

# SUSTAINABILITY REPORT 2019







# **SUSTAINABILITY REPORT 2019**



# OUR COMMITMENT REGARDING THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS





## VISION

To be a leading oil refiner and oil products marketing enterprise in Greece and the wider region.

## CORPORATE MISSION

**TO CONDUCT** our business operations so as to increase the company's corporate value for the benefit of all stakeholders -shareholders, personnel, customers, suppliers, associates and partners, as well as the local and greater community- applying technological and commercial innovations.

**TO MEET** our customers' needs responsibly and effectively, while expanding our share in the domestic market.

**TO FUNCTION** reliably, swiftly and flexibly in our relationship with employees, customers, suppliers, and the general public, by making use of practices that demonstrate responsibility and integrity, as well as respect for people and the environment.

## STRATEGIC GOALS

**MAXIMISING THE PROFITABILITY** of all the companies of the Group and overall financial performance.

**MAXIMISATION AND OPTIMISATION OF SALES**, by effectively marketing our products and exploiting opportunities in our three markets (domestic, aviation-marine bunkering, and export), for achieving the best possible profitability.

**STRIVING FOR THE HIGHEST STANDARDS** of Health and Safety, Environmental protection and Quality, through the application of technical, operational and organisational innovations and improvements

## OUR VALUES

### 1 INTEGRITY

- Respect for laws and regulations.
- Applying business ethics and the principles of corporate governance.
- Honest and open communication.
- Credibility and respectability in all kinds of business relations.

### 2 EFFICIENCY

- Achieving set targets.
- Creating value for shareholders and society.
- Servicing customers' needs.
- Providing a safe, stimulating and reciprocal workplace.
- Continuous improvement and promotion of learning and innovation.

### 3 SOCIAL RESPONSIBILITY

- Respect for all stakeholders.
- Respect for the environment and commitment for sustainable growth.
- Priority for Health and Safety.
- Ensuring that the companies of the Group are active and responsible corporate citizens, respecting the local community and society as a whole.

## OUR PRINCIPLES

### RESPECT FOR OUR PEOPLE

We recognise the value of our people and we promote their personal development, while offering competitive terms of employment, within a working environment of respect and mutual trust. We respect human and labour rights and give priority to workplace Health and Safety assurance.

### RESPECT FOR THE ENVIRONMENT

We recognise the value of our natural environment and the necessity for sustainable development and commit ourselves to the implementation of effective operational procedures and technology for its protection.

### TRANSPARENCY

We operate professionally and responsibly, strictly implementing the principles of business ethics and corporate governance.



# 1970

**[1972]**

Commissioning of the refinery. It comprises a Crude Oil Distillation Unit, a base oils production unit and port facilities.

**[1975]**

Construction completion of the 100,000 barrels/day Crude Distillation Complex.

Construction completion of the 1.5 million cubic metres tank farm.

**[1978]**

Commissioning of the Catalytic Reformer Unit for gasoline production.

# 1980

**[1980]**

Commissioning of the Catalytic Cracking Unit (for converting fuel oil to higher added value products).

**[1984]**

Construction of a Power Plant, burning fuel gas.

# 1990

**[1993]**

ISO 9002 quality certification for the entire range of the company's commercial and manufacturing activities.

**[1996]**

Purchase of 50% of the company's shares by Saudi Arabian Oil Company (Saudi Aramco).

Relocation of the Head Office to a modern Offices Complex in Maroussi.

# 48 YEARS

## IMPORTANT MILESTONES THE GROWTH OF



# MOTOR OIL

# 2000

## [2000]

Construction of new units and upgrading of the Naphtha Reformer into a continuous 103-octane number catalyst regeneration unit for the production of fuels conforming to EU specifications.

New Central Control Room and installation of a Distributed Control System.

Certification of the Environmental Management System, according to ISO 14001:1996.

## [2001]

Increase of the company's equity capital through public offer of shares and listing on the Athens Stock Exchange. Upgrading of the Lubes Vacuum Distillation Unit.

## [2002]

Acquisition of 100% of the retail oil marketing company AVIN OIL.

## [2004]

Commissioning of the new Truck Loading Terminal at the refinery.

## [2005]

The Hydrocracker Complex is commissioned, facilitating the production of "clean fuels" conforming to European Union specifications.

Repurchase of Saudi Aramco's stake in the company.

## [2006]

Certification of the refinery's Chemical Laboratory, according to ISO 17025:2005.

## [2007]

Registration of the company in the Hellenic Register of EMAS (Eco-Management and Audit Scheme). Issue of the first voluntary Environmental Statement, conforming with EU Regulation EMAS ER 761/2001.

## [2008]

Certification of Health and Safety Management System, according to OHSAS 18001:2007.

## [2009]

Increase of the participation in the share capital of OFC AVIATION FUEL SERVICES S.A. from 28.0% to 92.06%.

# 2010

## [2010]

Commissioning of the new 60,000 barrels/day Crude Distillation Unit, and of two additional Sulphur Recovery Units, of a combined 170 MT/day sulphur production capacity.

Completion of the acquisition of the shares of the companies SHELL HELLAS S.A. (renamed to Coral S.A.), and SHELL GAS A.E.B.E.Y. (renamed to Coral GAS A.E.B.E.Y.), as well as of 49% of the aviation fuels trading company.

## [2011]

Completion of the construction of 5th gas turbine in refinery's power cogeneration plant, which now has a total capacity of 85MW.

Construction completion of KORINTHOS POWER S.A. power plant, located in the MOTOR OIL refinery premises.

## [2014]

Acquisition of 100% of the retail oil marketing company Cyclon A.B.E.E.

## [2017]

Recertification of the Quality Management System according to the new ISO 9001:2015, of the Environmental Management System according to the new ISO 14001:2015 and of the Health and Safety Management System, according to OHSAS 18001:2007.

Certification of the MOTOR OIL Refinery according to the ISO 50001:2011 for Energy Management and according to ISO 18788:2015 for security.

## [2018]

Acquisition of 90% of the electricity company NRG TRADING HOUSE ENERGY S.A.

## [2019]

Expansion into the Renewables sector.



# MANAGEMENT MESSAGE

The MOTOR OIL Group Sustainability Report for 2019, the 18th consecutive such report, details our strategy and performance on significant issues related to sustainable development. The structure of the Report is based on the Global Reporting Initiative guidelines and the GRI Standards, as well as on the provisions of the United Nations Sustainable Development Goals (SDGs).

At the same time, this document serves also as our “Communication on Progress” prepared in accordance with the principles of the UN Global Compact, which we endorse and support.

The year 2019 was extremely satisfactory for us, as we successfully responded to a number of challenges, such as increased volatility in the international refining environment accompanied by the de-escalation of margins in the last quarter of the year, and the implementation of planned maintenance works to refinery units during September and October.

The high degree of correlation amongst our refinery units, combined as optimally as possible with the distribution of our products in the markets in which we have been traditionally active, allowed us to realise refining margins within the highest range in the sector. Meanwhile, we continued with targeted investments and laid the foundations for our entry into the Renewable Energy Resources sector to expand our energy portfolio even further.

On a consolidated basis, our operating performance (EBITDA) reached 474 million euros, and our net earnings after taxes 224 million euros. Our sales amounted to 14.4 million metric tons, once again far exceeding the refinery’s annual nominal production capacity.

The export orientation of the parent company was reaffirmed in 2019 as well, as 82.1% of sales was directed to customers abroad.





We have remained consistently committed to corporate responsibility. With more than 2,100 employees throughout the Group, we continuously provide for their professional development with extensive training programs that in 2019 exceeded 37,000 hours. With a target of zero accidents, we strive daily to cultivate a safety culture in all of our activities and particularly those related to the operation of our depots and facilities. We consistently reduce our environmental footprint by using technologies that lead to decreased emissions and to energy saving.

As we write this report, humanity is in the midst of an unprecedented pandemic. Economies on a global level are experiencing consequences of vast scope and intensity. The slowdown of the global economy will undoubtedly impact the economies of all countries, including the by-default internationalised refining industry.

True to its values, our company immediately took all necessary steps to protect the health and safety of its workers, its customers and its associates, while ensuring the smooth operation of its production network to supply the market without disruption.

Nowadays, it is clearer than ever that, at a time of continuous change, addressing sustainable development as a key cornerstone of one's business strategy is the only way to proceed, both for the company and for the community in which it operates. We at MOTOR OIL have always embraced that philosophy and believe it is the only road to success, both now and in the future.

MOTOR OIL Group Management



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# IDENTITY AND CORPORATE RESPONSIBILITY

**We are a modern energy group that grows and creates value with consistency and responsibility.**

In all the years during which the MOTOR OIL Group has been operating as an oil refinery and oil products marketing company, it has always functioned with a strong sense of corporate responsibility, aiming at sustainable profitability and development in a socially responsible manner. It implements investment programs aiming at the continuous development and optimisation of its productive activity, always bearing in mind the Vision and the corporate values that form the framework of its operation and business activity.

2019 was a positive year for MOTOR OIL with reasonably satisfactory financial results, in spite of the adverse conditions in the industry in the second half of the year, when international refining margins fell to low levels.

In this context, company strategy focused primarily on optimal distribution of products on the three main markets in which it does business (domestic market, exports and shipping/aviation), and on generating positive cash flows. As a result, MOTOR OIL managed to achieve sales in the amount of 14.15 million MT, significantly exceeding the refinery's annual nominal production capacity.

In 2019, the value of refinery products production amounted to 12.1 million MT compared to 13.3 million MT in the previous year. The decrease in production is due to the scheduled routine maintenance of the Fluid Catalytic Cracking unit that took place between September and October 2019.

The company once again confirmed its export orientation in 2019, during which overseas sales (including shipping and aviation) accounted for 82.17% of the company's total volume of sales, compared to 82.51% in 2018.

Regarding our financial overview, the creation of positive cash flows allowed, on the one hand, uninterrupted funding of the company's turnover and operating activities, while on the other hand reducing its net bank debt for the eighth consecutive year. It should be noted that MOTOR OIL's cash and cash equivalents exceeded its loan liabilities at the end of the fiscal year.

Finally, in 2019, the foundations were laid for the Group's entry into the RES sector as part of its strategy for diversification of its revenue.







**14.1**

**million tons  
Motor Oil sales**

**82.17%**

**of sales are exports  
Constantly reinforced export  
orientation**

## 1. MOTOR OIL Group Profile

The MOTOR OIL Group on average employs 2,153 people; it had a consolidated turnover in 2019 equivalent to 5% of the Greek GDP and total assets of 3.47 billion euros on a consolidated basis. The Group plays a leading role in the sectors of crude oil refining and marketing of petroleum products in Greece, as well as the greater eastern Mediterranean region, supplying its customers with a wide range of high-quality products.

The MOTOR OIL parent company was founded in 1970 and the refinery commenced operations in 1972. The company has been quoted on the Athens Stock Exchange since 2001. It is listed in the general index (ATHEX COMPOSITE INDEX), the high cap index (FTSE/ ATHEX LARGE CAP), the new High Dividend Yield Index and the international indices MSCI GREECE and FTSE4Good Index Series.

- The refining of crude oil and marketing of oil products are the main activities of the MOTOR OIL Group, whose refinery is one of the most technologically sophisticated, complex and flexible (in terms of production processes) refineries to be found anywhere in Europe or elsewhere.
- In the area of trade, the Group has a significant presence in the domestic market due to the liquid fuel retail networks of its subsidiaries AVIN OIL and Coral (formerly SHELL HELLAS S.A.). Together, these networks consist of a total of approximately 1,400 service stations selling liquid fuels, accounting for about 37% of the domestic market. Since 2017, Coral has been active in Cyprus' retail market through its subsidiary, Coral Energy Products Cyprus Limited, which operates 32 service stations, 29 of which are under the Shell brand. Similarly, since 2018, Coral has been active in Serbia's market through its subsidiary, Coral SRB d.o.o Beograd, which operates 4 service stations under the Shell brand.
- In the lubricants sector, the Group is represented by its subsidiary, LPC S.A. LPC is active in the industrial production of basic lubricants, the production and trade of packaged lubricants and the sale of paraffin. The company exports its products to more than 50 countries, and is the agent for internationally known VALVOLINE lubricants in Greece.
- The Group enjoys a strong presence in the liquefied gas sector through Coral Gas S.A. The company stores, packages and markets bottled and bulk liquefied gas and liquefied gas for vehicles (autogas), and has a market share exceeding 27%. In 2017, the company established a subsidiary in Cyprus intending to expand its activities abroad.
- The Group has a foothold in the power and natural gas market with the acquisition of 90% of NRG TRADING HOUSE ENERGY S.A. NRG offers electricity and natural gas programmes, and primarily aims to provide comprehensive services to home and commercial consumers through top-level services that meet all energy needs.
- The Group is active in the aviation fuel services sector through OFC AVIATION FUEL SERVICES S.A. in which MOTOR OIL and subsidiary AVIN OIL hold an equal stake of 48.97% and 46.03% respectively. OFC is the company which constructed and operates the system for supplying aviation fuel to the Eleftherios Venizelos Airport, Athens, as well as the fuel storage facilities at the same airport.
- The Group is also active in the aviation fuel market through its subsidiary Shell & MOH Aviation Fuels S.A. Shell Overseas Holdings Ltd and Coral S.A. have a 51% and a 49% holding, respectively. The Company provides aircraft refuelling services to 20 airports in Greece and in Sofia, Bulgaria.
- In 2019, the Group laid the groundwork for its entry into the Renewable Energy Sources sector through TEFORTO HOLDINGS LIMITED (wholly-owned subsidiary of Sousaki Electroparagogi), which entered into an agreement for the construction of 3 wind farms with a total capacity of 9.4 MW. The efforts to enter the RES sector continued in the beginning of 2020 with the acquisition by TEFORTO HOLDINGS LIMITED of a portfolio of solar farms operating in Greece with a total capacity of 47 MW.
- Finally, the Group has a stake in companies providing support for its operations, such as MOTOR OIL Finance plc, a financial services supplier, IREON INVESTMENTS Ltd, a holding company, Corinthian Oil Limited, which is involved in the marketing of crude oil and oil products, and Building Facility Services, which supplies facility management and operation services.

The following table sets out the major subsidiaries and affiliated companies comprising the MOTOR OIL Group, as well as the stakes held in them (directly or indirectly) by the parent company. More detailed information on the companies can be found in the Annual Financial Report 2019.





Name	Activity	Direct	Indirect
AVINOIL SINGLE MEMBER S.A.	Marketing of petroleum products	100%	
CORAL S.A.	Marketing of petroleum products	100%	
CORAL GAS S.A.	Marketing of liquefied petroleum gas	100%	
LPC S.A. LUBRICANTS & PETROLEUM PRODUCTS	Processing and marketing of lubricants and petroleum products	100%	
NRG SUPPLY AND TRADING S.A.	Power and natural gas sales	90%	
OFC AVIATION FUEL SERVICES S.A.	Aviation Fuel Supply Systems	48.97%	46.03%
IREON INVESTMENTS LIMITED	Holding Company	100%	
MOTOR OIL FINANCE plc	Financial services	100%	
CORINTHIAN OIL LIMITED	Marketing of crude oil and oil products	100%	
ELECTROPARAGOGI SOUSAKI S.A.	Production and marketing of electricity	100%	
BUILDING FACILITY SERVICES	Provision of facility management and operation services	100%	
MOTOR OIL MIDDLE EAST DMCC	Marketing of crude oil and oil products		100%
SHELL & MOH S.A. AVIATION FUELS	Marketing of aviation fuels		49%

*This Report includes results only for parent company MOTOR OIL and for subsidiaries AVIN OIL, Coral, Coral Gas, LPC, NRG and OFC.*

## 2. The Refinery

The refinery is considered one of the most modern refineries in Europe with a 11.54 rating on the Nelson Complexity Index. It has the capacity to process various types of crude oil and manufactures a wide range of oil products. It supplies commercial oil companies in Greece, but the bulk of its production is sold abroad. Moreover, it is the only refinery that produces base oils in Greece. The technical sophistication of the refinery allows MOTOR OIL to manufacture products with high added value, adjusting the final product mix to market needs, ensuring better distribution prices and achieving better refining margins than other composite refineries in the Mediterranean.



### Characteristics of the refinery

- **Processing capacity:** 185,000 barrels of crude oil per stream day (BSD).
- The refinery produces all types of fuel and is one of the most advanced and complex in Europe, with Hydrocracker and Catalytic Cracking units and an 11.54 rating on the Nelson Complexity Index.
- It produces refined fuels (gasoline and automotive diesel) in accordance with the EU specifications.
- It has ISO 9001:2015 certification for Quality, ISO 14001:2015 and EMAS III ER 1221/2009 certification for the Environment, OHSAS 18001:2007 certification for Health and Safety, ISO 17025:2005 certification for its Chemical Labs and CE Marking certification for its asphalt products, in accordance with Regulation (EU) No 305/2011 and the requirements of European standard EN 12591:2009. This is a combination of standards found in very few European refineries.

Also, MOTOR OIL applies the EI/JIG1530 standard in relation to the production, storage and distribution of Jet Fuel. In the context of reducing greenhouse gas emissions and the sustainability criteria laid down by the EU, our company applies a control system for biofuels and the blending of fossil fuels with biofuels, having been certified with the 2BSvs Certificate since October 2016.

This certification meets the requirements of the biofuel mass balance and expires in 2021. The refinery has earned two new certificates, the ISO 50001:2011 for energy management, and the ISO 18788:2015 for its security system.

- It is the only refinery in Greece with a unit producing base oils and finished lubricants, approved by such international agencies as the American Petroleum Institute (API), the European Automobile Manufacturers Association (ACEA) and the United States Army and Navy.
- It possesses a power and steam cogeneration unit, which now has a capacity of 85 MW following the recent addition of a fifth gas turbine.
- It uses natural gas as a fuel and as a raw material for the production of hydrogen.
- It has a storage capacity of 2,600,000 m<sup>3</sup> (Crude Oil: 1,000,000 m<sup>3</sup>, Intermediate & Finished Products: 1,600,000 m<sup>3</sup>).
- It has modern port facilities for tanker docking, suitable for tankers of up to 450,000 tons DWT, which can serve more than 3,000 vessels annually.
- It has a modern truck loading terminal, which can serve 220 tanker trucks per day, which significantly strengthens the competitive position of MOTOR OIL in the southern Greek market.

### 3. 2019 Results

2019, and especially its second half, was marked by lower refining margins globally. Thanks to the refinery's high complexity index, our Group was able to make continual adjustments to the crude supply mix in order to respond to these circumstances in the best way possible.

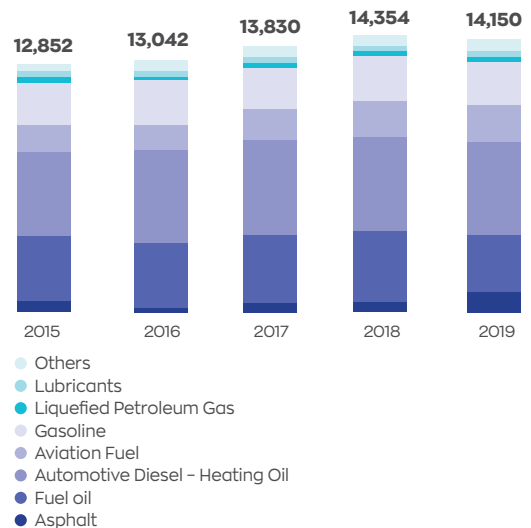
The company's strategy in 2019 focused on the distribution of its products in the best possible way, and the creation of positive cash flows. In 2019, MOTOR OIL's refining margins were higher than the benchmark for the sector. It should be noted that the contribution of industrial activity in 2019 to the company's total sales was lower compared to 2018 (85.75% from 90.87%) due to the regular maintenance of refinery units that took place between September and October 2019. However, the company's total volume of sales in 2019 once again significantly exceeded the refinery's maximum nominal capacity. Also within the year, the Group expanded its portfolio of entrepreneurial activities by entering the RES sector.

- In 2019, MOTOR OIL product sales reached 14.4 million MT\*. Its products are delivered to the three markets in which it operates (domestic market, exports, and the shipping/aviation sector) through a powerful sales network and with the help of long-standing relationships with customers. The quantities supplied to each of these markets are determined by the relevant demand, but also by the company's aim of supplying its products to the markets that offer the highest margins. The sales figures show the company's steady export orientation, based on which foreign sales, including shipping/aviation sales, to more than 45 countries (the main destinations being Saudi Arabia, the USA, the UK, Turkey, and EU countries) accounted for 82.17% of all sales, compared to 82.51% in 2018. Exports are also beneficial to the company on an operational level, allowing it to finance the purchase of crude oil at the current price levels and ensure a continuous supply of raw material to the refinery.

MOTOR OIL Sales per market (thousand Mt)



MOTOR OIL sales per product (thousand Mt)

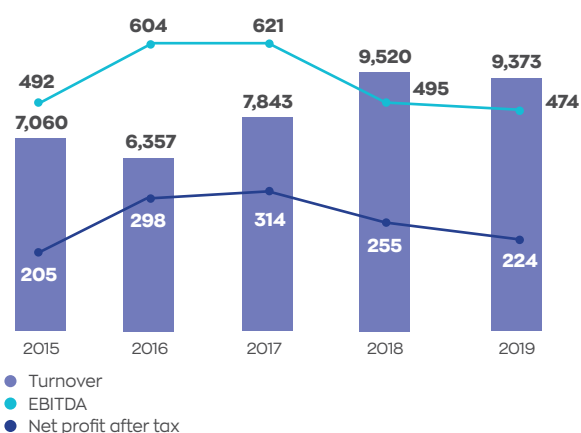


- Group turnover stood at 9.37 billion euros in 2019 (down 1.54% compared to 2018). Contributing to this development was the decrease in the average price of petroleum products (in USD) by about 9.76%, and part of the decrease in the turnover was offset by a weakening in the dollar/euro rate of 5.2%.
- The Group's EBITDA amounted to 474 million euros in 2019 compared to 495.1 million euros in 2018, down by 4.27%. Similarly, the Group's net results after tax for 2019 reached 224 million euros compared to 255 million in 2018, down by 11.9%. The above was mainly a result of the reduced refining margins during the second half of the year and the regular maintenance work, while the contribution of the commercial subsidiaries was particularly positive.
- MOTOR OIL's total domestic market share came to 29.7% from 31% This decrease is due to a slight drop in fuel oil sales.

\* 14,150 thousand MT sales and 258 thousand MT from the sale of crude oil to a third party.



### Consolidated Financial Results (million euros)



### MOTOR OIL's domestic market share

	2015	2016	2017	2018	2019
Fuels	35.2%	33.5%	28.4%	30.2%	29.7%
Shipping Aviation	26.2%	25.8%	24.9%	32.2%	32.2%
Lubricants	40.4%	38.4%	40.6%	45.7%	68.0%
<b>Total domestic market</b>	<b>32.7%</b>	<b>31.4%</b>	<b>27.4%</b>	<b>31.0%</b>	<b>29.7%</b>

## 4. Corporate Governance

The management and control of MOTOR OIL are based on contemporary principles of good corporate governance, as prescribed by legislation and the relevant regulations, and by other international practices and auditing standards. Corporate governance determines the company's daily operations with regard to issues such as:

- the appropriate structure of its Board of Directors,
- respect for, equal treatment and protection of the interests and the rights of all shareholders, customers and suppliers,
- compliance with legal and regulatory provisions,
- transparency in decision-making,
- the reliability and adequacy of all disseminated information, regarding the Group's strategy and financial results, or its financial transactions,
- the management of personnel and remuneration matters, and

- the identification, reporting and control of all inherent risks.

The company has its own Code of Corporate Governance (CCG), which was prepared and approved by the Board of Directors. The CCG sets out the framework governing the company's key operating areas, and includes the best practices in corporate governance it has adopted.

The Code is revised as appropriate (amendment of articles of association, changes in the organizational chart, or in the institutional and regulatory framework, etc.) and is always available in its current form on the company website. The company's most senior decision-making body is the Board of Directors, which is elected by the Annual General Meeting of Shareholders and which represents a broad range of knowledge, experience and qualifications, tailored to match the objectives of the company while ensuring, as far as possible, a numerical balance between executive and non-executive directors.

### Composition of Board of Directors

Name	Board Position	Member Identity*
VARDIS J. VARDINOYANNIS	Chairman and Managing Director	Executive
IOANNIS V. VARDINOYANNIS	Vice Chairman	Executive
IOANNIS KOSMADAKIS	Deputy Managing Director	Executive
PETROS TZANNETAKIS	Deputy Managing Director	Executive
GEORGE ALEXANDRIDIS	Member	Non-executive
THEOFANIS VOUTSARAS	Member	Executive
MICHAEL STEIAKAKIS	Member	Executive
DIMOSTHENIS N. VARDINOYANNIS	Member	Non-executive
NIKI STOUFFI	Member	Non-executive
ANASTASIOS TRIANTAFYLIDIS	Member	Non-executive/ Independent
ANTONIOS THEOHARIS	Member	Non-executive/ Independent
PANAGIOTIS KONSTANTARAS	Member	Non-executive/ Independent

\* In accordance with Law 3016/2002

## Board Committees

Three committees operate within the framework of the Board of Directors: Remuneration, Audit, and Organisation & Corporate Governance.

The Remuneration Committee comprises four executive members of the Board of Directors and a company executive. The chairman of the committee is P. Tzannetakis, and the other members are I. Kosmadakis, T. Voutsaras, M. Steiakakis, and I. Kioufis (Refinery Deputy General Manager). The Remuneration Committee has been in existence since 1996 and serves in an advisory capacity to the Board of Directors. It deals with staffing issues and recommends policies on salaries, benefits and incentives for management and staff, also overseeing implementation of the said policies. It should be noted that the company, in accordance with the provisions of Article 110 of Law 4548/2018, has a Remuneration Policy for Members of the Board of Directors which was approved by the Annual Ordinary General Meeting of Shareholders in June 2019 and is available on the company's website.

The members of the Audit Committee are named by the Annual Ordinary General Meeting of Shareholders, in accordance with the provisions of Law 4449/2017. The chairman of the committee is the non-executive member of the Board of Directors, P. Konstantaras and its ordinary members are G. Alexandridis (non-executive member of the Board of Directors), and K. Thanopoulos (independent member of the Committee according to Law 4449/2017). Alternate member of the Committee is N. Stoufi (non-executive member of the Board of Directors). The committee members are all well-versed in the sector in which the company does business. The Audit Committee has also been in existence since 1996, and is of considerable assistance to the Board of Directors in performing its duties, acting as the recipient of all reports on audits carried out by the company's Internal Audit Department. The statutory auditor or audit firm reports to the committee on all matters relating to the progress and results of the regular mandatory audit, submitting a special report on any weaknesses in the internal audit system.

Since 1990, the company has had its own Internal Audit Department, which reports directly to the Board of Directors and is overseen by the Audit Committee. The company's independent internal audit system aims at ensuring compliance with the company's procedures for managing financial and operational matters, as well as ensuring that issues related to the efficient management of business risks are given proper attention. Lastly, the company's financial statements are also audited by independent chartered auditors, in compliance with its statutory obligations.

The Organisation & Corporate Governance Committee was formed in June 2017 and is charged with overseeing matters related to the company's organisation which include changes in the organisational structure, as well as issues of complying with the mandates of the regulatory and institutional framework of corporate governance. The chairman of the committee is I. Kosmadakis, and the other members are P. Tzannetakis, T. Voutsaras and the non-executive member of the Board of Directors N. Stoufi.

## Control and Risk Management Systems

In respect of the operation of the company's Internal Control and Risk Management - ICRM - Systems, in relation to the procedure for compiling financial statements, we should state that the MOTOR OIL financial reports system uses a sophisticated software package to produce reports to the administration and to external users.

Financial statements and other analyses are submitted to the administration on a monthly basis, and compiled in simple and consolidated form, in accordance with the International Financial Reporting Standards, for submission to the administration and for general publication, on a quarterly basis. Both reports submitted to the administration and financial information released to the public contain all the necessary information expected from an updated internal audit system, featuring analyses of sales, costs and spending, operating profits, and other details.

All reports to the administration contain details for the current period, for purposes of comparison with the corresponding figures in the budget, as approved by the Board of Directors, and with the figures for the same period in the previous year. All published interim and annual financial statements are compiled in accordance with the International Financial Reporting Standards, contain all necessary information and opinions on the financial statements, are reviewed by the Audit Committee and approved in their entirety by the Board of Directors.

## Policy on Corruption

Combating corruption and preventing related incidents is a priority for us and for our stakeholders. Corruption is directly related to environmental degradation, the infringement of human and labour rights, and the violation of laws. Our commitment to fight corruption is manifested in our adoption of the United Nations Global Compact, which explicitly refers to actively combating corruption (Principle 10 - Businesses should work against all forms of corruption, including extortion and bribery) and in the fact that we have undertaken all necessary actions to prevent any such incidents. Just as in 2018, there were no confirmed incidents of corruption in 2019 involving our employees or our associates, nor were we fined or penalised for failure to comply with related laws and regulations. Moreover, in 2017 we proceeded to draw up the MOTOR OIL Group's General Operating Principles, which include those principles governing all of our activities and our transactions with internal and external stakeholders. Our principles have been posted on the company website [www.moh.gr](http://www.moh.gr) and have been notified to all of our employees and associates.



## 5. Participation in International – National Agencies and Networks

MOTOR OIL and the Group's other companies support and maintain lasting relationships with international and national bodies, and are members of:

- The Global Compact Network Hellas.
- The Hellenic Network for Corporate Social Responsibility.
- The Hellenic Federation of Enterprises (SEV).
- The Athens Chamber of Commerce and Industry, the Hellenic-American and Arab-Hellenic Chambers, as well as other regional Chambers.
- The Hellenic Association of Independent Power Producers.
- The Union of Listed Companies, etc.

MOTOR OIL also participates in the following organisations:

- CONCAWE (Conservation of Clean Air and Water in Europe), providing technical support to European refineries on Health, Safety and Environmental Protection issues.
- Oil Companies International Marine Forum (OCIMF), an association of petroleum companies with an interest in promoting the safe and environmentally friendly marine transportation of crude oil and petroleum products.
- Mediterranean Oil Industry Group (MOIG), the forum of oil companies on issues of prevention and timely response to sea pollution.

Moreover, we support the academic community in research exploring refining industry issues relating to health, safety and environmental protection.

It also takes part in a number of innovative research programmes:

- It works with the National and Kapodistrian University of Athens and the Department of Geology and Geoenvironment to determine chemical conditions prevailing in the refinery's coastal zone.
- Cooperates with 9 European universities, research institutes and companies in the implementation of the DIRPIMCOAL project which aims at the environmental optimisation of the liquefaction of coal from industrial and urban waste for the production of biofuels.
- Cooperates with 14 European universities, research institutes and private companies in the implementation of the CARMOF pilot project focused on capturing CO<sub>2</sub> at the refinery using innovative hybrid porous adsorbent materials.

- Works with the Metallurgy Lab of the National Technical University of Athens, POWER MEDIA PRODUCTIONS and the Municipality of Rafina-Pikermi to implement the European LIFE DIANA environmental project. LIFE DIANA involves constructing a pilot facility at the MOTOR OIL refinery to exploit petroleum sludge in making new added value materials.
- Works with a consortium of 27 European bodies (universities, research institutes, public organisations and private companies) as part of the European research project INFRASTRESS for the improvement of the security of critical national industrial facilities and infrastructure against cyber and physical threats.
- Collaborates with the Institute of Geodynamics, the NKUA Department of Geophysics-Geothermics, the Geophysics and Seismology Lab at the Technical Educational Institute of Crete, and Satways Ltd in implementing the ARIS national research project to develop an integrated early warning and seismic risk management system in the refinery area.
- Cooperates with the NKUA Department of Biology and the NTUA Biotechnology and Chemical Process Engineering labs to implement the DeepDesOil national research project developing a combined chemical-biological process for hyper-desulphurisation of petroleum products.
- Works with the Laboratory of Environmental Fuels and Hydrocarbons at the Centre for Research and Technology and the ELPE refineries as part of the PROOFF national research project developing innovative catalytic processes for the exploitation of low value oil fractions towards the production of upgrading fuels and petrochemical raw materials.
- Avin Oil works with the NTUA Vehicles Laboratory, the Centre for Technological Research of Central Greece and Real Consulting on the MOTIF national research project to develop and use smart applications and innovative systems to optimise road transport safety in the liquid fuel sector.
- LPC works with the Foundation for Research and Technology and the Technical University of Crete on the APOFASI national research project to develop a portable optical spectrometry system to detect contamination in liquid fuels.

## 6. Awards and Recognition

The Group's companies have received significant recognition for their work and activities from the international and Greek business communities. Such recognition highlights the excellent quality of the Group's products and services, as well as the positive response from the public.

CHIRIMA Business Awards	1st prize in the "Investor Relations" category for MOTOR OIL.
ICAP True Leaders	For the 9th consecutive year, MOTOR OIL was named the leading company on the basis of specific criteria (profitability, increase in personnel, leadership position in the sector and credit rating).
Joint Inspection Group	OFC was awarded for the twelfth consecutive year with the JIG Certificate of Excellence", which none of the 550 companies inspected by JIG worldwide has achieved ever before
JIG Sustained Performance Award	OFC earned the Sustainable Performance Award for the excellent results it has shown during the period 2016-2018.
Energy Mastering Awards	CORAL was awarded the GOLD award in the Leadership category.
Manufacturing Excellence Awards	LPC was awarded the BRONZE award in the Extrovert Manufacturing Activity category.
	CORAL GAS received the BRONZE award in the Innovative Products category for the Internal Leakage Limiter used in its cartridges.
Health & Safety Awards 2019	CORAL received the WINNER of the INDUSTRY award for establishing a culture of safety among personnel.
	CORAL GAS was awarded the GOLD award for its road safety program.
	AVIN OIL received the SILVER award for the expansion of its actions to strengthen the safety culture and increase personnel and contractor awareness of safety issues at retail stations.
Corporate Responsibility Excellence Awards	CORAL was awarded the Corporate Responsibility Excellence Award by the Hellenic Advertisers Association in the Purposeful Communication category for its road safety campaign.



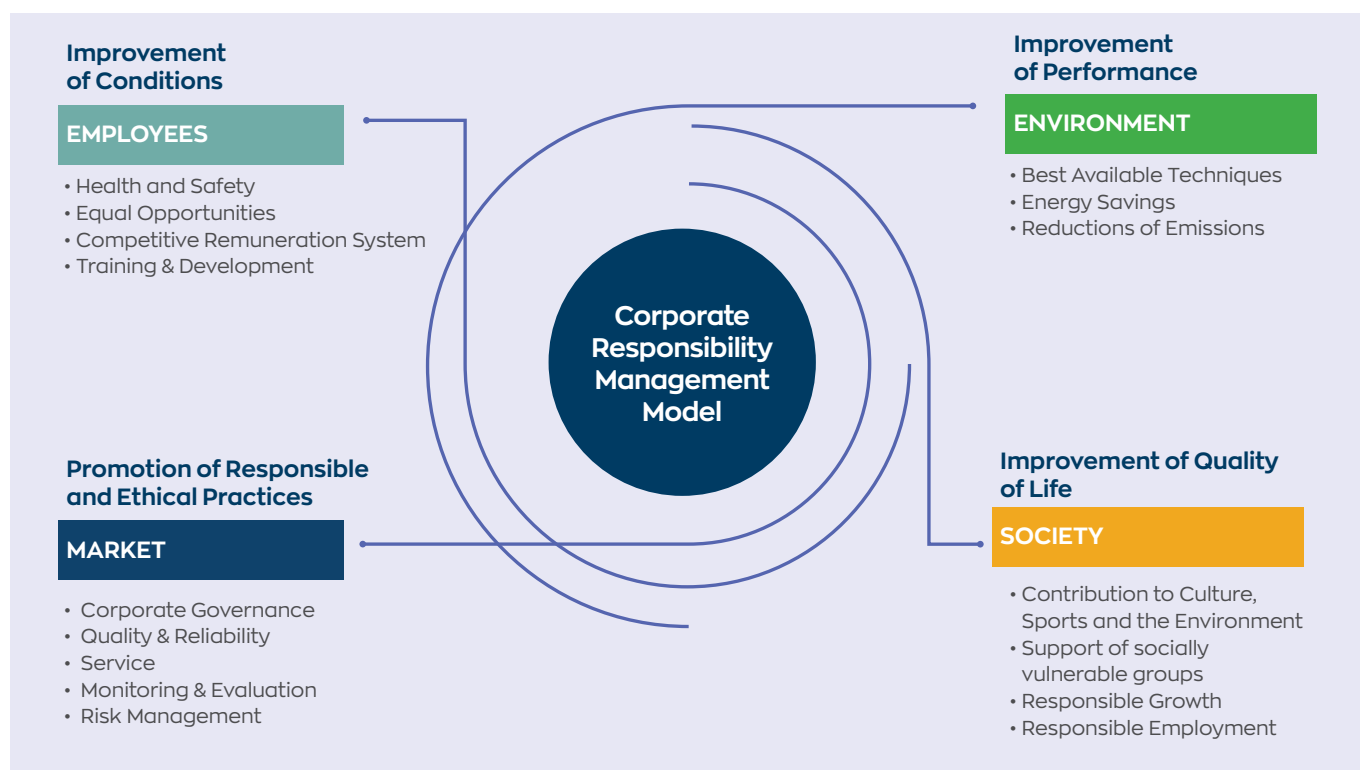
## 7. Managing Corporate Responsibility

The MOTOR OIL Group is engaged in the energy sector, mainly in the oil sector, which is an area requiring special respect for and compliance with the principles of Corporate Social Responsibility and sustainable growth. This is because crude oil, from extraction and transportation to refining and use of refined products, has environmental effects that must be effectively managed, utilising available technology.

In implementing the principles of corporate responsibility, we seek:

- to achieve a balanced approach to the economic, social and environmental impact of the Group's operations,
- to create value for our shareholders, while also serving the interests of other stakeholders,
- to show concern for our employees and for society at large.

We fully acknowledge the importance of these issues and demonstrate our corporate responsibility by our commitment to pursuing our business activities with due respect for people, the environment and society.



### MOTOR OIL

**With Responsibility towards its Employees,** adopts the four-fold approach of attracting, identifying, developing and retaining its human resources by investing in their training, securing a work setting where teamwork, respect and initiative are key and where Health and Safety are of top-most priority and ensured by the most advanced infrastructure and administrative practices.

**With Responsibility towards the Environment,** strives to ensure that its activities have the minimum impact on the environment, by having in place an effective Environmental Management System and implementing Best Available Techniques, and the most advanced systems for environmental protection, energy management and energy saving.

**With Responsibility towards Society,** pursues constructive social dialogue with the local communities in which it operates, in a climate of trust and respect. It supports these communities by participating in programmes that enhance their economic, social and cultural life, and becomes involved in similar activities that benefit society as a whole.

**With Responsibility towards the Market,** respects market rules and produces top quality products; it focuses on relations of trust with its customers, suppliers and partners, and strives to ensure the best possible return for its shareholders without compromising its principles of corporate responsibility and sustainable development.



### Responsible Management of the Supply Chain

For us, the proper management of the supply chain is an essential component of our corporate responsibility. We recognise that a sustainable supply chain not only minimises social and environmental risks but can also serve as a leading example of values and success for the industry and the community. We thus carry out detailed evaluation of our potential suppliers, on the basis not only of their economic viability but also of qualitative and environmental criteria.

Would-be suppliers are asked to complete questionnaires detailing their ability to safeguard the quality of the products and services they aim to provide, as well the environmental impact of their activities and the health and safety systems they employ.

In respect of the contractors working at the refinery and our other installations, we follow a comprehensive programme of safety training, the objective always being to achieve GOAL ZERO, i.e. zero accidents. For example, in 2019 we continued the programme whereby refinery contractors (1,117 individuals) underwent training with exams and certification over a total of 8,936 hours. Detailed evaluation and training programs are also implemented in the tanker truck companies which meet our transport needs. We are aware that every day dozens of tanker trucks are travelling the roads on our behalf, and are committed to minimising the risks inherent in road transport. For this reason, we have developed very detailed programmes in which transportation companies are assessed and given rigorous improvement targets; if they fail to meet them, their contracts are not renewed. As a result of this ground-breaking programme, by the end of 2019 our tanker trucks had travelled over 28 million km without a single accident.

## 8. Responsible Growth and Investments

Our vision is the consolidation of MOTOR OIL's position as a leading refining and oil products marketing company in the broader region in which we operate. In order to succeed in this objective, we focus on the following three key targets:

- Maximisation of financial returns and the refinery's profit margins.
- Maximisation and optimisation of sales, by effectively marketing the refinery products and exploiting opportunities in our three available markets (domestic, aviation/shipping, and exports), for achieving the best possible profitability.
- Striving for the highest standards of Health and Safety, Environmental Protection and Quality, through the application of technical and operational adaptations.

# 1,946

million euros Total investments  
for the period 2000-2019

Total investment expenditures by the Group in the period 2000-2019 amounted to 1,946 million euros, not including capital used for acquisitions.

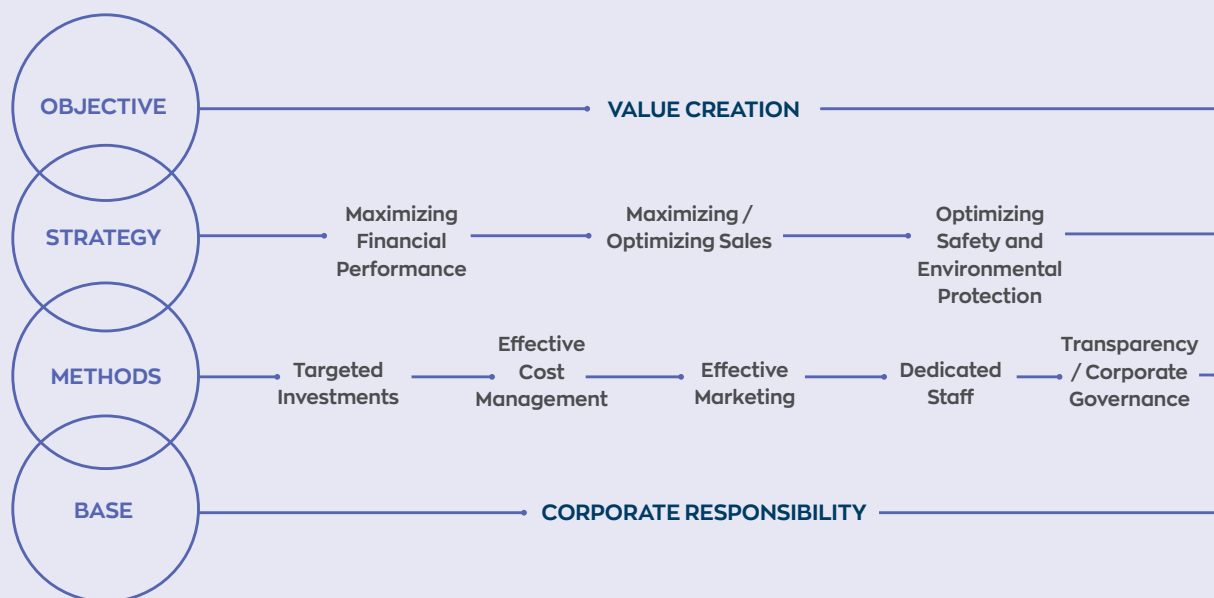
The outlay for investments in 2019 amounted to 159 million euros and, as far as the refinery is concerned, involved investments in large-scale projects, as well as the refinery's regular maintenance program which focuses on the revamping of the Fluid Catalytic Cracking unit, the project of the new naphtha treatment complex, the upgrade of the port and the new anchorage, and the construction of new and modification of existing tanks inside and outside the refinery.

The rest of our investment programme has been designed to upgrade the technological capacity and efficiency of the refinery, and to introduce vertical integration, automation, energy autonomy and environmental protection. The result has been that the refinery is now regarded as one of the most efficient and sophisticated installations of its kind in Europe and the world.





## Responsible Growth of Group Value



## 9. Responsibility for the Environment, Health and Safety

Ensuring health and safety and environmental protection constitutes a fundamental strategic aim. Thus, we strive to conduct our operations without compromising the health and safety of our employees and associates, while maintaining the highest standards of environmental protection and respecting the quality of life of those living in the vicinity of our industrial facilities.

The emphasis on management of Health, Safety and Environmental Protection, as well as our commitment to continual improvement of specific sectors, is reflected in a comprehensive management system that includes the Environmental and Energy Management System (ISO 14001), and the Health and Safety Management System (certified to OHSAS 18001:2007 standard since 2008), which translate this policy into programmes and quantifiable targets. Additionally, the Energy Management System is certified to ISO 50001:2011.



### Health, Safety and Environmental Protection Policy

**MOTOR OIL** operates with due respect for Health, Safety and the Environment. To achieve this, the company is committed to:

- Setting aims compatible with the continuous improvement of its Health, Safety and Environmental management systems.
- Complying with, or exceeding, the requirements of relevant legislation or other obligations.
- Producing guaranteed quality products in accordance with, or exceeding, Health and Environmental Protection specifications applicable to each, efficiently making use of raw materials, energy and technology.
- Reporting its performance, good or bad, as a responsible corporate citizen.
- Maintaining emergency action plans and systems which are regularly rehearsed with the appropriate drills.
- Applying a coherent Integrated Management System that takes Health, Safety and Environmental Protection factors into consideration when business decisions and plans are being prepared, and in the operation of its facilities.
- Offering information and training to its own employees and to subcontractors and others working on its behalf, so as to ensure their commitment to and raised awareness of safe working practices.
- Actively and uncompromisingly complying with environmental operating standards that set limits on waste and polluting emissions.
- Cooperating with all stakeholders in developing and applying balanced Health, Safety and Environmental Protection programmes that take into account the needs of all parties involved.

## 10. Responsible Quality Management

Our commitment to quality is a fundamental element of our strategy. MOTOR OIL's quality policy is summed up in two key principles, to which both management and employees are fully committed:

- We produce and sell products that satisfy our customers, always taking into consideration all stakeholders' interests.
- As we focus on our customers, we explore and evaluate their requirements and apply all necessary technologies and actions, aiming at the provision of high quality products.

For MOTOR OIL, the Integrated Management System used to implement our Quality policy is oriented to customers and their needs and systematically includes all quality-related operational and organizational processes. The System was revised and re-certified in 2017 by Bureau Veritas, in accordance with the newly revised standard ISO 9001:2015, valid until 2020, while the first relevant certification dates back to 1993.

The incorporation of the also newly revised and re-certified ISO 14001:2015 Environmental Management System and the OHSAS 18001:2007 Health and Safety Management System into the Integrated Management System confers the necessary internal coherence and links these management systems with other related processes which affect them, thus maximising their effectiveness. Also, for the thirteenth consecutive year, the company voluntarily issued an Environmental Declaration (EMAS) in accordance with EU Regulation (EC) No 1221/2009 and Regulation (EC) No 1505/2007.

Since 2016, our company has also been certified with the 2BSvs certificate applying to the control of biofuels and blending of fossil fuels with biofuels, and also meets the EI/JIG1530 standard requirements in relation to the production, storage and distribution of Jet Fuel. Specifically, it has received the distinction 'GOOD' from the inspectors of the JIG.

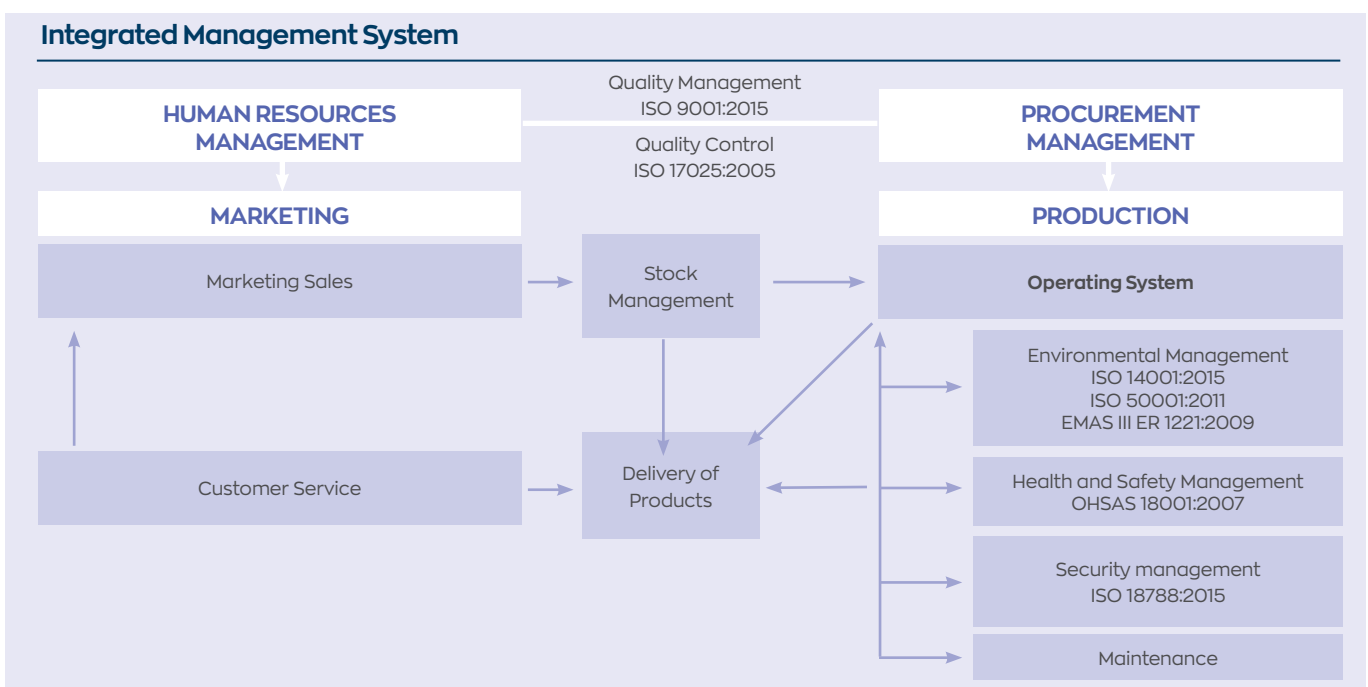
The Quality Control process meets the requirements of the ISO 17025:2005 standard, and the Hellenic Accreditation System (HAC) has certified the refinery's Chemical Laboratory as capable of conducting tests in accordance with the requirements of the standard, and issuing Quality Certificates endorsed by HAC for virtually all the company's products. This certification offers us an additional competitive advantage, ensuring that the quality of our products is guaranteed.

The refinery has also been awarded the CE Marking in accordance with standard EN 12591:2009 for asphalt products, the certification remaining valid until 2020. The refinery earned two new certificates in 2017 - ISO 50001:2011 for its energy management, and ISO 18788:2015 for its security system.

All Management Systems are subject to audits by the certification bodies, in order to confirm their consistent implementation, in line with the requirements of each one, and they are re-certified every three, four or five years, depending on the System.

### Certified Management Systems of the Group's Subsidiary Companies

- AVIN OIL has in place a Quality Management System certified to ISO 9001:2015, an Environmental Management System certified to ISO 14001:2015 and a Health and Safety at work Management System certified to OHSAS 18001:2007 for its Fuel and Lubricant Storage, Trade and Distribution sectors. It has also been certified by Bureau Veritas with regard to the quality and quantity of fuel it delivers through its service stations, in accordance with the new ISO 9001:2015 quality standards. AVIN OIL subsidiary MAKRAION is certified to the ISO 9001:2015 and OHSAS 18001:2007 standards for the establishment, management and operation of 11 stations selling liquid fuels located along major motorways (SEA Service Stations).







- Coral has been certified across all its activities since 2012. Specifically, ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007 certifications were secured for Coral's procedures for taking delivery, storage, mixing, loading, transportation and delivery to customers of various fuels products, lubricants and chemicals. In 2018, Coral subsidiary ERMIS S.A. was certified for the first time for the operation of retail stations and trading fuels and chemicals in accordance with ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007 and ISO 27001:2013 standards for the quality of Services, Environment, Occupational Health and Safety and Information Security (the certification applies to 225 own-operated service stations). It also has a Quality Control Department accredited by the Hellenic Accreditation System (HAC) based on ISO 17025.
- Coral Gas operates an Environmental Management System, with ISO 14001:2015 certification, and a Health and Safety Management System with OHSAS 18001:2007 certification, for all its facilities and ISO 9001:2015 certification for its Quality Management System. It has also been certified by Bureau Veritas with regard to the quality and quantity of autogas (LPG for vehicles) it delivers through its service stations, in accordance with ISO 9001:2015.
- OFC has a Quality Management System, certified to standard ISO 9001:2015, an Environmental Management System certified under ISO 14001:2015 and a Health and Safety Management System certified under ISO 45001:2018. These certifications relate to the main activity of the company which is the delivery, storage, and distribution of aviation fuel, as well as the provision of technical consultancy services and training in aspects of the refuelling of aircraft. In December 2018, a Fire Safety recertification was granted for the next five years.
- LPC has a Quality Management System in place, certified to the ISO 9001:2015 standard for the design, production, sale, and distribution of base lubricants, antifreeze, greases, and chemical products. It has been verified in accordance with the EMAS Regulation (EL 00051) and certified to ISO 14001:2015 for the environmental management of the waste lubricant oil regeneration process and lubricant oil production and packaging. It has been certified to ISO 5000:2011 for energy management, as well as to ISO 45001:2018 for ensuring Health and Safety at work.

## 11. Product Safety

All MOTOR OIL Group companies believe that providing safe products and high-quality services is of topmost priority. In this area, lengthy experience and a high level of know-how, together with consistent quality, guarantee that customers always receive the product they need with the appropriate quality and safety specifications.

### The Refinery

The MOTOR OIL refinery adheres to a standing commitment to deliver to its customers products that are safe to use and comply with the appropriate specifications established by Greek and international legislation. Guardian of the procedure is our state-of-the-art laboratory which is equipped with the latest technology. The lab supports all of the refinery's procedures, as well as those of the port and tanker loading terminals. It conducts lab tests on both incoming products (crude oil, chemicals, additives) and during the refining process, and naturally on final products before they are shipped off to customers. To that end, it carries out more than 25,000 lab tests a month, with the ultimate goal of ensuring the safe distribution of products until they reach end consumers and the products' excellent quality, thus minimising any potential risks to humans and the environment.

### Our Commercial Companies

Our commercial companies have developed innovative programs and integrated quality and quantity controls for their fuels which are implemented at all stages of transport - from the refinery or facility to the service stations. With the support of our specialised laboratories and purpose-designed quality control mobile units (vans) which carry out spot checks at our service stations, we actively safeguard the quality and quantity of our products. In 2019, monitoring of Shell, Avin and Cyclon service stations was conducted with state-of-the-art vans, which carried out intensive quantity and quality testing throughout Greece. Such testing mostly takes the form of spot checks at all of the companies' service stations. In 2019, there were 2,600 inspections at our service stations all over Greece.

Additionally, the integrated quality and quantity control system and the groundbreaking "Shell DNA" molecular marker technology used in all differentiated Shell fuels mean that customers can feel absolute confidence both in terms of the service they receive and the quantity and quality of Shell fuels.

In the area of LPG, Coral Gas aspires to be the leading company in Greece and is continuing efforts to offer innovative products to its customers. It has introduced significant innovations, and it now distributes all its packaged products to the market with special safety valves (the traditional liquefied gas bottles with FLV, GoGas with triple security and the new container with an ILL Flow Limiter Valve) significantly raising the level of safety and protecting the consumer by applying the latest solutions for all domestic and professional liquefied gas applications.

Furthermore, Coral Gas has introduced a special innovation in autogas. It introduced a molecular tracer to its autogas as part of an integrated quality and quantity assurance system. The molecular tracer is an addition to the work performed by Coral Gas mobile units, certified to quality standard ISO 9001, which conduct spot checks at service stations to ensure the quality and quantity of autogas.

## 12. Communication with Stakeholders

The long-standing communication and cooperation we have developed with stakeholders indicates the importance we attach to this issue, and our desire to openly discuss that any arising issues can be handled in mutually acceptable ways. Direct stakeholders and, in summary, their interaction with the Group companies, as well as the communication approach applied to each of them, are shown in the following table:

Social Partner	Identity	Key Issues of Interaction	Dialogue	Reference in the Report
Employees	Employees 2,153 direct employees, with 50% of them working in the refinery (see Chapter 2).	Employees offer their labour, knowledge and experience in return for a safe working environment, competitive and fair salaries and additional benefits as well as opportunities for professional advancement and personal development.	Ongoing, two-way communication between employees and management through corporate announcements, briefings, intranet, working groups and various events. The refinery employees are represented by their Trade Union and the Health and Safety Committee. Official dialogue is regularly conducted; employees are also encouraged to submit their individual proposals for improvements in working conditions.	Chapter 2
Customers	The refinery, due to the nature of its activity, has relatively few customers. The Group's commercial companies have an extensive network of customers, from industrial facilities and commercial companies to final consumers.	The refinery is in continuous communication with its customers in order to satisfy their requirements and provide high quality products, and is duly rewarded with the income it receives.  The Group's commercial companies place customer service at the very heart of their strategy, offering them products and services of the highest quality.	Long-standing and close relationships with our customers, based on the quality of our products, the service we offer, our experience, and our reliability.  We maintain ongoing communication with refinery customers, and once a year conduct a satisfaction survey.  In the commercial companies, the customer service departments and staff of our service stations are the public face of the company. We organize mystery shopping programmes for all our service stations and market surveys.	Chapters 1, 5
Local communities	Our industrial activities impact the local communities in the vicinity of the refinery (Ag. Theodoroi, Corinth) and the facilities of our commercial companies (Perama, Kalochori Thessaloniki, Kavala, Hania, Alexandroupoli).	We closely collaborate with the local and regional communities, whose key concern is the creation of jobs and the return of the so-called social product through the company's social contribution.	Continuous communication and interaction with local communities through local councils and other agencies such as private associations and organizations (see Chapter 5). Our sustained commitment and ongoing communication allow us to listen to the local community's needs and respond promptly and meaningfully.	Chapter 5





Social Partner	Identity	Key Issues of Interaction	Dialogue	Reference in the Report
<b>Partners and suppliers</b>	Suppliers of products and providers of contract services at the refinery, at the other facilities and at our service stations	We are closely collaborating with our partners and suppliers for the provision of products and services based on rigid quality and safety criteria. Consequently, they are fairly rewarded, without problems, for the provision of products and services, ultimately resulting in contribution to economic development.	We have long-standing and close relationships with our partners and suppliers. There is a structured communication and training programme at the refinery, as well as all of our facilities, offering them appropriate information on health, safety and environmental protection issues, for which compliance requirements are exceptionally strict and closely monitored (see Chapters 1 and 3).	Chapters 1,3
<b>Shareholders, Investors and Analysts</b>	The company's equity is held by private and institutional investors, both Greek and foreign. At the end of 2019 the main shareholder was Petroventure Holdings Ltd, with a stake of 40%. The free float percentage was approximately 54%. The business activities of MOTOR OIL are monitored by both Greek and foreign financial analysts.	Shareholders invest capital in MOTOR OIL, as in any other company, in the expectation that there will be long-term financial returns, including dividends and an increase in value of their shares.	The company operates a Shareholder Services Department. Regular communication with shareholders is conducted in various ways: roadshows 7-8 times a year; an Annual Analysts' Briefing once a year; 4 quarterly teleconferences with financial analysts; on the company website; press releases and announcements; the Annual Financial Report and Social Report, and regular attendance at investment conferences.	Chapter 1
<b>State and public bodies</b>	Public authorities at a local and national level, and authorities in other countries in which we are active or conduct sales	We are in close interaction with the State and create revenues through the payment of taxes and duties. Public authorities protect the public interest with laws and regulations, ensuring their enforcement, issuing operating licences and providing support in emergency situations.	We always operate within the confines of the law. There is an open and honest, two-way communication and cooperation with competent Public Authorities, ensuring the supply of information required by each body, as well as documented discussion on any issues arising.	Chapters 1, 3, 4, 5

## 13. Identification of Material Issues

The decision as to what should be included in our Report, and the guidelines for our strategy and actions regarding corporate responsibility, is based on the principle of “Materiality”, which is one of the most important and fundamental guidelines of the Global Reporting Initiative (GRI).

The principle of Materiality states that a company must report on the topics that significantly impact it and its strategy, as reflected in the organisation’s significant (either positive or negative) economic, environmental and social impacts; and on topics that substantively influence the assessments and decisions of both its internal and external stakeholders.

### Process for Assessing Material Issues

The process for assessing material issues was updated in 2017 and includes the assessment of 29 topics related to corporate responsibility. Of these, 18 were deemed material. Due to the nature of our activities, our Report places priority on issues of safety and environment, financial results, and on matters related to social contribution. In selecting and prioritising material issues, we used the GRI Standards guidelines, which are based on two key parameters: “impacts” (assessment of the impact of each issue of our company’s operation) and “influence” (assessment of how each issue influences our stakeholders and their relationship with the Group).

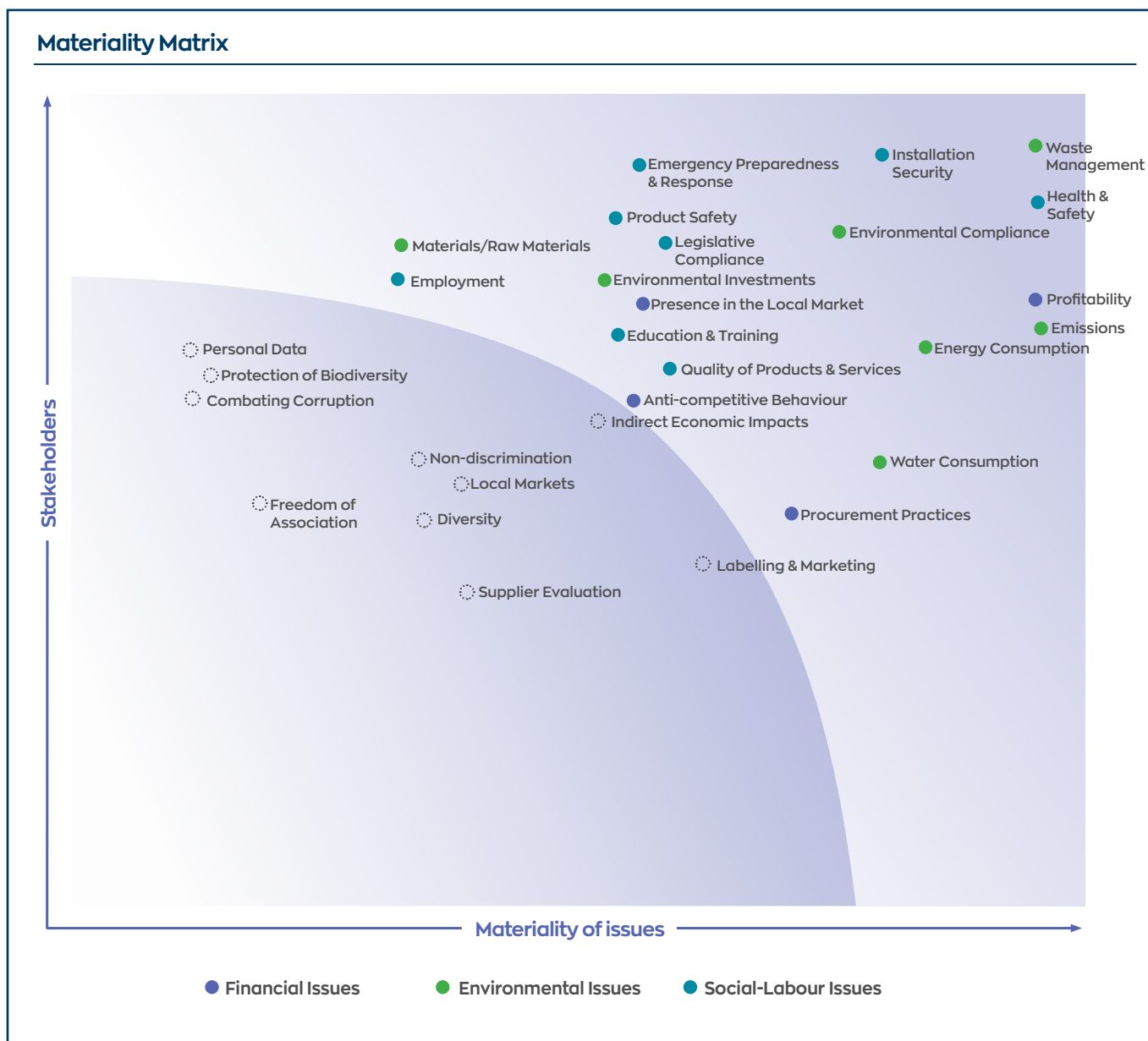
The process was based on the principles of relevance, materiality and prioritisation, and included:

**Step 1:** Identification and prioritisation of main stakeholders who were included in assessing material issues. The process included groups such as employees, representatives of local communities, customers and sub-contractors/associates.

**Step 2:** Identification and prioritisation of key corporate responsibility topics (financial, environmental, labour practices, human rights, social, etc.) using the GRI Standards guidelines and additional GRI guidelines for the sector (Oil & Gas Sector Disclosures). Material issues identified in the corporate responsibility reports of other companies in the sector were also taken into account.

**Step 3:** A materiality survey was conducted using a questionnaire to define issues based on the opinions of stakeholders and the company. A qualitative scale was used for each question (Very important, Important, Not very important, Not familiar with the topic). The company responded to the same questionnaire. The answers were used alongside the stakeholder results to identify material issues.

**Step 4:** A graph was created to visualise material issues. The Y-axis represents the opinions of stakeholders and the X-axis shows the weightier issues as assessed by the company. As a result, the issues of greatest importance (“influence”) to stakeholders and/or the company (“impacts”) were included in the Sustainability Report for 2019.



The following topics emerged from the process as most material: Profitability, Presence in the local market, Anti-competitive behaviour, Materials / Raw materials, Energy consumption, Procurement practices, Water consumption, Emissions, Waste management, Environmental compliance, Environmental Investment, Employment, Health and Safety, Education and training, Product safety, Quality of products and services, Compliance with the Law, Emergency response, Safety of facilities.



# RESPONSIBILITY TOWARDS OUR EMPLOYEES

## Our people are the most important resource for our success.

Our employees are our most valuable resource, essential to the achievement of our strategic goals, to the implementation of our growth business plans and in ensuring our long-term competitiveness.

That is why we have established an organised and modern Human Resources Division for the MOTOR OIL Group aimed at identifying, attracting, developing and retaining qualified employees and executives who can be utilised by all the companies.

We aim to provide a safe and fair workplace, which promotes trust, team spirit and respect for people, along with effectiveness.

We are committed to providing the best possible working conditions, securing respect for human rights and for the freedom of association, upholding nondiscrimination and providing equal opportunities for learning and personal development.

During 2019, the MOTOR OIL Group had an average workforce of 2,153 employees. We continued to renew our workforce through 535 recruitments over the last five years, offering an extended training programme and continuing the provision to our employees of a structured discretionary benefits package.





**2,153**

employees at Group level

**535**

recruitments over  
the 2015-2019 period

**37,780**

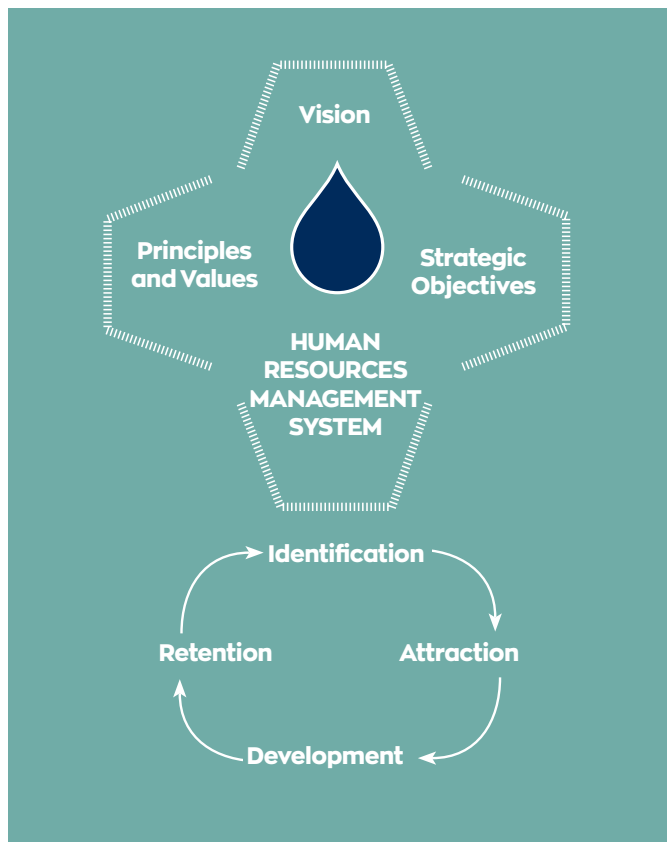
training hours in 2019

**78.9%**

of the personnel received training

## 1. Human Resources Management System

The MOTOR OIL Group has grown significantly over the last few years and has adopted a contemporary, fully integrated Human Resources Management System. The System is designed to allow proper management of the Group's human resources, with ongoing development and advancement of individual employees.



This system is founded on the principles and values of the Group and defined by its vision and strategic objectives. The purpose of the Human Resources Management System is to identify and attract the most talented executives on the market, develop them and retain them within the Group.

All of the above are implemented by the Group's HR Division within the following framework:

- Compliance with applicable legislation, and universally established principles of human and labour rights.
- Fairness and meritocracy in employee relations.
- Attracting competent young people with a professional approach to work, who share our values: reliability, dedication, integrity and personal responsibility.
- Providing equal opportunities and possibilities for the professional and personal development of employees.

- A competitive and fair remuneration system linked to employee performance and consistent with prevailing market conditions.
- Offering pay and benefits exceeding those provided for by law and by collective labour agreements.
- A programme of targeted education and training, covering subjects relevant to the Group's strategic development goals, and aiming at the effective and safe discharge of duties.
- Fostering corporate culture and corporate values.

## 2. Equal Opportunities and Human Rights

All aspects of human resources management are pursued with transparency and are based on meritocracy. We offer a workplace of no exclusions, in which all are treated fairly and are offered equality of opportunity, and where diversity is valued. Recruitment, transfers, promotions, benefits, education and training, etc., are governed by the principles of our equal opportunities policy, the avoidance of any form of discrimination, and respect for employees' dignity.

In applying the aforementioned, we have ensured:

- That the composition of management reflects the composition of the workforce.
- That education and training programmes are available to all personnel, in accordance with business needs.
- Equal pay for men and women.

We support attempts to build a society free of exclusion, in which people with disabilities can be productively integrated into the community. We ourselves employ 16 people with disabilities, who enjoy equal opportunities in employment and education.

MOTOR OIL fully respects international principles of human rights, in particular those set out in the United Nations Declaration of Human Rights, and in the UN Global Compact's ten principles, to which we are signatories. The Group is opposed to any practice which might encourage the imposition of any form of forced or child labour.

In all countries where the Group operates, it complies fully with national legislation on child labour; there are no instances of forced or child labour anywhere in the Group's activities, nor would they be acceptable.





### 3. Labour Relations and Trade Unions

At MOTOR OIL labour relations are regulated by the Employment Regulation which was drawn up in September of 1974. It is extremely important to our Group – and particularly to the refinery due to the complex nature of the work it entails – that employees can join unions and professional associations freely. Refinery employees are represented through their trade union and the Health and Safety Committee. The union has had a Collective Labour Agreement with the Hellenic Federation of Enterprises since 1986. This agreement lays down the terms of employment and pay levels at the refinery.

Since 2006, there has been a Company Collective Labour Agreement between the company and the union, which is renewed every year and is then submitted to the Corinth Labour Inspection. Furthermore, since 2014 it has also been submitted electronically to the Ministry of Labour.

We, therefore, hold regular meetings with union representatives, the common aim being to further develop relations and continue to achieve improvements in working conditions.

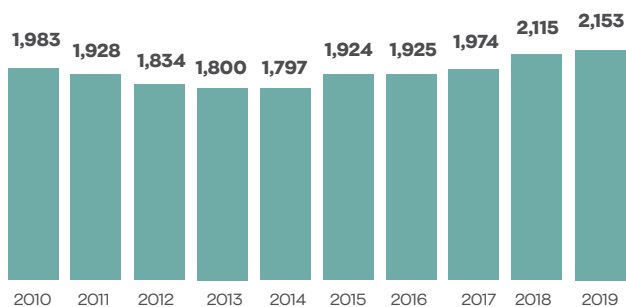
### 4. Basic Employment Data

In 2019, the size of the combined human resources of the Group (MOTOR OIL, AVIN OIL, Coral, Coral in Serbia and Coral in Cyprus, Coral Gas, OFC, LPC and NRG) - averaged over the year - was 2,153 employees. In addition to personnel directly employed by the companies of the Group, a significant number are indirectly employed through sub-contractors.

# 97%

of Group employees at the end of 2019  
were on open-ended contracts

Workforce  
(yearly average)



Workforce per Company

	2018	2019
MOTOR OIL	1,269	1,299
AVIN	181	178
CORAL*	347	341
CORAL GAS	107	104
OFC	22	24
LPC	141	143
NRG	48	64

\* In 2018, the employees of Coral S.A.'s subsidiaries that operate in Cyprus and Serbia were included.

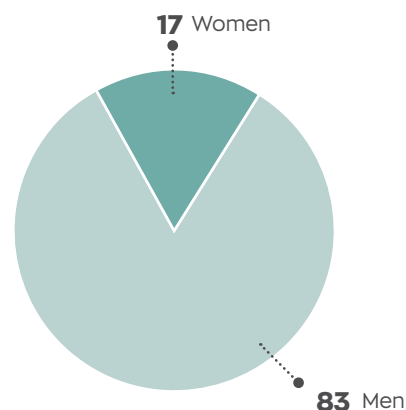
MOTOR OIL's main area of activity is the refinery at Agioi Theodoroi, Corinth, where in 2019 an average of 1,050 persons were employed. Approximately 55% of the refinery personnel and 44% of its managers live in the greater region of Corinth, where MOTOR OIL is the biggest employer.

#### Gender Profile

We support equal treatment for men and women, with equal opportunities for all. However, owing to the nature of the work and the skills required at the refinery, the percentage of women employees is relatively low. Thus, in 2019, on average, 17% of all employees were female, while at the Group Offices, the number of women rises to 36.3%. In 2018, women accounted 17% in the total workforce, whereas at the Group Offices they represented 38.7%.

Among management, women made up 14% of the total, a satisfactory reflection of the overall participation of women in the total workforce, while in other office and technical jobs the percentage was 17%. Percentages in 2018 were 16% and 17% respectively.

Distribution by gender 2019 (%)

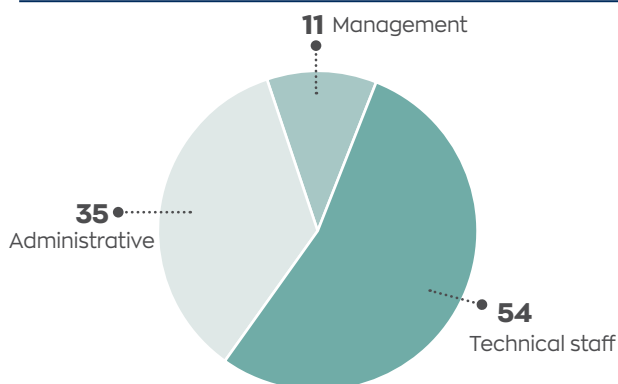


## Workforce Breakdown and Professional Advancement

In 2019, managers continued to comprise 11% of the total personnel of the Group, while technicians-operators and administrative personnel accounted for 89% of the total number of employees. In 2018, managers again accounted for 11%, technicians-operators accounted for 56% and administrative personnel accounted for 33% of the total number of employees.

Each employee has the opportunity for promotion within the management hierarchy, according to his qualifications and performance, as the main objective is to fill vacant managerial positions from within the Group wherever and whenever possible. In fact, each vacancy is first advertised internally; the position is opened to external applicants only if no suitable internal candidate can be found.

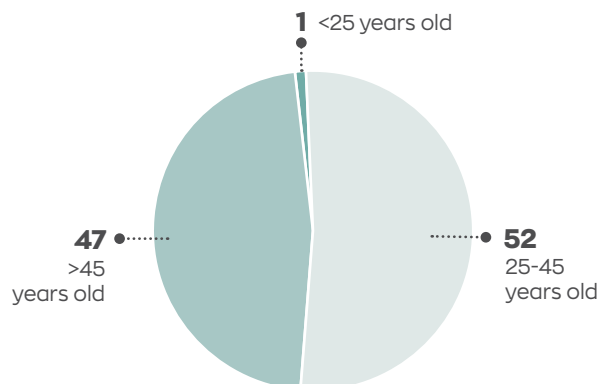
Workforce Breakdown 2019 (%)



## Average Age - Age Range

The average age of the Group workforce is 44.1. It should be noted that, in 2019, 52% of the workforce were under 45. In 2018, the average age was 44.1 and 54% of the workforce were under 45.

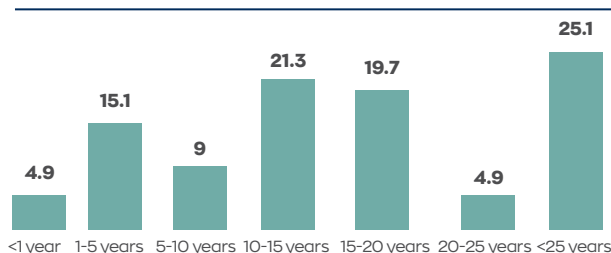
Age Range 2019 (%)



## Length of Employment and Turnover of Employees

Length of employment with the Group was, on average, 15.5 years. 71% of employees have been with the Group over ten years, while only 20% have less than five years of service.

Length of service 2019 (%)



In 2019, staff mobility was 5.2% and is indicative of long-term employment in our companies, which is rewarded by additional salary increments. In addition - at the refinery, at Coral and at Coral Gas - commemorative gifts of value are made to employees completing periods of long service; these gifts vary from company to company and commensurate to the years of service.

In 2019, the permanent staff increased by 109 new employees while 113 persons left for various reasons. We ascribe great importance to attracting and hiring new management executives. In the last years, we have embarked upon new collaborations with top universities around the world through which we seek to attract new candidates. These candidates are assessed through a thorough and detailed process that includes behaviour and skills measuring tools, in-depth interviews and a final selection panel.

### Staff mobility

	2018	2019
<b>Recruitments</b>	<b>147</b>	<b>109</b>
Men	104	85
Women	43	24
<b>Staff departures (classified by reason)</b>		
<b>Retirement</b>	<b>19</b>	<b>29</b>
Men	18	22
Women	1	7
<b>Resignation</b>	<b>35</b>	<b>57</b>
Men	30	47
Women	5	10
<b>Various</b>	<b>15</b>	<b>27</b>
Men	9	18
Women	6	9
<b>Total</b>	<b>69</b>	<b>113</b>
<b>Staff mobility*</b>	<b>3,3%</b>	<b>5,2%</b>

\* Staff mobility = Departures / Average number of employees x 100

## 5. Remuneration System and Additional Benefits

One of the Group's main objectives is to offer its employees competitive remuneration, both to reward their contribution and to maintain a high level of employee satisfaction.

The system we implement in order to set, manage and review salary levels is in line with current company and sector-specific agreements, and is consistent and transparent.

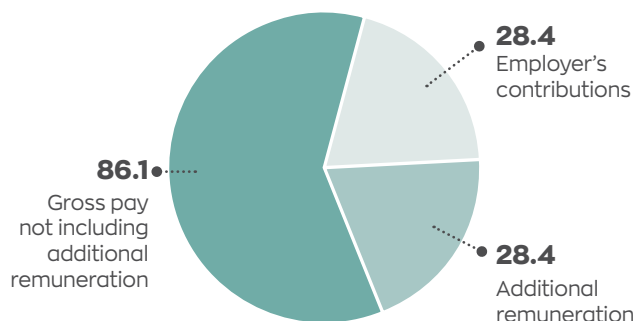
**142.9**  
million euros total workforce remuneration expenditure in 2019

Negotiations covering collective agreements on salary adjustments are in line with sector practices that are applied at national level. Moreover, the structure of the remuneration system ensures equal pay for men and women doing the same work, and rules out any other form of discrimination.

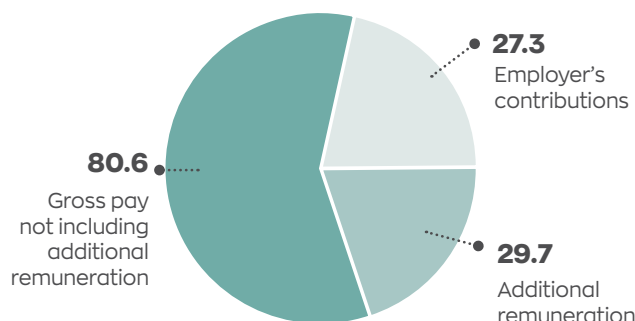
The factors determining wage/salary levels are mainly the employee's grade and performance, the responsibilities and accountabilities of the position held, the educational level and the seniority/ length of service.

The Group's total expenditure on wages/salaries in 2019 amounted to 142.9 million euros. This includes pay for regular and overtime work, mandatory employer contributions to social security funds and other additional allowances over and above those laid down in either labour legislation or collective agreements. These additional, non-statutory allowances are discretionary payments to employees intended to reward productivity and acknowledge the contribution of individuals to the Group's performance.

Breakdown of workforce remuneration expenditure 2019 (million euros)



Breakdown of workforce remuneration expenditure 2018 (million euros)



### Additional Discretionary Benefits

The Group introduced many years ago a wide range of supplementary, discretionary allowances and insurance benefits for employees and their family members. Such employee benefits are: insurance policies providing both pension and medical treatment coverage for employees, schemes helping employees with the costs of their children's education, Christmas parties for employees' children, long-service awards, support for employees participating in sporting activities, etc.

**10**  
million euros the Group's budget for discretionary benefits to employees and their families in 2019



## Voluntary Blood Donation

Blood donations by employees of MOTOR OIL have become a tradition, now with a 30-year history. The programmes are run in association with the Corinth General Hospital (for employees at the refinery) and the Metaxa Specialist Cancer Hospital (for employees at the MOTOR OIL head offices). Overall, the resulting blood reserves are used to cover the needs of the blood donors themselves, their families or close relatives, and other people, in the event of an emergency. Throughout the blood bank's operation, more than 3,900 units have been collected.

## Sports Activities for Staff

To promote and improve team spirit and a healthy lifestyle, we encourage their participation in a number of sporting activities.



### Athens Classic Marathon

For the fifth consecutive year, MOTOR OIL supported employees from the entire Group taking part in the biggest sports event in Greece - the 37th Athens Classic Marathon, which took place on November 9th & 10th. To help the entrants better prepare, training sessions were held a few months before, at Andreas Sygros Park and the municipal track of Corinth with the help of a trainer. On the day of the race, 95 people took part in the 5K, 75 people in the 10K, and 35 people ran the 42K Classic Marathon, all finishing in the packed Panathenaic Stadium. It is worth noting that MOTOR OIL secured 105 of the 205 entries through the "SCHEDIA" Non-Profit Organisation that supports the integration of the unemployed back into society.



### Football and Basketball Teams

In 2019, the MOTOR OIL employees' football team performed exceptionally well, winning 1st place in the 20-team corporate league in the "COMMERCIAL LEAGUE" category.

Furthermore, in 2019 the MOTOR OIL employees' basketball team won 1st place in the 3 on 3 tournament and 3rd place in the second league from a total of 50 teams.

## 6. Education and Training

Investment in ongoing training for our employees is a strategic choice and a key element in the process of aligning our workforce's skills with the full range of objectives and ambitions of the Group.

Therefore, given the critical importance of the issue, the MOTOR OIL Group designs and implements each year, a comprehensive programme of education and in-house training for employees. The basic objective served by this programme, is to continually enrich the vocational knowledge of our employees, expanding their range of skills, while also upgrading their level of technical training, allowing them to carry out their everyday and more long-term tasks.

# 7.7

million euros for education  
and training programmes over  
the period 2015-2019

### Education and Training Programmes

The parameters determining the planning and implementation of the education and training programmes are the educational needs of the workforce as identified in the working environment each year.

The education and training programmes cover the following areas:

- Training in business and administrative skills, computer skills, as well as personal development issues.
- Introductory training for new operators and maintenance technicians, and for new engineers.
- Skills training for technical staff in their particular areas of employment, as well as in use of personal safety equipment and working machinery/equipment.
- Training regarding Health, Safety, Environmental Protection and Quality, with an emphasis on the special features of each workplace.
- Training of non-technical staff in basic Health and Safety regulations, use of fire-fighting equipment and first aid provision.
- Instruction in safe driving techniques and in the procedures for the safe loading, unloading and transport of fuels.
- Emergency preparedness exercises, including scheduled or unscheduled drills.



The education and training programmes are implemented through in-house seminars, by attending domestic or international seminars run by internationally recognized educational centres. Also, Group managers attend conferences both in Greece and abroad, participate in undergraduate and postgraduate courses and are kept up to date through the purchase of books and subscriptions to specialist technical journals and professional associations.

### Training in 2019

In 2019, 37,780 man-hours were devoted to education and vocational training -at an overall cost of 2.2 million euros- involving the participation of 1,640 employees (78.9% of the total workforce), of which 169 were managers and 1,471 other personnel. The figure of training man-hours includes training related to fire safety, use of Personal Protective Equipment and other related subjects throughout the refinery and the other Group facilities.

However, it does not include training hours associated with emergency preparedness exercises. The corresponding figures for 2018 were 33,850 manhours, at a cost of 1.8 million euros which were attended by 1,547 employees, 158 of which were managers and 1,389 other personnel.

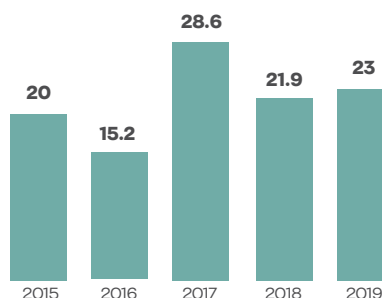
**78.9%**  
of our personnel received  
training

Occupational health and safety, environmental protection and quality were the principal subjects covered by training activities in 2019. In these areas training was provided to cover the relevant management systems, preventing sea and air pollution and avoidance of related incidents, process safety, occupational health, fire safety, the use of Personal Protective Equipment, rescue methods in cooperation with the Disaster Response Team (EMAK), safe driving and fuel transport, the provision of first aid and other more specialized topics.

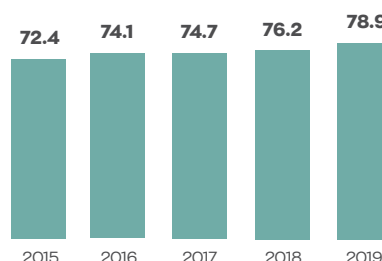
The other education programmes were designed to provide the existing technical staff with further training, in order to develop and further improve their skills in various specialized technical areas, and to train staff of the commercial companies on issues of climate change, personal data protection, taxation, management and leadership, internal audit, human resources management and evaluation, sales, IT, creating a safety culture, accounting, procurements, finance, customs policy, customer service, marketing, communication and law.

The contribution of Group executives in the in-house training and education programme was also very important. In 2019, this involvement accounted for about 7,300 hours. Moreover, during 2019, in line with the policy on reimbursement of tuition fees, 10 employees were assisted in their efforts to specialise in particular subjects, or achieve postgraduate qualifications in areas relevant to the Group's current operations.

Average Number of training hours per trainee



Percentage of trainees over the Total Workforce (%)



## Management and Employee Training in 2019

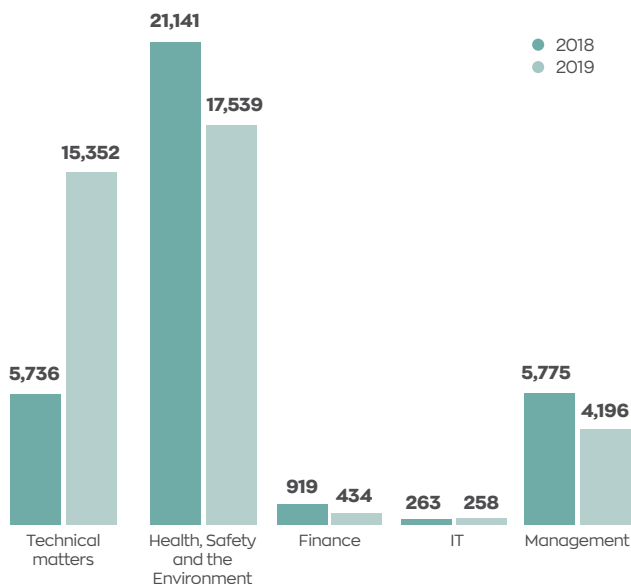
We strive to continually develop our management staff by offering innovative skills development programmes in cooperation with top educational institutions and bodies.

The following programmes were held, with certification by Harvard University, to teach leadership skills:

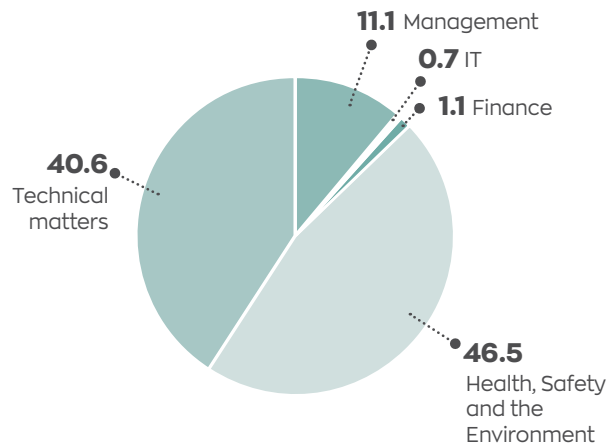
**Leadership Academy Step 1:** The objective of this training was to develop the skills necessary for all new managers to enable them to lead their teams and cultivate relationships with their colleagues and supervisors.

**Leadership Academy Step 2:** The purpose was to further develop the skills required of every manager in order to handle a variety of business challenges that have a direct impact on the success of their work.

Man-hours of training per subject



Man-hours devoted to each educational training area (%)  
Total hours: 37,780



## Training Subjects at the Refinery in 2019

In 2019, we reorganized the refinery Training Department with the aim of providing the most up-to-date and effective training to our employees at all levels of employment. To this end, we sought the assistance of consultants from internationally acclaimed training and development institutions.

The development of the new training and development system comprises of three phases:

- The evaluation of the existing system and identification of required improvements.
- A job analysis by position, the mapping of necessary skills and the creation of development plans.
- The development of training material as well as development of internal trainers (train the trainer).

By the end of 2019, the second phase regarding the technical staff was completed, and in the 1st quarter of 2020 the second phase will be completed and the third phase will begin, with an expected duration of 3 years.

Following the completion and implementation of the new training system the company will provide a modern and effective program based on international standards.

In 2019, the main training areas were as follows:

- Training of shift workers in the use of fire-fighting equipment and Personal Protective Equipment, with weekly drills.
- Training in the use of fire-fighting equipment and breathing devices at the refinery drill field.





- In-house training in the issuance of Work Execution Permits, as well as the use of gas detectors and breathing equipment.
- Training of rescue teams by the Elefsina Disaster Response Team in the rescue of persons at risk in inaccessible parts of the refinery, at a great height from the ground.
- Extensive training of the safety staff in first aid - with relevant certification-, in rescue methods in cooperation with the Disaster Response Team (EMAK) and the Hellenic Police and in safe and fast driving techniques for cars, motorcycles, ambulances and fire engines.
- Training of fire safety crews for combating forest fires.
- Theoretical training on scenarios of security breaches at the refinery by the commander of the Special Police Unit (OPKE) of the Hellenic Police.
- Seminar on the management of suspicious explosive objects by the Engineer Directorate of the Hellenic Army, as well as training in combat rescue and first aid in a possible terrorist attack.
- Training and periodic re-certification of stationary equipment Technical Inspectors in all applicable control methods (radiography, ultrasound, magnetic particles, penetrant fluid test, visual inspection, thermography etc.).
- Training in rotating machinery monitoring through vibration analysis for preventive maintenance.
- Training of newly-recruited personnel (engineers, operators, technicians) in the classroom, in the field and with drills.
- Participation of refinery engineers in international conferences, seminars and visits to other refineries.

### Training Tools at the Refinery

Production unit training simulators are used at the refinery to train control room operators, helping them develop and maintain their skills. In 2019, the upgrade of the existing operation simulators at the Hydrocracker, Fluid Catalytic Cracking and Crude Distillation Units began. At the same time, new simulators are being developed for the catalytic steam reforming of naphtha. Furthermore, a general use simulator has also been delivered and is being used for the training of field operators for chamber positions, and to assist field operators in understanding fundamental concepts. Its use is accompanied by training material for the use of machinery throughout the installation.

The online educational material, which is updated with e-books, conference presentations, educational videos, etc. is also an important tool. Technical Training Manuals are also available, which are written to reflect the current structure of the refinery and meet its current production needs. Furthermore, as part of the effort to raise awareness in security issues, short videos with targeted content are systematically shown at buildings used by field operators.

# HEALTH AND SAFETY

## Ongoing improvements in the area of Health and Safety are consistently our main priority

The nature of the Group's business operations - refining, storage, transportation and marketing of fuels - combined with our corporate principles and values, make occupational Health and Safety a matter of material importance, and a priority to which our commitment is absolute and permanent. In order to ensure a safe working environment, and achieve ongoing improvement in workplace health and safety conditions, we implement a rigorously structured Management System, fully aligned with European Union Directives and other, additional measures.

In pursuit of our established objective of "Goal Zero" Accidents, we reinforce and safeguard our management system with:

- Continuous training and presentations on safety issues, involving the entire workforce.
- Regular maintenance of equipment to ensure it functions properly and safely.

- Investment in new technology equipment and control measures.
- Risk assessment of critical tasks, in order to ensure that the proper precautions are taken before tasks are carried out.
- Fostering a culture of safety across the whole Group, with presentations of relevant material to the entire workforce.

In 2019, investments continued in order to improve both the operational and personal safety of employees, with the aim of consistently improving our performance in Health and Safety and strengthening the organisation's safety culture.

Moreover, a range of investments were made on projects that reduce the possibility of an accident and upgrade the fire safety equipment.







**1.2**

**The Group's injuries  
frequency index**

**38.3**

**million euros spent on safety  
in 2019 (investments  
and operating expenses)**



## 1. Health and Safety Management Framework

Health and Safety at work and the prevention of occupational hazard is a moral obligation and a business necessity, which goes beyond the narrow limits of a simple legal obligation. Our primary concern is to take measures, and implement projects and programmes, to ensure we attain our permanent objectives for workplace health and safety, which can be formulated as follows:

- To reduce the risk of major technological accidents to the lowest possible level.
- To eliminate occupational accidents - "Goal Zero".
- Continuous monitoring and upgrading of the quality of equipment to ensure that conditions conducive to safe work operations are continuously improved.
- Effective protection of people (our personnel, contractors' personnel, our neighbours, associates and site visitors), as well as the environment and our installations, from the hazards that may arise from the company's activities.
- Continuous training of personnel and briefing on health and safety issues in order to prevent accidents and occupational health problems.
- Full compliance with regulatory requirements.
- Active involvement of all employees in finding acceptable and effective solutions for protection and safety, as well as in establishing regulations, identifying hazards and assessing risk.
- Frank and open communication between workers and management in health and safety issues.

At the refinery, delivering on this commitment relies on the effective operation of the integrated Health and Safety Management System, which is certified compliant -since 2008- with the internationally recognised Health and Safety standard OHSAS 18001:2007. The same certification has been secured by OFC (in 2006), Coral and Coral Gas (in 2013).

The MOTOR OIL refinery's Health, Safety and Environment Department is responsible for the operation of the Health and Safety Management System. Moreover, the health and safety organisation includes in-house safety engineers, occupational physicians and nursing staff - both at the refinery and at MOTOR OIL's head office - at a level that goes beyond the requirements of the relevant Greek legislation.

There are also two statutory committees:

- The Safety and Environment Committee, made up of the refinery section heads which represents the entire workforce.
- The five-member Employee Health and Safety Committee, whose elected members are appointed every two years by the refinery employees.

The above Committees are intended to oversee control of health and safety conditions, making recommendations for changes and improvements as necessary.

Similar arrangements operate in the other companies of the Group, taking appropriate account of the particular conditions of each workplace.

Steps aimed at achieving the Health and Safety targets mainly involved developing a culture of safety and are based on the following actions and tools:

1. Toolbox meetings: brief meetings, either scheduled or ad hoc, where predetermined topics on safety are discussed. They highlight important issues, gather recommendations for improvement and facilitate two-way communication amongst personnel at all levels. As topics and suggestions are recorded, safety issues are continually reassessed and actions for improvement are set in motion.
2. Safety observations: field inspections by all employees with the aim of identifying unsafe behaviours. These observations do not focus on equipment but on human behaviour and involve dialogue about safety and good practices. Employees assume an active role through continuous observation and dialogue in the field that provides them with training but also enables them to train others.

### Health and Safety Management System (HSMS)

OHSAS 18001:2007





Employees develop a responsible attitude and are entitled to stop a particular task in the event they identify unsafe conditions. Continuous inspections by personnel result in raising awareness of all risks inherent in operations and in the improvement of the culture of safety. Additionally, the findings are recorded electronically via a special form. It is, therefore, possible to search and display a detailed report based on several criteria and to export statistical data to identify sectors with room for improvement.

3. Operator Care Program: the aim is that all employees will achieve the same level of knowledge. There are defined training objectives for each job position focusing on equipment, processing and area of responsibility from the aspect of safety so that unsafe conditions can be identified in time. Experienced department staff conducts training sessions, in a room with appropriate training materials and, more importantly, in the field. The trainer may also come from another department or an external partner, depending on the need.
4. An essential tool which was developed to raise employee awareness of safety issues is Time Out for Safety (TOS), which involves convening ad hoc meetings on safety issues. It is used in cases where a particular observation has been made or some unsafe condition has been identified in the field.
5. Weekly fire safety drills which take place at the refinery where a scenario is developed and supervisors and facility personnel hold discussions to encourage employee proposals for improvements.
6. The refinery's General Manager holds safety meetings with employees to provide guidance and exchange views on safety issues.

The development of a strong safety culture is not limited to our employees but also includes our contractors' employees who work at our facilities.

To this end, there is continuous cooperation and two-way communication, with actions that include:

1. Safety observations, with contractor companies receiving reports with observations on a daily basis, with a view to monitoring their performance as regards safety, rewarding good practice, and immediately implementing corrective actions.
2. Workshops aimed at raising contractor awareness for their active involvement in safety issues.
3. Meetings before critical projects with the participation of the safety engineers and technicians of all contractors with the aim of informing them on safety issues.

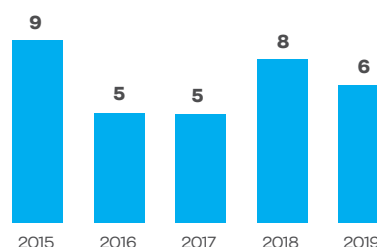
4. Daily communication between the responsible contractors and the company aimed at taking preventive measures, and the coordination and safe execution of work.
5. Continuous evaluation of the performance of contractors in the management of safety issues. Specifically for 2020, a pilot program has been approved and scheduled involving the evaluation of contractors by an independent third-party, who shall examine their health and safety management systems and safety performance. The evaluation is intended to be the starting point for continuous improvement aimed at surpassing the company's requirements and standards. Upon completion of the program the new way of evaluation, which will apply to all contractors, will be introduced.

## 2. Our performance on safety

All of the Group's companies regularly report, record, investigate and analyse incidents (fires, accidents, near-misses) using internationally recognised indices in order to take the appropriate corrective and preventive measures. We also enhance our experience by monitoring investigations of serious accidents at comparable facilities abroad and incorporating their findings into our own practices.

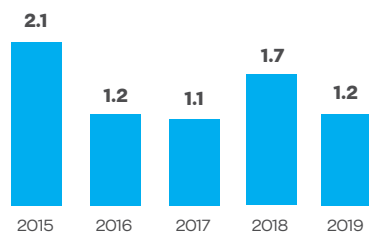
During 2019 we recorded six (6) lost time injuries at the facilities of the MOTOR OIL Group. Two occurred at the MOTOR OIL refinery, three at LPC and one at AVIN.

**Motor Oil Group: Number of Lost Time Injuries (LTI)<sup>1</sup>**



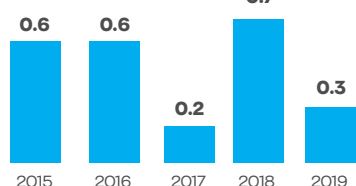
There were no fatal accidents or serious incidents during the course of our activities.

The Lost Time Injuries Frequency Index (LTIF) came to 1.2. At MOTOR OIL, the LTIF was 0.7, which historically is the second-lowest value for the company. The index was 8.7 at LPC and 1.9 at AVIN.

Motor Oil Group: Lost Time Injuries Frequency Index (LTIF)<sup>1</sup>

Frequency Index = Number of accidents per million man-hours

The Lost Time Injuries Severity Index (LTIS) recorded a value of 0.3 across the whole Group, with a value of 0.3 for MOTOR OIL. The LTIS was 1.4 at LPC and 0.2 at AVIN.

Motor Oil Group: Lost Time Injuries Severity Index (LTIS)<sup>1</sup>

Severity Index = Number of lost work hours per 1,000 man-hours

<sup>1</sup> Note: Includes the companies MOTOR OIL, Avin Oil (since 2006), Coral and Coral Gas (since 2010), OFC (since 2012), LPC (since 2015), Coral Cyprus and NRG (2018).

These values, in combination with the constantly increasing refinery production and the higher volumes handled by our commercial companies, continue the steady downward trend of the last twenty years, demonstrating the ongoing effort to reach our Zero Accident target.

In this context, the Group's management is offering its steady support to programmes aimed at training and informing the workforce and strengthening technical and organizational measures, remaining committed to our 'Zero accidents' objective. The LTIs have been analysed in depth to identify their causes and establish the most appropriate corrective measures, which were then communicated to personnel through training sessions and briefings.

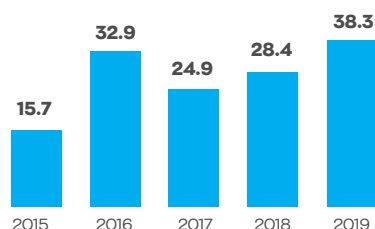
Recommendations for equipment improvements, arising from an investigation of LTIs, were implemented immediately. These statistics relate to accidents involving the Group's own employees and do not include lost-time accidents involving subcontractors' employees, the level of which remains very low. Accidents involving contractors' employees amounted to 3 in 2017, 2 in 2018 and 3 in 2019. Finally, we should note that, as in previous years, no case of occupational illness was recorded.

### 3. Health and Safety Investments

Improvements in safe working conditions are achieved by making the necessary investments in equipment, through the upgrading of procedures, and by means of Health and Safety inspections.

An investment programme is constantly active at the refinery and other facilities to ensure proper maintenance of electrical, mechanical and electronic equipment and to provide technical upgrading and renewal of that equipment to stay abreast of developing technology and to maintain the highest possible safety and accident prevention standards.

Health &amp; safety investments and operating expenses (million euros)



In 2019, the total cost of the capital investment program of all Group companies on projects to improve health and safety and to procure safety equipment amounted to 30.4 million euros, while the cost of operational expenses in this area was 7.9 million euros.

The greatest emphasis was laid on projects to reduce the risk of accidents and to improve working conditions, as well as projects aimed at upgrading fire safety measures at our facilities.

In the autumn of 2019, a major project was completed regarding the maintenance and upgrading of equipment of the units of the catalytic cracking, dimersol and alkylation complex. The primary purpose of the project was to improve process safety while increasing productivity. The project's total duration was more than 45 days, and it involved a large number of contractors, as well as many employees who worked intensively and performed extensive work.

The goal of zero accidents during work was achieved through increased safety measures as well as continuous supervision by an experienced Safety Technician team around the clock.

In 2019, the upgrade of the sprinkler system at the alkylation unit continued, along with replacement of the main fire safety valves in the refinery's fire suppression system and in segments of the network towards the flares.

Works to improve the refinery loading dock were completed, and included replacement of pretensioned beams at the dock and upgrading of materials in equipment and piping at the production units.

The upgrade of personal protection equipment continued, and new fire extinguishing equipment was purchased.



Additionally, all our commercial companies proceeded to investments for improvements of the safety systems in service stations and their facilities. These included maintenance and upgrade of facility equipment, automation, installation of cameras at services stations, lighting improvement, maintenance of fire extinguishing equipment and others. At the same time, significant investments were made, applying the provisions of Law 4439/2016, at our commercial companies' service stations located on the ground floor of buildings and less than 30 meters from public gathering spaces. Investments included the installation of a stage II vapor recovery system, a permanent hydrocarbon detection system, etc. These investments amounted to 3.6 million euros.

## 4. Procedures

Technical integrity of equipment, compliance with international standards/regulations and safe working conditions are amongst the primary factors ensuring safety in the workplace. Even more important is how individuals behave (the "human factor"). Refinery employees can perform their work safely not only as a result of the strict work procedures they are required to follow and because they have been provided with the appropriate skills and competencies, but also because they have been trained in safety awareness.

### Hazard Identification, Risk Assessment and Control

Across the whole range of refinery activities, studies have been conducted to assess risk for each work station and task; the necessary measures have been taken to eliminate or minimize all risks identified. Moreover, in the context of the requirements of OHSAS certification the whole monitoring process of our procedures has become fully systematic.

Within each refinery section, risks identified are classified into three categories according to the hazard level: low, medium or high. For each category of risk, we prepare a timetable for taking action to eliminate or reduce the risk and appoint a manager to be responsible for the necessary action.

Of particular importance during maintenance and repair work is the procedure for issuing Work Permits, within a stringent statutory framework of rules and procedures. For this reason, the issuing of these Permits is the subject of continuous training activity, covering both those who issue them and those who receive them, both company employees and any sub-contractor personnel who may be involved in work activities on the refinery site. In 2019 the revision of the Work Permit form was completed, as was the related process aimed at the modernisation of the permit issuance system and the transition to an electronic issuance platform.

In respect of the need to assess and minimize operational risks, the HAZOP - Hazard and Operability - Study is used to analyse risk and operability in all new units or whenever changes are made to an existing unit, and a five-year revision programme is implemented.

Likewise, the studies required by the regulations on fire safety are conducted; other safety studies are prepared and communicated for approval and registration as appropriate with the competent authorities.

Special focus is placed on the analysis of near misses, which are classified depending on the severity of the consequences and the probability of their occurrence ( $RISK = PROBABILITY \times SEVERITY$ ). Near misses are discussed with the entire workforce in order to cultivate a culture of safety and to generate proposals for improvement through the exchange of information. In 2019, the written procedure for reporting and investigating incidents and near misses was revised. The revised procedure introduces changes to the categorization and recording of incidents, defines crucial terms more clearly and is in line with international good practice and modern standards.

In respect of health and safety equipment (personal protective equipment, fire-fighting equipment, etc.) rigorous specifications based on recognized European standards are implemented.

In addition, safety equipment specifications are monitored continuously so that they can be updated in line with the new technological developments.



### Indicative Activities in 2019 in the area of Procedures

- We reviewed procedures in the Health and Safety Management System.
- A new form was drawn up and the process for issuing Work Permits was revised.
- The procedure for reporting and investigating incidents and near misses was revised.
- Personal detectors for 4 gases (H<sub>2</sub>S, LEL, CO & O<sub>2</sub>) for use in enclosed spaces were increased.
- A new general safety regulation for contractors has been adopted, which summarizes all pre-existing regulations and sets new requirements regarding occupational safety.
- We continued implementation of the programme to monitor and assess contractors in respect of their compliance with health and safety rules when working in the refinery facilities.
- A pilot program was approved introducing a new way of evaluation of contractors with respect to health and safety by a third, independent body, according to stringent criteria based on international practices and standards.
- We continued to update the Safety Data Sheets for refinery products, adding new information, as part of our implementation of the provisions of the European REACH and CLP Regulations.
- Participation continued in international organisations dedicated to exploring and achieving continual improvement in rules and practices.



### Protection (Security)

We take all necessary preventive measures to protect our installations against possible - malicious or not - security threats. The security system is fully automated and includes an automatic identification system of incoming employees and vehicles with the issue of RFID cards during entry, security cameras in the perimeters of the refinery and the port, a motion detection system at the enclosure and an automatic monitoring and notification system (video analytics) in case of breach of the refinery's perimeter.

Those of our personnel responsible for this protection are suitably trained, both in security and safety matters, so as to be able to effectively and swiftly fulfil their responsibilities, while at the same time fully respecting individual freedoms and fundamental human rights.

## 5. REACH and CLP Regulations

REACH Regulation concerns the registration, evaluation, authorisation and restriction of chemicals manufactured in the EU or imported in quantities reaching one tonne or more per year. The purpose of the Regulation is the protection of the environment and human health and it affects producers, importers and downstream users of chemicals and preparations within the EU.

Since 2008, MOTOR OIL has been participating, together with other companies in the industry, in the respective Consortia and Substance Information Exchange Fora (SIEFs) for the substances it manufactures/imports, so that it can be kept up to date on REACH developments and be prepared to meet any legal and scientific requirements. In the past year the company has updated certain registration dossiers, as required by the Regulation (i.e. keeping up-to-date information on registered substances) and will continue updating the rest in 2020.

The CLP Regulation deals with the classification, labelling and packaging of chemicals, ensuring that the risks involved are clearly communicated to employees and consumers in order to ensure their safe use at all times. MOTOR OIL has completed the above process of labelling all its products and classifying them in all safety data sheets and regularly updates them each time new information is available.

## 6. Emergency Response Plans

The emergency response arrangements at all Group company facilities are based on the Emergency Response Plan, which is regularly reviewed and updated to take account of changing legal requirements and revised "best practices" resulting either from technical advances or experience gained by others in dealing with major or minor accidents. Additionally, we have prepared and submitted studies to the competent authorities in accordance with the EU Seveso III Directive which covers the most likely accident scenarios, and relative prevention and response measures.

The Emergency Response Plans describe, with particular reference to a major accident situation, the public health protection measures -including warnings for neighbouring communities, and related advice- that would be put into effect in the event that the Major Technological Accidents Response Plans were activated; these plans are drafted by the competent authorities and determine how the state might intervene in emergency situations.

The purpose of the Emergency Response Plans is to provide the personnel involved with a comprehensive response plan to address emergencies which may arise from the operation of every installation. The plans provide the necessary guidelines for taking and executing the correct decisions and actions, providing information for:

- the operational organisation for addressing the event / emergency.
- the Action Plans.
- communication with the company's staff and the Public Authorities and/or other competent services that must be notified in each case.
- the communication actions with the other stakeholders.

In 2019, a program for the inspection and evaluation of fire protection equipment, the fire safety network and the operational organization for emergency response was implemented by an internationally recognized company. Starting from the results of the evaluation, immediate and long-term actions were launched to improve the means and preparedness for handling major incidents. At the same time, actions are being implemented in line with existing programming to optimize the means available to prevent and respond to such incidents. The supply of 2 new fire rescue pick up trucks and 3 new ambulances has been completed.



As regards the refinery specifically, the plan includes:

- The Mutual Aid Agreement, whereby all Greek refineries co-operate in the event of an emergency. The effectiveness of this collaboration plan is ensured through joint exercises involving the local fire brigade and the refineries.
- A Corporate Contingency Plan for reciprocal assistance between Group companies in the event of an emergency. This has also been integrated into the Emergency Response Plan of each individual company. In this context, MOTOR OIL participated in fire safety drills at the facilities of DESFA.
- Drills carried out every week and major industrial accident response drills carried out regularly during the year, during which the Major Incident Response Procedure is activated. In cooperation with the Demokritos Research Centre, a study on risk analysis and the improvement of methods for response and management of emergency scenarios is underway.
- The fixed and portable equipment for leak detection and fire-fighting, are upgraded according to a regular annual investment plan.
- The availability on the refinery site of 6 fire engines and one 12,000-litre bulk foam tender, which are available on 24-hour standby. In 2019, the modernization of the fire truck fleet continued with the receipt of the upgraded fire truck No.5 and the commencement of the upgrade of fire truck No.3 by an external associate. A pick-up truck with capacity for immediate response and fire suppression using water and foam was added to the fleet of fire-fighting vehicles.
- The existence of alternative locations for the Incident Control Room at four different strategic points on the refinery site, and the availability of an automatic call system and an automatic messaging system that enables contact with refinery staff in an emergency.
- The introduction of satellite phones at the refinery itself and in the administration offices. These phones make communication possible and allow coordination even in extreme circumstances, such as a natural disaster, when ordinary landlines and mobiles may be rendered useless.

## Our commercial companies

Coral and Coral Gas conduct scheduled and unscheduled drills at their facilities and offices in which all personnel take part. The Emergency Response Plans are activated during the drills. The two-fold aim is to provide ongoing training and ensure personnel preparedness and to verify that fire safety equipment is up to par. The drills are designed to respond to a variety of potential scenarios and the Fire Brigade takes an active part in some of these. An evaluation follows each drill and the findings are promptly addressed.

Specifically in 2019, 6 emergency response drills were conducted at the Coral Gas facility in Aspropyrgos. One of these was a joint drill with the Fire Brigade, based on a scenario of “fuel leakage outside the petroleum and liquefied gas facilities”. 7 drills, including a joint fire safety drill with the Fire Brigade were held at the Thessaloniki facility, based on a scenario of a gas leak at the tanker loading terminal, in which 3 Fire Brigade vehicles, 10 firefighters and all facility personnel took part. Furthermore, an emergency drill was held in the framework of the SEVESO Directive, based on a scenario of a leak with fire in a tank.

Similarly, 5 drills were held at the Coral facilities in Perama, one of which was held at the new petroleum product pier based on a scenario of an oil spill during the unloading of a tanker, with the participation of the Piraeus Port Authority. 4 drills were held at the Ikonio facilities. 4 fire safety drills were held in Thessaloniki, as well as a fuel leakage drill, a safety drill, and an earthquake drill. 4 fire safety drills were held at the Chania facilities, as was a drill based on a scenario of a leak during the unloading of a tanker with the participation of the Port Authority, and 2 earthquake drills. Furthermore, a fire safety drill was held at the Nerokouros facility in Chania, and a tanker spill drill at the Gouves facility in Herakleion.

The drills were successful and both fixed and portable equipment functioned effectively. Fire Safety Team personnel responded in accordance with the Emergency Response Plan. Evaluations were subsequently conducted with the Fire Brigade’s participation.

Avin conducted three fire drills at the tanker loading terminal in Ag. Theodoroi. All personnel and firefighting crews at the terminal and refinery took part in the drills, during which the Emergency Response Plans were activated. Drills are designed for a range of alternative scenarios. Furthermore, a drill was run for responding to earthquakes and another for responding to spills occurring during fuel transfer (using a special vehicle made for this purpose).

The LPC facility also maintains an emergency response system. The system includes an emergency response study, procedures and plans for various situations (fire, earthquake, terrorist act, flood, etc.), team organisation (fire crews, evacuation teams, and others), a training programme and training and preparedness drills. LPC is not required to have a Response Plan for Large-scale Industrial Accidents (SATAME). In 2019, 19 fire safety drills were conducted at the production facilities, as was 1 evacuation drill.

## 7. Safety of Port Installations

Safety measures at port facilities are of great importance since they ensure the smooth flow of the works in the refinery, as well as the protection of the marine environment from any pollution.

It should be noted that MOTOR OIL became the first Greek company to be certified by the Ministry of Mercantile Marine for compliance with the International Ship and Port Facility Security (ISPS) Code, which is applied according to the requirements of chapter XI-2 of the International Convention for the Safety of Life at Sea (SOLAS). The accreditation is reviewed each year, in accordance with the existing legislative provisions.

In all areas of the port facilities security checks are carried out on crews and supplies, as well as checks on access.

In 2019, 8,716 people and 1,544 vehicles entered the port facilities, after passing security checks. The security checks are conducted with the permission of the Port Authorities, pursuant to the terms laid down in the approved Port Facility Security Plan, which is based on the International Ship and Port Facility Security Code (ISPS Code).

The Code requires that drills be held at least every sixteen months, using security scenarios that are often combined with sea pollution and/or fire scenarios, with the cooperation and participation of the local Port Authorities. 1,577 ships berthed at the quays of our port facilities in 2019.

## 8. Safeguarding Workforce Health

The health of our workers is a key area of care and concern. Therefore, the personnel at the refinery and the facilities undergo regular check-ups, while all Group employees are covered by group hospital care programs.

The refinery provides full coverage to personnel and infrastructures for the provision of medical services and first aid, which includes a central clinic staffed by doctors and nursing personnel equipped with essential supplies, defibrillators, medicinal and other specialised materials (bandages for burns, neutralising chemicals) to treat emergency cases.

There is also a fully equipped first-aid station at the Alkylation Unit, with a nurse on 24-hour call, as well as three properly equipped first aid stations and five ambulances.

In addition:

- Rescue crews receive continuous training in rescue practices and first aid. A "First Aid Guide" had been published and is systematically used for training needs, and first aid courses were conducted.
- Employees are supplied with the necessary personal protective equipment, which is always kept up to date, in line with technological advances and changes in European specifications.
- The quality of drinking water is tested through analysis by independent laboratories.
- The restaurant staff undergoes medical checks in accordance with the requirements of the law.
- Measurements are taken to establish levels of concentration of chemicals in the workplace, in line with the requirements of the relevant legislation. Over the last 10 years, the company has conducted a special study demonstrating that concentrations of all chemical substances were below the limit values for exposure. A study was conducted in 2017 confirming once again that the levels of chemical substances in work areas were almost nil and well below the limit values. Furthermore, measurements were taken to determine the inhalable and respirable fractions of airborne particles in the atmosphere of the main warehouse, where it was ascertained that average concentrations for an 8-hour work day are clearly lower than the statutory exposure limit values. N-Methylpyrrolidone (NMP) levels in the work area of a lubricant production unit were also measured, and found to be much lower than the respective occupational exposure limit value.

A well-equipped doctor's office also operates at the Head Office, prepared to respond to acute cases, manage chronic illnesses, provide information on health issues and organise blood donations. Finally, occupational physicians and arrangements for general medical procedures and screening examinations are also in place for the benefit of all subsidiary companies of the Group.



## 9. Training on Safety Issues

The continuous training of our employees and the creation of a high level of safety awareness, together with the technical and organisational measures, form the essential pillars for accident prevention and the maintenance of a safe work environment.

We also see that our contractors' employees are kept aware of health and safety issues, with the emphasis on general principles of accident prevention and the company's procedures ensuring safe execution of the work they undertake. Visitors are given safety instructions in the form of a special leaflet, while a special briefing film is screened for them on entry to the refinery facilities.

The general content of health and safety training includes the following subjects:

- Fire safety - use of fire extinguishing means.
- Work Permits.
- Work in confined spaces.
- Identification of occupational hazards and risk evaluation.
- Personal Protective Equipment.
- Material Safety Data Sheets.
- Emergency response procedures and participation in relevant drills.
- First aid.
- Presentations - analyses of Major Technological Accidents.
- Safe road transport of fuels (for the Group's commercial companies).



### Safety Day 2019 - Dilemmas-Care-Risk Acceptance

In recent years, the Safety Day has been organised on an annual basis in the Group. In 2019, Safety Day took place on the 8th of May with the theme "Dilemmas-Care-Risk Acceptance-Care", featuring a more in-depth look at certain concepts and the way in which they are interconnected. This year the aim was the evaluation of the progress made to date. Safety Day is organised simultaneously throughout the Group, in all the companies, the refinery, offices, facilities and service stations, and the workers and associate contractors dedicate more than an hour from their work to participate in scheduled meetings.

In 2019 there were more than 120 meetings with the participation of more than 1,500 workers and contractors. At the meetings, videos and slides are shown, on-the-job risks are identified and recorded, and employees themselves propose solutions for addressing such risks.

The main component of these sessions is the open and honest discussion about how each individual handles the dilemmas, and how to take steps to protect the people around them and contribute towards the Zero Goal: Zero Accidents and Zero Lost Time.

As a result, the participants show great interest and make personal commitments to CHANGE their BEHAVIOUR with safety in mind. These Safety Days have the broad support and the participation of the Group's leadership, and they play an important role in raising awareness and forming a uniform culture regarding the importance of Safety.

#### Figures for health & safety training

	MOTOR OIL		Other companies in Group <sup>1</sup>	
	2018	2019	2018	2019
Total workforce	1,269	1,299	846	854
Workers undergoing training	1,054	1,051	622	626
Man-hours of training	15,032	14,067	3,336	3,472
Contractors undergoing training	570	1,117	2,741	2,986
Man-hours of training	4,560	8,936	5,893	6,463

<sup>1</sup> Avin Oil, Coral, Coral Gas, OFC and LPC



## Workforce Training

As part of encouraging a culture of safety among personnel, information on safety topics is regularly disseminated, while safety messages and posters, the results of accident and near-miss investigations are posted on notice boards at all of our facilities.

In 2019, refinery personnel were trained, certified and recertified in the issuance of work permits, which stipulate the work safety procedures in place at the refinery. As they do every year, the rescue crews received training at the Elefsina Search and Rescue Team (EMAK) facilities in techniques for rescue from a height in an industrial setting and they carried out related drills. Furthermore, training on issues related to security in the refinery area was conducted by Specialised Hellenic Police personnel, as was training of shift workers in the use of Personal Protective Equipment, with weekly drills. Extensive training of the safety staff was conducted in first aid - with relevant certification- and in safe and fast driving techniques for cars, motorcycles, ambulances and fire engines.

A seminar on the management of suspicious explosive objects was conducted by the Engineer Directorate of the Hellenic Army, as well as training in combat rescue and first aid in a possible terrorist attack.

In addition, the structured efforts to educate the technical staff of our facilities were continued through films and presentations on incidents, analysing causes, effects and the corrective measures taken. Intensive training was also offered in 2019 for new employees (technicians and operators) in key topics affecting their area, most of which were related to the safety procedures at the refinery and the particular units where they will be working. Lastly, 12 new engineers were trained in the Emergency Response Plan, as part of assuming duties of the on-duty engineer.

## Training for Contractor Employees

In 2019, contractor personnel working at the refinery also received intensive training from an independent organisation on safety-related issues. A total of 1,117 workers received training on key safety issues and best international practices from trainers with extensive experience in the refinery sector. At the end of the training the participants sat for examinations, and only those who successfully completed the course could now receive an entrance card and work at the refinery. It is worth noting that the contractors' employees that worked at the refinery in 2019 were almost twice as many as they were in 2018 due to a significant increase in maintenance work.

Intensive training was conducted at our commercial companies for personnel working at our own-operated retail stations and for contractors at our facilities. A total of 2,741 people received training; 2,550 of them were at service stations and 190 at our facilities. The main training topics covered safe operations, safety check-lists, and others.



## Training in Fire Safety

In order to improve the readiness of refinery personnel to respond to emergency situations, as well as to rehearse the procedures of the Emergency Response Plan and check the operability of equipment, regular emergency preparedness exercises are carried out. In 2019, 48 drills were conducted, of which 8 were held on the drill field, 3 were based on large-scale personnel evacuation scenarios, 3 on forest fire scenarios and 3 were carried out in cooperation with AVIN's loading terminal.

In addition, in 2019:

- Personnel of the fuel distribution department and the safety service were trained in the use and operation of the fire-fighting equipment of the fire rescue pick up trucks.
- Safety service personnel were trained in driving fire truck No 4.
- Crews were trained in the operation of upgraded fire truck No 5.
- New operators were trained in fire safety equipment and fire-fighting.
- New engineers were trained in basic fire fighting principles and the use of fire extinguishers.
- All shift-workers passed the annual training in the use of Respiratory Protective Equipment.
- The personnel of the fire safety service and the mechanical and general maintenance department were trained in the use of a special welding helmet which provides breathing air through filters.
- Rescue team training continued while selected members attended advanced rescue training by EMAK trainers.
- Fire safety crews received training in combating forest fires.



## Road Safety

2019 was another year without any road accident for our commercial companies. Road safety is a priority for these companies, which every day transport more than 8,000,000 litres of liquid fuel and 520 metric tons of gas across Greece and the Balkans. On an annual basis, they travel more than 28 million kilometres delivering fuel in Greece and abroad without accident or injury to drivers or others, demonstrating in practice our commitment and dedication to road safety, and our contribution to the common good. In 2019, more than 390 drivers of private and public use tank trucks received training in their special skill areas.

Fuels are a category of hazardous materials and their safe transport requires precautionary measures to be taken at three levels:

- The maintenance of a high technical standard of transport equipment, i.e. road tankers.
- The promulgation of strict safety procedures and the constant monitoring of their implementation.
- The ongoing updating and training of drivers.

The Group's commercial companies, carrying out their activities with a keen sense of responsibility, are continually engaged in striving to meet the above requirements, in the context of the rules laid down by the state, the Greek and global petroleum industry, and their own company policies and procedures. To succeed in this objective they operate integrated systems for recording and monitoring of road tankers carrying out transport operations on their behalf (company-owned or belonging to partner companies), as well as training programmes for drivers, while also undergoing tests and certification from external accreditation agencies under the standards ISO 9001 (Quality Management), ISO 14001 (Environmental Protection) and OHSAS 18001 (Health and Safety Management).

Road tankers undergo multiple thorough safety checks every year in accordance with the «Regulations on Safety of Loading of Tankers with Liquid Fuels at Petroleum Facilities». This check extends to the full compliance with the terms included in the European Agreement concerning the Carriage of Dangerous Goods by Road (ADR).

There is also an ongoing training programme focusing on defensive, fuel-efficient and safe driving, loading/unloading procedures and fuel handling, anti-skid and anti-roll over manoeuvres, fuel chemistry, handling of customer complaints, vehicle safety equipment, fume recovery, security, etc.

In recent years the programme has also incorporated a detailed analysis of the routes taken by our tanker drivers, so that the safest route is always taken for each journey. GPS tracking devices have also been fitted to tankers to allow closer monitoring of driver behaviour (speed, route taken, stops etc.).

# RESPONSIBILITY FOR THE ENVIRONMENT

**Protection of the environment and energy-saving are among our primary concerns.**

Respect and care for the environment is a common denominator in all activities of the MOTOR OIL Group. We operate as a responsible corporate organisation and espouse the principles of sustainable development, which is based on environmental protection, mutual respect and a sense of duty towards future generations. For these reasons, we continue with investments aimed at the steady improvement of our environmental performance. In 2019, we spent 31.2 million euros in our investment programme with both large and smaller scale projects, making a direct or indirect contribution to environmental protection.

In 2019, we continued with investments at the refinery to upgrade and replace furnaces in the Lubricant Vacuum Distillation Unit to further enhance energy savings. We completed the application of the Advanced Process Control (APC) system to the lubricant unit with the aim of maintaining consistent product quality, efficiency and safety. In addition, we continued to upgrade the desalination units and as part of general equipment maintenance, we completed projects to reduce energy consumption and emissions.

Our commitment to continuing to decrease our environmental footprint, as seen in the diagrams of the related indicators, remains consistent and uncompromising. In 2019, the specific values for energy consumption, carbon dioxide and sulphur dioxide emissions, and water consumption were slightly higher than in 2018 due to the regular maintenance of the units which led to the less efficient operation of the refinery.

As part of ongoing improvement and review of the environmental management system, as certified under the ISO 14001 standard, two communication procedures were revised in 2019, and the annual Environmental Statement 2018 was issued in accordance with the EMAS III ER122/2009 regulation. In compliance with provisions of Law 4403/2016 requiring corporate groups to publish non-financial information, as well as the requirements of Circular 62487/07-06-2017, we have included data on the environmental performance of MOTOR OIL and subsidiaries CORAL, CORAL GAS, AVIN OIL, LPC and OFC in this report. These data reflect energy and fuel consumption, along with greenhouse gas emissions related to this energy and fuel consumption.





**We use best available  
techniques and state-of-the-art  
anti-pollution technology**

**31.2**

**million euros  
Investments and operating  
costs related to the  
environment in 2019**



# 1. Environmental Management

The company's primary goal to minimise the environmental impact and energy footprint of its operation, as part of sustainable development strategy, is based on the Environmental and Energy Management systems, according to ISO 14001 and ISO 50001 respectively.

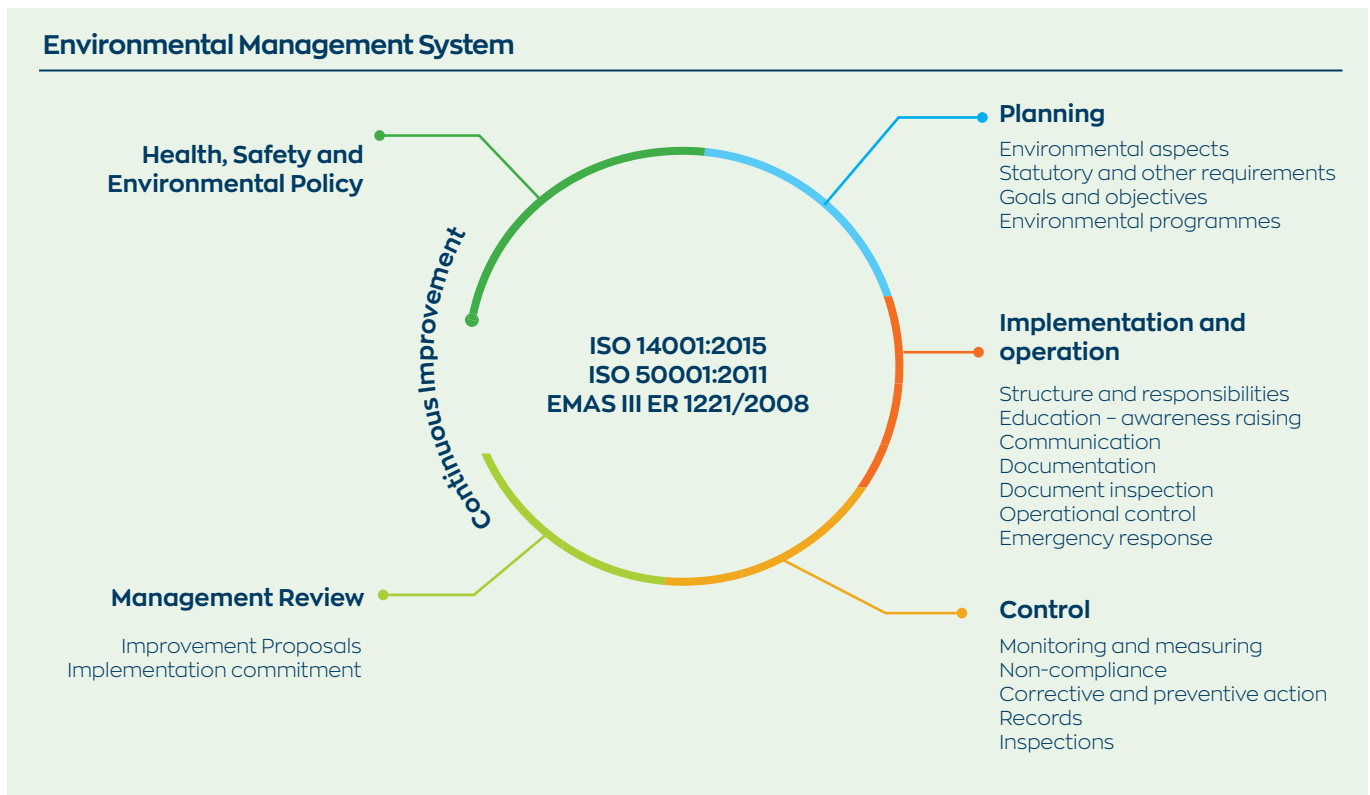
The Environmental and Energy Management systems are part of the Integrated Management System and serve as effective management tools for implementing our environmental protection policy objectives, which are:

- Complying fully with all Greek and EU environmental protection legislative requirements.
- Operating the refinery facilities in accordance with approved environmental conditions.
- Distributing products that comply with the European quality and environmental protection norms, by taking steps to upgrade production processes accordingly.
- Planning and implementing projects with minimized environmental impacts.
- Implementing Best Available Techniques.
- Monitoring and continually minimising the emissions of greenhouse gases, as well as those of other gas pollutants, and reducing solid and liquid waste as far as technically and economically feasible.

- Monitoring and, as far as possible, minimising, the consumption of energy.
- Pre-empting risks of environmental pollution, minimizing the probability of environmental accidents, and preparing, implementing and testing appropriate emergency intervention procedures.
- Training of, and awareness-raising among, all our personnel and contractors' employees who work on our premises, on the implementation of our environmental protection policy.
- Evaluating our environmental performance and continuously improving our Environmental Management System.
- Developing communication and dialogue with all stakeholders, especially with local communities in areas around the company's facilities.

The Environmental Management System ensures that suitable procedures are in place to identify and evaluate the significant environmental impacts of our activities, and forms the basis for drawing up strategies and implementing technically feasible and financially viable programmes to protect the environment.

The company's Environmental Management System was first certified in 2000, in accordance with the ISO 14001:1996 standard.



This was followed by re-certifications, and in 2017, certification was expanded to include the production, trade and delivery of fuels, biofuels, basic lubricants, lubricants, paraffins, asphalt, sulphur and special petroleum products with the new re-certified ISO 14001:2015 standard.

Additionally, in 2017, MOTOR OIL certified its Energy Management System at the refinery to the ISO 50001:2011 standard, which binds the company to using energy efficiently with the aim of conserving natural resources, reducing greenhouse gas emissions and helping to alleviate the effects of climate change.

The Environmental and Energy Management Systems are part of the company's Integrated Management System, which has also been recertified to the revised ISO 9001:2015 standard for quality. Therefore, the various internal operations and procedures of the Environmental Management System are themselves subject to the rigorous documentation imposed by the standard.

In 2019, as part of efforts to ensure the ongoing fine-tuning and improvement of the Environmental Management System, two communication procedures were reviewed in regard to:

1. Procedure for monitoring and reporting related to CO<sub>2</sub> emissions from combustion/processing.
2. Operation of the wastewater biological treatment unit.

Our commitment to publish our environmental performance figures and the impact of the operations at our facilities, as explicitly set out in our Policy on the Environment, led to our voluntary adoption and implementation of the Community Eco-Management and Audit Scheme EMAS III, provided for by European Regulation 1221/2009.

Within the framework of EMAS, the company is required to publish, on an annual basis, information about its environmental performance in the form of an Environmental Statement, allowing it to remain in the EU Eco-Management and Audit Scheme System, by the decision of the Ministry of Environment and Energy renewed annually. In 2019, MOTOR OIL issued its BVQI certified Environmental Statement 2018, its thirteenth such annual report. It is available on the website, [www.moh.gr](http://www.moh.gr).

## Compliance with Environmental Legislation

The key element of MOTOR OIL's environmental policy, which is applied to all company activities, is to comply with environmental legislation.

Our commitment to rigorous adherence to Greek and European legislation is reflected in our environmental performance indicators, which are reported to the competent authorities and stakeholders.

The refinery facilities operate under the terms and conditions described in detail in the Decision Approving Environmental Conditions for the refinery's operation pursuant to Directive 2010/75/EU (IED) on the prevention and control of emissions into air, water and soil.

The refinery facilities also fall under the greenhouse gas emission allowance trading scheme within the European Community aimed at promoting efficient and cost-effective reduction of greenhouse gas emissions.

Prior-period reports are submitted to competent authorities annually, outlining:

- Emissions and plan for monitoring carbon dioxide emissions. In 2019, an emission data report was also submitted to the authorities for the years 2014-2018, in order for the facility to revise its emission permit for the 4th period of the greenhouse gas emission allowance trading scheme (2021-2030 period).
- Quantities and type of produced solid waste and its management.
- Quantity and quality of liquid waste.
- Results of monitoring and recording environmental quality.
- Emissions from main combustion plants.
- Annual final report for the European Pollutant Release and Transfer Register (EPRT), in compliance with Regulation (EC) No 166/2006.
- Quantities of ship-generated waste offloaded at MOTOR OIL's port facilities.

In addition, the annual Environmental Statement is filed in accordance with the requirements of EMAS ER 1221/2009. The company is registered with the European Eco-Management and Audit Scheme (EMAS), and in the corresponding Hellenic Register, under number EL 000067.

Similarly, LPC submitted:

- Annual statements to the Electronic Waste Registry regarding waste collection and transport activities (Reg. No 15-1) and waste generation (Reg. No 15-2) for the year 2019.
- Annual statement to the Electronic Waste Producers Registry (EWP Reg. No 616) for 2019 (Hellenic Recycling Agency-EOAN, alternative management of waste lubricating oils).
- Annual final report for the European Pollutant Release and Transfer Register (EPRT), in compliance with Regulation (EC) No 166/2006, for 2019.
- The verified annual Environmental Statement (BV) in accordance with the requirements of EMAS ER 1221/2009. The company is registered with the European Eco-Management and Audit Scheme (EMAS), and in the corresponding Hellenic Register, under number EL 000051.

## Refinery/facilities communication with local stakeholders

All of our companies maintain open channels of communication with local administration authorities and other stakeholders, either by sending representatives to conferences and meetings, or keeping local organisations informed about its investment plans and its programmes relating to environmental protection.

Besides briefing local authorities, the company also maintains open communication lines with refinery neighbours, listening and responding to any complaints they may have. Recording, investigation and evaluation of complaints from residents are all covered by a specific procedure to ensure the appropriate immediate or long-term corrective action is taken, in line with the causes of the nuisance.

The fact that in recent years the number of complaints from the local community has been kept at low levels demonstrates the efficacy of the measures described above. Specifically, for 2019, we received 11 complaints by neighbours, with two of them concerning nuisance from emissions, 8 from noise and 1 from odours. Of the 11 complaints, 5 were determined to be groundless and no corrective measures were necessary, while 6 were deemed justified, but not significant, as they were related to essential processes or matters of unit operation which were promptly addressed.

No complaints were received in 2019 from neighbours of the Coral, Coral Gas and LPC facilities.

## Environmental Impact Assessment

In striving to consistently improve its environmental performance over and above what is legally required, MOTOR OIL identifies and assesses the environmental aspects and unavoidable impacts of its operation and implements programmes to prevent and mitigate them.

An important tool in this endeavour is the identification of environmental aspects and the systematic assessment of environmental impacts at all stages of the production process.

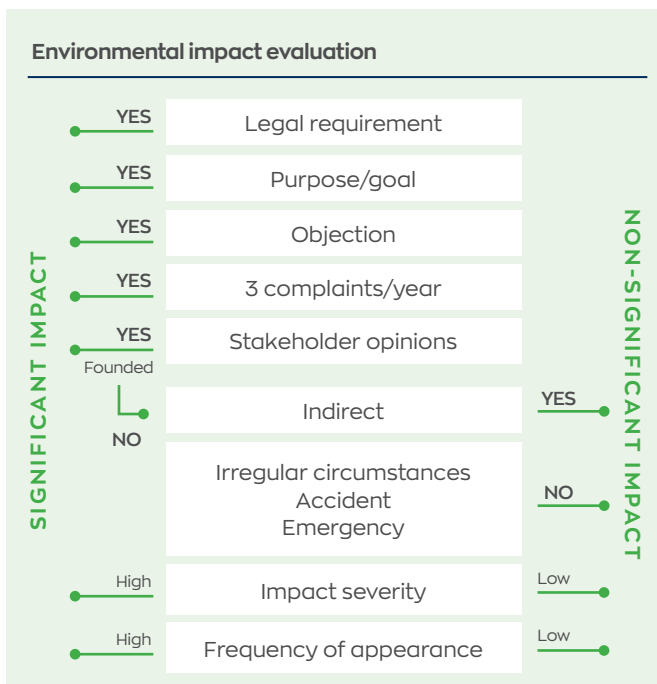
The following are taken into account when identifying environmental aspects:

- Current legislative requirements and their amendments
- Stakeholder views
- The refinery's operation under normal and abnormal conditions, and potential emergency situations.

The assessment of impacts and their classification as significant or non-significant is based on a number of criteria. Specifically, impacts are considered significant when:

- They constitute legislative requirements for the facility.

- They are related to the company's environmental policy or some predetermined purpose or objective.
- An objection or complaint has been expressed or is considered vital following evaluation of stakeholder views.



The assessment mentioned above is a dynamic process that monitors changes to the refinery's configuration and redefines the significance and classification of impacts.

The company's environmental records are reviewed regularly; where new activities or changes have been introduced, such review seeks to identify any new environmental aspects / impacts that may arise from:

- New compliance requirements due to changes in legislation.
- New activities, products or services, or changes in existing ones.
- Objections from or the views of stakeholders.

This procedure for classifying the environmental impacts associated with the refinery's operation, and their significance classification, has led to the following impacts being classified as significant, therefore constituting the challenges we are called upon to manage:

- Gas emissions from fixed combustion sources and from the refinery's production processes.
- Energy and water consumption.
- Hazardous and non-hazardous solid waste.
- Liquid industrial effluents and urban liquid waste.
- Noise.



The above environmental impacts are monitored regularly using suitable environmental indicators, based on which targets are set to address, properly manage and improve environmental performance by implementing programmes.

When new projects are being planned, alternative designs are evaluated taking account of their respective environmental impacts, with the aim of minimising these impacts as far as practicable, incorporating Best Available Techniques and choosing the most environmentally friendly solution.

## 2. Environmental Investments and Expenditures

The company's investment policy is oriented towards producing products that comply with European quality specifications, using modern technologies to ensure a high level of environmental protection and improve the quality of the environment, and towards capital investments aiming at improving and enhancing the refinery's environmental performance.

Between 2000 and 2019, the Group realised an investment programme totalling 1,945.9 million euros (as shown in the relevant table). From 2000 to 2019, investment related to the environment amounted to 872.4 million euros, i.e. 44.8% of the total investment programme. In 2019, total investments amounted to 159 million euros, of which 31.2 million euros concerned investments and operating expenses to improve and protect the environment.

In 2019, the installation of the Advanced Process Control (APC) system for the lubricant vacuum distillation unit (U-200) was completed, and will ensure optimal control and ongoing automated regulation of its operation. The design of the new Diesel Optimizer program for existing APCs (fractional distillation and hydro-desulphurisation) also began, aimed at the optimal management of diesel currents. There are multiple benefits from the operation of the new system, in terms of both process safety and environmental savings, due to the significant savings of energy and the consequent reduction of the carbon footprint in the production process, as well as the optimization of the specifications of the products produced.

In 2019, the upgrade of the lubricant vacuum distillation unit continued with the replacement of the 3 old furnaces with 2 new, technologically advanced and more efficient ones with a shared system to preheat combustion air and increase thermal efficiency. Regarding the above project, it is important to note that it is a project for the improvement of our environmental performance, as it is aimed at the optimization of energy efficiency and reduction of emissions. The enhanced energy efficiency has a direct impact on reduction of atmospheric emissions (because of the improved combustion process and reduction in use of fuel). The burners in the new furnace are low NO<sub>x</sub> burners, which also helps reduce the quantity of NO<sub>x</sub> emitted in the furnace fumes.

Also as part of decreasing our energy footprint, in 2019 the upgrade of the seawater desalination units continued, which involved the addition of a new reverse osmosis unit, which will reduce energy consumption for water production. The new unit will replace the older water production unit which used multi-stage flash technology.

At the same time, the collaboration for the implementation of the European LIFE DIANA environmental programme aimed at installing an innovative pilot facility at the refinery to stabilise residual petroleum sludge continued. Furthermore, we took part in research projects aimed at environmental protection, specifically: the DIRPIMCOAL project to produce biofuel from industrial and urban waste; the CARMOF project to capture CO<sub>2</sub> at the refinery production facilities; and the DeepDesOil project to develop a combined chemical-biological process for hyper-desulphurisation of petroleum products.

**872.4**  
million euros  
environmental investment  
and operating expenses  
from 2000 to 2019

**Environmental Investments and Operating Expenses 2000 - 2019** (million euros)

Year	2000-2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Total level of investment	1,237.6	55.3	68.7	54	42.4	86.4	107.3	135.2	159	1,945.9
Investment relating to environment	660.2	16.4	18.7	11.0	8.4	18.9	18.7	20.6	26.2	799.1
Environmental operating expenses	35.3	3.3	4.0	4.5	5.7	5.1	4.9	5.5	5.0	73.3
Total environmental investments & operating expenses	<b>695.5</b>	<b>19.7</b>	<b>22.7</b>	<b>15.5</b>	<b>14.1</b>	<b>24.0</b>	<b>23.6</b>	<b>26.1</b>	<b>31.2</b>	<b>872.4</b>



### 3. Implementation of Best Available Techniques

Best Available Techniques (BAT) are techniques that can prevent (primary prevention measures that are intrinsic to the production process itself), or control (secondary measures or “end-of-pipe” techniques) - in the most efficient manner - the pollution caused by an industrial activity, while being economically feasible and technically practicable.

Best Available Techniques per sector are described in the corresponding Reference Documents (BREFs). These include the best available techniques and information on their feasibility, emissions levels, related monitoring, consumption levels and measures for site remediation once the facility has ceased operation.

In the context of its environmental permit MOTOR OIL uses the Best Available Techniques in order to optimize its environmental and energy efficiency.

The application of BAT at the refinery includes:

- measures to prevent or reduce emissions during the facility's operation;
- automations and control systems that contribute to the efficient management of raw materials and energy, while ensuring high levels of reliability and safety in the units;
- emissions monitoring;
- incorporation of BATs either into the initial design of a unit, or when existing units and processes are expanded or modified.

### 4. Energy-Saving

For us, the rational use of energy is an important parameter in conducting responsible business activities and is indicative of our commitment to the principles of sustainable growth.

Thus:

- Our goal is to measure and improve, on a continuous basis, our performance with respect to the use of energy and the reduction of carbon dioxide emissions.
- We invest in the application of economically feasible technologies that contribute to the reduction of emissions. Cooperating with the competent state authorities and other agencies in planning and implementing technologically feasible and financially viable environmental protection policies.
- We report our actions and results to all stakeholders.

#### 4.1. Energy Efficiency Improvement

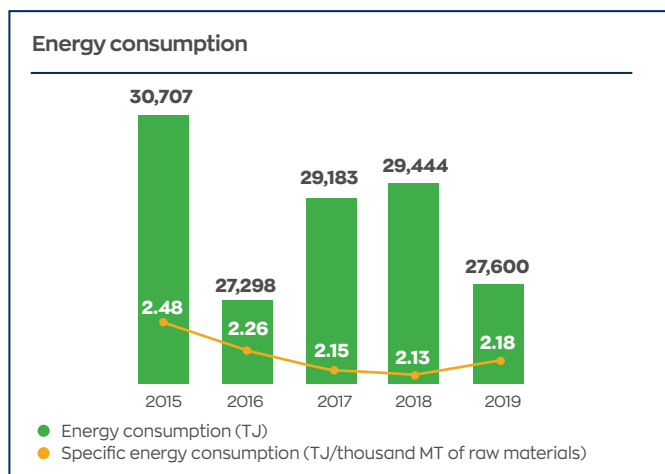
Our “energy footprint” is an important consideration that leads us to actively identify areas with potential for enhancing energy efficiency, and to implement appropriate projects through the use of Best Available Techniques or equivalent technologies.

The MOTOR OIL refinery has drawn up and is implementing an investment programme aimed at improving energy efficiency, primarily in the older units which were less energy-efficient due to their design. Thus, in recent years, one additional power-steam cogenerator was installed to minimise boiler use; the thermal pyrolysis furnace was upgraded; the air preheating furnace of the Crude Distillation Unit was replaced, while additional heat recovery exchangers were installed in the Thermal Pyrolysis Unit. The project to upgrade the furnaces at the Lubricant Vacuum Distillation Unit into forced draft furnaces continued, and in 2019 the upgrade of the furnace in the Lubricant Extraction Unit was completed, with thermal efficiency now reaching 90% (~ 7% benefit), while giving a boost to supply.

In 2019, the installation of the Advanced Process Control (APC) system for the lubricant vacuum distillation unit (U-200) was completed and will ensure optimal control and ongoing automated regulation of its operation. The design of the new Diesel Optimizer program for existing APCs (fractional distillation and hydro-desulphurisation) also began, aimed at the optimal management of diesel currents and minimization of downgrades to critical product features. There are multiple benefits from the operation of the new system, in terms of process safety and environmental protection, due to the significant savings of energy and the consequent reduction of the carbon footprint in the production process.

In the past, APC systems had been installed in almost all production units, and this year marks the twelfth since natural gas was introduced. As part of optimising operations, in 2019 extensive revamping took place at the Fluid Catalytic Cracking (FCC) unit, and the catalyst of the gasoil desulphurisation unit's reactor was replaced. An extensive turnaround of gasoline production units was also completed.

Energy consumption and the overall performance of the facilities is systematically monitored with the application of an integrated Energy Management System. It is noted that energy consumption for 2019 in absolute numbers showed an increase from 2018, due to extensive maintenance work. Nevertheless, per-unit energy consumption showed an increase and amounted to 2.18 TJ, up 2.3% from 2018. This increase is due to the fact that, as a result of extensive maintenance work, the refinery could not operate at optimal energy efficiency. Our long-standing commitment to continue to reduce energy consumption is depicted in the diagram below.



## Use of Natural Gas

Introducing the use of natural gas to the refinery in 2008 was an important step towards reducing its energy footprint, while also improving financial and environmental results, given that the use of natural gas usually reduces CO<sub>2</sub> emissions and is for the most part the economically most efficient way of generating electricity and producing hydrogen.

Natural gas is used:

- As an alternative raw material for the hydrogen production unit (instead of naphtha or LPG), which allows the quantities of carbon dioxide emitted to be reduced by approximately 8% and 19%, respectively.
- As an alternative fuel for the Power Cogeneration Plant gas turbines, instead of either fuel gas or propane, achieving a reduction of carbon dioxide emissions by as much as 16%.
- As an alternative or supplementary fuel for the refinery's pre-heat furnaces and steam boilers, thus both increasing energy efficiency and significantly reducing emissions of air pollutants.

## Power and Steam Cogeneration Plant

The Cogeneration Plant now includes five gas turbines, with a total active power of 85MW, and three boilers recovering heat from the exhaust fumes generated. These boilers generate about 140 tons of high and low pressure steam per hour, making the refinery self-sufficient in electricity – as it eliminates the need to draw power from the Public Power Corporation grid – and meeting most of its need for steam.

The operation of the plant also contributes to the reduction of greenhouse gas emissions on a national level by drastically reducing electricity consumption from the national grid, the production of which would require a different fuel mix. Moreover, heat recovery and steam generation at the refinery reduce the use of boilers. The resulting benefit for the environment - in terms of lower CO<sub>2</sub> emissions due to own generation of electricity - is indicated in the following table.

In addition, the Power Management System (Best Available Technique), which was upgraded in 2011, protects the refinery from partial or complete shutdown owing to a failure of the internal or external power network, significantly increasing the level of safety and reliability and thereby improving environmental efficiency.

### Avoiding CO<sub>2</sub>(tn) by cogeneration of electricity and steam

2018	2019
385,448	370,513

## Upgrading of Preheating Furnaces and Boilers

The upgrading of the furnaces is intended to ensure more effective use of the heat from the exhaust fumes, thereby reducing consumption of fuel, CO<sub>2</sub> emissions and emissions of other atmospheric pollutants. A rolling programme is underway to upgrade the refinery furnaces, introducing forced draft technology – which increases the efficiency of a furnace by more than 6% – and replacing the existing boilers with new, more energy-efficient boilers emitting fewer NO<sub>x</sub>. With the completion of the upgrade of the visbreaker unit, a new improved-efficiency pre-heating furnace was installed, allowing a savings of up to 30% in fuel use compared with previous years. Furthermore, the project to upgrade the furnaces at the vacuum distillation unit began and in 2019 the upgrade of the furnace in the Lubricant Extraction Unit was completed. A study is underway on the further upgrade of the furnace of one of the two crude distillation units and the reconfiguration of its preheating exchangers, which, together with new equipment, will help achieve even greater energy savings.

## Recovery of Gases and Condensates

The recovery of condensates, which are then used in the steam boilers to produce steam, was maintained at high levels. Using the energy content of the condensates means reducing the gas and liquid fuel required to generate steam in the steam boilers. Continual care is also taken to maximise recovery of gases, so that they can be used as fuel and their combustion in the flare minimised.

## Desalination

Desalination of seawater using reverse osmosis technology is the most energy-efficient method. This technique is being widely used and a project is underway for the upgrade of an array of units providing a total capacity of 500 m<sup>3</sup>/h, with a view to making the use of thermal desalination units completely unnecessary.

## Monitoring and Daily Practice

The energy performance of production units is constantly monitored, to correct any malfunctions that come to light. The Advanced Process Control system, through continuous monitoring, achieves the optimisation of energy use in the units where it has been installed. The APC system is fully operational for the crude distillation units, the Vacuum Distillation units, the Hydrocracker and Hydrogen Production units and the Diesel Hydrodesulphurisation and Lubricant Vacuum Distillation units, making a significant contribution to optimising operations and providing direct control of their most important operational parameters. Automated sulphur and distillation analysers have also been installed and are used by the APC to adjust the processes and minimise energy consumption accurately.

With the same aim, the refinery's preventive maintenance programme provides for:

- The systematic re-tubing, repair and cleaning of heat exchangers and air coolers in order to maximise heat recovery and reduce consumption.
- Replacing, through annual programmes, of pipeline and equipment insulation, thus minimizing losses to the environment.
- The maintenance and/or replacement of rotating equipment, whose energy performance has fallen below specified levels, as a result of length of use.
- Repairing and/or replacing of the refractory material, burners and tubes of pre-heat furnaces.

## Our commercial companies

Energy consumption and related emissions by the subsidiaries are not considered substantial for us, since the most significant environmental impact derives from the operation of the refinery. That is where we focus the majority of actions as part of our strategy. Nevertheless, we commenced documenting our performance to meet the requirements to publish environmental data of Law 4403/2016, which was adopted to incorporate European Directive 2014/95/EU into national legislation.

### Energy consumption for buildings and facilities of our commercial companies

Company	Type of energy	2018		2019	
		MWh	TJ	MWh	TJ
CORAL GAS	Electrical power (Aspropyrgos, Kalohori, Marousi, Perissos))	1,347	4.85	1,458	5.25
	LPG (Kalohori)	153	0.55	135	0.49
	Natural Gas (Perissos)	-	-	39	0.14
CORAL	Electrical power (Perama, Ikonio, Hania, Kalohori, Kavala, Alexandroupoli Marousi, Perissos)	3,762	13.54	3,793	13.65
	Heating oil (Perama, Kavala, Alexandroupoli)	4,974	17.91	48	0.17
	Natural Gas (Perissos)	-	-	94	0.34
AVIN OIL	Electrical power (Agioi Theodoroi, Kavala)	1,738	6.26	1,575	5.67
	Heating oil (Kavala)	17	0.06	0	0
	Natural Gas (Perissos)	-	-	45	0.16
LPC	Electrical power	6,142	22.11	6,302	22.69
	Natural gas	56,825	204.57	64,369	231.73
	Fuel for own use	8,324	29.97	0	0
OFC	Electrical power	571	2.05	644	2.32
	Heating oil	94	0.34	86	0.31
	Automotive diesel	76	0.27	69	0.25
NRG	Electrical Power	-	-	397	1.43

### Energy consumption by privately owned fleet of our commercial companies

Company	Type of energy	2018				2019			
		Lt	MWh/lit	MWh	TJ	Lt	MWh/lit	MWh	TJ
CORAL GAS	Automotive diesel	108,804	0.0119	1,295	4.66	111,927	0.0119	1,332	4.79
	LPG (Autogas)	832	0.0071	6	0.02	1,494	0.0071	10,578	0.04
CORAL	Automotive diesel	407,169	0.0119	4,845	17.44	339,344	0.0119	4,038	14.54
AVIN OIL	Automotive diesel	404,000	0.0119	4,808	17.31	356,896	0.0119	4,247	15.29
LPC	Automotive diesel	134,490	0.0119	1,600	5.76	133,177	0.0119	1,585	5.71
OFC	Automotive diesel	5,260	0.0119	63	0.23	4,952	0.0119	59	0.21
	Petrol	1,398	0.0097	14	0.05	1,896	0.0097	18	0.07



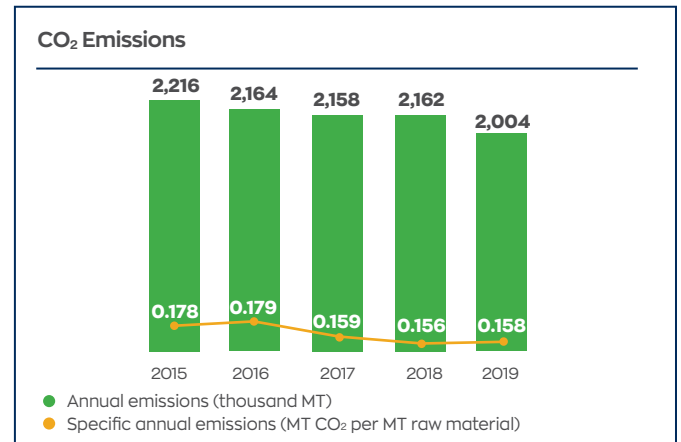
## 4.2. CO<sub>2</sub> Emissions

The year 2019 was the seventh year of implementing the new system to monitor greenhouse gas emissions for the period 2013-2020. Apart from the need to reduce CO<sub>2</sub> emissions, this phase of application will also be subject to rigorous specifications relating to accuracy of measurements and assessment of their relative uncertainty.

In order to comply with these requirements, MOTOR OIL:

- Uses the appropriate methodology to monitor CO<sub>2</sub> emissions from its facilities, the methodology resting on methods of calculation based on flow analysis measurements and analyses of fuel quality.
- Calculates at the refinery chemistry laboratory – certified to EN 17025:2005 standards – the quantity of carbon contained in the refinery gas fuel using the gas chromatography method.
- Submits to the competent ministry annual reports on CO<sub>2</sub> emissions, which are verified as to their reliability and validity by a certified external agency.

Total CO<sub>2</sub> emissions for the refinery in 2019 were at 2,004 thousand tons. There was a drop in overall emissions in 2019 over 2018, due to reduced production as a result of maintenance works. The specific value remained at the same level as in 2018.



### Emissions of CO<sub>2</sub> in MT from energy consumption for buidlngs and facilities of our commercial companies

Company	Type of energy	2018	2019
		tn CO <sub>2</sub> eq	tn CO <sub>2</sub> eq
CORAL GAS	Electrical power (Aspropyrgos, Kalohori)	850	930
	LPG (Kalohori)	35	31
	Natural Gas (Perissos)	-	8
CORAL	Electrical power (Perama, Ikonio, Hania, Kalohori, Kavala, Alexandroupoli)	2,373	2,420
	Heating oil (Perama, Kavala, Alexandroupoli)	1,321	13
	Natural Gas (Perissos)	-	20
AVIN OIL	Electrical power (Agioi Theodoroi, Kavala)	1,097	1,005
	Heating oil (Kavala)	4	0
	Natural Gas (Perissos)	-	10
LPC	Electrical power	3,875	4,021
	Natural gas	12,223	13,846
	Fuel for own use	2,349	0
OFC	Electrical power	348	411
	Heating oil	25	21
	Automotive diesel	19	18
NRG	Electrical Power	-	253

### Emissions of CO<sub>2</sub> in MT from energy consumption by privately owned fleet of our commercial companies

Company	Type of energy	2018			2019		
		Lt	tn CO <sub>2</sub> eq/1.000 lt	tn CO <sub>2</sub> eq	Lt	tn CO <sub>2</sub> eq/1.000 lt	tn CO <sub>2</sub> eq
CORAL GAS	Automotive diesel	108,804	2.639	287	111,927	2.639	295
	LPG (Autogas)	832	1.519	1.26	1,494	1.519	2.27
CORAL	Automotive diesel	407,169	2.639	1,075	339,344	2.639	896
AVIN OIL	Automotive diesel	404,000	2.639	1,066	356,896	2.639	942
LPC	Automotive diesel	134,490	2.639	350	133,177	2.639	351
OFC	Automotive diesel	5,260	2.639	14	4,952	2.639	13
	Petrol	1,398	2.270	3.17	1,896	2.270	4.16

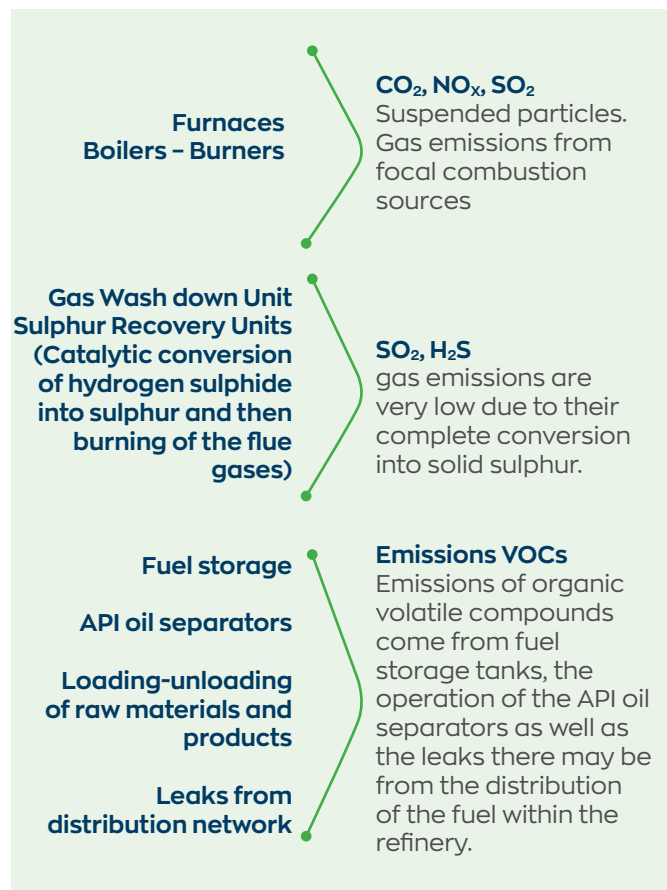
Emission factors of electrical energy and fuels were taken from the National Inventory Report (NIR 2018 and NIR 2019).



## 5. Air Quality Management

Ensuring air quality for the purpose of protecting the environment of the wider area around the facility is a key pillar of our environmental policy. The achievement of ongoing improvement in this area is not just a response to legal requirements; it is also due to our commitment to the principles of Corporate Responsibility, according to which we regard air quality as a material issue.

The facility's emissions are summarized in the figure below:



### Emissions Monitoring

The assessment of air quality, for the purpose of protecting and improving the quality of the atmosphere, is based on a measurement program that covers the facility's emissions (point source and diffuse), as well as the air quality around the refinery and at the nearest populated area. All measurements are performed using state of the art equipment and are based on international standards.

#### A) Air quality monitoring

In the **peripheral zone of the refinery** air quality is monitored at four stations which are equipped with contemporary, automated tools with multiple measuring and monitoring abilities:

- Three fixed monitoring stations are capable of continuously measuring the concentration of hydrogen sulphide ( $\text{H}_2\text{S}$ ) and sulphur dioxide ( $\text{SO}_2$ ).
- A mobile station which can perform continuous measurement of meteorological parameters (wind speed and direction, air temperature and relative humidity), and concentrations of nitrogen oxides ( $\text{NO}$ ,  $\text{NO}_2$  and  $\text{NO}_x$ ), sulphur dioxide ( $\text{SO}_2$ ), hydrogen sulphide ( $\text{H}_2\text{S}$ ), carbon monoxide ( $\text{CO}$ ), methane, hydrocarbons excluding methane, and total hydrocarbons ( $\text{CH}_4$ , NMHC, THC), benzene and particulate matter  $\text{PM}_{10}$  and  $\text{PM}_{2.5}$  (particulates with an aerodynamic diameter of  $<10\ \mu\text{m}$  and  $<2.5\ \mu\text{m}$  respectively), as well as meteorological parameters (wind speed and direction, air temperature and relative humidity).

#### B) Monitoring of point source emissions

Gaseous emissions from the stacks of the main combustion plants of the Combustion, Lubricant, and Hydrocracking and complexes and the electricity generation units are continuously monitored by online analysers, which are controlled and calibrated to the EN14181 standard. In addition to pollutant concentrations, the oxygen concentration and temperature, flow, humidity, and pressure of flue gases are also monitored. The gaseous emissions of the Fluid Catalytic Cracking unit are also monitored on a continuous basis. Emissions from the refinery's other stacks are monitored every three months by a suitably accredited external organisation.

Moreover, in conformance with the refinery's environmental terms, the supply of gases to the flares in the Combustion, Lubricant and Hydrocracking units is also constantly monitored.

It should be noted that all analysers are connected to the refinery's Distributed Control System (DCS), a configuration that allows for complete control.



An automated performance control system operates at the **Sulphur Recovery units**, which continuously monitors and records H<sub>2</sub>S concentrations at the entry points, and H<sub>2</sub>S and SO<sub>2</sub> concentrations at the exit points of these units. The H<sub>2</sub>S/SO<sub>2</sub> ratio is also continuously measured, recorded and adjusted to ensure maximised recovery performance (which is >99.5% in the case of the new SCOT-type units). The smooth operation of the afterburners (incinerators) associated with these units is achieved through continuous monitoring of SO<sub>2</sub> and O<sub>2</sub> at the exit points, and of the temperature at the radiant section of the furnaces. Operation of both the Sulphur Recovery units, and the afterburners, is automatically controlled via the refinery's Distributed Control System (DCS).

## Clean Fuels

### Integrated Sulphur Management System

Refineries face the following challenge: the amount of sulphur in the available crude oil types is increasing over time, while the specifications for allowable sulphur content in the fuels produced have reached extremely low levels (e.g. for petrol and automotive diesel, the 2009 specification for sulphur content is a maximum of 10 ppm or the equivalent of 0.001%). Moreover, the maximum acceptable level of sulphur emissions is also low (<660kg/h), and the concentration of sulphur dioxide in the atmosphere around a refinery, on an hourly basis, should not exceed 350 µg/m<sup>3</sup>. In this context, the removal of sulphur coming into the refinery with crude oil - at a concentration which in 2019 ranged between 0.14% and 4.2% - is a significant challenge.

MOTOR OIL, as a responsible corporate citizen with respect for the environment, has in place a particularly effective system which incorporates Best Available Techniques, in order to achieve the best results, both in terms of maximising the degree of sulphur removal and minimizing the amount of energy consumed.

In this way, and through the Hydrocracker Complex, MOTOR OIL produces and markets petrol and automotive diesel with a sulphur content below 10 ppm. Furthermore, Sulphur emissions from the refinery are minimized if the overall rate of hydrogen sulphide conversion into elemental sulphur in the new SCOT-type Sulphur Recovery units is in the order of 99.95%.

Elemental sulphur is initially produced in liquid form, which by cooling and appropriate processing, is converted to a solid granular form, stored in silos for sale as a raw material for the production of sulphuric acid and fertilisers. The whole process is carried out in a completely closed circuit, thus avoiding the dispersing of sulphur particles in the air.

## Minimizing Emissions

Apart from the measures to control concentrations of airborne pollutants, a range of measures has been taken within the refinery to limit atmospheric pollution, such as:

- Operation of an electrostatic filter on the outlet of the Catalytic Pyrolysis unit, intended to reduce emissions of suspended particles from the catalyst.
- Desulphurisation of gases used as fuel in the refinery before they enter the gas fuel system, reducing emissions of sulphur dioxide.
- Installation of burners with low NO<sub>x</sub> emissions, both in the design of new furnaces and in the upgrading of old ones, in order to reduce their emissions.
- Furnace cleaning while in operation, aiming at increasing heat induction, saving fuel and decreasing flue gas temperature.
- Installation of closed circuits in the gas processes, relieving pressure of gases by safety valves to the flares, placing of second-tier seals on floating-roof tanks, placing of floating tops on the oil separators and operation of a steam recovery system at the Tanker Loading Terminal, as well as measures to reduce emissions of hydrocarbon gases, in tandem with the implementation of the system of bottom-loading tankers.
- Operation of steam recovery units for loading of petrol at all AVIN OIL and Coral facilities, as provided for in legislation, and at all service stations for use in unloading of petrol from tankers to tanks (in accordance with the provisions of Directive 94/63 [Stage I]).



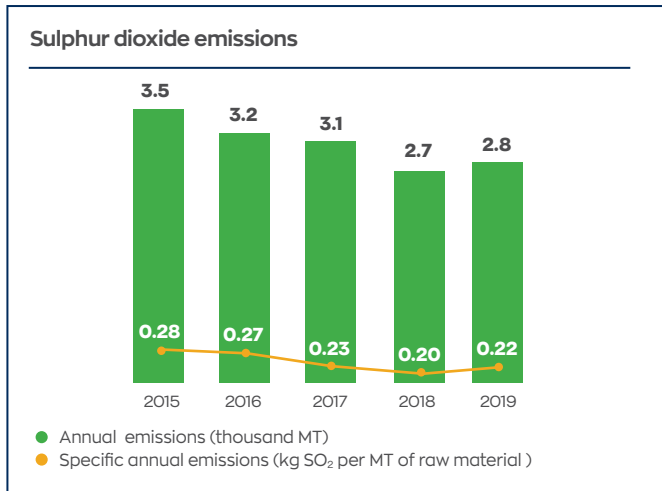
### Leak Detection and Repair (LDAR)

At modern refinery which comprises many different types of installed equipment, through which large quantities of raw materials circulate, as well as intermediates and final products, it is to be expected that there will be particular points with a higher risk of hydrocarbons being accidentally released into the atmosphere. In order to check and limit fugitive emissions from the equipment, a programme has been implemented featuring regular controls at selected points (better known as LDAR - Leak Detection and Repair) in order to identify and repair possible leaks.

There are 6,171 inspection points, covering all production units, the truck loading terminal, port facilities and storage tanks. Checks are carried out by refinery staff at least once a year, using portable equipment to measure volatile carbon concentration. In the event that concentrations are found to exceed 5,000 ppm, a repair request for the equipment checked is issued. In 2019, there were 17,776 checks.

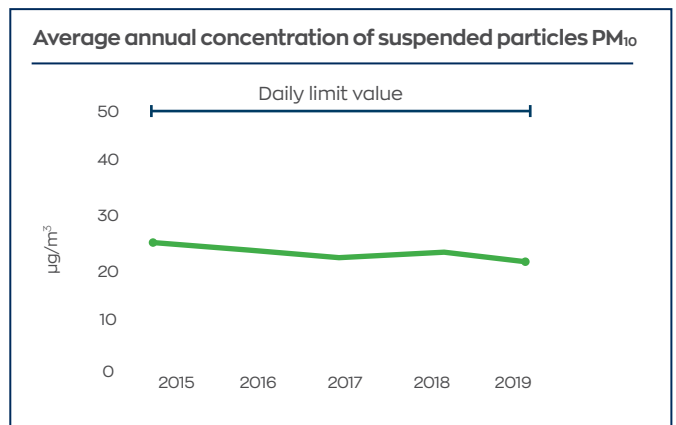
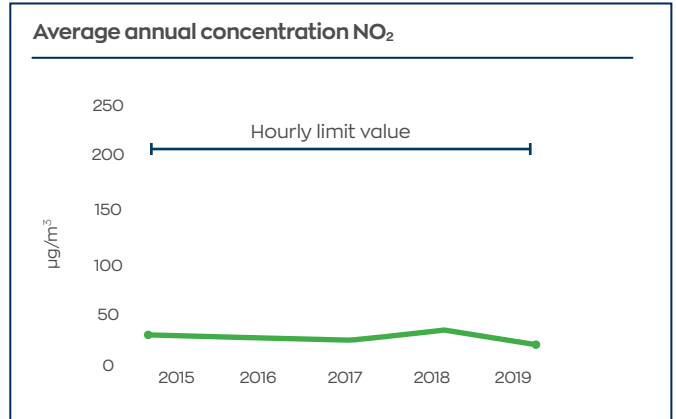
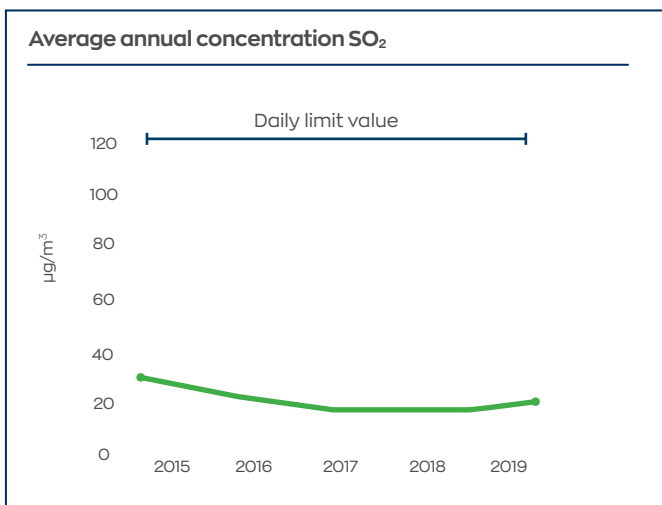
## In Numbers

The diagram below shows total annual emissions of sulphur dioxide, as well as emissions per ton of raw material. In 2019, there was a slight increase both in the total emissions and emissions per ton of raw material (by 9%) compared to 2018 due to a slight increase in the use of fuel oil in production.



As far as air quality during 2019 is concerned, the processing of the recordings at the four air quality monitoring stations, in the context of the emissions monitoring programme, has shown, as in previous years, that air quality in the vicinity of the refinery remains highly satisfactory. Detailed figures for the last five years show that there has been no exceeding of the hourly limit values and daily levels permitted by legislation, and the recorded values are much lower than the limit values allowed.

The following diagrams show the average annual values of the last five years for SO<sub>2</sub>, NO<sub>2</sub> and suspended PM<sub>10</sub> particles. In 2019, no limits were exceeded.



Further information on MOTOR OIL results for 2019 is available in the Environmental Statement 2019, which presents diagrams relating to all air pollutants.

See the following link: [www.moh.gr/Default.aspx?a\\_id=10492](http://www.moh.gr/Default.aspx?a_id=10492)

Similarly, more information about LPC is available at the following link: <http://lpc.gr/perivallongr/perivallontikes-diloseis/>

## 6. Liquid Waste Management

Liquid waste produced by the refinery's various processes fall into two categories: industrial waste and urban waste. The management and processing of liquid waste is a material issue for the company, which incorporates Best Available Techniques, while due to their different pollutant load, the industrial and urban waste streams undergo different types of processing prior to their final disposal. Industrial liquid waste is pre-processed and then taken to the Liquid Industrial Waste Treatment Plant, while urban waste is removed to the Urban Waste Treatment Plant.

The effective operation of the Industrial Waste Water Treatment Plant is evidenced by the fact that concentrations of various pollutant substances at the plant outlet are clearly below relevant limit values.

In the case of some substances (including benzene, toluene, ethyl benzene, xylene and a number of heavy metals), their concentrations are very much below corresponding limit values, approaching the limit of detection in some cases.

**Supply and Concentrations of Pollutant Parameters at Outlet of Liquid Industrial Waste Treatment Plant**  
(average annual values)

Parameter	Average Value					Limit value
	2015	2016	2017	2018	2019	
Supply (m <sup>3</sup> /day)	10,070	9,592	8,323	9,133	9,479	
pH	7.6	7.1	7.4	7.3	7.3	6-9
Temperature (°C)	27.5	30.2	29.8	29.0	30.2	35
Hydrocarbons (mg/l)	2.1	1.6	1.4	1.4	1.6	10
BOD <sub>5</sub> (mg/l)	23.8	24.6	24.4	24.5	25.0	40
COD (mg/l)	105.3	106.0	106.3	106.1	115.6	150
NH <sub>3</sub> (mg/l)	13.4	13.5	13.5	13.5	13.5	15
Phenols (mg/l)	0.2	0.3	0.3	0.3	0.3	0.5
Sulphurs (mg/l)	1.1	1.1	1.1	1.1	1.3	2
Suspended solids (mg/l)	19.0	19.6	20.1	21.1	22.0	40

- Monitoring and control of subsoil and aquifer quality, based on hydro-geological studies submitted to the Ministry of Environment and Energy, takes place at ten boreholes. According to the approved environmental terms, during 2018, two sets of samples were taken at these boreholes – one every six months- in order to determine the value of a number of parameters, such as concentrations of heavy metals and hydrocarbons, the results of which were found to meet legislative requirements.

- Sampling and measurements continued in 2019, to check and monitor the quality of the seawater and to determine the conditions prevailing in the coastal zone near the refinery port facilities. The study was conducted by the Geochemistry section of the Faculty of Geology and Geoenvironment at the University of Athens.

## 7. Solid Waste Management - Recycling

Solid waste management is a material issue for the company. Waste management is based on an integrated process covering all stages in the life cycle of the waste and includes the following methods: processing and reuse, recycling, recovery and final disposal. The main aims of the solid waste management programme are:

- Reduction of quantities produced, at source,
- Separation into hazardous and non-hazardous waste at source,
- Maximum exploitation prior to final disposal, through recycling or re-use or recovery of useful components or regeneration, and finally,
- Safe transportation and final disposal without putting at risk human health or the environment.

Solid waste management is handled by appropriately licensed, specialised companies. Spent catalysts, which, depending on the particular case may be classified as hazardous solid waste, are disposed of in a number of ways (either exported, or regenerated for re-use by specialized firms abroad, or used in cement manufacture). Empty hazardous substance containers are also disposed of by licensed companies.

Specifically, as part of the integrated solid waste management programme, the MOTOR OIL refinery has already implemented bio piling technology for processing contaminated soil and installed a bioremediation facility. The company electronically submits an annual report to the competent departments of the Ministry of Environment and Energy which lists all types of solid waste generated by its operations and outlines how solid waste is handled and who the recipients are.

As far as used lubricants and their packaging is concerned, contracts are in place with a firm specialised in used mineral oil recycling and with a firm specialised in handling packaging materials. These two contracts provide for recycling of used lubricants and their packaging, thus contributing to the protection of the environment and the rational use of raw materials. We also collaborate with accredited firms for recycling other categories of solid waste.



### Recycling - Solid waste disposal (MT/year)

	2015	2016	2017	2018	2019
Batteries	1.04	5.32	9.12	1.3	20.78
Tyres	0.7	5.0	9.0	5.4	10.0
Lubricants	1.4	82.8	201.0	122.6	73.8
Wooden packaging	115.7	130.1	107.3	249.3	261.5
Paper and paper packaging <sup>1</sup>	203.0	167.2	88.6	103.6	104.5
Plastic and plastic packaging	214.8	215.7	41.6	35.2	35.8
Metal (scrap)	2,198	2,205	2,352	2,120	1,932
Electrical/electronic equipment	1.9	1.2	10.2	13.9	4.5
Remediated soil	403.4	567.0	446.0	545.8	423.3
Contaminated packaging	8.7	16.8	27.0	6.9	11.4
Asbestos-containing materials	12.7	17.8	0	0	8.0
Printer cartridge packaging (units)	712	494	472	1,333	541
Spent catalysts for recycling	2,747	2,129	2,767	2,363	3,089
Mixed packaging	393	220	919.5	824.3	1,074

<sup>1</sup> In all the companies of the Group, recycled and non-chemically bleached paper is used.

### Recovery and reprocessing of raw materials

The main product traded by Group companies is fuel burned in various types of combustion engines in industry or by our final customers/consumers. Nevertheless, in view of our acute environmental conscientiousness, we endeavour to recover whatever is feasible at the various stages of our activity.

At the refinery, the stages of refining create by-products with specifications that deviate significantly from the desirable ones, making reprocessing necessary. The effort made is towards the direction of utilising them, as much as possible in later stages of refining, in order to minimise the consumption of energy and the capacity that is committed for reprocessing. The goal is to restrict the overall reprocessing to the crude oil units. The quantities that were reprocessed are presented below and were increased in 2019 as a result of extensive suspensions of operation for maintenance works.

### Recovery of raw materials (MT)

2018	2019
77,790	92,933

Our commercial companies work with the Alternative Management of Waste Lubricating Oil company (ENDIALE S.A.) to collect used internal combustion engine lubricants. Waste lubricating oils are a particularly hazardous type of waste because they contain heavy metals, chlorinated compounds and sulphur and must not escape into the air or into aquifers. In 2019, through this management programme, 89,542 litres were collected from Coral service stations and 14,589 litres from Avin's. Coral Gas participated in a programme to recover and recycle gas cartridges.

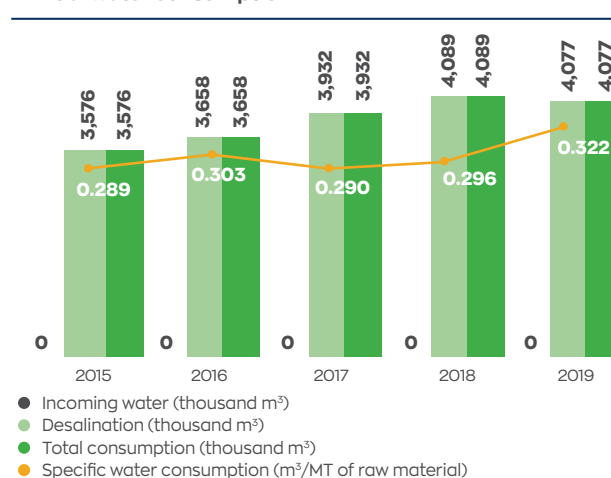
## 8. Water Management

MOTOR OIL views water resource management as a material issue and has consistently implemented measures to reduce and rationally manage water consumption at its refinery. The water used in the various parts of the refinery originates 100% from sea water processed at desalination units.

As part of decreasing our energy footprint, an upgrade of the seawater desalination units was completed, which involved the addition of a new reverse osmosis unit. The new unit, which is the preferred method from an environmental and economic perspective, replaced the desalinated water production system which used multi-stage flash technology. The older system is now used only as a back-up when the osmosis units are undergoing maintenance.

The new, state-of-the-art osmosis unit will achieve a reduction in energy consumption for water production, rendering its operation more environmentally friendly. Meanwhile, the replacement of the older unit improved the reliability of existing desalination units and contributed to the refinery's smooth operation, while the use of seawater with the capacity for incorporating the cooling water recycling system to meet the unit's needs is the best solution in terms of energy efficiency.

### Annual water consumption





In 2019, total consumption decreased slightly due to the extensive maintenance work at the units. On the other hand, there was an increase in the quantity of water consumed per ton of raw material, which at the end of 2019 was 0.322 m<sup>3</sup>. This was higher (by 8%) than in 2018 (0.296) and is due to the maintenance of units requiring water without contributing to production. The effort to reduce the quantity of water used per ton of raw material is part of our primary goals and a number of actions and investments have been made in this regard with projects to improve energy efficiency at the refinery (reduced steam consumption, operational improvements, etc.).

## Re-use and Recycling of Water

One of the important processes at the refinery is the processing of the acid water flows generated in different phases of the production process. About 46% of this water flow is recycled to feed the crude oil desalinators, while the rest is channelled to the Industrial Wastewater Treatment Plant, allowing a proportional reduction in consumption of fresh water and in the volume of wastes needing treatment.

## 9. Noise Management

Every feasible effort is made at both the refinery and all Group facilities to minimize environmental noise levels. In order to mitigate any potential nuisance, regular measurements are made at set points on the refinery's perimeter and additional measures are taken, such as the use of noise barriers or closed sound insulation systems and other technical means, where required. Results of measurements for 2019 as set out in the following table show that noise levels are lower than the legal limits laid down in the environmental operating conditions of the refinery.

Noise levels are also measured in the work areas (platform, loading stations, etc.) at our commercial companies' facilities and noise emissions are found to be low.

Particular care is taken when upgrading equipment or building new units by applying evaluation criteria and criteria for the use of equipment with low noise emissions, while during the maintenance period the duration and intensity of exposure is limited through proper planning, design and organization of the works, so that the least possible disturbance can be ensured.

### Average measurement (DBA)

	Jan. 2018	Jan. 2019	Jul. 2018	Jun. 2019	Oct. 2018	Oct. 2019	Legal Limits (DBA)
Perimeter of refinery facility	54.8	55.5	54.8	55.5	55.2	55.1	65.0
Southern Refinery Perimeter	52.3	52.4	52.1	52.4	52.7	52.4	55.0

## 10. Protection of the Marine Environment

The operation of MOTOR OIL's refinery and several of the facilities of our commercial companies are fully integrated with the marine environment. Owing to the impacts of a potential pollution incident, extensive prior planning and preparation is imperative, particularly to prevent but also to effectively respond to such events. It should be noted that no parts of the refinery or of our other facilities abut on natural habitats or protected areas which might be affected by their operation.

In this area, MOTOR OIL and our commercial companies:

- Implement all necessary active and passive protection measures to minimise the risk of oil spills within the boundaries of the refinery. In 2019, not a single leak was reported.
- Implement all necessary measures and provide all equipment for the safe sail in and sail out of tankers at their port facilities, as well as for their safe loading/unloading.
- Keep on hand all necessary equipment for response to a small or medium-scale local contamination incident (Tier-1/2). They also keep on hand a stock of oil slick dispersant, which can be used only with the consent of the Port Authorities.
- Check the readiness for implementing the existing anti-contamination plans and maintain a high degree of readiness among staff in the use of necessary equipment, in cooperation with internationally recognised companies such as Oil Spill Response Limited (OSRL), with an annual programme of drills and training.
- Have in place a reception and handling plan for ship-generated waste and cargo residues.
- Are members of international and regional organisations whose aim is the prevention and timely response to oil spill incidents.



# SOCIAL RESPONSIBILITY

**We stand side by side with the community, offering consistent and long-lasting support.**

Our standing objective is to follow a course of constant growth and creation of value for all stakeholders, effectively playing our social role, and increasing our contribution to society. It is of vital importance to us that our activities should benefit the society in general, by way of direct and indirect job creation, fostering local entrepreneurial activity and purchasing goods and services from domestic and local suppliers.

Moreover, we wish to see all our business activities interact positively and productively with the social environment in which we operate. It is for these reasons that the Motor Oil Group implements a programme of donations and sponsorships, addressed mainly to local communities and designed to help improve the quality of life, protect the environment and foster a healthy social and cultural life.

In this context, in 2019 we spent 6.2 million euros on Social Solidarity projects and various sponsorships. It is one of the Group's strategic objectives to bring prosperity to the communities around or in the general area of its refinery and the facilities of its commercial companies through job creation, support for the local market, and general social care.

Finally, according to the supplementary indices of the Oil & Gas Sector, our Group does not operate in areas where there are native populations, or where such populations might be affected by our activities, nor were there any significant disputes, involuntary movements of personnel or other impacts on local communities or native populations in 2019.







**689**

**million euros the social  
product in 2019**

**36.5**

**million euros Social  
solidarity projects and  
sponsorships in  
the past 10 years**

**6.2**

**million euros in 2019**



## 1. Economic Benefits to Society - Social Product

The scale of the Group's operations, combined with its consistent focus on steady growth, resulting in a very significant contribution to the country's economic development. This contribution, based on our successful activities, is made through the generation of value for our shareholders and other stakeholders, the creation of jobs and our contribution to the broader social progress.

Moreover, our interaction with stakeholders creates primary value for their benefit and secondary value too, in that it contributes to the value they in turn generate for the economy and the society as a whole.

In 2019, the Group's total revenues from economic activities amounted to 9,467.9 million euros. Out of these, 7,747.5 million euros were used to purchase crude oil and other raw materials. This represents 82% of revenues, a justifiable amount given the nature of Group activities.

# 689

million euros the social product in 2019

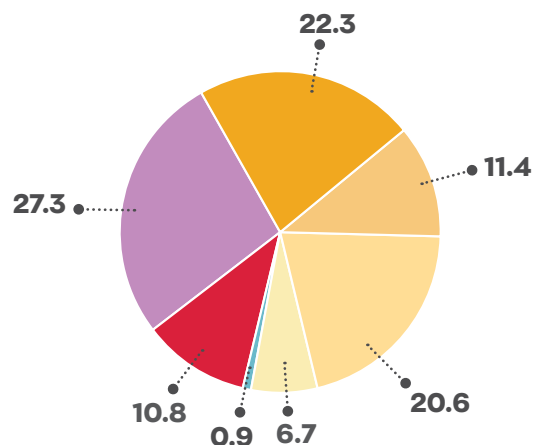
The Social Product is that part of our income allocated to selected stakeholders, which include: the workforce, the state, shareholders, banks, suppliers (not including suppliers of crude oil, other raw materials and finished products), as well as society at large (donations and sponsorships).

It also encompasses the cost of securing operations, including expenditure for Health, Safety and the Environment, insurance of facilities, repairs and preventive maintenance.

Based on the above, the Social Product returned to stakeholders in 2019 amounts to 689 million euros, compared to 757 million euros in 2018.

Allocation of social product 2019 (%)

Total: 689 million euros



- Staff: Gross remuneration, other fees, insurance contributions (own and employer's)
- Public Sector
- Shareholders
- Banks
- Sponsorships/Donations
- Assurance costs (Health & Safety, Environment, Maintenance, Premiums)
- Other purchases

### Social Product 2019 (million euros)

Revenues from customers and other sources

**9,467.9**

Stakeholders

**8,436.6**

Balance

**1,031.3**

Suppliers - Raw Materials

**7,747.5**

Staff: Gross remuneration, other fees, insurance contributions (own and employer's)	153.6
Society: Donations - Sponsorships	6.2
Public Sector: Taxes and Duties	78.5
Shareholders: Dividends	141.8
Other Purchases	189.1
Banks: Interest	45.9
Assurance: Health & Safety, Environment, Maintenance, Premiums	74.1

Investments for Development, Health, Safety and Environment

**269.3**

Payments of Obligations

**64.7**

Cash

**697.3**



## Support of Local Entrepreneurship

As the largest enterprise and employer in the Prefecture of Corinth, MOTOR OIL makes a direct or indirect financial contribution to a large number of businesses and families in the region (approximately 600 refinery employees live in neighbouring municipalities). Moreover, the company supports local initiatives to encourage entrepreneurship.

We have a policy of preferring local businesses when it comes to supplying the refinery with services, consumables, food, etc. - even when there are financially more advantageous offers from outside the area. In 2019, we spent 26 million euros, thereby providing further support to the economy of Corinth and the surrounding region. We further paid roughly 1.2 million euros in municipal and property taxes.

## 2. Customer Service and Respect

All the Motor Oil Group companies operate having customer service as a top priority. The Group's long experience in combination with a high level of expertise, and its rigorous insistence on quality, guarantee comprehensive, integrated service and ongoing development of relations of trust with customers and associates.

### The Refinery

MOTOR OIL conducts quantitative and qualitative customer satisfaction surveys covering the full spectrum of its clientèle. Survey data are evaluated, with a view to building on the company's strengths and to detecting in particular the company's weaknesses and taking appropriate corrective action. Over time this process has led to a reduction in the number of complaints about the refinery; in 2019, there were no complaints, while in 2018 there were just 2 complaints about delayed deliveries which were successfully resolved.

### Our Commercial Companies

The Group's commercial companies have integrated systems for serving the thousands of customers who place their trust in them every day.

More specifically, a number of market surveys are carried out to collect and evaluate data on levels of service, fuel quality, customer selection criteria, etc.

A market survey is conducted each year through a worldwide programme aimed at systematically monitoring customer perceptions of Shell service stations. Our service stations are also subject to inspection by unannounced visitors in the Mystery Motorist programme.

The scheme evaluates the level of service and customer satisfaction using a questionnaire covering such areas as efficiency, service, cleanliness and speed of transactions. In 2019, about 2,860 secret visits were carried out at Shell service stations and 1,150 visits at Avin service stations. The results were presented to the companies' Retail Sales divisions, which in turn discussed them with the retail station managers and to take corrective measures where necessary.

Shell retail station customers can now express their opinion through the Voice of Customer tool, an innovative online consumer survey application for PCs and mobile phones, through which customers can register their opinions after a visit to a retail station. This platform generated more than 173,000 completed questionnaires in 2019, giving us the opportunity to quickly analyse the results and resolve any problems our customers may encounter.

Finally, significant steps were taken in recent years in order to improve the level of service for our final consumers and corporate customers. As part of updating its systems and to improve its shipping customer service, Coral launched the Coral Marine Portal, which facilitates monitoring of fuel delivery (e-vessel) to ships, amongst other things.

Avin made use of the new state-of-the-art call centre, and established procedures and monitoring systems to automate and quickly respond to customer requests. It also joined the Hellenic Institute of Customer Service with the aim of optimising the quality of its customer service and provide ongoing training of employees working in the sector.

Lastly, the Coral NET, Avin Portal and Cyclon Portal online platforms are used by most of our corporate customers, providing faster and better service.



### AVIN launches pioneering "AVIN Win" loyalty program

Wishing to reward customers for their trust, AVIN launched the new "AVIN Win" loyalty programme in 2017.

Through this program, customers can collect points each time they purchase fuel, lubricants heating oil or Agora Shop products by using their "AVIN Win" card or app. Once they have 250 points, they automatically win a 3-euro coupon, which they can redeem the next time they buy something at the service station.

The programme was a great success in 2019, with more than 750,000 members and the issuance of over 1.4 million gift certificates.

### 3. Social Solidarity and Sponsorships

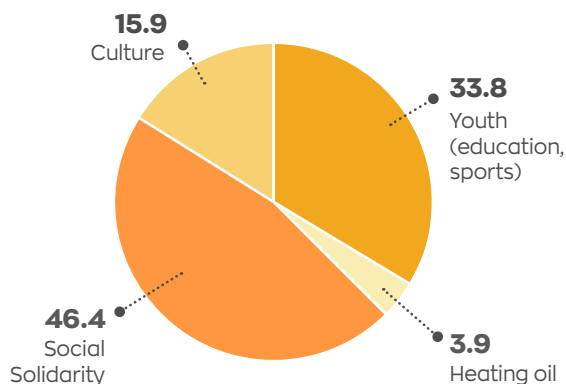
Through our social responsibility projects, we endeavour to provide ongoing, consistent support for the community and particularly for those pillars that improve the community's quality of life: education, healthcare, culture, sports and entrepreneurship.

In 2019, as in previous years, our Group's social actions focused on the financing and promotion of social solidarity programmes across the country, though our primary focus was mainly on organisations and agencies based in municipalities in the vicinity of our facilities. Our key objective was to provide relief to the most vulnerable social groups and to meet their basic needs. To this end, we have promoted actions designed to assist our fellow citizens, while also supporting cultural agencies, educational institutions, organisations engaged in charitable and humanitarian work, as well as local government agencies.

The actions we supported are in line with the following key axes:

- Social solidarity
- Culture
- Youth – education

Allocation of social responsibility funds 2019 (%)



Allocation of social responsibility funds (thousand euros)

	2018	2019
Social solidarity	2,666	2,865
Culture	685	978
Youth (education, sports)	1,053	2,082
Heating oil	208	240
<b>Total</b>	<b>4,612</b>	<b>6,165</b>

#### 3.1 Social Solidarity

Our company's objective is to promote and support actions designed to relieve the needs of disadvantaged social groups. As we have been doing through the years, in 2019, we supported many community actions, provided food for the indigent through municipal and church organisations, supported the work of charitable organisations and foundations, supported actions for health and supplied large quantities of heating oil to the municipalities bordering on our refinery facilities and other selected areas across Greece.

##### Fighting Poverty

The economic crisis affecting Greece over the last decade has directly resulted in a dramatic increase in cases of poverty. In response to this need, our company has undertaken to support the most vulnerable social groups, both by supplying the neediest with staple goods and by offering financial assistance.

Actions have focused mainly on the Prefecture of Corinth, the final recipients included the Municipality of Loutraki-Agioi Theodoroi, the Municipality of Corinth and bordering communities, members of low-income families, associations, agencies providing support services, and so on.



##### The Food Bank

The MOTOR OIL Group has supported the food bank operating in the municipalities of Loutraki, Corinth, Perama and in the Municipal Ward of Agioi Theodoroi, playing an active part in meeting the basic needs of families in financial difficulty.

Among other things, our company has provided foodstuffs, helping to ensure the continued operation of an institution responding to the difficult social and economic challenges of the present day.

The donation by the MOTOR OIL Group has helped the endeavour, through which more than 1,200 indigent families have found relief.

Additionally, in an effort to help families facing financial difficulties in Corinth and the surrounding region during the Christmas and Easter holidays, MOTOR OIL distributed 1,240 food stamps to help them meet nutritional needs and put food on the holiday table. During the holiday period, the company financially supported, through donations, the Region of Peloponnese, the Municipality of Corinth, the Municipality of Loutraki, the Kivotos tou Paidiou children's charity, churches, etc. The company has also supplied foodstuffs to the food and clothing bank set up by the Metropolitan Church of Corinth and to the Church of the Annunciation of the Theotokos and helped provide meals to students in the Agioi Theodoroi area.



## Donation of Heating Oil and Lubricants

In 2019, the company provided around 228,000 litres of free heating oil, worth approximately 240,000 euros, through the free heating oil budget.

This programme is intended to help with the cost of heating orphanages, kindergartens, municipal childcare centres, secondary schools, elderly people's homes, churches and church foundations located in municipalities bordering on our facilities, as well as other recipients in other parts of Greece. Among the recipients were the "Smile of the Child" charity for the protection of minors, the "Amalieion" Girls Boarding Home, the "Strofi" Therapy Center for Dependent Individuals, the Student Dormitory of Rethymno, the Public Library of Rethymno, the Atalanti Healthcare Center, the Corinth Judicial Prison, the Corinth General Hospital, numerous monasteries and churches, such as the Monastery of Agia Eleni in Loutraki which houses a nursing home, the church of Panagia Giatrissa in Loutraki, and others. Other recipients included all schools in the municipalities of Corinth, Loutraki and Perama and the municipal communities of Agioi Theodoroi, Isthmia, Saronikos, Solygeia, and others. We also provided lubricants to a number of government services, such as the Attica Tollway Traffic Police, the Corinth Port Authority, the Regional Fire Administration of Peloponnese, and others.

## Supporting Charitable Organisations and Institutions

Our objective is to make a contribution to improving living conditions for people with problems, helping organisations and foundations which offer high-quality services to assist them in their rehabilitation and reintegration into the community.

Specifically:

- We have supported the activities of the Marianna V. Vardinoyannis Foundation. Set up by its president, UNESCO Goodwill Ambassador Marianna V. Vardinoyannis, the Foundation seeks to promote issues related to protection of children's rights while improving living conditions for children in all areas.
- We supported the non-profit organization "Desmos" in the important work it performs, by connecting the needs of charities and public organizations with the desire of individuals and companies to help.
- We have supported the humanitarian agency "Lifeline Hellas", helping with the organisation of an event, the revenues of which will be used to support neonatal units at state hospitals.
- We have provided financial support to associations and agencies involved in community work, such as the Women's Association of Agioi Theodoroi, the "Child's Heart" Panhellenic Association for the Protection & Help of Children with Congenital Heart Disease, the "Agapi gia zoi" (Love for life) national association to prevent traffic accidents and support for persons with disabilities, the union of persons with disabilities of the Prefecture of Corinth, etc.
- In the field of healthcare, we have offered a new digital radiography machine to the Kouloureio Hospital of Hydra and we supported the burn unit of the General Hospital of Corinth with medical supplies and equipment. We also offered support to the Hellenic Institute of Cardiology and the Agioi Theodoroi regional section of the Greek Red Cross.



### Support for the Elderly

For more than ten years, MOTOR OIL has been continually engaged in a very important social initiative in collaboration with the Open Care Centres for the Elderly (KAPI) of the Municipalities of Corinth and Agioi Theodoroi. The initiative involves the provision to elderly people of a full lunch and milk and yoghurt for supper - offered every day, all year round. The food is prepared at the refinery canteen and is the same meal as the one offered to employees.

In 2019, the refinery canteen provided meals for 116 elderly people at the Corinth, Agioi Theodoroi and Examilia KAPI.

## Support for Local Authorities and other agencies

The Group has traditionally supported the local communities in which it operates. To this end, we do our best to provide effective assistance to meet the needs of local authorities and actively help them in their work.

For example, in 2019 the Motor Oil Group donated to the Hellenic Disabled Children's Society (ELEPAP) of Chania a school bus specifically tailored to the needs of children with disabilities to help support the foundation. It also made a donation for the repair of damage sustained by more than 60 households affected by the unprecedented storm that hit Western Crete in February 2019. Furthermore, it donated 1 outboard engine to the Port of Rethymno and 1 to the Port of Corinth to ensure the operational readiness of their ships. It donated 24 traffic cameras to the Greek Police, as well as firefighting equipment to the Poros, Nafplio and Corinth Fire Departments, and it provided spare parts for the repair and maintenance of earthmoving machinery of the Engineer Directorate of the Hellenic Army General Staff.

Moreover, in 2019, our company also provided financial assistance to various agencies, including the Federation of Local Improvement Societies of Agioi Theodoroi, the local improvement societies "Glykia Zoi", "Klara Elias" of Sousaki, Corinth, the improvement society of Ano Sousaki, the "Psiloritis" Cretan Society of Corinth and others.

The financial aid we provided comprised donations for operating needs, indoor and outdoor revamping projects, building maintenance, road completion and clearing, road surfacing, lighting, water supplies and rainwater drainage pipes, cement laying, covering fixed expenditures, creation of children's playgrounds, and so on.

## Environment

We support activities and programmes which make an active contribution to improving infrastructures and raising public awareness of environmental protection issues. MOTOR OIL provides support to many environmental associations and organisations, such as MEDASSET (Mediterranean Association to Save the Sea Turtles), PAKOE (Panhellenic Center of Ecological Research), and others.



In 2019 we supported the Hellenic Society for the Protection of Nature in the important work it has been doing on the island of Kythira for the conservation of the unique flora of the island, with projects such as the Botanical Garden and the Seed Bank with seeds of rare native plants.

MOTOR OIL has also consistently provided support to the “Agioi Theodoroi” Forest Protection Society, which plays an important role in forest protection, security and fire-fighting within the Municipality of Agioi Theodoroi and beyond.

In respect of water supplies, the company this year met the water needs of about 190 homes near the refinery. The water, produced at the refinery by reverse osmosis, is used to water gardens and for cleaning purposes. The supply of water to these houses, which are not on the Agioi Theodoroi water system, relies on the network of pipes laid and maintained by MOTOR OIL.

In 2019, 85,000 cubic metres of water, worth more than 85,000 euros, were supplied free of charge.

### 3.2. Culture

We believe in the role of the arts, culture and history as key components of healthy social development. We strive to offer support to activities which highlight and promote our cultural and historical heritage.

Specifically, the Group:

- For yet another year sponsored the Botsis Foundation for the Promotion of Journalism, providing financial support for its invaluable work.
- Covered the cost of filming the wreckage of the submarine “Katsonis” as part of a documentary about its role in World War II.
- Provided support to the Navy History Service for the purchase of new printing machines.
- Supported KOLEKTIV 8, a cultural organisation, to host the 3d Mediterranean Photography Festival.
- Once again endorsed the “Friends of Music” Association of the Municipality of Loutraki - Perahora, which staged the Loutraki Festival 2019, featuring many young musicians.
- Provided support to the intellectual foundation “Cretan Centre” for the publication of a book on the Cretan dialect (Kritiko Lalologio).
- It also supported the journal Periplous Naftikis Istorias [A Voyage through Maritime History], published quarterly by the Greek Maritime Museum, and assisted the Hellenic Maritime Association in publishing its journal Naftiki Ellas [Maritime Greece], a traditional maritime magazine published monthly by the Naval Print Shop since 1928.

Lastly, the MOTOR OIL Group has provided financial support for cultural associations and agencies not just in communities near its facilities, but elsewhere in Greece as well.

### 3.3. Education and Youth

We support education because we believe in the power of knowledge to cultivate our minds and characters and shape us into active and conscientious citizens. That is why we take such a keen interest in assisting and promoting the work of education, research and technology.

In 2019, the MOTOR OIL Group:

- Provided snacks to 115 students from financially vulnerable families attending all schools in Agioi Theodoroi.
- Supported the 1st Corinth Primary School, the Corinth Special Primary School, the 1st and 3rd Corinth General Upper Secondary School, the Vrachati Kindergarten and Primary School, the 2nd Kindergarten, the 1st and 2nd Primary School of Agioi Theodoroi, as well as numerous schools in the greater Corinth area, in meeting their operational needs.
- Moreover, it provided equipment, such as computers, interactive boards, projectors and printers, to a significant number of schools in the Prefecture of Rethymno and Corinth, as well as in the cities of Ermioni and Kranidi, helping the schools to provide more effective teaching for their students.
- Financially supported the school trip program of the 1st Lower Secondary School of Rethymno, the 14th Primary School of Rethymno, the Episkopi Upper Secondary School, the Ermioni General Upper Secondary School, etc.
- Provided heating oil to dozens of schools in Corinth, Perama, Loutraki, Ermioni, as well as other areas in Attica and across Greece, helping schools to run smoothly and providing better conditions for learning.



#### Scholarship programme in association with the Athens School of Fine Arts

In 2012, Motor Oil embarked on a strategic collaboration with the Athens School of Fine Arts, in an effort to support the arts and to help young people wishing to continue their studies abroad.

The collaboration involves granting a 12,000 euros scholarship each year to a graduate of the School to cover the costs of postgraduate studies in the visual arts at a foreign university and 2 additional awards of 4,000 and 2,000 euros each. The successful candidate is chosen by a six-member panel assisted by a well-known art curator, and the award-winning work becomes the property of MOTOR OIL, the hope being that over time a permanent collection of works can be built up for display at the company's premises.

At the same time, along with their portfolios, the candidates submit 1-2 original works to be shown in an exhibition at the Group's head offices for a period of a year.



## The Vardinoyanneion Foundation

The Vardinoyanneion Foundation was established in 1989 to provide scholarships and grants to candidates who have distinguished themselves academically or who need financial support for undergraduate studies at colleges and universities in Greece or abroad. The areas of study and the scholarships available are not fixed, but change each academic year, by decision of the board of trustees.

For the 2019-2020 academic year, support was given to 73 students in the following areas: Economics, Psychology, Law, Chemistry, Mathematics and Medicine. Undergraduate scholarships were also given to 2 students in the areas of IT and Chemical Engineering. Since the Foundation began its scholarship programme, 179 scholarships and 1,992 bursaries have been granted.

## Educational Visits to the Refinery

Every year, we arrange visits to the refinery and our facilities for students at universities and technical colleges, Armed Forces academies and secondary schools. Through presentations and a guided tour of the production facilities, the idea is to provide visitors with information on the company's environmental protection programmes and its safety and protection actions, amongst others. As part of the 2019 programme, around 445 persons visited the refinery and the facilities of our commercial companies.

## Student Internships

Every year, the company takes on a number of students for paid summer internships, lasting from one to two months. The students fill various positions in the refinery, the facilities and head offices. In addition, we give a number of students the opportunity of a six-month internship, when this forms part of the degree course they are taking. We also provide positions for international students to gain work experience, in collaboration with the International Association for the Exchange of Students for Technical Experience (IAESTE).

As part of this activity, in 2019 we filled 137 trainee positions of 1-2 months, and 40 positions of over 2 months, at a total cost of more than 294,000 euros.

## Sports

We offer our support to athletics and competitive sports and provide assistance to smaller clubs and sporting associations in the amateur sector. During 2019, our Group supported the Episkopi Sports Club in Rethymno, and the Rethymno Wrestling Club. It also supported the Isthmia Sporting Club, the Kranidi Sporting Club, the Agioi Theodoroi Sporting Club, the Spilio Sporting Club, the Corinth Sporting Club, the Ermionida Sporting Association, the Corinth Sporting Club 2006, etc.

As it does every year, the company assisted in the staging of the famous "Spartathlon" long-distance race by providing a doctor and equipped ambulance, and also supported the Control and Aid Centre located in front of the refinery.

It also supported the 5th Authentic Phidippides Run (Athens - Sparta - Athens), with a distance of 490 km.

Finally, AVIN OIL S.A. was the golden sponsor of the Rethymno Cretan Kings Basketball Club, once again supporting it during the 2019-2020 season.



## Shell Eco-marathon

Coral actively supports the Shell Eco-marathon, a global initiative whose main aim is to promote sustainability in transport, innovation and energy efficiency. Coral invites university students from Greece to compete in this leading educational programme organised by Shell and including teams from all over Europe and beyond to construct energy-efficient vehicles. The winning team will be the one travelling the greatest distance with the equivalent of 1 litre of fuel of its own choice: Traditional internal combustion engines running on petrol or diesel, biofuel engines, electric motors, hydrogen cells or solar panels are concealed beneath the exterior of modern, futuristic vehicles which cut a striking figure on the race track.

Greek teams from leading universities and technical colleges in Greece, as well as schools all over the country, have been participating since 2004 in the Shell Eco-marathon. For yet another year, Greek participation was strong. Their results were once again notable, despite competing on a new track, which forced them to revise and adjust their strategy.

Team "Poseidon", from the departments of Mechanical Engineering, Electrical Engineering, Automation Engineering and the School of Management and Economics at the University of Western Attica, was entered in the Prototype (Battery Electric) category with the prototype electric vehicle "Trireme" and won 18th place, achieving a rate of 407 km/kWh. Team "Prometheus", from the National Technical University of Athens School of Electrical and Computer Engineering, was entered in the Prototype (Battery Electric) category with the prototype electric vehicle "Pyrphoros" and won the 25th place, reaching 280 km/kWh and significantly improving last year's performance. Team "TUC Eco Racing" from the School of Production Engineering and Management of the Technical University of Crete, with the advanced city vehicle "Spyros Louis", entered in the Urban Concept (Hydrogen) category and became a point of reference in the field of organization and safe work for both the organizers and the other groups.

At the same time, it successfully completed all technical and safety checks, ensuring the possibility to compete on the track. The serious malfunction of the power supply (hydrogen cell) during the race did not prevent the team's vehicle from completing 10 of the 11 rounds, without, unfortunately, being able to finish the race.

# SUSTAINABILITY REPORT FRAMEWORK

**The Report underlines the Group's commitment to a responsible and sustainable growth.**

**As an active member of the community, the MOTOR OIL Group strives to achieve sustainable development by responding to the environmental challenges deriving from its operations while at the same time trying to meet the needs of the local and wider society.**

## 1. About the Sustainability Report

This Sustainability Report of 2019 is the eighteenth such record of the annual activities of the MOTOR OIL Group (1 January 2019 - 31 December 2019). The primary goal of the Report is to provide comprehensive information for all stakeholders in the Group: workforce, customers, suppliers, shareholders, investors, creditors and local communities.

The structure of the Sustainability Report 2019 complies with the totality of aspects of corporate responsibility. It focuses, therefore, on actions that demonstrate respect for human values and the environment, the implementation of an effective health and safety policy and support for efforts to achieve sustainable social development. The various sections of the Report describe in detail the Group's activities, with presentations of the latest quantitative figures and data.

The terms 'Group' and 'MOTOR OIL Group' refer to the MOTOR OIL Group and its constituent subsidiary Groups and companies, AVIN OIL, Coral, Coral Gas, LPC, NRG and OFC. The term 'company' refers to the parent company 'MOTOR OIL'; the terms 'other companies' and 'remaining companies' refer to the aforesaid set of companies, while the term 'commercial companies' refers, once again, to the aforesaid set of companies, not - however - including OFC.

## UN Global Compact - Global Reporting Initiative - Sustainable Development Goals

The selection of topics for the Sustainability Report 2019 was based on the "GRI STANDARDS" guidelines of the Global Reporting Initiative (GRI), on the Oil & Gas sector supplement and on the ten principles of the United Nations Global Compact.

At the end of the Report there is a summary table matching the contents of the current Report to the GRI indicators and Global Compact principles. In this sense, the Sustainability Report 2019 also serves as a "Communication on Progress" for the Global Compact, setting out the way in which its ten principles have been implemented.

Furthermore, through this Report we testify our commitment to the United Nations Sustainable Development Goals for 2030 by noting the specific Goals which are relevant to us and to which we contribute through our corporate responsibility strategy. At the end of the Report we present a detailed link of our programs, actions and material issues with the Goals relevant to our operations.

Supplementary data for the Group's activities can be found in the Annual Financial Report 2019 and the Environmental Statement 2019, as well as at the companies' websites, [www.moh.gr](http://www.moh.gr), [www.lpc.gr](http://www.lpc.gr), [www.avinoil.gr](http://www.avinoil.gr), [www.coralenergy.gr](http://www.coralenergy.gr), [www.coralgas.gr](http://www.coralgas.gr), [www.nrgprovider.com](http://www.nrgprovider.com), [www.ofc.gr](http://www.ofc.gr).

## Communication

The MOTOR OIL Sustainability Report 2019 has been edited and compiled by the Group's Communications, Corporate Affairs and Corporate Social Responsibility Department. We wish to extend our heartfelt thanks to all other Divisions and Departments whose contributions of data have allowed us to produce a comprehensive Report.

We welcome all views and observations on the structure and content of the report - your input will help us to keep improving its quality.









Please contact us on +30 210 8094004, or send your comments to [csr@moh.gr](mailto:csr@moh.gr)











## 2. Global Compact: Communication on Progress 2019 and our contribution to the Sustainable Development Goals

MOTOR OIL participates in the United Nations Global Compact, which constitutes the biggest Corporate Responsibility initiative in the world. In year 2008, MOTOR OIL became a signatory of the UN Global Compact; at the same time the company became a member of the Global Compact Network Hellas. The Global Compact incorporates ten fundamental principles relating to human rights, labour rights, environmental protection and anti-corruption.

We are committed to these principles, which we have integrated in the policies and processes of the company. MOTOR OIL's Sustainability Report 2019 contains information relating to our social and environmental practices and the outcomes thereof, which underline our commitment to the Global Compact. The following chart lists the compliance of MOTOR OIL with the ten Global Compact Principles, by making reference to the relevant chapters of the Sustainability Report 2019, and to the GRI indicators taken into account in compiling the Report.

The 10 Principles of the Global Compact	Sustainable Development Goals	Material Issues	GRI Standards indicators	Reference in the Sustainability Report or Description on the Implementation Approach
<b>HUMAN RIGHTS</b>				
<b>PRINCIPLE 1:</b> Businesses should support and respect the protection of internationally proclaimed human rights.	 	Health and Safety of employees  Human Rights	GRI 102-8 GRI 102-41 GRI 403-2 GRI 403-3 GRI 403-4 GRI 407-1	<b>Chapters 2 and 3</b> Full compliance with relevant Greek legislation and international conventions.
<b>PRINCIPLE 2:</b> Businesses should make sure that they are not complicit in human rights abuses.		Human Rights	GRI 407-1	<b>Chapter 2</b> Full compliance with relevant Greek legislation and international conventions.
<b>LABOUR</b>				
<b>PRINCIPLE 3:</b> Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.			GRI 102-41 GRI 407-1	<b>Chapter 2</b>
<b>PRINCIPLE 4:</b> Businesses should uphold the elimination of all forms of forced and compulsory labour.		Full compliance with relevant legislation and conventions (Social-economic compliance)	GRI 419-1	<b>Chapter 2</b> Full compliance with relevant Greek legislation and international conventions. Cases of forced, compulsory or child labour do not exist and are not accepted in any way.
<b>PRINCIPLE 5:</b> Businesses should uphold the effective abolition of child labour.				
<b>PRINCIPLE 6:</b> Businesses should uphold the elimination of discrimination in respect to employment and occupation.	  	Presence in the local marketplace  Labour  Health & Safety of employees  Education and Training	GRI 202-2 GRI 401-2 GRI 403-1 GRI 403-4 GRI 404-1 GRI 404-2	<b>Chapter 2</b>



The 10 Principles of the Global Compact	Sustainable Development Goals	Material Issues	GRI Standards indicators	Reference in the Sustainability Report or Description on the Implementation Approach
ENVIRONMENT				
<b>PRINCIPLE 7:</b> Businesses should support a precautionary approach to environmental challenges.	      	Materials and Resources	GRI 301-1 GRI 301-2 GRI 301-3 GRI 302-1 GRI 302-2 GRI 302-3 GRI 302-4 GRI 303-1 GRI 303-2 GRI 303-3 GRI 305-1 GRI 305-2 GRI 305-4 GRI 305-5 GRI 305-6 GRI 305-7 GRI 306-1 GRI 306-2 GRI 306-3 GRI 306-4 GRI 306-5 GRI 307-1 OG13	<b>Chapters 1 and 4</b> MOTOR OIL Environmental Report 2018 and LPC Environmental Report 2019.
<b>PRINCIPLE 8:</b> Businesses should undertake initiatives to promote greater environmental responsibility.		Water Consumption		
<b>PRINCIPLE 9:</b> Businesses should encourage the development and diffusion of environmentally friendly technologies.		Energy Consumption		
		Emissions		
		Effluents and Waste		
		Compliance with the Environmental Legislation		
		Safety and Security of depots and installations		
		Emergency Response Plans		
ANTI-CORRUPTION				
<b>PRINCIPLE 10:</b> Businesses should work against corruption in all its forms, including extortion and bribery.		Anti-corruption mechanisms	GRI 205-3	<b>Chapter 1</b> and <a href="http://www.moh.gr">www.moh.gr</a>



### 3. GRI Compliance Level

The MOTOR OIL Sustainability Report, which has been published every year since 2002, is the main tool available for communicating with our stakeholders about the Group's efforts and performance in achieving sustainable development through the application of the principles and objectives of Corporate Social Responsibility. It contains the most important facts and data relating to the previous year's financial, social and environmental performance.

The Sustainability Report 2019 has a similar structure to previous editions, so as to facilitate comparisons of performance over time. The compilation of the Sustainability Report 2019 is based on the Global Reporting Initiative (GRI) guidelines, just as in the six previous editions, and specifically of the new GRI STANDARDS edition. The GRI guidelines have provided a sound basis for the selection of the material issues that had to be covered by the Report, for an effective communication with stakeholders. The Sustainability Report 2019 is not certified by an external certification authority.

Boundaries and limitation of material issues				
Material Issues	Boundaries		Limitations	
	Within the Organization	Outside the Organization	Within the Organization	Outside the Organization
Financial Performance (Profitability)	MOTOR OIL GROUP	Shareholders, investors analysts, Partners and suppliers, Customers.	The management of material issues and the selected performance indices concern the parent company MOTOR OIL and its subsidiaries AVIN OIL, Coral, Coral Gas, LPC, NRG and OFC which are controlled by MOTOR OIL except is otherwise indicated in specific indices.	
Presence in the local Marketplace	MOTOR OIL GROUP	Partners and Suppliers		
Anti-Corruption	MOTOR OIL GROUP	Shareholders, investors, analysts, Partners, suppliers, Customers, Public authorities.		
Materials and Resources	MOTOR OIL GROUP	Local Communities, Suppliers, Public authorities.		
Energy Consumption	MOTOR OIL GROUP	Local Communities		
Water Consumption	MOTOR OIL GROUP	Local Communities		
Waste Management	MOTOR OIL GROUP	Local communities and public authorities.		
Emissions	MOTOR OIL GROUP	Local communities and public authorities.		
Environmental Compliance	MOTOR OIL GROUP	Shareholders, investors, analysts, Public authorities.		
Environmental Investments	MOTOR OIL GROUP Employees	Shareholders, investors, analysts, Local communities, Public authorities.		
Employment	MOTOR OIL GROUP Employees	Local Communities		
Health and Safety	MOTOR OIL GROUP Employees	Partners and suppliers, Contractors' staff and tank lorry drivers.		
Training and Education	MOTOR OIL GROUP Employees	Partners and suppliers, Contractors' staff and tank lorry drivers.		
Product Safety	MOTOR OIL GROUP Employees	Local communities, Public authorities, Customers.		
Service and Product Quality	MOTOR OIL GROUP Employees	Local communities, Public authorities, Customers.		
Compliance with laws and legislations	MOTOR OIL GROUP	Investors, Shareholders, Local communities, Public authorities, Partners and suppliers Customers.		
Emergency Response Plans	MOTOR OIL GROUP Employees	Local communities, Public authorities, Partners and suppliers, Contractors' staff and tank lorry drivers.		
Safety and Security of depots and installations	MOTOR OIL GROUP Employees	Local communities, Public authorities, Partners and suppliers, Contractors' staff and tank lorry drivers.		

Overall in the Sustainability Report, where numerical data or performance indicators are presented, the method of data collection and calculation of results is also stated. The Environmental and Health and Safety performance indicators are specifically calculated according to internationally accepted procedures.

The following table records the GRI Indicators, and in the column headed “Reference” the source of information relating to each indicator is given.

The symbols used in the table are:

- Indicates the page(s) of the Sustainability Report 2019 that include information on the indicator.
- 📄 Indicates reference to the Annual Financial Report 2019.
- 🌐 Indicates reference to the company's website.

GRI INDEX - GRI Standards: Core option General Standard Disclosures		
Disclosure	Description	Reference
<b>ORGANIZATIONAL PROFILE</b>		
GRI 102-1	Name of the organization	Back Cover
GRI 102-2	Activities, brands, products and services	■ p. 11-13 📄 p. 11-14, 20-33 🌐
GRI 102-3	Location of headquarters	Back Cover
GRI 102-4	Location of operations	■ p. 12
GRI 102-5	Ownership and legal form	■ p. 12-13, 15-16, 25 📄 p. 34, 47-51 🌐
GRI 102-6	Markets served	■ p. 12-14 📄 p. 11-12, 20-33
GRI 102-7	Scale of the organization	■ p. 11-15, 20, 31-36, 68-69 📄 p. 9-20
GRI 102-8	Information on employees and other workers	■ p. 31-32
GRI 102-9	Supply chain	■ p. 20, 22-23-33
GRI 102-10	Significant changes to the organization and its supply chain	■ p. 4-5, 12-13, 20 📄 p. 18-33
GRI 102-11	Precautionary principle or approach	■ p. 14, 21-23, 40-41, 44-49, 52-55
GRI 102-12	External initiatives	■ p. 17, 70-73, 74-75
GRI 102-13	Membership of associations	■ p. 17
<b>STRATEGY</b>		
GRI 102-14	Statement from senior decision-maker	■ p. 6-7
GRI 102-15	Key impacts, risks and opportunities	■ p. 6-7, 27, 28-29, 38-39, 50-51, 66-67 📄 p. 35-39
<b>ETHICS AND INTEGRITY</b>		
GRI 102-16	Values, principles, standards, and norms of behavior	■ p. 2-3, 19
<b>GOVERNANCE</b>		
GRI 102-18	Governance structure	■ p. 15-16 📄 p. 47-51 🌐
<b>STAKEHOLDER ENGAGEMENT</b>		
GRI 102-40	List of stakeholder groups	■ p. 24-25
GRI 102-41	Collective bargaining agreements	■ p. 31
GRI 102-42	Identifying and selecting stakeholders	■ p. 24-25
GRI 102-43	Approach to stakeholder engagement	■ p. 24-25
GRI 102-44	Key topics and concerns raised	■ p. 24-25
<b>REPORT PROFILE</b>		
GRI 102-45	Entities included in the consolidated financial statements	■ p. 12-13 📄 p. 20-33
GRI 102-46	Defining report content and topic boundaries	■ p. 26-27, 74
GRI 102-47	List of material topics	■ p. 26-27
GRI 102-48	Restatements of information	There were no significant updates.
GRI 102-49	Changes in reporting	No changes.



GRI INDEX - GRI Standards: Core option General Standard Disclosures		
Disclosure	Description	Reference
REPORT PROFILE		
GRI 102-50	Reporting period	1/1/2019 – 31/12/2019
GRI 102-51	Date of most recent report	■ p. 82
GRI 102-52	Reporting cycle	Annual
GRI 102-53	Contact point for questions regarding the report	■ p. 74
GRI 102-54	Claims of reporting in accordance with the GRI Standards	■ p. 77
GRI 102-55	GRI content index	■ p. 78-81
GRI 102-56	External assurance	■ p. 77

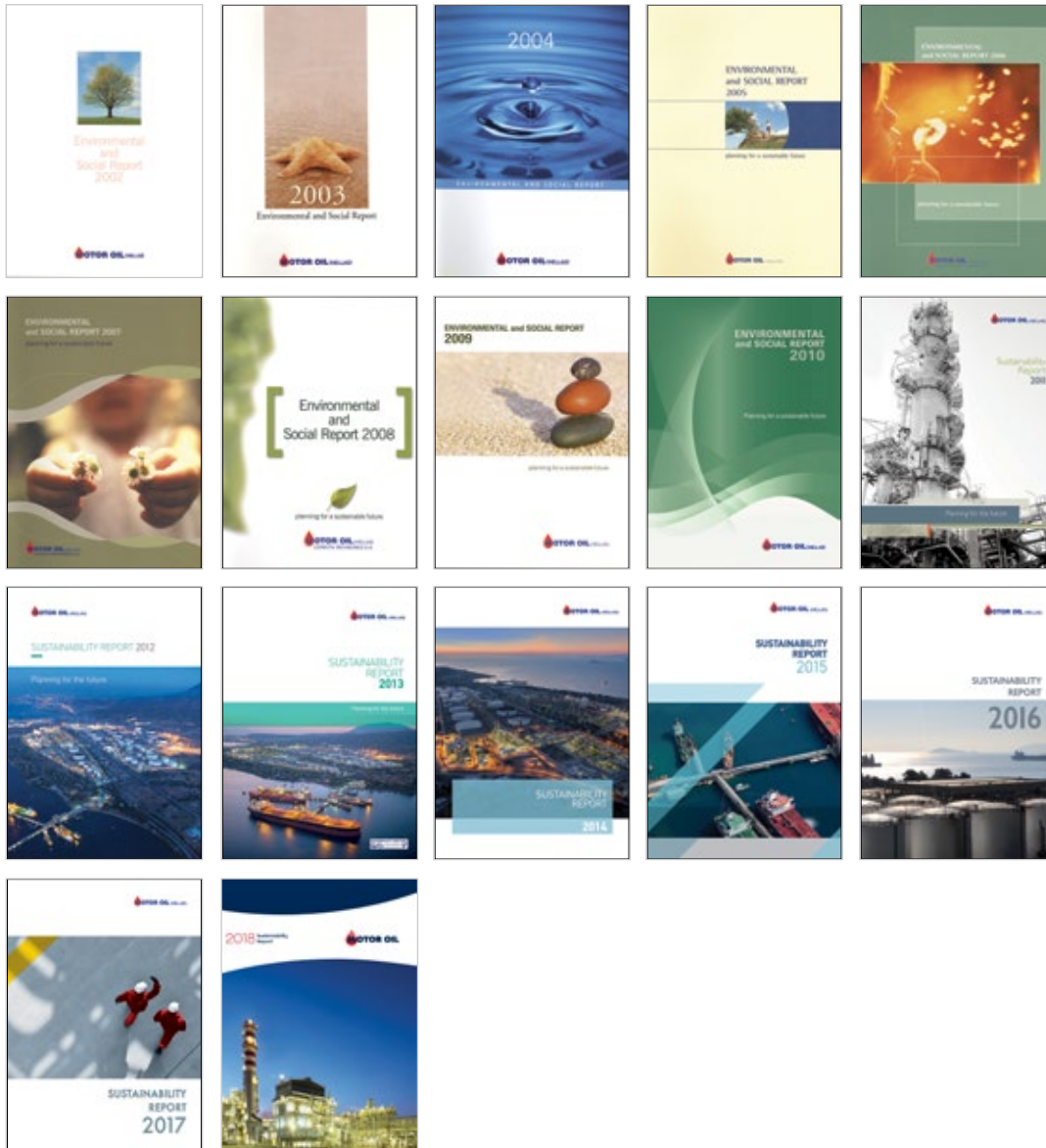
GRI INDEX - GRI Standards: Core option Specific Standard Disclosures			
Material Topic	Indicator	Description	Reference
ECONOMY			
Economic Performance (Profitability)	GRI 103	Management Approach	■ p. 12-14, 20-23 ■ p. 47-51 □
	GRI 201-1	Direct economic value generated and distributed	■ p. 12-14, 68-69 ■ p. 9-10
	GRI 201-2	Financial implications and other risks and opportunities due to climate change	Climate change impacts regarding the possible financial implications, risks or opportunities, constitute parameters thoroughly taken into account in the process of analysing, evaluating, approving and planning for investments or other initiatives.
	GRI 201-4	Financial assistance received from the government	MOTOR OIL has not received financial assistance from the government.
Market Presence	GRI 103	Management Approach	■ p. 15-16, 29-31, 33, 66, 69
	GRI 202-1	Ratios of standard entry level wage by gender compared to local minimum wage	■ p. 33
	GRI 202-2	Proportion of senior management hired from the local community	■ p. 15-16, 31
Procurement Practices	GRI 103	Management Approach	■ p. 15, 29-31, 33, 66, 69
	GRI 204-1	Proportion of spending on local suppliers	■ p. 69
Anti-corruption	GRI 103	Management Approach	■ p. 16
	GRI 205-3	Confirmed incidents of corruption and actions taken	No such incidents.
Anti-competitive Behavior	GRI 103	Management Approach	■ p. 15-16
	GRI 206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	No such incidents.
ENVIRONMENT			
Materials	GRI 103	Management Approach	■ p. 13, 63-64
	GRI 301-1	Materials used by weight or volume	■ p. 13-15
	GRI 301-2	Recycled input materials used	■ p. 63-64
	GRI 301-3	Reclaimed products and their packaging materials	■ p. 64



GRI INDEX - GRI Standards: Core option Specific Standard Disclosures			
Material Topic	Indicator	Description	Reference
ENVIRONMENT			
Energy	GRI 103	Management Approach	■ p. 56-58
	GRI 302-1	Energy consumption within the organization	■ p. 56-58
	GRI 302-2	Indirect energy consumption	■ p. 56-58 10,593 MWh from the Electricity Market.
	GRI 302-3	Energy intensity	■ p. 56-58
	GRI 302-4	Reduction of energy consumption	■ p. 56-58
Water	GRI 103	Management Approach	■ p. 64-65
	GRI 303-1	Total water usage	■ p. 64-65
	GRI 303-2	Impacts from withdrawal of water	■ p. 64-65
	GRI 303-3	Water recycled and reused	■ p. 64-65
Emissions	GRI 103	Management Approach	■ p. 50-56, 59-62
	GRI 305-1	Direct greenhouse gas emissions	■ p. 59
	GRI 305-2	Indirect greenhouse gas emissions	■ p. 59
	GRI 305-4	Greenhouse gas emissions intensity	■ p. 59
	GRI 305-5	Reduction of greenhouse emissions	■ p. 59, 61
	GRI 305-6	Emissions of ozone depleting substances	Non - existent.
	GRI 305-7	Emissions of NO <sub>x</sub> , SO <sub>x</sub> etc.	■ p. 60-62
Effluents and Waste	GRI 103	Management Approach	■ p. 63-64
	GRI 306-1	Water discharge	■ p. 63
	GRI 306-2	Waste by type and disposal method	■ p. 63-64
	GRI 306-3	Significant spills	There were no significant spills.
	GRI 306-4	Hazardous waste	■ p. 63-64
	GRI 306-5	Water bodies affected by water discharges and/or runoff	■ p. 65
Environmental Compliance	GRI 103	Management Approach	■ p. 50-65
	GRI 307-1	Significant fines and sanction for non-compliance with environmental laws and regulations	No such fines.
SOCIETY			
Employment	GRI 103	Management Approach	■ p. 29-32
	GRI 401-1	New employee hires and employee turnover	■ p. 32
	GRI 401-2	Benefits provided to full - time employees	■ p. 33
Occupational Health and Safety	GRI 103	Management Approach	■ p. 38-41
	GRI 403-1	Employee representation in formal joint management-employee health and safety committees	■ p. 40
	GRI 403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism	■ p. 41-42
	GRI 403-3	Employees with high incidence or high risk of diseases related to their occupation	■ p. 41-42
	GRI 403-4	Health and safety topics covered in formal agreements with trade unions	■ p. 31, 40-41, 46-49
Training and Education	GRI 103	Management Approach	■ p. 35-36, 46-49
	GRI 404-1	Average hours of training per year per employee	■ p. 35-36, 47
	GRI 404-2	Programs for upgrading employee skills	■ p. 35-37, 47-49

GRI INDEX - GRI Standards: Core option Specific Standard Disclosures			
Material Topic	Indicator	Description	Reference
SOCIETY			
Freedom of Association and Collective Bargaining	GRI 103	Management Approach	■ p. 31 ■ p. 40
	GRI 407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	No such operation.
Customer Health and Safety	GRI 103	Management Approach	■ p. 23, 44
	GRI 416-1	Assessment of the health and safety impacts of the organizations products and services	■ p. 23, 44
	GRI 416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	No such incidents.
Product Labelling	GRI 103	Management Approach	■ p. 22-23, 44
	GRI 417-2	Incidents of non-compliance concerning laws and regulations about product labelling	No such incidents.
Socioeconomic Compliance	GRI 103	Management Approach	■ p. 15-16, 19-23, 75-76 ■ p. 47-51 📄
	GRI 419-1	Non-compliance with laws and regulations in the social and economic area	No such fines.
Emergency Preparedness	GRI 103	Management Approach	■ p. 38-46
		Mechanisms used to involve local communities in the development of emergency plans for existing and new operations (e.g. risk communication, preparation, rehearsal, regular review and modification, arrangements for the management of crises, timely and transparent incident communication)	■ p. 40-49
Safety of Processes' and Facilities	GRI 103	Management Approach	■ p. 40-49
	OG 13	Number of process safety events, by business activity	■ p. 40-43

# SUSTAINABILITY REPORTS OF PREVIOUS YEARS



All the material used for printing the Motor Oil Sustainability Report are friendly to the environment.







**Headquarters** Irodou Attikou 12A 15124, Marousi T +30 210 8094000  
**Refinery** PO Box 23 20100 Korinthos T +30 27 410 48602, 48702

**[www.moh.gr](http://www.moh.gr)**