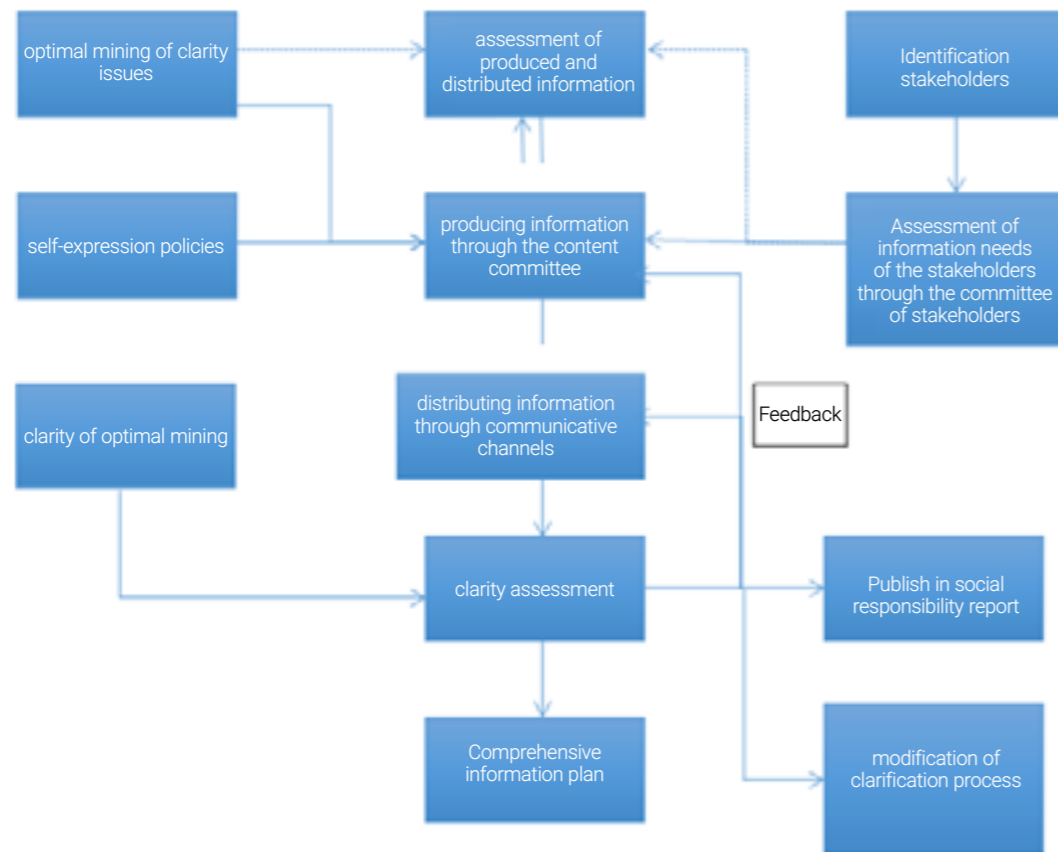
4. Mission

This dimension emphasizes the extent to which there are specific goals in the organization and alignment of activities with goals. This goal-setting enables the organization to better respond to environmental changes, including vision, goals, and strategic orientation.



Organizational Transparency Model

MAPNA BOILER has always strived to establish organizational transparency and provide information content to stakeholders given their expectations. Based on this, a model is implemented in the company for information transparency at the organization level. The model is as follows:



1. Evaluating stakeholders' needs

in this step, the stakeholders' information needs are identified by the Stakeholder Committee through the interaction, interview and questionnaire collection.

2. Optimizing Transparency Subjects

This step utilizes other companies' experiences, global standards, and authoritative articles to extract important information subjects.

3. Assessment of the produced and published information

in this step, the information which is currently being produced and disseminated within the company and its units is evaluated in terms of the type of information and how it is disseminated.

4. Producing information through Content Committee

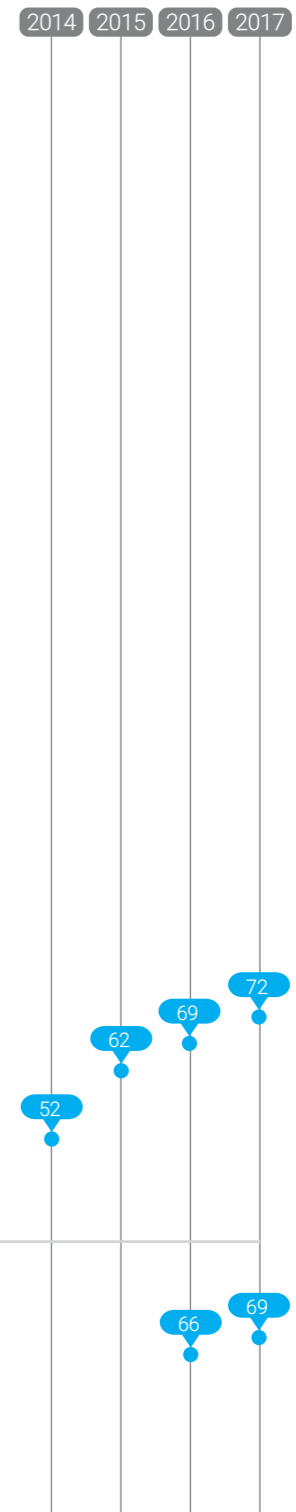
in this step, according to the organization's disclosure policies, given the limitations to which it is willing to self-declare in some of its departments, it is appropriate to produce proper information through the organizational unit's representative in the content committee.

5. Publishing information through communication channels

in this step, the appropriate channels for disseminating information are determined by the content committee and published through these channels upon entering the identity of the communication channels.

6. Assessment of transparency and its outcomes

in this step, the transparency of the organization is evaluated based on the information produced and published according to standard criteria, and based on its results, the transparency model of the organization is improved and modified if needed.



Disciplinary Committee and Anti-Corruption Approaches

MAPNA BOILER has set up a disciplinary committee chaired by the human resources director to deal with ethical violations and probable corruption in the company, with representatives from employees and production staff addressing specific ethical violations and corruption at all levels of the organization. Here are some of the items identified in the Company's Disciplinary Code are as immoral:

- 1 Deliberately inflicting damages on machinery or property of the company.
- 2 Bribery and misconduct.
- 3 Abuse of office property and work tools at his / her disposal to secure personal resources.
- 4 Disclosure of confidential material and documents for non-official use in accordance with the Company's Privacy Policy.
- 5 Providing fake documents for hiring or submitting any non-documentary certificate for the benefit of employment and occupation.
- 6 Creating strife and bullying in the workplace with colleagues and clients.
- 7 A tendency for social corruption to have an adverse effect on labor discipline.
- 8 Insulting and defaming others, officials, and company executives.
- 9 Conducting any movement which is contrary to social, religious, moral, occupational, and organizational dignities in the workplace.
- 10 Non-compliance with Company Regulations, constraints and Ethics.

It is noteworthy that the activities related to corruption control in the company are limited to the activities of this committee and have not been expanded due to the small number of cases.

Ethical Code 195:

We avoid the acceptance of any gifts / privileges that give us the impression that we are influential in the MAPNA Group or create the expectation in the donor that we will help him in the organization in future.

Ethical Code 50:

We adhere to gender, racial, ethnic, and religious discrimination policies in all employee-related processes and procedures (including recruitment, promotion / downgrading, transfer, dismissal, adjustment, salaries, benefits, etc.).

Diversity, equal opportunities and justice

Respect for diversity, equal opportunities and justice are the ethical values that MAPNA BOILER has always pursued and that the company strives to preserve the interests of all stakeholders and create equal opportunities for them. Since diversity and equal opportunities are among the issues considered in social responsibility, MAPNA Boiler believes in the principle of equal opportunity for all people.

Ethical Code 157:

we do not permit any insult to the employees of Mapna Group and support them by consideration of justice.



Therefore language, gender, ethnicity, religion, etc. have no impact on job opportunities, vertical and horizontal promotion, relocation, termination of service, determination of salaries and benefits and amenities of employees. Accordingly, employee competence and performance are always the basis of decision making. Therefore, to ensure equal opportunities in employment, promotion, remuneration, mission, training, welfare facilities, etc., many approaches such as recruitment, compensation, employee compensation, and integrated welfare budgeting have been predicted and all employees of the company execute and apply the relevant rules through the bylaws and procedures. Moreover, in some special occasions to appreciate those who are in the minority, the company considers certain ceremonies; for example by celebrating the woman day and giving them gifts, or congratulating the Christian colleagues on the occasion of New Year's Eve.

Assuring the existence of justice, equal opportunities, competence-orientation, accepting diversity and respecting human dignity; in this respect, Mapna Boiler Group has established various human resources strategies which are summarized in the following table:



Subject	Approach/HR practices	Implementation	process
Justice and providing equal opportunities	Necessity of commitment to justice at distribution and manner levels	Since the beginning	Ethical value management/ comprehensive ethical document
	Identifying the instructional needs based on analyses of job features		Training and instructing the employees
	Donations based on loan performance, treatment and welfare	Since 2016	Service compensation/ performance management
	Planning promotion programs	Since beginning	Promotion& downgrade process/ promotion principles
	The possibility of presenting opinions by all employees	Since 2013	Managing employees participation
Accepting diversity	Service-compensation system	Since 2009	Instruction for determining salary
	Participation in employees poll (attitudes)	Since 2012	
	Recruitment based on the applicants' competence	Since 2008	
	Absence of the law for forbidding recruitment based on gender, religion, race ...	Since 2008	Planning, recruiting and discharge of employees
	Possibility of promotion regardless of gender	Since 2008	Planning, recruiting and discharge of employees
Competence-orientation	360 degree assessment of managers in compliance with Individual Development Plan (IDP)	Since 2012	Instructions for promotion
	Compiling competence model of the organization	Since 2015	Employees development process
	Developing occupational job-path system	Since 2016	Leadership and culture development process
		Since 2015	Employees development process/ Instructions for promotion
	Emphasis on appointment from inside the organization	Since the beginning	Promotion/downgrade process
Respecting human dignity	Job allowance (all employees based on performance)	Since the beginning	Employees performance management/ 2010 method of calculating working allowance
	Promotion (all employees based on performance)		Promotion/downgrade process/ Instructions for promotion
	Competence-oriented recruitment	Since 2013	
	Converting the status of force-supply employees	Since 2016	Recruitment process
	Employing internal trainers	Since 2015	Instructions for converting status
Respecting human dignity	Necessity of respect to the colleagues' dignity	Since 2006	Instructing and training the employees
	Issuance of the disciplinary regulations	Since the beginning	Comprehensive moral document
	Developing ethical codes in the organization	Since the beginning	Work relationships/ disciplinary regulations
	Managing employees exit (retirement etc.)	Since 2015	The book of ethical codes
	Since 2014	Planning, recruitment and employment processes	

2016 2017

The approach of creating equal opportunities not only for employees but also for other stakeholders has been observed and this approach has increased the satisfaction of community stakeholders in this regard in recent years.

Establishment of justice and creation of equal opportunities

Organizational Law-Compliance and observing stakeholders' rights

MAPNA BOILER strives to observe and respect the rights of all stakeholders so that accountability to all stakeholders is one of the strategic foundations of the organization. To this end, in form of Stakeholder and Organizational Legislation Committee, the company examines and monitors the needs, expectations, and rights of stakeholders in the economic, environmental, social, and information contexts, as inputs to other organizational systems, through which appropriate programs for Satisfaction of stakeholder needs is provided, used.

Type of stakeholders' needs and expectations

Type of stakeholders' needs and expectations	Related organizational structure	Related committee
Economic	Strategic management system and reference to business strategy map	Strategic management committee
Social-environmental	Corporate Social Responsibility System and Map of Corporate Social Responsibility Strategy	Social responsibility committee
information	Stakeholder Communications system and reference to the Organizational Transparency Program	Content committee

Preserving the rights of customers and reviewing their complaints

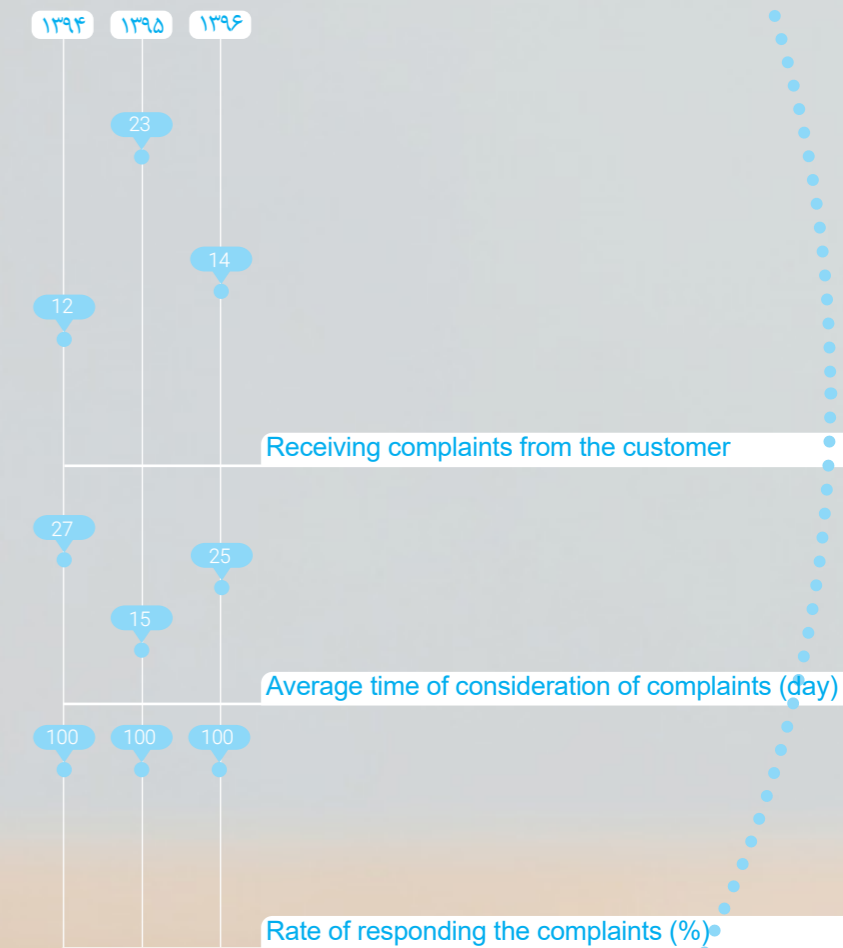
Ethical Code 151:
In Commitment to the organizational rules and constraints (e. g. Entry and exit), we behave responsively and as a role model for other colleagues.

- 1 Genuine respect for the human dignity of the customer in all circumstances is at the heart of our ethics.
- 2 Transparent, timely, accurate and complete information delivery and effective advice and training are our response to the right to information from customers and consumers
- 3 Speed, accuracy, ease and quality of service and delivery are the goals of MAPNA Group.
- 4 Privacy and customer secrets and privacy are our professional policies.
- 5 Criticism is the right of the consumer and the consumer. Accountability, liquidity and compensation are the result of our organization's performance.
- 6 We consider ethical business a condition of fair dealing in contract and avoidance of any wrongdoing.
- 7 Commitment to our obligations, especially in price, on time delivery and impeccable delivery of goods and services, is our organizational character.
- 8 We value the customer and consumer perspective, and emphasize the right choice of customers by diversifying our products and providing services with flexibility and welcoming their needs and tastes.
- 9 offering pre-sale to after-sales service, along with commitment to quality standards, is also a moral obligation.
- 10 To deal honestly, fairly, frankly and to avoid any deceit is MAPNA's mission.

Customers, as one of the key stakeholders, have always been the focus of the company and their associated rights have been identified complied with. MAPNA BOILER has been conducting customer surveys and complaints since 2006 and has developed an executive approach to customer satisfaction and complaint management and has continuously refined it. The company strives to establish a lasting relationship with all customers. Hence, in line with the values of the organization and the creation of discourse based on openness, transparency, trust and respect, it uses different approaches in the following table.

Approaches to components of customer relationships and rights					
Approach Title	Components of long-lasting relationship				Evaluating approaches effectiveness and efficiency
	openness	trust	transparency	respect	
Surveying customers' opinions and letting them of the results			●	●	satisfaction with transparency of the survey
Clarification of both parties' duties in agreements			●		Satisfaction with technical considerations of agreement
Formation of customer satisfaction committee	●	●	●	●	Quality of responding the complaints
Direct meetings with customers in case of complaints	●	●	●	●	Customers' overall satisfaction
Necessity of commitment to principles of customers' rights		●	●		satisfaction with considering technical features

In addition to designing and implementing the above approaches, the company strives to empower employees to protect customer rights and develop a customer-centric culture, while identifying and identifying customer contact points, developing the resources, competencies, powers and information needed by employees. .



Preserving the rights of suppliers and partners

The organization's ethical policy towards suppliers and partners includes:

- 1 An honest, frank, and genuine and mutual respect for our suppliers is the cornerstone of our ethics.
- 2 Contract fairness, commitment to contract terms and timely payment of claims are our policy with suppliers.
- 3 Goodwill, providing mental security, protecting the professional status of suppliers, avoiding any harm, respecting suppliers' privacy, and keeping their information confidential is our moral duty.
- 4 We are loyal to our suppliers' property, human resources and intellectual property.
- 5 Suppliers will always find us welcoming criticism. It is our moral obligation to find out and respond to their views and criticisms.
- 6 Spiritual support for suppliers, assistance and good cooperation in critical situations and continuity of cooperation based on satisfaction is the organizational character of MAPNA Group.
- 7 Helping contractors and suppliers develop professional ethics.
- 8 Build engagement with suppliers on a clear and transparent way of expressing the expectations and obligations of the parties.
- 9 Speed is the moral duty of our suppliers.
- 10 Emphasizing on information opportunities and fair competition.
- 11 Appreciating the good cooperation of suppliers is a moral and godly value.
- 12 Protecting the legal rights of contractor staff is our human duty.
- 13 We consider qualified and fair supervisors the right of suppliers, and in the supervision, evaluation, and adjudication of contractors' activities, we govern scientific and professional fairness and standards.
- 14 Organizational predictability for suppliers is assured of their rights being protected.

Suppliers and partners are other stakeholders with whom the organization has an honest and ethical treatment. Paying attention to suppliers and partners and building a win-win and long-lasting relationship based on trust and openness with suppliers are ethical considerations. Some of the approaches to ethical behavior with suppliers and stakeholders are as follows:

Approaches to create sustainable relationship with suppliers					
Approach	Effect on sustainable relationship				Effectiveness evaluation indicators
	openness	trust	clarity	respect	
Meetings with suppliers	●●●	●●	●●	●●	<ul style="list-style-type: none"> - Satisfaction level of suppliers - Percentage of progress in the construction of equipment - Contractor's accident rate - Duration of contract with suppliers <p>●● High effect ● Moderate effect ● Low effect</p>
Transferring technical knowledge and training the suppliers in form of developing internal production	●●	●●●	●	●●	
Asking the suppliers opinions in form of polls	●●	●●	●	●●	
Providing feedback on the results of suppliers' performance	●	●	●●	●●	
Providing health and safety services to contractor employees (production and execution)	●	●	●	●●	
Holding commissions for transactions and fair selection of suppliers	●●	●●	●●	●●	
Signing long-term agreements with suppliers	●●	●●	●		

Clarifying the obligations of the parties in the contracts, the transparent method of trading, and providing the supplier with the necessary experience and information during the partnership are examples of ethical behavior with partners and suppliers. Supplier satisfaction is measured with the aim of creating transparency and mutual trust in the company, while receiving feedback from suppliers, and defining and implementing appropriate programs to enhance a sustainable win-win relationship.

Economical sustainability for stakeholders

Chapter 7

Sustainable Development Goals



MAPNABE

The fifth value created by the social responsibility of the organization is establishment of economical sustainability for the stakeholders.

Sustainable economic development is an opportunity to work and live a promising future. Reducing today's production costs will lead to safer results for tomorrow. In fact, a sustainable economy is the main mission of organizations, because without the presence of a sustainable economy the life of organizations is endangered. MAPNA Boiler also strives to create good economic value for itself and for all its stakeholders and tries its best to sustain and preserve these values. Much of MAPNA Boiler's economic activities are tracked in the organization's business strategy map.

The Corporate Social Responsibility System at Mapna Boiler also seeks to moderate economic value among stakeholders and prevent their excessive tendency toward certain stakeholders. In doing so, it has been negotiating with various stakeholders and influential in this regard.

The following are some of the company's approaches to economic sustainability for itself and all its stakeholders. The issues that lead to the value creation and economic sustainability of the company and the stakeholders are described below.



Mapna Boiler's economic sustainability

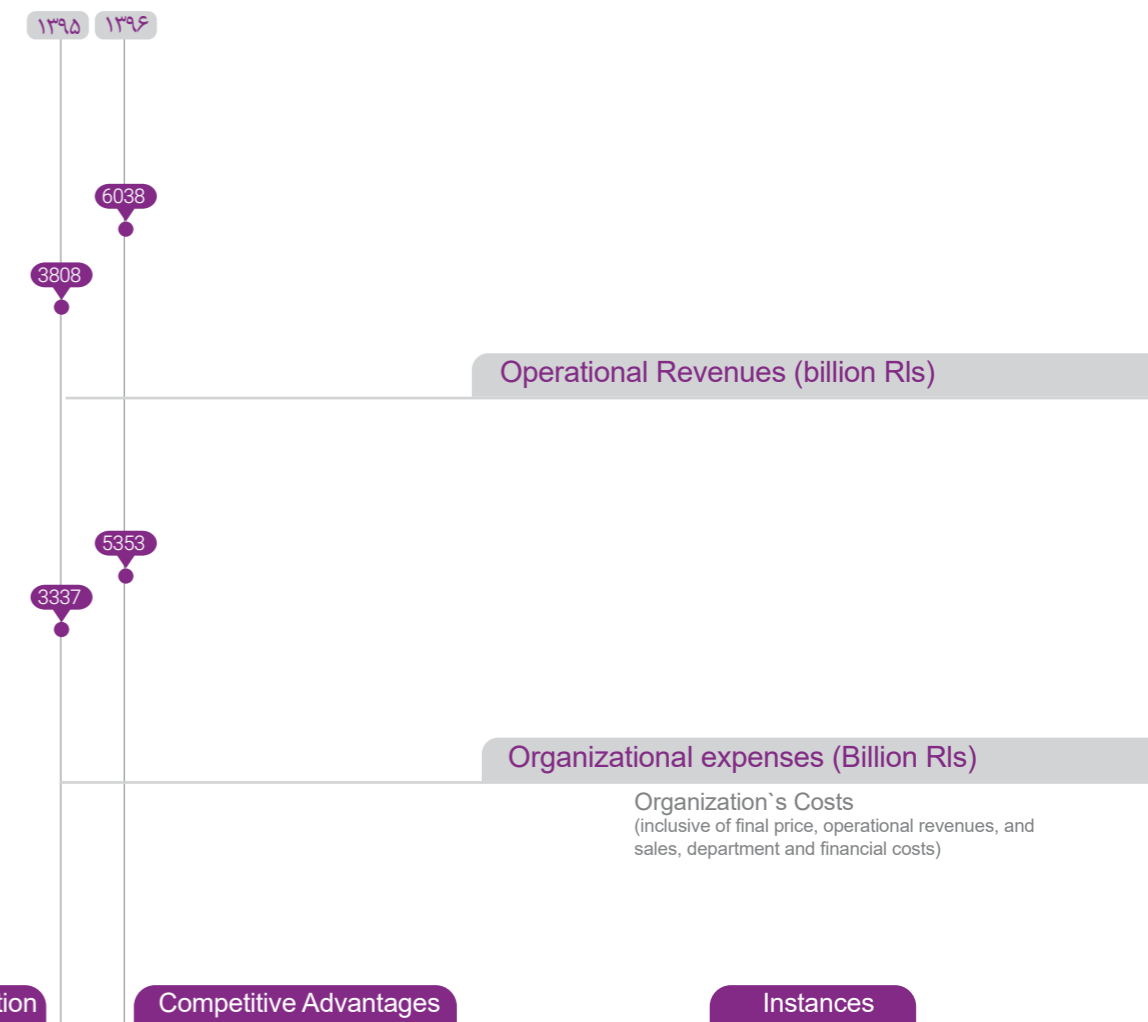
MAPNA BOILER, relying on systematic and integrated management centered on the strategy, strives to move toward achieving economic sustainability by targeting and implementing its strategies.

Produced and distributed economic value

Sustainable Economic Income and Profit is one of the most important indicators of value creation that a positive and sustained process can lead to better shareholder satisfaction, increased employee well-being, positive impact on local and national economy, and strengthened suppliers. Mapna Boiler Company always strives to increase sales and sustainable profitability. The amount of revenue from the sale of the company's products and services over the last two years is as follows later.

Investing in infrastructures and properties of the organization

Investing and updating assets is one of the factors contributing to the growth of the company, which is the infrastructure of many sustainable growth plans. Mapna Boiler has not raised capital in the last five years but has invested a percentage of its profits in infrastructures.



Value Recommendation	Competitive Advantages	Instances
Competitive price	<ul style="list-style-type: none"> Mapna brand Technical knowledge certificate of horizontal HRSG boiler design from Doosan 	<ul style="list-style-type: none"> Establishment of value engineering to cut down on costs Massive purchase of materials and equipment required for projects Improvement of manufacturing processes
Technologic response	<ul style="list-style-type: none"> Design of horizontal HRSG boilers downstream of gas turbine from 20 to 200 MW capacity Expert and experienced manpower 	<ul style="list-style-type: none"> Developing technological corporations with superior international companies and science and technology centers Developing products basket Establishment of innovation system and technology management establishment of R&D management
Meetings with suppliers	<ul style="list-style-type: none"> Providing services in form of complete value chain Project Backup Inventories Mapna International (corporation in LC management for supplying foreigner) 	<ul style="list-style-type: none"> Establishment of sales and market development deputy Establishment of the committee of management of customers' satisfaction Re-designing processes based on SAP Developing and promoting laboratories Establishment and employing Pmbok guidance model Promoting quality assurance unit in order to employ more effective tools of quality engineering

Value engineering practices in the company

Value engineering is an organizational approach used for value creating in the company. Value engineering is a structured and functionalist methodology with specific steps which seeks to increase the value index of a given product, project or service. Value index is the ratio of the function and quality of an entity (project, product, service) to the costs of its lifetime. Value engineering tries to improve this index via specific steps. This approach was systematically started at Mapna Boiler in 2012 and so far various projects have been conducted in this respect, the most important of which are as follows:

Project	Important practices	The amount of savings	Year	Project	Important practices	The amount of savings	Year
First value engineering study under the title of "improving value index of Harp"	<ul style="list-style-type: none"> • Holding seminars before the workshop and instructing basic concepts of value engineering • Workshop on value engineering • Preparing and presenting final report 	550000000 Tomans in each boiler, which is equal to 1% saving in each HRSG boiler	2013	Fifth value engineering study under the title of "increasing value index of HRSG boiler tanks"	<ul style="list-style-type: none"> • Holding seminars before the workshop and instructing basic concepts of value engineering • Workshop on value engineering • Forming teams for investigating the selected ideas from the workshop • Managing the development project by the selected ideas • Economic analysis of the selected ideas 	Under calculation	2017-2018
Second value engineering study under the title of "increasing value index of boiler's water feed system in a Miami combinatory cycle block"	<ul style="list-style-type: none"> • Holding seminars before the workshop and instructing basic concepts of value engineering • Workshop on value engineering • Preparing and presenting final report • Implementing the results of the study in 3 projects, namely Ferdowsi, Asalouye and Uremia 	1500000000 Tomans in each boiler, which is equal to 5.5% saving in each HRSG boiler	2015	Sixth value engineering study under the title of "increasing value index of welding processes"	<ul style="list-style-type: none"> • Holding seminars before the workshop and instructing basic concepts of value engineering • Workshop on value engineering • Forming teams for investigating the selected ideas from the workshop • Managing the development project by the selected ideas 	Under calculation	2017-2018
Third value engineering study under the title of "increasing value index of low-pressure and high-pressure drums"	<ul style="list-style-type: none"> • Holding seminars before the workshop and instructing basic concepts of value engineering • Workshop on value engineering • Preparing and presenting final report 	2000000000 Tomans in each boiler, which is equal to 6% saving in each HRSG boiler	2017				

Organizational Productivity System

Another system resulting in improved economic sustainability is organizational productivity, which has so far implemented the followings to improve productivity:

- Formation of strategic committee of productivity
- Developing the map of productivity path
- Compiling cultural content for the communicative channels
- Holding educational workshop on productivity by the Iranian Center for Educating Productivity Management
- Holding meetings in the strategic productivity committee
- Holding internal meetings with related units in the company
- Creating infrastructures for measuring productivity in the company
- Defining indicators of productivity in fields of capital, human force, machinery and equipment, raw material
- Gathering information and measuring productivity indicators in fields of capital, human force, machinery and equipment
- Analysis and identification of opportunities for improvement in fields of capital, human force, machinery and equipment
- Presenting reports of the practices in meetings of the strategic productivity committee

Economic sustainability in interaction with different stakeholders

Developing interactions with stakeholders and establishing win-win relationships with them is one of the ways that lead to mutual economic sustainability, so MAPNA BOILER always considers economic sustainability in interaction with different stakeholders and therefore takes different approaches to the agenda. Here are some of them.

Shareholders

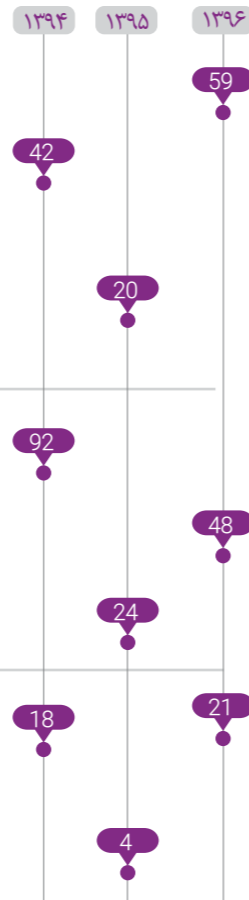
Shareholders of the company are the first beneficiaries concerned with the economic viability and profitability of the company. Shareholders are the capital flow of the company, and raising funds is their key role in creating economic sustainability for the company. The biggest stakeholder expectation of a return on equity is the company's profitability. Therefore, the life of the organization is dependent on generating profitability for shareholders, which is always one of the primary goals of any business. As previously stated, MAPNA BOILER is a privately held limited partnership with shareholders that are designated by MAPNA Group as a parent holding company. It is worth noting that Mapna Group Company is a public company with multiple shareholders and its shares are listed on the Tehran Stock Exchange. The Company's approaches to adhering to shareholder sustainability are as follows:

- Sustainable profitability growth
- Developing products and markets based on the company's strategies to grow sales and increase profitability that the water industry entails. In this regard, the company always strives to maintain its profitability and increase its growth rate.
- Provide transparent reports to shareholders in order to maintain sustainability

Some of the indicators that confirm the positive trend of sales growth and sustainable profitability are as follows:

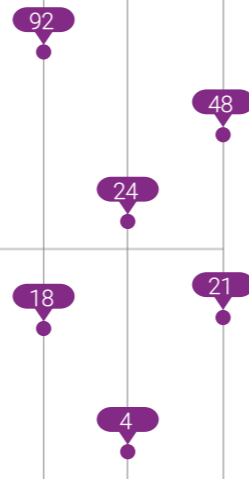
Percentage Net Growth Rate

Despite the economic sanctions, the trend for the sales of the company products has grown over the past years. Through various methods such as increasing the customers' satisfaction and loyalty, presence in vendors list, increasing sales in the current markets and entrance to new markets, the company is trying to keep the current trend. The increase in this trend has been slower recently which can be attributed to the reduced budgets of gas, oil and petrochemical industries. With increasing the sales in power plant areas, the company has managed to develop its indicators. Moreover, entrance to water industry has been a new opportunity for selling new products, resulting in stability of sales in the future.



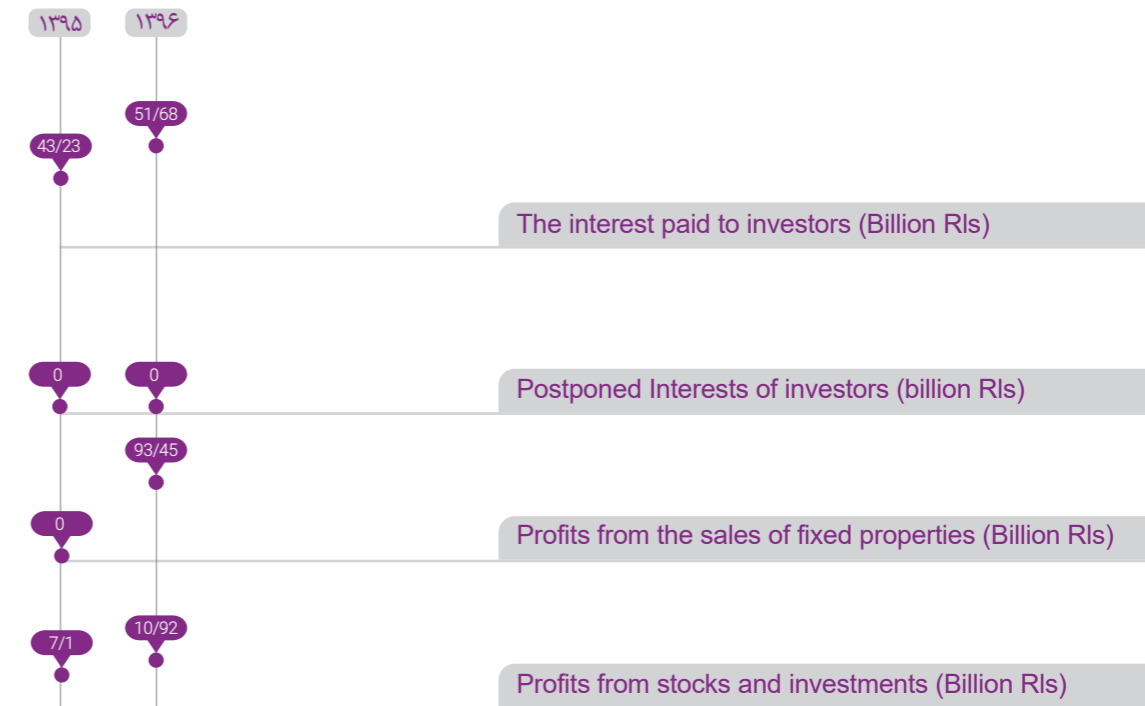
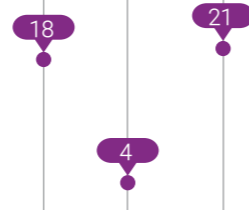
Percentage gross Growth Rate

The company's profitability has always been ascending over the past several years. To keep this trend stable, also regarding the instability of the macro environment, the company has employed approaches such as managing key expenses, reducing operational expenses and supporting the supply of key products based on stock management and reduced costs.



Percentage of shares increased value

The value of the company's shares has also grown over the recent years. This is while the capital and number of shares have been constant during 2016 and 2017. The pace of the change in the shares value has been in accordance with environmental changes affecting the sales.



Staff

Employees, referred to as human capital, are the stakeholders who provide service to the organization in long-term contracts. The potential of these stakeholders has a bearing on the quality of the process of converting raw materials into products of the company and can contribute to the economic sustainability of the company by their role in various dimensions. These stakeholders have different expectations for their service that financial and economic needs are the most important need of the majority and the main reason for their service to the organization. MAPNA BOILER has always strived to fulfill its legal obligations to its employees and to provide them with a variety of benefits and rewards, including those described in Chapter 4. Employees, like other stakeholders, benefit from the company's profitability process. In addition, various investments are made by the company in terms of economic sustainability and value creation for these beneficiaries and their development:

- Paying wages in a timely manner and beyond the legal minimum and at the top corporate level and increasing the 23% salary index in 2017 compared to the same period last year
- Providing welfare baskets and social and supplementary insurance to employees
- Invest in human resource development such as skills development through training
- Employee insurance in accordance with the rules for using retirement insurance
- Employee support payments in unsuitable conditions in the form of loans, collateral and charitable donations

Type of cost	Million RIs	
	2016	2017
Educational expenses	3183	3047
Staff insurance	95517	85893

Customers

Customers are one of the most important stakeholders on whose satisfaction depends economic viability, as the company's performance depends on their demand for the product. Therefore, the company needs to satisfy these stakeholders in order to increase their growth and develop their numbers. MAPNA BOILER has always strived to promote economic sustainability through win-win interaction with its customers and to provide them with satisfaction and loyalty. The following are some examples of the company's efforts to provide economic sustainability to its customers:

- Defining multiple measures to ensure the quality and delivery time of the product in accordance with the company's brand commitment to customers
- Innovation and development of new products based on customer needs and interactions with them such as design of static self-heating boilers, heat exchangers, waste incineration and ...
- Providing services related to equipment maintenance after delivery
- Technical advice and knowledge transfer to clients when needed

Some of the above mentioned items are illustrated below:



Partners and suppliers

Partners and suppliers are stakeholders of the organization whose enhancing economic sustainability can lead to mutual growth for the company. Increasing engagement with them and getting more services and reinforcing them over time will improve the quality of their services, which can impact on improving a company's services and economic sustainability. For this reason, the company strives to promote economic sustainability based on:

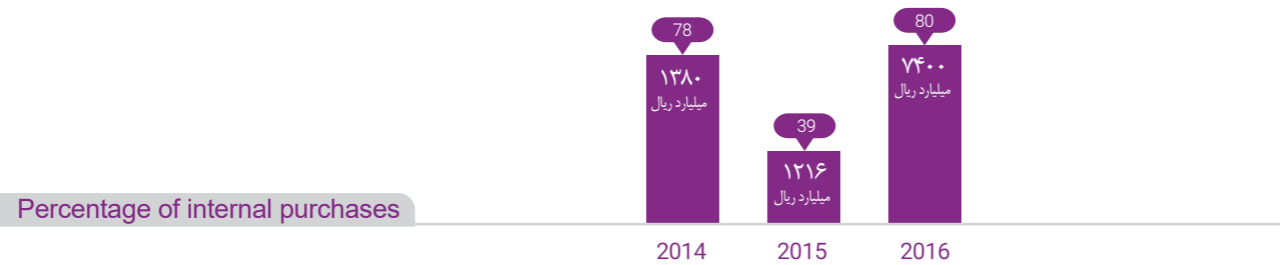
- Paying claims to these stakeholders as soon as possible. The company always strives to pay its debt in the shortest possible time.
- Localizing and expanding the use of partners and suppliers: In this approach, the company strives to build sustainable equipment and products by engaging these stakeholders in a win-win approach.

Society and indirect effect of economy

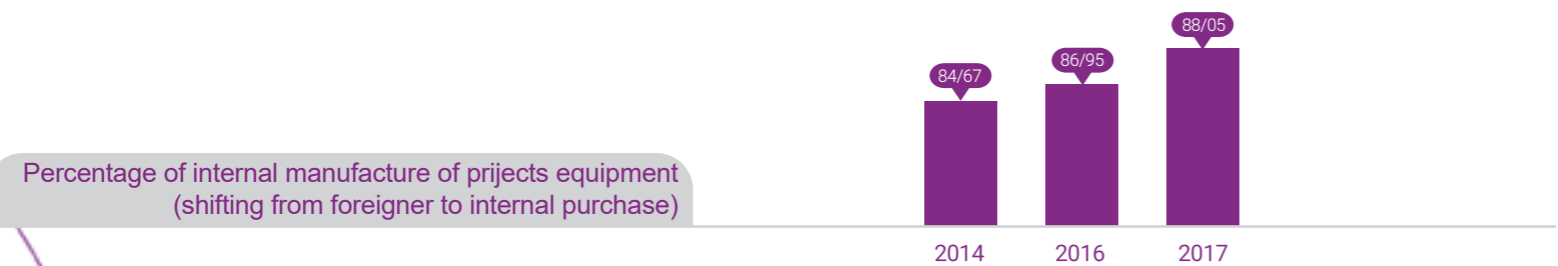
In addition to other stakeholders, the community, which includes governmental organizations and institutions, as well as the general public (with local community priority) can foster economic sustainability in the company. MAPNA Boiler's engagement with various organizations and institutions, especially in the local community, has enabled the company to benefit from the support of these organizations in a variety of dimensions. The Company uses its facilities and exemptions in the performance of its duties in relation to government agencies such as finance, social security, banks and other government agencies. Examples include obtaining six loans over a two-year period, obtaining tax exemptions under the law, and obtaining some of the requirements following negotiations. In the local community and in the neighborhood, the company also strives to create a trust-based image that enhances both the positive impact and satisfaction of the company and reduces the company's complaints and possible imposing costs.

The company also strengthens the economy in its local and national dimensions, thereby positively impacting the lives of individuals in the economy. Some of the indirect economic impacts of the company are as follows:

1 In order to sustainably meet the needs of our suppliers and to enhance the boom in the domestic industry and sustainable employment-creation, the company is looking to maximize the supply of domestic suppliers and develop sustainable partnerships with them. It has its agenda, and thus in a win-win relationship, leads to the development of the national economy. To this end, the company prioritizes domestic suppliers as much as possible in the supply of materials and parts.



2 Domestic construction and localization of foreigner equipment is another step that the company is taking. The localization of equipment increases domestic production and has a positive impact on the national economy. In this regard, the company is seeking to increase the localization of equipment by acquiring reverse engineering and engineering knowledge, some of which are as follows:



3 Improving energy efficiency in the country through MAPNA Boiler's green products is an indirect economic impact. As previously described, the performance of some of the company's products is to convert the smoke and heat output of the gas turbine into energy, thereby leading to nationwide energy efficiency (see Chapter 5 for more details).

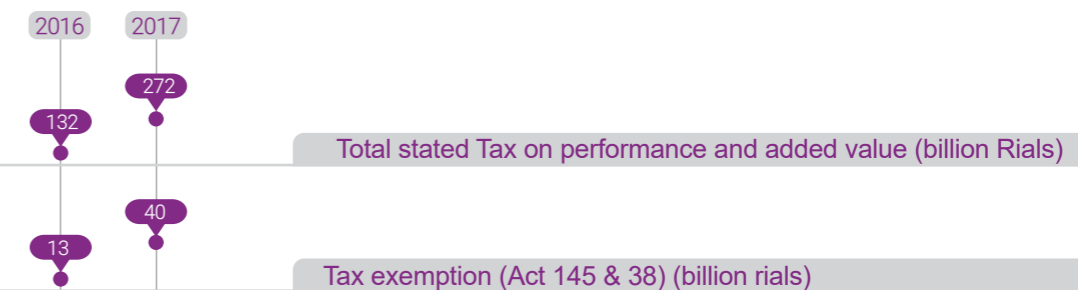
4 Today, one of the most serious crises in Iran is water. Mapna Boiler Company has entered the industry on the basis of its ability to design and develop desalination equipment and, in the context of desalination projects, is providing clean water and reducing the economic pressure caused by the crisis in the country.

5 Among other indirect economic impacts of the company, the transfer of up-to-date knowledge and technology by working with reputable companies (such as CMI Belgium) and the possibility of using knowledge to develop and build the interior and supply knowledge-based products to different parts of the country and reduce dependency. Overseas is in the category of power plant boilers.

6 Direct employment of local community forces in the province where the plant is located and active sites of the company as well as the creation of indirect employment capacity by supplying items to suppliers (Chapter 4) are considered to have significant economic impacts at the local community level.

7 Taxes are part of the company's income that is used as a result of its economic activity to develop the necessary capital for development and development of the country. With this view, the company voluntarily pays to develop the country by providing transparent tax reports. The corporate tax rate for the past two years has been as follows, with some tax incentives also based on some of the activities such as creating regional sports facilities and facilities for its employees and being among the knowledge-based industries. The total tax paid for the year 2017 was 272 billion RIs, which despite the exemptions from the pardon, had increased by 106% compared to the same period last year.

8 Another impact of the development company is the location of the plant and the complex. The company has planted trees in the area, planted the area and developed sports and educational facilities throughout the region.



GRI INDEX

INDEX	Description
full	All available information is provided.
partial	Due to some limitations and according to the organization's decision, part of the desired information has been provided.
Not reported	Due to some limitations and according to organization's decision, no information has been provided.
Not applicable	The mentioned approach is not applicable for this organization
Lack of relevant approach	The items mentioned in the standard are not implemented as an approach.

INDEX	Index title	Page NO	Status in report
101	foundation	10-13	full
102-1	Name of the organization	10	full
102-2	Activities, brands, products, and services	18-20 ,10-13	full
102-3	Location of headquarters	15	full
102-4	Location of operations	18	full
102-5	Ownership and legal form	120	full
102-6	Markets served	21	full
102-7	Scale of the organization	19-20	full
102-8	Information on employees and other workers	25,59	full
102-9	Supply chain	12	partial
102-10	Significant changes to the organization and its supply chain	11,30,13	full
102-11	Precautionary Principle or approach	84-91,99	full
102-12	External initiatives	44-51,108-114	full
102-13	Membership of associations	108	full
102-14	Statement from senior decision-maker	6	full
102-15	Key impacts, risks, and opportunities	36,99,116,146-151	full
102-16	Values, principles, standards, and norms of behavior	14,41,124-125	full
102-17	Mechanisms for advice and concerns about ethics	41,67,124-125,130	full
102-18	Governance structure	12.15.30.39-41.120-123	full
102-19	Delegating authority	40-41.121	full
102-20	Executive-level responsibility for economic, environmental, and social topics	39-41	full
102-21	Consulting stakeholders on economic, environmental, and social topics	123	full
102-22	Composition of the highest governance body and its committees	120-123	full
102-23	Chair of the highest governance body	121.123	full
102-24	Nominating and selecting the highest governance body	120-122	full
102-25	Conflicts of interest	41.125	full
102-26	Role of highest governance body in setting purpose, values, and strategy	41.135	full
102-27	Collective knowledge of highest governance body	-	Not reported
102-28	Evaluating the highest governance body's performance	120-122	full
102-29	Identifying and managing economic, environmental, and social impacts	34.36-41.123	full
102-30	Effectiveness of risk management processes	-	Not reported
102-31	Review of economic, environmental, and social topics	123	full
102-32	Highest governance body's role in sustainability reporting	41.123	full
102-33	Communicating critical concerns	123	full
102-34	Nature and total number of critical concerns	123	full

INDEX	Index title	Page NO	Status in report
102-35	Remuneration policies	61-63-68	partial
102-37	Stakeholders' involvement in remuneration	60-61	partial
102-38	Annual total compensation ratio	-	partial
102-39	Percentage increase in annual total compensation ratio	66	Not applicable
102-40	List of stakeholder groups	66	full
102-41	Collective bargaining agreements	-	Lack of relevant approach
102-42	Identifying and selecting stakeholders	31	full
102-43	Approach to stakeholder engagement	47-52	full
102-44	Key topics and concerns raised	36	full
102-45	Entities included in the consolidated financial statements	120	full
102-46	Defining report content and topic Boundaries	3	full
102-47	List of material topics	36	full
102-48	Restatements of information	--	Not applicable
102-49	Changes in reporting	3	Not applicable
102-50	Reporting period	33	full
102-51	Date of most recent report	-	full
102-52	Reporting cycle	31	full
102-53	Contact point for questions regarding the report	3	full
102-54	Claims of reporting in accordance with the GRI Standards	3	full
102-55	GRI content index	152	full
102-56	External assurance	-	Not applicable
103-1	Explanation of the material topic and its Boundary	36	full
103-2	The management approach and its components	34	full
103-3	Evaluation of the management approach	34-40-41	full
201-1	Direct economic value generated and distributed	66-142-147	full
201-2	Financial implications and other risks and opportunities due to climate change	-	Not applicable
201-3	Defined benefit plan obligations and other retirement plans	-	Not applicable
201-4	Financial assistance received from government	151	full
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	-	Not reported
202-2	Proportion of senior management hired from the local community	-	Not reported
203-1	Infrastructure investments and services supported	142-143	full
203-2	Significant indirect economic impacts	149-151	full
204-1	Proportion of spending on local suppliers	150	full
205-1	Operations assessed for risks related to corruption	--	Lack of relevant approach
205-2	Communication and training about anti-corruption policies and procedures	130	Lack of relevant approach
205-3	Confirmed incidents of corruption and actions taken	-	full
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	95	Not applicable

INDEX	Index title	Page NO	Status in report
301-1	Materials used by weight or volume	95	full
301-2	Recycled input materials used	3	full
301-3	Reclaimed products and their packaging materials	-	Not applicable
302-1	Energy consumption within the organization	97-98	full
302-2	Disclosure Energy consumption outside of the organization	-	Lack of relevant approach
302-3	Energy intensity	98	full
302-4	Reduction of energy consumption	92-94	full
302-5	Reductions in energy requirements of products and services	92	full
303-1	Water withdrawal by source	92-94	full
303-2	Water sources significantly affected by withdrawal of water	-	full
303-3	Water recycled and reused	-	full
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	-	Not applicable
304-2	Significant impacts of activities, products, and services on biodiversity	-	Not applicable
304-3	Habitats protected or restored	97-98	Not applicable
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	-	Not applicable
305-1	Direct (Scope 1) GHG emissions	96	full
305-2	Energy indirect (Scope 2) GHG emissions	-	Lack of relevant approach
305-3	Other indirect (Scope 3) GHG emissions	--	Lack of relevant approach
305-4	GHG emissions intensity	96	full
305-5	Reduction of GHG emissions	86-87-96	full
305-6	Emissions of ozone-depleting substances (ODS)	-	Not applicable
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other	96	full
306-1	Water discharge by quality and destination	92-93	full
306-2	Waste by type and disposal method	94-95	full
306-3	Significant spills	-	Not applicable
306-4	Transport of hazardous waste	95	full
306-5	Water bodies affected by water discharges and/or runoff	-	Not applicable
307-1	Non-compliance with environmental laws and regulations	104-105	full
308-1	New suppliers that were screened using environmental criteria	-	Not applicable
308-2	Negative environmental impacts in the supply chain and actions taken	-	full
401-1	New employee hires and employee turnover	25-59	full
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	64-66	full
401-3	Parental leave	70	full
402-1	Minimum notice periods regarding operational changes	-	Lack of relevant approach
403-1	Workers representation in formal joint management-worker health and safety committees	72	full

INDEX	Index title	Page NO	Status in report
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	75	full
403-3	Workers with high incidence or high risk of diseases related to their occupation	74	full
403-4	Health and safety topics covered in formal agreements with trade unions	65-74	full
404-1	Average hours of training per year per employee	66-67-75	full
404-2	Programs for upgrading employee skills and transition assistance programs	67	full
404-3	Percentage of employees receiving regular performance and career development reviews	-	Not reported
405-1	Diversity of governance bodies and employees	131-134	full
405-2	Ratio of basic salary and remuneration of women to men	-	Not applicable
406-1	Incidents of discrimination and corrective actions taken	--	Not applicable
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	--	Not applicable
408-1	Operations and suppliers at significant risk for incidents of child labor	-	Not applicable
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	--	Not applicable
410-1	Security personnel trained in human rights policies or procedures	67	Not applicable
411-1	Incidents of violations involving rights of indigenous peoples	-	Not applicable
412-1	Operations that have been subject to human rights reviews or impact assessments	131-134	Not applicable
413-1	Operations with local community engagement, impact assessments, and development programs 7	36-94-103-108-115	full
413-2	Operations with significant actual and potential negative impacts on local communities	90-91-96-99	full
414-1	New suppliers that were screened using social criteria 7	111	full
414-2	Negative social impacts in the supply chain and actions taken	--	Lack of relevant approach
415-1	Political contributions	99	Lack of relevant approach
416-1	Assessment of the health and safety impacts of product and service categories	-	full

INDEX	Index title	Page NO	Status in report
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	99	Lack of relevant approach
417-1	Requirements for product and service information and labeling	-	full
417-2	Incidents of non-compliance concerning product and service information and labeling	-	Lack of relevant approach
417-3	Incidents of non-compliance concerning marketing communications	36-94-103-108-115	Lack of relevant approach
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	-	Not applicable
419-1	Non-compliance with laws and regulations in the social and economic area	-	Not applicable

Global Reporting Initiative

Global Reporting Initiative

Global Reporting Initiative

Global Reporting Initiative

MAPNA GROUP
MAPNA Boiler & Equipment
Engineering & Manufacturing Co.

Global Reporting Initiative