



Environmental  
and  
Social Report 2008



planning for a sustainable future

Your views and comments on the structure and content  
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# Environmental and Social Report 2008

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# Management Message

**The strategic objectives** and business policies we apply at MOTOR OIL aim at the achievement of sustainable development, which pursues economic growth consistent with human well-being, in conditions of environmental sustainability.

The *Environmental and Social Report 2008* that you are currently perusing – the seventh consecutive edition – presents the disciplined and systematic work of our employees, the measurable results and the strategic handling of challenges by MOTOR OIL, as they arise from the pursuit of sustainable growth through the application of the principles of Corporate Social Responsibility.

This year, we endorsed and are participating in the United Nations *Global Compact* initiative, the purpose of which is to guide enterprises towards sustainable growth through voluntary and responsible behaviours and actions. Therefore, we are committed to full compliance with the ten principles of the *Global Compact*.

We strive for continuous improvement in what we do, and for our efforts to be more effective, we need to set the right targets. In year 2008, with the participation of all our people, we focused on programmes relating to safety at work, environmental

protection, our human resources and social contribution, as well as the realization of our economic and development objectives.

In year 2008, MOTOR OIL's sales amounted to 9.3 million metric tons, breaking the 9 million tons barrier for the first time. However, the year's financial results were significantly burdened by the negative effect of stock valuation at the end of the year, due to the very sudden adjustment of international oil prices in the second half of the year and especially in the last quarter.

Our investment plan continued in year 2008 with the new Crude Distillation Unit project entering the construction phase, and the largest-scale periodic maintenance programme in the history of the refinery being completed smoothly and safely. The new unit, together with the expansion of the sulphur recovery and production units, will be commissioned in year 2010.

Occupational safety continues to be our primary objective. This year, our activity in this area focused on the certification of the *Health and Safety Management System* in accordance with the OHSAS 18001:2007 international standard, on equipment improvement projects and on projects minimizing the risk of accidents.

In the field of human resources management, we continued providing our structured programme of discretionary benefits, and we renewed our personnel by hiring new colleagues.

Environmental protection is always a principal issue, and efforts to improve the refinery's environmental footprint are continual. In year 2008, the refinery was connected to the natural gas network; the project of upgrading steam production was completed; many other smaller environmental investments were implemented; and the company received the «*ECOPOLIS 2008 – Environmental Investment*» award for the second consecutive year.

In the field of community involvement, year 2008 saw the disbursement of around 4.7 million euros in support of the work of various foundations and authorities, both in the local communities and in the broader society. We continued with our project for rehabilitation of Makistos village in lleia, which was destroyed in the forest fires of August 2007. The last home is expected to be handed over within year 2009.

The perusal and acceptance of our Report by all of you, our stakeholders, and your comments (favourable or unfavourable) help us in becoming better.

# MOTOR OIL's Profile



## **Value creation with respect for people and the environment**

Combining a progressive perception on corporate responsibility with an efficient business model, competent people and management, MOTOR OIL is on a course of continual growth and value creation for all stakeholders, while it effectively fulfils its social role, enhancing its societal contribution and paving the way for its future growth.

# Timeline of MOTOR OIL's Growth

- 1972** ▶ Refinery begins operations. It comprises a crude oil distillation unit, base oils production unit and port facilities.
- 1975** ▶ Construction of a 100,000 barrels/day crude distillation unit and storage facilities of 1.5 million cubic metres capacity.
- 1978** ▶ Construction of a catalytic reformer unit (further processing of naphtha for gasoline production).
- 1980** ▶ Commissioning of a catalytic cracking unit (for converting fuel oil to higher-value products).
- 1984** ▶ Construction of a power plant, burning fuel gas. Company granted the right to sell surplus energy to the national power grid.
- 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 Aramco Overseas Company B.V., a wholly-owned subsidiary of the Saudi Arabian Oil Company (Saudi Aramco). Relocation of head office to new modern facilities in Maroussi.
- 2000** ▶ Production of fuels conforming to EU specifications for 2000. New units were constructed and the naphtha reformer was upgraded into a continuous 103-octane number catalyst regeneration unit. New central control room and installation of a Distributed Control System. The Environmental Management System is ISO 14001:1996 certified.
- 2001** ▶ Increase of the company's equity capital through public offer of shares and listing on the Athens Stock Exchange. Installation of a new gas turbine in the power plant. Upgrading of the lubes vacuum distillation unit.
- 2002** ▶ Acquisition of 100% of the retail oil marketing company AVIN OIL.
- 2003** ▶ Certification of the Quality Management System of the company compliant with ISO 9001:2000 in January 2003, for the whole spectrum of its operations.
- 2004** ▶ Commissioning of the new Truck Loading Terminal at the refinery. The Environmental Management System is recertified, according to ISO 14001:2004, for a further three years.
- 2005** ▶ The Hydrocracker Complex is commissioned, facilitating the production of clean fuels conforming to European Union specifications for 2005 and 2009. Motor Oil Holdings S.A. acquires the stake in MOTOR OIL previously held by Aramco Overseas Company B.V.
- 2006** ▶ Recertification, according to ISO 9001:2000 for three more years. ISO 17025:2005 certification of the refinery's chemical laboratory.
- 2007** ▶ ISO 14001:2004 recertification of the Environmental Management System valid until 2010. Registration of the company in the Hellenic Register of EMAS (Eco-Management and Audit Scheme). Award «ECOPOLIS 2007 – Environmental Investment» Award "ECOPOLIS 2007 – Environmental Investment"
- 2008** ▶ Health and Safety Management System is certified compliant with OHSAS 18001:2007. Safe accomplishment of the largest shut down in the history of the refinery for periodic maintenance works. New Crude Distillation Unit enters the construction phase. The company is awarded by the NGO Ecocity with the "ECOPOLIS 2008 – Environmental Investment" award for a second consecutive year.



# Vision, Mission, Principles and Values

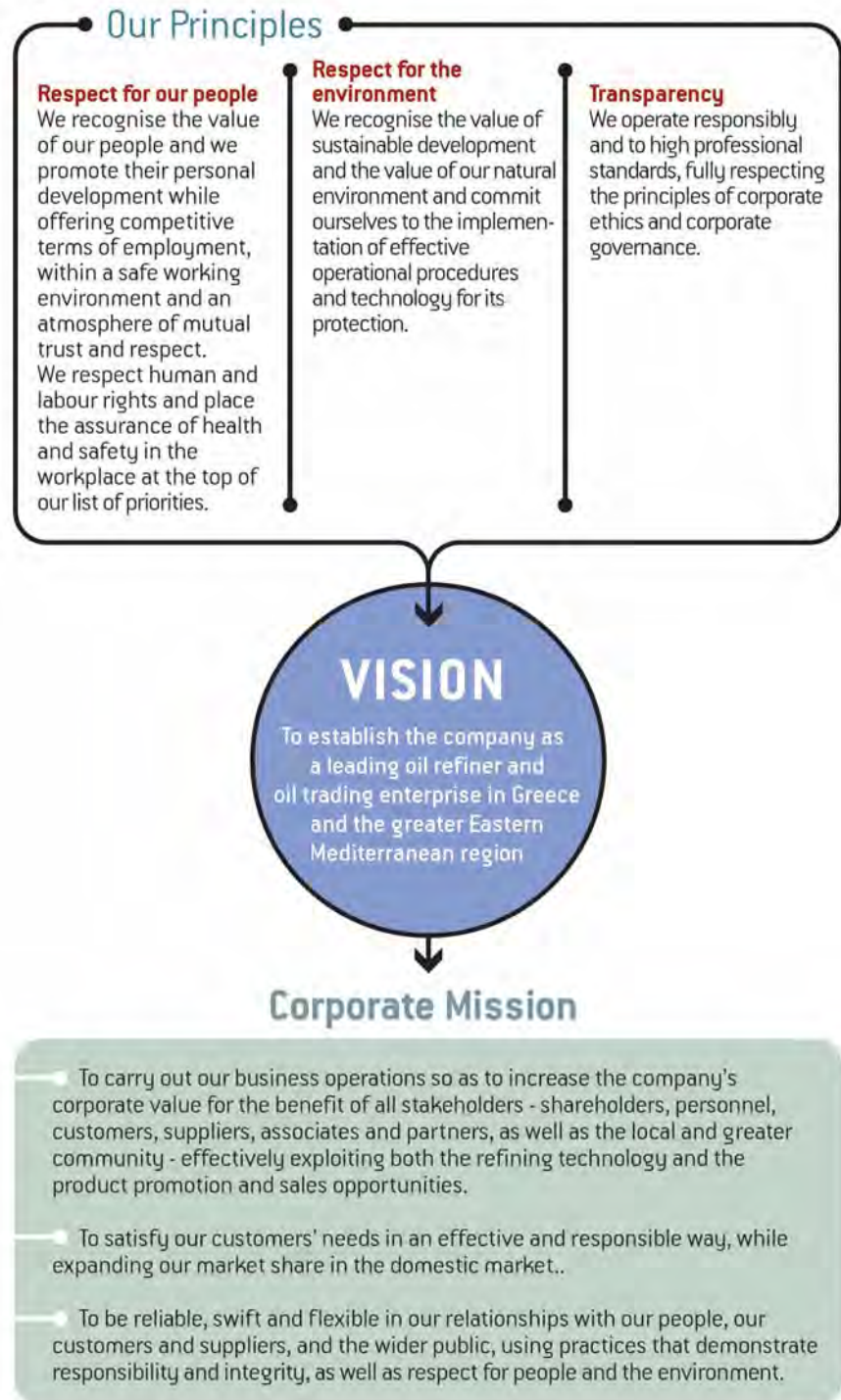
Since 1972, when MOTOR OIL began operating as an oil refiner and oil products marketing company, it has always functioned with responsibility and integrity, aiming at sustainable profitability and growth in a socially responsible way. Its Corporate Vision and Mission define the context which drives the planning and implementation of its dynamic growth. Moreover, its operation is founded on a set of firm Principles and Values that underpin its business activity.

MOTOR OIL's Vision and Corporate Mission are underpinned by three basic Principles:

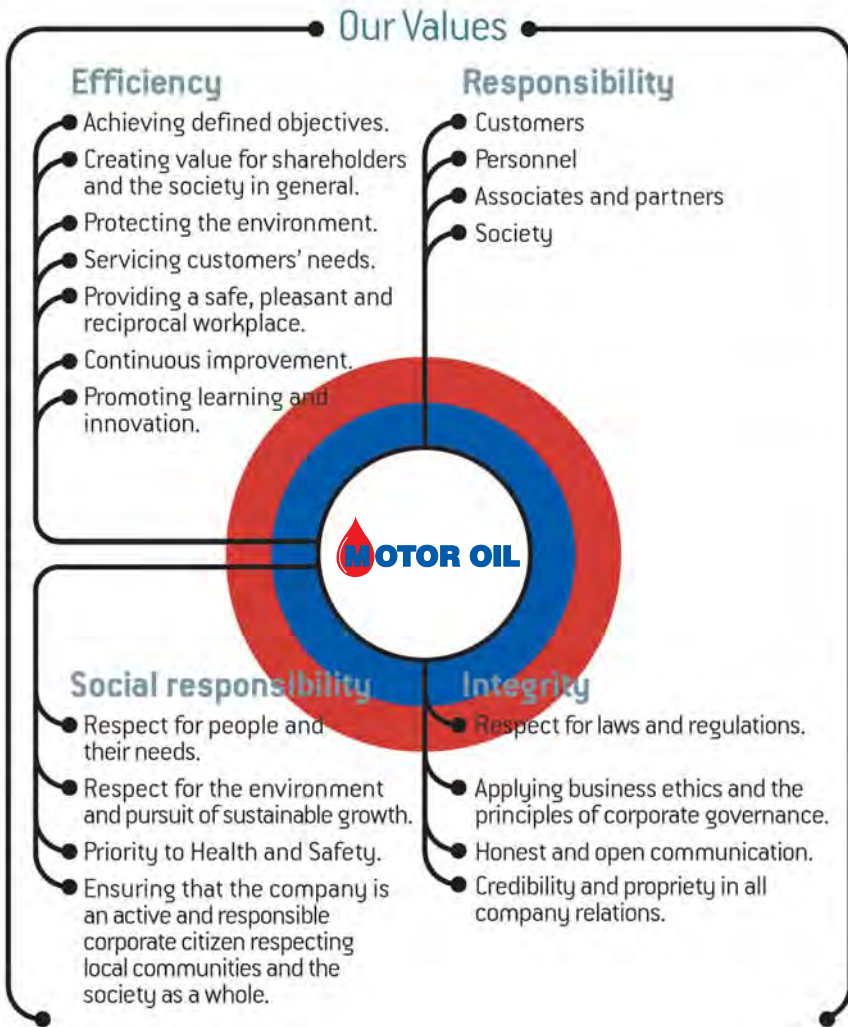
- » Respect for our people
- » Respect for the environment
- » Transparency

The realization of the Vision and Corporate Mission is based on four corporate Values:

- » Efficiency
- » Responsibility
- » Social Responsibility
- » Integrity



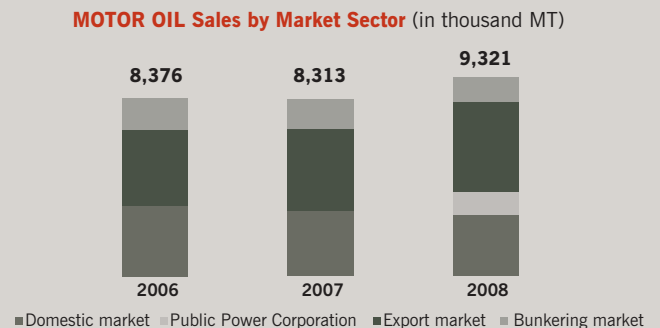
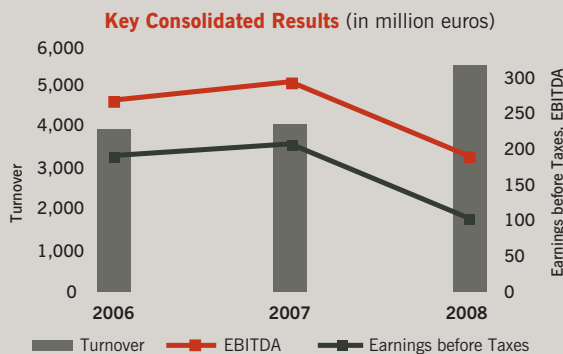
# MOTOR OIL: 36 years of achievements and growth



**MOTOR OIL** plays a leading role in the crude oil refining sector and the marketing of petroleum products in Greece and the greater region of the Eastern Mediterranean, supplying this region with a wide range of high quality products. With a consolidated income, in 2008, equivalent to approximately 2.4% of Greece's GDP, it constitutes one of the main pillars of the national economy.

MOTOR OIL was established in 1970, and its refinery was commissioned in 1972. It is listed on the Athens Stock Exchange since 2001, and is included in the FTSE/ATHEX International Index, the FTSE/ATHEX-20 Index, the General Index (ATHEX Composite Index), the MSCI (Morgan Stanley Capital International) Small Cap index, and in other sector-specific indexes.

The company owns 100% of AVIN OIL shares and, directly or indirectly, is a shareholder with various holdings in eight other companies, details of which are included in MOTOR OIL's *Annual Financial Report 2008*.



KORINTHOS POWER S.A. has been granted an electricity production licence by the Ministry of Development, for a 396 MW natural gas combined-cycle plant, located in Aghioi Theodoroi/Corinth. On the basis of a Joint Venture Agreement signed in November 2008 between MOTOR OIL and MYTILINEOS S.A., MOTOR OIL'S holding in the share capital of KORINTHOS POWER will be reduced to 35%, and the holding of MYTILINEOS S.A. will be 65%, and expected to be included in the energy portfolio of ENDESA HELLAS S.A.

### The 2008 results

The consistent and successful pursuit of MOTOR OIL's strategy has resulted in successively increased sales and profitability. Year 2008 was yet another important year with respect to the achievement of financial results, implementation of investments and forming of strategic alliances.

The chart shows the progress of three key indicators of consolidated performance– Turnover, EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) and EBT (Earnings Before Taxes). MOTOR

OIL's consolidated financial statements – apart from the parent company – also incorporate the results of AVIN OIL, KORINTHOS POWER S.A. and MAKREON S.A., with the "full consolidation" method, and those of OLYMPIC FUEL COMPANY S.A. and HELLENIC AVIATION FUEL COMPANY S.A. (HAFCO S.A.), with the "net equity" method, while ATHENS AIRPORT FUEL PIPELINE COMPANY S.A., AVIN ALBANIA S.A., BRODERICO LTD and ELECTROPARAGOGI SOUSSAKI S.A. are included at their acquisition cost.

MOTOR OIL's sales figures for 2008, in the three markets in which it operates – domestic, exports and bunkering (marine-aviation) – broke the barrier of 9 million metric tons for the first time in its history, reaching

### HOLDINGS (as at 31.12.2008)

#### SUBSIDIARIES

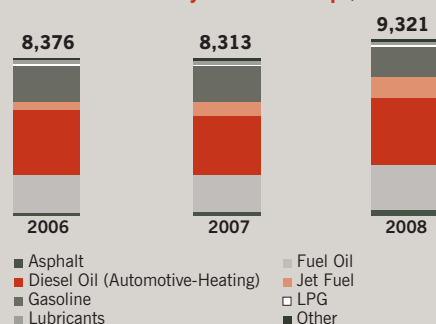
	Share
AVIN OIL S.A.	100%
KORINTHOS POWER S.A.	100%
MAKREON S.A.	100%
AVIN ALBANIA S.A.*	100%
BRODERICO LTD*	100%
ELECTROPARAGOGI SOUSSAKI S.A.*	70%

#### ASSOCIATED COMPANIES

	Share
OLYMPIC FUEL COMPANY S.A.	28%
HELLENIC AVIATION FUEL COMPANY S.A. (HAFCO S.A.)	50%
ATHENS AIRPORT FUEL PIPELINE COMPANY S.A.	16%

\* Inactive.

MOTOR OIL Sales by Product Group (in thousand MT)



### MOTOR OIL Share in the Inland Market

	2006	2007	2008
Domestic market	21.6%	20.6%	27.4%
Bunkering market	29.0%	25.7%	21.3%
<b>INLAND MARKET TOTAL</b>	<b>23.4%</b>	<b>21.9%</b>	<b>25.9%</b>

2.4% of GDP  
The 2008 Consolidated Income

## The refinery

9.3 million tons. 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 in markets offering higher margins.

Exports to more than fifty countries were realized in year 2008.

As for the annual financial results (earnings before taxes), despite the particularly strong 9-months earnings, were negatively influenced during the last quarter of 2008 by the sudden adjustment of international oil prices, due to the global economic crisis and the consequent unfavourable conditions in the refinery sector.

**The company's refinery** is located in Aghioi Theodoroi, Corinth, approximately 70 km from the centre of Athens. Together with its auxiliary facilities and its marine and truck loading terminals, it is the largest private industrial complex in Greece and is considered as one of the most state-of-the-art refineries in Europe, with a Nelson Complexity Index of 11.95.

The refinery processes crude oil of various types, producing a wide range of oil products, complying with the most stringent international specifications, and supplies oil companies in Greece and customers abroad. Moreover, it is the only Greek refinery that produces base oils. The products produced at the refinery comply with the European Union specifications that became effective on January 1st, 2009, as well as the strictest relevant international specifications.

The Crude Oil (Atmospheric) Distillation unit produces liquefied petroleum gas, naphtha, jet fuel, diesel and fuel oil. Some of these products are subjected to secondary processing in view of improving their quality, such as the catalytic reforming of naphtha to produce gasoline and the hydrotreating of middle distillates to produce heating gasoil and low-sulphur diesel oil. Fuel oil, which accounts for the largest quantity but lowest value product of atmospheric distillation, is processed in conversion units (Thermal, Catalytic and Hydrocracking), which increase the production of high value white products, such as diesel and gasoline.

**411.4 million euros**  
The year 2008  
Social Product



## Added Value - Economic Benefits to Society

- ▶▶ It produces all types of fuel products and is one of the most complex and state-of-the-art refineries in Europe, with Hydrocracking and Catalytic Cracking units and with a Nelson Complexity Index of 11.95.
- ▶▶ It produces clean fuels (gasoline and diesel) in accordance with EU specifications for 2009.
- ▶▶ It has ISO 9001:2000 certification for quality, ISO 14001:2004 for the environment, OHSAS 18001:2007 for Health and Safety, while the refinery's Chemical Laboratory is also certified as per ISO 17025:2005.
- ▶▶ It is the only Greek refinery that produces base oils.
- ▶▶ It is energy-independent – installed power 68.3 MW.
- ▶▶ Its tanks have a capacity of 2,300,000 m<sup>3</sup>.
- ▶▶ It has modern facilities for tanker docking, suitable for tankers of up to 450,000 tons DWT.

natural resource. In year 2008, the refinery was connected to the national natural gas network, acquiring the capability of using natural gas for the production of hydrogen, and also as a fuel for its thermal and energy requirements. This capability adds flexibility in the selection of the best mix of raw materials and fuels, while also further improving the refinery's environmental performance.

Liquid waste is collected and treated at the Waste Water Treatment Plant and the Urban Liquid Waste Treatment Plant.

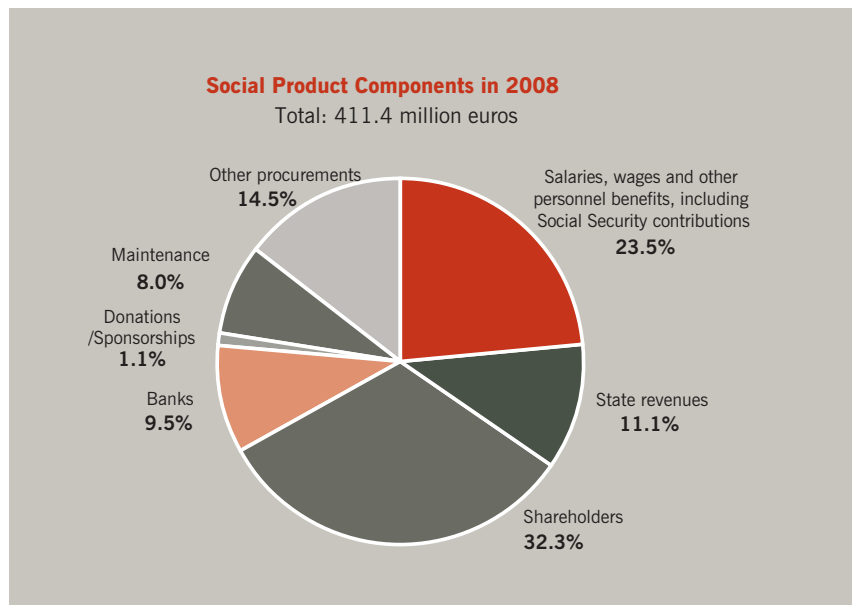
The Truck Loading Terminal which has been operative since year 2004 has significantly strengthened MOTOR OIL's competitive position on the market in Southern Greece. Additionally, in view of improving its share in Northern Greece and obtaining better access to the Balkan markets, the company obtained, in year 2007, a long-term lease for a Truck Loading Terminal in the area of the city of Kavala.

**We create value** for both our shareholders and other stakeholders, and for the society as a whole, by aiming at achieving sustainable development, and by faithfully applying the principles of Corporate Governance.

The scale of our operations, combined with our consistent focus on steady growth, result in a very significant contribution to the national economy. This contribution, which is directly associated with the efficiency and commercial success of our industrial operations, encompasses value and job creation, the contribution to social progress and cohesion while protecting the quality of the environment.

Our functioning in the particularly important energy sector reduces the country's dependence on foreign suppliers of oil products. On a first level, our interaction with stakeholders creates primary value for all those concerned. On a second level, it contributes to the creation of value for the national economy and society as a whole. This is achieved by creating

The operation of a refinery requires auxiliary supplies of electric power, water and steam. The refinery's electric energy requirements are fully covered by four gas turbines in the Power Co-generation Plant. Needs for high pressure steam are covered by four boilers, combined with the steam produced in some refinery units, while the seawater desalination units produce water of a suitable quality for supplying the boilers. By the addition, in 2007, of a new, reverse osmosis desalination unit the refinery's water requirements are fully covered, saving significant quantities of fresh water, the at risk highly valuable



jobs, continuously improving our production processes, as well as by investing in expanding or upgrading our own facilities.

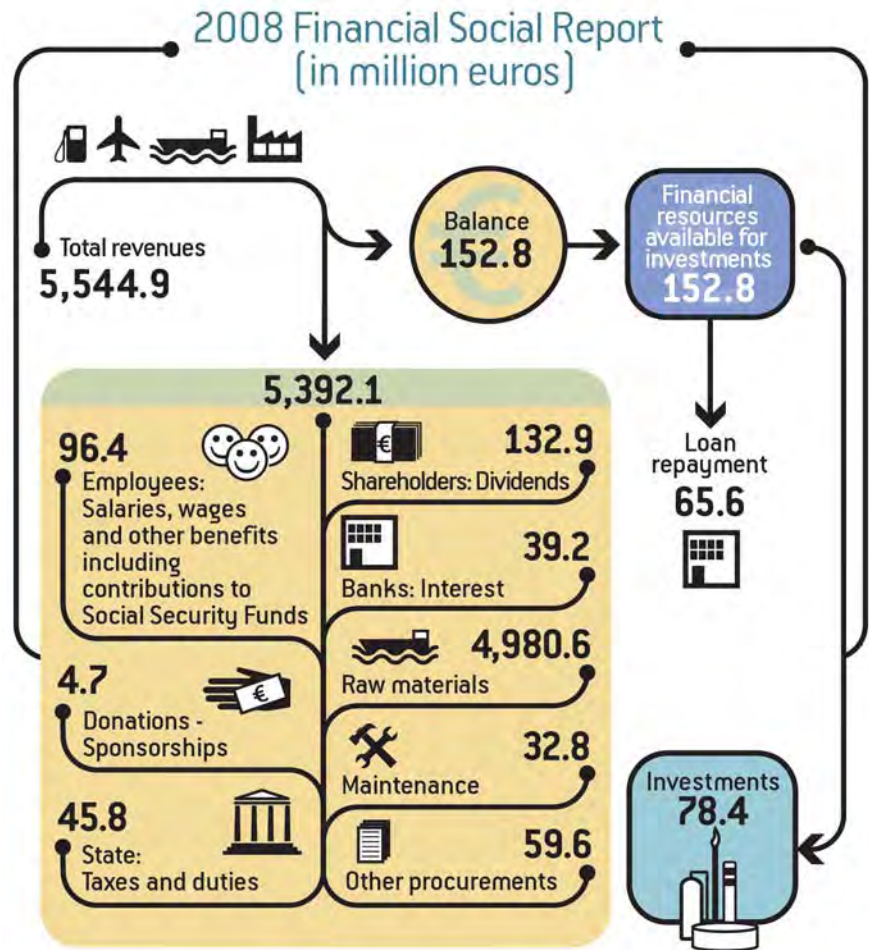
In 2008, the group's income totalled 5,544.9 million euros, equivalent to approximately 2.4% of Greece's Gross Domestic Product (GDP) that year. Of this, 4,980.6 million euros were allocated to the purchase of raw materials (crude oil) and fuel products, accounting for 89.8% of the group's total revenue, this high proportion being an inevitable consequence of the nature of the group's activities.

The extent and composition of our contribution to society is clearly determined by the magnitude and the constituents of the *social product* we produce.

The *social product* can be defined as that part of our income that is allocated to a selected group of stakeholders, that is: company employees, the state and social security funds, shareholders, banks, suppliers and society in general (donations and sponsorships).

It encompasses: payroll expenditure and various other employee benefits, over and above those required by legislation (such as additional health insurance for hospital treatment and additional pension allowances); social insurance contributions made to the various social security funds; corporate income taxes and duties paid to the state; donations and sponsorships; interest paid to credit institutions; expenses related to regular preventive maintenance programmes; payment of suppliers and dividends paid to shareholders.

On the basis of the above assumptions, the *social product* paid off to



stakeholders in 2008 was 411.4 million euros (compared with 409.1 million euros in 2007 and 380.0 million euros in 2006).

In the past three years, MOTOR OIL has contributed in excess of 167 million euros in revenue to the state budget, through taxes and other payments, and has paid its personnel, in net salaries and other benefits, over 208 million euros.

Furthermore, during the past three years, its contribution to public welfare initiatives amounts to 12.0 million euros (see chapter *Community Involvement*).

**726 million euros**  
The total investments over the last seven years

# Growth - Investments

**The core** of MOTOR OIL's business model comprises the responsible growth of the value of the company for the benefit of all stakeholders. This is achieved by means of a continual and duly targeted investment programme, and the application of effective organizational and management systems, which lead to high operational efficiency in all sectors, with consequent higher financial returns. At the same time, the company's Principles and Values impose the element of sustainability to this growth, which means that the pursuit of the best possible results goes hand in hand with respect for people and the environment, and by guaranteeing safe working conditions.

In this context, our strategic objective remains the consolidation of MOTOR OIL's position as a leading refining and fuel products marketing company in the broader Eastern Mediterranean region. In order to achieve this objective, we implement a consistent but flexible business strategy, which is focused on the following three key goals:

- **Maximising economic performance (i.e. the refinery profit margins) by means of:**
  - ▶▶ Expanding the refinery distillation capacity by 60,000 barrels per day (see below).
  - ▶▶ Applying new product specifications promptly and as cost-effectively as possible, by exploiting state-of-the-art technologies (see below).
  - ▶▶ Improving the energy-efficiency of the refinery, thus reducing its operating cost as well as CO<sub>2</sub> emissions (see chapter *Environment*).



- ▶▶ Full automation of refinery operations.
- ▶▶ Increasing the efficiency of production processes and the availability of process units.
- **Effective product marketing in a way that enables the attainment of optimal overall profitability from the three principal markets (domestic, bunkering and export), in order to achieve the best possible profitability, by means of:**
  - ▶▶ Maximising the domestic market share by improving the distribution network.
  - ▶▶ Developing export sales, particularly targeting high potential developing markets with significant profit margins.
  - ▶▶ Expanding and exploiting the company's storage facilities in view of improved response to demand for products and improved customer service offer.
- **Achievement of the highest possible level of Health and Safety, Environmental Protection and Quality, through technological, operational and organizational adaptations to the refinery, such as:**
  - ▶▶ Implementation of programmes concerning the Environment, Health and Safety.
  - ▶▶ Strengthening of preventive safety measures in process units through investments in automated prevention and protection systems that fulfil or exceed the specifications foreseen by Hellenic law and international regulations.
  - ▶▶ Upgrading the reliability of the process units' support systems, such as the power and steam Co-generation Plant and other critical utilities.
  - ▶▶ Implementation of personnel training programmes based on the use of the most advanced technology systems, such as simulators for training the operators of process units.

Achieving our strategic objectives – value creation through the production and marketing of oil products conforming to the most stringent international specifications, without compromising environmental protection, and the health and safety of our own employees and subcontractors – requires major capital investments. In the seven-year period 2002-2008, total capital investments reached 726 million euros (refer to chapter *Environment*). The major part of this investment was spent on the

construction of the Hydrocracker complex. The commissioning of this complex, in November 2005, allowed the production of clean fuels compliant not only with European Union specifications for 2005 but also with the stricter specifications applying from 2009. At the same time, it helped to increase the production of middle distillates of which there is a shortage in Greece and in Europe. The refinery has also gained more flexibility, allowing the maximization of either diesel or gasoline production, according to seasonal demand. Finally, commissioning of the Hydrocracker helped to improve the refinery's environmental performance even further by reducing emissions of certain pollutants.

The rest of the capital investment programme has been focused on the technical upgrading of the refinery, in terms of vertical integration, automation, energy sufficiency and environmental protection. As a result, it is now considered as one of the most technically advanced refineries in Europe and worldwide (on the basis of the Nelson Complexity Index achieved), with OHSAS 18001:2007, ISO 14001:2004 and ISO 9001:2000 certification for its health and safety, environmental and quality management systems, respectively.

Overall, the group's investments for year 2008 amounted to 78.4 million euros and concerned the following, amongst others:

- ▶▶ The largest-scale periodic maintenance programme in the company's history (31.1 million euros).
- ▶▶ Expenditure for the New Crude Distillation Unit, which entered the construction stage in year 2008 (26.6 million euros).
- ▶▶ Works to increase storage capacity (7.9 million euros), with the construction of tanks for LPG (5 tanks), fuels (6 tanks), lubricants (2 tanks) and desalinated water (1 tank).
- ▶▶ The project for upgrading the lubricants' production complex.
- ▶▶ The following projects, which were completed in year 2008:
  - Connection of the refinery to the national natural gas network.
  - Construction of the new machine shop and the new central warehouse.
  - Maintenance and refurbishment of all steam production boilers. Expenditure for the last of the 4 boilers for 2008 came to the amount of 1.4 million euros.
  - Refurbishment of the Truck Loading Terminal in Kavala, which the company has obtained through a long-term lease contract. Expenditure for 2008 amounted to 1.1 million euros.

The Company growth prospects for the 3-year period 2008-2010 are based on an investment plan which includes an increase in distillation capacity due to the

investment in the new Crude Oil Distillation unit, to be commissioned in 2010. The capital expenditure for the new 60,000 barrels/day Distillation unit will come to around 180 million euros. This investment is part of the refinery expansion programme, for which MOTOR OIL has already invested significant capital funds. With the new unit, the refinery's capacity will exceed 170,000 barrels/day or 9.0 million MT per annum. Additional benefits are expected from the substitution of imported Straight Run Fuel Oil by own-produced product, the possibility for further optimization of crude oil supplies, and the ability to process new types of crude oil.

Besides the construction of the new CDU, growth prospects include the current projects of upgrading the lubricant unit and expanding the storage capacity.

Finally, of the new projects to be commissioned in year 2009, the most important are: the construction of a new sulphur recovery unit and the upgrading of the wastewater treatment plant (environmental projects that will make a significant contribution to the improvement of the refinery's environmental performance), as well as projects for increasing the electricity generation capacity.

**488** million euros  
the environmental protection investments  
over the last seven years



# Health, Safety and Environmental Management - Quality

**Ensuring** Occupational Health and Safety and Environmental Protection is part of our corporate Principles and Values and constitutes a fundamental strategic aim. That is, we strive to carry out our industrial and commercial operations without compromising the health and safety of our employees and collaborators, 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 importance we attach to the management of Health, Safety and Environmental Protection, and our commitment to the continuous improvement in these areas, is set out in the relevant policy that governs the operation of the *Environmental Management System* (ISO 14001:2004 certified) and the *Health and Safety Management System* (OHSAS 18001:2007 certified since 2008), which lay down the detailed programmes and measurable targets to be achieved.



## Health, Safety and Environmental Protection Policy

MOTOR OIL operates with due respect for Health, Safety and the Environment.

*To that end, the company is committed to:*

- ▶▶ Setting goals 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, making efficient use of raw materials, energy and technology.
- ▶▶ Reporting its performance, good or bad, as a responsible corporate citizen.
- ▶▶ Maintaining emergency action plans which are regularly rehearsed.
- ▶▶ Operating a coherent *Integrated Management System* that takes account of Health and Safety, and Environmental Protection factors when plans are drawn up, or business and operational decisions are being taken.
- ▶▶ Offering advice, information and training, to its own employees and to subcontractors and others working on its premises, so as to ensure their vigilance and commitment to compliance with safe working practices.
- ▶▶ Actively and uncompromisingly complying with environmental operating standards that set limits on waste and polluting emissions.
- ▶▶ Co-operating with all stakeholders for developing and applying balanced Health, Safety and Environmental Protection programmes that take into account the needs of all parties involved.

*At MOTOR OIL, anything we plan, design or do is done safely, in an environmentally-friendly manner, and with financial efficiency.*

We are equally committed to quality management, which is an integral part of our strategy. Since the start of its operations, MOTOR OIL, with respect and responsibility towards its customers, has focused its efforts on supplying them with high-quality products.

MOTOR OIL's quality policy is summed up in two key principles, to which both management and employees are fully committed:

- ▶▶ *MOTOR OIL will produce and sell products that satisfy its customers,*

*always taking under consideration the stakeholders' interests.*

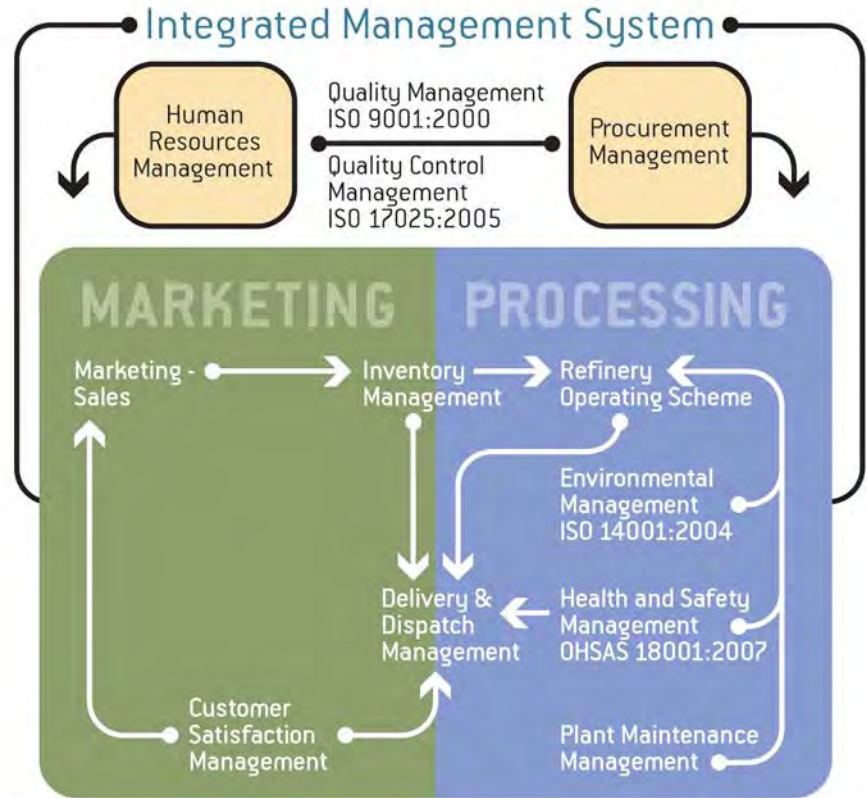
- ▶▶ *MOTOR OIL focuses on its customers, examines and evaluates their requirements and applies all necessary technologies and actions, in order to avoid compromises in quality matters and constantly strives to improve the effectiveness of its Quality Management System.*

The quality policy is applied through preventive management procedures, which allow potential problems to be pre-empted before they arise.

The customer-oriented *Integrated Management System* takes full account of quality issues in all operational and management processes, as shown in the diagram. The consolidation of the *Environmental Management System* and the *Health and Safety Management System*, into the *Integrated Management System* confers an overall coherence to the company's operational management and links these management systems with other related processes, helping to maximise their effectiveness.

The company's *Integrated Management System*, through which its quality policy is implemented, is certified according to ISO 9001:2000, by Bureau Veritas (BV). In year 2008, the certification's scope was extended to include activities relating to biofuels (production, distribution and trading).

The *Quality Control Management* process meets the requirements of the ISO 17025:2005 standard and the Hellenic Accreditation System (ESYD) has certified the refinery's Chemical Laboratory as fit for purpose and able to carry out testing in accordance with the requirements of the standard, and issues Quality Certificates endorsed by ESYD for practically all the company's products. This certification is an additional competitive advantage, that is the quality of our products is now guaranteed.



## Corporate Governance

**The supreme administrative body** of the company is the Board of Directors, which is elected by the Annual Ordinary General Meeting of Shareholders and operates according to the provisions of law 3016/2002 on Corporate Governance and the company's Articles of Association. Information about the board's structure is available in the company's website.

The company's management and control is based on the modern principles of corporate governance, as prescribed by legislation and the relevant regulations, and by other international codes of best practice and auditing standards. Its strategy and daily operations are deployed within the framework of corporate governance principles, which govern issues such as: the structure of its Board of Directors; its compliance with legal and regulatory provisions; the respect for, and protection of, shareholders' interests; the reliability of information disseminated; and the systematic assessment and management of corporate risks.

Two three-member committees operate within the framework of the Board of Directors: the *Internal Audit Committee* and the *Compensation Committee*.

The *Internal Audit Department* reports directly to the Board of Directors, and is supervised by the Internal 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 at safeguarding issues related to the efficient management of business risks. The company's financial results are also audited by independent chartered auditors, in view of complying with its legally instituted obligations.

## Customer Service

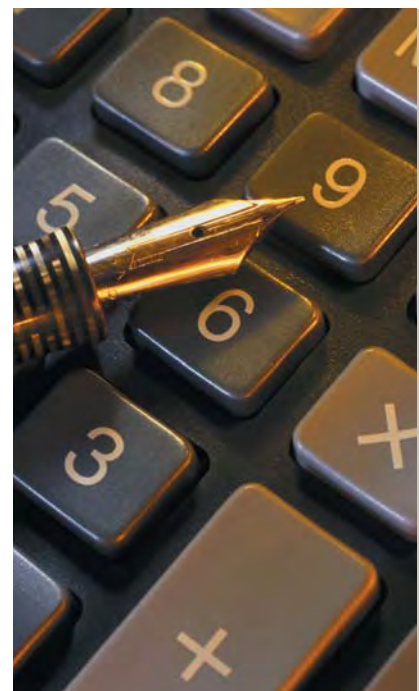
**MOTOR OIL** aims to being as customer-focused as possible and is adopting a systematic approach to satisfying customer requirements. Besides its direct contact with customers, it conducts a quantitative and qualitative customer satisfaction survey approximately every two years, covering the full spectrum of its clientele. This is aimed at establishing an objective view of their level of satisfaction, learning about their perception of the quality of our services, and obtaining feedback about their overall impression of MOTOR OIL's corporate image. Within the framework of the survey, customers are asked to respond to 7 groups of questions covering the following issues: determination of the customer's relationship with the company, satisfaction from the quality of the company's products, speed of order processing, issuance of bills of loading and invoices, loadings on ships or trucks, handling of complaints, and general evaluation of the company's image by the customer.

The basic objectives of this survey are:

- ▶▶ Evaluating customer satisfaction.
- ▶▶ Evaluating the perceived quality of the whole range of MOTOR OIL's services.
- ▶▶ Determining aspects of MOTOR OIL's current products, services and offers that need to be improved.
- ▶▶ Determining the criteria used by those selecting MOTOR OIL as a supplier, and assessing the impression they have of MOTOR OIL's image as a supplier or partner.
- ▶▶ Assessing MOTOR OIL's overall corporate image.

The results of the survey are analysed and evaluated with a view to building on the company's strengths, detecting weaknesses and taking action to correct them, thus demonstrating the customer-focused nature of the company's strategy.

Such surveys were carried out in years 2003, 2004 and 2007. The processing of responses and recommendations from these surveys led to a series of interventions that allowed for a reduction in oral or written complaints from customers, despite the fact that the increase in sales volumes between 2003 and 2008 exceeds 35%.



# Communication with stakeholders

**MOTOR OIL's stakeholders**, as well as their interaction with the company, are schematically shown in the diagram. The communication and cooperation we have developed with stakeholders expresses the importance we attach to this issue,

and our desire to discuss and take into consideration their needs, so that any social and environmental impacts may be confronted with mutually acceptable solutions, as much as possible.

▶▶ **Shareholders:** At the end of 2008, 61.5% of the company's shares belonged to its founding family (Vardinoyannis family), while the remaining 38.5% belonged to investors. Communication with shareholders is implemented in various ways: through the company's website, with press releases and announcements issued by the Investors' Relations Section, through the Annual Financial Report and the Environmental and Social Report, through the operation of an Investors' Relations Section, and with regular participation in roadshows.

▶▶ **Employees:** Various communication methods are used, such as corporate announcements, the intranet and task forces.

▶▶ **Society** (with emphasis on local communities affected by the company's operation): Communication takes place mainly through Local Authority bodies, as well as other authorities, such as private associations and organizations (see chapter Community Involvement and p. 69).

Stakeholder "Society" also includes:

- **Non-Governmental Organizations** and other social organizations, as well as **Academic and Scientific Bodies**. Chapter *Community Involvement* contains detailed reference to collaborations developed with these stakeholders in year 2008.
- **Business Organizations:** MOTOR OIL is a member of the Hellenic Global Compact Network, the



## Commitment to Corporate Social Responsibility and Sustainable Development

Hellenic Network for Corporate Social Responsibility, the Hellenic Federation of Enterprises (SEV), the Athens Chamber of Commerce and Industry (EBEA), and other regional Chambers, CONCAWE, MOIG (Mediterranean Oil Industry Group, and OCIMF (Oil Companies International Marine Forum), see p. 70.

- ▶▶ **Customers:** Due to the nature of its business, MOTOR OIL has a relatively small number of customers. Communication with customers is mainly the task of the Marketing Division, which involves other company departments if necessary. Information about products can be found on the company's website, as well as in the Material Safety Data Sheets.
- ▶▶ **Associates and suppliers:** These are providers of products and contractor services at the refinery, where there is a structured communication programme for providing them with suitable information on matters of health, safety and environmental protection.
- ▶▶ **Public Authorities:** There is open, honest and bilateral communication and cooperation with the relevant Public Authorities, for the provision of information necessary to each party, as well as for documented discussion on any issues arising.

**MOTOR OIL operates** in the oil sector, where the principles of Corporate Social Responsibility and sustainable development need to be particularly applied and respected, given that crude oil reserves are finite, and that their exploitation – from extraction and transportation, to refining and the use of refined products – has environmental consequences that need to be effectively dealt with, using the latest available technology.

Corporate Social Responsibility (CSR) indicates a balanced approach to the economic, social and environmental impact of business operations that is consistent with the "society – environment – economy" triangle. This is widely and universally accepted by responsible members of the global business community and underpins the main aspiration of corporations in terms of creating value for their shareholders, while satisfying customers, ensuring employee welfare, protecting the environment and contributing to society. This encompasses the notion of sustainable development, the kind of development that aims at meeting current needs without putting at stake the availability of resources for future generations.

We fully acknowledge the importance of the above-mentioned issues and we express our social responsibility by recognising the extent of our obligations in this area, as expressed by our commitment to pursue our business activities with due respect for people, the environment and society. A natural consequence of this commitment is the adoption of a holistic approach to implementing Corporate Social Responsibility principles, by considering the protection of the

environment, and fulfilling our obligations to all stakeholders (our employees, shareholders, customers, suppliers and society as a whole).

MOTOR OIL is a founding member of the Hellenic Network for Corporate Social Responsibility and the Hellenic Global Compact Network, since it has ratified in 2008 and participates in the UN Initiative for the Global Compact, the purpose of which is to guide enterprises towards sustainable development, through volunteer and responsible behaviour and actions. Therefore, the company is committed to complying fully with the ten principles of the Global Compact with respect to:

- ▶▶ human rights,
- ▶▶ labour relations,
- ▶▶ the environment, and
- ▶▶ transparency (anti-corruption).

Moreover, MOTOR OIL as a responsible public company, listed on the Athens Stock Exchange, ensures that its activity complies with the current code of business ethics and meets contemporary demands for more transparency, and reliable and timely dissemination of information to all stakeholders.

MOTOR OIL has adopted a Corporate Social Responsibility model that incorporates the four sectors of action included in Corporate Social Responsibility programmes, as they moreover arise from the UN Global Compact and the internationally accepted Global Reporting Initiative (GRI) standard.

Each one of these sectors has its respective stakeholders. The diagram

indicates these sectors, the respective stakeholders and the current issues of interest ("effects, challenges and opportunities" according to GRI terminology) on which MOTOR OIL's activities are focused.

**MOTOR OIL:**

**as a responsible employer,**

cares about the career and personal development of its employees, invests in their training, provides a creative and supportive workplace environment characterised by good team-work and mutual respect, and conducive to initiative and innovation; where Health and Safety constitute major priorities that are assured through state-of-the-art infrastructure and modern management practices;

**having a responsible attitude towards the environment,**

tries to ensure that its activities have the minimum possible impact on the environment, by having in place an effective Environmental Management System, using Best Available Techniques and other advanced systems for environmental protection and efficient energy saving and management;

**as a responsible member of society,**

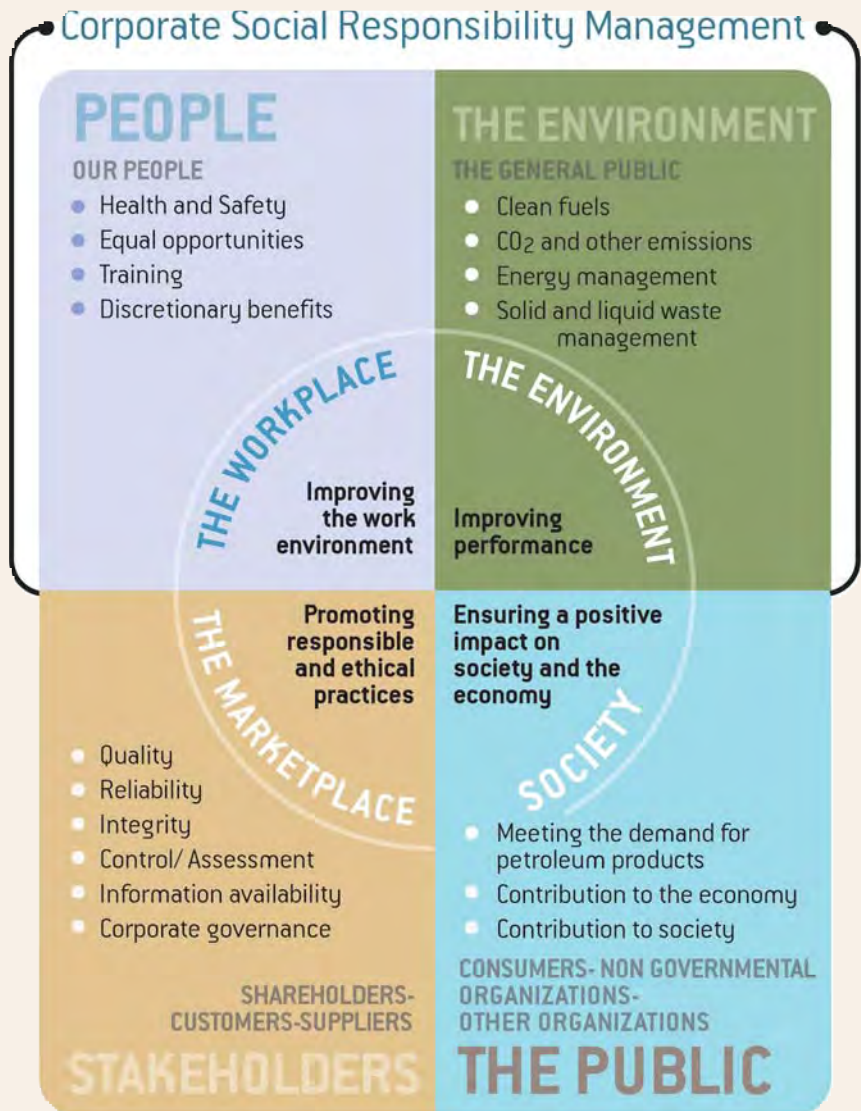
seeks fruitful social dialogue, in a climate of mutual trust and respect, with the local communities in which it chiefly operates; it supports these communities, by participating in

programs that enhance their economic, social and cultural life, and becomes involved in similar activities that benefit society as a whole;

**having a responsible position on the market,**

respects market rules and produces top quality products; it focuses on relations of trust with its customers, suppliers

and partners, and strives – through the systematic and consistent achievement of its business targets – to obtain the best possible return for its shareholders without compromising its corporate social responsibility and sustainable development standards.



## Evaluation and management of Corporate Social Responsibility issues

The evaluation of material issues and challenges relating to sustainable development and concerning MOTOR OIL is implemented by taking the following into consideration:

- ▶▶ The company's Principles and Values, Vision and Mission.
- ▶▶ The company's strategy.
- ▶▶ The corporate governance principles applied by the company.
- ▶▶ The company's policies (Health, Safety and Environment Policy, Quality Policy, Human Resources Management Policies).
- ▶▶ The views of stakeholders and especially those of local communities.

The efficient management and implementation of programmes and actions arising from the above evaluation:

- ▶▶ Follows the procedures foreseen by the Annual Operating Plans and in the Five-year Business Plans, where the programmes and actions are recorded as explicit short- and long-term goals of the company's overall strategy, on the basis of which we operate and we are assessed.
- ▶▶ Is implemented and monitored by the certified Management Systems for Quality (ISO 9001:2000), the Environment (ISO 14001:2004) and Health and Safety (OHSAS 18001:2007) on the basis of specific procedures and working guidelines.



## The MOTOR OIL Environmental and Social Report

MOTOR OIL's annual *Environmental Social and Report*, the present edition of which is the seventh in a consecutive series, is an independent source of information presenting the systematic and strategic confrontation of the challenges arising from the pursuit of sustainable development through the application of the principles of Corporate Social Responsibility. *The Environmental Social and Report* records, in detail, all the relevant issues managed by the company and relating to the fields of Corporate Governance, Communication with stakeholders, Human Resources, Health and Safety, the Environment and Community Involvement.

The *Environmental and Social Report* is an appropriate demonstration of MOTOR OIL's commitment to producing value while respecting people, the environment and society, and reporting on its actions and performance in the above fields.

## Awards

In year 2008, MOTOR OIL received the «*ECOPOLIS 2008 – Environmental Investment*» award from the Environmental Non-Governmental Organization Ecocity (see p. 56).

It was also awarded by the Municipality of Penteli for the support it provided to the town's Civil Protection group in 2007, for the purchase of a fire engine.

### 2008

- «*ECOPOLIS 2008 – Environmental Investment*» Award (see p. 56).

### 2007

- «*ECOPOLIS 2007 – Environmental Investment*» Award.
- «*Entrepreneurship Award 2007*» from the Corinth Chamber of Commerce.
- The MONEY Business Award in the category «*High Investments*».

### 2006

- The LEADERS OF THE YEAR Award to MOTOR OIL's Chairman and Managing Director, Mr. Vardis Vardinoyannis, for «*Consistent Business Achievements*».
- The MONEY Business Award in the category «*Investor Relations*».

### 2005

- The MONEY Business Award in the category «*Best Company in the FTSE/ATHEX-20 Index*».
- The MONEY Business Award in the category «*High Investments*».

### 2004

- The MONEY Business Award in the category «*High Investments*».
- The MONEY Business Award in the category «*Investor Relations*».

### 2003

- The MONEY Business Award in the category «*High Investments*».

# AVIN OIL



**AVIN OIL** was established in Athens in 1977. It commenced its commercial activity with the distribution of lubricants, produced by MOTOR OIL, throughout Greece. The first petrol stations bearing the AVIN OIL trademark were established in Attica, in October 1982. The first AVIN OIL petrol stations in the Peloponnese were established in 1985. AVIN OIL's network began to expand rapidly in 1987, with the commissioning of its owned Truck Loading Terminal in Aghioi Theodoroi, Corinth, which is supplied by the adjacent MOTOR OIL refinery.

At the same time, the AVIN OIL network continued to expand throughout Southern Greece, and particularly in the areas of Sterea, Evia, as well as in Western Greece and most of the Ionian Islands. The first AVIN OIL petrol stations in Northern Greece opened in 1984, and specifically in the prefectures of Thessaloniki and Serres. The growth of its network in Northern Greece was and continues to follow a steep path.

Today, with more than 560 petrol stations throughout Greece and with annual sales of around 1,200,000 metric tons in year 2008, AVIN OIL is 4th in the Greek market, among more than 20 retail companies. Its turnover

for 2008 was 1,019.0 million euros, with a net profit of 2.5 million euros before taxes.

AVIN OIL's only shareholder is MOTOR OIL.

AVIN OIL is marketing high quality fuels to private and professional car owners, to aviation and the industry, asphalt, Liquefied Petroleum Gas and lubricants, which comply with the international API, SAE, CCMC, ACEA technical specifications as well as the specifications of major car manufacturers.

Since year 2008, AVIN OIL implemented an EN ISO 9001:2000 certified Quality Management System for the branches of Fuels and Lubricants Storage, Distribution and Trading and Retail Network Management .

AVIN OIL procures its products mainly from MOTOR OIL, as well as from the other Greek refineries, and its comparative advantage consists in the sale of high specification products at competitive prices.

AVIN OIL sells its fuels in the Greek market, mainly through its owned Storage and Truck Loading Terminal in Aghioi Theodoroi, Corinth. The

facility in Aghioi Theodoroi was inaugurated in 1987 and constitutes a sophisticated loading terminal, equipped with comprehensive safety and environmental protection systems. Our partners are also served by other 3rd party terminals in other parts of Greece (Attica, Thessaloniki, Kavala, etc.) with which AVIN OIL has throughput agreements in place. The company exports fuels and lubricants to neighbouring countries (Albania, Bulgaria, FYROM, Romania and Cyprus).

AVIN OIL has constructed and operates the Megara Twin Petrol Station and was recently awarded the contract for the construction and operation of the Twin Petrol Stations of Platanos on Egnatia highway, and of Leptokarya on the Lamia-Thessaloniki National Road.

AVIN OIL holds a 14% stake in the Olympic Fuel Company S.A., which has built and solely operates the Aviation Fuel Supply System (Hydrant System) at the "El. Venizelos" Athens International Airport. Also, the company has a stake, together with Chevron, in the Hellenic Aviation Fuel Company S.A. (HAFCO S.A.), which currently operates at four Greek airports (Athens, Thessaloniki, Kavala and Zante).





# Human Resources



**We ensure a workplace of trust, team spirit and respect for people**

We recognize the fact that our value as a company is created by our human resources. Realising our vision requires the active involvement of all our people. With their participation we can achieve our corporate objectives, implement our growth business plans and safeguard our long-term competitiveness. Our business operations, the quality of our products and the service to our customers, are fully dependent on the performance of our staff, which we strive to reinforce by providing excellent work conditions in a workplace of respect for people and their needs, and by placing particular emphasis on the efficient use, proper management and development of our human resources.

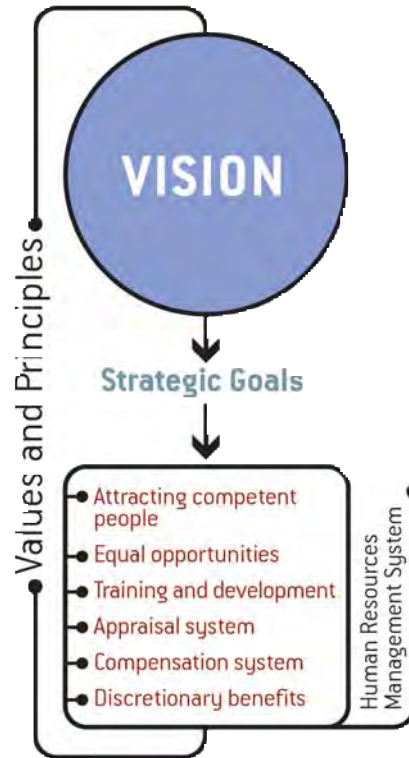
In year 2008, we refreshed our human resources with new hirings, we applied an extended educational programme for staff training and development, and we continued to provide the structured welfare plan of discretionary benefits.

# Human Resources Management System

**The respect** for our employees and their needs is one of our corporate principles, which leads us to consider the care for our people and their families as one of our primary entrepreneurial and social obligations. This concern is manifested in our continuous effort to develop and motivate our employees, to support and encourage them and offer them fairness and equality of opportunity; to create a working environment in which they can achieve their full potential through professional and personal development. This same philosophy underpins our policies and programmes that aim at fostering a coherent corporate culture, ensuring employee job satisfaction, providing professional development opportunities and achieving a healthy balance between work and family life.

This approach, which amongst others is well suited to our objective of attracting young and talented employees, is implemented through the application of a modern and integrated *Human Resources Management System*. The system is based on our values and principles and is defined by our vision and strategic objectives.

Its main components include attracting competent people, providing equal opportunities, personnel training and development, as well as the appraisal, the compensation and discretionary benefits systems, while a grid of programmes and policies supports the achievement of the system's objectives in practice.



## Objectives of the Human Resources Management System

- ▶▶ Compliance with legislation in force and with universally established principles of human and labour rights.
- ▶▶ Fairness and meritocracy in all aspects of employee relations.
- ▶▶ Ensuring equal opportunities for employees and offering them possibilities for professional and personal development.
- ▶▶ Accountability of employees for the achievement of the company's business goals.
- ▶▶ Fair and competitive remuneration system linked to employees' performance and expectations, and in line with prevailing market conditions.
- ▶▶ Providing allowances exceeding the legally anticipated and those provided for by collective labour agreements.
- ▶▶ Providing continuous education and training for human resources development, to ensure that the necessary skills are acquired and that work is being carried out effectively and safely.
- ▶▶ Extending the scope of welfare provisions to cover employees' families and making efforts to improve their work/life balance.
- ▶▶ Creation of strong bonds between employees and the organisation, through candid, reciprocal and open communication.
- ▶▶ Enhancement of corporate culture and corporate values.

# Equal Opportunities and Human Rights

**Within the framework of applying** our corporate Principles and our commitment to Corporate Social Responsibility, we offer a workplace without exclusions, which favours diversity and provides equal opportunities to all.

All aspects of human resources management are pursued with transparency, fairness and on the basis of meritocracy. Recruitment, transfers, promotions, remunerations and benefits, education and training, etc. are governed by the principles of our equal opportunities policy, the avoidance of any form of discrimination and the respect for employees' dignity. In applying the equal opportunities policy we try to ensure that:

- ▶▶ The composition of management reflects the composition of the workforce as a whole.
- ▶▶ Education and training programmes are available to all personnel, in accordance with business needs.

▶▶ Equal remuneration is provided to men and women.

▶▶ The various benefits and welfare provisions provide additional support for employees and their families, while aiming at the maintenance of a healthy balance between their professional and personal lives.

Moreover, we acknowledge the importance of the role played by businesses in the collective effort to establish a society without exclusions, where disadvantaged people are protected not only by welfare provisions, but mainly by the efforts that are made for their societal inclusion in a productive manner. Thus, we offer jobs to disabled people, providing them with equal opportunities with respect to employment, education and professional development. In year 2008 we employed 20 people belonging to this category.

As for the protection of labour rights and of the fundamental human rights, our respect for these is a natural consequence of our corporate Principles and corporate culture, and is reflected in our commitments, policies and practices. Besides, MOTOR OIL's activities take place exclusively on Greek territory, the legislative framework of which is harmonized with the requirements of the 1998 Declaration of the International Labour Organization (ILO) on Fundamental Principles and Rights at Work, with reference to the Greek Constitution and labour law. The eight fundamental ILO conventions have been ratified by the Greek Parliament and constitute Greek law. Included in these are the two conventions concerning the protection of freedom of association and the right to collective bargaining, adopted in 1948 and 1949 respectively and ratified by the Greek Parliament in 1962. Finally, it is a fact that there has been no case of compulsory or child labour in the operations of the company, nor does the company tolerate such violation.

**1,485** people were employed by Motor Oil and Avin Oil in year 2008

**97.8%** of employees in 2008 were on open-ended contracts



## Employment

**In year 2008**, the human resources of MOTOR OIL and AVIN OIL amounted to an average of 1,485 people, of which 1,294 were men and 191 were women. In relation to year 2007, human resources presented a net increase of 15 people.

Besides employees directly employed by the two companies, it should be noted that a significant number of people are indirectly employed through sub-contractors.

Due to the continuous growth of the group, personnel levels have been steadily increasing since year 2000, in spite of investments aimed at increasing the level of refinery automation and of efforts made to simplify tasks. The significant rise in the total number employed since 2003, reflects increasing numbers required at the refinery, in order to complete and operate the expanded and upgraded facilities for the production of clean fuels conforming to the relevant 2005 and 2009 EU specifications. This investment programme was completed in 2005

when the new units were commissioned. It also reflects the need for timely and sufficient training of new employees hired to cover the vacancies created by the relatively high number of retirements in the period 2005 – 2007.

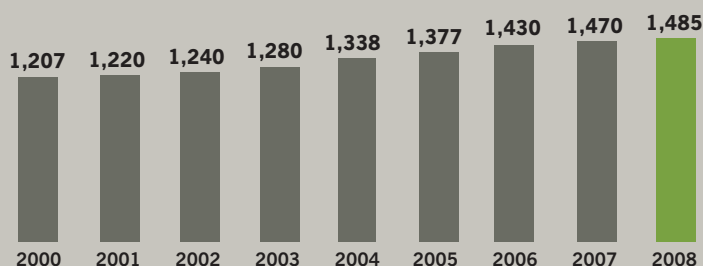
In 2008, 1,090 out of MOTOR OIL's 1,278 employees were based at its main site (the refinery in Aghioi Theodoroi, Corinth). The remaining 188 were based at the company's head office in Maroussi. About half of the refinery personnel live in the broader area of Corinth, where MOTOR OIL is the biggest employer. AVIN OIL, by comparison, employed 207 people in year 2008.

## Labour Relations

**Labour relations** are at a particularly good level. We not only comply with legal requirements, relating to worker participation and the protection of human rights, but also aim to cultivate mutual trust and co-operation. We operate a progressive system of human resources management policies, which incorporates clarity and fairness in matters of recruitment, transfers, promotion, remuneration, education and training, benefits, holidays and other types of leave. A reflection of the harmonious state of industrial relations is the fact that there have been no strikes in recent years. At MOTOR OIL, terms and conditions of employment are regulated by a company collective labour agreement, which has been in place since September 1974 and is approved by the Ministry of Labour.

Employees are free to participate in trade unions and professional associations without any limitation. Refinery employees have their own union which has been a signatory to a collective labour agreement with the Federation of Greek Industries since 1986. This agreement, which lays down the terms of employment and pay levels at the refinery, is supplemented by an annual local agreement between the company and the union. We believe that cooperation with the employee's union is very important, and therefore hold regular meetings with its representatives, with the common aim of developing bilateral relations, preserving labour peace and improving the overall working environment.

**Direct Employment** (annual averages) 2000 - 2008



# Personnel Composition

## Gender profile

We respect diversity and we try to create an inclusive work environment where all employees have equal opportunities, and we do not discriminate on grounds of gender. However, due to the nature of most refinery jobs, the ratio of women to men is relatively low. Thus, in 2008, 13% of all employees were female, rising to 34% for head office personnel. Among management, women made up 11% of the total, a satisfactory reflection of the general percentage of women in overall staff numbers, while in other office and technical jobs the percentage was 13%.

## Educational level

Considerable importance is attached to the educational level of our workforce, and our aim is to attract, develop and retain suitable and competent employees. 25% of the workforce are university or college (TEI) graduates. In order to develop the skills of personnel and maintain a high-output culture in the workplace, we implement various educational, vocational training and personal development programmes, and the personnel are encouraged to follow external courses

leading to the award of recognized diplomas.

## Personnel categories

In 2008, across the group, management grades made up 12% of total personnel, while technicians and administrative personnel accounted for 88% of the total.

Each employee has the opportunity to ascend management hierarchy, depending of course on their qualifications, performance and skills, as the company aims at filling vacant managerial posts from within the company, wherever and whenever this is possible.

combined workforce has considerable experience in the group, as their service is longer than 10 years, while 37.1% have less than 5 years' service. These figures suggest a healthy balance in the service profile of our personnel: between experienced, older employees and those, more recently recruited, who bring dynamism to the workforce as a whole.

Long-term employment at MOTOR OIL is rewarded with additional compensation benefits and, at the refinery, with honouring gifts for employees completing 15 and 20 years of service.

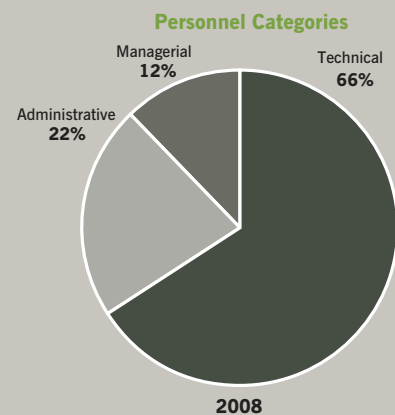
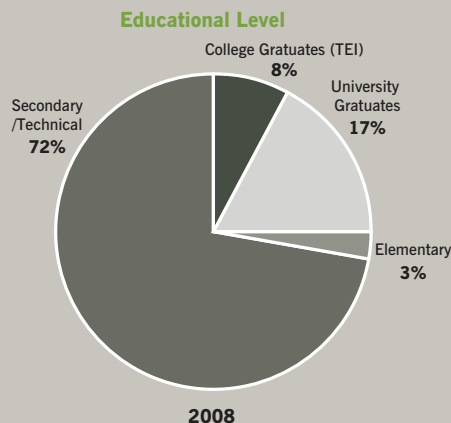
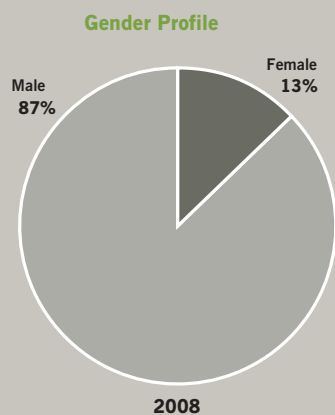
## Average age

Over the last few years, the average age of the group's employees remains around 41.5 years, coming to 41.7 years in 2008, up from 41.4 years in 2007 and from 41.6 in 2006, and down from 42.3 in 2005. 62% of the employees were aged less than 45.

## Length of service and mobility

As far as length of service is concerned, the average was 14.6 years in 2008, reflecting the low level of personnel turnover. Some 52.6% of the group's

A large percentage of employees (32.6%) falls in the 1 to 5 years range of service length. This figure is due to the increased number of recruitments since 2003, mainly to confront the additional personnel requirements caused by the operation of the new units at the refinery, and the need to cover vacancies arising from the relatively high number of retirements due to the change to the retirement conditions foreseen by law, whereupon a number of employees chose to retire a bit earlier under the provisions of the previous retirement regime.



## Compensation and Benefits

### Personnel Mobility

	2006	2007	2008
<b>Hirings</b>			
New hirings	123	139	57
<b>Resignations by reason</b>			
Retirement	56	44	37
Resignation	12	20	11
Other	9	8	11
<b>Total</b>	<b>77</b>	<b>72</b>	<b>59</b>
<b>Personnel mobility*</b>	<b>5.4%</b>	<b>4.9%</b>	<b>4.0%</b>

$$\text{*Personnel Mobility} = \frac{\text{Number of persons leaving}}{\text{Average personnel number}} \times 100$$

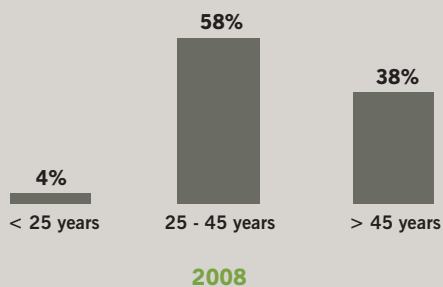
In 2008, we recruited 57 new employees, while 59 left for various reasons. The number of recruitments in 2006 and 2007 was particularly high, for the reason mentioned above, i.e. in view of preparing to cover the needs arising from the expected increased retirements.

The remarkably low level of personnel turnover (averaging 4.0% across the workforce in 2008) reflects the establishment of mutual trust between the workforce and the company, the professional satisfaction of employees, and the development of harmonious, long-term labour relationships.

### One of MOTOR OIL's main objectives

is to offer its employees competitive and high level salaries, so as to reward their contribution to the company and maintain high employee satisfaction levels. Our approach to pay policy is to set, manage and review salary levels in a consistent, transparent and objective way, in line with current sector-specific and national practices. Negotiations for the drafting of collective agreements relating to salary readjustments are based on the industry practices applied at national level. Moreover, the structure of compensation ensures equal pay treatment for men and women for the same job, and rules out discriminations of any other kind.

#### Average Age



#### Length of service



### The Basic Principles of our Compensation System

- » Competitive remuneration compared with market rates.
- » A fair and reliable salary review process.
- » Consistency and meritocracy in pay policy.

The remuneration paid is performance-based; performance is annually appraised for each employee on the basis of structured procedures. These appraisals, besides evaluating performance, also act as a tool for motivating employees, providing incentives and determining education and training requirements. The factors determining salary levels are mainly the grade scale, the responsibility position held, the educational level and seniority (length of service).

Total personnel expenditure during 2008 amounted to 88.5 million euros. This includes the compensation cost of regular and overtime work, various mandatory employer contributions to Social Security Funds and other additional employee allowances not required by legislation.

The additional non-statutory wage allowances, which constitute a discretionary benefit paid to employees, are meant to significantly enhance their income and reward their performance and contribution to the company's results, as well as to foster their long-term stay with the company.

### Principal Supplementary Wage Allowances

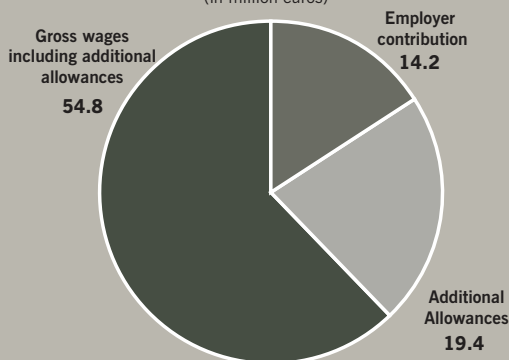
- » *A long-service supplement*, which is a percentage of the base salary, is first paid after three years' service and then increased every three years of service, up to a maximum of 57% of base salary.
- » *A complementary long-service supplement*, equivalent to a double annual leave allowance, is paid to those who complete five years of employment, and a double Easter bonus is paid to those who complete 10 years of employment. This means that an employee with 10 years of employment receives the equivalent of 15 months pay each year.
- » *A continuous attendance allowance* is paid to refinery employees who achieve exceptionally low levels of absenteeism.
- » *An one-off payment* to refinery employees on completing 25 years of service, equivalent to one month's base salary and a similar one-off payment after completion of 30 years of service, equivalent to one month's gross salary.
- » *A Marriage allowance*.

## 319 Recruitments in the period 2006-2008

## 4% The very low personnel mobility in 2008

### Compensation Cost Breakdown 2008

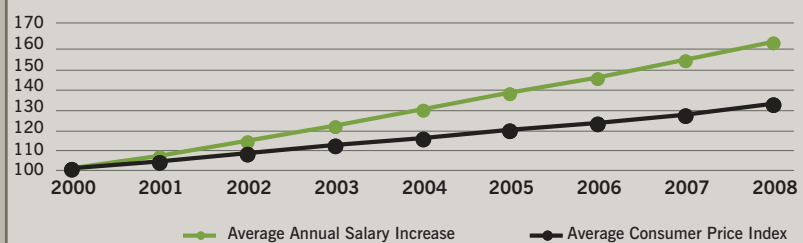
(in million euros)



Annual Total: 88.5 millions euros

### Average Annual Salary Increase vs the Average Consumer Price Index

(Base Year 2000 = 100)



The average annual salary increments, as a rule, significantly exceed the average Consumer Price Index.

## Discretionary Non-Wage Benefits

**Besides the basic pay and benefits package,** we have developed a wide range of complementary discretionary non-wage and insurance benefits for our employees, as well as for their family dependents. The MOTOR OIL discretionary benefits plan has been established for many years, while its current structure is in place since 2002.

These discretionary provisions aim at providing for the welfare and security of employees over and above what the law requires, at their personal development, at the further strengthening of their ties with the company for the purpose of developing the corporate culture, at cultivating co-operation and team spirit, and at

helping towards achieving a healthy work/life balance.

The cost of the discretionary non-wage benefits in year 2008 amounted to 7.4 million euros, significantly lower than

the 15.2 million euros in 2007, due to the imponderable factor of extraordinary payments for the pension plan; such extraordinary payment was made in 2007 to cover differences from previous years.

### Schemes covering retirement benefits, life insurance and hospital treatment

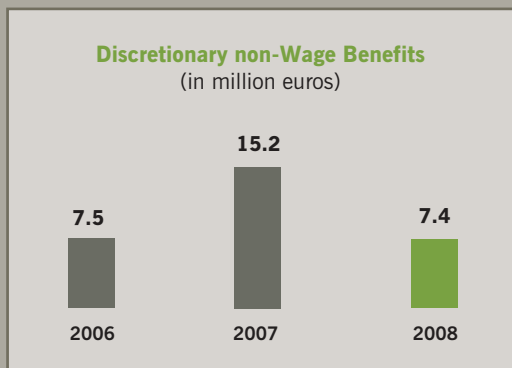
We try to support our personnel and their families with improved and flexible benefits in line with contemporary trends and requirements, and aim at providing protection and financial assistance in cases of unforeseeable medical emergencies, which can incur hard to bear costs. In this context, since 2002, we have operated a group health insurance scheme covering employees and their dependant family members.

This health insurance scheme provides compensation in the following cases:

- ▶▶ Loss of life due to illness or accident.
- ▶▶ Permanent total disability due to illness or accident.
- ▶▶ Permanent partial disability due to accident.
- ▶▶ Loss of income due to illness or accident.
- ▶▶ Hospital and out-patient care.
- ▶▶ Maternity allowance.

Employees also benefit from a private pension scheme which pays out a lump sum to those retiring at normal retirement age or earlier due to disability.

The entire cost of both these schemes is covered by the Group.





## Discretionary non-Wage Benefits

### Personal development and welfare

- ▶▶ Pension plan (see p. 30).
- ▶▶ Study subsidies (see p. 34).
- ▶▶ Provision of financial facilities to cover emergencies.

### Corporate culture and team spirit

- ▶▶ Organization of excursions and dinner events for employees and their families.
- ▶▶ Financial support for the employees' football teams to compete in Corporate Games.
- ▶▶ Organization of Christmas parties for employees' children. This event is a major company institution, and is very popular among employees.
- ▶▶ Organization of New Year's celebrations with lotteries and gifts.
- ▶▶ For the refinery in particular, an "annual employee ball" is organized; it is a big corporate celebration of fraternisation and entertainment, away from the workplace formalities.
- ▶▶ Provision of "name-day" gifts.
- ▶▶ Long-service gifts – at 15 and 20 years – for workers at the refinery (54 gifts in 2008).

### Health

- ▶▶ Hospital treatment scheme for employees and their dependent family members (see p. 30).
- ▶▶ Private life insurance scheme.
- ▶▶ Full compensation for the first three days of illness (consecutive or otherwise) within the year.
- ▶▶ Availability of three occupational physicians to deal with both occupational and personal health concerns.

### Family

- ▶▶ Implementation of more favourable maternity policies – compared with the law – for working mothers.
- ▶▶ Wedding present allowances (26 allowances in 2008).
- ▶▶ Paid leave arrangements on special occasions (e.g. covering bereavement, in other serious situations, to parents for taking care of school childcare issues, etc.).
- ▶▶ For refinery employees:
  - performance awards for secondary school children (65 awards in 2008).
  - award of educational grants for university students (113 grants in 2008).
  - full coverage of the children's participation cost in summer camps (47 cases in 2008).
  - award of a day care nursery allowance (46 allowances in 2008).
  - award of financial assistance for the beginning of the school year (853 cases in 2008).

### Facilities

- ▶▶ Operation of a restaurant at the refinery, with a symbolic cost contribution paid by employees and at headquarters with special prices for employees.
- ▶▶ Free transportation of employees to/from work by bus.

### Football teams

In year 2008, the MOTOR OIL employees' football team celebrated the winning of yet another championship. For the 13th consecutive year, it came first among 24 other teams in the Athens Corporate Games Football League championship, and was crowned champion.

The MOTOR OIL team has competed for 16 consecutive years in these games and won several major trophies: eight "doubles" (championship and cup), five championships, one cup, and two ethos awards. The team has also succeeded in international competitions, having won the World Corporate Championship in 2004 and the European Corporate Games tournament in 2003 and 2005.

In 2008, the equivalent AVIN OIL football team achieved the fourth place in the Greek Oil Companies 8-a-side championship. In previous years, the team was part of the 5-a-side championship and was champion in year 2006.

**2,700**  
employees and family members  
took part in 46 excursions  
to various parts of the country  
in 2008.

## Education and Training

**MOTOR OIL** continued to invest in the education and training of its personnel in year 2008. We recognise that in a globalized and highly specialised sector, such as the oil sector, following our growth path and implementing our business strategy is closely linked with the development of the skills and competencies of our staff. Hence, our education and vocational training activities, and the personal development of our employees, are of paramount importance and we allocate significant resources to those activities, both in terms of money and effort.

Our **training policy** aims at ensuring that each employee's knowledge and skills match their job function, without any gender or age discrimination, and at meeting the following principal objectives:

- ▶ The continuous, responsible and comprehensive education and vocational training of employees.
- ▶ The continuous expansion of the professional know-how and the development of employees' personal skills.
- ▶ The internal designation and promotion of staff to managerial positions.



## Training Performance in 2008

- ▶▶ **Training Activity Ratio**<sup>1</sup>: 8.0 hours/person
- ▶▶ **Training Cost Ratio**<sup>2</sup>: 1.0%
- ▶▶ **Training Participation Ratio**<sup>3</sup>: 29.9%

1. Total training hours over total number of employees.
2. Total training expenditure over total payroll expenditure including employer's social security contributions.
3. Total number of trainees over total human resources.

**Education and training programmes** are planned, according to the needs arising, on an annual basis. The following factors are taken into account when planning vocational training activities:

- ▶▶ The prevailing corporate priorities and goals.
- ▶▶ The training activities of previous years.
- ▶▶ The Health and Safety training requirements, both from a technical point of view and from the point of view of increasing the awareness of the importance of safety at all employee levels.

- ▶▶ The requirements for specialist training on particular technical themes, on Environmental Protection and Quality Management.
- ▶▶ The individual employee requirements for personal development.

Education and vocational training programmes concern the following **sectors** in general:

- ▶▶ Induction training for newly-hired unit operators and maintenance technicians.
- ▶▶ Induction training for newly-hired engineers.

- ▶▶ Training of technical personnel on the specific scope of their tasks. This training concerns the know-how each employee needs to have in order to complete their tasks successfully.
- ▶▶ Training of non-technical staff on the basic Health and Safety regulations, use of fire-fighting equipment and First Aid.
- ▶▶ Training on business skills and personal development issues.
- ▶▶ Academic education (graduate and post-graduate programmes) within the framework of employee preparation for undertaking increased responsibilities.
- ▶▶ Preparedness for emergencies with regular planned or unplanned drills. This training also includes joint drills with the other Greek refineries, and sessions with the participation of the Fire Brigade Search and Rescue Team (EMAK).
- ▶▶ Foreign language learning.
- ▶▶ Health and Safety training for subcontractor personnel.



**92,500**  
man-hours  
of training  
in the period  
2004-2008.

**The implementation of vocational training programmes** is achieved through various approaches, including:

- ▶▶ In-house training seminars.
- ▶▶ Participation of employees in external seminars organised by internationally-recognised educational and training bodies, such as the Institute of Petroleum and the Oxford Princeton Programme, and in local or international conferences, such as the European Refining Technology Conferences (ERTC) and the CONCAWE (of which MOTOR OIL is a member) seminars and meetings.
- ▶▶ Offering opportunities for employees to continue their education or to follow postgraduate courses, by covering the relevant cost.
- ▶▶ Encouraging employees to learn foreign languages, according to business requirements, and sponsoring them accordingly.
- ▶▶ Paying for technical magazine subscriptions and covering professional society membership fees.

The in-house training seminars are carried out in dedicated in-house training facilities, fully equipped with state-of-the-art IT and presentation

systems, available at both the refinery and the head office.

A total of 11,830 man-hours of education and vocational training were delivered in 2008, at a total cost (including indirect costs) of 850,000 euros.

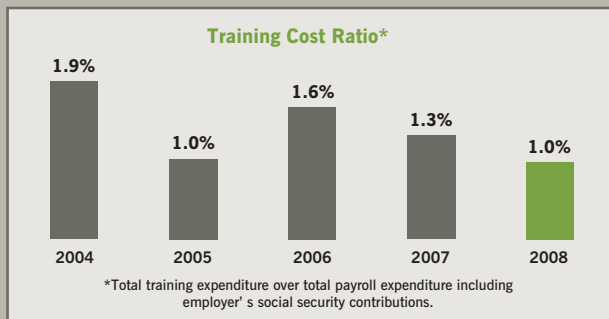
The number of employees participating in the training programmes was 444 in total (202 managers and engineers and 242 other employees). This number does not include training hours relating to the execution of emergency drills. On the basis of these data, the average length of training undertaken was 26.6 hours per participant (down from 64.9 in 2007 and 40.3 in 2006).

In year 2008, there was no need to train new operators (hence the reduced number of training hours per trainee in relation to the two previous years). Emphasis was placed on the training of existing technical staff, aimed at developing and improving further the skills of employees on personnel management and various specialized technical issues. Health and Safety in the workplace, as well as Environmental Protection, were also main themes of the 2008 training process.

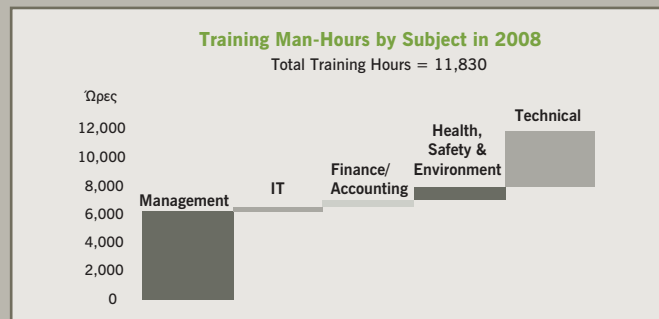
Finally, a major part of the training process was dedicated to Administrative, Financial and IT subjects, aiming at developing the administrative and technical skills of other personnel.

Also in 2008, in line with the policy of paying the tuition fees for employees following graduate or post-graduate studies, we covered the cost for the following cases:

- ▶▶ three employees for participating in the post-graduate Business Administration course run by the Hellenic Management Association (EEDE),
- ▶▶ two employees for acquiring a Business Administration degree,
- ▶▶ one employee for acquiring a postgraduate diploma in Human Resources Management,
- ▶▶ one employee for specializing in International Accounting Standards,
- ▶▶ two employees for specializing in Applied Accounting – Auditing,
- ▶▶ one employee for specializing in Taxation;
- ▶▶ one employee for specializing as a Computer Systems technician,
- ▶▶ two employees to attend foreign language courses.



The high value of the Training Cost Ratio in 2004 is due to the programme implemented that year for the induction training of the newly-hired operators in view of the operation of the new units in 2005, while its high value in 2006 is due to the extensive Health and Safety training programme. By contrast, the low value in 2008 is due to the fact that no new operators were hired, and therefore the relevant programme was not implemented.



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### Training and induction of new operators and maintenance technicians: an integrated system

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It is MOTOR OIL's policy that when refinery operators retire, and also for the coverage of new jobs arising from the investment programme, new operators must be both adequately trained and experienced in performing the duties of their prospective posts before assuming actual responsibilities. To achieve this, new operators are hired about one year before the retirement of their predecessors or the activation of new job positions. Training takes the form of a specially organized multi-faceted and comprehensive induction programme. This programme, which includes appropriate theoretical and practical training, ensures that the refinery's future technical personnel have acquired both technical skills and competencies and a full understanding of the responsibilities associated with their work in a demanding and potentially hazardous environment. The approximately twelve-month induction training is carried out by refinery managers, engineers and skilled operators from various units of the refinery, according to the responsibilities the new recruits will take on.

As with any other form of training, the newly hired operators training process is evaluated when completed, in view of identifying weaknesses and implementing improvements for the future delivery of the training package. Thus, an evaluation of the training experience gained in previous years led to the partial restructuring of the new operators induction programme, with respect to the emphasis placed on practical training at the initial stage of the induction programme; this is no longer limited to the theoretical coverage of the curriculum, but in addition includes practical demonstrations/exercises on site.

The induction training schedule, and the subjects covered are as follows:

- ▶▶ One month's training on fundamental subjects (Health and Safety, Protection of the Environment, Fire Protection, Quality, First Aid, Properties and Specifications of Crude Oil and Petroleum Products, Refining Processes, Plant Equipment, Maintenance, Technical English, Computers, etc).
- ▶▶ Five months of day-shift full-practice in the particular job function to be taken up.
- ▶▶ Six months practice shift-working, without assuming actual operational responsibilities, in order to gain experience and for evaluating their knowledge and experience, their interest and devotion to the task, in view of a final evaluation of their suitability for the job in question.

At the end of each of the three training stages, the new operators take a written test that ensures their gradual evaluation.

After completion of the above training, the new operators take up their posts in a phased way, working with experienced operators, initially taking on basic tasks before moving on to assuming their full responsibilities.

A similar programme, adapted to the relevant requirements, is also applied for the induction of the newly-hired maintenance technicians.

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### Education and training tools

Investments are made for the correct and effective support of the education and training process for refinery personnel, and the refinery's specialized staff apart from delivering the training, plans the education process and prepares the required support material, in the form of technical manuals and other printed material. A **four-volume set of training manuals** has been published to cover the training needs of refinery personnel with respect to the structured and specialized provision of information focused on the operations and processes of the particular refinery:

- ▶▶ **Volume I – Fundamentals and Lubricants' Processes**
- ▶▶ **Volume II – Fuels' Processes**
- ▶▶ **Volume III – Products**
- ▶▶ **Volume IV – Electromechanical Equipment**

5.0 million euros  
invested in  
employee  
education and  
training in the  
period  
2004-2008

These manuals were exclusively written by MOTOR OIL refinery engineers to replace earlier documentation published during the 1980s, which became obsolete following the recent large-scale upgrading and expansion of the refinery. They are perfectly adapted to the refinery's current structure, cover all aspects of processes and products, and they provide the necessary theoretical and technical documentation, so as to constitute single, integrated and comprehensive sources of information.

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### Computerized Training Simulator (CTS)

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The CTS is used to train the operators of the refinery's most complex plant (i.e. the Fluid Catalytic Cracking Complex), and the operators of the Hydrocracker Complex. It is an exceptionally effective training tool, the first of its kind in the Greek industrial sector, and contributes greatly to the safe operation of the refinery.

The system consists of a network of computers supporting workstations similar to those used for the actual control of the refinery units. The CTS simulates the operation of the actual process units. The accuracy with which the real operation is replicated is very high; also, the actual work environment is accurately simulated, thereby rendering training particularly effective.

Using the CTS for training leads to multiple and important benefits, including:

- ▶▶ The ability for on-the-job training of the operators in handling complex units in various operating scenarios, e.g. under normal operating conditions but with different feed types, in cases of malfunctions in the units, or at the normal start-up or shut-down of the units.
- ▶▶ The ability to train the operators on emergency shut-down procedures.
- ▶▶ The ability to train the operators on the procedures for restoring the units to normal operating conditions after an incident of unstable operation.
- ▶▶ The ability to assess the skills and preparedness of the trainees.

As well as being a training tool, the CTS also allows for carrying out important studies with respect to the safe and efficient operation of the units, such as the ability to evaluate alternative approaches for the computerized control of the units, or the evaluation of the dynamic behaviour of units under different operating conditions.

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# Health and Safety



**We are committed to Health and Safety, as it constitutes a moral obligation and a business necessity**

We perform our industrial and commercial operations within the framework of our Principles and Values. One of our fundamental Values is respect for people, which gives rise to our commitment to ensuring a safe working environment and continuous improvement of health and safety in the workplace. We accomplish this commitment by applying a soundly structured system on the basis of which we manage all Health and Safety issues.

In year 2008, our activity in the field of Health and Safety focused, amongst other things, on the safe completion of the largest-scale planned shutdown in the history of the refinery for carrying out periodic maintenance works, on implementing investment projects to reduce the risk of accidents, on improving fire safety equipment, on training and on fostering the safety awareness and accidents' prevention mentality among our employees. The continued downward trend in the values of the *Accident Frequency* and *Accident Severity Indexes* is a noteworthy achievement, and an encouraging result in our pursuit of achieving «zero» accident rates.

# Health and Safety Management

**Health and Safety** at work and the prevention of occupational risk is a moral obligation and a business necessity, which goes beyond the narrow limits of a simple legal obligation. Our principal concern, arising from our integrated Health, Safety and Environmental Protection policy, is to take all necessary measures and implement all appropriate projects, programmes and procedures that allow us to achieve our standing goals for Health and Safety in the workplace, which are laid down as follows:

- ▶▶ To minimize the risk of major accidents to the lowest possible level.
- ▶▶ To eliminate occupational accidents.
- ▶▶ Continuous monitoring and upgrading of the quality of equipment in order to achieve continuously improved conditions for safe work execution.
- ▶▶ Efficient protection of people (our personnel, contractors' personnel, inhabitants of neighbouring communities, associates and visitors), as well as the environment and our own installations from the hazards that may arise from the company's activities.

The company's management and all its executives are committed to providing the necessary support for the implementation of all programmes and actions ensuring constant improvement of health and safety conditions in the workplace, and contributing to the development of a soundly-based safety culture and of an accidents' prevention mentality.

Delivering on this commitment relies on the application of the integrated *Health*



and Safety Management System, which is a basic process of the *Integrated Management System*. The *Integrated Management System* is ISO 9001:2000 certified, and therefore the execution of the various internal operations and procedures of the *Health and Safety Management System* is characterized by the strict documentation imposed by the ISO 9001:2000 standard.

In year 2008, and as a result of coordinated teamwork that lasted for several months, the *Health and Safety Management System* was restructured in accordance with the principles of the OHSAS 18001:2007 standard, and certified to the same standard in

December 2008 by Bureau Veritas.

This fact constitutes a concrete proof of the company's commitment to the continuous improvement of Health and Safety, since the OHSAS certification completes and improves the existing *Health and Safety Management System* aiming at the further:

- ▶▶ harmonization with legislative requirements,
- ▶▶ improvement of working conditions and productivity increase,
- ▶▶ reduction of accidents and of the direct and indirect cost of incidents,
- ▶▶ improvement of company operations through the reduction of occupational hazards,



- ▶ improvement of the corporate image for its customers and employees,
- ▶ enhancement of the ability to handle emergencies,
- ▶ assurance of the application of the HSE policy and of the continuous monitoring and upgrading of procedures.

Moreover, the company gains a competitive advantage, since the OHSAS certification is a marketing tool; it enhances and correlates to ISO 9001 and ISO 14001 standards and is an international standard that offers the company global recognition.

The **new operational structure** of the *Health and Safety Management System* is still based on the four stages of the established Demming cycle (**Plan →**

**Do → Check → Act**), but is markedly oriented towards continuous improvement.

The successful implementation of the *Health and Safety Management System* relies on **a framework of supportive**

**components**. Each one of these components is an essential building element of the system, and when applied simultaneously, they work in synergy to increase the overall effect significantly.

### **Health and Safety Management System: Framework of supportive components**

<b>People</b>	<ul style="list-style-type: none"> <li>● Visible and systematic management by capable executives at all management levels.</li> <li>● Setting goals, responsibilities and accountabilities.</li> <li>● Active involvement of all employees.</li> <li>● Provision of appropriate and full training to all employees.</li> </ul>
<b>Equipment</b>	<ul style="list-style-type: none"> <li>● Continuous inspections of the mechanical and all other equipment in our installations, to ensure its operational integrity throughout its life-cycle.</li> <li>● Equipment upgrading plan to ensure optimized performance with respect to both productivity and safety.</li> </ul>
<b>Procedures</b>	<ul style="list-style-type: none"> <li>● Strict application and documentation of procedures for operational safety and efficiency.</li> <li>● Strict compliance with relevant legislation, with international standards and codes of practice and with established operational rules.</li> <li>● Systematic identification, control and assessment of all risks associated with the hazards arising from the refinery's operations.</li> <li>● Ensuring that all operations are carried out in full compliance with safety rules and regulations.</li> <li>● Systematic recording, investigation and analysis of all incidents.</li> </ul>
<b>Communication</b>	<ul style="list-style-type: none"> <li>● Excellent cooperation and communication with public authorities and other stakeholders, including providing them with all relevant information.</li> </ul>
<b>Results</b>	<ul style="list-style-type: none"> <li>● Systematic measurement of results using established industry indicators, so as to ensure constant improvement in performance and identification of malfunctioning and vulnerabilities.</li> </ul>
<b>Risk control</b>	<ul style="list-style-type: none"> <li>● Occupational risks and the respective protective measures are sufficiently understood by all, and at all management levels.</li> <li>● Continuous review and updating of the company's <i>Emergency Response Plan</i>.</li> </ul>



**Health and safety management system**  
an intergrated system with  
OHSAS 18001:2007  
certification

## Upgrading and improving the safety conditions and the quality of the work environment

The operation of the *Health and Safety Management System* is assigned to the refinery's Health, Safety and Environment Section. Moreover, the Health and Safety organization includes in-house Safety Supervisors, Occupational Physicians and nursing staff, both at the refinery and at the company's head office, at a level that more than covers the provisions of the relevant core laws (Law 1568/1985 and Presidential Decree 17/1996).

During 2008, our efforts to achieve our Health and Safety goals were focused on the following main directions:

- ▶▶ Projects and investments for upgrading and improving the safety and quality of the work environment.
- ▶▶ Projects and expenses for upgrading, consolidating and improving the instructions and procedures for preventing and controlling occupational risks.
- ▶▶ Training and safety awareness fostering, both for our own personnel and the personnel of contractors, preparedness and cooperation with stakeholders.
- ▶▶ Implementing suitable measures for the prevention of accidents during the course of the 2008 planned shutdowns of refinery units for maintenance purposes.
- ▶▶ Organizing for the company's harmonization with the European Union's REACH (Registration, Evaluation and Authorization of Chemicals) Regulation.

**Improvements** in working conditions and in the safety of the work environment are achieved by making the required investments in equipment, through the introduction of new procedures, and by means of Health and Safety inspections.

### Investments and expenses

The refinery was designed, built, and operates, in accordance with Greek and international regulations and standards. However, there is a continuing investment programme in the proper maintenance of the electrical, mechanical and electronic equipment, and in technical upgrades and renewals of this equipment by taking account of engineering developments, aiming at

maintaining the highest possible standards of safety and accident prevention. The cost of the company's investment programme (including AVIN OIL investments) for improving Health and Safety standards, and for acquiring and maintaining safety and medical equipment, was 8.3 million euros in 2008, while the cost of all other types of expenses was 2.7 million euros. Therefore, the overall 2008 cost of investments and expenses amounted to 10.9 million euros, up 56% in relation to year 2007. Particular emphasis was placed on implementing projects that mitigate accident hazards and improve working conditions, as well as on projects that improve the facilities' fire safety.

### Investments and Expenses for Health and Safety (in thousand euros)

Investments	8,262
Fire Safety	894
Emergency Response	534
Personal Protective and Medical Equipment	187
Risk Reduction	6,586
Security	61
<b>Expenses</b>	<b>2,681</b>
<b>Total</b>	<b>10,943</b>



Among other things, this amount included investments for:

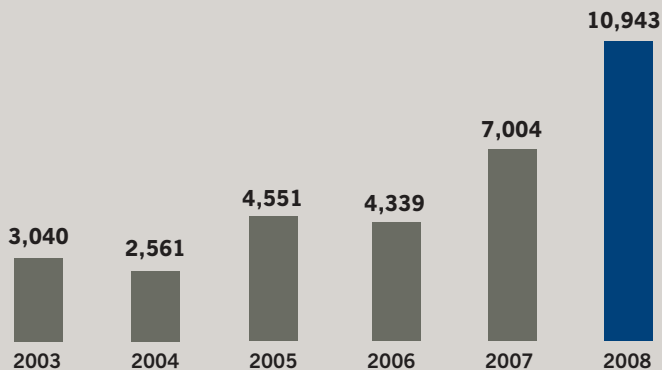
- Continuation of the project for installation of the Advanced Process Control (APC) System, a natural continuation of the Distributed Control System (DCS). To date, the APC has been implemented in the Catalytic Cracking Complex and in the Vacuum Distillation Unit, while the inclusion of the Crude Distillation Unit in the system is in progress (budget: 8.8 million euros).
- The first stages of the project for upgrading the Alkylation unit safety level, which consists in the installation of water curtain and water deluge systems to enclose a potential hydrogen fluoride leak. The project budget is 3.2 million euros. The construction of a suitable underground facility for the safe storage of hydrogen fluoride tanks was completed in the same unit, as well as the installation of hydrogen fluoride detectors and pH meters. ("HF mitigation system").
- Completion of the relocation of maintenance workshops and of the central materials warehouse to new

buildings and sites located further away from the production units. These projects, besides improving productivity, also aim at providing more comfortable and safe working conditions for employees working on these sites. The project budget is 2.5 million euros.

- Construction of a new power substation on the jetty, incorporating all the state-of-the-art safe operation techniques, with a budget of 3.2 million euros. At the same time, an automatic fire-fighting system was installed in two existing refinery power substations.
- Completion of the fire protection project in the area of the large heat exchangers at the Hydrocracker Complex, through the expansion of the fixed fire-extinguishing foam system (installation of an elevated fire-fighting monitor and of a foam tank), which significantly improves the fire safety level by minimizing response times.
- Continuation of the double block bleed valves installation project in the furnaces of the process units.
- Installation of shut-off valves in the Hydrocracker Complex, as well in other units.

- Connection of reactors and other vessels to a high-pressure nitrogen supply system in order to ensure safe decompression in case of an emergency.
- Elevation of the vents of the sewer system at various units for better gas dispersion.
- Renewal and upgrading of the basic Personal Protective Equipment (PPE) and of the refinery's Medical Centre equipment, besides the procurement of special safety devices for the tasks of monitoring, supervising, maintaining and repairing the plant equipment.
- Improvement of the fire safety systems with various projects, such as: (a) automation of the fire-fighting system in the Truck Loading Terminal, (b) construction of a permanent foam system in the second product-pump-station, (c) installation of water curtain systems for the protection of refinery units, as well as the pipe trench, (d) installation of a foam container in the fire-fighting system of the Dewaxing unit, (e) installation of fire detection systems on various sites in the refinery, (f) procurement of new portable fire

**Investments and Expenses for Health and Safety** (in thousand euros)



pumps, and (g) replacement of a large number of old portable fire extinguishers, with a parallel effort to achieve consistency in this type of equipment, as much as possible.

- Renewal of the wireless communication devices to improve intra-communications, especially in emergency situations.
- Acquisition of new vehicles used to transfer personnel and materials, as well as bicycles; it is to be noted that bicycles have been widely used for many years within the refinery, as an environmentally-friendly means of transport that moreover offers added safety.
- Safety improvements at various access points to refinery facilities (ladders, platforms, etc.), improvements in lighting and signposting of the internal road network.
- Continuation of the project for installation of a lift at the Catalytic Reforming Unit.

### Internal and external inspections

The continuous monitoring of equipment and workplaces to identify potential hazards by carrying out planned Health and Safety inspections are essential procedures that are given the highest priority. At the refinery, the planned Health and Safety inspections are realized by both internal inspection teams and external safety auditors, including Greek or foreign consultants.

The projects under construction are the object of daily ad hoc inspections, while the planned internal inspections are carried out on the basis of an annual schedule by teams of different composition and mandate, consisting of refinery executives and other competent personnel:

- ▶▶ Safety and Environment Inspections by a three-member team headed by a Section Head, and including one Engineer and one Supervisor. There are 23 such teams, and each one is responsible for one of the 23 sectors in which

the refinery is divided for this purpose.

- ▶▶ Executive Safety and Environment Inspections by a team headed by the General Manager of the refinery, and including the Departmental Managers and the Head of the Health, Safety and Environment Section.

There are also two institutional Committees – the Safety and Environment Committee, consisting of refinery Section Heads, and the Employee Health and Safety Committee as per Law 1568/1985; the meetings of these committees give rise to recommendations for the improvement of health and safety conditions.

The findings and recommendations arising from the above inspection process, and the recommendations arising from the meetings of the two Committees are evaluated and lead to appropriate technical or organizational measures being taken to achieve long-

**10.9** million euros  
investments and expenses in 2008  
for improving health and safety



## Upgrading and improving safety procedures

term improvements of the level of health, safety and environmental protection. 914 new recommendations were recorded in year 2008, while 849 were implemented (including pending recommendations of the previous year), with another 221 recommendations currently pending.

Finally, it is apparent that the technical inspections and equipment audits carried out by the Technical and Maintenance Departments, lead to findings and to the implementation of measures that involve risk prevention and contribute to the improvement of health and safety conditions.

**The technical integrity** of equipment and the safe working conditions are just one of the parameters ensuring safety in the workplace. The attitude of the human factor is even more important; through the establishment of strict processes and the provision of suitable training for ensuring that the necessary skills and competencies are acquired and that the safety awareness is appropriate, human resources are led to execute their work safely.

### Complying with legislation

Not only is relevant Greek and European Health and Safety legislation strictly observed and complied with, but other international standards, codes of practice and established operational rules are also complementarily followed where this is judged likely to allow us to achieve even higher standards of Health and Safety than would be achieved by legal compliance alone.

We have developed a Database, available to all employees on the

company's Intranet, which contains all the provisions of Greek law concerning Health and Safety issues that are relevant to the refinery's operation. This Database is exceptionally important, not only for the legality of our operations, but also for the wealth of information it contains on all issues, e.g. on risk identification and control, drafting of Emergency Plans, levels of exposure to hazardous substances, etc.

### Risk identification and control

We continuously seek to implement best practices by identifying Health and Safety hazards in all workplaces, and applying practices and procedures for their mitigation or elimination. The framework for hazard identification and control is provided by Greek legislation (Presidential Decree 17/1996), and by other European and international codes of practice.



- Systematic evaluation studies of occupational hazards per type and job position have been carried out for all the refinery's activities and suitable measures to eliminate or control such hazards or maintain them at acceptable levels, have been determined. Whenever required by any changes to the workplace or the working conditions, these studies are reviewed, so as to be up-to-date and current on a continuous basis.
- We provide appropriate and adequate training to all our workers covering: information and instruction relevant to the hazards arising from their work, measures for the elimination or control of such hazards, correct use of Personal Protective Equipment, safe working practices, appropriate emergency response procedures and first aid provision.
- We ensure the enforcement of safety rules in all situations, by implementing all required protective measures and complying with safe working procedures. The process for issuance of Work Permits is particularly important during the execution of repair and maintenance work, because it ensures employee protection. This is why the process for issuance of Work Permits is the object of continuous training for our employees who issue or receive such permits, as well as for contractors' personnel involved in refinery activities.
- European (ATEX Directives) and Greek legislation (Presidential Decree 42/2003) are applied with respect to the protection of workers from explosions. The measures foreseen concern the avoidance of inflammable substance leaks, the prevention of ignition, the training of employees and the specifications of the work and protection equipment.
- We encourage the active involvement of all workers in Health and Safety arrangements, both individually and through their being represented on the Employee Health and Safety Committee.
- As for the evaluation of operational risks, we carry out detailed hazard and operability (HAZOP) studies, as a matter of absolute necessity, for all new facilities and for all modifications to existing facilities, on a case-by-case basis.
- As of 2007, we have implemented an innovative project, concerning the application of a specialized *Risk Based Inspection (RBS)* programme to three refinery units: the Crude Distillation unit, the Naphtha Stabilizer and the Caustic Soda and Amine Treating unit. RBI is an innovative approach that ensures optimum results. Experience from application of this method in 2008 has led to changes in the intervals between consecutive technical inspections for all equipment and pipelines. Also, all piping in these units has been recorded and classified in groups (corrosion circuits), which makes their inspection more efficient.
- Specifications have been issued for all Health and Safety equipment (Personal Protective Equipment,

Fire-fighting Equipment, etc.) in order to facilitate the replacement of equipment and achieve consistency to the greatest possible extent. These specifications are updated in line with technological developments.

### Reports, measurements and indexes

We systematically record, investigate and analyse all incidents (fires, accidents, near-misses) with a view to implementing corrective and preventive measures. Moreover, we strive to enhance our experience by studying the investigations of serious accidents occurring in similar facilities abroad, and taking advantage of their conclusions and recommendations as and when they are applicable to our own facilities.

We systematically record and analyse all relevant operational data, which compose the picture of our Health and Safety performance in order to be able to monitor this performance statistically. Through goal-setting and benchmarking on the basis of internationally-established performance indicators we seek to ensure continuous improvement, and highlight potential weaknesses and vulnerabilities.

### Emergency Response Plans

Our emergency response set-up is based on our *Emergency Response Plan*, which is regularly reviewed and updated taking account of refinery expansions and other changes to its configuration, of changing legal requirements, and of best practices resulting from technical developments or by the experience gained by others in dealing with major or non-major

accidents. We have also prepared and submitted studies to the competent authorities, which comply with the European SEVESO II Directive, as regards the most important potential accident scenarios and the respective prevention and confrontation measures.

In July 2008, the refinery was inspected by a special committee of competent Authorities, established in accordance with the provisions of article 16, SEVESO II. The committee's report has not yet been submitted.

The *Emergency Response Plan*, especially for major accidents, specifies the protection measures for the public, the instructions for the inhabitants of local communities and the way of dealing with the issues arising from the potential activation of the Major Technological Accidents Response Plans (SATAME), drafted by the competent Authorities, which determine the intervention of the state.

The *Emergency Response Plan* prescribes equipment, organization and facilities available (both internally and from off-site sources) to mitigate the effects of an emergency. Features of the Emergency Response Plan include:

- ▶▶ The Mutual Aid Agreement whereby all Greek refineries co-operate in the event of an emergency, dating from 1988. The effectiveness of this collaboration is ensured through joint exercises involving MOTOR OIL, the local fire brigade and the other refineries.
- ▶▶ The safety drills, organized weekly, and the preparedness exercises on dealing with major accidents that are organized several times a year. During these exercises, the Major Incident Response procedure is

activated. Twenty-four such exercises were carried out in year 2008. Safety drills and major exercises contribute greatly to the training and preparedness of employees, to the evaluation and upgrading of fire safety equipment, and to the evaluation and modification of the Plan itself.

- ▶▶ The fixed and portable equipment for fire detection, fire-fighting, and leakage detection and containing, which are upgraded according to a regular annual investment plan.
- ▶▶ The availability on the refinery site of six fire engines and one 12,000-litre bulk foam tender, that are available on 24-hour standby, and are operated by trained fire-fighter crews.
- ▶▶ The operation, in 2008, of the upgraded automatic telephone call system (COMMUNICATOR) for executives, in the event of an emergency outside normal working hours.
- ▶▶ The existence of alternative locations for the Incident Control Room at four different strategic points of the refinery.

### Medical services - health

For the refinery personnel we have in place a programme of inoculations and regular medical examinations (including blood tests, X-rays, cardiograms, eye tests, etc.). We have organised a comprehensive occupational health service at the refinery with the appropriate personnel and material resources in place to provide medical and first-aid services, including:

- A main Medical Centre, housed in modern premises covering around 100 sq. m., staffed by an Occupational Physician and nursing staff, and equipped with all necessary hospital equipment for emergency treatment. It has five patient examination and first aid beds, as well as one fully equipped short-term treatment ward.
- A Pharmacy stocked with all necessary medicines, surgical dressings and other medical equipment.
- A suitably-equipped first aid station at the Alkylation unit, where there



is medical assistance available on a 24-hour basis.

- Three suitably-equipped first aid stations (located in the Central Control Room, the Chemical Laboratory and the Hydrocracker Complex).
- Three fully-equipped ambulances.

Fire-fighting crews are also trained in rescue practices and in first aid provision.

A Medical Centre, staffed by two doctors, is also available on the company's head office premises to cater for the needs of MOTOR OIL and AVIN OIL personnel located there.

Smoking is prohibited throughout the company's facilities. Smoking is only allowed in employees' personal offices and specially designated areas.

Finally, the non-exposure of workers to concentrations of noxious substances that can be harmful to their health is confirmed by carrying out relevant concentration measurements, in accordance with the provisions of the relevant legislation.

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### Examples of actions taken during 2008 to improve operating procedures

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- The auditing and inspection of selected hot and confined space works continued, as particular emphasis is placed on this type of works. Between 5-7 audits are carried out each day, and more than 2,000 audits took place in year 2008 alone (increased number due to the major refinery shutdown for preventive maintenance).
- Continued application of the new technique (introduced despite the higher cost involved), which allows crude oil tanks to be cleaned without the necessity for personnel to enter the tanks, thus entirely eliminating the associated hazards.
- Continued application of the system of imposing penalties on contractors, who breach the company's Health and Safety rules while working on refinery premises, implemented for the first time in year 2006. Persistent breaches lead to escalated disciplinary measures depending on the severity of the breach. As of 2008, this system also produces a sub-contractor reliability scale, based on the evaluation of breaches identified.
- A new procedure for critical works was issued (use of cranes and liftings), and lists of actions in case of natural disasters (earthquakes, etc.) were reviewed and completed. Also, the OHSAS 18001:2007 certification led to the need to review 18 existing procedures and draft a new procedure for Vertical Health, Safety and Environment Inspections.
- In the framework of our policy to reward the personnel of refinery Sections in which no accidents were recorded, or whose safety performance was significantly improved over the previous year (2007 in this case), the Management of the company rewarded the personnel of four Sections (Catalytic Cracking, Lubricants' Distribution, Housekeeping and Fire Safety) with elegant honouring gifts.
- Review and re-issuance of the Material Safety Data Sheets (MSDS) for the refinery products, within the framework of application of the REACH Regulation provisions, continued. This work is ongoing, in line with developments in the application of the REACH Regulation.





## Planned shutdowns of refinery units

**A large-scale planned shutdown** of refinery units for periodic maintenance tasks took place in the period from May to July 2008, together with another three smaller-scale planned shutdowns in individual units. The work carried out was the most extensive, with respect to both volume and complexity, since the establishment of the refinery – as apart from the Catalytic Cracking complex, the Hydrocracker complex as well was included in the scope of works for the first time; the work was accomplished in absolute safety, and the unit start-ups were exemplary. This fact alone constitutes an exceptionally positive result.

Such extended interruptions in the operation of the plant, require special vigilance and precautionary safety measures, because of the greatly increased risk of accidents. Careful planning, continuous supervision and special accident prevention measures are required during the shutdown period, including the following: achievement of a heightened state of safety awareness among all those involved, by providing them with guidance and information about the increased risk level; co-operation with

site managers, on a daily basis, to identify hazards jointly and initiate remedial measures; and daily site safety inspections.

Inspection teams were set up especially for the works in 2008; they were headed by executives from the Health, Safety and Environment Section and staffed by engineers from the Technical Department. The teams were charged with the duty of 24-hour monitoring of the works with respect to application of safety rules, in view of immediately correcting any irregularities onsite.

Nine unplanned shutdowns occurred in year 2008, besides the planned shutdowns. Accidents were avoided in these cases as well, through the application of a similar range of preventive measures.

## Training, safety awareness and co-operation with shareholders

**The continuous training** of our employees, their updating with the required information, the creation of a high level of safety awareness, together with the technical and organisational measures are the essential pillars for accident prevention and the maintenance of a safe work environment. This fundamental approach governs the *Health and Safety Management System* of MOTOR OIL.

Considerable emphasis is placed on the systematic supply of Health and Safety information to sub-contractors involved in refinery site operations, in particular relating to safe working procedures and general principles of accident prevention, the aim being to ensure their full and effective participation in refinery operations.

The general content of Health and Safety training includes the following subjects:

- ▶ Fires – fire safety – use of fire-fighting equipment.
- ▶ Work Permits.
- ▶ Work in confined spaces.
- ▶ Identification of occupational hazards and risk evaluation.
- ▶ Personal Protective Equipment.
- ▶ Classification, packaging and marking of hazardous substances.
- ▶ Material Safety Data Sheets.
- ▶ Emergency response procedures and participation in relevant drills.
- ▶ First aid.
- ▶ Cleanliness – ergonomics.
- ▶ Presentations – analyses of accidents occurring abroad.

In 2008, emphasis was placed on the field of fire safety, on training/certification of Work Permit



issuers (company personnel) and recipients (contractor personnel), on OHSAS 18001 and other specialized issues:

- The always-current issue of fire safety was a central theme of Safety-related training in 2008, and all refinery personnel in responsible positions (foremen, supervisors, engineers, section heads, managers) were trained on a range of subjects, including everything the relevant employees need to know about fires, fire safety and available fire-fighting equipment.
- Full training programme (three-day seminar), in view of application and certification as per the OHSAS 18001 standard, addressed to executives that were to undertake the role of internal auditors for the said system.
- Training of duty engineers mainly on the response to major incidents and on the available fire-fighting equipment, at a both theoretical and practical level, in the form of real-life fire-fighting drills and related desk exercises.

- Training and certification of 21 company employees who issue Work Permits.
- "Toolbox Meetings» training sessions (the 2006 Environmental and Social Report contains extensive reference to this training approach) on special subjects concerning specific workplaces.
- Training of relevant personnel on safe welding practices.
- The structured and focused efforts to provide information to the employees of subcontractors, and to raise their safety awareness continued in 2008, covering:
  - The information delivery programme (including provision of information, question and answer sessions, recording results in a database, issuing of special cards showing successful attendance of the programme) covering all employees of subcontractors who receive Work Permits. The training material comprised a general component - covering Health and Safety subjects relevant to all types of refinery work – and a second, specialist component – relevant

to 29 different types of activity. This information programme covers 8 hours and was attended by around 150 persons in 2008, adding to the 420 individuals who received training in the previous two years.

- Toolbox Meetings on the first Monday of every month, attended by the contractors working at the refinery during that period, on Health and Safety issues relevant to the work executed by them, and - mainly - to discuss irregularities observed during workplace inspections.
- Safety drills and preparedness exercises are regularly rehearsed to improve the preparedness of personnel in handling emergencies and to test equipment and procedures related to the *Emergency Response Plan*. The relevant programme for year 2008 included 52 drills (one per week), of which 24 concerned the response to a Major Incident. Half of the drills were planned, while the rest were unscheduled drills (with respect to the date and time, the location and the scenario) involving mobilization of response



# Accident statistics

equipment. Planned drills took place at different parts of the refinery site, involving theoretical and practical training in fire-fighting procedures and familiarization of personnel with fire-fighting equipment and related Personal Protective Equipment.

- In order to raise safety awareness amongst the personnel, Health and Safety messages and posters are regularly displayed on 13 notice boards, dedicated for this purpose, located throughout the refinery site.
- A new approach to training unit operators on safety issues has been applied since the end of 2008 based on material contained in video tapes. The video tapes are short in duration (10 – 20 minutes), and are shown on TV monitors located throughout the different Departments. Operators are able to watch the video tapes at a time that is suitable for them, but on the basis of a predetermined schedule. The six video tapes made available in year 2008 had the following themes: safe use of electrical tools, hearing protection, safe use of scaffolding, safe transportation, avoiding falls, and

safe start-up of electrical equipment.

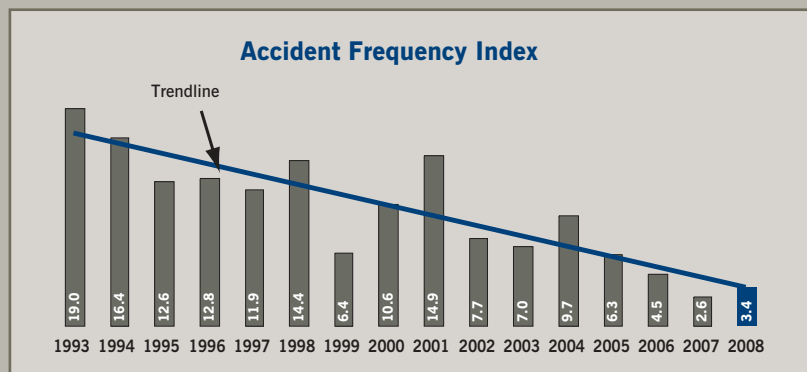
- The «Visitor Guidelines» leaflet was issued in 2008; the leaflet is distributed to visitors to the refinery, and contains the basic rules to be followed during their visit.

Cooperation with other stakeholders is considered a necessary element of the responsible handling of Health and Safety issues. For this purpose, Refinery Cooperation Meetings on Health, Safety and Environment issues are organized and attended by representatives of Greek refineries, the competent ministries, local government, the fire department and other stakeholders. MOTOR OIL competent employees attend these meetings and play an active role with presentations on various topics. These meetings promote cooperation and synergy in a field where there really is increased capacity for the exchange of knowledge and experience.

**The successful operation** of the *Health and Safety Management System* is reflected in accident statistics (indicating both the number and the frequency and severity of accidents) which show a clear downward trend over the years.

Eight accidents were recorded in year 2008, compared with six in 2007 and ten in 2006. It should be noted that the largest planned shutdown in the refinery's history for maintenance works took place in year 2008. The *Accident Frequency Index*, due to the bigger number of accidents, showed an increase in 2008 compared with the previous year (from 2.6 to 3.4, equivalent to a 31% worsening), but was much lower than the target (3.8).

The above result should also be linked to the *Accident Severity Index*, which improved significantly in relation to year 2007, since it dropped from 1.1 to 0.5 (55% improvement), when the target was 0.7. This value is the lowest since the refinery's establishment, and indicates fewer serious accidents than in 2007 (reduced number of work hours lost).



Frequency Index= Accidents (Lost Work Injuries) number per one million hours worked

# The REACH regulation

These statistics relate to our own employees and do not include accidents involving sub-contractors' employees, which showed a marked reduction: no accidents were recorded in 2008, compared with one in 2007, one in 2006, five in 2005, four in 2004 and nine in 2003.

The above data concern the refinery workplace only; however, it should be noted that no accidents were recorded in the remaining workplaces (MOTOR OIL head office, and AVIN OIL offices and facilities).

## The European Union REACH

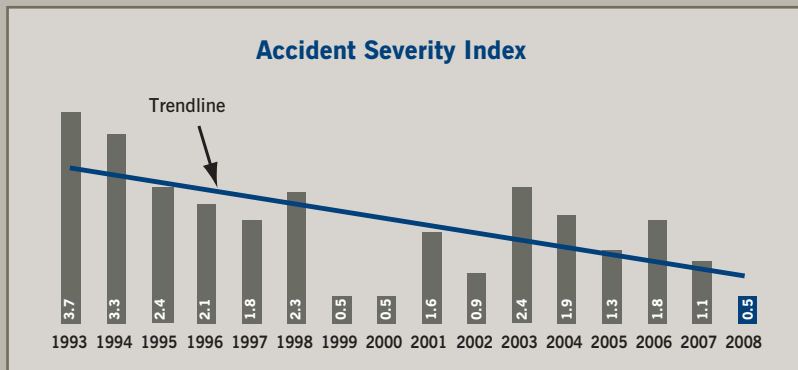
**Regulation** (Registration, Evaluation and Authorization of Chemicals), effective as of 1st June 2007, creates a new basis for the protection of human health and the environment from the use of chemicals throughout their life-cycle.

As a socially responsible company, MOTOR OIL is committed to complying with the requirements of the new Regulation and taking all necessary action for the timely registration of the chemicals it produces and distributes. Within this framework:

- ▶ We have mobilized our human resources in view of harmonization with the above-mentioned Regulation. In recognition of the importance of the participation of all stakeholders in the production and distribution of our end products, the company discusses and analyzes all individual issues that arise in the application of the Regulation, with both suppliers and customers.
- ▶ Furthermore, we are active participants of the CONCAWE organization, which provides technical advice to European refineries on matters of Health,

Safety and Environmental protection, and we participate in the Fuel Ethers Reach Consortium (FERC), the core organization assisting ether (MTBE/ETBE/TAME/TAAE) producers in their preparation for the registration of these substances. Through these forms of participation, we can ensure that the chemical properties of the products we produce and distribute are systematically analysed and scientifically studied with respect to chemical safety and the associated protective measures relevant to their uses, throughout their life-cycle.

2008 was a milestone year for the Regulation, marked by the completion of the initial registration by the companies of the substances included in its field of application. The entire procedure was completed through the European electronic system IUCLID, which constitutes a basic tool for achievement of the Regulation's objectives. MOTOR OIL completed the pre-registration of the substances that concern it, without a hitch and within the prescribed time limits. Full registration of the substances is scheduled to be completed by November 30th, 2010.



**Severity Index** = Number of lost man-hours per one thousand worked hours

## Security - revised edition of «Port Information & Regulations»

**We are taking all appropriate preventive measures** to protect our installations against likely security threats, both deliberate and non deliberate ones. Our personnel responsible for this protection are suitably trained, both in security and safety matters; they can thus effectively and swiftly carry out their tasks, in full awareness of the duties assigned to them, and of the need to fully respect freedom and the fundamental human rights.

Furthermore, we give the highest priority to security measures aimed at the protection of our port facilities in order to prevent any incident whatsoever, which apart from any other consequences, may also cause marine pollution. It should be noted that, in 2004, 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 revised each year, in accordance with the existing legislative

provisions of the Ministry of Mercantile Marine.

The revised *Port Information & Regulations* became applicable in year 2007. We consider the existence of the *Port Information & Regulations* for our port, which codifies in a single volume all the requirements for the safe docking of vessels at our terminal – according to Ministry of Mercantile Marine guidelines, and international codes and conventions – to be a prerequisite for the best possible protection of both our installations and the vessels themselves. The revised *Port Information & Regulations* consolidates all new provisions arising since its previous issue, including those of the ISPS Code, while it also describes clearly and in detail, our minimum requirements relating to safety and security, as well as the measures to be taken to avoid pollution.

## AVIN OIL

**The core principle** governing how AVIN OIL exercises its operational activity is respect for people and the environment. In this spirit, the company has developed its policy for «*Health, Safety and Environmental Protection*» and implements a *Health, Safety and Environmental Protection Management System*, on the basis of which it manages issues relating to Health and Safety, aiming at avoiding all incidents whatsoever that can have effects on health, the environment or assets.

AVIL OIL is committed to the following:

- ▶ Fully complying with applicable legislation, regulations and codes of practice concerning Health and Safety.
- ▶ Regularly making available to the authorities and all involved stakeholders full and accurate Health and Safety data relating to the risk free use of the products it distributes.
- ▶ Providing its employees with a safe and appropriate work environment.
- ▶ Ensuring that Health and Safety issues are handled by competent and dedicated in-house personnel (occupational physician, safety engineer, etc.).
- ▶ Providing appropriate Health and Safety training to its employees and accordingly informs those with whom it collaborates.
- ▶ Maintaining updated *Emergency Response Plans* for efficiently responding to emergencies or large-scale incidents.
- ▶ Observing and applying, to the best of its ability, all international technological developments.



- ▶▶ Encouraging its associates and customers to adopt similar approaches to Health and Safety issues.
- ▶▶ Continuously striving to improve its Health and Safety performance.

In the procedures field in year 2008:

- AVIN OIL Road Tanker drivers were trained on safe driving techniques (anti-rollover and anti-skid training). This training takes place on a special track, using a suitably modified road tanker vehicle. Other contracted road tanker drivers will also be trained in the near future.
- The safety training (on issues related with the safe receipt, delivery and distribution of fuels) of Road Tanker drivers was repeated and extended to cover not only AVIN OIL's own drivers but also other, contracted Road Tanker drivers.
- The thorough programme of annual inspection for all Road Tankers (owned and sub-contracted) involved in the distribution of the company's products was continued, in line with state and petroleum industry regulations. Such inspections extend to

compliance with the terms included in the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). All Road Tankers loaded at AVIN OIL's facilities are equipped with a special Safety Pass certifying that they have been checked according to the ADR.

- A schedule was drafted for the signature of a contract with the company's sub-contracted transporters, relating to the provision of the following to them through a specialized company: (a) Safe transportation consultancy, and (b) Safety training on issues related with the safe receipt, delivery and distribution of fuels, and anti-rollover and anti-skid training.
- The process for harmonization with the requirements of the European Union REACH (Registration, Evaluation and Authorization of Chemicals) Regulation, effective as of 1st June 2007, is currently in progress. As a downstream user, AVIN OIL has provided all necessary information to its suppliers and customers.

- Security personnel at the Aghioi Theodoroi terminal, Corinth, received training relating to the handling of fire-fighting equipment.
- A far-reaching scheme for training all AVIN OIL petrol station personnel on safe petrol station operation has been put into practice; training is carried out at each individual petrol station, to ensure universal participation.

In the field of capital investments in Health and Safety, five new large and five new small (for heating oil distribution) Road Tankers became operative in year 2008, while at the AVIN OIL terminal:

- Asbestos-containing materials (roof material in the loading gantries) were removed and replaced by non-harmful materials.
- The fire fighting system was upgraded with the installation of non-explosive electric light globes in the pump station and the loading gantries, and with upgrading of the fire fighting equipment at the pump station.
- Improvements were made to the technical infrastructure to reduce the risk of accidents and improve safety levels (e.g. installation of an emergency shower, posting of signs requiring the use of Personal Protective Equipment, installation of an air exhaust system in underground warehouses, etc.).



# Environment



## **Caring for the future by protecting the environment**

Respect and care for the environment is a common denominator of all our activities. We operate competitively but, at the same time, as a responsible corporate organization we espouse the Principles of Sustainable Development; that is, the development which is based on mutual respect and on our responsibility towards future generations.

Year 2008 saw the introduction of natural gas to our refinery, completion of the steam production unit upgrading programme, execution of the largest preventive maintenance programme in the history of the refinery, extension of ISO 14001:2004 certification to cover biofuel production, trade and delivery, and issuance of the annual voluntary *Environmental Statement 2007* in accordance with the EMAS ER 761/2001 regulation. Finally, the company received the «ECOPOLIS 2008 - Environmental Investment» award.

# Environmental management

**Protection of the environment** and its safeguarding for future generations is a global challenge which is becoming an ever-greater concern for the whole of society as the effects of climate change are becoming more and more visible. Air, soil and water are the three invaluable resources that we are being called to protect, so that society may continue to enjoy the achievements of scientific and technological progress within a climate of free movement of people, goods and ideas.

We seek to ensure that our facilities operate in the most energy efficient possible manner, minimize the greenhouse gases emissions as well as of other pollutants, function within the framework of approved environmental terms, rigorously adhere to the relevant Hellenic and European legislation and finally implement projects and actions that go beyond the strict application of the law.

Selection of the most efficient means and measures to reduce our environmental impact covers the entire spectrum of our activities; from the selection of technologies when building new plants, to the practices applied during the refinery's daily operation, and from the use of advanced process control systems to the training provided to employees working at the refinery.

The improvement of our performance would not be at the desired level if the results of our efforts were not evaluated systematically. The application of Management Systems contributes to this by defining the sectors where environmental benefits are maximized through the allocation of necessary resources.

The pace with which scientific, technological and legislative developments in the environmental field take place, renders our membership in international

organizations as well as, the active support of the scientific work of the academic community, more than more than necessary.

## Environmental Management System

Our company's commitment towards the minimization of the environmental impact resulting from its operation, is expressed through our *Health, Safety and Environmental Protection Policy*. Our commitment would not materialise without the application of a valid and internationally accepted environmental management system. This system ensures that environmental performance is measured systematically and that activities requiring intervention and improvement are recognized. Thus, the allocation of resources to actions with the maximum possible environmental benefit is ensured.



487.9 million euros in environmental investments in the last seven years



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## Environmental objectives

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The *Environmental Management System* is an effective tool for implementing, and monitoring compliance with the company's various environmental protection policy objectives, which are:

- ▶▶ Keeping abreast of legislative developments and ensuring full compliance with all Greek and EU environmental legislation in force.
  - ▶▶ Operating the facilities within the framework of approved environmental terms.
  - ▶▶ Planning and implementing the various company projects by taking into account the dimension of minimizing environmental effects.
  - ▶▶ Applying Best Available Techniques to the greatest possible extent.
  - ▶▶ Monitoring and continuously minimizing the emissions of greenhouse gases as well as those of other pollutants, and of solid and liquid waste, as far as technically and economically possible.
  - ▶▶ Monitoring and, as far as possible minimizing, the consumption of energy.
  - ▶▶ Pre-empting any risk of environmental pollution, reducing the probability of environmental accidents, and preparing, implementing and testing the appropriate emergency response procedures.
  - ▶▶ Training of, and awareness-raising among, all our personnel and subcontractors' employees who work on our premises, on the implementation of the company's environmental protection policy.
  - ▶▶ Evaluating our environmental performance and continually improving our *Environmental Management System*.
  - ▶▶ Developing communication and dialogue with all stakeholders.
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The company's *Environmental Management System* was first certified compliant with the ISO 14001:1996 standard in 2000. Since 2004 it is certified compliant with the ISO 14001:2004 standard by BV (Bureau Veritas). The ISO 14001:2004 standard imposed new, stricter requirements for environmental management issues, but at the same time provides the tools required for more efficient operation of such systems. MOTOR OIL was re-certified by BV for ISO 14001:2004 in 2007, and expanded its certification in 2008, to include the production, trade and delivery of biofuels, asphalt and specialized petroleum products.

The *Environmental Management System* is part of the *Integrated Management System*, which is ISO 9001:2000 certified for quality, and therefore the execution of various internal functions and procedures of the *Environmental Management System* is characterized by the strict documentation imposed by this standard.

The aforementioned management systems are applicable to issues concerning the company's everyday operation. Our commitment to make public the data regarding our environmental performance and the effects arising from the operation of our facilities, as expressly mentioned in our Policy for the Environment, has led to the voluntary adoption and application of the *European Eco-Management and Audit Scheme (EMAS)*, as foreseen by European Regulation 761/2001. This system ensures that all companies or organizations adopting it, identify the environmental impacts arising from their activities, define strategies and implement plans to mitigate them to

## Environmental management system

- ISO 14001:2004 certified
- EMAS ER 761/2001 certified
- Included in the ISO 9001:2000 certified integrated management system

the larger extent as reasonably possible.

Additionally, within the framework of EMAS, the company is committed to publish, on an annual basis, information regarding its environmental performance, in the form of an *Environmental Statement*. This is a prerequisite which allows the organization to remain within the Eco-Management and Audit Scheme System, and is manifested with renewed decisions of the Ministry of the Environment, Urban Planning and Public Works each year. In 2008, MOTOR OIL issued its BV-certified *Environmental Statement 2007*, its second such statement after the one for the year 2006.

It is worth noting that, in the oil refining sector, the triple combination of ISO 14001:2004 and EMAS certification for the environment and ISO 9001:2000 for quality, is particularly important, and provides multiple advantages; such certification is rarely encountered in European refineries of a similar complexity level as the MOTOR OIL refinery.

## «ECOPOLIS 2008» Environmental Sensitivity Award

In year 2008, MOTOR OIL received a significant distinction: The «*ECOPOLIS 2008 – Environmental Investment*» Environmental Sensitivity Award for businesses, which it had also received in 2007. The company was awarded for the implementation of an innovative crude oil tank cleaning method. This method minimizes the environmental impact, by reducing the quantity of solid waste produced and achieving zero gaseous emissions. Moreover, it eliminates the hazards for the health and safety of employees, since they are not required to enter the tanks.

The prize award was organized for a fourth consecutive year by the environmental, non-profit, non-governmental organization Ecocity. The purpose of this institution is to recognize and reward environmentally-sensitive initiatives and projects implemented by Scientific Authorities, Municipalities, Public Sector Organizations, Enterprises, State Authorities and the Media.

The award ceremony took place at the GAIA Natural History Museum on June 4th, 2008, and the award was received on behalf of the company by the Head of the Health, Safety and Environment Section, Mr Y. Paleokrassas.

The ECOPOLIS 2008 sculpture. The winning entry was artist's Valentino Marengo «LEAF», made of recycled glass. The laurel leaf signifies victory and recognition, while the recycled material symbolizes economy in the use of resources by mankind.



## Environmental investments and expenses

**The company's investment policy** is oriented towards the production of products that comply with the relevant specifications, by using technologies that minimize environmental effects. Projects for the improvement and enhancement of the refinery's environmental performance absorb resources, having the maximization of expected benefits as the main criterion.

During the last seven years, as shown in the table below (which includes the corresponding AVIN OIL data), MOTOR OIL has implemented a massive investment programme totalling 725.8 million euros. The major part of this investment programme was related to the construction of the Hydrocracker complex and its supportive facilities. Low-sulphur fuels produced by the Hydrocracker complex, satisfy EU specifications that came into force on 1.1.2009. Investments in clean fuels absorbed 56.2% of total investment, while investments for the further improvement of environmental performance absorbed an additional

11.0%. Overall, environment-related investments amounted to 487.9 million euros or 67.2% of the total investment programme.

Total investments in 2008 amounted to 78.4 million euros, of which 16.7 million euros (21.3% of the total) concerned projects in improving and protecting the environment.

Year 2008 was characterized by the completion of the largest preventive maintenance programme in the history of the refinery, while the upgrading of steam boilers was completed, thus contributing significantly to the reduction of the refinery's NOx emissions. A series of other, smaller and larger, projects were implemented during the year; these were oriented towards the reduction of emissions and energy consumption, the improvement of the environment-related measurements system as well as, the improvement of the liquid waste management.

## Environmental impact management

**The operation of a complex industrial plant**, as is the case for modern refineries, is characterized by the influx of large quantities of raw materials, the consumption of equally large quantities of energy in order to convert these into end products, and finally the distribution thereof on the market.

This process gives rise to the need for a system that will regularly and reliably measure and then assess the impact that each of the production units has on the environment and finally, classify them according to their criticality. This in turn necessitates the establishment of a set of criteria, including legislative requirements and the opinions of stakeholders, among other things.

Finally, it is clear that this system will have to be structured in such a way as to monitor the evolution of the plant and redefine the criticality of individual parameters.

The minimization of the impact that our activities have on the marine environment, the underground water, the air and soil quality, the reduction

### ENVIRONMENTAL INVESTMENTS AND EXPENSES 2002 - 2008 (in million euros)

Year	2002	2003	2004	2005	2006	2007	2008	Total	Percent
Total Capital Investments	47.4	88.5	251.0	164.5	44.6	51.4	78.4	725.8	
Environmental Project	9.3	58.3	234.6	132.0	15.1	21.9	16.7	487.9	67.2%
- For clean fuels	1.0	54.6	231.5	120.6	0.0	0.0	0.0	407.7	56.2%
- For improving performance	8.3	3.7	3.1	11.4	15.1	21.9	16.7	80.2	11.0%
Environmental Expenses	2.0	2.2	2.2	2.5	2.6	2.9	4.0	18.4	
<b>TOTAL OF ENVIRONMENTAL INVESTMENTS AND EXPENSES</b>	<b>11.3</b>	<b>60.5</b>	<b>236.8</b>	<b>134.5</b>	<b>17.7</b>	<b>24.8</b>	<b>20.7</b>	<b>506.3</b>	

and efficient management of solid and liquid waste, the further reduction of the noise naturally caused by such intensive industrial activities, and finally the rational use of water and energy, all constitute the most important challenges that the company has to confront.

In recognition of the human factor contribution for the limitation of the environmental impact of its activities, MOTOR OIL provides relevant training to its employees for this purpose.

With respect to the construction of new projects, the evaluation of alternative proposals takes environmental effects into account, in view of minimizing them by incorporating Best Available Techniques.

## Best available techniques

**Directive 96/61/EC** for the *Integrated Pollution Prevention and Control (IPPC)*, is aimed at the integrated prevention and control of pollution caused by industrial activities.

This Directive introduced the concept of *Best Available Techniques (BATs)* at a legislative level. BATs are techniques that can most effectively prevent or control – depending on their field of application – the pollution caused by an industrial activity, while also being economically feasible and technically practicable. Best Available Techniques per sector are described in the relevant *Best Available Techniques Reference Documents (BREFs for short)*.

MOTOR OIL incorporates the aforementioned techniques both during the design of new refinery units and for

the upgrading of existing ones, in view of minimizing the impacts arising from their operation. At the same time, the company incorporates automations and control systems in the operation of the refinery; these contribute to the efficient management of raw materials and energy while ensuring high levels of reliability and safety in the units. Finally, Best Available Techniques that reinforce pollution prevention capacity have been adopted and are applied in the refinery's daily operation.

Some typical examples of BAT application are shown in the following table.

<b>Production of Fuels and Lubricants</b>	<b>Ancillary Facilities</b>
<ul style="list-style-type: none"> <li>» Hydrocracker Complex</li> <li>» Upgraded pre-heating furnaces</li> <li>» Maximization of refinery-gas recovery</li> <li>» Upgrading of amine regeneration unit</li> <li>» Closed-circuit sulphur production</li> </ul>	<ul style="list-style-type: none"> <li>» Introduction of natural gas to the refinery</li> <li>» Electricity co-generation</li> <li>» Installation of low-NOx burners</li> <li>» Reverse osmosis desalination unit</li> </ul>
<b>Environmental Protection Systems</b>	<b>Control Systems</b>
<ul style="list-style-type: none"> <li>» Acid water treatment units</li> <li>» Waste water treatment plant</li> <li>» Electrostatic filter in the fluid catalytic cracking unit</li> <li>» Vapour recovery system in the Truck Loading Terminal</li> </ul>	<ul style="list-style-type: none"> <li>» Power Management System (PMS)</li> <li>» Distributed Control System (DCS)</li> <li>» Advanced Process Control (APC)</li> </ul>
<b>Daily Operation</b>	
<ul style="list-style-type: none"> <li>» Fugitive emissions Leak Detection and Repair (LDAR) programme</li> <li>» Automated tank cleaning method</li> <li>» Heat exchangers maintenance and cleaning programme</li> </ul>	



# Climate change

**The climate change** taking place over the last fifty years constitutes one of the most important challenges – on a global scale – for human health, social cohesion, economic development and food-chain safety.

According to the annual report\* of the *Intergovernmental Panel on Climate Change (IPCC)*, changes to the climate itself (increased average temperature, changes to atmospheric conditions, etc.) and the effects of such changes (altered ecosystem composition, reduced polar ice caps, observed changes in the duration of each season, etc.) are now clearly visible.

It has been widely accepted that the main cause of climate change is the increase of the concentration of anthropogenic greenhouse gases in the atmosphere, such as carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), chlorofluorocarbons (CFCs), sulphur hexafluoride (SF<sub>6</sub>) and nitrous oxide (N<sub>2</sub>O). Characteristic of the urgency of the situation is the fact that greenhouse gases emissions have increased almost 12-fold in the last 100 years.

In order to avoid increases to the earth's temperature, it is necessary to stabilize the greenhouse gases concentration in the atmosphere, which means that by 2020 the emissions will have to be reduced by 25% to 40% compared to 1990 levels.



## International initiatives

In 1997, 184 countries committed, by signing the *Kyoto Protocol*, to reduce their emissions by 5% compared to 1990's (base year) levels, within the period between 2008 and 2012. The Protocol was formally put in force on 16th of February 2005.

Within this framework, the EU undertook the obligation to limit man-

made emissions by 8% within that same period, while Greece was given a margin to increase emissions by 25% compared to the base year. For the achievement of the above objectives, *the Greenhouse Gas Emissions Rights Trading Scheme*, as established by Directive 2003/87, was adopted as the main mechanism. Through this scheme, Member-States are invited to submit *National Emission Allocation Plans* for individual activities

\* *Climate Change 2007, Synthesis Report*

and subsequently to the relevant enterprises.

2008 was characterised by an intense activity in EU in respect to the formulation of new policies towards the reduction of greenhouse gases emissions. On 23 January 2008, the European Commission announced a new series of measures, through which it aims to achieve its targets for reducing emissions and promoting renewable energy sources by year 2020. Targets set include the reduction of emissions by 20% compared to 1990 levels, and an increase of the share of renewable energy sources to 20%.

The further reinforcement and extension of the *Emissions Rights Trading Scheme* will constitute the main tool for the achievement of the above objectives. It is expected that the emissions from the activities included in the Scheme will be reduced by 21% in comparison to those of year 2005, while it is important to note that within the new framework of measures, allocation to enterprises will be implemented on a European and not a national level. The above measures are currently in the process of being instituted in the form of Directives and Regulations.

### **MOTOR OIL's position**

MOTOR OIL shares society's concerns over the effects of the anthropogenic activities on the environment and the consequences of climate change.

Our belief is that in order to confront this phenomenon, coordinated action on a global level as well as, strong commitment towards this aim from all stakeholder groups, including consumers, is required. The intensive and targeted information provision on issues related to the rational use of energy as well as, of the other resources that are becoming insufficient, such as water, and the consequent mentality changes, are important parameters for the success of any other initiatives.

Within the framework of carrying out our business operations in a responsible manner, and adhering to the principles and objectives of Corporate Social Responsibility and sustainable development, we are committed to:

- ▶▶ Measuring and improving, on a continuous basis, our performance with respect to the use of energy and the reduction of greenhouse gases emissions.
- ▶▶ Investing in the application of technologies that contribute to the reduction of emissions.
- ▶▶ Cooperating with the competent state authorities and other stakeholders in planning technologically feasible and financially viable environmental protection policies.
- ▶▶ Reporting our actions and results to all interested parties.

### **CO<sub>2</sub> emissions**

2008 is the first year of the 2nd stage of the implementation of Kyoto Protocol decisions for the period 2008-2012. Apart from the requirements in respect to the reduction of CO<sub>2</sub> emissions, the 2nd implementation stage imposes stricter specifications relating to the accuracy of measurements and the evaluation of their relative uncertainty.

Within this framework, MOTOR OIL:

- ▶▶ Completed the accreditation of its Chemical Laboratory quality control as per the EN 17025:2005 standard, for the calculation of the carbon quantity in the refinery fuel gas, using the gas chromatography methodology.
- ▶▶ Installed appropriate devices for the continuous measurement of flow and molecular weight at the flare of the hydrocracker complex.
- ▶▶ Proceeded with the first stage certification of the continuous measurement analytical devices installed in the smoke stacks of the fuels, lubricants and hydrocracker units.

During 2008, carbon dioxide emissions amounted to 1.952 million tons, i.e. 6% less than in year 2007. It should be noted that this reduction was achieved without any reduction in the refinery's production, which in fact was slightly higher. Thus, the refinery's emissions per ton of product produced dropped from 0.29 to 0.27 tons of CO<sub>2</sub>.

# Energy consumption optimization

**The process of crude oil refining** as well as, the conversion of its fractions into end products is particularly energy-intensive. Energy requirements are such that, the rational use of energy is of particular importance, both for the environment and the company's economic results.

Year 2008 was characterized by the introduction of Natural Gas to the refinery. The projects completed in previous years (replacement of gas turbines, upgrading of pre-heating furnaces, installation of Advanced Process Control, etc.), combined with the continuous monitoring of energy performance together with the preventive maintenance programmes implemented, contributed to the reduction of the refinery's energy consumption by approximately 6% (3.8 TJ per ton of product produced, down from 4.0 TJ in 2007).

## Introduction of natural gas to the refinery

2008 was an important year for the shaping of the refinery's «energy footprint». The first delivery of natural gas in May 2008 marked a turn to more environmentally-friendly sources

of energy. Moreover, it is important to note that the construction of the natural gas pipeline serving MOTOR OIL, constitutes an important parameter for the economic viability of a potential expansion of the national network to Megalopoli, in view of supplying the Public Power Corporation's electricity generation plants, with significant environmental and economic benefits for the area.

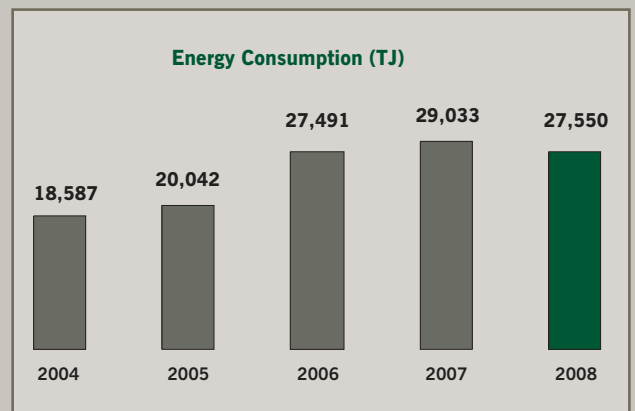
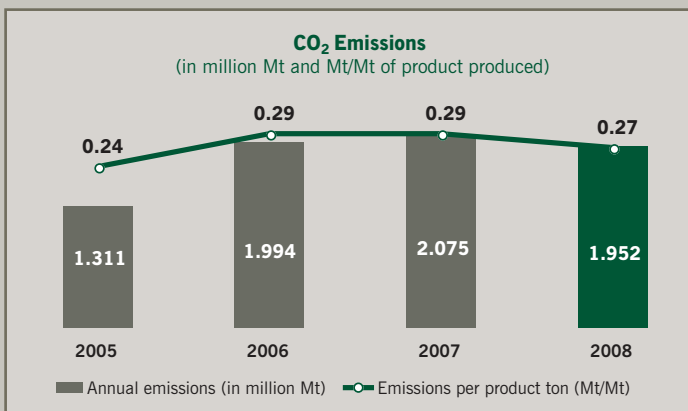
Within the refinery, natural gas is used:

- ▶ As an alternative raw material for the hydrogen production unit. The production of environmentally-friendly fuels requires the consumption of large quantities of hydrogen, the production of which is based on the catalytic reformation of hydrocarbons (naphtha or LPG) with steam. Carbon dioxide is produced as a by-product of this procedure. Utilization of natural gas as an alternative feedstock results in reduced carbon dioxide quantities emitted. It is estimated that emissions are 12% lower than those generated with the use of naphtha or LPG.

- ▶ As an alternative fuel for the Power Co-generation Plant turbines, which consume either fuel gas or propane as the case may be, and depending on the refinery's operating scheme. The use of natural gas allows the plant to operate with approximately 16% lower emissions.
- ▶ As an alternative or supplementary fuel for those refinery furnaces that currently use heavy fuel oil fractions thus resulting in significantly decreased quantities of emitted air pollutants.

## Electricity and steam co-generation

The reliable and uninterrupted operation of the Power Co-Generation Plant is of decisive importance for the refinery's operation. The four gas turbines, with a total capacity of 68.3 MW, in conjunction with the two waste heat boilers that recover heat from the flue gases generated, provide the refinery with the required power supply autonomy while at the same time cover a large percentage of its steam requirements.



Besides the autonomy it provides, the operation of the Plant contributes to the reduction of greenhouse gas emissions at a national level. Its operation drastically reduces electricity imports from Public Power Corporation (PPC), the production of which would require the conventional fuel mix, with multiple adverse results for the environment. For year 2007, the estimated benefit for the environment amounted to 38,700 tons of CO<sub>2</sub>, while for year 2008 increased to 61,000 tons. This increase is attributed both to the further reduction of imports from PPC, and the improvement of the Plant's energy performance to 36.9% from 34.7% in 2007.

Moreover, the simultaneous production of 100 tons of steam per hour is translated into a benefit for the environment amounting to around 200,000 tons of CO<sub>2</sub> per annum, which would have otherwise been released from the burning of additional fuel in the refinery's steam boilers.

Year 2008 saw the successful completion of the Level II preventive

maintenance programme of the 3rd gas turbine, which, together with the replacement of the two older gas turbines that took place in years 2006 and 2007 (the fourth turbine was installed in 2005), upgraded the Plant's overall performance.

### Monitoring and daily practice

Besides the major projects taking place at the refinery in view of saving energy, the daily practice of monitoring the energy performance of the units and the timely intervention for the correction of any weaknesses appearing, makes a major contribution in this direction. The installed Advanced Process Control (APC) system optimizes the energy use in each of the units, by virtue of the continuous monitoring.

Similarly, the refinery's preventive maintenance programme provides for:

- ▶▶ Systematic retubing, repair and cleaning of heat exchangers and air coolers in order to increase the percentage of energy recovered. During 2008, a site for the safe and environmentally-sound cleaning

and maintenance of the refinery's exchangers was completed in 2008.

- ▶▶ Replacement, through annual programmes, of pipeline and equipment insulation, thus minimizing losses to the environment.
- ▶▶ Maintenance and/or replacement of rotating equipment whose energy performance is not up to specifications, perhaps due to ageing.
- ▶▶ Repair and/or replacement of refractory, burners and tubes of pre-heating furnaces.





# Air quality management

**Safeguarding air quality** both within refinery's boundaries and in the surrounding area, is a legal as well as an ethical obligation for the company, within the framework of Corporate Social Responsibility. Air pollutants concentrations are monitored through a wide range of techniques that make use of state-of-the-art measurement equipment. The measurement grid that has been created covers both point and diffuse emissions sources on a continuous and intermittent basis.

► Monitoring of air quality in the peripheral zone of the refinery, is carried out on a continuous basis by three fixed monitoring stations, which are capable of measuring and recording hydrogen sulphide (H<sub>2</sub>S) and sulphur dioxide (SO<sub>2</sub>). A fourth, mobile station, equipped with state-of-art measuring and recording devices has the ability to monitor the concentrations of multiple pollutants, including nitrogen oxides (NO and NO<sub>2</sub>), sulphur dioxide (SO<sub>2</sub>), hydrogen sulphide (H<sub>2</sub>S), hydrocarbons besides methane (CH<sub>4</sub>), particulate matter PM<sub>10</sub> as well as, meteorological parameters. In 2008, the mobile station was equipped with PM<sub>2.5</sub> particulate and carbon monoxide measurement equipment, a provision that exceeds the legislative requirements. It must be noted that the PM<sub>2.5</sub> measuring device is the only one operating on a private basis in Greece.

► The flue gases of the main refinery chimneys are continuously monitored by online analysers. The parameters measured are temperature, flow, exhaust gas humidity and oxygen, NO<sub>x</sub> and dust

## Leak Detection and Repair (LDAR)

The refinery's fugitive emissions detection and leak repair programme is based on the EPA 21 method of the United States Environmental Protection Agency.

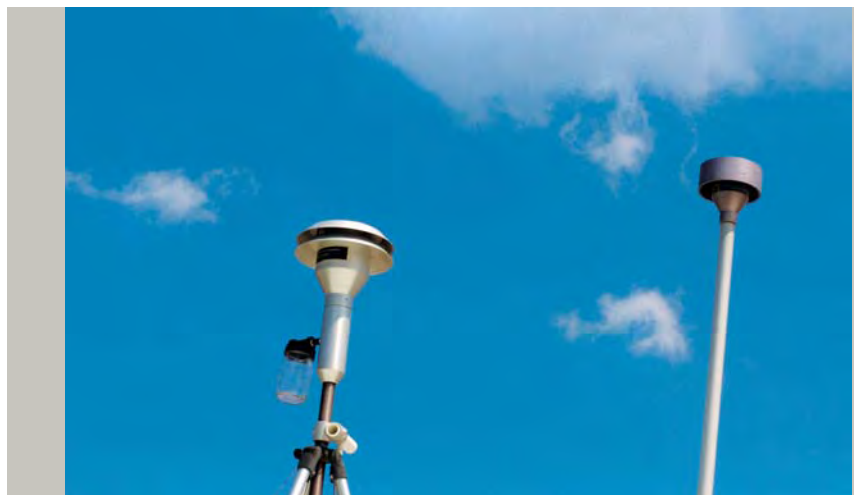
Fugitive emissions can result at numerous points within the refinery, such as valves, pumps, flanges, safety valves and other related equipment installed on the pipelines, pressure vessels, reactors or storage tanks.

The programme's key design and implementation points are:

- Determination of control points
- Determination of measurements frequency
- Determination of the appropriate measurement methodology to be used
- Implementation of periodic checks at the predefined points
- Repair of leaking components
- Reporting on findings

The MOTOR OIL refinery's leak detection programme includes more than 5,000 predetermined points, which cover all production units, truck loading terminals, port facilities, storage tanks and oil separators. These points are checked by refinery personnel at least once a year (the frequency depends on the process to be controlled), using portable volatile hydrocarbon concentration measurement equipment. In the event that concentrations are found to exceed 5,000 ppm, a repair request is issued for the equipment checked.

6,100 checks were implemented in year 2008, which revealed 68 points requiring intervention by the refinery's personnel, and which were either handed in for immediate repair or scheduled for repair during the refinery's planned maintenance programme.



concentration. It is important to point out that the analysers are connected to the refinery's Distributed Control System (DCS), a configuration which allows for the complete control of the combustion taking place in the furnaces.

- ▶ An automatic performance control system is operative in 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, SO<sub>2</sub> concentrations at the exit points of those units. Also, the H<sub>2</sub>S/SO<sub>2</sub> ratio is continuously measured, recorded and adjusted, so as to ensure maximization of recovery performance (more than 99%). The operation of sulphur production units and of the respective meta-furnaces is controlled via the refinery's Distributed Control System (DCS).
- ▶ The supply lines of the flares of both the Fuels production unit and the Hydrocracker unit, are subject to continuous measurement of total sulphur concentration. The

analysers installed are connected to the Distributed Control System of the refinery.

- ▶ Emissions from the refinery's other chimneys are measured and certified every four months by a suitably accredited company.

A plethora of different types of equipment, from and to which large quantities of raw materials, intermediate and end products are transferred, is installed in any industrial unit, as is the case of a modern refinery. In such an environment, it is to be expected that specific points will present a higher risk of hydrocarbon leaks into the atmosphere. In order to limit fugitive emissions from the equipment, a program of periodic checks on carefully selected points has been designed and implemented. The Leak Detection and Repair programme (LDAR for short) constitutes a major tool towards the reduction of hydrocarbon emissions in the atmosphere.

Besides the measures for **monitoring** concentrations of air pollutants, a

**series of measures to actively reduce air pollution** are in place within the refinery. The refinery's fuel-gas desulphurization units and the sulphur recovery units play a vital role in this process. It is noted that the units were expanded during the Hydrocracker Complex construction project in 2005.

In 2008, a new water washing system of the diesel desulphurization unit's gases was installed; this provided a higher nitrile removal capacity which in turn improved the the operation of the downstream gas treatment and sulphur recovery units. Finally, a study is being carried out for the upgrading of the methyldiethanolamine recovery unit; this project is expected to further improve the operation of the refinery's sulphur recovery units.

The project for the upgrade of the refinery's steam generation complex, with a total cost of 7.6 million euros, came to completion with the revamp of the fourth steam boiler. The upgrade ensures reliable steam generation for the refinery's needs, while also achieving the reduction of nitrogen



oxide emissions and noise levels.

The detailed records for the past five years demonstrate that both the hourly and daily concentrations are much lower than the limit values set by law ( $\text{NO}_x$ :  $200 \mu\text{g}/\text{m}^3$ ,  $\text{SO}_2$ :  $350 \mu\text{g}/\text{m}^3$ ,  $\text{PM}_{10}$ :  $50 \mu\text{g}/\text{m}^3$ ).

As for hydrogen sulphide emissions (which have been minimized following the upgrading of the acid gas processing systems and sulphur recovery units), these are monitored on a daily basis by all 4 air quality monitoring stations. The analysis of results shows that the concentration of  $\text{H}_2\text{S}$  at the station located in Aghioi Theodoroi, outside the Refinery, and therefore in the broader region of the facilities, is particularly low.

Finally, sulphur emissions in 2008 ( $247 \text{ kg}/\text{h}$ ) appeared significantly lower than in previous years (2007:  $256$ , 2006:  $406$ , 2005:  $391 \text{ kg}/\text{h}$ ), due to the use of low-sulphur fuel.

## Low- $\text{NO}_x$ Burners

Nitrogen oxides ( $\text{NO}_x$ ) are responsible for a series of environmental effects, such as the creation of photochemical pollution, the phenomenon of acid rain and the increased concentration of ozone in the atmosphere, which is detrimental to human health.

During the burning of liquid or gaseous fuels, the nitrogen ( $\text{N}_2$ ) contained in the atmosphere is oxidized, resulting in the production of  $\text{NO}_2$  and  $\text{NO}$  (thermal oxides), depending on prevailing burning conditions. The main factors affecting the creation of oxides are burning temperature, air excess and flow conditions in the burner.

The first low- $\text{NO}_x$  burners appeared at the beginning of the 1990s, when the effects of  $\text{NO}_x$  in the atmosphere started to be noticed. At this point, it should be pointed out that their design and construction is quite challenging; the burners must be designed in such a way that the achievement of low  $\text{NO}_x$  concentrations does not affect other operating parameters such as their energy performance and  $\text{CO}$  emissions.

The main techniques used (alone or combined) are the following:

- (1) reduction of the air preheat temperature,
- (2) low air excess,
- (3) gradual introduction of air or fuel and creation of two or three combustion zones with mixtures that are rich or poor in fuel, and
- (4) re-circulation of exhaust gases.

The implementation of these techniques leads to the alteration of the combustion mechanism, which can result in the reduction of  $\text{NO}_x$  emissions by 50% to 60%.



## Liquid waste management

**Liquid waste** produced by the refinery's operation can be divided into two categories: *industrial waste* and *urban waste*.

Due to their different pollutant load, different processing techniques are applied to these types of waste, prior to their final disposal. Industrial liquid waste is pre-processed in the refinery's specialised units and then transferred to the Waste Water Treatment Plant, while urban waste is transferred to the Urban Liquid Waste Treatment Plant. After the waste is processed, processed liquid waste is transferred to the end recipient, while the sludge produced is dehydrated and compressed prior to final disposal.

The following table shows the evolution of the hydraulic and pollutant load of

the Waste Water Treatment Plant over the last five years.

During 2008 a number of projects for the improvement of rainwater and equipment drainage management were completed, together with projects concerning the operation of the Industrial and Urban Liquid Waste Water Treatment plants. Moreover, the reinforcement of the acid water treatment plant allowed for greater flexibility in load management.

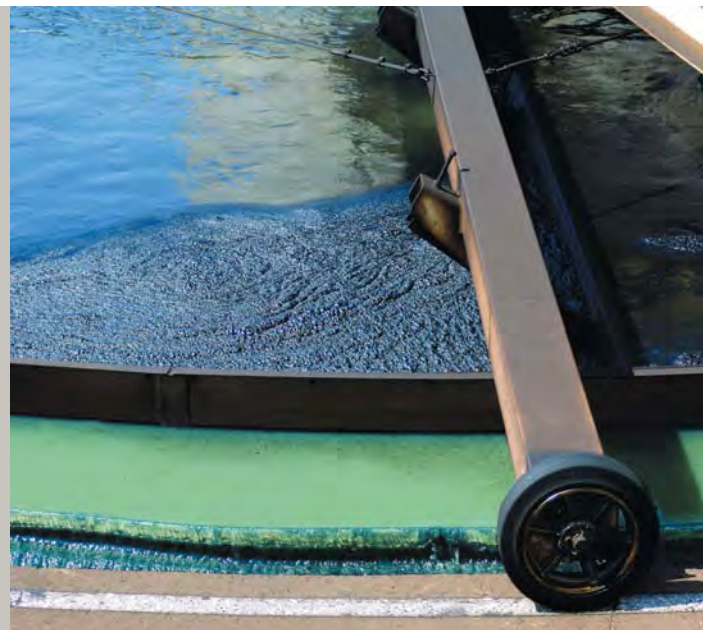
Particular attention has been paid to the management of sludge produced; a method is being examined for its

stabilization and safe disposal in landfills or its utilization as an alternative fuel. At the same time, the project for the ventilation of the sludge storage tank was completed.

Finally, a study is being conducted for the utilization of existing idle capacity to further improve gaseous emissions and the increase of the sludge drying efficiency at the industrial waste water treatment plant.

**Hydraulic and Pollutant Load of the Industrial Waste Water Treatment Plant**

Parameter	2005	2006	2007	2008
Discharge Rate (m <sup>3</sup> /day)	7,565	8,976	10,385	10,297
BOD <sub>5</sub> (Kg/day)	266	305	286	265
Suspended solids (Kg/day)	75.0	143.0	208.0	174.0
Phenols (Kg/day)	3.10	2.51	2.58	3.79



# Solid waste management - Recycling

## The management of solid waste

produced during the operation of the refinery requires integrated processes to be put in place covering all stages of waste life-cycle, from collection to eventual exploitation/disposal.

The main aims of a solid waste management programme are:

- ▶ reduction of quantities produced, at source,
- ▶ separation into hazardous and non-hazardous waste at source, wherever possible,
- ▶ 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 aiming towards the protection of both the environment and the human health.

Cooperation with licensed companies specializing in the management of specific types of solid waste is deemed more than necessary in all occasions.

In year 2008, more than 121 Mt of spent catalyst were removed by licensed solid waste management companies.

At this point, a mention must be made on the programme regarding the removal of asbestos components from MOTOR OIL's facilities. In 2008, 1,075 m<sup>2</sup> of asbestos sheets (11.56 Mt) were removed, following another 4,150 m<sup>2</sup> in year 2007. The removal was carried out by a specialized hazardous material management company, which has the necessary

## Landfarming at the refinery

The deposits arising during tank cleaning are processed in either two-stage (decanter) or three-stage (tri-canter) centrifuges, for the removal of hydrocarbons. The resulting solid residue is subjected to biodegradation at specially prepared sites (landfarms), in conformity with the relevant API landfarming standard.

This method has proved to be effective for the reduction of the concentration of all oil product components, and is based on the metabolic activity of microorganisms (algae, protozoa, fungi and bacteria) that naturally occur in the soil. Bacteria present the largest populations, and are the most biochemically-active agents. The characteristics of the soil, the oily components in the sludge collected from tank bottoms, and the weather conditions are the main parameters that can influence the effectiveness of this method.

An environmental audit was carried out due to the change in use of the land previously used for the application of the above method; the audit included chemical analyses for the determination of substances presenting environmental concerns, such as metals, metalloids, Polycyclic Aromatic Hydrocarbons (PAHs) and DOC (Dissolved Organic Carbon) and evaluation thereof on the basis of geochemical criteria, taking into consideration the land's geochemical background, and the maximum acceptable limits determined by international environmental legislation. The audit was carried out by a research team led by Prof. A. Kelepertzis, of the Department of Economic Geology and Geochemistry, Faculty of Geology and Geoenvironment, of the University of Athens.

The following conclusions were drawn from the audit:

- ▶ «...the concentrations of all environmentally graded metals and metalloids in the soil examined are considered normal on the basis of both the geological background and the land use of the project site».
- ▶ «...the concentrations of aromatic hydrocarbons in the soil examined are considered normal on the basis of the maximum acceptable values established by current environmental legislation».

licenses for both collection and export of the asbestos abroad.

As far as used lubricants and their packaging is concerned, we have contracts 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 the recycling of used lubricants and their packaging, thus contributing to the protection of the environment and raw material savings. We also collaborate with accredited firms specialised in the recycling of batteries, ink toner cartridges, motor vehicle tyres and computers.

## Water management

### In 2008, the following were recycled:

- 2,732 tons of iron (scrap)
- 121 tons of spent catalyst
- 45 tons of wood
- 26 tons of paper<sup>1</sup>
- 13 tons of lubricants<sup>2</sup>
- 3.4 tons of batteries
- 1,300 toner cartridges

The money raised from paper and toner cartridges recycled at Head Office is donated to the Foundation «For the child and the family».

<sup>1</sup> The use of recycled and non chemically-bleached paper was initiated in 2008.

<sup>2</sup> These quantities refer to the refinery alone, since corresponding reliable figures for the AVIN OIL retail network are not available.

## Noise Management

**Water** is one of the natural resources at risk, a fact which renders its sound management more than imperative.

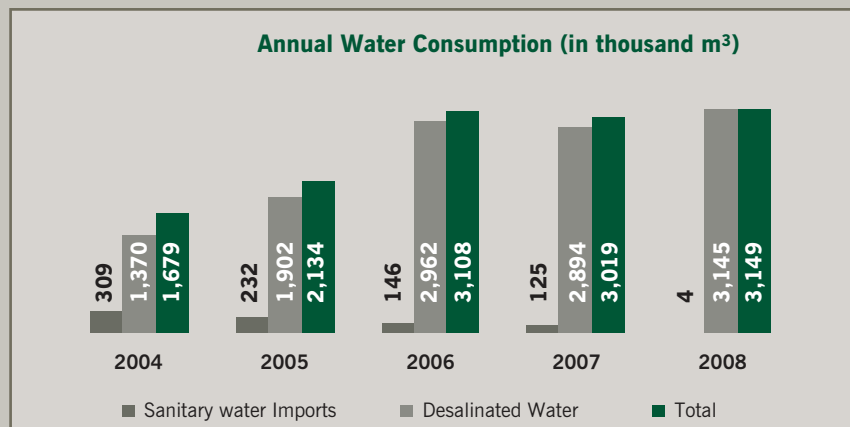
Year 2008 was a milestone for water management at the refinery. For the first time, the operation of the desalination units made possible the supply of adequate quantities of water to cover more than 99.8% of the refinery's needs. Thus, where imported water in year 2007 amounted to 125 thousand m<sup>3</sup>, this quantity dropped to 4 thousand m<sup>3</sup> in year 2008.

It should be noted that in 2006, following the completion of the refinery's expansion project, the quantity of water consumed per ton of product produced increased. In year 2007, this quantity dropped by 7%, and increased again by 3% in 2008. This increase is attributed to the thorough preparation of the equipment for maintenance during the extensive refinery's turn around.

**Noise caused** by industrial facilities, such as the MOTOR OIL refinery, is a natural and inevitable consequence of the activities taking place.

MOTOR OIL monitors noise levels on a regular basis, by carrying out measurements at a large number of locations around the refinery, and takes suitable measures to minimize any disturbance caused to the neighbours. Such measures include the installation of silencers and sound curtains, as well as the procurement of equipment with low noise emissions.

A study on noise reduction in the refinery's sulphur recovery units was completed in year 2008.



# Marine environment protection

**Due to its location**, the operation of MOTOR OIL's refinery is completely interwoven with the marine environment. Due to the extensive impact a potential pollution may cause, both on the marine ecosystem and the economic and social life of adjacent areas, as well as the tremendous expense that rehabilitation entails, prior planning and preparation for successfully responding to such incidents is absolutely necessary.

Within this framework, MOTOR OIL:

- ▶▶ Takes all necessary active and passive protection measures to minimize the risk of oil spills during the operation of its refinery.
- ▶▶ Takes all necessary measures and provides all equipment for the safe arrival and departure of tankers at its facilities, as well as for the safe loading/unloading thereof.
- ▶▶ Has drafted an *Oil Spill Contingency Plan*, which is harmonized with the Local Contingency plan and the National Contingency Plan drafted by the Ministry of Mercantile Marine.
- ▶▶ Maintains all necessary equipment for responding to local small and medium scale water pollution incidents (Tier 1 & 2), such as absorbents, booms, skimmers, coastline cleaning equipment and vessels (boats, tugboats and a special vessel equipped with tanks for storing the collected pollutants). There are also appropriate stocks of oil dispersants, used at the final stage of clean-up operations, when authorised by the port authorities.
- ▶▶ Audits the preparedness of the above plans and maintains personnel response capability at high levels, with an annual drill schedule, which includes eight Tier

1 (small scale) pollution drills and two Tier 2 (medium scale) pollution drills.

- ▶▶ Is a member of international and regional organizations, whose aim is to coordinate the cooperation for preventing major oil spill incidents and the providing assistance in the response to such incidents should they occur (see p. 70).



## Communication with stakeholders

**Within the framework** of the principles of Corporate Social Responsibility, MOTOR OIL uses various means of keeping local authorities and other stakeholders informed of its activities, either by involving its own staff in local authority conferences and meetings, or by organising events at the refinery. The aim of such meetings is to provide regular briefings to the local authorities about its investment plans and its programmes relating to environmental protection.

Within this framework, a meeting with Local Government officials and other local authorities took place in April 2008, to provide information on the company's environmental policy and investment prospects in the coming years. The presentation was made by the Refinery's General Manager, Mr M. Steiakakis, with an introduction by the Deputy Managing Director, Mr I. Kosmadakis.

Besides briefing the local authorities, the company also keeps in touch with

refinery neighbours, and accepts any complaints they may have. Complaints expressed by neighbours are recorded, investigated and evaluated according to the refinery's complaint handling procedures, and short or long term measures are taken to address them, depending on the cause of the disturbance. One typical example of actions to reduce disturbance is the study for and subsequent installation of a foam breakdown system at the industrial waste water treatment plant, following a specific complaint received. The number of complaints recorded during year 2008 was 27, compared with 35 complaints in 2007, 24 in 2006 and 36 in 2005.

Finally, we contribute to the environmental protection work of Non-Governmental Organizations. In 2008, we sponsored a study on the quality of seawater around the Argosaronikos islands, carried out by the Pan-Hellenic Centre of Ecological Research (PAKOE).

## Participations and collaborations

**MOTOR OIL acknowledges** the value of the exchange of information and opinions between companies, organizations and other entities on environmental protection issues. The progress of science and technology, as well as developments taking place at a legislative level, render the need for communication between entities imperative.

- ▶▶ We are an active member of the CONCAWE organisation (*CONservation of Clean Air and Water in Europe*), which provides technical support to European refineries on health, safety and environmental protection issues. Our participation ensures constant, complete and systematic information provision on matters concerning environmental protection, during production, distribution, handling and use of the products that we produce. The conclusions of research projects are evaluated and incorporated in our daily business practices in the most suitable manner, thus further improving the company's environmental performance.
- ▶▶ We are a member of the *Oil Companies International Marine Forum (OCIMF)*, an association of petroleum companies with an interest in the marine transportation of crude oil and petroleum products, as well as the operation of oil terminals. The forum's activities are aimed at promoting the safe and environmentally-friendly operation of facilities and oil tankers, through the continuous improvement of design standards and operating practices.

- ▶▶ At a regional level, we are a member of the *Mediterranean Oil Industry Group (MOIG)*, a regional oil industry forum on the coordination of the industry in preventing marine pollution and in the preparedness for responding to major oil spill incidents in the Mediterranean Sea.

We support the academic community both in the development of primary knowledge and in the observation and study of phenomena in view of drawing environment-related conclusions.

Within this framework, MOTOR OIL:

- ▶▶ Finances the programme entitled «*Study of the distribution and chemical behaviour of toxic pollutants in a marine area affected by industrial activities. Application of mild catalytic pollution control technologies*», carried out by the Athens University Chemistry Department and the National Centre of Scientific Research «*Demokritos*». Within the framework of this programme 2 doctoral theses are being elaborated. The programme concerns the study of the levels, distribution and environmental behaviour of basic pollutants in the marine area of the North-western Saronic Gulf, where the MOTOR OIL refinery is located. It also concerns a deeper analysis of environmentally significant chemical processes typical to the area, and the investigation of the possibility to apply mild pollution control/decontamination technologies.
- ▶▶ Continues to cooperate with the Applied Geochemistry Laboratory of the Geology Department, Patras University, for the determination of prevailing chemical conditions in the water column of the refinery's coastal zone.
- ▶▶ Supports the research programme of the Institute of Technology and Solid Fuels Applications, concerning the use of solid waste for energy production.
- ▶▶ Participates in the research programme entitled «*Development of new chemical processes for the production of biodiesel from biomass and its uses on the Greek market*»; apart from MOTOR OIL, eight other parties are involved, including the National Technical University, the Centre for Research and Technology Hellas (CE.R.T.H.), and the Agricultural University of Athens. The aim of this programme is to examine the basic operating parameters of a hydrogen-processing plant for mixtures of vegetable oils and de-sulphurised diesel, the possibility of using conventional catalysts for this purpose and finally, the examination of the possibility of simultaneous processing of gasoils and vegetable oils.



# Compliance with environmental legislation

**Strict application** of the measures instituted by national and European authorities, and compliance with the reporting requirements of current legislation, constitute integral parts of our environmental policy.

Thus, in year 2008:

- We submitted the greenhouse gas emissions report for year 2007 to the Ministry of the Environment, Physical Planning and Public Works.
- We submitted the annual report on hazardous and non-hazardous wastes (liquid and solid) production for year 2007 to the same Ministry and to the Peloponnese Regional Authorities; a similar report was submitted to the National Statistical Service for year 2006.
- We submitted the annual report on gaseous and liquid pollutant emissions for year 2007 to the same Ministry and the competent Prefecture Council.

Additionally:

- We submitted the plan for the collection of waste generated by ships at MOTOR OIL's port facilities, to the Ministry of Mercantile Marine.
- We submitted a report on the construction of five new propane, butane or LPG storage tanks at MOTOR OIL's facilities. According to a decision taken by the Ministry of the Environment, Physical Planning and Public Works, the proposed project will be included in the Environmental Terms Approval Decision currently being revised. This will be issued in



application of Directive 96/61/EC on Integrated Pollution Prevention and Control (IPPC).

- The review of environmental terms for MOTOR OIL's facilities is currently in progress.
- Additional data for the Environmental Impact Study of the new Crude Distillation Unit, currently under construction, was submitted to the Ministry of the Environment.
- Finally, the annual Environmental Statement 2007 was submitted to the Ministry of the Environment, Physical Planning and Public Works, in accordance with the requirements of EMAS ER 761/2001. The company is registered with the European Eco-Management and Audit Scheme (EMAS) and in the Hellenic Register of EMAS-registered organizations, under number EL 000067.

## AVIN OIL

**For 31 years, AVIN OIL** has been operating in the oil sector – marketing quality products and services – with respect for people and for the environment. Its «*Health, Safety and Environmental Protection Policy*» summarizes the principles the company consistently adheres to in all of its activities. The policy requires compliance with all legal obligations, regulations and codes of practice. AVIN OIL operates a comprehensive *Health, Safety and Environmental Management System* which provides for regular audits and management reviews to ensure its effectiveness and continuous improvement.

The company has invested in its retail network so as to comply with the requirements of EU Directive 94/63 (Stage I) concerning the recovery of Volatile Organic Compound (VOCs)

emissions, and is gradually investing in the installation of devices for the early detection of tank leakages in its petrol stations.

The programme for renewal of the company's fleet of road tankers ensures the safe transportation of products, and the protection of the environment in parallel. Within the framework of this programme, all road tankers have undergone the necessary modifications and are suitably equipped with the required systems for recovering VOCs emissions. Three new road tankers were added to AVIN's fleet in 2008; these are included in a broader plan for the acquisition of a total of ten road tankers. The new road tankers are fully equipped for environmentally-friendly operation, in accordance with current legislative provisions. Finally, AVIN OIL's road tanker drivers were trained in 2008 on the

principles of ecological driving, through the European ECODRIVE programme.

The Aghioi Theodoroi Truck Loading Terminal is fully equipped for bottom loading, while its upgraded pump station makes a major contribution to the reduction of its energy consumption. Finally, in order to ensure the quality of the soil, two (2) monitoring wells have been constructed and for taking soil samples on a monthly basis, for the early detection of a potential petroleum product contamination.

AVIN OIL has signed a contract with a firm specialised in the recycling of used lubricants and with another one specialised in the recycling of the used lubricants' packaging; these contracts provide for the collection and recycling of AVIN OIL's lubricants and packaging materials after use.



# Community Involvement



## **Commitment to the community – responsibly, consistently and reliably**

We strive to benefit local communities through job creation and fostering entrepreneurial activity, to contribute to the overall economic development of the country, and to ensure that our activities have a positive and productive impact on the social environment in which we operate. Moreover, we also believe that we have a responsibility towards society to participate actively in enhancing social values, and in creating a hopeful and humane future. For these reasons, we support the communal and cultural life in the area surrounding our installations, as well as the social and cultural life of society as a whole, by means of a diversified programme of donations and sponsorships.

## Contribution to Society

**Our social contribution** is one of the main parameters of the way in which we perceive our commitment to Corporate Social Responsibility, and we handle it as responsibly as we handle our human resources, environmental protection, health and safety in the workplace, and the issues of corporate governance.

Our sponsorship activities seek to provide consistent and reliable assistance to the community, according to our corporate objectives and values, aiming at supporting the values that promote the quality of life: education, healthcare, athleticism and culture.

During 2008, and in line with our long-standing tradition as a socially active corporate citizen, we sponsored and donated a wide variety of different activities realized by reliable organizations and foundations. The activities we supported were selected by the competent company executives at local and corporate level, in accordance with the procedures and

provisions of the relevant policy and in application of our strategy for community involvement, which is built around the following main objectives:

- ▶ support for cultural, athletic and social activities and initiatives,
- ▶ donations to hospitals and church-run aid agencies,
- ▶ contribution to education and the sciences,
- ▶ support for the work of non-governmental organisations, associations and charitable foundations,
- ▶ broad assistance in addressing the social needs of groups and individuals,
- ▶ support for projects to improve local infrastructure, and
- ▶ hosting of informative visits to the refinery, and offering student traineeships.

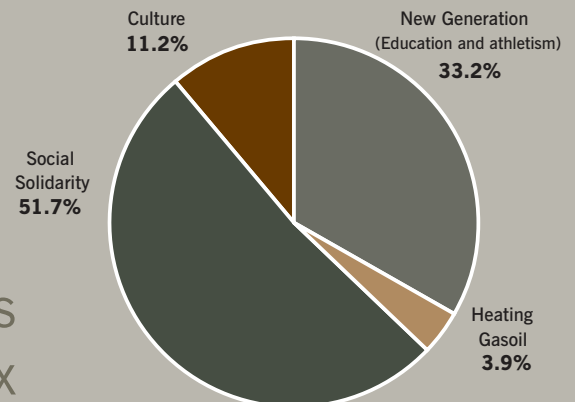
## Contribution to local communities

**A prime aspiration** of ours is being a source of prosperity to the local communities adjacent to or near the refinery, through the large number of job opportunities we offer, as well as the provision of a broader care for these communities by working on the development of constructive relationships with them, which we constantly strive to enhance aiming at achieving a balanced and harmonious coexistence.

This care is expressed through the support we offer for the implementation of various programmes and initiatives. The programmes we support are selected through a process of dialogue, communication and cooperation with the various authorities and organisations in the municipalities of Aghioi Theodoroi, Corinth, Loutraki, Saronikos and Solygeia. The main criteria we take into consideration for selecting the particular programmes, are their potential contribution to the development and promotion of the local communities, to the enhancement of the social sub-structure, and the exploitation of synergies that lead to more tangible results rather than merely meeting societal needs.

### 4.7 million euros in donations and sponsorship in 2008

Distribution of the 2008 Sponsorship Programme



6.2% of the group's net earnings after tax

### Education

We provide financial support for various local schools, aiming at contributing to the improvement of their infrastructure or educational equipment, and at the realization of various school activities and programmes that promote the level of education.

The following are some examples of these activities in 2008:

- Financial support to the environmental programme of the 2nd Corinth Junior High School, for educational visits and the publication of the 9th issue of the school's newspaper, currently in its sixth year, always on account of our company's support.
- Financial aid for schools in Aghioi Theodoroi: to the 3rd Kindergarten, which opened in 2008, for the acquisition of equipment and educational material; to the 1st Day Nursery for the acquisition of garden toys and playground equipment; to the 1st and 2nd Kindergarten for the purchase of educational equipment; to the Junior High School for the replacement of classroom curtains;



and to the Senior High School for educational visits.

- Provision of computer equipment to the Corinth Experimental Junior High School (3 computers, 10 monitors and 4 printers).
- Financial aid to the Elementary School and Kindergarten of Xylokeriza for the construction of a computer room.
- Economic support to the Isthmia Junior High School for an

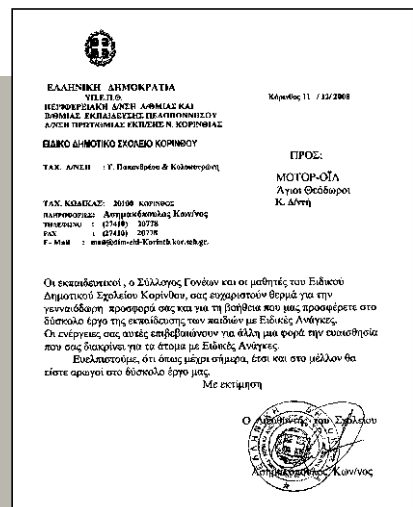
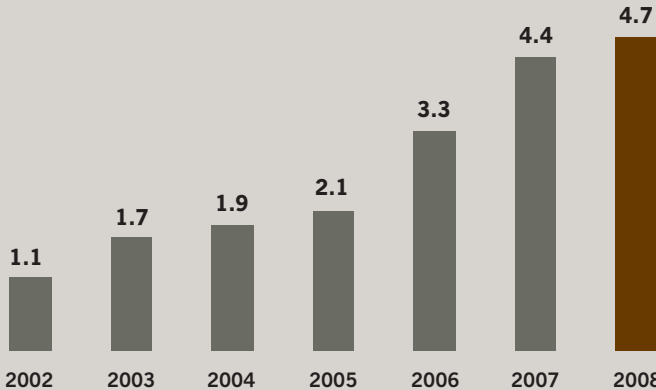
educational visit to Thessaloniki by the students of the 3rd class, within the framework of the «Artistic Intervention» educational and cultural programme.

- Financial aid, for the third consecutive year, to the Elementary School of Almyri for the maintenance of its facilities.
- Support for the Isthmia Elementary School and Kindergarten Parent-Teacher Association, for organizing cultural events and educational excursions.
- Purchase of books for the Elementary School and Kindergarten of Vochoikos, Corinth.

### Culture

In year 2008, we contributed to the realization of many high-quality cultural events by assisting a multitude of local associations that promote the area's cultural level in many ways, such as by offering classes for traditional dancing and theatre workshops, organizing concerts and theatrical performances, and by rewarding top students.

Donations and Sponsorships (in million euros)



### Refurbishment of the «Krokideios Hall», Holy Diocese of Corinth

We responded with a major donation to the appeal of the Bishop of Corinth to raise funds for the repair and refurbishment of the «Krokideios Hall», in order for the historical hall to re-open its doors to the Corinthian Church and the public. It is the only hall in the town of Corinth that is suitable to serve as a venue for the pastoral, spiritual, artistic and social activities of the Holy Diocese, as well as a multi-function hall for the town of Corinth, something that the town clearly needs.

### Corinth Municipal Cultural Centre

Year 2008 was the 150th anniversary of the establishment of the New Town of Corinth (the town was moved from the site of Ancient Corinth to New Corinth in 1858, after the catastrophic earthquakes). In order to celebrate this anniversary, the Municipality of Corinth and the Corinth Municipal Cultural Centre organized a series of events throughout the year, under the general heading «150 years Corinth – one town, centuries of history». The events included scientific conferences, theatre and dance performances, artistic exhibitions, musical events and sports activities. MOTOR OIL sponsored the events of the «150 years Corinth – one town, centuries of history» programme.

We also sponsored the Corinth Municipal Cultural Centre's organization of the summer events «Cultural Mosaics 2008», which included concerts (by ONIRAMA, Katsimihas-Xydous-Koutras, the 70-member German group Frohlicher Akkordeon Express, and others), traditional dances and songs with groups from Greece, Egypt and Russia, theatrical performances (*The Doctor in Spite of Himself* by Molière, *Oh my kidneys* by M. Tsikliropoulos, *Clouds* by Aristophanes, Shadow Theatre), and a Rock-Metal music festival



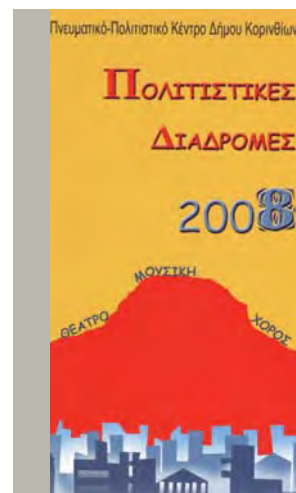
19.2 millions euros  
in donations and sponsorships  
over the last six years

### Aghioi Theodoroi Cultural Centre

As we do every year, we supported the events organized by the Aghioi Theodoroi Cultural Centre, which celebrated 20 years of ongoing and expanding cultural activity in year 2008. The Centre offers culture, entertainment, knowledge, education and new horizons to the citizens of Aghioi Theodoroi.

The Cultural Centre operates many different departments, such as: guitar (40 children), traditional dance (150 children – 80 adults), adult and children's theatre workshop (60 persons), philharmonic (25 persons), adult and children's modern dance (70 adults – 90 children), parental consultancy, art workshop (for elementary school and kindergarten – 53 children), puppet theatre for kindergarten and adult and children's choir (120 persons).

Many different events were organized in 2008, including theatrical performances with the «Notis Pergialis» Open Theatre, the «Horeftiko Sergiani» Festival, with traditional dance performances by dance departments of cultural associations throughout Greece, painting and photography exhibitions



- We donated to a series of cultural events organised by various local associations, such as the Corinthian Amateur Theatre «*Vassilis Rotas*», for the play *Medea* by Euripides, and the play *Me arithmo protokollou* by Vassilis Kostaras, which were presented at theatrical festivals in Greece and abroad, the «*Irida*» theatre in Corinth, the Loutraki-Perahora Municipality Cultural Centre for the organization of Carnival events, the Isthmia Cultural Club, the Corinth Epirots Association «*Pindos*», the «*Aghios Dimitrios*» Cultural Association of Xilokeriza for the publication of its annual magazine, the Saronikos Municipality's Cultural Association, «*Arakoukia*» for the organization of a musical cultural evening, the «*Mainalo*» Arcadians Union of Corinth Municipality, the Examilia Cultural Association for events organized by its dance group, the Aghioi Theodoroi Women's Association and the Aghioi Theodoroi Cretan Association «*Psiloritis*».
- We support many local newspapers and magazines, which have limited resources and a small readership



### Concert by the «*Mikis Theodorakis*» Orchestra

Over the last six years, since the 1,600-capacity open-air theatre named after the renowned Greek composer Mikis Theodorakis was inaugurated in Examilia, Corinth, the Lysippeion Cultural Centre of Corinth Prefecture has been organizing a large popular music concert with the «*Mikis Theodorakis*» Orchestra. The 2008 concert took place on July 25th.

MOTOR OIL sponsors the event every year. The purpose of this sponsorship is to pay a tribute to the valuable musical heritage of Mikis Theodorakis, who, besides his enormous symphonic work, has also composed ninety-four song-cycles that promote poetry in a simple and genuine manner and originate from the roots of our popular tradition. Moreover, the company shows its support to this orchestra that, for over a decade and under the composer's supervision, has presented remarkable productions, cooperated with major artists, musicians and singers and has travelled around the world, promoting the power of Mikis Theodorakis' music.

At the concert of July 25th 2008, a major cultural event for the area as always, the «*Mikis Theodorakis*» Orchestra played famous popular songs by the composer, accompanied by the voices of Kostas Thomaidis, Grigoris Valtinos, Lina Orfanou, Hero, Alexandros Hajis and Petros Gaitanos.



## Social solidarity

- ▶▶ About eight years ago, MOTOL OIL launched a very important social solidarity initiative in cooperation with the Corinth Municipality Protection Centre for Elderly People, which the company continuously supports. The initiative involves a meals programme for Corinth's destitute elderly people, within the framework of which free lunches and dinner supplements are offered 365 days a year. The meals are prepared at the refinery's restaurant and are the same as those offered to refinery employees.
- ▶▶ In every year and since its establishment in year 2000, we offer significant economic assistance to the Aghioi Theodoroi Protection Centre for Elderly People; the Centre has around 400 members and we cover part of its operational expenses and the enrichment of the events it organizes for the area's elderly. In year 2008, this assistance covered many events, such as excursions, special painting and handicraft seminars and conferences on medical issues relevant to geriatric diseases.
- ▶▶ We offered economic assistance to the «*Efthymeion Centre*» for Treatment and Rehabilitation of People with Special Needs, in Corinth, for the organization of an artistic event at the «*Mikis Theodorakis*» theatre in Examilia, in which, the children of the «*Efthymeion Centre*» were playing the leading roles. The Centre provides assistance and relief; it is recognized for the quality of its services and has thus far provided care for more than 400 Persons with special needs, both through its treatment programme and its occupational workshops. In 2008, the Centre accommodated around 153 persons with special needs. Persons with special needs require constant and specialized support, and continuous medical and social care. MOTOR OIL has shown interest in the «*Efthymeion Centre*» for many years given that we are convinced that exclusion has no place in contemporary society, and that persons with special needs should be incorporated in society through suitable actions and programmes.
- ▶▶ We offered economic assistance to the Hellenic Red Cross, Aghioi Theodoroi Regional Department, in order to equip the ambulance and the coastal First Aid station with a portable defibrillator, and for meeting part of the operational costs of its team of volunteer lifeguards.
- ▶▶ We donated to the Corinth Prefecture Association of Sickle Cell Anaemia Patients, which represents 60 thalassemia patients, who receive transfusions and are monitored by the Corinth Hospital.
- ▶▶ We offered Christmas gifts to the schoolchildren in Aghioi Theodoroi, Isthmia and Kyra-Vryssi.
- ▶▶ During the Christmas and Easter periods, we offered some economic assistance to more than 620 destitute people in Corinth, Aghioi Theodoroi, Isthmia, Loutraki, Saronikos and Solygeia.
- ▶▶ As every year, we provided the Municipality of Aghioi Theodoroi with lubricants for all municipal vehicles and machinery, as well as electronic equipment (6 computers, 7 printers and 30 monitors).
- ▶▶ We donated to various entities, such as the Corinth Labour Centre, the Association of Corinth Police Officers, the Corinth Municipality Cleanliness and Landscaping Division, and the Corinth Trade Association.
- ▶▶ We provide assistance to neighbouring communities in emergency situations, placing at their disposal the refinery's personnel and its technical, fire-fighting anti-pollution and medical equipment whenever necessary, as well as its personnel buses to meet the occasional transport needs of schools and sports clubs. Examples of this activity in 2008 include the provision of a company ambulance on around eight different occasions, the provision of fire-fighting equipment and personnel on two occasions, and coaches on ten occasions.





## Heating

In year 2008, more than 250,000 litres of heating gasoil were provided free of charge during the winter months to more than 220 recipients. The objective of this social contribution is to meet part of the heating expenses of schools, orphanages, public kindergartens, municipal childcare centres, public elderly people's homes, churches, church institutions, etc. in the neighbouring municipalities, as well as the similar expenses of a large number of other recipients in other regions of the country, mainly in the Athens area. Such recipients included the «*Smile of the Child*» charity organisation, the «*Efthymeion Centre*» for treatment and rehabilitation of people with special needs, the «*Corinth Special Elementary School*» for disadvantaged children, the Aghioi Theodoroi schools, the Corinth Kindergarten, the «*Vissarioneio*» old people's home in Istiea, the «*Agia Eleni*» elderly people's home in Loutraki and the «*Floga*» Association of Parents of Children with Neoplasia.

## Environment – Improving local infrastructure

### Donation of a Fire Engine to the Municipality of Aghioi Theodoroi

MOTOR OIL donated a fire engine to the Municipality of Aghioi Theodoroi, at an official ceremony that took place on July 16, 2008. This action underlines the continuous interest of the company in the safety of people, and the protection of the environment of the greater area, as well as its excellent cooperation with the neighbouring Municipalities, especially that of Aghioi Theodoroi.

The fire engine is a MAGIRUS-DEUTZ make, is equipped with tanks for 6,000 litres of water and 500 litres of foam component, and a roof water/foam monitor, while its operation is assisted by two water and water/foam spraying hoses. It is an exceptionally effective fire-fighting vehicle, which will contribute significantly to the Municipality's efforts to ensure the best possible fire protection in the area, at a time when incidents of forest fires are on the rise.



- We supported the Municipality of Solygeia in carrying out a deep exploratory water bore in its effort to increase its available drinking water reserves.
- We covered the needs of around 200 homes around the refinery, in terms of garden and cleaning water, with water quantities produced by the refinery's desalination plants. This water is a source of life for the area's vegetation. MOTOR OIL has built and maintains the water supply mains to these homes, as they are not covered by the existing Aghioi Theodoroi water distribution network. In year 2008, 72,000 cubic metres of water were thus provided free of charge, with a value exceeding 230,000 euros.
- We provided support to the «Aghioi Theodoroi» Forest Protection Association, which owns three fire engines and other equipment, to allow it to continue its important work of direct and effective intervention by its volunteer firemen in the case of a forest fire in the region.
- We donated to the construction of a one thousand five hundred seat open-air theatre in a very picturesque location in Sofiko village, which will be the host of cultural events organized by the Municipality of Solygeia.
- We also made donations to various local development and other associations, involved in landscaping and related infrastructure projects. These associations included, among others: the Sousaki «Klara Elias» association for upgrading the facilities of the association's children's club, the Kitsivari «Galini» association for

replacement of the cultural events hall roof, the Kitsivari «Nea Zoi» association for road paving works, «Apostle Paul» (Keghreon), «Glykia Zoi» (Sousaki) for sports facilities and installation of trash cans on the beach, «Philothei» Keghreon for road paving, «Aghios Charalambos» Kalamakiou for electricity works, «Halcyon» Agia Marina-Kyra Vryssi for landscaping in the churchyard, «Kallybizes» Aghioi Theodoroi for repair and acquisition of new toys for the playground, «Prathi» Aghioi Theodoroi for repair of the church of Panagia Prathiou, «Pika» Kinetta, «Kiafa Beka» Aghioi Theodoroi, «Protoporos» Aghioi Theodoroi for landscaping of a site to be used for the construction of a playground, and the Federation of Aghioi Theodoroi Residents' Associations.

## Sports

We support activities that promote the spirit of athleticism in the young people of the local communities, as an instrument for cultivating a spirit of fair competition, developing personality and enabling healthy inclusion in society. Some examples of this contribution to local communities in 2008 include:

- ▶ A significant donation to the football team of the «Corinthos» Pan-Corinthian Athletics Club, which we have been supporting for a number of years.
- ▶ Financial support to the Loutraki-Perahora Municipality for the organization, together with the National Volleyball Association, of the 1st European Beach Volleyball Championship for under-18s, in Loutraki (28-31 August 2008), which attracted the participation of 48 teams from 26 European countries.



## Broader Social Contribution

- ▶ Financial support for infrastructure and organizational projects to the «Tiron» Basketball Club of Aghioi Theodoroi, which was established in 1988 (many of the founding members being former employees of MOTOR OIL) and has more than 100 active athletes of all ages. Also, donations to the «Saronikos» Galatakiou Sports Association, the Corinth Gymnastics Sports Union, the Union of Corinth Football Clubs, and the Corinth Tennis Club.
- ▶ Donations to numerous other local sports clubs, including the Aghioi Theodoroi «Theseas» karate Sports Club, the Aghioi Theodoroi Tennis Club, the Football Clubs «Kypselos» Corinth, «Ethnikos» Xylokeriza, «Pannemeatikos» Nemea, «Teneatis» Athikia, the Loutraki Sports Club «Poseidon», the «Isthmiakos» Sports Club, the Corinth Marine Club, the «Palaimon» Basketball Club, the «Aghioi Theodoroi» Sports Association, the Corinth Gymnastics Sports Union, the «Corinthos» Football and Gymnastics Club, the Corinth Football and Athletics Academy, the «Corinthos» Volleyball Club, and others.

### Entrepreneurship

Being the largest economic entity and employer in the Prefecture of Corinth, MOTOR OIL provides income, directly or indirectly, to a large number of families in the area, and is a pillar of prime importance for the area's economic development. The company also supports the market in the Corinth area by implementing a policy of preference for the region's businesses in order to meet the refinery's needs in consumables, food, etc., even if cheaper sources are available elsewhere.

We support local initiatives that aim at promoting entrepreneurship:

- The Corinthia Chamber of Commerce organized the 2nd regional exhibition «Corinthia 2008» between 17.9.2008 and 21.9.2008, which we supported. The exhibition, with 138 exhibitors and 18,000 visitors, was an important economic, social and cultural event for the Corinth region. In parallel events, presentations were made on



Corinthian cuisine, fashion, dance and ballet, while meetings on the prefecture's development included themes such as the environment and new forms of energy, and the relations of small and medium enterprises with banks.

**Our contribution to society** is not limited to supporting the local communities only, but also extends to a wide range of other objectives. Examples of our diverse activity in 2008 are mentioned below:

### Social solidarity

Action aimed at supporting bodies involved in social solidarity activities is a fundamental expression of our corporate values and our concept of Corporate Social Responsibility in particular.

- ▶ MOTOR OIL assisted the social work of UNICEF by making significant donations to the fund raising radio show and telethon organized in 2008.

The telethon took place on 16 December 2008 in cooperation with ET1 national television and with the participation of private radio and television stations, to raise funds for supporting the hungry or underfed children around the world.

The radio show of love took place on 17 April 2008, within the framework of an awareness campaign organized by UNICEF and the Ministry of Foreign Affairs, on the subject of Combating Child Trafficking. The exploitation of children as commercial objects for labour or sexual acts, is a profitable international operation – the third most profitable after arms and drug trading. Around the world, 1.2 million children are trafficked illegally each year.

UNICEF supports protection centres where children can find food and shelter, receive professional training and suitable psychological support. UNICEF also promotes the children's education as a strategy for the prevention of the exploitation of children, and works at international level to improve legislation in view of providing comprehensive protection to children.

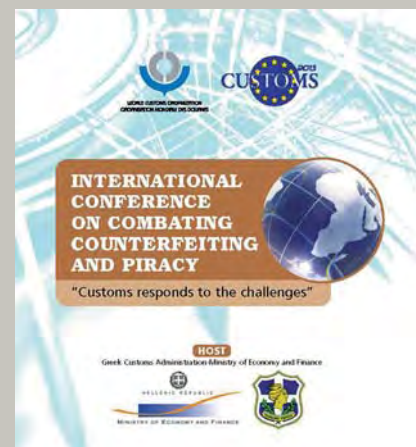
- ▶▶ We made a large donation to the Holy Diocese of Lambi and Sfakia for the reconstruction of the Panagia Thymiani Holy Monastery, and for the completion of a charitable Foundation owned by the Diocese, which aims to offer assistance for the rehabilitation of persons suffering from chronic mobility problems and other disabilities, in continuation of a similar donation made in 2007.
- ▶▶ We donated significantly to the «Annousakeion» Treatment Centre of the Holy Diocese of Kissamos and Selinos, which implements a multi-faceted social activity aiming at relieving human pain. It provides

accommodation for seventy senior citizens, operates four fully equipped physical therapy units with skilled staff, and has set up a programme for the provision of home help to the infirm; this programme provides systematic and organized care to 350 families.

- ▶▶ Within the framework of our initiatives for promoting entrepreneurship:
  - We supported the Arab-Hellenic Chamber of Commerce and Development for the organization of the 2nd Arab-Hellenic Economic Forum, which took place in Athens on 19-20 November 2008, with the main aim of promoting business relations between Greece and the Arab countries.
  - We sponsored the General Directorate of Customs of the Ministry of Economy and Finance for the organization of national celebrations to mark the 40th anniversary of the European Customs Union, which is a basic component of the

Common Market. These events took place between September and December 2008 and aimed at raising public awareness with respect to the role of customs authorities and relevant future developments, which are expected to facilitate trade and public security.

- The General Directorate of Customs of the Ministry of Economy and Finance was also supported for the co-organization (together with the World Customs Organization and the European Union's Directorate-General for Taxation and Customs) of the international conference entitled «*International Conference on the fight against counterfeiting and piracy. Customs Response to the Challenge*».
- We supported the National Federation of Petroleum, Refinery and Chemical Industry Employees (as we do every year), the National Union of Retired Refinery Workers, the American-Hellenic Chamber of Commerce and the American-Hellenic Institute.





**«Nikolaos J. Vardinoyannis Foundation» at the Panagia Kalyviani Women's Holy Monastery**

For the last 30 years, MOTOR OIL – within the context of its charitable work – has been the main patron of the «Nikolaos J. Vardinoyannis Foundation» based at, and supervised by, the Panagia Kalyviani Women's Holy Monastery in the Heraklion Prefecture of Crete. We cover part of the Foundation's expenses, while the Holy Monastery is responsible for the remainder of the operating costs. The Foundation was set up and funded by the company's founder, Nikolaos J. Vardinoyannis, and its mission is the accommodation and social/professional rehabilitation of orphaned and indigent girls. Located in the idyllic setting of the Monastery, the Foundation is a sanctuary, where the girls are sheltered and cared for. They are trained in household tasks, particularly in the art of cutting and sewing, in embroidery, cooking, decoration and handicraft. The Foundation accepts girls aged 12-18, for a three-year stay. They receive accommodation, meals, tutoring, and religious and social instruction. Other needs, such as clothing, are also met. The Foundation has facilities to accommodate 60 girls.

- ▶ We sponsored the organization of an event by ActionAid Hellas at the Athens Megaron on 6 and 7 November 2008, in view of assisting the work of ActionAid, whose vision is a better and safer world for us and our children, through the eradication of absolute poverty.
- ▶ We donated to the telethon organized by Rethymnon Prefecture on Creta Channel on 6 May 2008, to support the family of a police officer who was seriously injured in the line of duty.
- ▶ We donated to the Hellenic Society for the Protection and Rehabilitation of Disabled Children (ELEPAP), the Hellenic Muscular Dystrophy Association (MDA Hellas) for the creation of a Youth Centre for young people suffering from neuromuscular diseases, the «Oasis» Addict Support Centre, the Organization Against Drugs (OKANA), the Children's Protection Association, the Hellenic Federation of Unions of Parents of Persons with Learning Difficulties, the Special Occupational Education Centre for intellectually challenged persons and the «Aghios Haralambos» old people's home in Aigion, which is run by the Agapis Melathron Ecclesiastical Foundation.



**act!onaid**

## Makistos: Promises turned into reality

Makistos village in Ilia prefecture was one of the villages devastated by the fiery storm that razed the country in the summer of 2007. Its homes were devoured by flames and fell into ruin. Whole families were wiped out, and a lifetime's efforts were lost. The Chairman and Managing Director of MOTOR OIL, Mr Vardis J. Vardinoyannis and his wife Mrs Marianna V. Vardinoyanni, a UNESCO Goodwill Ambassador, were among the first people to show an interest in our fire-stricken fellow countrymen and women; Mrs Vardinoyanni immediately travelled to Makistos and announced the undertaking of the entire repair cost of the homes.

The preliminary works for the rehabilitation of the Makistos village began immediately; the project was assigned to a construction company, which appointed permanent engineers in Makistos as of September 10th 2007, to ensure the best possible planning of works. The preliminary site surveys (house plans, recording of properties, examination and evaluation of damage to buildings, etc.) showed that the best method to rehabilitate the structures is their full repair, so as to ensure that the complete prior form is restored, while their static properties are significantly improved, and proper structural design codes are followed for enhancing the resistance to earthquakes. This method is also the most suitable from an architectural point of view, since it preserves the building façades and does not alter the village's architectural character as it was before the catastrophe.

Separate surveys for each building started to be drafted as of October 2007. The surveys include a full static analysis for the rehabilitation and structural reinforcement works, and a full architectural study covering the radical re-arrangement and



reconstruction of the buildings' interiors, on the basis of current standards for comfortable, modern homes. The constructors started taking over in January 2008, and clearing works began; as soon as the first permits were issued by the competent Town Planning Bureau, repair works were also able to begin.

On May 17, 2008, the inhabitants and the Local Municipal Authorities were briefed on the progress of works during an open meeting, and the surveyors presented the specifications and repair methods followed for the reconstruction of the buildings.

The complete project involves the repair of 49 buildings, which include 66 independent homes, and of 2 churches that have already been repaired. Besides the constructors and their employees, more than 25 professional engineers –

architects, civil engineers, mechanical engineers, soil engineers and professors from the National Technical University of Athens – are involved in the execution of this project.

The first 8 repaired buildings were handed over in November 2008, while by the end of the year a total of 12 buildings (16 independent homes) had been delivered. The works are proceeding rapidly, and the last building is expected to be handed over before the end of year 2009.

The «Next Day» programme was also in progress in year 2008; this programme was supported by MOTOR OIL with a cash sponsorship, and is an initiative of the Hellenic Network for Corporate Social Responsibility – of which MOTOR OIL is a founding member – in cooperation with the Non-Governmental Organization



PRAKSIS. The programme aims at protecting vulnerable groups in the fire-stricken areas (children and the elderly), and at organizing tree-planting activities with the participation of volunteer employees from the sponsoring companies. Actions in 2008 included reforestation expeditions – during which 2,000 trees were planted in the Avlida area – and tree-watering expeditions. Eleven volunteers from the company’s personnel participated in these expeditions.



### Education, science and culture

We provide consistent support for education, the sciences and culture. We believe in the power of knowledge as the factor that cultivates and fosters the development of both individuals and teams, and this is why we care about supporting and promoting education, research and technology - the three main pillars that constitute the driving force of progress and the support of society's

future. We also believe in the role of art and culture as key elements of a healthy social development, which is based on solid intellectual foundations, and we provide multi-faceted support for activities that present and bring out our cultural heritage.

In year 2008, we focused our interest on the following:

- ▶ For the celebrations of Naval Week 2008 (29 June – 6 July), we donated to the Hellenic Navy and the Hellenic Coast Guard. The Naval Week, which celebrated its 75th anniversary in 2008 – since it was established in 1933 – is celebrated every 2 years with events throughout the country. The aim of the events is to stimulate the sensitivity and love of Greek people for the sea, for the naval and maritime professions, as well as to promote our Nautical History, the Navy, a main element of our national security and the fiduciary of our nautical tradition, and the Merchant Navy, the pillar of the country's economic prosperity.

### The «Vardinoyanneion Foundation»

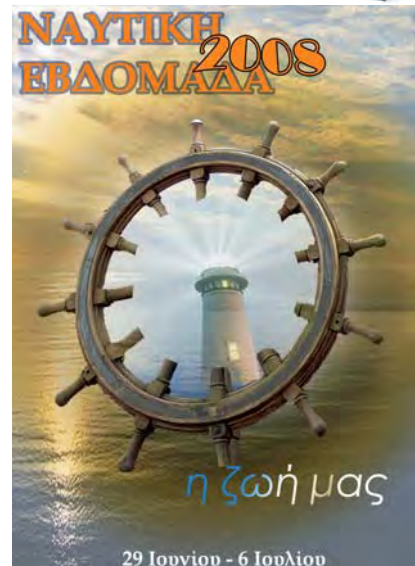
The «Vardinoyanneion Foundation», sponsored primarily by MOTOR OIL – the other sponsors being other companies of the Vardinoyannis Group – was established in 1989, and is run by a seven-member Board of Trustees. Its mission is to grant scholarships and awards, as well as to provide annual financial assistance, without examinations, for candidates who have distinguished themselves academically, or who are in need of support for graduate or post-graduate studies at tertiary education institutions either in Greece or abroad. Through these scholarships and financial support, candidates are assisted in overcoming financial problems allowing them to continue their studies unhindered.

The supported study areas vary in each academic year. A total of twelve scholarships were awarded for the academic year 2008-2009:

- two postgraduate scholarships for studies abroad, in the fields of Business Administration and Food Technology,
- five postgraduate scholarships for studies in Greece, in the fields of Greek Language and Literature, Business Administration, Maritime Studies, Clinical Psychology and International and European Studies,
- five undergraduate scholarships for studies in Greece, in the fields of Agronomy, Medicine, Archaeology, Economics and Naval Architecture.

In addition to the scholarships, 124 annual assistantships were also awarded in the academic year 2008-2009.

Since its establishment, the Foundation has awarded 122 scholarships and 1,274 annual assistantships.





### Association on Historical and Folklore Studies in Rethymnon

Since its establishment in 1965, the Association on Historical and Folklore Studies in Rethymnon has had a very creative history. Its aim is the collection, recording and publication of previously unpublished historical and folklore material, the preservation of our traditions and the collection of objects of historical and folklore interest. It is the founder of the Historical and Folklore Museum, it has organized meetings, conferences (local, regional and international), it has promoted educational programmes in Rethymnon and has published the *Cretologica Grammata* review since 1993; the review contains original articles, with important material supporting the research and study of local history.

In 2008, MOTOR OIL sponsored the Association on Historical and Folklore Studies in Rethymnon for the publication of the minutes of the conference «90 Years from the Union of Crete with Free Greece» and of the conference «Mylopotamos from Antiquity until Today».



### At the Herodium with Michalis' Sougioul music

October 2008 brought the 50th anniversary of the death of composer Michalis Sougioul, whose life was a major chapter in the field of music for an entire era. He composed his melodious and nostalgic songs as easily as breathing, and there was not a single song of his that did not become a success.

A tribute to the composer's memory was organized on 9 October at the Herodium under the characteristic title «... kai o minas echi ennia!...», which was the title of one of his biggest successes. MOTOR OIL was one of the sponsors of this tribute.

Michalis Sougioultzoglou was born in Aydin, Asia Minor, at the beginning of last century. In the 1930s, having shortened his name to Sougioul, he created a glorious career as a musician, conductor and composer. He composed romantic tangos and waltzes in Greece between the two world wars, impassioned and encouraged the Greeks in World War II with his «war» songs, which were sung by the famous Sophia Vembo, («*Pedia, tis Ellados pedia*», «*Mas horizei o polemos*», etc.) and was justly considered the composer par excellence of the '40 epopee. After the war, he created a new type of song, which he called «arhontorebetiko», to which the whole of post-war Greece danced and celebrated.

«Sougioul could put melody to a phone book,» Alekos Sakellarios used to say with his renowned humour. The case of his famous song «*Asta ta mallakia sou*» has gone down in history. Sakellarios has written the lyrics for a film, but no composer had succeeded in putting music to the difficult lyrics. «Bring it here,» said Sougioul and quickly made the whole of Athens sing that song on the same night!

The presentation at the Herodium was made by Ilias Logothetis, and Babis Tsertos was the main singer. Other participating artists included Manolis Mitsias, Loukianos Kilaidonis, Stamatias Fasoulis, Eleni Dimou, Spyros Papadopoulos and others.



## Photographic quest at the four corners of Europe

The well-known photographer Pavlos Fysakis set on a photographic expedition between 2005 and 2007, the central quest of which were the four geographical extremities of Europe. His destinations included Greece (Gavdos – southern edge), Norway (Nordkapp – northern edge), Russia (Urals – eastern edge) and Portugal (Sintra/Capo da Roca – western edge).

On a superficial level, the photographic research involved the creation of portraits of the cultural, social and natural environment of the four points that define the European Continent. But the main concern arising from the photography of these locations is whether a «European identity» exists or not.

In the locations in question, the photographic medium led the photographer to depict a similar atmosphere in these vastly different destinations. Some of his points of reference are: The effect of geographical location on the character and culture of the locals. The complexity of the concept of borders and the drama of their determination. Religion and religious sentiment, which adds symbolism to the continental extremities, from Gavdos where the Apostle Paul was shipwrecked, to the Ural Mountains. The sense of loneliness. The Christian cross, lighthouses, horizons, shadows, walls bearing characteristic motifs and societal symbols recur in their different versions and frame his heroes: the European of the extremities. The Europeans that embrace the continent and reflect its limits.

MOTOR OIL sponsored the publication of a collection of photographs from this photographic expedition, which was awarded at the Photobiennale in Thessaloniki and for which both the Museum of Contemporary Art in Moscow and the Thessaloniki Photography Museum have expressed an interest.



- ▶ The second scientific conference entitled «*Small scale water and liquid waste treatment plants*», organized by the Engineering Department of Planning and Regional Development of the University of Thessaly in cooperation with the Chemistry Department of the Aristotle University of Thessaloniki, in Skiathos from 2 to 4 May 2008. We sponsored this conference, the purpose of which was to present research projects relating to urban



and industrial liquid waste, natural liquid waste treatment systems, decentralized waste treatment systems, small liquid waste treatment plants, economic and technical parameters, sludge management and recycling, treated water recovery and re-use.

## Greek National Opera

The Greek National Opera, the only opera in Greece, which has served the noble art of opera and ballet for more than a hundred years, is the point of reference for the public that enjoys such art forms. Over the years, all entities that have supported its creative work have done so because they believe in the quality of the entertainment it provides, and also because they understand the importance of its contribution to Greek culture.

In year 2008, MOTOR OIL placed its trust in the Greek National Opera and supported it in the accomplishment of its artistic programme.



## Internship programme

Each summer, we offer one-month long periods of work experience for a large number of University and Technical School students at various positions in the refinery and in the head office. During their stay, trainees are introduced to the company's work environment and take part in projects involving team-work with our experienced members of staff who are tasked for this particular purpose. Furthermore, a number of students are offered the possibility of six months' practical work experience, relevant to their specific areas of study. During 2008, 137 month-long internship positions and 16 six-month positions were offered within the framework of this programme, with a total cost of around 200,000 euros.

- ▶ The symposium entitled «*Chemical Metrology*», which is a relatively new scientific sector, whose main objective is the production of reliable analytical results and the elimination of the uncertainty of measurements. Today, issues relating to the quality of measurements are considered particularly important and are directly linked to safety, environmental protection and commerce. This symposium, which we sponsored, was organized by the Association of Greek Chemists in cooperation with EURACHEM, a network of European organizations whose aim is to establish an international system for the traceability of chemical measurements and the promotion of quality rules.
- ▶ The support to the 14th Scientific Conference of Greek Medical Students and the 2nd International Forum of Medical Students and Young Greek Doctors, which took place at the Athens Megaron from 23 to 25 May and were attended by more than 2,000 medical students and healthcare professionals from all over Greece.

### Informational visits to the refinery

Every year, we organize informational one-day seminars and visits to our refinery for University, Technological, Military Academy and High School Students. During these events, visitors are given guided tours of the refinery and are briefed on technical, commercial and career matters, according to their specific interests, as well as on MOTOR OIL's contribution to society and on its commitment to environmental protection. Within the context of these events, more than 320 people participated in such visits during 2008.

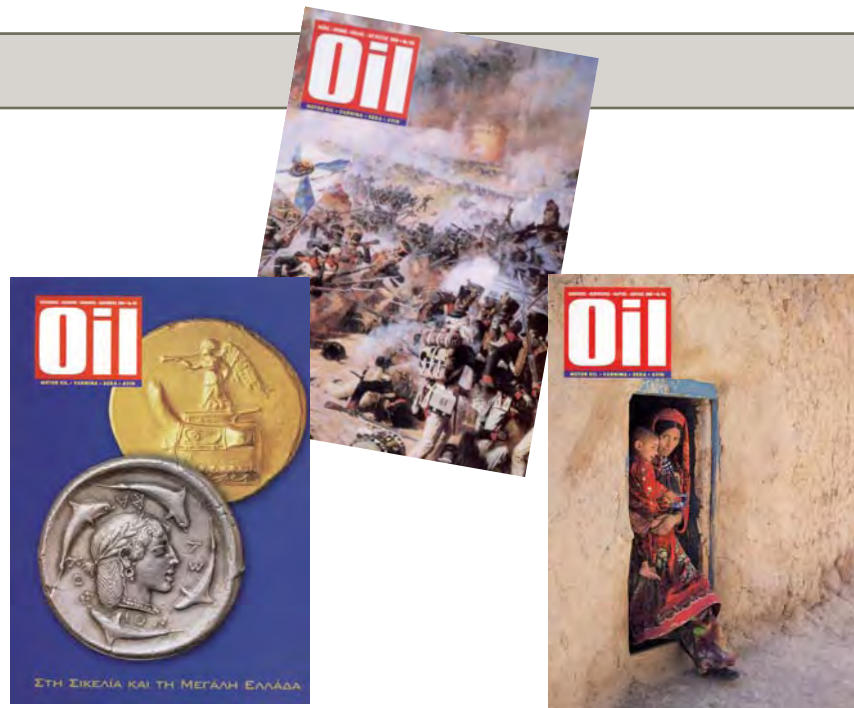


- » The offering of financial support to the High School of Episkopi – Rethymnon to organize an educational visit to Thessaloniki, and to the 1st Junior High School of Rethymnon to cover the cost of a visit by 12 students, with their attendants, to the Finsterwaltergymnasium in Rosenheim, Germany, within the framework of an educational student exchange programme.
- » The sponsorship to the Association «Pnyka – 21st Century» for publication of the book «Alexandros Panagoulis – Resistance Leader», in honour of this emblematic personality of the fight against the dictatorship.
- » The sponsorship to the Children's Stage of the National Theatre for the presentation on the island of Amorgos, for the island's children, of a play based on the book by Vassilis Mavrogeorgiou «The nicest story in the world».
- » The support to the International Scientific Conference entitled «The former eparchy of Agios Vassilios, Rethymnon, from antiquity until today: environment, archaeology, history, society», which was organized from 19 to 23 October 2008 by the Scientists' Association of the Municipality of Lambi.



## «OIL» Magazine

Since 1971, MOTOR OIL has been the primary publisher of the quarterly magazine, «OIL», which continues to be published on a regular basis. This magazine features high-standard articles on historical, sociological, religious, energy, environmental, scientific and technological topics, and promotes specific important company activities with broad public impact. The magazine has a run of 3,000 copies and is read by a significant number of both public and private organisations, as well as by higher education institutions.



►► The sponsorship of the Pammitis communication group for the presentation of Euripides' «Troads». This play was presented under the aegis of the Ministry of Foreign Affairs and the Hellenic Bureau of the UN High Commission for Refugees, to which all proceeds of

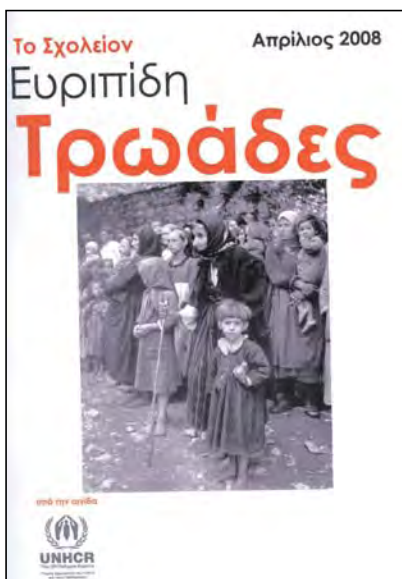
the play were donated.

- The donation to the Holy Church of Virgin Mary Presentation in Rethymnon, (the Cathedral of the town), to assist the effort of creating an Ecclesiastical Museum, in which more than five hundred ecclesiastical relics currently kept in the church repository are to be exhibited. A similar donation for the same purpose was also made in 2007.
- The additional donation – besides the ones in 2006 and 2007 – to the Holy Church of the Dormition of the Blessed Virgin in Mastamba, Rethymno, for the completion of its cultural and social events centre.
- The assistance to the Ecclesiastical Council of the Church of Saints Peter and Paul of the Missiria parish (Rethymnon), for completion of the church.

►► The financial assistance to the Ecclesiastical Council of the Church of Saint George of Kalo Horio, Pediada, Heraklion, for the construction of a church in honour of Saint Anne.

The following sponsorships made in year 2008 are also worth mentioning:

- Support for the concert of the Russian State Chamber Orchestra Moscow Virtuosi, which took place at the Herodium on 5 September 2008.
- Financing of publication of the book «Kato Poros».
- Support for the Cultural Committee of Ermioni Municipality.
- Support for the Cultural Educational Association of Garazos for the establishment of a Cultural Centre.
- Support for the magazine «Periplus Naftikis Istorias» (nautical history and tradition), of the «Kritika Nea»



newspaper, for the special edition entitled «*The Economy of Crete in the 21st century*» of the newspaper «*Kritiki Epitheorisi*» and for other important local journals and newspapers of small readership.

- Sponsorship to the Cultural Association «*Tourtouli*» of Agios Georgios, Sitias, for maintenance works on the village Elementary School, and to the Association of Mygdaliotes for completion of a church in the village.
- Financial assistance to the Drapetsona Municipal Development Enterprise for the organization of cultural events for kindergarten children in the Municipality of Drapetsona.
- Financial assistance for the cultural events of the Pan Cretan Association, the Society of the Sfakian Diaspora, the Association «*Cretagenis Zeus*», the Pan-Hellenic Federation of Cretan Associations, and the Association of Employees of Ekali Municipality.
- Computer donations: one to the 86th Elementary School of Kypseli, and three to the Organization for Vocational Education and Training, for the Korydallos Vocational Training Institute (IEK).

### Health care and volunteering

Health is a major objective of our social contribution, because the well-being of society is interwoven with the physical and emotional health of its citizens. We support institutions that are involved in health care and we donate medical equipment to hospitals. We systematically support the Corinth General Hospital over the years, and had, in the past, undertaken the cost of all the equipment for a clinic in the University Hospital of Crete.

### Corinth General Hospital

We support the Corinth General Hospital in a systematic and diversified way, covering the cost of medical equipment, the cost of improving the infrastructure of buildings, or by supporting scientific events and publications. Over the last ten years, our collaboration with the Corinth General Hospital has included the following:

- 2008** ● Donation of a portable echo-cardiograph to the Cardiology Clinic.
- Sponsorship for the organization of the 1st Cardiometabolic Risk Factors Conference, 29-31 May 2008.
- 2007** ● Financial assistance towards the organisation of a seminar on cardiology, paediatrics and intensive care treatment.
- Coverage of the cost of cleaning and painting works at the «Psychargo» psychiatric clinic.
- 2006** ● Donation of a complete gastroscope-orthoscope.
- Financial assistance towards the organisation of the seminar «*Treatment of the casualties of major road accidents*».
- 2005** ● Donation of special surgical equipment for the General Surgery, Orthopaedics and Urology Departments.
- Funding the publication of an information leaflet on the hazards of smoking.
- 2004** ● Donation of a series of medical textbooks to the library of the Hospital.
- Financial assistance for the Cardiology Department's educational programme.
- 2003** ● Donation of a plasmapheresis device for the Blood Donation Department.
- 2002** ● Donation for covering part of the cost of building improvements.
- 2001** ● Donation of medical equipment, including an electrocardiograph, for the Internal Medicine Department.
- 2000** ● Donation of an 8-12 blood units centrifugation device for the Blood Donation Department.
- 1999** ● Donation of a fully equipped Laparoscopy unit for the General Surgery Department.
- 1998** ● Donation of a complete laryngoscope for the Otorhinolaryngology Department.



► We systematically support the Humanitarian Organization «*Lifeline Hellas*», which was established in 2003 as the Greek branch of «*Lifeline*», a humanitarian, non-profit making organization. Princess Catherine of Yugoslavia has been the head of «*Lifeline*» since its establishment in 1993. It is mainly active in Serbia and Montenegro, where it cooperates with local and foreign NGOs to assist children, the elderly, hospitals and social welfare foundations, as well as all those who are in need. Its principal objective is to combat infant mortality in Serbia, where it is the highest in Europe, due to the antiquated equipment and major shortages in obstetric and paediatrics wards. In year 2008, we assisted «*Lifeline Hellas*» in its programme for the provision of modern medical equipment for infant hospitalization in Serbian hospitals.

### Voluntary blood donation

Voluntary blood donation is an act of generosity and love, and one of the best ways to prove our social solidarity on a personal level. Thousands of patients requiring blood transfusion are saved thanks to such donations. We encourage our personnel to participate in blood donation programmes, arranged in cooperation with the Corinth General Hospital, for refinery employees, and with the «Metaxa» Hospital for head office employees. MOTOR OIL's personnel have been voluntarily donating their blood for over 23 years and this humanitarian initiative has become an established custom. The resulting blood bank covers the needs of the volunteer blood donors, of their close relatives, as well as the needs of other fellow-men in emergency situations. During 2008, 77 blood units were collected; their total number since 1991 is 2,450.

In 2008, we supported the Hellenic Association of Volunteer Blood Donors for the publication of its periodical.



### Sports

For MOTOR OIL, supporting sports means embracing young people, because involvement in sports cultivates the body and the spirit, enhances the sense of sportsmanship and forms healthy personalities. We support non-professional team sports, championships, as well as less popular sports. We support small clubs and amateur sports associations.

In year 2008, the company's main sponsorship activities included:

► MOTOR OIL was a prize sponsor for the «*Pastrikakeia 2008*» sailing races, which took place in Faliro bay on 10 and 11 May 2008. These races have been organized by the Hellenic Naval Academy for the last 31 years, with the Piraeus Sailing Club and the Yacht Club of Greece, under the aegis of the Hellenic Sailing Federation. They are named after Navy Cadet I. Pastrikakis, who died heroically on 17 November 1912 as the officer of a landing party in the land operations



## « The «Vardinoyanneia» EAA Premium International Track and Field Meeting

MOTOR OIL is a permanent official sponsor of the «Vardinoyanneia» International Track and Field Meeting, which has been held every year since 1985 in Rethymnon, Crete, in honour of Pavlos Vardinoyiannis. Organised by the Atromitos Union of Rethymno, it is held under the aegis of the European Athletics Association (EAA) and observes the rules of the International Association of Athletics Federations (IAAF).

All major Greek athletes and many foreign sports champions have competed in the «Vardinoyanneia» meeting. Twenty-seven national records have been achieved as well as one European Youth record, and a world record in 2001 by the Cuban Javelin thrower, Osleidy Menendez. Reflecting the wide participation of athletes from all over the world, the outstanding scores achieved and the high standard of organisation, the «Vardinoyanneia» were promoted to the EAA Premium category in 2006. Every year since 2002, the games are being scored top by the European Athletics Association, thus placed at the top of their category.

### Milestones

- 1985** First games on dirt track
- 2000** Inclusion in the EEA Permit category
- 2001** World record in women's javelin throwing
- 2006** Inclusion in the EEA Premium category
  - The best EAA Permit games 2002, 2003, 2004, 2005
  - The best EAA Premium games 2006, 2007

During the 24th «Vardinoyanneia», which took place on 14 July 2008, a total of 309 male and female athletes from 39 different countries (55 of whom

from Greece) competed in 16 different events. The women's triple jump, the men's discus throw, the men's and women's 100 metres and the men's 400 metres were the events that attracted sports fans, who filled the Gallou Stadium for yet another year to admire some of the top names in classical sports, Olympic medallists and world champions.

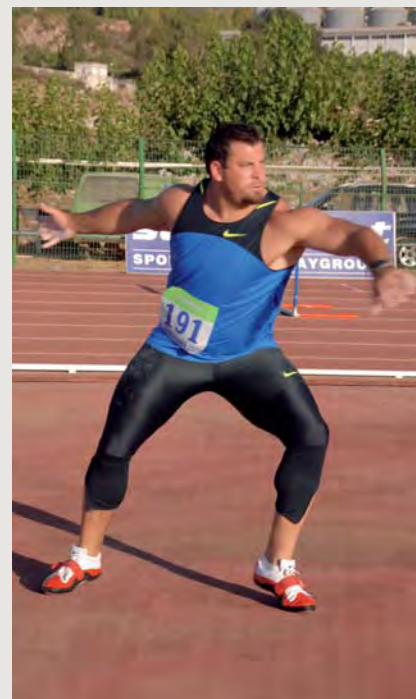
In the women's triple jump, Cuban Savigne Yargelis with 15.20 m snatched the victory from Pigi Devetzi, who came second with 14.75 m.

In the men's discus throw, there was a Titan battle between the two top athletes in the world, eventually won by Lithuanian Virgilijus Alekna with a throw of 70.86 m, putting later Beijing Olympic gold medallist Gerd Kanter from Estonia in second place at 68.73 m.

In the women's 100 metres, victory went to American Melissa Barber at 11.23", while in the men's 100 metres, Marc Burns from Trinidad came first with an excellent time of 10.03".

The men's 400 metres was also an excellent race, with American Angelo Taylor coming first at 45.02". A very good race was the women's 100 metres hurdles, with the first five athletes coming in at under 13", and Jamaican Delloreen Ennis-London coming first at 12.62".

The «Vardinoyannia» meeting is hosted at the Olympic-standards «Pavlos I. Vardinoyannis» Gallos Municipal Athletics Centre stadium in Rethymno. MOTOR OIL provides a significant amount of special funding for the maintenance and upgrading of the stadium's infrastructure.







for the liberation of Chios Island. Twenty-eight clubs with more than 200 boats and 300 athletes participated in the sailing races.

- ▶ Every year, we support the long-distance race known as the «*Spartathlon*», by providing a physician and a fully-equipped ambulance, as well as supporting the abreast of the refinery Control and Supply Station. The course of the event retraces Pheidippides' 246-km historic run from Athens to Sparta, in 490 BC, where he asked the Spartans for their support against the Persian army in Marathon. The 26th event was held in 2008. The hyper-marathon started on 26 September at the Acropolis Propylaea. The starting line consisted of 308 athletes (men and women) from 34 countries, of whom 154 passed the finishing line, including 16 women. The first athlete's time was 22:20:01, the last athlete's time was 32:36:29, while the oldest athlete to cross the finishing line was 73 years old. The athletes are rewarded with an olive branch and water from Evrotas River.

- ▶ Major regularly recurring sponsorships to the following sports clubs:

- The amateur athletics club of the Heraklion Sports Fans Club (OFI), which is one the largest amateur clubs in Greece, with eight active departments (basketball, track, weightlifting, chess, volleyball, water polo, swimming, football academy). Track is the most important department in Amateur OFI, with many significant distinctions over the last few years. In 2008 it was listed 4th in the national classification of the Hellenic Amateur Athletic Association, an excellent position for a regional club.
- The basketball team of the Rethymnon Athletics and Gymnastics Club (AGOR), which ascended to the A1 National League in 2007.
- The Rethymnon Volleyball Club, whose teams play a major role in Regional Championships.





- The Asteras Rethymnou FC.
- The «Koronis» Koilada Athletic Club.
- The Spelios Athletic Club.
- The Arkadi Basketball Team.



- The Athletic Club of Episkopi, Rethymnon, Crete.

►► Also, major sponsorships for the following clubs:

- The historical Apollon Smyrnis Gymnastics Association (founded in 1892 in Smyrna, Asia Minor, and moved to Athens in 1922).
- The Poros Troizinia Sailing Club, which allows more than 80 athletes to train in rowing and kayaking; 8 of these athletes are members of the National Team.
- The Rethymnon Tennis Club.
- The Athletic Club of Anoixi, Athens.

# Global Compact: Communication on Progress

In year 2008, MOTOR OIL voluntarily became a signatory of the UN Global Compact, by ratifying the relevant UN Initiative; 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. MOTOR OIL's *Environmental and Social Report* contains information relating to our social and environmental practices and their results, which underline our commitment to the Global Compact.


The Ten Principles of the Global Compact		Reference in the Environmental and Social Report or Description of the Implementation Approach	GRI Indicator
<b>Human Rights</b>			
Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights.	Chapters «Human Resources» and «Health and Safety». Full compliance with relevant Greek and international legislation.	LA4, LA6-7, LA13-14, HR4-9, SO5, PR1-2, PR8
Principle 2	Businesses should make sure that they are not complicit in human rights abuses.	Chapter «Human Resources». Full compliance with relevant Greek and international legislation.	HR4-9, SO5
<b>Labour</b>			
Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	Chapter «Human Resources».	LA4, HR5, SO5
Principle 4	Businesses should uphold the elimination of all forms of forced and compulsory labour.	Chapter «Human Resources». Full compliance with relevant Greek and international legislation.	HR7, SO5
Principle 5	Businesses should uphold the effective abolition of child labour.	Chapter «Human Resources». Full compliance with relevant Greek and international legislation.	HR6, SO5
Principle 6	Businesses should uphold the elimination of discrimination in respect of employment and occupation.	Chapter «Human Resources».	EC7, LA2, LA13-14, HR4, SO5
<b>Environment</b>			
Principle 7	Businesses should support a precautionary approach to environmental challenges.	Chapters «Environment» and «MOTOR OIL's Profile».	EN18, EN26, EN30, SO5
Principle 8	Businesses should undertake initiatives to promote greater environmental responsibility.	Chapters «Environment» and «MOTOR OIL's Profile».	EN2-3, EN5-9, EN11, EN16, EN18-22, EN26, EN30, SO5, PR3-4
Principle 9	Businesses should encourage the development and diffusion of environmentally friendly technologies.	Chapters «Environment» and «MOTOR OIL's Profile».	EN2, EN5-7, EN18, EN26, EN30, SO5
<b>Κατά της Διαφθοράς</b>			
Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery.	Chapter «MOTOR OIL's Profile».	

# Principles and Boundaries of the Report

The MOTOR OIL *Environmental and Social Report*, which has been published every year since 2002, is the main communication tool with our stakeholders about the company's efforts and performance in achieving sustainable development by applying the principles and objectives of Corporate Social Responsibility.

*The Environmental and Social Report 2008* concerns MOTOR OIL and its subsidiary, AVIN OIL, and has a similar structure as previous editions, so as to ensure the comparability of results over time. In drafting the report, we have taken into consideration the 3rd revised edition (2006) of the Global Reporting

Initiative guidelines, in the belief that these guidelines provide a sound basis for communicating the material issues for both MOTOR OIL and its stakeholders. We believe that we have achieved the application of these guidelines at level B.

		C	C+	B	B+	A	A+	
Report Application Levels	Mandatory	Self Checked			Report Externally Assured		Report Externally Assured	
	Optional	Third Party Checked						
		GRI Checked						

*The Environmental and Social Report 2008* is not certified by an external certification authority.

In each chapter of the *Environmental and Social Report 2008*, and wherever performance indicators or other data are reported, the method of collection and calculation of such data is mentioned. However, the following clarifications are also useful:

- » The information and indicators in the "Human Resources" chapter include data for MOTOR OIL and AVIN OIL, on a consolidated basis.
- » In the "Health and Safety" chapter, the value details of the relevant capital investments refer jointly to


MOTOR OIL and AVIN OIL, but the accident indicators refer only to the MOTOR OIL refinery workplace; i.e. they do not include AVIN OIL or MOTOR OIL Head Office. This differentiation is immaterial, given that the critical area in this particular case is the refinery.


- » In the "Environment" chapter, the value details of the relevant investments, as well as the data on recycling, refer jointly to MOTOR OIL and AVIN OIL. The other indicators concern the MOTOR OIL refinery only.
- » In the "Community Involvement" chapter, the value details of donations and sponsorships refer

jointly to MOTOR OIL and AVIN OIL.




















The following table records the GRI Indicators, and in the column entitled "Reference" the references to sources of information relating to each indicator. The symbols used in the table are:

p.: indicates the page(s) of the *Environmental and Social Report 2008* that include information on the indicator.

 : indicates reference to the *Annual Financial Report 2008*.

 : indicates reference to the company's website.

## Table of the Global Reporting Initiative Indicators (G3 Content Index)

Indicator	Description	MOTOR OIL Reference
1.1	Management statement.	p.: 4
1.2	Description of key impacts, risks, and opportunities.	p.: 19-21, 57-58
2.1	Name of the organization.	p.: front cover,  front cover, 
2.2	Primary brands, products, and/or services.	p.: 8-11,  : 12-13, 
2.3	Operational/Organizational structure of the organization.	p.: 9,  : 20-25, 59, 
2.4	Location of organization's headquarters.	p.: back cover,  back cover, 
2.5	Countries in which the organization operates.	p.: 8-10
2.6	Nature of ownership and legal form.	 : 17-25, 
2.7	Markets served.	p.: 8-10,  : 11
2.8	Scale of the organization.	p.: 8-10, 26  : 9-17, 19, 80-81, 72
2.9	Significant organizational changes during the reporting period.	p.: 6, 9, 13-14, 98,  : 19-21
2.10	Awards received.	p.: 21, 56
3.1	Reporting period.	p.: front cover, 98
3.2	Most recent previous report.	p.: 102
3.3	Reporting cycle.	p.: 98
3.4	Contact point for questions.	p.: inside front cover
3.5	Process for defining report content.	p.: 20-21
3.6	Boundary of the report.	p.: 98
3.7	Limitations on the scope or boundary of the report.	p.: 98
3.8	Joint ventures, subsidiaries and outsourcing.	p.: 98
3.9	Data measurement techniques.	p.: 98
3.10	Explanation of the reasons for any re-statement of information provided in earlier reports.	p.: 98
3.11	Changes from previous reports.	p.: 98
3.12	Location of the Standard GRI Disclosures.	p.: 99-101
3.13	External assurance.	p.: 98
4.1	Corporate governance structure.	p.: 17,  : 33, 80, 
4.2	Segregated role of the Management and Governance bodies.	 : 33, 80, 
4.3	Independent and/or non-executive members of the Board of Directors.	
4.4	Mechanisms of communication with the Board of Directors.	p.: 18-19,  : 30
4.5	Linkage between the compensation of Management and the performance of the organization.	p.: 17
4.6	Processes for the Board to avoid conflicts of interest.	The majority of the non-executive and independent Board Members safeguards the avoidance of conflicts of interest.
4.7	Process for determining the qualifications and expertise of Board Members for guiding sustainability strategy.	The professional experience of Board Members, along with their educational level and social status provide assurance for an unbiased global and objective view of the issues.
4.8	Mission, values statements, and corporate policies related to sustainable growth strategy.	p.: 7-8, 17, 19-21
4.9	Board procedures for sustainability management.	p.: 17, 19-21
4.10	Evaluation of the Board's performance.	Performance evaluation is anticipated in the Rules of Company Procedures.
4.11	Application of the precautionary principle.	p.: 15-16, 38-40, 54-56
4.12	Externally developed voluntary charters or initiatives to which the organization subscribes or endorses.	p.: 18-21
4.13	Association memberships.	p.: 18-19, 69-70
4.14	List of stakeholders.	p.: 18-19
4.15	Identification of stakeholders.	p.: 18-19

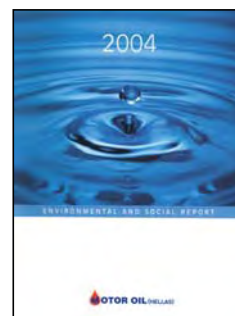
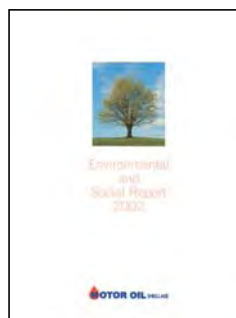
## Table of the Global Reporting Initiative Indicators (G3 Content Index)

Indicator	Description	MOTOR OIL Reference
4.16	Approaches to stakeholder engagement.	p.: 18-19
4.17	Topics raised by stakeholders.	p.: 17-21
DMA EC	Disclosure on Management Approach EC	p.: 7-10, 11-14, : 18-20
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, taxes, and payments to capital providers.	p.: 9-12
EC3	Coverage of defined benefit plan obligations.	: 72
EC6	Local suppliers approach.	p.: 81
EC7	Local recruitment.	p.: 26
EC8	Infrastructure investments and services provided for public benefit.	p.: 11-12, 74
EC9	Indirect economic impacts.	: 26-28, 73-76
DMA EN	Disclosure on Management Approach EN	p.: 7-8, 15-16, 19-21, 53-56, : 29-30,
EN2	Percentage of materials used that are recycled input materials.	irrelevant
EN3	Direct energy consumption by primary energy source.	p.: 61
EN5	Energy saving.	p.: 61-62
EN6	Initiatives to produce energy-efficient or renewable energy based products and services.	p.: 68
EN7	Initiatives to reduce indirect energy consumption.	p.: 61-62
EN8	Total water withdrawal by source.	p.: 68
EN9	Effects of water withdrawal.	p.: 68
EN11	Land management in sensitive areas.	non-existent
EN16	Greenhouse gas emissions.	p.: 60-61
EN18	Initiatives to reduce greenhouse gas emissions.	p.: 58-61
EN19	Emissions of ozone-depleting substances.	non-existent
EN20	NOx, and SOx emissions.	p.: 65
EN21	Water discharge.	p.: 66
EN22	Solid waste.	p.: 68
EN26	Environmental impact mitigation.	p.: 57-58, 60-62
EN30	Environmental protection investments and expenses.	p.: 57
DMA LA	Disclosure on Management Approach LA.	p.: 7-8, 24-25
LA1	Workforce profile.	p.: 25-26
LA2	Employee turnover.	p.: 28
LA3	Benefits provided to full-time employees.	p.: 28-32
LA4	Percentage of employees covered by collective bargaining agreements.	p.: 25
LA6	Workforce representation in joint health and safety committees.	The Health and Safety Committee of the refinery employees represents all the employees.
LA7	Standard injury and lost day rates.	p.: 49-50
LA10	Average hours of training per year per employee.	p.: 32-36
LA11	Programs for skills development and lifelong learning.	p.: 32-36
LA12	Performance and career development reviews.	p.: 24
LA13	Breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	p.: 27-28
LA14	Men to women basic salary ratio.	There is no differentiation
DMA HR	Disclosure on Management Approach HR.	p.: 23-24
HR4	Incidents of discrimination.	No incidents
HR5	Operations that limit freedom of association and collective bargaining.	No such operations
HR6	Child labour.	p.: 25
HR7	Forced or compulsory labour.	p.: 25

**Table of the Global Reporting Initiative Indicators (G3 Content Index)**

Indicator	Description	MOTOR OIL Reference
HR8	Security personnel training on issues relating to the protection of human rights.	p.: 51
HR9	Violations of rights of indigenous people.	Irrelevant
DMA SO	Disclosure on Management Approach SO	p.: 7-8
SO1	Impacts on local communities.	p.: 73-75
SO5	Participation in public policy development.	We are members of business associations which participate in public policy development.
DMA PR	Disclosure on Management Approach PR	p.: 50
PR1	Health and safety impacts of products and services.	p.: 50
PR2	Non-compliance incidents with regulations and codes concerning health and safety impacts of products and services.	No incidents
PR3	Product information.	Material Safety Data sheets for all our products.
PR4	Non-compliance incidents with regulations and codes concerning labeling and product information.	No incidents
PR5	Customer satisfaction.	p.: 17
PR6	Legal compliance of marketing communications programs.	Irrelevant
PR7	Non-compliance incidents of marketing communications programs with regulations and codes.	No incidents
PR8	Complaints regarding breaches of customer privacy.	No incidents
PR9	Fines for non-compliance of products.	No fines

## Environmental and Social Reports of previous years





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ALL THE MATERIALS USED FOR PRINTING THE MOTOR OIL ENVIRONMENTAL AND SOCIAL REPORT  
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12A IRODOU ATTIKOU STREET, 15124 MAROUSSI, ATHENS  
TEL.: +30 210 809 4000, FAX: 210 809 4444  
[www.moh.gr](http://www.moh.gr)