

# ENVIRONMENTAL and SOCIAL REPORT 2007

planning for a sustainable future

Your views and comments on the structure and content of the Environmental and Social Report 2007 will help us in our effort to ensure continuous improvement. Please forward your comments to the following e-mail address: [csr@moh.gr](mailto:csr@moh.gr)

# ENVIRONMENTAL and SOCIAL REPORT 2007

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## MANAGEMENT MESSAGE

**A**t MOTOR OIL, we believe that running the business responsibly means complying with the principles and objectives of both Corporate Social Responsibility and Sustainable Development, the development approach that aims at meeting today's needs without putting at stake the availability of resources for future generations. We believe that commitment to these principles is a sound foundation for long-term value creation. Thus we proceed with firm and effective actions and growth plans to deliver our corporate targets, while paying due respect to people, the environment and society as a whole.

MOTOR OIL's systematic and strategic handling of the challenges arising from the pursuit of sustainable development through the application of the principles of Corporate Social Responsibility, is presented in its Environmental and Social Report, the present edition of which is the sixth in a consecutive series

This year, we adopted the Global Reporting Initiative's G3 guidelines, aiming at expanding the scope and contents of the Report and providing relevant and material information for each Corporate Social Responsibility issue.

The greatest challenges that we strive to effectively manage, with the participation of all our people, concern

safety at work, environmental protection, issues relating to our human resources and the achievement of our financial and strategic objectives.

For MOTOR OIL, 2007 was a positive year with respect to financial results. We cannot dismiss the financial dimension of sustainable development. It is this financial dimension that allows businesses to fulfil their core social responsibility of consistently compensating their employees, paying their suppliers, growing, creating new jobs and value for their shareholders and society as a whole. Often, the financial dimension is the one that provides enhanced feasibility for efficiently responding to the critical parameters of environmental protection and community involvement.

Year 2007 was also important for MOTOR OIL's growth, from the point of view of the implementation start of our new refinery expansion programme. Following the major investments of years 2003-2005 for the construction of the Hydrocracker Complex, growth prospects for the period 2008-2010 are focused on the 60,000 bpd capacity new Crude Distillation Unit, and the expansion of the sulphur recovery and handling units, which are due for commissioning in year 2010.

We firmly believe that safety at work is both a moral obligation and a business necessity. This year, our activities in this field focused mainly, on equipment upgrading, on projects to reduce the risk of accidents, on training and on further fostering the safety awareness and accidents' prevention attitude of our employees. Further reduction of Accident Frequency and Severity Indexes is noteworthy, and constitutes an encouraging result giving us the incentive to continue pursuing the goal of "zero" accidents.

In the field of human resources, we have renewed our personnel by hiring new colleagues, and we applied an extensive training programme aiming at enhancing the skills and competencies of our people and at their personal development, while the provision of our structured programme of discretionary benefits continues.

Our care for the environment is constant, as we are fully aware of the problems arising from environmental degradation, especially in view of the current global issue of climate change and its adverse consequences.

Over the last five years, we have invested more than 460 million euros in

environmental protection projects. Of this money, a large percentage has been invested in the production and distribution of environmentally-friendly fuels in advance of the deadlines imposed by European and national law, in energy-saving projects to reduce CO<sub>2</sub> emissions, the incorporation of Best Available Techniques and in pollution control process units. Many other projects have also been implemented to improve our refinery's environmental footprint.

In year 2007, we published our first annual voluntary Environmental Statement 2006, in accordance with the EMAS regulation, and re-certified the Environmental Management System as per ISO 14001:2004, valid until 2010. We completed works to link the refinery with the natural gas distribution network (implemented in May 2008), and we commissioned a new low energy-consumption seawater desalination unit, which allows us to fully cover our own needs in fresh water, and even those of our neighbours. Our environmental protection efforts were rewarded by the Ecocity Non-Governmental Organization with the «ECOPOLIS 2007 – Environmental Investment» award.

In the field of community involvement, and in keeping with the long tradition we have developed as socially active

corporate citizens, we supported many and varied actions with donations and sponsorships to reliable foundations and authorities, both in the local communities and in the broader society. Around 4.4 million euros were disbursed for this purpose in 2007. Our contribution to our fellow citizens, who suffered from the major disaster caused by forest fires in August 2007, was to undertake the project of rehabilitation of Makistos village, which is currently in progress and will be completed in early 2009.

This is what happened this year, and is reported in the Environmental and Social Report 2007, which you are currently holding. However, our endeavour for sustainable development through Corporate Social Responsibility is a constant and ongoing process. We are aware that achievement of our objective of creating value while respecting people, the environment and society, is a never-ending process.

The perusal and acceptance of our Report by all of you, our stakeholders, and your comments (favourable or unfavourable) will support us in this on-going endeavour.



**Value creation while respecting people and the environment**



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# MOTOR OIL's PROFILE

## 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 new storage facilities with a capacity of 1.5 million cubic metres.
- 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 catalyst regeneration unit operating at 103-octane number. 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 production 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** ● The refinery's Truck Loading Terminal begins operations. 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). The company was awarded the NGO Ecocity "ECOPOLIS 2007 – Environmental Investment" award.



**T**he Corporate Vision and Mission of MOTOR OIL, based on a consistent set of Values and Principles have provided the framework that led us to a course of continuous growth and value creation for all stakeholders. Combining a progressive perception on corporate responsibility with effective organisation, and with competent people and management, we effectively carry out our social role, we enhance our societal contribution and we pave the way for our future growth.



## MISSION, PRINCIPLES AND VALUES

**S**ince 1972, when MOTOR OIL began operating as an oil refiner and oil products marketer, it has always functioned with responsibility and integrity, and aimed for 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, all its operations are guided by a set of firm Principles and Values that underpin its business activities.

### Principles and Values

### Corporate Mission

#### Vision

To establish the company as a leading oil refiner and oil trading enterprise in Greece and the greater Eastern Mediterranean region.

- To carry out our business operations so as to increase the company's corporate value for the benefit of all stakeholders – shareholders, personnel, customers, suppliers, associates and partners, as well as the local and greater community – effectively exploiting both the refining technology and the product promotion and sales opportunities.
- To satisfy our customers' needs in an effective and responsible way, while expanding our market share in the domestic market.
- To be reliable, swift and flexible in our relationships with our people, our customers and suppliers, and the wider public, using practices that demonstrate responsibility and integrity, as well as respect for people and the environment.

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

● **Respect for our people**

We recognise the value of our people and we promote their personal development while offering competitive terms of employment, within a safe working environment and an atmosphere of mutual trust and respect. We respect human and labour rights and place the assurance of health and safety in the workplace at the top of our list of priorities.

● **Respect for the environment**

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

● **Transparency**

We operate responsibly and to high professional standards, fully respecting the principles of corporate ethics and corporate governance.

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

- **Efficiency**
- **Responsibility**
- **Social responsibility**
- **Integrity**

**Efficiency**

- Achieving defined objectives.
- Creating value for shareholders and the society in general.
- Protecting the environment.
- Servicing customers' needs.
- Providing a safe, pleasant and reciprocal workplace.
- Continuous improvement.
- Promoting learning and innovation.

**Responsibility**

- Customers
- Personnel
- Associates and partners
- Society



**Social responsibility**

- Respect for people and their needs.
- Respect for the environment and pursuit of sustainable growth.
- Priority to Health and Safety.
- Ensuring that the company is an active and responsible corporate citizen respecting local communities and the society as a whole.

**Integrity**

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

## MOTOR OIL IN BRIEF

The company plays a leading company in the crude oil refining sector and the trade 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 2007, equivalent to approximately 1.8% of Greece's GDP, it constitutes one of the main pillars of the national economy.

MOTOR OIL was established in 1970 and has been listed on the Athens Stock Exchange since 2001. It is included in the FTSE/ATHEX International Index, the FTSE/ATHEX-20 Index, the General Index (ATHEX Composite Index), and in other sectoral indices. Since May 2006 it has been a component of the MSCI (Morgan Stanley Capital International) Index.

The company owns 100% of AVIN OIL shares and, directly or indirectly, is a shareholder with various holdings in seven other companies, details of which are included in MOTOR OIL's Annual Report 2007. KORINTHOS POWER S.A. has obtained an electricity production licence from the Ministry of Development, for a 396 MW natural gas combined-cycle gas turbine power plant in Aghioi Theodoroi/Corinth.



### HOLDINGS (as at 31.12.2007)

SUBSIDIARIES	Share
AVIN OIL S.A.	100%
AVIN ALBANIA S.A.*	100%
MAKREON S.A.	100%
BRODERICO LTD *	100%
ASSOCIATED COMPANIES	Share
KORINTHOS POWER S.A.	30%
OLYMPIC FUEL COMPANY S.A.	28%
HELLENIC AVIATION FUEL COMPANY S.A. (HAFCO S.A.)	50%
ATHENS AIRPORT FUEL PIPELINE COMPANY S.A.	16%

\* Have not yet started operations and are not included in the consolidated financial statements

## 2007: Results

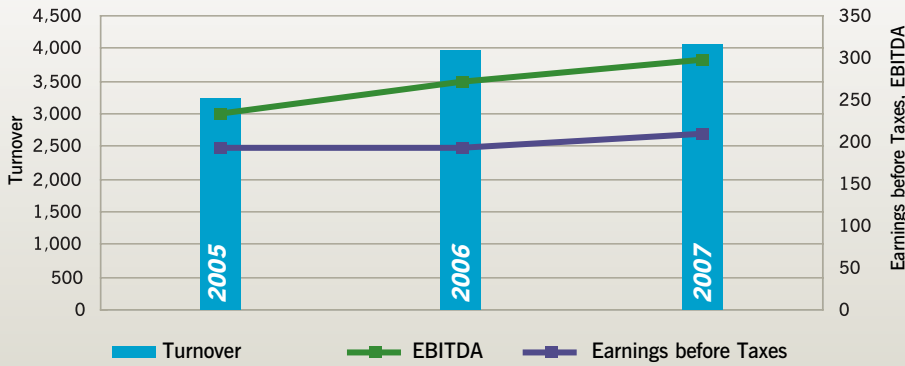
The consistent and successful pursuit of MOTOR OIL's strategy has resulted in successively increased sales and profitability. Year 2007 was a particularly positive year for the company, with very good financial results. The chart shows the progress of three key indicators of consolidated performance – 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 the wholly owned subsidiary companies AVIN OIL and MAKREON S.A., with the "full consolidation" method, and those of OLYMPIC FUEL

COMPANY S.A., HELLENIC AVIATION FUEL COMPANY S.A. (HAFCO S.A.) and KORINTHOS POWER S.A., with the "net equity" method.

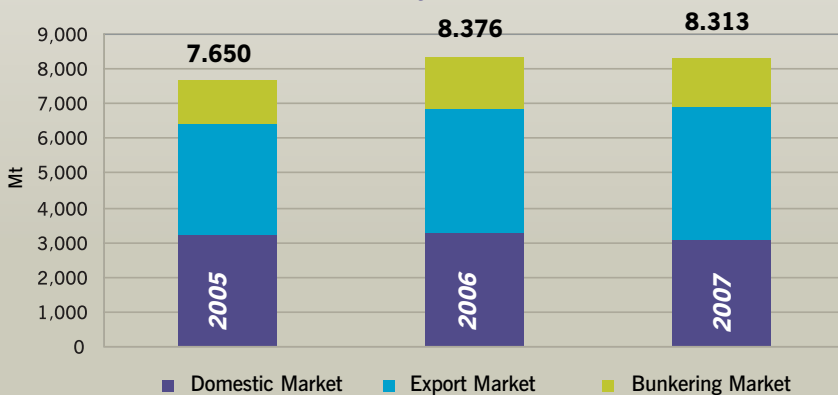
MOTOR OIL's sales figures (in Mt) for 2007 were marginally lower than in 2006, while the three markets in which it is active include the domestic, exports and the bunkering (marine-aviation) markets. The quantities supplied to each of these markets are determined by the relevant demand, but also by the company's aim of supplying its products in markets offering the higher margins.

Exports to more than thirty countries were realized in year 2007.

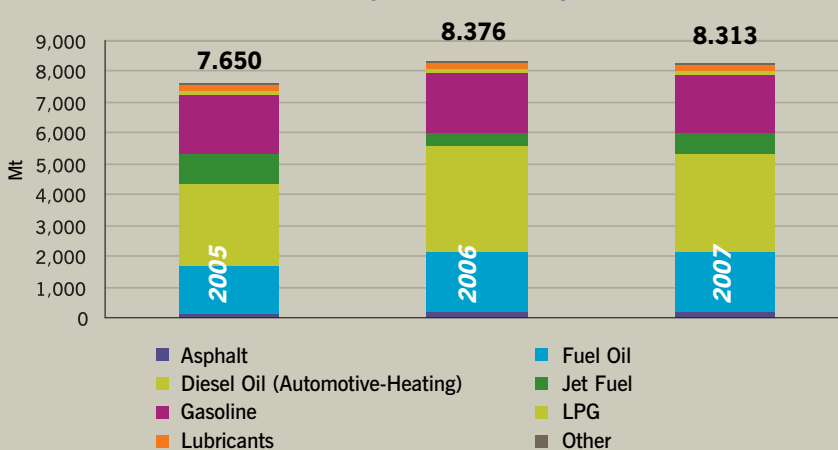
## Key Consolidated Results (in million euros)



## MOTOR OIL Sales by Market (in thousand Mt)

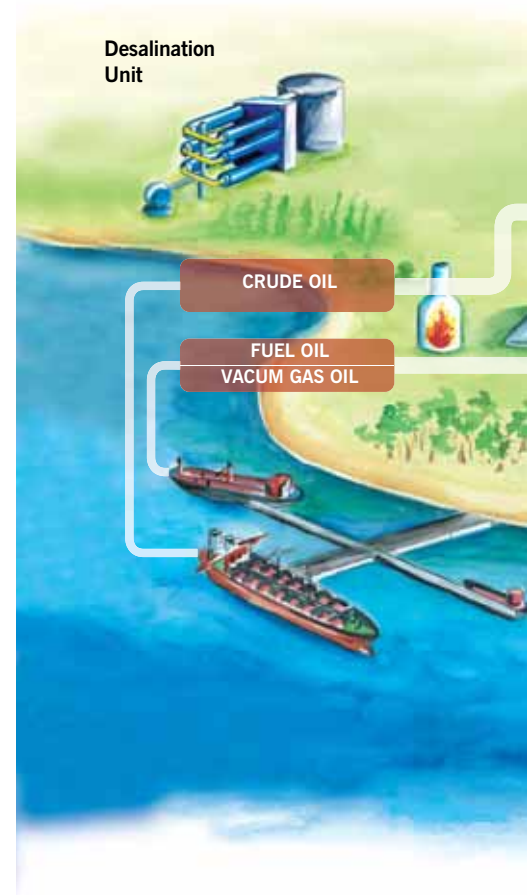


## MOTOR OIL Sales by Product Group (in thousand Mt)



## MOTOR OIL Share in the Inland Market

	2005	2006	2007
Domestic Market	21.4%	21.6%	20.6%
Bunkering Market	24.8%	29.0%	25.7%
Lubricants	56.5%	53.0%	44.3%
<b>INLAND MARKET TOTAL</b>	<b>22.2%</b>	<b>23.4%</b>	<b>21.9%</b>

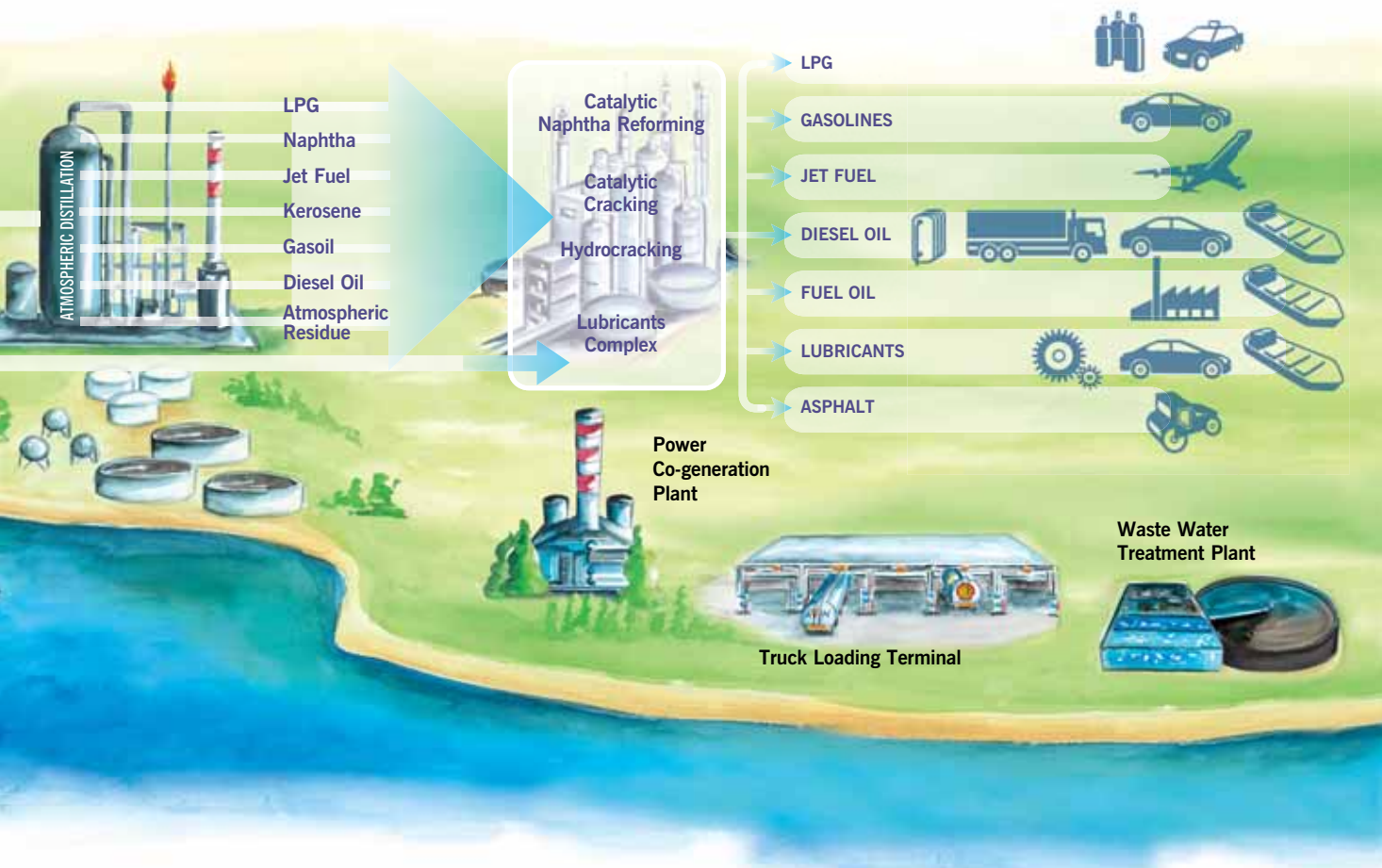


## The refinery

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 regarded as one of the most state-of-the-art refineries in Europe, with a Nelson Complexity Index of 11.95.

It 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 clients abroad. Moreover, it is the only Greek refinery that produces lubricants.

The Crude Oil (Atmospheric) Distillation unit produces liquefied petroleum gas, naphtha, jet fuel, diesel and fuel oil. Some products are subjected to secondary processing in view of improving their quality, such as the catalytic reforming of naphtha to produce gasoline and the hydrocracking of diesel 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.

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 quality suitable 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 the valuable natural resource of fresh water.

Liquid waste is collected and treated in 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.

## ADDED VALUE – ECONOMIC BENEFITS TO SOCIETY

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

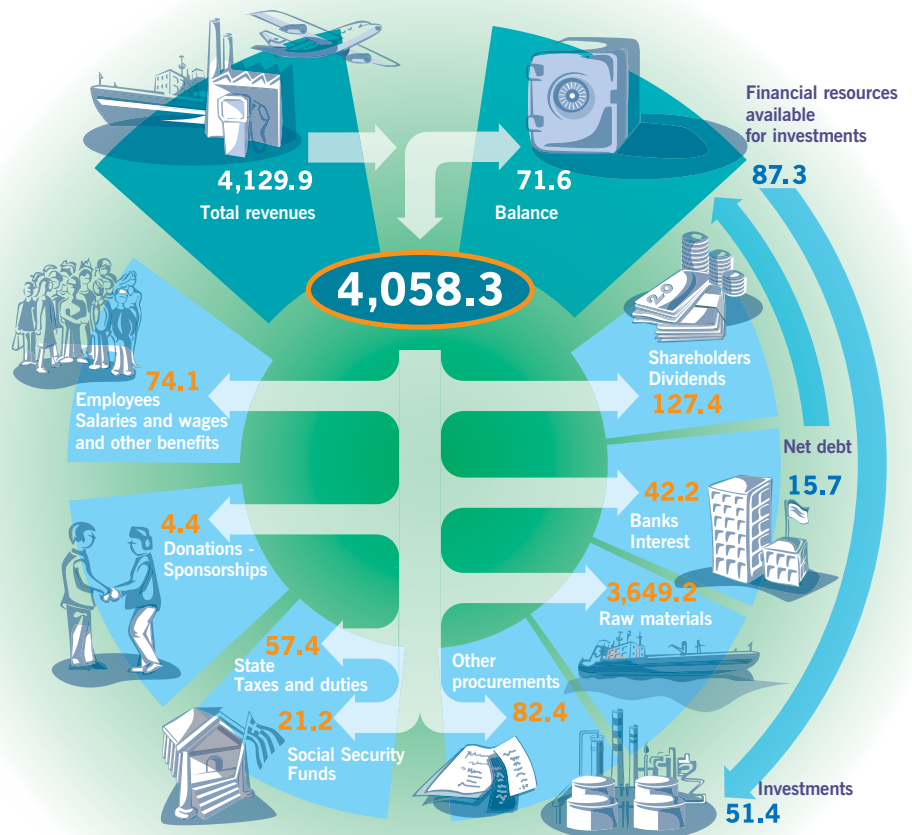
The scale of our operations, combined with our consistent orientation for steady growth, result in a very significant contribution to the national economy. This contribution, linked directly to the efficiency and commercial success of our industrial operations, encompasses value and job creation, the 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 sources of supply of oil products. On a first level, our interaction with stakeholders creates primary value for all 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 jobs, continuously improving our production processes, as well as by investing in expanding or upgrading our own facilities.

In 2007, the group's income totalled 4,129.9 million euros, equivalent to approximately 1.8% of Greece's Gross Domestic Product (GDP) that year. Of this, 3,649.2 million euros were allocated to the purchase of raw

materials (crude oil) and fuel products, accounting for 88.2% of the group's total revenue, this high proportion being an inevitable consequence of the nature of the group's activities.

2007 Financial Social Report (in million euros)



# 409.1 million euros

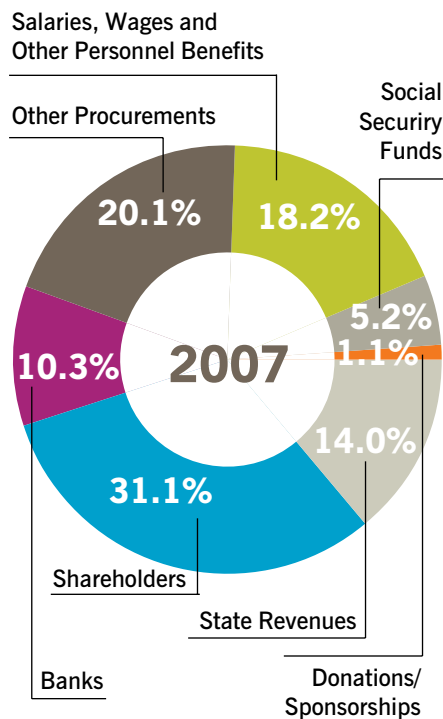
## THE YEAR 2007 SOCIAL PRODUCT

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; payment of suppliers and dividends paid to shareholders.

On the basis of the above data, the *social product* paid off to stakeholders in 2007 was 409.1 million euros (compared with 380.0 million euros in 2006 and 321.0 million euros in 2005).

### Social Product Components Total: 409.1 million euros



In the past three years, MOTOR OIL has contributed in excess of 191 million euros revenue to the state budget, through taxes and other payments, and has paid its personnel, in net salaries and other benefits, over 196 million euros. Furthermore, during the past three years, its contribution to public welfare initiatives amounts to about 9.8 million euros (see chapter *Community Involvement*).

## STRATEGIC OBJECTIVES – INVESTMENTS

The core of MOTOR OIL's business model comprises the responsible growth of the company for the benefit of all stakeholders. This is achieved by means of an on-going and duly targeted investment programme and the application of effective processes 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 add the element of sustainability to this growth, which means that the pursuit of the best possible results takes place 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 refining margins) by means of:**
  - Economically efficient and timely meeting of the latest product specifications by exploiting state-of-the-art technology.
  - Improving the energy-efficiency of the refinery, thus reducing its

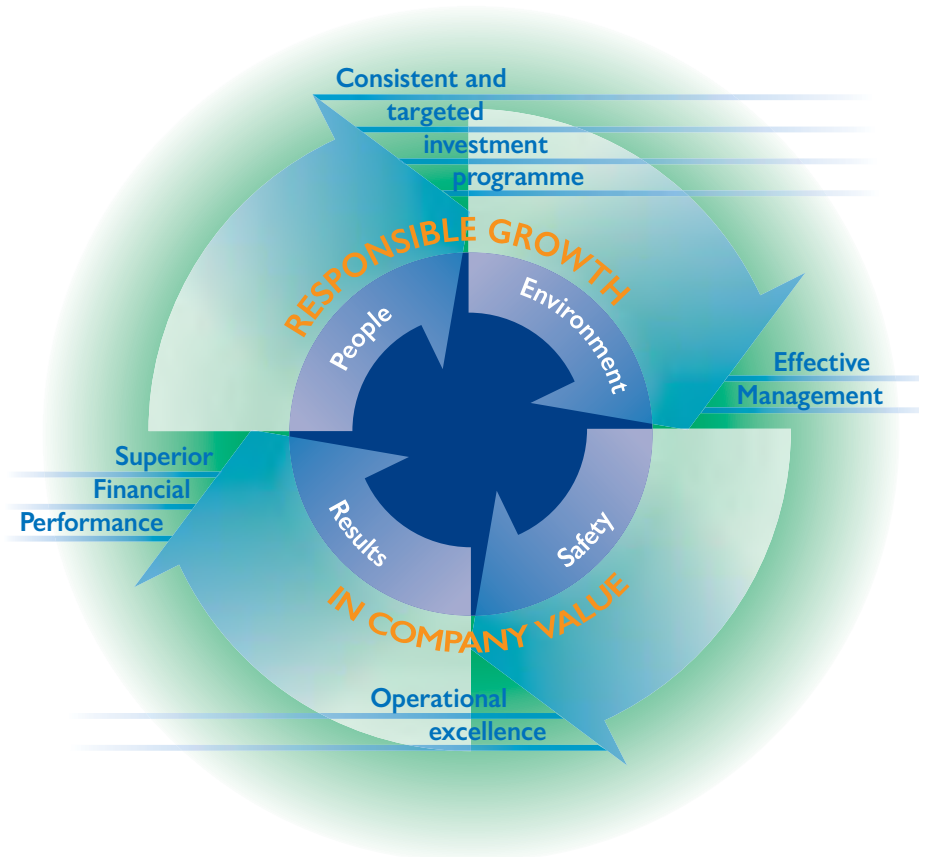
operating cost as well as CO<sub>2</sub> emissions.

- 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), by means of:**

- Maximising the domestic market share through the improvement of 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.

■ **Implementing a consistent and targeted investment programme** aiming at technical, operational and organizational improvements at the refinery so as to achieve the highest possible standards of Health and Safety, Environmental protection and Quality, by:



- Implementing investments for maintaining high quality levels in programmes concerning the Environment and Health and Safety at work.
- Implementation of personnel training programmes based on the use of the latest technology systems, such as simulators for training process units' operators.
- Upgrading the reliability of production unit support systems, such as the power and steam Co-generation Plant and other critical utilities.
- Strengthening of preventive safety measures in production units through investments in automated prevention and protection systems that fulfil or exceed the specifications foreseen by Hellenic law and international regulations.

Achieving our strategic objectives – value creation through the production and marketing of oil products conforming to the most stringent EU and international specifications, without compromising environmental protection, and the health and safety of our own employees and subcontractors – requires major capital investments. In the six-year period 2002-2007, total capital investments reached 648 million euros (refer to chapter *Environment*). The major part of this investment was spent on the construction of the Hydrocracker



**648 million euros**

THE TOTAL INVESTMENTS OVER THE LAST SIX YEARS

**471 million euros**

THE ENVIRONMENTAL PROTECTION INVESTMENTS OVER THE LAST SIX YEARS

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 ISO 14001:2004 and ISO 9001:2000 certifications for its environmental and quality management systems, respectively.

Specifically, these significant other investments have included: the installation of two gas turbines at the refinery's Power Co-generation Plant (in replacement of two older gas turbines), which ensure the refinery's energy

sufficiency; the installation of the Distributed Control System; the ongoing installation of the Advanced Process Control System; the upgrading of the Custody Transport System at the refinery's jetty; the construction of a new refinery Truck Loading Terminal; the construction of a new Sulphur Recovery Unit; the ongoing phased renewal of steam boilers; the upgrading of the Waste Water Treatment Plant; the installation of a reverse osmosis seawater desalination unit; the construction of three additional tanks; the ongoing upgrading of the lubricants complex, and the completion of works for the connection of the refinery to the national natural gas network, which was achieved in May 2008.

Company growth prospects for the period 2008-2010 include an increase in refining 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. By virtue of the new unit, the refinery's capacity will exceed 170,000 barrels/day or 9.0 MT per annum. Additional benefits are expected from the substitution of imported Straight Run Fuel Oil by own-produced product, from the potentiality for further optimization of crude oil supplies, and the ability to process new types of crude oil.

## 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, and is reflected in our *Environmental Management System* and *Health and Safety Management System*, 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.

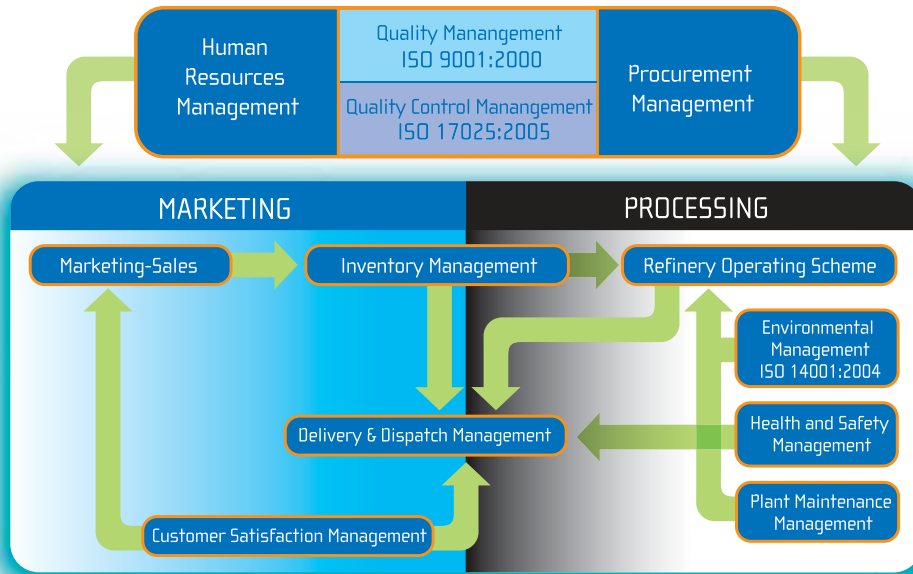
MOTOR OIL's quality policy is summed up in two key principles, to which both management and employees are fully committed:

- *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.

## INTEGRATED MANAGEMENT SYSTEM



## CORPORATE GOVERNANCE

The company's supreme administrative body is the twelve-member Board of Directors, which is elected by the Annual Ordinary General Meeting of Shareholders and operates according to the provisions of the law and the company's Articles of Association. Information about the board's structure and other relevant issues are included in the *Annual Report 2007*.

The company's *Integrated Management System*, through which its quality policy is implemented, is certified according to ISO 9001:2000, by Bureau Veritas (BV).

The process of Quality Control Management meets the requirements of 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 issue Quality Certificates endorsed by ESYD for practically all the company's products. This certification provides us with the further competitive advantage namely that the quality of our products is now guaranteed.

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 best practice codes 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

**M**OTOR OIL aims to be as customer-focused as possible and is adopting a systematic approach to satisfying customer requirements. Besides its direct contact with customers, it conducts approximately every two years a quantitative and qualitative customer satisfaction survey, 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, clients are asked to respond to 7 groups of questions covering the following issues: determination of the client's relationship to 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 client.

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.

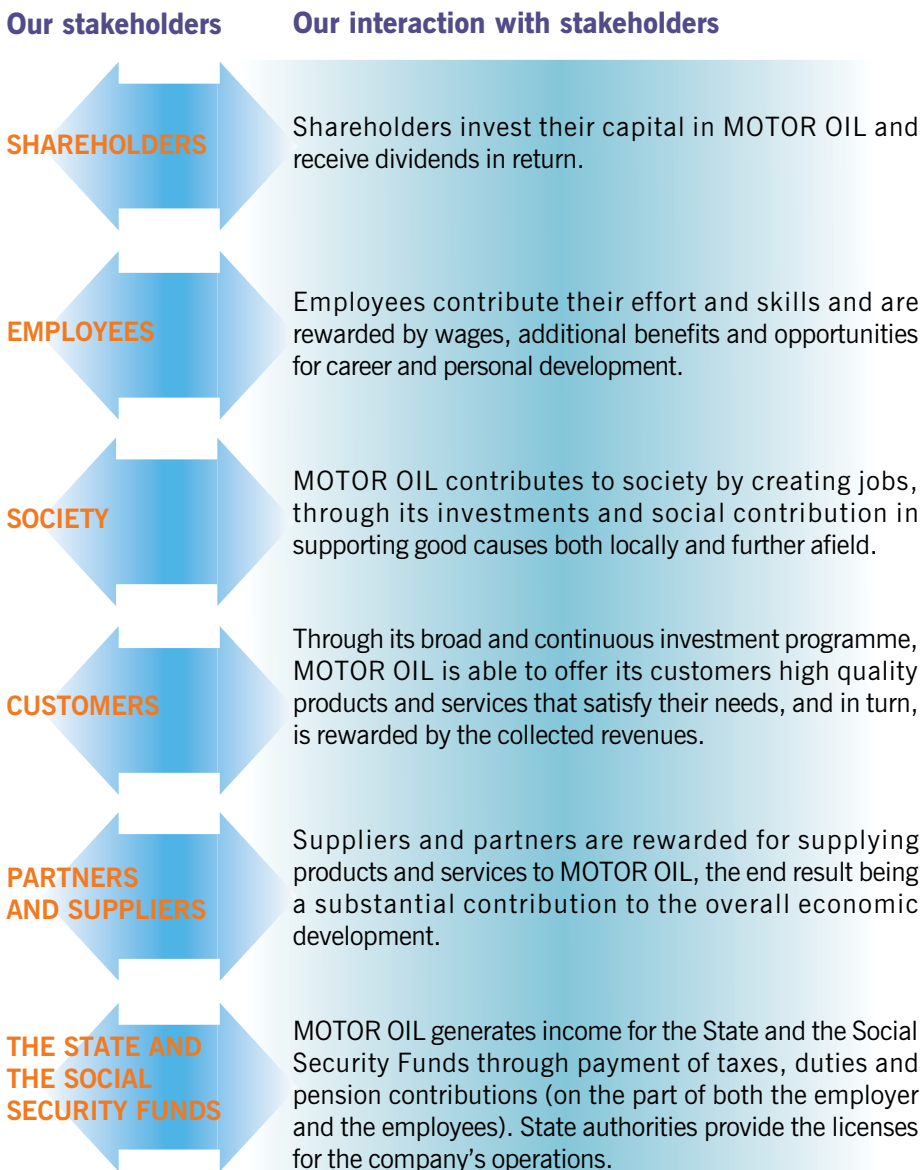
The results of the survey are analysed and evaluated with a view to building on the company's strengths, detecting weaknesses and taking action to correct them, thus demonstrating the customer-focused nature of the company's strategy.

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 clients, despite the fact that the increase in sales volumes between 2007 and 2003 exceeds 20%.

# COMMUNICATION WITH STAKEHOLDERS

**M**OTOR 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 2007, 61.54% of the company's shares belonged to its founding family (Vadrinoyannis family), while the remaining 38.46% belonged to investors. Communication with shareholders is implemented in various ways: through the company's website, with press releases and announcements, through the Annual Report and the Environmental and Social Report, through the 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. 88).

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 2007.
- **Business Organizations:** MOTOR OIL is a member of the Hellenic Network for Corporate Social



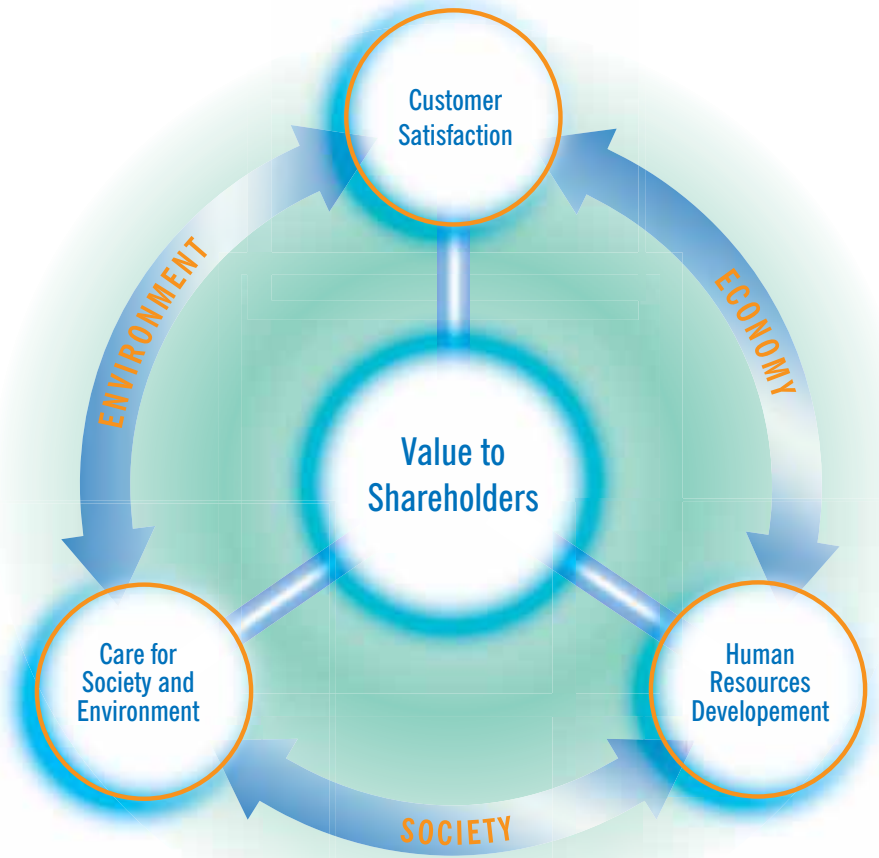
# COMMITMENT TO CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABLE DEVELOPMENT

Responsibility, CONCAWE (see p. 88), MOIG (Mediterranean Oil Industry Group), and various Chambers of Commerce.

- **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 an 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 the documented discussion on any issues arising.

Corporate Social Responsibility (CSR) indicates a balanced approach to the economic, social and environmental impact of business operations that is consistent with the triangle: «society – environment – economy». This is widely and universally accepted by responsible members of the global business community and underpins the main aspiration of any corporation in terms of

creating value for its 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 today needs without putting at stake the availability of resources for future generations.



## Corporate Social Responsibility Model



The world's major and most responsible businesses have begun to move away from the traditional approach – which confined their social role merely to donations for charitable causes, sponsorships of events and basic welfare measures for their employees – and are gradually adopting a systematic and strategic approach to Corporate Social Responsibility, both internally and externally. This strategy aims at a long-term increase in their performance, through practices that satisfy all stakeholders as illustrated by the triangle: «society – environment – economy».

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 refined-products' use – has environmental consequences that need to be effectively dealt with, using the latest available technology.

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 in our commitment to pursuing 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, 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 has ratified and participates in the UN Global Compact, the purpose of which is to guide enterprises towards sustainable development, through volunteering 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).

Today, 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 the 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 technical support and 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 up-to-date 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 participates 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.



## AWARDS

- Is implemented and monitored by the certified Management Systems for Quality (ISO 9001:2000) and the Environment (ISO 14001:2004) on the basis of specific procedures and working guidelines.

### The MOTOR OIL Environmental and Social Report

MOTOR OIL's annual *Environmental and Social Report*, the present edition of which is the sixth 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 and Social 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.

In 2007, MOTOR OIL received the «*Entrepreneurship Award 2007*» from the Corinth Chamber of Commerce for its contribution to the prefecture's economy, quality, job creation and social activity.



The award was collected on behalf of the company by the refinery's General Manager, Mr M. Stiakakis.



- 2007 ● Award «*ECOPOLIS 2007 – Environmental Investment*» (see p. 68).
- «*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

**M**OTOR OIL maintains a presence in the retail fuels market as well, through its 100% subsidiary AVIN OIL. AVIN OIL was established in 1977 and is dynamically active in the Greek petroleum market, distributing products that meet the latest specifications and cover modern automotive and lubrication needs, always with respect for people and the environment.

AVIN OIL's high quality fuels provide energy to industry, aviation, private and professional vehicles. Gasoline, diesel, asphalt, liquefied petroleum gas, fuel oil, lubricants that comply with the strictest international specifications, constitute the most integrated range of automotive, heating, lubrication, road-construction and industrial products.

AVIN's main supplier is MOTOR OIL, and its most significant business advantage is the ability to market high quality products that comply with the latest specifications at competitive prices. Since 1987, AVIN OIL is operating its own Truck Loading Terminal at Aghioi Theodoroi, which is directly connected by pipeline with the MOTOR OIL refinery.

Following a steady growth course, AVIN OIL has created a consolidated network of about 560 petrol stations,



offering excellent and integrated service to motorists throughout Greece, supplying them with the latest technology fuels. The marketing of the additive-enriched lead-free petrol *Win 95 Unleaded*, of *SUPER PLUS 100* and of the automotive diesel oil *Diesel Best*, which ensure excellent engine protection and superior performance, a cleaner environment and greater fuel economy, prove the company's constant quest to cover even the most specific consumer requirements.

The main activities of the AVIN OIL retail network include the sale of the advanced technology AVIN lubricants, and of the Non-Fuel Retailing products (food, car accessories), as well as the fleet card *AVIN Card*, which is an essential and efficient financial management tool for large companies.

AVIN OIL applies strict management and distribution procedures throughout the three stages of fuel delivery: from the loading points (company installations and refineries), to the transport vehicles (road tankers), and to the final delivery points (petrol stations, factories, residences, etc.) in order to ensure both the safe transportation and quality of the product delivered to the end consumer.

Within the framework of the constant improvement of its services in view of covering all end consumer needs, AVIN OIL has introduced, since 2005, the Retail Heating Oil Sales service, taking orders and delivering heating oil directly to end consumers in the Attica basin. Moreover, it has created the Customer Service Centre (CSC), an integrated centre to which the customers may directly place their

orders or any other request, which will be dealt in an efficient and responsible manner. CSC provides in addition valid information on new programmes, services, products and promotions offered by the company to customers throughout Greece.

*AVIN Gas* canisters were successfully launched in year 2006, at the same time as the distribution and marketing of marine lubes, entering thus into additional market segments.

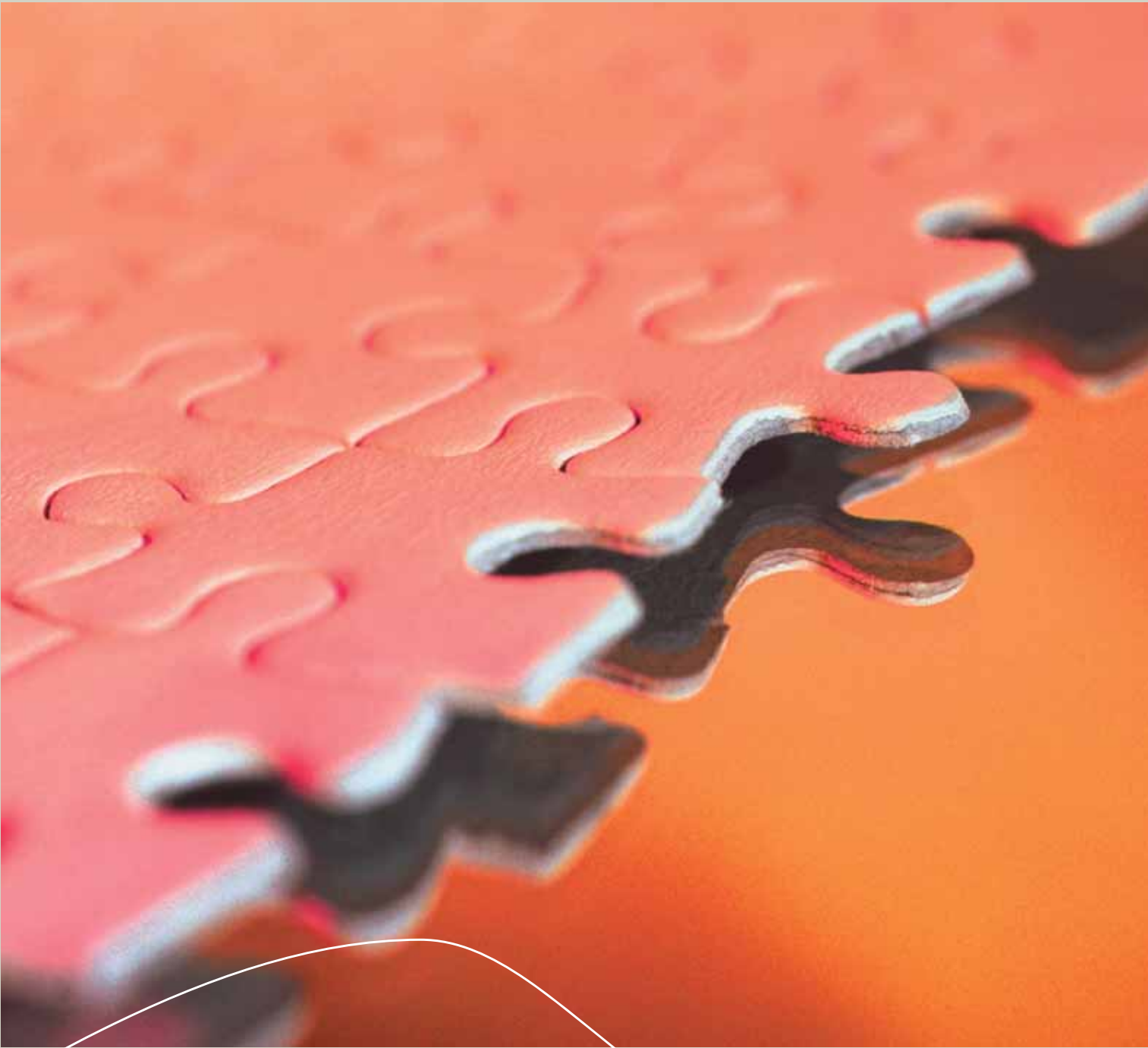
The acceptance and reliability of AVIN OIL has transcended Greek borders and has led to the development of a marked export activity in neighbouring countries.

AVIN OIL has constructed and operates the Megara Twin Petrol Station and holds a stake in Olympic Fuel Company S.A., which has built



and 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).

With annual sales of around 1.2 million metric tons in 2007, AVIN OIL holds the 4th position among the more than 20 oil marketing companies in the Greek oil market. The company's turnover for 2007 was 826.3 million euros, with a net profit of 985.2 thousand euros before taxes.



**On steady effort we ensure a workplace of trust, team spirit and respect for people**



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# HUMAN RESOURCES



**W**e recognize the fact that our value for society 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 2007, 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

**T**he 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.



**1,470 people**

**WERE EMPLOYED BY MOTOR OIL AND AVIN OIL IN YEAR 2007.**

Its main components include attracting competent people, providing equal opportunities, personnel training and development, as well as the appraisal, compensation

and discretionary benefits systems. All these components are supported by a set of plans and policies, which are applied towards the following objectives:

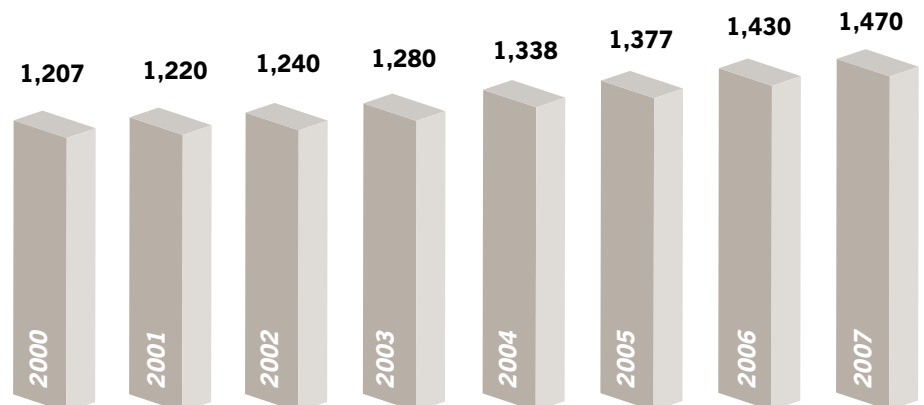
- Compliance with legislation in force and with universally established principles of human and labour rights.
- Creation of strong bonds between employees and the organisation, through candid, reciprocal and open communication.
- Enhancement of corporate culture and corporate values.
- Fairness and 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 carried out effectively and safely.
- Extending the scope of welfare provisions to cover employees' families and making efforts to improve their work/life balance.

## EMPLOYMENT

In year 2007, the human resources of MOTOR OIL and AVIN OIL amounted to an average of 1,470 people, of which 1,280 were men and 190 were women. In relation to year 2006, human resources presented a net increase of 40 people.

Due to the continuous growth of the group, personnel levels have been steadily increasing since year 2000, in despite 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

**Direct employment (annual averages) 2000-2007**



## EQUAL OPPORTUNITIES AND HUMAN RIGHTS



employees hired to cover the vacancies created by the relatively high number of retirements.

In 2007, 1,078 out of MOTOR OIL's 1,265 employees (average for the year) were based at its main site (the refinery in Aghioi Theodoroi, Corinth). The remaining 187 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 205 people in year 2007.

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

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 provisions, 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.
- 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, in the framework of our social contribution, we are consistent supporters of the Special Olympics institution (see p. 117), while in the field of employment we offer jobs to disabled people, providing them with equal opportunities with respect to employment, education and professional development. In year 2007 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 within the 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 references both to the Greek Constitution and labour law. The eight fundamental conventions of ILO 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 violations.



# 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 nature of most refinery jobs, the ratio of women to men is relatively low. Thus, in 2007, 13% of all employees were female, rising to 35% 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%.

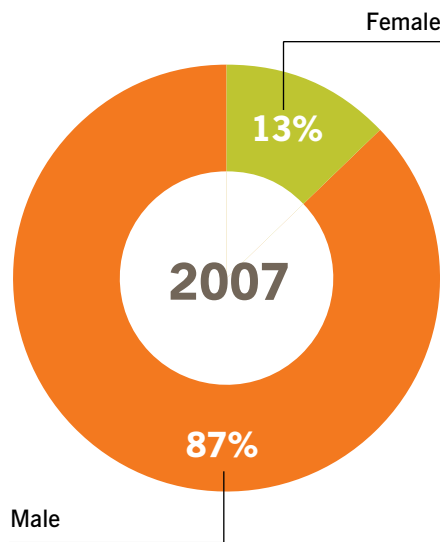
## Educational Level

Considerable importance is attached to the educational level of our workforce, and our aim is to attract, develop and retain suitable and competent employees. 24% 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 acquisition of recognized diplomas.



Gender Profile

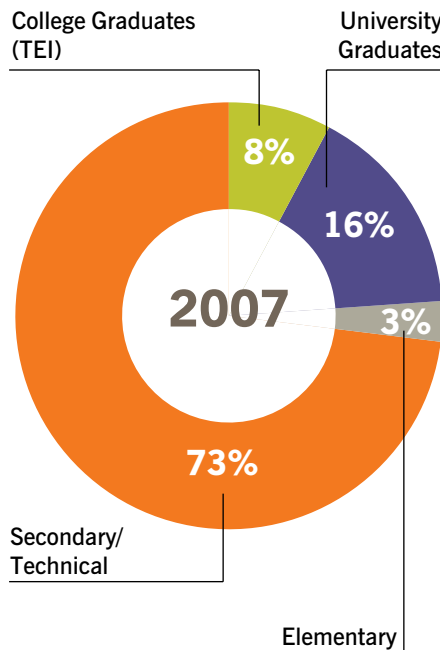


## Personnel categories

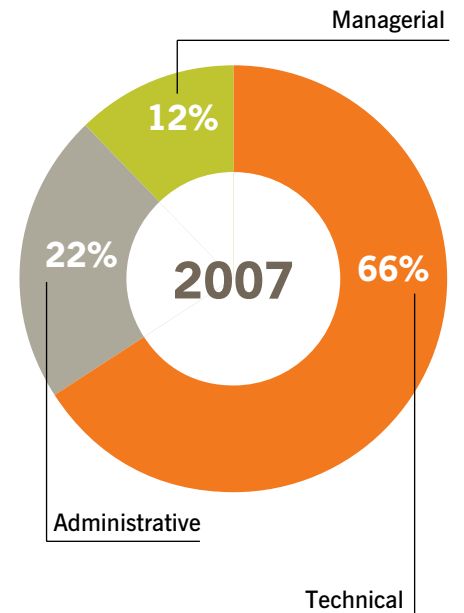
In 2007, across MOTOR OIL and AVIN OIL, management grades made up 12% of total personnel, while technicians and administrative personnel accounted for 88% of the total.

Each employee has the opportunity to rise up on the management scale, 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.

Educational Level



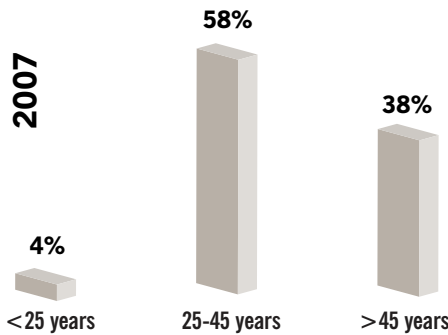
Personnel categories



# 139 RECRUITMENTS IN 2007

## 4.9% THE VERY LOW PERSONNEL MOBILITY

### Average age



### Average age

Over the last few years, the average age of the group's employees has dropped, coming to 41.4 years in 2007, down from 41.6 in 2006 and 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 14.1 years in 2007, reflecting the low level of personnel turnover. Some 55.3% of the combined workforce of the two companies has considerable experience in the group, as

their service is longer than 10 years, while 35.2% 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.

A large percentage of employees

(27.0%) 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 upcoming change to the retirement conditions foreseen by law.

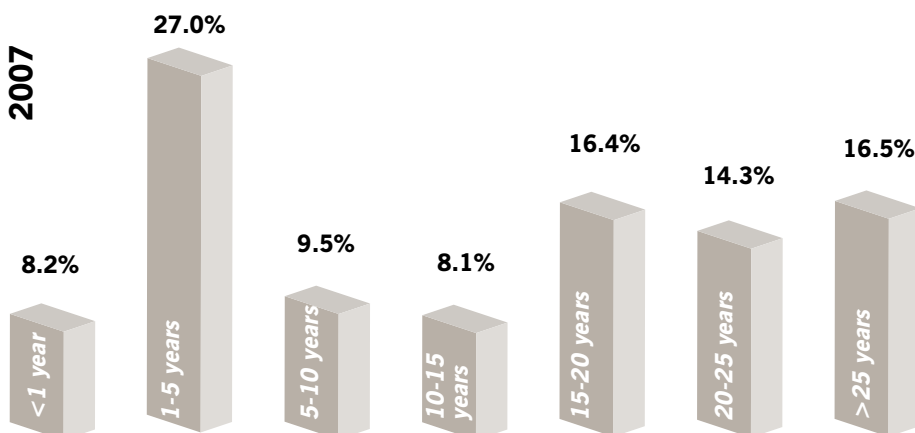
In 2007, we recruited 139 new employees, while 72 left for various reasons. The number of recruitments in 2006 and 2007 was particularly

### Personnel Mobility

	2005	2006	2007
<b>NEW HIRINGS</b>	63	123	139
<b>RESIGNATIONS BY REASON</b>			
Retirement	50	56	44
Resignation	10	12	20
Other	6	9	8
<b>Total</b>	<b>66</b>	<b>77</b>	<b>72</b>
<b>PERSONNEL MOBILITY</b>	<b>4.8%</b>	<b>5.4%</b>	<b>4.9%</b>

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

### Length of service



high, for the reason mentioned above, i.e. in view of preparing to cover the needs arising from the expected increased retirements in the near future.

The remarkably low level of personnel turnover (averaging 4.9% across the workforce in 2007) reflects the mutual trust between the workforce and the company, the professional satisfaction of employees, and the development of harmonious, long-term labour relationships.

98.5%

OF EMPLOYEES IN 2007 WERE ON OPEN-ENDED CONTRACTS.

## 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.

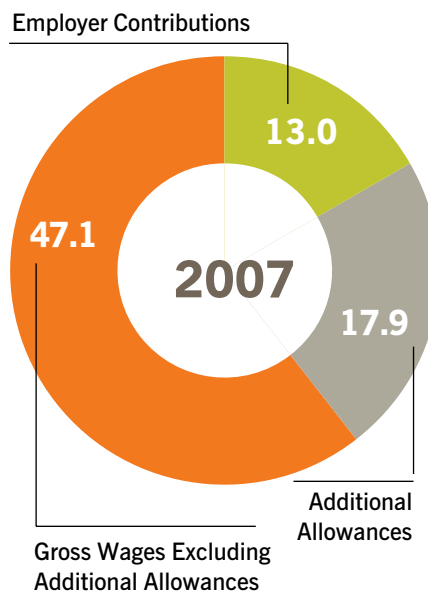
Employees are free to participate in trade unions and professional associations without any limitation. Refinery employees have their own union which has been a signatory to a

collective labour agreement with the Federation of Greek Industries since 1986. This agreement, which lays down 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 the bilateral relations, preserving labour peace and improving the overall working environment.

## COMPENSATION AND BENEFITS

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 sectoral 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.

Compensation Cost Breakdown  
(in million euros)



Annual Total: 78.0 million euros

### 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.

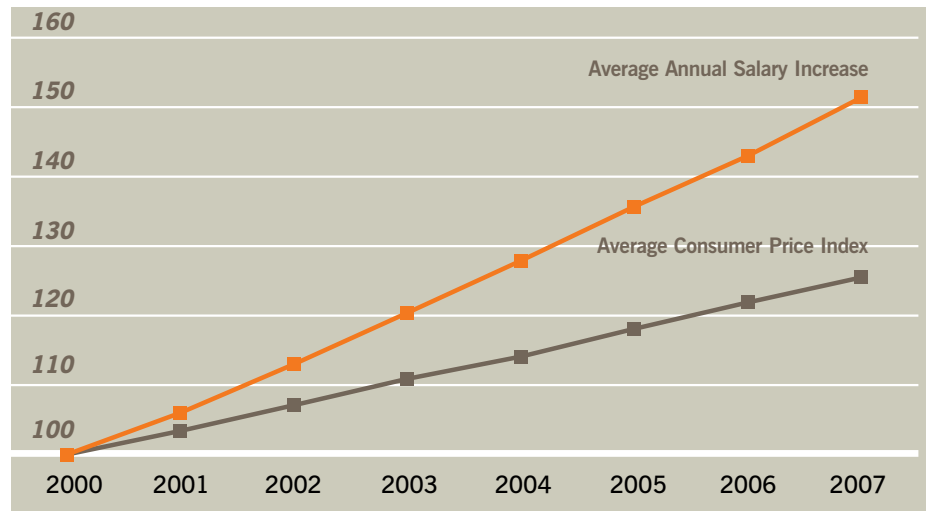
The remuneration paid is performance-based; performance is annually appraised for each employee on the basis of structured procedures. These appraisals, besides evaluating performance, also act as a tool for motivating employees, providing incentives and determining education and training requirements.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

educational level and the seniority (length of service).

Total personnel expenditure during 2007 amounted to 78.0 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.

### Average Annual Salary Increase vs. the Average Consumer Price Index (Base Year 2000 = 100.0)



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

### Principal Supplementary Wage Allowances

- A *long-service supplement*, which is a percentage of the base salary, is first paid after three years' service and increased after every further three years' 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.
- *Marriage allowance*.

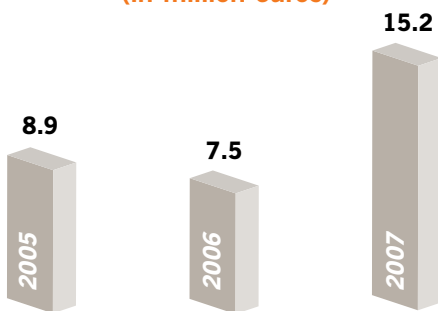


## DISCRETIONARY NON-WAGE BENEFITS

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.

### Discretionary non-Wage Benefits (in million euros)



The cost of the discretionary non-wage benefits in year 2007, amounted to 15.2 million euros, significantly increased from the 7.5 million euros in 2006, due to the unforeseen factor of extra-ordinary payments for the pension plan, which were made in 2007 to cover differences from previous years.



The following table depicts the full structure of the discretionary non-wage benefits plan.

### Discretionary Non-Wage Benefits

#### Personal development and welfare

- Pension plan (see p. 36).
- Study subsidies (see p. 41).
- 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 of the employees' football teams to compete in Corporate Games (see p. 37).
- Organization of Christmas parties for employees' children.
- 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 (60 gifts in 2007).



# 2,380

EMPLOYEES AND FAMILY MEMBERS TOOK PART IN 42  
EXCURSIONS TO VARIOUS PARTS OF THE COUNTRY IN 2007

## Health

- Hospital treatment scheme for employees and their dependent family member.
- 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 (31 allowances in 2007).
- 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 (64 awards in 2007).
  - award of educational grants for university students (123 grants in 2007).
  - full coverage of the children’s participation cost in summer camps (50 cases in 2007).
  - award of a day care nursery allowance (43 allowances in 2007).
  - award of financial assistance for the beginning of the school year (950 cases in 2007).

## 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.



## 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.



## Football Teams

2007 was yet another excellent year for the MOTOR OIL employees' football team. It came first among 24 other teams in the Athens Corporate Games Football League championship, and won the "double": championship and cup.

The MOTOR OIL team has competed for 15 consecutive years in these games and won several major trophies: eight "doubles" (championship and cup), four 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.

The equivalent AVIN OIL football team was a 2007 Cup finalist, in the Greek Oil Companies 8-a-side championship. For the three previous years the team was part of the 5-a-side championship and was champion in year 2006.

- 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.



## EDUCATION AND TRAINING

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 vocational education and 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 2007

- *Training Activity Ratio*<sup>1</sup>: 12.4 hours/person
  - *Training Cost Ratio*<sup>2</sup>: 1.3%
  - *Training Participation Ratio*<sup>3</sup>: 19.7%
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.





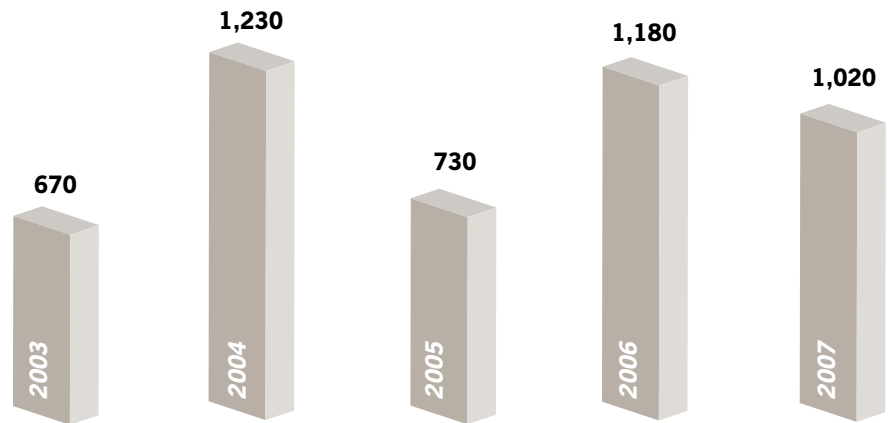
**1.0 million euros**  
*THE 2007 INVESTMENT IN  
 EMPLOYEE EDUCATION  
 AND TRAINING*

**18,240**  
*MAN-HOURS OF EDUCATION IN 2007*

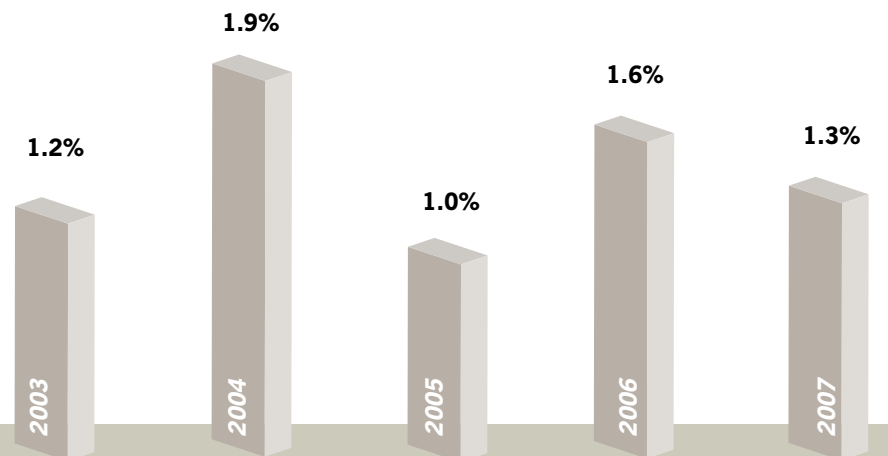
Education and vocational training programmes concern the following **sectors** in general:

- Induction training of newly-hired unit operators and maintenance technicians (see p. 41).
- 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 provision.
- 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 languages learning.
- Health and Safety training of subcontractor personnel.

**Training Cost (in thousand euros)**



**Training Cost Ratio\***



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 new units in 2005, while its high value in 2006 is due to the extensive Health and Safety training programme.

\*Total training expenditure over total payroll expenditure including employer's social security contributions.



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 18,240 man-hours of education and vocational training were delivered in 2007, at a total cost (including indirect costs) of 1.0 million euros.

The number of employees participating in the training programmes was 281 in total (92 managers and engineers and 197 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 64.9 hours per participant (up from 40.3 in 2006).

In 2007, unit operators hired in 2005 and 2006 underwent repeat training, within the framework of the new approach to training for this group of employees. This repeat training, together with the induction training of new engineers, unit operators and maintenance technicians hired in 2007, constituted the focus of the 2007 educational process, and absorbed the largest number of training hours.

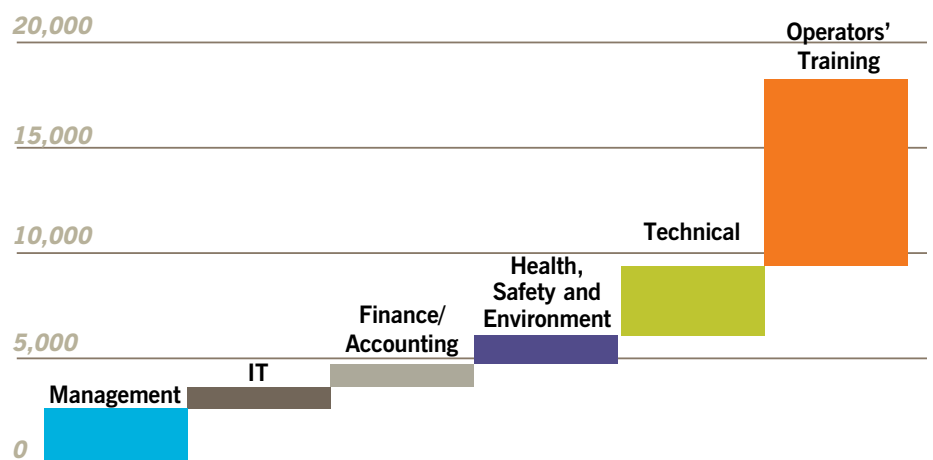
Furthermore, emphasis was placed on

the training of existing technical staff, aimed at developing and improving further the skills of employees on various specialized technical issues.

Health and Safety in the workplace, as well as Environmental Protection, were also main themes of the 2007 training process, but to a lesser extent than in 2006, given that they constituted the training focus in that year.

Finally, a major part of the training process was dedicated to Administrative, Financial and IT subjects, for the development of other employees' administrative and technical skills.

**Training Man-Hours by Subject in 2007**  
(Total Training Hours = 18,240)





Also in 2007, in line with the policy of paying the tuition fees for employees following graduate or post-graduate studies, we covered the following cases:

- one employee for participating in the post-graduate Business Administration course run by the Hellenic Management Association (EEDE),
- one employee for acquiring a Business Administration degree,
- one employee for participating in an Applied Economics – Finance postgraduate course,
- one employee for participating in a Law postgraduate course,
- one employee for specializing in Applied Accounting – Auditing,
- one employee for specializing in Supply Chain Management,
- one employee for specializing as a Computer Systems technician, and for
- two employees to attend foreign language courses.

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

It is MOTOR OIL's policy that, when refinery operators retire, their successors must be both adequately trained and experienced in performing the duties of their prospective posts before assuming actual responsibilities. To achieve this, any new operators are hired about one year before the retirement of their predecessors. 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 nine-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.

In year 2007, an evaluation of the 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:

- Two months 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, Sealing, English, Computers, etc).
- One-and-a-half months of day-shift practice in the particular job function to be taken up.
- Six months practice shift-working, without assuming actual operational responsibilities, in order to obtain 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.

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

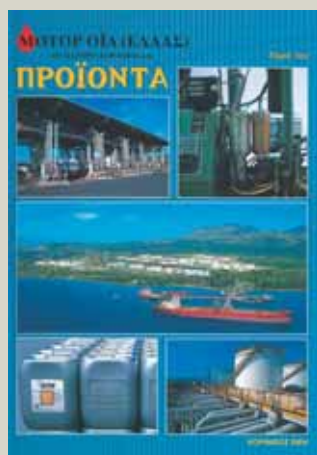
A similar programme, adapted to the relevant requirements, is also applied for the induction of the newly-hired maintenance technicians.

## 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. Within this framework, two noteworthy activities have been implemented in the recent past, whose importance transcends the company's boundaries, given that they make a significant contribution to the effective specialized training of the country's technical staff:

- A **four-volume set of training manuals** was published in 2005, 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*

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 completely 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.

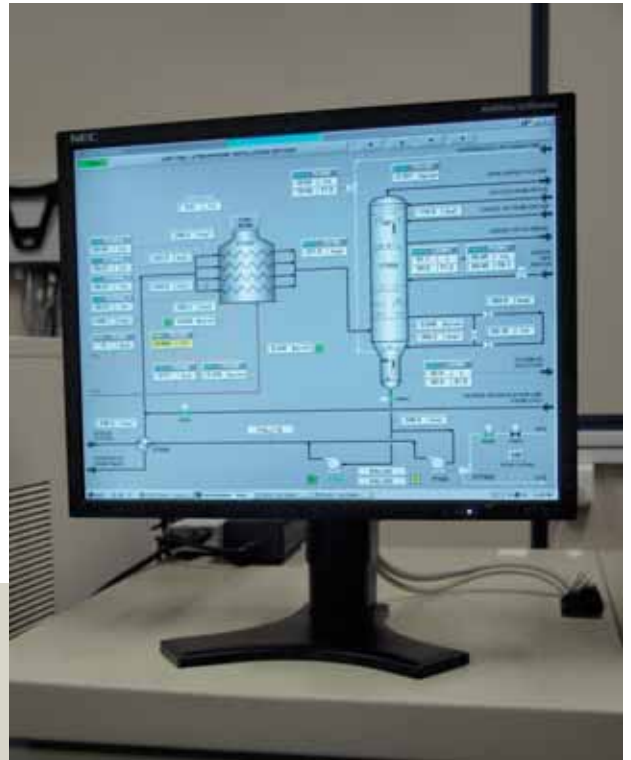


- Installation of the **Computerized Training Simulator (CTS)** was also completed during 2005, at a total cost of 1.2 million euros. The CTS is a primary and extremely efficient tool for the training of the operators of the refinery's most complex plant (i.e. the Fluid Catalytic Cracking Complex),

and of the operators of the Hydrocracker Complex. The simulator, the first of its kind in the Greek industrial sector, contributes greatly to the safe operation of the refinery.

The system consists of a network of computers supporting work-





stations similar to those used for the actual control 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 for evaluating 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.



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





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## HEALTH AND SAFETY

## HEALTH AND SAFETY MANAGEMENT

**H**ealth 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.

This truth is reflected in the way in which we perform our commercial and industrial operations, which moreover is determined by our Principles and Values. One of our fundamental Values is the respect for people and their needs, from which there follows our commitment to a safe working environment and to the continuous improvement of the health and safety conditions of our workplaces, which we accomplish by the application of a soundly-based system for Health and Safety management.

In year 2007, our activities in the field of Health and Safety focused, amongst other things, on improving fire safety equipment, on implementing projects to reduce the risk of accidents, on training and on fostering the safety awareness and accidents' prevention mentality among our employees. The further reduction of the Accident Frequency and Accident Severity Indexes is a noteworthy achievement, and an encouraging result in our pursuit of achieving zero accident rates.

**O**ur principal concern, arising from our Health, Safety and Environmental Protection policy (see p. 16), is to take all necessary measures and institute 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 that ensure the constant improvement of health and safety conditions in the workplace, and contribute to the development of a soundly-based safety culture and of the 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 (see p. 17).

The *Health and Safety Management System*, which has been developed by our own competent specialists, is based on best-practice elements of other internationally-recognized safety management systems. Its **operational structure** includes the four stages of the established Demming cycle (**Plan** → **Do** → **Check** → **Act**) and is a

# HEALTH AND SAFETY MANAGEMENT SYSTEM

AN INTEGRATED SYSTEM UNDERPINNING THE ACHIEVEMENT OF OUR GOALS.

management cycle that operates as a self-checking and self-correcting mechanism, designed to ensure continuous improvements in the system's operation.

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, work in synergy to significantly increase the overall effect.

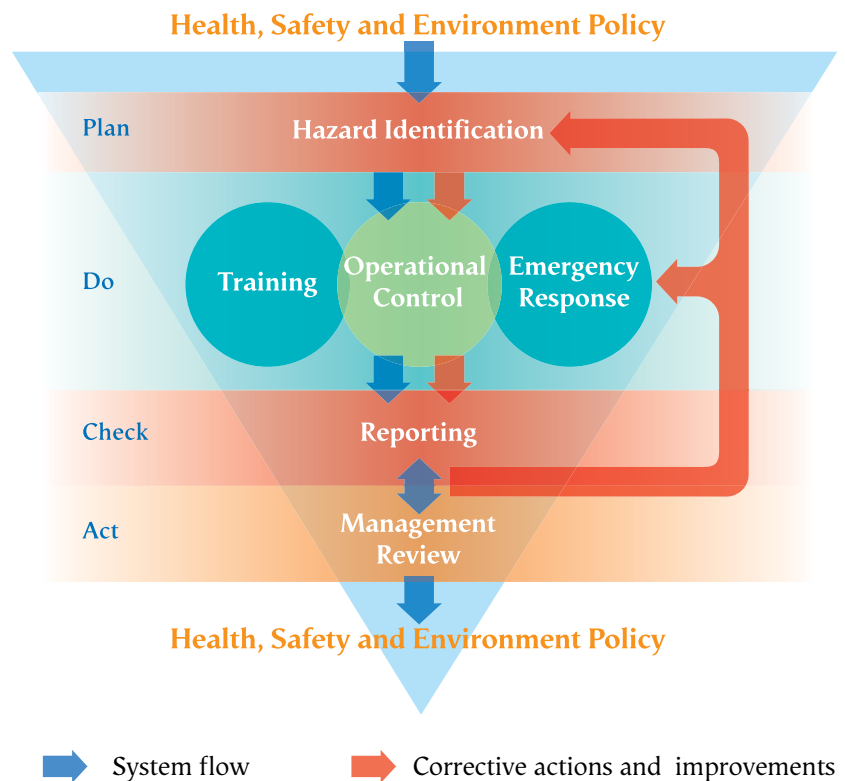
The operation of the *Health and Safety Management System* is assigned to the refinery's Health, Safety and Environment Section. Moreover, Health and Safety organization includes in-house Safety Supervisors, Occupational Physicians and nursing staff, both at the refinery and at the company's head office,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

MOTOR OIL is aiming at reforming the *Health and Safety Management System*, so as to be certified according to the OHSAS 18001:2007 standard. Preparation for this important quality upgrade of the system began at the end of 2007, and will continue in year 2008, in view of achieving certification by 2009.

During 2007, our efforts to achieve our Health and Safety goals were focused around 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 2007 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.

## Operational structure of the *Health and Safety Management System*



## Health and Safety Management System's 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>

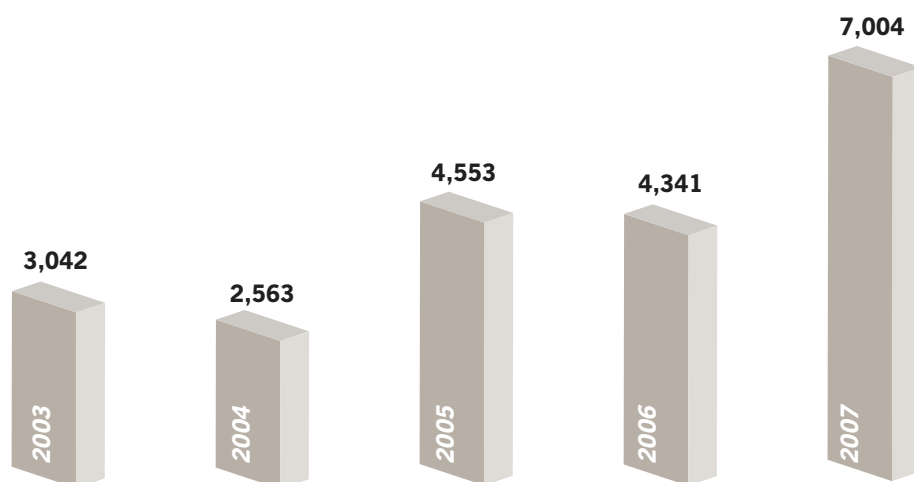
## UPGRADING AND IMPROVING SAFETY CONDITIONS AND THE QUALITY OF THE WORK ENVIRONMENT

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 programme of investments in suitable maintenance of electrical, mechanical and electronic equipment, and in technical upgrades and renewals of this equipment, aiming at maintaining the highest possible standards of safety and accident prevention, by taking account of engineering developments. 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 5.0 million euros in 2007, while the cost of all other types of expenses was 2.0 million euros. Therefore, the overall 2007 cost of investments and expenses amounted to 7.0 million euros, up 61% in relation to year 2006. 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)



2007	
<b>Investments</b>	<b>4,996</b>
Fire Safety	675
Emergency Response	229
Personal Protective and Medical Equipment	248
Risk Reduction	3,761
Security	83
<b>Expenses</b>	<b>2,008</b>
<b>Total</b>	<b>7,004</b>





Among other things, this amount included investments for:

- Works for the relocation of maintenance workshops and of the central materials warehouse (to be completed within year 2008) 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 interchange junction on the old National road for safer vehicle traffic towards the new units, with a construction cost of 0.5 million euros.
- 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.
- Replacement of a number of fixed fire-fighting monitors with new devices of improved performance and durability, and installation of additional monitors at other points.
- Installation of a new power-driven water pump in the refinery's fire-fighting network, which is equipped with a total of 4 power-driven and 3 diesel-driven pumps. Also, installation of a new, bigger

capacity pump, for filling the foam tank used to supply fire engines.

- Upgrading of the fire protection 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.
- Replacement of a large number of old portable fire extinguishers. Efforts are made to ensure homogeneity in this type of equipment, to the greatest extent possible.
- Replacement of one fire truck and upgrading of the bulk foam tender.
- Installation of new fire safety valves in the Alkylation unit, and of water curtain systems in another three units and in the API-1 oil separator.
- Installation of an automatic fire detection and fire-fighting system in three electrical substations.
- Replacement of the sprinkler systems in three tanks.
- Construction of a suitable underground facility for the safer storage of hydrogen fluoride tanks at the Alkylation unit.
- Operational improvements to the Distributed Control System (DCS)

and for the fire protection of data cables.

- Conversion and upgrading of the system controlling the emergency shut-down of the boilers.
- Renewal of the wireless communication devices to improve the intra-communication response, 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.
- Continuation of the double block bleed valves installation project in the furnaces of the process units.
- Safety improvements at various access points to refinery facilities (ladders, platforms, etc.), improvements in lighting and signposting of the internal road network.
- Elevation of the vents of the sewer system at various units for better gas dispersion.
- Installation of a lift at the Catalytic Reforming Unit.
- Soundproofing of compressors at the Waste Water Treatment Plant.
- Enhancement of the compressors' protection against high temperatures.



## 7.0 million euros

INVESTMENTS AND EXPENSES IN 2007  
FOR IMPROVING HEALTH AND SAFETY.

### Major safety related capital projects

A number of the major investment projects of the last few years, whose main purpose was the production of clean fuels and the technical upgrading of the refinery, in terms of vertical integration, automation and energy sufficiency, also had a direct positive effect in improving the safety level at the refinery.

- Implementation of the Advanced Process Control System (APC), which extends and expands the functionalities of the Distributed Control System, was continued during 2007. 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).
- Work continued during 2007 on the phased upgrading project for the refinery's steam generating boilers. The largest of the four boilers has now been upgraded, and works have started on yet another boiler. The burners of the upgraded units are designed for operation at much lower noise levels than the old ones (budget: 4.5 million euros).
- Installation of the Computerized Training Simulator was completed during 2005, at a total cost of 1.2 million euros. The aim of this state-of-the-art facility is to provide efficient training for the operators of the Hydrocracker and Catalytic Cracking Complexes (see p. 42).
- Installation of a 3.1 million-euro Power Management System was completed in 2005, increasing the reliability of the refinery's electrical power system with immediate positive consequences for the safety of the refinery.
- The Custody Transfer System at the refinery's jetty was upgraded in 2004, thus improving the reliability, safety and effectiveness of product loading (cost: 1.6 million euros).
- Also in 2004, the new Truck Loading Terminal was commissioned. It incorporates innovative technologies with positive Health and Safety implications, including a state-of-the-art automatic loading system and improved fire extinguishing devices operating independently from the refinery fire safety network.
- 2000 saw installation of the Distributed Control System (DCS), providing for fully computerized control of refinery operations (cost: 20.9 million euros).



## 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-term improvements of the level of health, safety and environmental

protection. 802 new recommendations were recorded in year 2007, while 930 were implemented (including pending recommendations of the previous year), while another 156 recommendations remain 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.

## UPGRADING AND IMPROVING SAFETY PROCEDURES

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 through 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 way

of 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.

- 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 homogenization thereof to the greatest possible extent. These specifications are updated in line with technological developments.

A project of major importance was implemented in year 2007 concerning the optimization of the technical inspections efficiency at three refinery units (RBI, Risk Based Inspections).

## Risk Based Inspections (RBI)

In year 2007, we appointed the TÜV consultancy firm to implement an innovative project, concerning the application of the firm's specialized RBI programme to three refinery units: the Crude Distillation unit, the Naphtha Stabilizer and the Caustic Soda and Amine Treating unit.

RBI is an approach to the planning of technical inspections in a way that ensures optimum results. It is based on the evaluation of risk, and was first applied in the petroleum industry. The evaluation of risk is done by taking two parameters into consideration: the probability of a hazard due to equipment failure, and the extent of such a failure's consequences. The evaluation is carried out on all the equipment elements of a process unit; on the basis of this evaluation the equipment elements are then classified in priority groups. Thus, the elements with both a high probability of failure and extensive consequences of the failure, are given higher priority than items of equipment with an equally high probability of failure but with a lesser extent of consequences.

The expected benefits from the application of RBI are multiple, which is exactly why we decided to proceed with the implementation of this project:

- Enhancement of personnel safety levels.
- Reduction of maintenance costs.
- Productivity maximization due to the increased availability and utilization of units.
- Maximization of the protection of critical equipment against serious failures.

Study, analysis and inspection activities for the implementation of the project in the three refinery units covered 430 individual cases of fixed equipment (piping, pressure vessels, distillation columns, etc.).

Finally, the special support software TÜV-RoiM<sup>®</sup>, is being used for the continuous monitoring of the RBI implementation and the management of any changes occurring in the production process thereof.



## 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 statistically monitor this performance. 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 to the competent authorities studies complying with European directive SEVESO II, with respect to the



most important potential accident scenarios and the respective prevention and confrontation measures.

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 way by 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. A joint exercise at the ELPE refinery in Aspropyrgos was organized in year 2007; MOTOR OIL participated in this exercise by means of a fire-engine and fire-fighting crew.

- 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. Three such exercises were carried out in year 2007. 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 plan.

- The availability on the refinery site of six fire engines and one 12,000 litres bulk foam tender, that are available on 24-hour standby, and are operated by trained fire-fighters' crews.
- The operation of an automatic telephone call system (COMMUNICATOR) for executives, in the event of an emergency outside normal working hours.

In 2006, in order to improve our



preparedness for effectively responding to a major incident, a fourth alternative location for an Incident Control Room was established, situated within the Hydrocracker Complex, to complement the three existing such locations on the refinery site.

For the refinery personnel we have in place a programme of regular medical examinations (including blood tests, X-rays, cardiograms, eye tests, etc.) and of inoculations. 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.

## Medical services - health



- Three suitably-equipped first aid stations (sited at 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 employee's 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.

## Examples of actions taken during 2007 to improve operating procedures

- Implementation of the Risk Based Inspections project (see p. 54).
- Particular emphasis was given to the auditing and inspecting selected hot works and confined space works.
- Application of a new technique (introduced despite the higher cost involved), that allows crude oil tanks to be cleaned without the necessity for personnel to enter the tanks, thus entirely eliminating the associated hazards (see p. 85).
- 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, was quantified. Persistent breaches lead to escalated disciplinary measures depending on the severity of the breach.
- New procedures for critical works were issued – use of cranes and liftings, security devices (flame traps etc.) when using inflammable gases (acetylene) or oxygen.
- Emergency response teams were set up, which can intervene on a 24-hour basis if necessary, to rescue persons trapped at elevated points; these teams are staffed by suitably trained personnel (see p. 59).
- 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, we rewarded the personnel of four Sections 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 (see p. 61). This work is ongoing, in line with developments in the application of the REACH Regulation.

## PLANNED SHUTDOWNS OF REFINERY UNITS

Four planned shutdowns of refinery units for maintenance purposes were carried out in 2007, without a single accident occurring - an exceptionally satisfactory outcome. Such extended interruptions of a unit's operation 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 jointly identify hazards and initiate remedial measures; and the carrying out of daily site safety inspections.

Five unplanned shutdowns occurred in year 2007, besides the planned shutdowns. Accidents were avoided in these cases as well, through the application of a similar range of preventative measures.

## TRAINING, SAFETY AWARENESS AND COOPERATION WITH STAKEHOLDERS

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 *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.

A particularly broad personnel training programme on Health and Safety was implemented last year (2006), focussing on issues concerning the issuance of Work Permits, the use of respiratory Personal Protective Equipment and the rescuing of persons trapped at elevated points.

In year 2007, emphasis was placed on taking advantage of the experience gained in the 2006 programme, covering new subjects and on the training of newly-hired engineers and unit operators:

- Induction training of the newly-hired unit operators and maintenance technicians, and repeat



training for those hired over the last two years (see p. 41).

- Training of the newly-hired duty engineers mainly on the handling of major incidents response and on the available fire-fighting equipment, on both a theoretical and practical level, in the form of real-life fire-fighting drills and related desk exercises.
- Training of the lubricants warehouse employees on the safe use of forklift trucks.
- «Toolbox Meetings» training sessions (the 2006 Environmental and Social Report contains extensive reference to this training approach) on special subjects concerning specific workplaces.
- Many rescue drills were organized under the supervision of the Fire Brigade's Search and Rescue Team (EMAK) officers, within the framework of staffing the crews charged with carrying out rescue operations at elevated points - in continuation of the relevant 2006 training. In these drills, trainees were divided into groups of 7 or 8 and, after repeating the theoretical part of the training, participated in real-life exercises carried out at suitable refinery points. A total of

around 90 persons from all shifts were trained.

- The following took place at two different meetings of refinery executives: (a) the findings of "The Report of the BP U.S. Refineries Independent Safety Review Panel" (also known as the "Baker Report") relating to the accident at the BP Texas City Refinery on 23.3.2005 were presented, and (b) a presentation entitled «The Challenge of Health and Safety Culture Management» was made.
- The structured and focused efforts to provide information to employees of subcontractors, and to raise their safety awareness continued in 2007, 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 materials 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 100 persons in 2007, adding to the 230 individuals who received training in year 2006.

- 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



## ACCIDENT STATISTICS

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 have shown a clear downward trend over the years.

Six accidents were recorded in year 2007, down from ten in 2006 and fourteen in 2005. The *Accident Frequency Index* showed a significant reduction in 2007 compared with the previous year (from 4.5 reduced to 2.6, equivalent to a 42% improvement), that was a much better performance than what was targeted (4.2).

The *Accident Severity Index* also improved during the year, dropping to 1.1 from 1.8 in 2006 (39% improvement), although the target of 0.75 was not achieved due to the fact that more accident related man-hours were lost than was initially anticipated.

These statistics relate to our own employees and do not include accidents involving sub-contractors' employees, which showed a marked reduction: only one such accident was recorded in 2007, compared with 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).



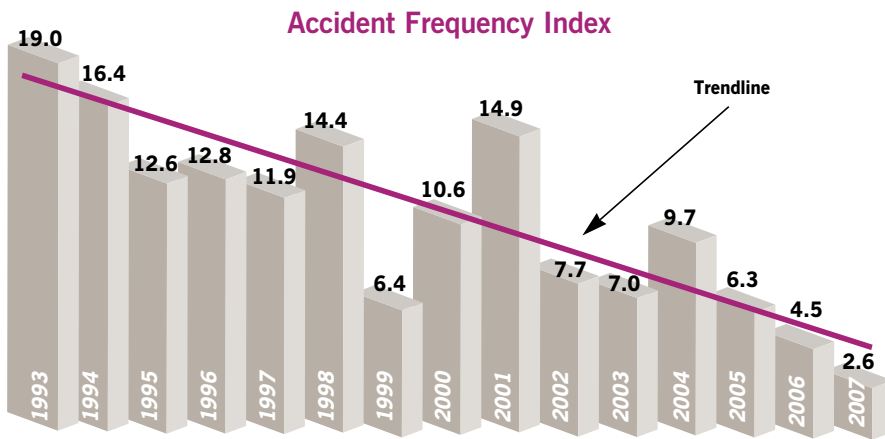
year 2007 included 52 drills (one per week), of which 3 concerned the response to a Major Incident. Half of the drills (26) were planned, while the rest (26) were unscheduled drills (with respect to the date and time, the location and the scenario) involving mobilization of response equipment. Planned 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.
- Co-operation with other organizations and stakeholders involved in the sector is regarded as an essential part of the company's approach to Health and Safety. During 2007:

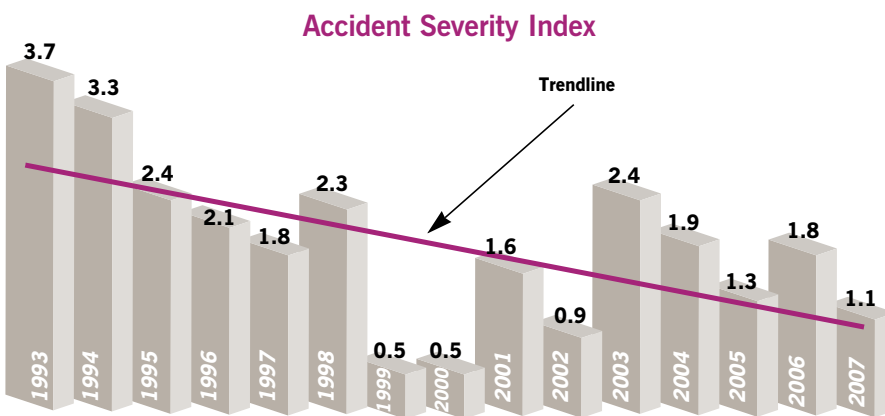
- The 28th Meeting of Greek Refineries on Health, Safety and Environmental Protection was organized by the Hellenic Gas Transmission System Operator (DESFA). This involved representatives from all Greek refineries, government and local authority officials, the emergency services and other interested parties. MOTOR OIL personnel that attended the meeting contributed with presentations on various issues. These meetings serve the purpose of promoting co-operation and developing and exploiting synergies in an area where there is extensive scope for exchanging knowledge and experience.



## THE REACH REGULATION



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



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

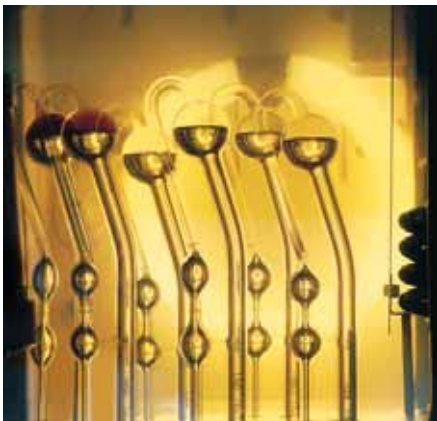
The European Union REACH Regulation (Registration, Evaluation and Authorization of Chemicals), effective as of 1st June 2007, creates a new basis for the protection of human health and the environment from the use of chemicals throughout their life-cycle. Recognising the weaknesses of the pre-existing legal framework, the EU after a long lasting series of initiatives and consultations, has agreed a range of measures, enshrined in REACH, whose essential characteristic is to place responsibility for identification of the hazards of chemicals with their producers.

Within the framework of its duties 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.

Conscious of the public interest in human health and environmental protection, we have mobilised our specialists to prepare for compliance with this new legislation. In recognition of the importance of the participation of all those involved in the production and distribution of our end products, the company discusses and analyzes the individual issues arising during application process of the Regulation, with both its 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, as well

## SECURITY – REVISED EDITION OF «PORT INFORMATION & REGULATIONS»

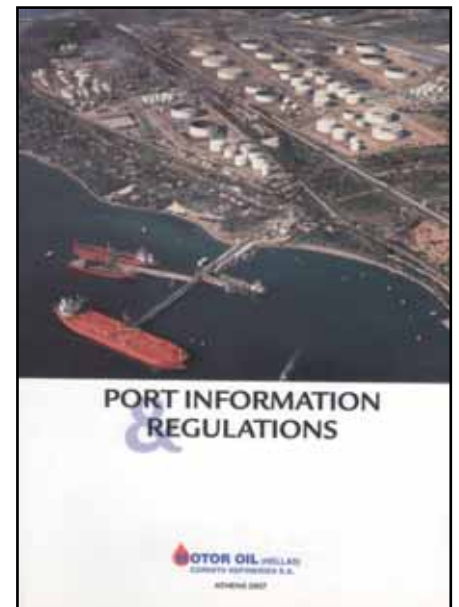


as participating in the Fuel Ethers Reach Consortium (FERC), which is the core organization assisting ether (MTBE/ETBE/TAME/TAEE) producers in their preparation for the registration of such substances. Through these forms of participation, we can ensure that the chemical properties of the products we 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.

**W**e 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 revised «Port Information & Regulations» became applicable in year 2007. We regard 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 to 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.

AVIN 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 2007:

- 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 of 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.

- 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.
- Personnel at the Aghioi Theodoroi terminal, Corinth, received Health and Safety training relating to the operation of the terminal.

In the field of capital investments in Health and Safety, three new Road Tankers became operative in year 2007, 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 safety system was upgraded with the installation of flame traps in the vapour recovery unit, and with replacement of the sprinklers in the loading gantries with new ones of improved performance and durability.
- Improvements were made to the infrastructure to reduce the risk of accidents (e.g. installation of more efficient lighting in tanks and loading gantries, installation automatic shut-down mechanisms on the fuel pump to ensure flow interruption if liquid fuel is present in the vapour recovery circuit).





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



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# ENVIRONMENT



## ENVIRONMENTAL MANAGEMENT

Our fundamental corporate Principles determine the framework of our commitment to environmental protection. Our invariable aim is to minimize the environmental impact arising from our business operations, throughout the life-cycle of our process units, from the project planning stage to the operational phase, and to the final stage of decommissioning. We are committed to applying our Environmental Policy, to applying Best Available Techniques for environmental protection, wherever practically possible, and to the continuous improvement of our performance by applying Management Systems, which we also exploit in the process of identifying, evaluating and responding to environmental impacts.

In year 2007, we published our first annual voluntary *Environmental Statement 2006*, in accordance with the EMAS regulation, we re-certified the *Environmental Management System* as per ISO 14001:2004, valid until 2010, we completed works to link the refinery with the natural gas distribution network (which was effected in May 2008), and we commissioned a new low energy-consumption seawater desalination unit, which practically eliminates the need to import fresh water. Finally, the company received the «ECOPOLIS 2007 – Environmental Investment» award.

As a society, as a company and as individuals we face the challenge of finding ways to deal with environmental problems responsibly and decisively, otherwise human activity could quickly and irreversibly destroy natural resources and ecosystems, which have taken millions of years to create.

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 to protect the world we live in. In this context we seek to ensure that our facilities operate at the best possible energy performance, to minimize the emissions of greenhouse gases as well as those of other pollutants, to operate within the framework of approved environmental terms, to rigorously adhere to the relevant Hellenic and European legislation, as well as to implement projects and actions that go beyond the strict application of the law.

### Environmental Management System

We are committed to our core goal of satisfying society's energy needs while contributing to the economic and social progress, respecting the principles of Sustainable Development and minimising the environmental impact of our business operations. This



# ENVIRONMENTAL MANAGEMENT SYSTEM

- ISO 14001:2004 CERTIFIED
- EMAS ER 761/2001 CERTIFIED
- INTEGRATED IN ISO 9001:2000

*Management System* is ISO 9001:2000 certified for quality, and therefore the execution of the different internal operations and procedures of the *Environmental Management System* is characterized by the strict documentation imposed by the ISO 9001:2000 standard.

The company's *Environmental Management System* was first certified compliant with the ISO 14001:1996 standard in 2000 for all refinery operations; since 2004 it is certified compliant with the stricter ISO 14001:2004 standard by BV (Bureau Veritas). The ISO 14001:2004 standard, whose value is recognised worldwide, embodies all provisions, methods and tools required for the development, implementation and maintenance of an effective *Environmental Management System*.

Our environmental policy includes the firm commitment for continuous improvement and for dissemination of information relating to the environmental impact of our activities. In the framework of this commitment, and beyond our legal obligations, we have decided to adopt and implement, on a voluntary basis, the non-mandatory Eco-Management and Audit Scheme (EMAS) specified in EU directive 761/2001.

During 2007:

- The *Environmental Management System* was certified by BV in accordance with the EMAS ER 761/2001 standard, and re-certified as per ISO 14001:2004, valid until

year 2010.

- The BV-validated *Environmental Statement 2006* for the refinery was published (the relevant report for year 2007 will be issued in 2008).
- The Ministry of the Environment, Urban Planning and Public Works approved the registration of MOTOR OIL in the Eco-Management and Audit Scheme (EMAS) and its refinery in the

Hellenic Register of EMAS-Registered Organizations.

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.

## Environmental objectives

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 impacts.
- 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.

## «ECOPOLIS 2007» Environmental Sensitivity Award



In year 2007, MOTOR OIL received a significant distinction: The «*ECOPOLIS 2007 – Environmental Investment*» Environmental Sensitivity Award for businesses. The company's entry, entitled "Upgrading refinery processes and production units to improve environmental performance", concerned the projects of Natural Gas, of upgrading the Waste Water Treatment Plant, and the installation of Electrostatic Precipitators.

The prize award was organized for a third 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 Scientists, Scientific Authorities, Municipalities, Public Sector Organizations, Enterprises, State Authorities and the Media.



The award ceremony took place at the GAIA Natural History Museum on 6 June 2007, and the award was received on behalf of the company by the Head of the Health, Safety and Environment Section, Mr G. Palaiokrassas.

The bronze and marble "ECOPOLIS 2007" sculpted award. *«It symbolizes the environment and human culture, the sun and the city. Nature and its immense for us importance, make us responsible for continuing the beauty and the functioning of the universe»* (the sculptor Maria Christoforatu).



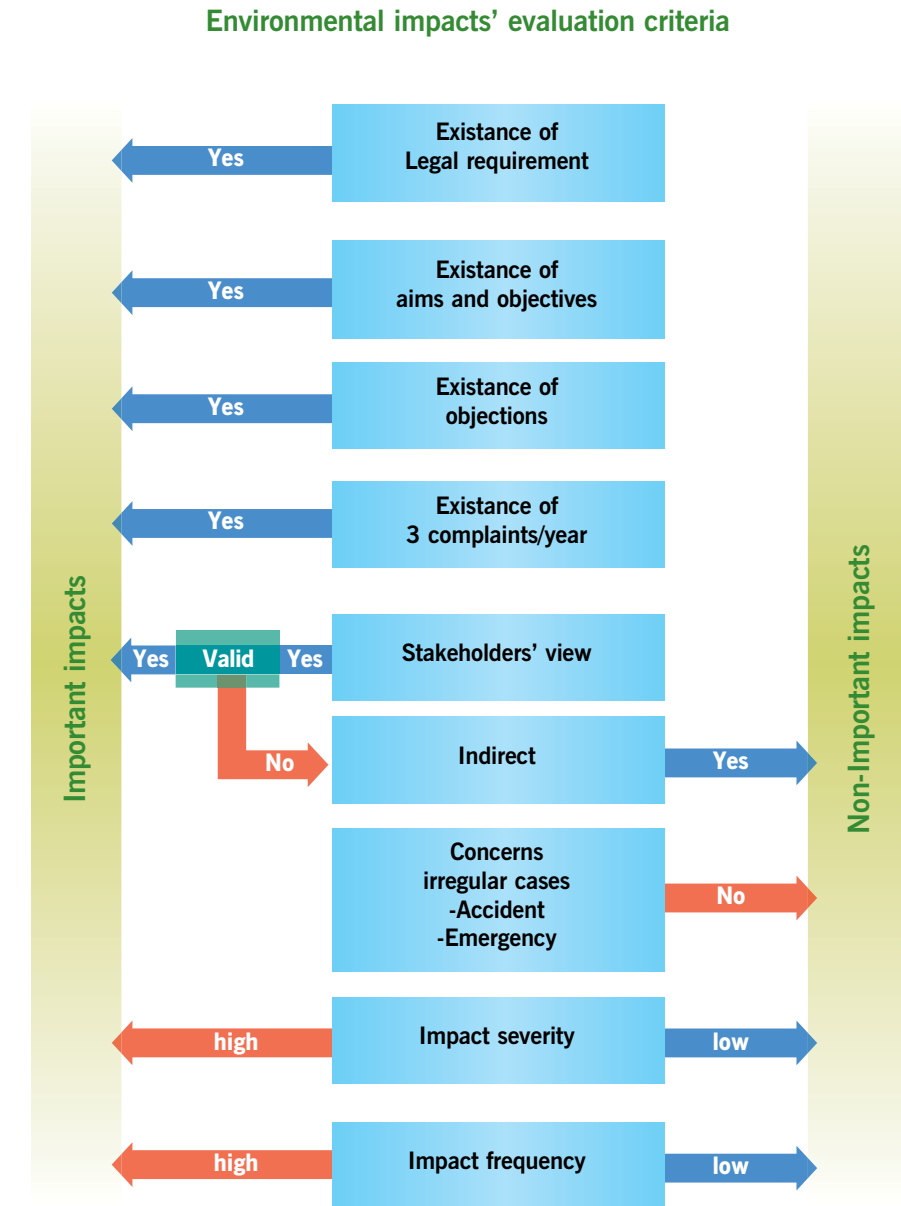
# ENVIRONMENTAL IMPACT MANAGEMENT – THE CHALLENGES

Aiming at the continuous improvement of its performance in the environmental protection field, and besides adhering rigorously to its institutionalized obligations, MOTOR OIL implements plans for preventing and responding to the environmental impacts inevitably arising from its operation. A basic tool in this effort is the measurement and regular evaluation of results, as well as the systematic evaluation of environmental impacts, which is implemented on the basis of a set of criteria according to which an impact is characterized as significant or non-significant.

All environmental impacts relating to the operation of the refinery have been evaluated as to their significance, and this procedure has led to the following impacts being classified as significant, therefore constituting the challenges we are called upon to manage:

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

The above environmental impacts are recorded on a regular basis, and suitable environmental indexes are used for their monitoring, on the basis of which the appropriate actions are planned and implemented aiming at the proper



measures being taken, at the effective management and improvement of the company's environmental performance.

As for the construction of new projects, alternative proposals are evaluated with

regard to their environmental impacts, in view of minimizing such impacts through the as far as possible incorporation of Best Available Techniques, and by selecting the most environmentally-friendly solutions.



**471.2 million euros**

IN ENVIRONMENTAL INVESTMENTS IN THE LAST SIX YEARS.

## ENVIRONMENTAL INVESTMENTS AND EXPENSES

The company's investment policy focuses on producing environmentally-friendly products, by using new technologies that minimize environmental impacts, and by automating the processing operations for the improvement of energy performance and the efficiency of the refinery and other facilities.

During the last six years, as shown in the table (which includes the corresponding AVIN OIL data), a massive investment programme totalling 647.7 million euros has been implemented, the major part of which was related to the upgrade and expansion of the refinery's processing configuration, (mainly the construction of the Hydrocracker complex), for clean fuels production satisfying the EU specifications coming into force in 2009. Of this amount, 471.2 million euros were channelled to environmental protection projects (72.8% of the entire investment programme). Projects for the production of clean fuels, which were completed and commissioned in year 2005, absorbed 407.7 millions euros (63.0% of the total investment budget).

Of the total 51.4 million-euro capital investment programme during 2007, 21.9 million euros (equivalent to 42.6%) concerned investments that serve the environmental protection objectives and improve the overall refinery's environmental performance.

The most important project in 2007, which contributes to the improvement of the refinery's environmental performance, was the completion of the construction of the network connecting the refinery to the natural gas grid (see p. 76). Also of special significance were the major projects for the construction of a new, reverse osmosis desalination unit (see p. 87), the replacement of another gas turbine in the refinery's Power Generation Plant, the upgrading of steam generation boilers including the installation of low-NOx burners, the installation of new filters in the Dewaxing unit, and the implementation of a Best Available Technique for tank cleaning (see p. 85).

Respectively, in year 2006 the most significant environmental project concerned the upgrading of the Waste Water Treatment Plant (see p. 81 and the *Environmental and Social Report 2006*).

## COMPLIANCE WITH ENVIRONMENTAL LEGISLATION

We rigorously comply with the environmental protection terms of our operating licence as laid down by the relevant state authorities, and with all the other related obligations arising from the effective Greek and European environmental legislation. Moreover, our investment programme does not only aim at timely compliance with any new requirements, but also provides for implementing projects that go beyond the requirements of the current legislation.

We regularly report to the authorities, as we are required to do. Thus we:

- Submit annual reports to the competent authorities on the quantities of emissions to air, and the amounts of liquid and solid waste produced from the refinery's operation, in accordance with Hellenic law.
- Report to the competent authorities on total annual emissions of sulphur dioxide, nitrogen oxides and particulate matter from the major combustion units of the refinery, as required by EU Directive 2001/80/EC.
- Similarly, reports are submitted to competent authorities and the local authorities (Corinth Prefecture and Aghioi Theodoroi Municipality) on annual emissions to air, on the amounts of liquid and solid waste and, on a monthly basis, in respect of liquid waste.

### ENVIRONMENTAL INVESTMENTS AND EXPENSES 2002 - 2007

(in million euros)

Year	2002	2003	2004	2005	2006	2007	Total	Percent
Total Capital Investments	47.4	88.5	251.0	164.5	44.6	51.4	647.7	
Environmental Projects	9.3	58.3	234.6	132.0	15.1	21.9	471.2	72.8%
- For clean fuels	1.0	54.6	231.5	120.6	0.0	0.0	407.7	63.0%
- For improving performance	8.3	3.7	3.1	11.4	15.1	21.9	63.5	9.8%
Environmental Expenses	0.9	1.0	1.1	1.3	1.4	1.6	7.3	
<b>TOTAL OF ENVIRONMENTAL INVESTMENTS AND EXPENSES</b>	<b>10.2</b>	<b>59.3</b>	<b>235.7</b>	<b>133.3</b>	<b>16.5</b>	<b>23.5</b>	<b>478.5</b>	



## BEST AVAILABLE TECHNIQUES: BROAD APPLICATION AT OUR REFINERY FOR NEW UNITS AND FOR UPGRADING EXISTING PRODUCTION FACILITIES.

### BEST AVAILABLE TECHNIQUES

- Report to the competent authorities on the way we handle solid waste, and where appropriate, we collaborate on this with licensed solid waste disposal companies to ensure their most effective disposal.

During 2007:

- The Ministry of Development renewed the Operating License for all the MOTOR OIL refinery facilities and for the Waste Water Treatment Plant, as it was configured after the implementation of modification and upgrading projects.
- The same Ministry also renewed the Operating License for the fourth gas turbine in the refinery's Power Generation Plant.
- The revised MOTOR OIL's industrial facilities scheme for the management of hazardous and non-hazardous solid waste was submitted to the Ministry of the Environment, Physical Planning and Public Works.

In 2006, MOTOR OIL's compliance with environmental legislation and with its own environmental protection terms was confirmed by the state authorities, and other independent inspection bodies, following relevant inspections. Also, the Peloponnese Regional Authorities approved the permits for the processing and management of hazardous and non-hazardous wastes, according to the legislation that was reviewed in 2006.

Our commitment to environmental protection is furthermore demonstrated by the fact that we choose *Best Available Techniques* (BAT) at the decision stage for both new capital investment projects and for upgrades of existing production facilities.

The BAT concept is covered by EU Directive 96/61/EC concerning the Integrated Pollution Prevention and Control (IPPC) in the industrial sector. The purpose of this Directive is to ensure the integrated prevention and control of pollution caused by various industrial activities, including refineries. BATs are deemed to be techniques that most effectively contribute to the prevention (primary measures incorporated in the production process) or control of pollution (end-of-pipe-techniques), that can be effectively implemented and that are economically feasible and

technically practicable, while achieving the aims of the Directive.

In 2006, we submitted to the Ministry of the Environment, Physical Planning and Public Works a detailed technical report on BATs used in the refinery for pollution prevention and control.

A tangible example of BAT implementation at the refinery was the commissioning in 2005 of three new pollution control units, whose capital cost was 19.8 million euros. For year 2006, the most important example of the incorporation of BATs concerned the Waste Water Treatment Plant (see p. 81). As for year 2007, BATs included the new, reverse osmosis water desalination plant (see p. 87). Other examples of the use of BATs in upgrading projects are mentioned in the relevant sections below.

#### Three Best Available Techniques pollution control units

##### 1. Electrostatic Precipitator capturing and removing catalyst particles at the Fluid Catalytic Cracking unit

The Fluid Catalytic Cracking process involves the continuous recirculation of the catalyst for its re-activation by thermal regeneration. The result of this process is the partial fragmentation of the catalyst and the production of particles that if dispersed into the atmosphere become a form of potentially hazardous, inhalable, micro-particulate pollution. The usual and most economical method of controlling these emissions is through the use of cyclones. For further improving removal efficiency, MOTOR OIL has installed an Electrostatic Precipitator through which the flue gases of the Catalytic Cracker unit are passed. This is the most complete and environmentally efficient technology available for dealing radically with the removal of suspended catalyst particles. The total cost of the project was 6.4 million euros.

## 2. Closed-loop system for sulphur recovery handling

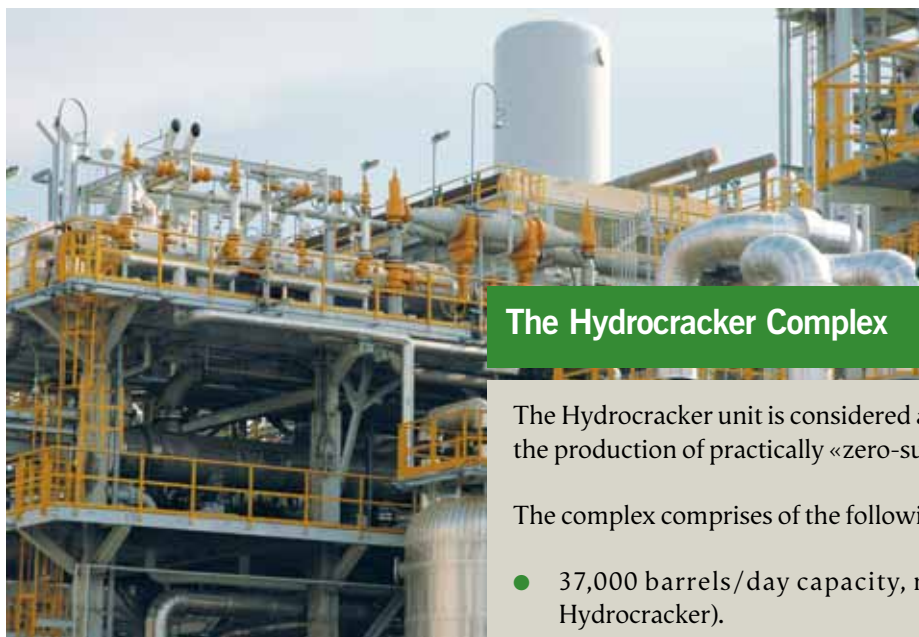
Sulphur is a by-product of the fuel desulphurisation process and is recovered by the Sulphur Recovery Units. The final product is in the form of solid flakes which in the past used to be piled up in the open air. In order to minimise the environmental impact of this process (associated with an unsavoury odour and dispersion of sulphur dust into the air), it was decided to upgrade the sulphur solidification process and to store the final product in silos. The process is now carried out in an entirely closed-loop system, thus reducing the environmental impact as much as possible, while improving product quality and the quality of the working environment in that area of the refinery. The total cost of the project was 6.6 million euros.

## 3. New sour waste water treatment unit

Construction of a new sour water treatment unit, to remove hydrogen sulphide and ammonia from the liquid effluents of the production processes, was part of the major refinery expansion associated with the construction of the Hydrocracker complex. In order to maximise the environmental benefits arising from these new facilities, they were designed with a greater than necessary capacity, so as to be able to process all liquid effluents produced at the refinery, in the most efficient way by taking advantage of the environmental effectiveness of the technology, its efficiency being more than 99.9%. The total cost of the project was 2.3 million euros.

# PRODUCTION OF CLEAN FUELS

The 350-million-euros investment in the Hydrocracker complex, commissioned in November 2005, enables us to produce practically «zero sulphur» (10 ppm) fuel, corresponding to the EU specifications for gasoline and automotive diesel, to be implemented on January 1, 2009. The current specification, applied on 1 January 2005, allows 50 ppm of sulphur content, while, between 2005 and 2009 both types of fuel (50 and 10 ppm) must be made available on the market. In practice, we already supply low sulphur (less than 50 ppm) fuel, thus contributing to environmental protection ahead of what the legislation requires us to do.



## The Hydrocracker Complex

The Hydrocracker unit is considered as one of the Best Available Techniques for the production of practically «zero-sulphur» gasoline and automotive diesel.

The complex comprises of the following units:

- 37,000 barrels/day capacity, medium pressure Hydrocracker (Mild Hydrocracker).
- 32,000 barrels/day capacity, diesel-fuel polishing unit.
- 65,000 Nm<sup>3</sup>/hr hydrogen production plant.
- 150 KV sub-station for connecting the refinery to the interconnected electricity transmission system, along with a newly-installed gas turbine, raising the installed power capacity to 68.3 MW.
- New sulphur recovery complex.

Since February 2006, we have been supplying automotive diesel containing up to 2% biodiesel, moving towards the target specified for 2010 by EU legislation, namely a minimum of 5.75% of biofuels content in the fuels used in the transportation sector. Biodiesel, (a mixture of fatty acids methyl-esters derived from oil producing seeds, such as, sunflower, soy and rape), can be used as a substitute fuel in diesel engines. It is not toxic, does not contain aromatic compounds, it is easily biodegradable, and in comparison to diesel oil produces less emissions of particulates, carbon monoxide and hydrocarbons.

## CLIMATE CHANGE

Climate change is considered one of the gravest threats to sustainable development, with adverse effects on the environment, human health, food security, financial activity, natural resources, and the natural environment in general. It is nowadays generally accepted in scientific circles that the increased concentration of anthropogenic greenhouse gases (GHG) in the earth's atmosphere leads to climate changes. According to the Intergovernmental Panel on Climate Change (IPCC), the effects on our climate are already visible, and therefore immediate action is required on the basis of the principle of prevention.

In order to confront the problem, the global community adopted the United Nations Framework Convention on Climate Change (UNFCCC) in 1992; the



Convention determines the framework for action in view of stabilizing concentrations and avoiding the hazardous human intervention in the climate system.

The gases monitored include, primarily, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), chlorinated hydrocarbons and sulphur hexafluoride. A small concentration of CO<sub>2</sub> in the atmosphere is the result of natural processes, but anthropogenic activities, such as the combustion of petroleum products, carbon and natural gas, or forest fires, increase this concentration exponentially. Anthropogenic activities have added 2.3 trillion tons of CO<sub>2</sub> to the atmosphere over the last 200 years. Overall, the concentration of CO<sub>2</sub> in the atmosphere has increased by 31% since 1750. Emissions today are about 12

times higher than in 1900, and its concentration in the atmosphere is the highest observed in the last 420,000 years.

In its findings, the IPCC mentions that GHG emissions must reach their peak within the next 10-15 years, and then drop to below 50% by year 2050, in relation to year 2000 levels, in order to stabilize the concentrations in the atmosphere at the lowest required levels. In order to achieve the lowest concentration levels, developed countries must reduce their emissions by 25-40% below 1990 levels by year 2020. Moreover, the IPCC mentions that if the earth's average temperature increases by more than 6°C by the end of the century, there will be catastrophic consequences for economies, societies and ecosystems throughout the planet.



## The Kyoto Protocol

The Kyoto protocol came into force on February 16th, 2005, introducing legally binding targets for the reduction of greenhouse gas emissions in developed countries. Within the framework of the Kyoto Protocol objectives, the European Union has committed to reducing anthropogenic emissions of the six greenhouse gases by 8% compared to 1990 levels, in the period 2008-2012. As a member of the European Union, Greece has undertaken the obligation to reduce greenhouse gas emissions in the period 2008-2012 by 25% in relation to base year emissions. Year 1990 is considered the base year for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O emissions, while year 1995 is used for the other gases.

Besides the allocation of mandatory emission targets per state, the application of the Kyoto protocol foresees the parallel operation of the Greenhouse Gas Emissions Rights Trading Scheme, which allows for the trading of emission rights between the involved parties. International operation of the Emissions Rights Trading System begins in year 2008, while the EU has also applied it in the period 2005-2007, by issuing Directive 2003/87, on the basis of which a greenhouse gas emissions rights trading scheme was established. Under the Directive, Member States are required to submit comprehensive national allocation plans per individual sector envisaged by the Directive, covering the expected national emissions, and with reference to the relevant installations in each



sector. The trading scheme, amongst others, covers large fuel-combustion industrial installations and aims at encouraging the adoption of energy-efficient methods for reducing CO<sub>2</sub> emissions.

During the first phase of operation of the trading scheme (2005-2007), MOTOR OIL was allocated emission rights within the National Allocation Plan covering both its existing operating units and those under construction during that period. The second phase of the trading scheme (2008-2012) is on-going and the National Allocation Plan has been finalized, granting new emission rights to MOTOR OIL.

## Our position

We recognize and share the general concern over the effect of anthropogenic activities on the global climate, and the potential effects of climate change on the environment.

We believe that confronting climate change as a global phenomenon, transcending natural or political borders, requires the cooperation and commitment of the global community, as expressed through states, various international and local organizations, companies and industries, as well as consumers at all levels.

Therefore, and within the framework of carrying out our business operations in a responsible manner, which is expressed through adherence to the principles and objectives of Corporate Social Responsibility and sustainable development, we are committed to the following:

- Saving energy with the aim of reducing greenhouse gas emissions.
- Investing in the application of management procedures and financially acceptable process technologies, which contribute to reducing 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.



## Optimizing energy consumption

The refinery's production processes are particularly energy-intensive, with similarly high requirements for steam. Refineries are industrial plants with large combustion facilities and are covered by the Kyoto Protocol provisions, concerning the reduction of greenhouse gases emissions. Therefore, we are particularly concerned with the refinery's «energy footprint» and with rationalising the way we manage our energy needs and use of fuel – as issues of particular environmental significance. We identify areas with potential for more efficient energy use and we implement the appropriate projects by using Best Available Techniques where appropriate.

According to a survey conducted by the

international consulting firm Solomon Associates on the world-wide energy efficiency of refineries on the basis of 2006 data, MOTOR OIL's Energy Intensity Index was estimated at 97, the lowest score being 67 and the highest being 185.

- **Electricity and steam co-generation (BAT).** We have been investing in co-generation units since 1980, and have achieved total energy self-sufficiency at the refinery through self-generation of all electric power requirements, with additional high benefits for the country as regards carbon dioxide emissions. The Power Co-Generation Plant of the refinery is of the combined-cycle type and includes four gas turbines producing a total of 68.3 MW, and two boilers which recover heat from the flue gases to produce approximately

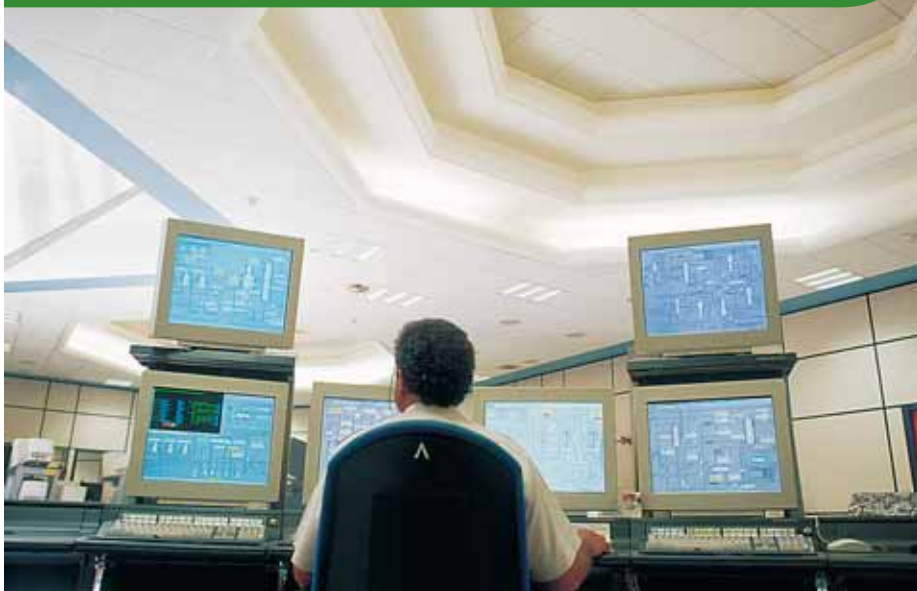
100 tons of steam per hour. The overall performance of the combined cycle is around 80%, compared to performances of 30%-40% for steam and electricity generation if the combined cycle approach was not implemented. This approach ensures an optimum combination of environmental and economic advantages, given that the energy remaining in the super-heated flue gases of the gas turbines is utilized in the boilers to produce high-pressure steam. The Plant makes use of the fuel gas produced in various units, and natural gas as an auxiliary fuel (since 2008), and constitutes one of the most significant means of energy saving on the site.

In year 2007, we also replaced the second of the two older gas turbines in the Power Co-Generation Plant (the first one was replaced in 2006). We chose to replace the turbines (instead of implementing simple maintenance), despite the significantly increased cost, which amounted to a total of 8.2 million euros, in order to improve energy efficiency (from 30% to 33%) and reduce the emissions of CO<sub>2</sub> and of other air pollutants.

The refinery's electricity network is controlled by an automatic *Power Management System* – Best Available Technique – the installation cost of which was 3.1 million. The Power Management System increases the reliability of the electricity network significantly, thus improving the environmental performance as well.



## Refinery process control with Best Available Techniques



The advanced *Distributed Control System (DCS)*, commissioned in 2002, provides for the fully computerized control of the refinery's operating processes. Although DCS is not primarily an environmental protection investment, it has had a significant positive effect on environmental performance, since the automation of production processes results in significantly more reliable operation and in minimal unscheduled operation interruptions, which are associated with inherent risks of accidents and pollution.

Similarly, there are further environmental benefits resulting from the implementation of the *Advanced Process Control System (APC)*, an extension of the DCS, which is in the process of being introduced in additional refinery units. APC contributes to the maximization of the refining profit margin, since it constitutes a fundamental tool for increasing the production of high added-value products, for the more efficient utilization of production units, for reducing the refinery's operating costs, for more efficient use of energy, raw materials, steam and water, which all lead to improved environmental performance. During 2004-2007, as part of an 8.8 million euros investment programme, APC was applied to existing refinery units – the Vacuum Distillation Unit and particularly the Catalytic Cracking Complex after changes in the operating mode (desulphurized feedstock) following the commissioning of the Mild Hydrocracker Complex. In year 2007, the application scope of this system expanded to the Crude Distillation unit as well, where the aims of the APC are to both maximize production of the more profitable mix of intermediate products, and to achieve a better management of the changes in crude oil feedstock quality and the maintenance of optimum operating conditions.

- **Introduction of natural gas to the refinery (BAT).** In 2006, we commenced the construction of the natural gas internal distribution network, in preparation for the scheduled connection of the refinery to the main natural gas pipeline to Corinth. The project was completed in 2007, at a total cost of 8.0 million euros, and the first delivery of natural gas was taken at the end of May 2008, after completion of the natural gas pipeline by the Hellenic Gas Transmission System Operator (DESFA).



As a result of MOTOR OIL being the major industrial consumer of natural gas in the region, it was economically feasible for the natural gas pipeline network to be extended to Corinth and eventually to Megalopoli, where the Public Power Corporation's power generation plants are located, a project which will have significant positive economic and environmental conse-

quences for the region as a whole.

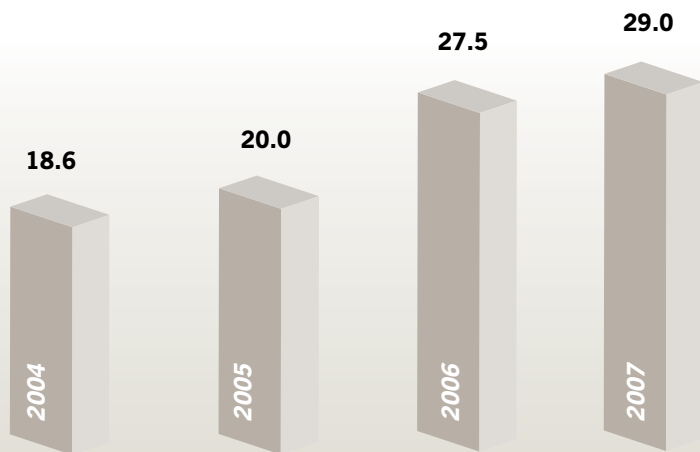
The use of natural gas at the refinery will help improve its economic and environmental efficiency, given that it will reduce CO<sub>2</sub> emissions and is the best fuel for power production and the best raw material for hydrogen production. Moreover, its use as a fuel in refinery furnaces will lead to less polluting emissions. Natural gas is used in the refinery for the following purposes:

- As an alternative raw material and/or fuel for the Hydrogen

Production plant, primarily as raw material for hydrogen production but also as fuel to power the plant (the feedstock currently used by the hydrogen plant is naphtha or LPG).

- As an alternative fuel for the gas turbines of the refinery's Power Co-generation Plant.
- As an alternative or supplementary fuel for those refinery furnaces that currently use heavy fuel oil fractions, thus significantly improving the environmental efficiency of furnace emissions.

Energy consumption (million GJ)



Energy consumption includes the consumption of liquid and gaseous fuels in the refinery's combustion processes, and the consumption of electric energy for the operation of mechanical equipment. In year 2007, this consumption amounted to 28.8 million GJ. The increase in energy consumption in relation to the period prior to year 2006 is due to the addition of new units (Hydrocracker Complex and the new Waste Water Treatment Plant), as well as the increase in the complexity of processes. Moreover, it is due to the doubling in production of environmentally-friendly fuels, whose production however requires increased quantities of energy.

- **Installation of high-performance, low-emission burners (BAT).** The phased replacement of all refinery boilers used for steam production, at a cost of 5.1 million euros to date, was continued in 2007 with the upgrading of the largest of the four boilers and the start of works on yet another one. This project aims at reducing energy consumption, and consequently at reducing emissions of CO<sub>2</sub> and of other gaseous pollutants; in particular, the installation of low-NO<sub>x</sub> burners (yet another BAT) contributes to the reduction of nitrogen oxides emissions as well. An additional environmental characteristic of these burners is that they operate at lower noise levels, thus producing less noise pollution.

- **Upgrading of pre-heating furnaces (BAT)** so as to exploit the heat content of flue gases for achieving reductions in fuel consumption and in emissions of CO<sub>2</sub> and of other air pollutants. The 2.7 million-euro upgrading of the crude oil pre-heating furnace at the Crude Distillation Unit (the refinery's largest furnace) was completed. This upgrade increased the thermal output of the process to 87% from a previously 80%, resulting in a fuel economy of about 1 metric tonne per hour. There is also an on-going maintenance and various other improvements programme in place for the furnaces, in view of maintaining or increasing their energy-efficiency.

- **Maximization of gas recovery (BAT)** by conversions in operating processes to use gases as fuel and thus minimizing flaring.
- **Maximization of heat recovery and minimization of heat losses (BAT).** Hot streams to be cooled are used to heat cooler streams, so as to achieve proportionate fuel and energy savings. At the same time, we apply strict maintenance and cleaning programmes for heat exchangers, in view of increasing their performance, as well as for maintaining air-coolers and thermal insulations in an excellent operating condition.

It is also worth mentioning that the new – reverse osmosis – desalination unit was commissioned in year 2007, which by virtue of its increased performance consumes less energy (see p. 87). Equally, the multi-stage

evaporation technology desalination unit commissioned in year 2005 has increased performance for reducing energy consumption

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

MOTOR OIL implements suitable methodology in order to monitor CO<sub>2</sub> emissions from its facilities. In order to follow not only of the letter but also of the spirit of the law, CO<sub>2</sub> monitors were installed in year 2006 in the flares of the fuels and lubricants production complexes in view of improving the monitoring of CO<sub>2</sub> emissions, that were previously assessed by means of approximate computational methods.

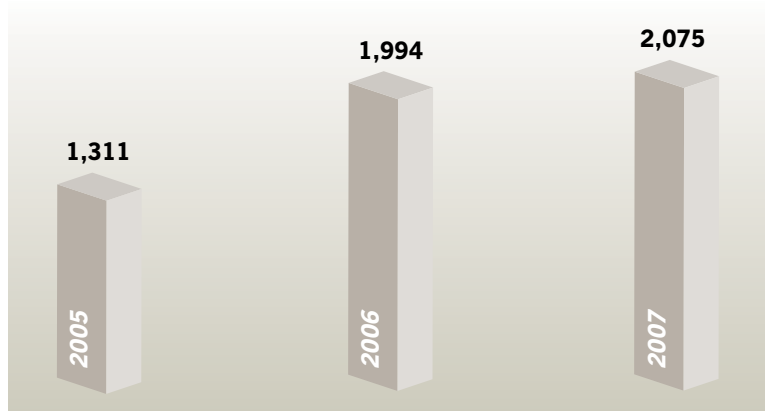
Annual CO<sub>2</sub> emission reports are drafted each year in accordance with the law, and submitted to the competent ministry. These reports are verified by a competent organization

with respect to their reliability and validity.

Overall CO<sub>2</sub> emissions for year 2007 amount to 2.075 million tons. The increase in the quantity of CO<sub>2</sub> produced in relation to year 2005 (see also the energy consumption graph) is due mainly to the addition of new units, the increase in the complexity of processes, and to the units' operating cycle (shut-downs, turnarounds etc.).

Finally, the transportation of personnel by coach to and from the workplace constitutes an indirect contribution to the struggle against climate change, since CO<sub>2</sub> emissions from our employees' cars are eliminated when this transport option is used; in the case of the refinery, this concerns more than 50% of the employees.

CO<sub>2</sub> Emissions (in thousand Mt)



## AIR QUALITY MANAGEMENT

**M**onitoring of gaseous emissions at the refinery and in the surrounding area, in view of protecting and improving air quality, is being achieved through a combination of continuous and periodic measurements, both of diffuse emissions and of point emissions from chimneys and flares. Modern measurement equipment, which is constantly improved and renewed, is used for such measurements.

- Monitoring of air quality in the peripheral zone of the refinery, as well as in the greater area around the refinery, is carried out directly by three appropriately placed fixed gas monitoring stations and by a mobile station. The fixed stations are capable of measuring and recording hydrogen sulphide and sulphur dioxide. The mobile station has multiple measurement and recording functions, which include meteorological parameters, nitrogen oxides, hydrogen sulphide, sulphur dioxide, methane, hydrocarbons besides methane, particulate matter PM<sub>10</sub>, and total suspended solids.
- The flue gases of the main refinery chimneys are continuously monitored by analysers, linked to the DCS, measuring the following parameters: temperature, oxygen, dust, humidity, nitrogen and sulphur oxides. In this way, real-time monitoring of point emissions from the refinery's main units is achieved, in view of ensuring the completeness of combustion. Computational methods are also used, in combination with the measurement of relevant parameters.



### Gaseous emissions by source and type

- Furnaces
- Boilers - Burners

**CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>2</sub>,**  
Gaseous emissions from fixed combustion sources.

- Gas Stripping Unit
- Sulphur Recovery Units (Catalytic conversion of hydrogen sulphide into sulphur followed by incineration of flue gases).

**SO<sub>2</sub>, H<sub>2</sub>S**  
Hydrogen sulphide emissions are minimal due to the almost full sulphur recovery.

- Fuels storage
- API Oil Separators
- Feedstock and products receipt and delivery
- Piping network leakages

**VOCs emissions**  
The emissions of Volatile Organic Compounds are coming from fuels storage tanks, the operation of API Oil Separators and from leakages that may occur during intra-refinery fuels movement.



- The flue gases from the incinerator that burns the tail gas of the sulphur recovery process are continuously monitored by analysers measuring hydrogen sulphide, sulphur dioxide, carbon disulphide, flow rates, temperature, carbon monoxide, and

oxygen; they are also connected with the DCS in order to ensure by full monitoring and control that the sulphur recovery process operates at greater than 99% efficiency.

- The main feeding pipe-work of the





fuels and Hydrocracker Complex flares are monitored by total sulphur analyzers, which are linked to the DCS.

**Reduction of gaseous emissions into the atmosphere** is achieved through a series of measures and programmes that include:

- Reduction of emissions of suspended catalyst particles in flue gases from the Catalytic Cracking unit is achieved by means of an electrostatic precipitator, which treats the flue gases stream; this is a preventive measure according to Best Available Techniques. The electrostatic precipitator, commissioned in 2005 at a cost of 6.4 million euros, is not a legal requirement, achieves far greater reduction in suspended particulate matter than the legal limits.
- The reduction of sulphur and nitrogen oxide emissions in the flue gases of the Catalytic Cracking unit as a result of the commissioning of the Hydrocracker complex in 2005.
- Desulphurisation of fuel gas: fuel gas used as fuel in the refinery, before entering the refinery fuel gas system, is pre-treated for the removal of

hydrogen sulphide so that the emission of sulphur dioxide in flue gases is minimized. Following the commissioning of a new sulphur recovery unit in 2003, the efficiency of this process was considerably improved. Moreover, in 2005, a new complex of sulphur recovery units was commissioned as part of the Hydrocracker Complex, which achieves over 99.9% efficiency (Best Available Technique); effectively, this means that the hydrogen sulphide content of fuel gas is reduced to near-zero.

- The control and minimization of fugitive and diffuse emissions of volatile compounds from refinery equipment is achieved by applying the Leak Detection and Repair Program (LDAR), which is a Best Available Technique based on the EPA 21 method. By this technique, the concentration of volatile compounds is measured at the potential leak points. When a reading above 5,000 ppm is registered, immediate action is taken to repair the relevant item of equipment.
- The reduction and control of fugitive hydrocarbon emissions by applying various measures included

in BATs, such as the installation of closed circuits in gas processes, the rooting of gases released from safety valves to the flares, the installation of secondary seals in floating roof tanks, the installation of floating covers on oil separators and the installation of a vapour recovery system in the Truck Loading Terminal at the same time as the application of the bottom loading system.

In 2007, the following were implemented:

- A programme of measurements aimed at detecting and repairing leaks of volatile compounds from all equipment at the Hydrocracker Complex, was completed. Among the targeted volatile compounds were hydrocarbons (Volatile Organic Compounds, VOCs), hydrogen sulphide ( $H_2S$ ) and methyl mercaptan (MeSH).
- Equipment for the monitoring of gas emissions was enriched, through the procurement of carbon monoxide and suspended particulate matter  $PM_{2.5}$  measurement devices, in view of upgrading the mobile air quality monitoring station. These devices are over and above those required by law.
- Oxygen analyzers and temperature measurement devices were installed at the furnace of the Crude Distillation Unit for monitoring these parameters in the flue gases for achieving a better control of combustion conditions.
- Hydrogen sulphide detectors were installed at the Waste Water



## LIQUID WASTE MANAGEMENT



Treatment Plant.

- The vents of the liquid sulphur tank were placed higher up in order to reduce odours.

The **results of the monitoring programme** show that the air quality in the Refinery area is particularly satisfactory.

In particular, detailed records for years 2004, 2005, 2006 and 2007 show that the hourly emission value limits allowed by law have not been exceeded ( $\text{NO}_x$ :  $200 \mu\text{g}/\text{m}^3$ ,  $\text{SO}_2$ :  $350 \mu\text{g}/\text{m}^3$ ), and neither have the daily limits ( $\text{PM}_{10}$ :  $50 \mu\text{g}/\text{m}^3$ ); moreover, the values recorded are much lower than the limit values. It is known that there is scientific evidence that  $\text{NO}_x$  emissions are related to the appearance of acid rain and smog, while  $\text{SO}_2$  is also responsible for acid rain.

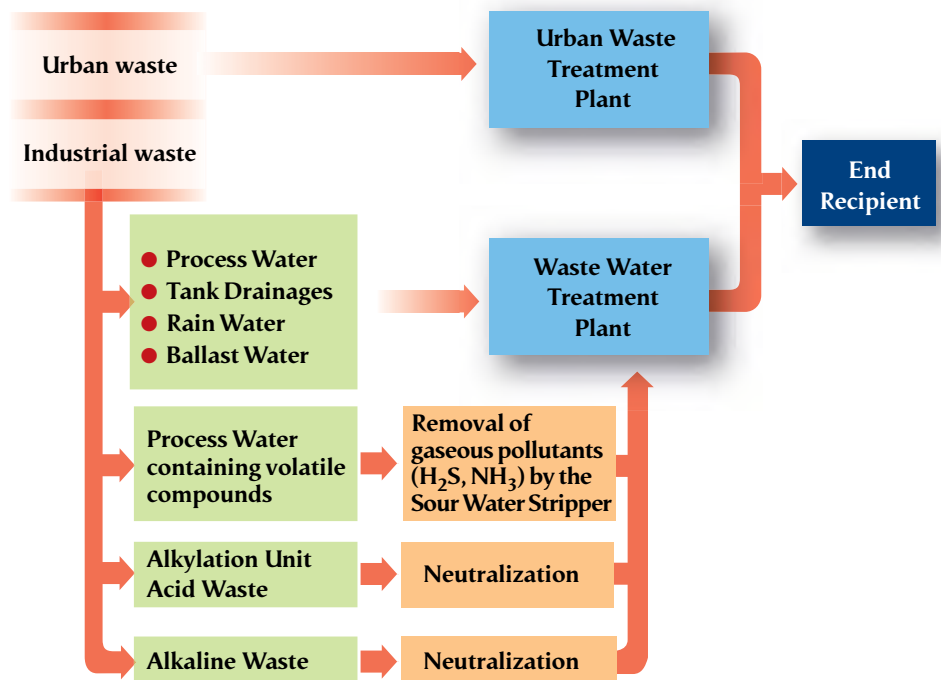
As for hydrogen sulphide emissions (which have been minimized by virtue of upgrading the sour gas processing systems and sulphur recovery units), these are monitored daily by all 4 air quality monitoring stations. The analysis of results shows that the concentration of  $\text{H}_2\text{S}$  at the station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

Finally, sulphur emissions in 2007 ( $256 \text{ kg}/\text{h}$ ) appeared significantly lower than in previous years (2004:  $780$ , 2005:  $391$ , 2006:  $406 \text{ kg}/\text{h}$ ), due to the use of low-sulphur fuel and despite the expansion of the refinery's premises.

Liquid waste produced by the refinery's operation can be divided into two categories:

- Industrial waste
- Urban waste

### The origin and processing of liquid waste at the refinery



### Waste Water Treatment Plant

Industrial liquid waste, which composes of waste water from the process units, storage tanks drainage, rain water collected within the refinery area, and ballast water from oil

tankers, is directly channelled to the Waste Water Treatment Plant (WWTP).

By contrast, the alkaline («spent caustic») and acidic («sour water») liquid waste produced at various stages of the production process undergoes

special pre-treatment before being transferred to the WWTP:

- Acid water from production units, containing volatile pollutants (hydrogen sulphide and ammonia) is pre-processed at the Sour Water Stripper unit, to remove 99.9% of gases.
- Acid waste from the Alkylation unit is subject to neutralization in special tanks with limewater -  $\text{Ca}(\text{OH})_2$  solution.
- Alkaline waste is neutralized with sulphuric acid in the Neutralisation unit.

The Waste Water Treatment Plant was upgraded in 2006 at a cost of 13.1 million

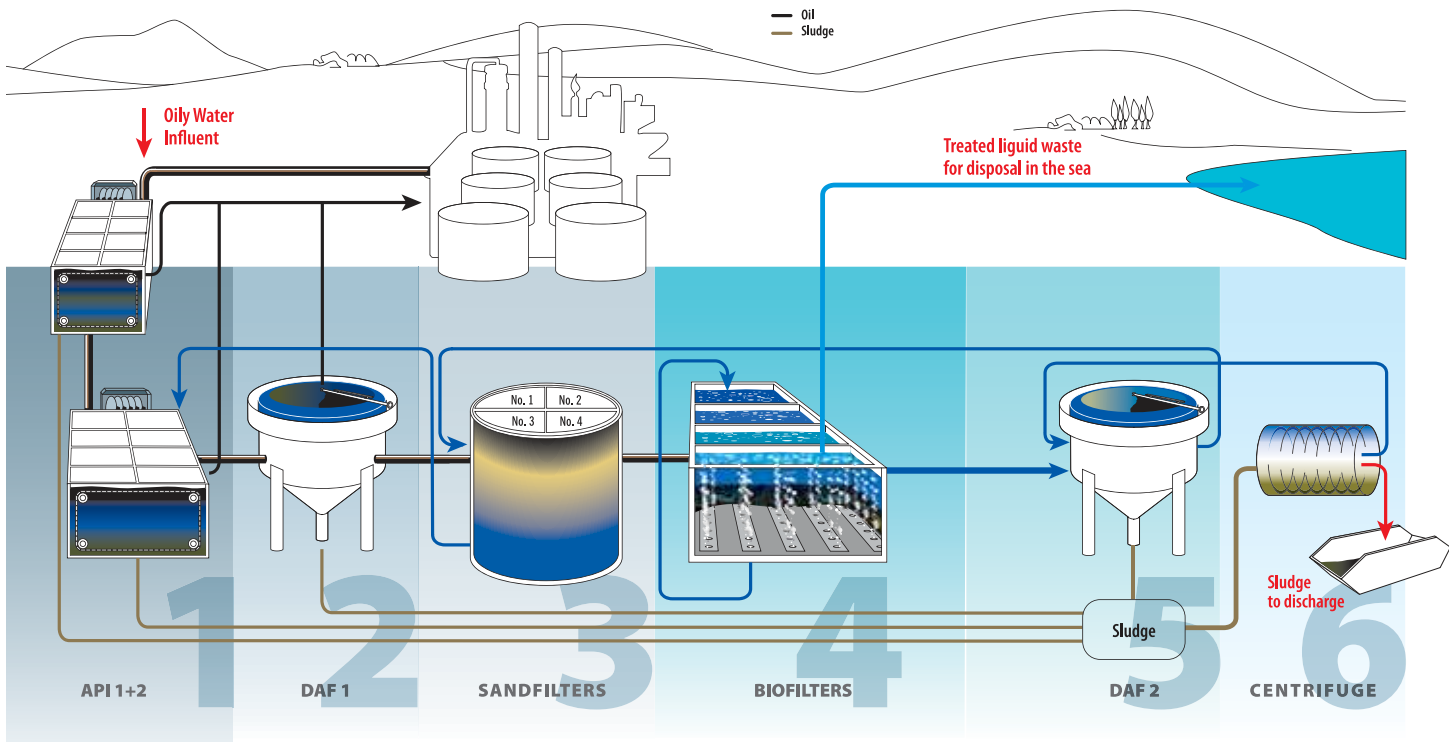
euros. It was designed to incorporate Best Available Techniques, so that the quality of treated waste released into the sea through an underwater pipeline exceeds the requirements of legislation and of the applicable environmental standards relating to industrial effluents.

The WWTP upgrade project aimed at modernizing the facilities using new technologies, and adding additional treatment steps for further improvement of the quality of waste and the plant's mechanical availability.

The liquid waste treatment process is fulfilled in two stages (the **first stage** comprises the API-type oil separators, the Flotation unit and the Sand Filters, while the **second stage** comprises the Biofilters), and evolves in six steps (a

more detailed description of the WWTP can be found in the Environmental and *Social Report 2006*):

1. Two **API-type oil separators (API-1 and API-2)** are used to achieve the primary separation of sludge and oil. The separated oil returns to the oil recovery system (slops) of the refinery for reprocessing
2. After the API-2 oil separator, the waste passes into the **Dissolved Air Flotation unit (DAF-1)** for deeper separation of the oil, which returns to the oil recovery system (slops) of the refinery to be reprocessed.
3. Subsequently, the waste passes to the **Sand Filtration** step in order to remove suspended particles and the



even further removal of residual oil, which can interfere with the biofiltration process which follows.

4. Biological pollutants are oxidized and biodegraded in the **Biofilters**, through controlled use of micro-organisms.
5. The water used to backwash the biofilters is treated in the second **Dissolved Air Flotation unit (DAF-2)** in order to remove the remaining suspended solids.
6. Finally, any sludge produced is dehydrated in a **Centrifuge** and is compressed before final disposal.

## Urban Liquid Waste Treatment Plant

Urban liquid waste collected through the sanitation system of the refinery, which does not contain any oil products, undergoes a 4-stage treatment in the Urban Liquid Waste Treatment Plant, before disposal into the sea, as provided for by relevant Greek environmental legislation:

1. **Primary treatment**, which attains the removal of solids from the waste by sifting and gravity sedimentation.
2. **Secondary treatment – biological treatment**, using activated sludge for oxidising and deactivating the biological contents of the waste through controlled use of micro-organisms.

## Hydraulic and pollutant load at the exit of the Waste Water Treatment Plant

Parameter	2004	2005	2006	2007
Discharge Rate (m <sup>3</sup> /day)	6,936	7,565	8,976	10,385
BOD <sub>5</sub> (Kg/day)	261	266	305	286
Suspended solids (Kg/day)	62.4	75.0	143.0	208.0
Phenols (Kg/day)	2.45	3.10	2.51	2.58

3. **Tertiary treatment**, during which the clear liquid of the secondary treatment is processed to remove nitrogen-containing compounds.
4. **Disinfection** in a chlorination tank, in order to destroy pathogenic micro-organisms.

## Improvements in 2007

After the upgraded Waste Water Treatment Plant was commissioned in year 2006, a problem appeared, namely the contamination of the air around the plant by unsavoury odours. The following projects were implemented in order to confront this problem, which improved the operation of the plant and the air quality in the area:

- Aeration of the free surface of the tank where the sludge is collected before reaching the final centrifuge phase, so as to ensure constant air renewal.
- In order to confront the problem of odours from the open tanks of the Waste Water Treatment Plant, the static method of odour absorption through installation of deodorizing blocks was applied (patented by the

German company Biothys). These blocks are made of a polymer material in solid form, incorporating the active deodorizing substances, which are harmless for health and environmentally-friendly. The deodorizing blocks are affixed to specially designed devices that are placed around the tanks. Thus, the malodorous air current passes through the blocks, and the disturbing odour in the surrounding area is attenuated.

Other projects leading to improvement of liquid waste management:

- Reduction of the environmental impact of jet fuel transfers, through the installation of a recovery system for the product escaping when tanks are drained, which product used to be drained to the WWTP.
- An 800 m<sup>2</sup> platform was constructed for cleaning heat exchangers. Cleaning waste is collected in a sump from which it is routed to the WWTP for processing.
- The operation of the sewage system in the North section of the refinery was upgraded, by its connection to the drain of the Hydrocracker Complex.

## SOLID WASTE MANAGEMENT - RECYCLING

The management of solid waste produced during the operation of the refinery is based on an integrated process that covers all stages of their life-cycle, from collection, packaging, labelling, processing (if necessary), temporary storage and eventual exploitation/disposal. This management process is aimed at the environmentally safe management of solid waste, the prevention of all potential hazards to human health, the reduction in the volume of waste, and its disposal with the aim of ultimate re-using.

Available exploitation/disposal methods include:

- Recycling (outside the refinery).
- Recovery (outside the refinery).
- Use as an alternative fuel (outside the refinery).
- Processing within the refinery,
- Re-use.

Disposal of solid waste is accomplished by firms licensed to handle solid waste disposal, depending on the nature of the material. Spent catalysts are collected by firms licensed to handle hazardous solid waste and are disposed of in a number of approved ways (sold abroad, regenerated for being reused, or disposed of at cement factories for incineration). During 2007, a quantity of spent catalyst material was

collected for exporting; similarly, quantities of contaminated soil were disposed of for treatment to a firm licensed to handle hazardous wastes, in addition to contaminated packaging and pollution control materials (booms), also to licensed firms.

The company, as a solid waste producer, submits an annual report to the competent departments of the Ministry of the Environment, Physical Planning and Public Works, quoting all types of waste arising from the plant's operation, as well as their handling methods and the end legally approved recipients.

There is no single prescribed method for industrial waste management. The unique characteristics of each type of waste provide the explanation for the constant development of different or new, improved processing methods for each type of waste. Our effort to identify and apply improved and efficient waste management methods is included in this framework. In year 2007, we began investigating the issue of identifying a method for further processing of the sludge produced by the sludge dehydration unit of the Waste Water Treatment Plant.

The oily deposits from crude oil tanks are treated for oil removal, while the resulting solid residue is subjected to biodegradation on specially tailored sites (landfarms), conforming to the relevant API landfarming standard.

Cleaning crude oil storage tanks of the deposits (or sludge) accumulated at the bottom, due to the gradual precipitation of solid particles contained in crude oil, is a challenge for any refinery. The typical cleaning method used which involves people entering the tank, entails major hazards for the health of employees, and is also particularly detrimental to the environment, as it allows gaseous hydrocarbons to escape into the atmosphere, while the solid waste sent to the biodegradation sites has a high volume and high petroleum content.

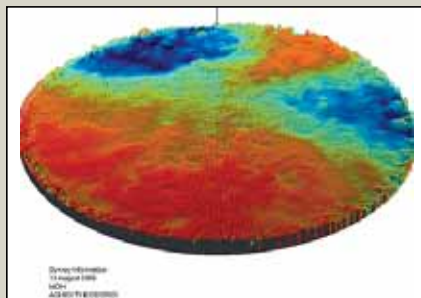
Adhered to its commitment to minimize the environmental impact of its operation, MOTOR OIL applies, since 2006, the new innovative technology introduced by Willacy Oil Services Ltd for cleaning crude oil tanks; despite its increased cost, this method minimizes the environmental impact by reducing the quantity of solid waste and eliminating the emission of gaseous hydrocarbons into the atmosphere, while also eliminating risks to the health and safety of employees, since they are not required to enter the tank.

The cleaning of a crude oil tank using this technique is implemented in five consecutive stages:

## An automated and environmentally-friendly technique for cleaning crude oil tanks (Best Available Technique)

### 1. Calculation of the volume of sludge

Using ultrasound technology and with the tank operating as normal, the morphology of sludge deposits is recorded, thus allowing precise calculation of its volume.



### 2. Sludge dispersal

- The tank is filled with crude oil, with its roof at its lowest point.
- A high capacity pump is connected to a loop that re-circulates the mixture of crude oil and sludge. A heat exchanger is included in the re-circulation loop, in order to elevate the mixture's temperature.
- The fluidic mixer nozzle system is installed on the roof of the tank and connected to the re-circulation system while the nozzle is inserted into the tank. Hydraulic mixing lasts for several days, eventually ensuring dispersion of the sludge

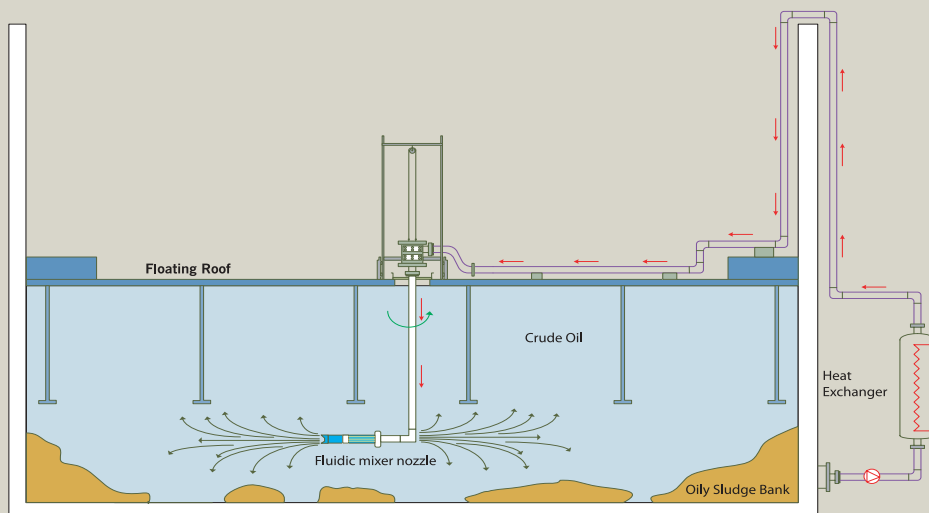
### 3. Sludge treatment

- Simultaneously with phase 2, part of the crude oil/sludge mixture is drained to a triple-stage oil recovery system, which separates the mixture into crude oil, water and solid sediment. The crude oil re-circulates back in the tank, the water is drained to the Waste Water Treatment Plant, while the solid sediment, with a very low oil content, is carried to the refinery's landfarms for biodegradation.
- The process is repeated until the tank water and solid sediment are

completely separated from the crude oil, at which point the crude oil is returned to a crude oil tank for refining.

### 4. Mechanical removal of residual sludge with a remote-controlled bulldozer

A specially-designed, remote-controlled hydraulic bulldozer is placed in the tank at this stage, in order to collect the residual sludge quantities.



### 5. Water-jet cleaning

The tank is filled with seawater in which chemical additives have been added, and recirculation (phase 2) and oil separation (phase 3) are continued until the tank is completely clean.



## WATER MANAGEMENT

For used lubricants and their packaging, we have contracts in place with a firm specialising in recycling used mineral oils and with a firm specialising in handling used packaging. These contracts provide for the recycling of used lubricants and of their packaging, contributing to the protection of the environment and raw material savings. We also collaborate with accredited firms specialising in the recycling of batteries, ink toner cartridges, motor vehicle tyres and computers.

### In 2007, the following were recycled:

570.5 tons of spent catalyst  
 27.0 tons of paper  
 18.9 tons of wood  
 863.1 tons of scrap iron  
 0.2 tons of batteries  
 1,250 ink toner cartridges  
 29.6 tons of lubricants\*  
 17.6 tons of plastic packaging material\*

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

\*These quantities refer to the refinery alone, since corresponding reliable figures for the AVIN OIL retail network are not available.

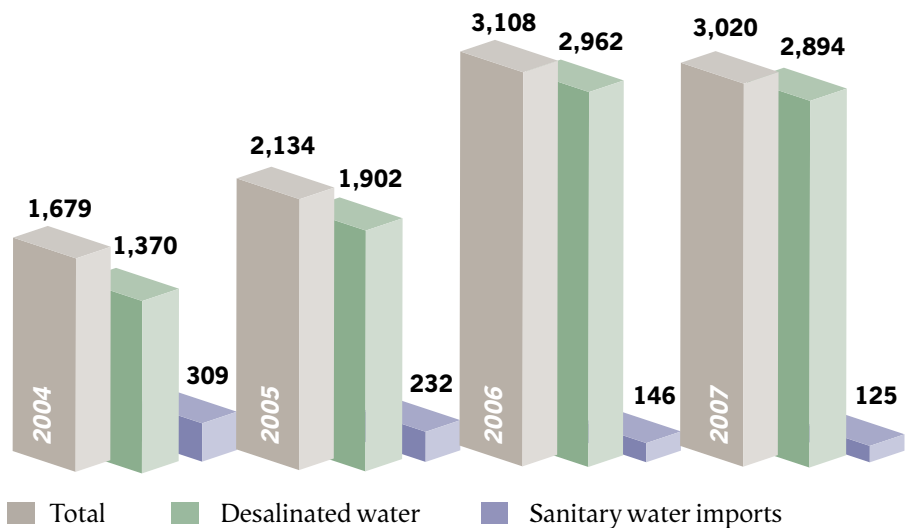
**S**ustainable management of water resources is a necessity in this day and age, since the danger of drought is becoming more and more threatening. We recognize this fact and implement measures for more rational water management at MOTOR OIL's refinery.

The water used in various refinery units originates from the processing of seawater in desalination plants, and from the supply of sanitary water with road tanker vehicles and ships.

The quantity of water consumed each year is rising, due to the addition of new units. However, it is noted that the water used in the production process originates exclusively from the desalination of seawater, thus having no impact on the area's natural resources. The quantity of desalinated water over total water consumed is constantly increasing, with a parallel reduction in the quantity of sanitary water imported.



Annual water consumption (in thousand m<sup>3</sup>)



## Reverse Osmosis Desalination Unit (Best Available Technique)

In order to cover the refinery's water requirements, a new reverse osmosis seawater desalination unit was built in year 2007, with a budget of 2.5 million euros, as the most advanced and environmentally friendly approach. The reverse osmosis desalination technique is based on the use of special membranes that are only permeable by water molecules. When high pressure is applied, the seawater is forced to pass through these membranes and is separated into two fractions: the *permeate*, which has a very low salt concentration and is suitable for most industrial uses, as well as for irrigation and water supply, and the *concentrate*, i.e. the water that does not pass through the membranes and in which the salts are detained.

The new desalination unit has a maximum capacity of 1,200 m<sup>3</sup>/day and operates as an auxiliary to the existing desalination units. The new unit covers the entire refinery's operating needs in desalinated water for steam production, as well as for other uses; thus, fresh water, a valuable natural resource, no longer needs to be used.

## NOISE MANAGEMENT

Noise is a by-product of industrial activities. 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 on equipment, as well as the procurement of equipment with low noise emissions.

Two projects were implemented in 2007 in order to reduce noise pollution:

- A noise curtain was installed on the compressors of the Waste Water Treatment Plant.
- A silencer was placed on a steam line vent in the Hydrocracker Complex.

## PREPAREDNESS FOR MITIGATING THE ENVIRONMENTAL IMPACT OF EMERGENCY SITUATIONS

The handling of a sea water pollution incident, especially of a large scale one, demands a responsible level of prior planning and preparedness so that immediate appropriate action can be taken. This is because the potential consequences of such incidents may be extensive, the geographic area affected may be large and the impact in terms of the destruction of marine life may be serious, causing negative economic effects in affected areas and requiring extensive costs for environmental remediation.

MOTOR OIL is committed to taking all possible measures to mitigate the consequences that may occur as a result of accidents – large or small – through the development of more rigorous contingency plans than those required by relevant legislation. We are committed to preventing damage that may occur as a result of the normal operation of the refinery, both on land or in sea areas for which we are responsible. However, should such an eventuality occur, MOTOR OIL has the know-how, the trained staff and the necessary equipment to respond effectively and swiftly to small and medium level pollution incidents (Tier-1 and Tier-2) in the coastal area around the refinery.

## Oil Spill Contingency Plan

The company's Oil Spill Contingency Plan is integrated with the Local Contingency Plan for prevention of marine pollution (managed by the local Port Authorities) as well as with the National Contingency Plan (managed by the Ministry of Mercantile Marine).

MOTOR OIL has the suitable equipment for dealing with medium scale (Tier-2) pollution incidents, such as absorbents, booms, skimmers, vessels (boats and towboats), a special vessel equipped with tanks for storing the collected pollutants, equipment for shore cleaning, etc., while its staff is continuously being trained on the mobilisation and use of this equipment. It also has appropriate stocks of oil dispersants, used at the final stage of clean-up operations, when authorised by the port authorities. The oil-spill response equipment is continuously upgraded. Furthermore, the company is contracted with Southampton Oil Spill Response Limited, an international organisation providing know-how, equipment, materials and technical support for dealing with oil pollution, especially large scale (Tier-3) incidents. MOTOR OIL is also a member of the Mediterranean Oil Industry Group (MOIG), a regional oil industry forum on oil-spill preparedness and response for the Mediterranean region, whose aim is to ensure good coordination and cooperation by the oil industry in cases of major oil spill incidents and to provide mutual aid.

MOTOR OIL's Oil Spill Contingency Plan lists all tourist and other installations in the area along with the appropriate shore-cleaning method for each situation. Practice drills are carried out on an annual basis – eight for dealing with small scale pollution incidents (Tier-1) and two for dealing with medium scale pollution incidents (Tier-2).

## PARTICIPATIONS AND COLLABORATIONS

We are an active member of the CONCAWE organisation (CON-servation of Clean Air and Water in Europe), which provides technical support to European refineries on health, safety and environmental protection issues. This participation ensures constant, complete and systematic information provision on matters concerning environmental protection, both at the production stage and during the use of the products we produce and distribute. Issues such as the protection of air quality, water resources and soil are confronted and investigated in the most systematic and scientific manner. The conclusions of research projects are evaluated and incorporated in our daily business practices in the most suitable manner, thus further enhancing the company's environmental performance.

We collaborate with the academic community in research programmes relevant to environmental protection. Examples of actions in progress include:

- 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*», of the Athens University Chemistry Department and the National Centre of Scientific Research «*Demokritos*», within the framework of which 2 doctoral theses will be worked out.

## COMMUNICATION WITH STAKEHOLDERS

MOTOR OIL uses various means of keeping local authorities informed of its activities, including holding events at the refinery, involving its own staff in local authority conferences and meetings, and making available information about its investment plans, particularly as far as they concern environmental protection measures.

Complaints expressed by refinery 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. The number of complaints recorded during year 2007 was 37, compared with 24 complaints in 2006, 36 in 2005 and 23 in 2004.

## AVIN OIL

The programme concerns the study of levels, distribution and the 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.

- The programme entitled «PYRCASOL – High value hydrocarbons recovery by sequential PYRolysis and CAlytic reforming process of SOLid carbonaceous materials», which involves the use of solid waste (biomass, polyethylene, used tyres, etc.) for the production of fuel gas that can be used as an alternative fuel in industrial applications. The programme is coordinated by CE.R.T.H. (The Centre for Research and Technology Hellas).
- The programme entitled «Development of new chemical processes for the production of biodiesel from biomass and its uses in 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.

For 30 years, AVIN OIL has been operating responsibly and reliably in the fuels marketing sector. Respect for people and the environment has always been, and remains, a priority in all its activities. In order to ensure the safe and uninterrupted supply of its products and services to customers, the company has developed and implements a programme of measures which comprise its «Health, Safety and Environmental Protection Policy». The policy requires compliance with all legal obligations, regulations and codes of practice. The company 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 Compounds (VOCs) emissions from petrol storage and distribution. The company's fleet of road tankers (both owned and contracted) that distribute its products has been suitably equipped with the required systems for recovering VOCs emissions. Top loading gantries at the company's Truck Loading Terminal at Aghioi Theodoroi were replaced with bottom loading gantries, and a Vapour Recovery Unit is installed, thus completing the related company's investments in the entire fuel distribution operation – the Truck Loading Terminal, the road tankers and the service stations.



The pump station at the Aghioi Theodoroi Truck Loading Terminal was upgraded, resulting amongst others in as much as 25% reduction of power consumption.

AVIN OIL is contracted with a firm specialising in the recycling of used lubricants and with another one specialising in the recycling of lubricants packaging; these contracts provide for the collection and recycling of AVIN OIL's lubricants and packages after use.

During 2007:

- The renewal of its fleet of owned road tankers was continued, introducing three new vehicles, fully equipped for environmentally-friendly operation, as required by current legislation.
- Covers were installed on oil separators in the Truck Loading Terminal.
- Employees at the Truck Loading Terminal were trained on issues of environmental protection relating to the operation of the terminal.





**In partnership with the community - responsibly, consistently and reliably**



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## COMMUNITY INVOLVEMENT

## CONTRIBUTION TO SOCIETY

At MOTOR OIL, we strive to ensure that our activities have a positive and productive impact on the social environment in which we operate, contribute to the overall economic development of the country, and benefit the local communities through job creation and the fostering of entrepreneurial activity.

Moreover, we also believe that we have a responsibility towards society to participate actively in enhancing social values, and in creating a future worthwhile living in. A future that is more humane and more hopeful. 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 the broader society, by means of various donations and sponsorship programmes.

Our social policy, as one of the main parameters of the way in which we perceive our commitment to Corporate Social Responsibility, is a complement and extension of our respective policies for human resources, environmental protection and health and safety in the workplace.

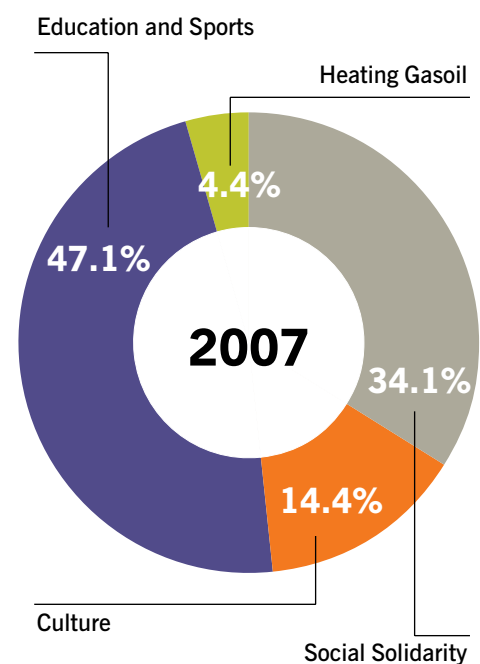
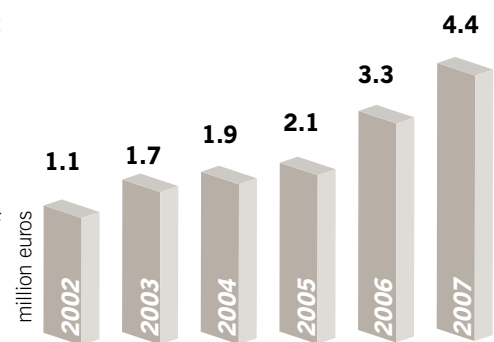
We strive to work in partnership with the community in a responsible, consistent and reliable manner that is in line with our corporate aims and values, implementing sponsorship activities which offer support to education, healthcare, sports and culture, because we believe in these aspects that promote the quality of life.

During 2007, 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 competent company executives at local and corporate level, in accordance with the procedures and provisions of the relevant policy.

The main directions of our social contribution involved the following:

- support for cultural, athletic and social activities and initiatives,
- contribution to the education and the science,
- donations and sponsorships for international sports meetings and athletics associations,
- hosting of informative visits to the refinery, and offering student traineeships,
- donations to hospitals and church-run aid agencies,
- support for the work of non-governmental organisations, associations and charitable foundations, and
- broad assistance in addressing the social needs of groups and individuals.

### Donations - Sponsorships



4.4 million euros

IN DONATIONS AND SPONSORSHIPS IN 2007

2.1% OF THE EARNINGS BEFORE TAX

14.5 million euros

IN DONATIONS AND SPONSORSHIPS OVER THE LAST SIX YEARS

## CONTRIBUTION TO LOCAL COMMUNITIES

A prime aspiration of ours is the provision financial support 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 substructure and the exploitation of synergies that lead to more tangible results rather than merely meeting societal needs.

During 2007, our cooperation with the local communities was developed along the following lines:

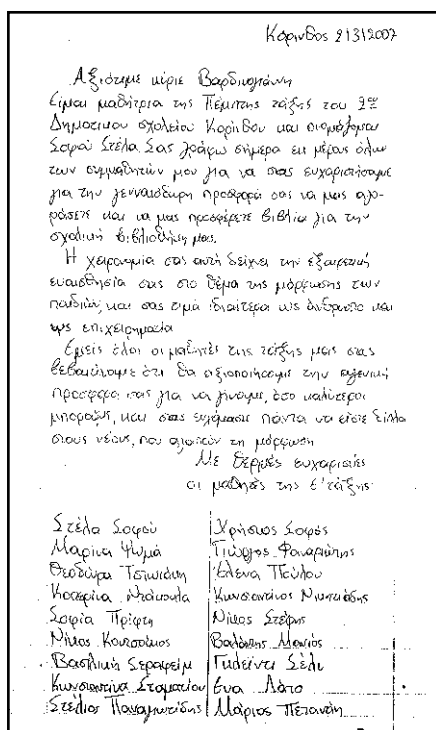
- supporting education,
- financing the organization of cultural, social, business and sports events,
- providing financial aid to the work of various associations,
- supporting social solidarity projects and healthcare service provision organizations,
- contributing to the cost of projects that improve the local infrastructure.

### 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 2007:

- Financial aid for schools in Aghioi Theodoroi: to the 1st Day Nursery for the purchase of audiovisual equipment and garden toys and for covering the cost of the paediatric attention of the children; to the 1st and 2nd Kindergarten for the purchase of educational software and playground equipment; to the Elementary School for infrastructure improvement works; to the Junior High School for the establishment of a lending library, procurement of PCs and for maintenance works; and to the Senior High School for educational visits, and for the tree planting and paving of the courtyard.
- Financial support to the environmental programme of the 2nd Corinth Junior High School, for: (a) a seven-day educational visit to Brussels, the purpose of which was to acquaint the children with the energy issue within the framework of the European Union and with the Greek education in Belgium, and (b) a six-day educational visit to Berlin for

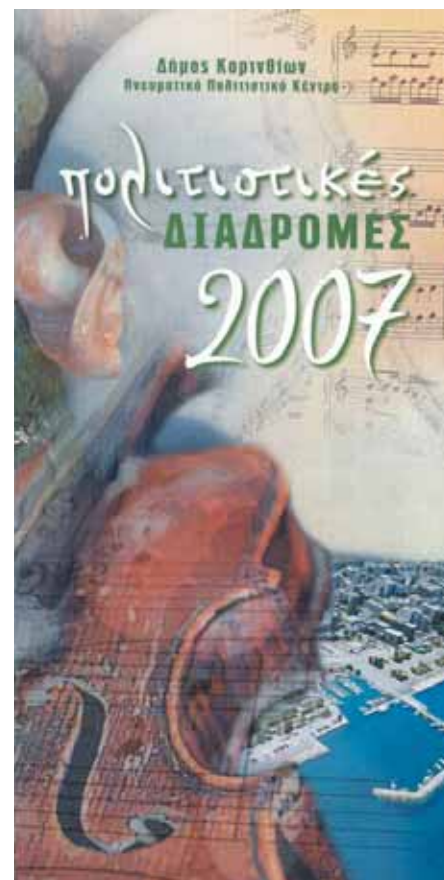






## Culture

In year 2007, 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.



*Environment that unites and hurts us».*

- children learning the German language. Moreover, we defrayed the publication cost of the school's newspaper, which was dedicated to the protection of the environment.
- Financial aid to the Corinth Special Elementary School, which offers education to disadvantaged children, for equipping the «independent living» workshop, and for acquiring gymnastics equipment and educational materials.
- Economic assistance to the Experimental Junior High School of the Peloponnese University, for the purchase of experimental equipment for Physics and Technology classes.
- Financial aid to the Elementary School and Kindergarten of Xylokeriza for the purchase of athletics materials and gymnastics equipment.
- Economic support to the Isthmia Junior High School for the construction of sports facilities (mini soccer), and of a theatre stage.
- Financial aid to the Elementary School of Almyri for the maintenance of its facilities.
- Economic assistance to the Isthmia Elementary School and Kindergarten, for organizing cultural events and educational excursions.

- We sponsored the Corinth Municipal Cultural Centre's organization of the summer events «*Cultural Mosaics 2007*», which included concerts (by Lavrentis Machairitsas, Themis Adamantides, Thomopoulos, and others), traditional dances and songs with groups from Greece, India, Bulgaria and Russia, theatrical performances (Shakespeare's *Macbeth*, *Erofilo* of G. Chortatsis, *The Misunderstanding* of Camus, *Karagiozis* Shadow Theatre, *The enchanted tree* and *The Vizier's daughter's riddles*) and a beach party.
- We supported the Aghioi Theodoroi Cultural Centre, the Aghioi Theodoroi Women's Association and the Aghioi Theodoroi Cretan Association «*Psiloritis*», for the organization of cultural events (concerts, theatrical performances, etc.), the main events being the Carnival celebrations, and the 15th July 2007 concerts of the *Athens Municipal Choir* and the «*Dionysios Lavragkas*» mandolinata.
- We supported the organization of a Kraus Florin photography exhibition in the Aghioi Theodoroi Cultural Centre (17-31.12.2007), entitled «*The*
- We donated a series of cultural events organised by various local associations, such as the Corinthian Theatre «*Vassilis Rotas*», for the organization of the Theatre Festival «*Corinth 2007*», the summer events programme of the Loutraki-Perahora Municipality Cultural Centre, the Isthmia Cultural Club, the Prathi Cultural Association, the Corinth Theatre «*Irida's*» performance of *Von Dimitrakis* of D. Psathas, the «*Mainalo*» Arcadians Union of Corinth Municipality, the Examilia Cultural Club for the purchase of costumes for their dance department, and the Saronikos Municipality's Cultural Association, «*Arakoukia*».

## Concert by the «Mikis Theodorakis» Orchestra



Over the last five 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 concert usually takes place on July 29th, to commemorate Mikis Theodorakis' birthday.

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 29th 2007, a major cultural event for the area as always, the «Mikis Theodorakis» Orchestra played famous popular songs by the composer, and by Dimitri Papadimitriou, accompanied by the voices of Maria Farantouri, Petros Gaitanos, Foteini Darra, Yakinthi Laiou and Maria Zoi.

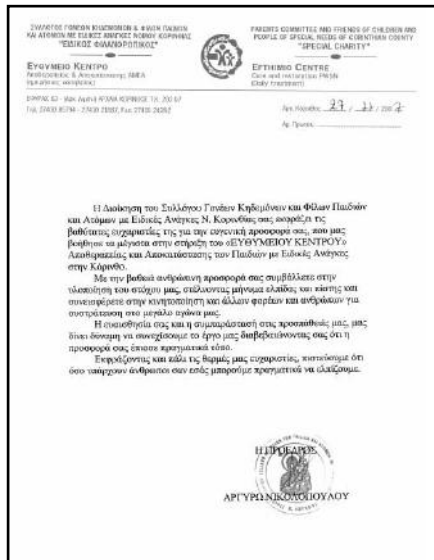


## Social solidarity

- As every year, we provided the daily lunches for the residents of the Corinth elderly people's home, which are being prepared at the refinery's restaurant.
- We gave significant economic assistance to the Aghioi Theodoroi Protection Centre for Elderly People, to cover part of its operational expenses and enrich the activities available to the area's elderly people.
- We offered economic assistance to the «Efthymeion Centre» for Treatment and Rehabilitation of People with Special Needs, in Corinth, for the completion of the «Assisted Living Home» building, where the children can live after their parents are deceased. The «Efthymeion Centre», which accommodates around 120 children who are treated daily at the centre's facilities, is a centre that provides assistance and relief, and is

recognized for the quality of its services. 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 through suitable actions and programmes.

- We offered economic assistance to the Hellenic Red Cross, Aghioi Theodoroi Regional Department, for the acquisition of a motor boat for the Department's volunteer lifeguards.
- 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 600 destitute people in Corinth, Aghioi Theodoroi, Isthmia, Loutraki, Saronikos and Solygeia.
- 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 2007 include the provision of the company's ambulance on June 23rd, to cover the track race «*At the footmarks of St Paul*» from Kechries to Ancient Corinth, and the provision of the ambulance on June 17th to cover the initiative of the Association of Frogmen and the Saronikos Municipality to clean the sea bottom in the area of Almyri-Helen of Troy Spa.



## Environment - Improving local infrastructure

- We defrayed the reconstruction cost of the downtown Playground at the P. Tsaldari Square in Corinth. The Playground, which was built at the beginning of the 1960s, and welcomes hundreds of small children on a daily basis, was in very poor condition with respect to safety, so that the children were somehow exposed to various risks, instead of enjoying a completely safe place to have fun in.

## Helping in dealing with an oil spill incident

On December 10th, 2007, the company was called upon to offer assistance in dealing with a small-scale marine pollution in the area of the Xylokastro Municipality marina, caused by a fuel leak from a vessel moored in the marina. We provided the Municipality's competent services with booms, which were used to contain the oil spill.



- We provided water to about 200 homes around the refinery, out of our own water supply, for watering gardens and cleaning purposes. This water is a source of life for the region's greenery. 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. During 2007, 83,000 cubic metres of water, at a cost of more than 255,000 euros, were distributed in this way.
- We donated the «Aghioi Theodoroi» Forest Protection Association for the acquisition of a second fire engine, which will significantly increase the association's capacity for a direct and effective intervention by its volunteer firemen in the case of a forest fire in the region. Moreover, we also made a donation to the Loutraki-Perahora Forest Fire Protection Association.
- We made a donation to Saronikos Municipality for the completion of the Holy Church of the Assumption of the Blessed Virgin in Almyri village.
- We also made donations to various local development and other associations, involved in landscaping and related infrastructure projects. These associations included, among others: the «Galini» and «Panorama» associations for the construction of playgrounds, «Apostle Paul», «Glykia Zoi» for road paving and lighting works, «Philothei» Kephreon for the lighting of the settlement's main roads and the construction of a small church dedicated to Saint Philothei, «Aghios Charalambos» for electricity

works, «Halcyon» for the construction of a gazebo in a churchyard, "Arion" for the installation of air conditioning in a church, «Kiafa Beka» for the fencing of a playground, «Protoporos» 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 of cultivating the noble emulation, of developing the personalities and of enabling the healthy inclusion in society. Some examples of this contribution to local communities in 2007 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.
- The financial support to the «Aghioi Theodoroi» Athletics Club for the establishment of children's classes.
- The financial support to the Loutraki-Perahora Municipality for the organization of the 1st European Volleyball Veterans' Championship (7-13 October 2007).
- The donations to numerous other local sports clubs, including the Aghioi Theodoroi «Theseas» karate Sports Club, the Agios Georgios Corinth Cultural and Sports Association, the Loutraki Athletics Club «Poseidon», the «Loutraki» Football and Athletics Club, the Athletics Club of Perahora, the «Isthmiakos» Sports Club, the



«Tiron» Basketball Association of Aghioi Theodoroi, the Football Union of Corinth Football Clubs, the Corinth Marine Club, the «Palaimon» Basketball Club, the «Corinth 2006» Sports Association, the Corinth Gymnastics Sports Union, the «Pannemeatikos» Sports Association, the Association of Corinth Veteran Footballers, the «Corinthos» Football and Gymnastics Club, the Poseidonia Corinth Football Club, the «Atromitos» Hiliomodiou Football Club, the Corinth Football and Athletics Academy, the «Corinthos» Volleyball Club, etc.



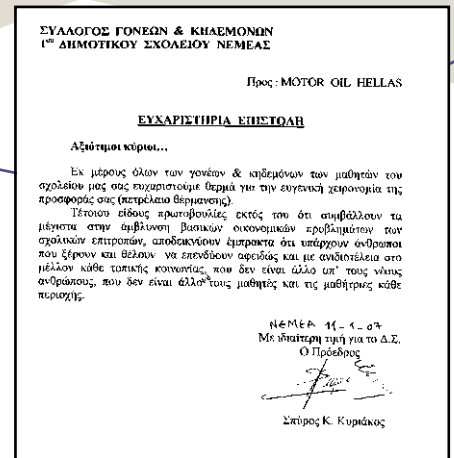
## Entrepreneurship

MOTOR OIL, as the largest economic entity and employer in the Prefecture of Corinth, provides income, directly or indirectly, to a large number of families in the area, and is a pillar of prime importance for its 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.

We support local initiatives that aim at promoting entrepreneurship:

- We sponsored the «*Corinthia 2020*» Development Congress, organized by the Corinth Chamber of Commerce on July 1st, 2007. The aim of the congress was the evaluation of the current situation in Corinth, the promotion of the particular characteristics and competitive advantages of the Prefecture, the presentation of documented scientific projects and proposals relating to each development sector, as well as the diagnosis of the development prospects and the formulation of directions and proposals.
- The Corinth Chamber of Commerce organized the «*Corinthian Expo 2007*» between 19.9.2007 and 23.9.2007, which we also supported. The aim of the expo, in which 90 local enterprises took part, was to promote the region's products and tourism services, while organizing events relating to business development, investments and

sales promotion in Greece and abroad.



## Heating

In year 2007, more than 300,000 litres of heating oil were provided free of charge during the winter months. 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 for its Ancient Corinth establishment, 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, and the girls' orphanage of Lamia.

## BROADER SOCIAL CONTRIBUTION

Our contribution to society is not limited to supporting the local communities only, but also extends to a wide range of other objectives, including:

- supporting education, science, and culture,
- supporting healthcare services,
- providing economic support for sports,
- providing financial aid for charity events,
- assisting church-run activities and non-governmental/non-profit organisations,
- supporting activities aiming at responding to unexpected societal needs.

Examples of the wide range of activities undertaken in 2007 are given 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.

#### In the aftermath of the August fires - Assisting the fire afflicted

The summer of 2007 brought horror and pain to the hearts of all Greeks, due to the fiery storm of the tremendously extensive forest fires that razed the country, causing inestimable damage and claiming tens of human lives. Artemida, Makistos, Ancient Olympia, Zaharo, Parnitha, Penteli, Grammos, Evia. The list is endless. There were more than 6,000 forest fires. Seventy-three people lost their lives. 620 thousands acres of forests and crops turned to ashes. Homes and properties were destroyed.

In keeping with its long tradition of social solidarity, MOTOR OIL immediately responded by offering its assistance in the major collective effort to confront the consequences of this tragedy, by undertaking the project of repairing or reconstructing the homes in Makistos village that suffered damages or were completely destroyed by the fires.

Makistos is a village located in an area of exceptional natural beauty, on the south side of Mount Lapitha, 12 km east of Zaharo. It is the first of the villages that were devastated by the fires of August 24th 2007. The fire left behind 7 dead and one seriously injured person, a village in ruins, forests and fields burnt to the ground. The preliminary works for the rehabilitation of the village began immediately; the project was assigned to a construction company, which appointed a permanent engineer-foreman in Makistos as of September 10th, 2007, to ensure the best possible planning of works. The clearing and repair works began immediately after the appointment of the construction contractors in January 2008.

The first onsite surveys showed that of the 70 buildings in the village (67 homes and 3 churches), 55 (52 homes and the 3 churches) were partially or totally ruined. Detailed studies



The Penteli Municipality fire engine.



View of the repair works on a home.

followed, including survey reports, experts' reports, descriptions of the existing situation and technical descriptions of the rehabilitation works required for each individual building.

The following principles are adhered to for the successful completion of the project:

- Consultations with the inhabitants to ensure their participation in the decision-making process; the repair plans are presented to the owners for their final acceptance.
- Close cooperation with the competent state and municipal authorities, to accelerate the settlement of the bureaucratic procedures.
- The project's technical speci-

cations aim at providing the best possible repairs for the buildings, so as to ensure they return to their initial form but with significantly improved static properties, correcting the damage sustained from earthquakes in previous decades.

- Reconstruction of all buildings that cannot be repaired.

To date, the churches of Virgin Mary and Saint George have been repaired, while the first repaired homes will be handed over in September 2008. Eighty percent of the project is expected to have been completed by the end of 2008, and the entire project will be handed over by mid-2009.

The Makistos village rehabilitation project is MOTOR OIL's prime commitment for a substantial and effective contribution to the fire

victims, and is supplemented by the following direct actions:

- Catering aid was sent to the fire victims in the Zaharo area during the first days after the catastrophe, via the Municipality of Aghioi Theodoroi. Later, a donation was made to the Municipality's Cultural Centre for the purchase of stationery for children in the afflicted areas.
- A donation was made to the Municipality of Penteli for the acquisition of a fire engine, in order to improve the efficiency of its volunteer Civil Protection unit, whose mission includes the fire protection of Mount Pentelikon.
- Solygeia forest is one of the most important forests in Eastern Corinthia. Financial assistance for the protection of this forest was given to Solygeia Municipality,





*The church of Saint George before and after the repairs.*

*The church of Virgin Mary before and after the repairs.*

aiming at the installation of additional permanent fire-fighting water tanks, as well as for drilling a water bore in order to increase the available water reserves in case of a fire emergency.

- The initiative of the Hellenic Network for Corporate Social Responsibility - of which MOTOR OIL is a founding member - for cooperation with the Non-Governmental Organization PRAKSIS, was supported with a cash sponsorship. This action is implemented through the «Next Day» programme, which aims at protecting vulnerable groups in the fire-stricken areas (children and the elderly), and at organizing tree-planting activities in the regions of Ilea and Evia, with the participation of volunteer employees from the sponsoring companies. Fifteen volunteers from the company's personnel have participated in the tree-planting activities

implemented thus far in the Avlida area.

- A donation was made to a humanitarian event organized by the Humanitarian Organization Lifeline Hellas, for the collection of donations to cover the immediate needs of children in families afflicted by the fires.
- Donations were made for organizing cultural and sports events the income of which was provided to the fire victims (the «Menandreia» cultural events organized by Kifissia Municipality, the concert organized by Amaroussion Municipality, the friendly football tournament between Iraklis, Panathinaikos and Panionios FCs, and the musical performance organized at the Athens Music Hall by the Chania (Crete) Women's Association).



*The blue of the sky, streaming in through the ruins! Hope and light!*





ASSOCIATION OF FRIENDS OF CHILDREN WITH CANCER

## Oncology Hospital for Children

### A chain of love for hope (elpida)

MOTOR OIL is supporting the social mission of the Association of Friends of Children with Cancer «ELPIDA» since its establishment in 1990 (this mission was presented in detail in MOTOR OIL's *Environmental and Social Report 2006*).

On May 7th, 2007, the «ELPIDA» Association organized a major telethon entitled «*a chain of love for hope*» in cooperation with MEGA television channel, in order to collect donations for the construction of the first Oncology Hospital for Children. This telethon was one of the largest campaigns of love and humanitarian aid ever to take place in Greece. The participation of Greeks living in the country and abroad, in an unprecedented mobilization led by many important personalities from various fields, resulted in the collection of 12.5 million euros. MOTOR OIL's contribution was 300,000 euros.

### A dream come true

*«The great vision of our Association, the project for which we have fought over the last few years, has now become reality, with the foundations being laid for the first Oncology Hospital for Children in Greece! The success of a*

*collective battle that was initiated by "ELPIDA" and became a symbol for the entire Greek population, is truly moving. Love is the foundation of this Hospital. Every single brick and stone comes from the heart. Every room is an anchor point of hope and life, in a significant alliance between science and humanitarianism».*

**Extract from the speech made by Mrs Marianna V. Vardinoyianni, President of the Association of Friends of Children with Cancer «ELPIDA» during the foundation ceremony for the Oncology Hospital for Children.**

A project with a history of seventeen years, the construction of the Oncology Hospital for Children by the Association of Friends of Children with Cancer «ELPIDA» is expected to be completed by the end of year 2009, after the signature of the donation contract between the Association, the Greek State and the Children's Hospital. The hospital's foundations were laid on April 24th, 2007, by the President of the Republic Mr Karolos Papoulias, and the Late Archbishop of Greece Christodoulos blessed the site where the hospital is to be built. The ceremony was attended by politicians, ministers, members of parliament, the President of MOTOR OIL, Mr Vardis J. Vardinoyiannis, and other entrepreneurs, intellectuals and artists, important benefactors and donors,

members and friends of the Association.

The Oncology Hospital for Children, the total surface area of which is 14,880 sq.m., will be built on two adjacent plots in Goudi, granted by the neighbouring «Aghia Sofia» Children's Hospital and the Ministry of National Defence, and will consist by a complex of four main buildings, supplemented by the necessary auxiliary edifices. Special overhead walkways are to be built, connecting the Oncology Hospital with the «Aghia Sofia» and «P. & A. Kyriakou» Children's Hospitals. The new Hospital will be administratively and functionally affiliated to the «Aghia Sofia» Hospital.

The Oncology Hospital – which is unmatched by any other similar facility, at least in Europe – will be able to accommodate around 300 children with cancer every year. Most of these children would not have had access to suitable treatment, because the cost of hospitalization abroad exceeds half a million euros. Around 10% of the children treated at the Hospital may also come from other countries, e.g. from the Balkans.

The Oncology Hospital for Children will include the following operational sections:

- Bone Marrow Transplant Unit, with



a capacity of 18 beds.

- Three Oncology-Haematology Units, with 29 beds each.
- Three Day-care Units for the Oncology-Haematology Departments, with 8 beds each.
- Day-care Unit for the Bone Marrow Transplant Unit, with a capacity of 4 beds.
- Radiotherapy Unit (1 bed capacity).
- In vitro Laboratory.
- Pain Infirmary.
- Outpatients Departments.
- Blood Donation Centre.
- Conference room (50 persons capacity).
- School for the education of hospitalized children.
- Positron Emission Technology Diagnostic Department.
- Nuclear Medicine Department (equipped with  $\gamma$ -camera).
- Guesthouses for parents.





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

For more than 29 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 Heraklio 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, Nikos 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.



of its offices and the modernization of its equipment, as well as for the organization of a celebration for its 25th anniversary.

- We supported the «3rd European Conference of Customs Chemists», which took place in Athens between the 27th and the 29th of June 2007, jointly organized by the European Union's Directorate-General for Taxation and Customs and the competent authorities of the Ministry of Finance and Economics. Delegates from 43 countries attended the conference, and discussed the role played by customs chemical laboratories in facilitating trade and ensuring safety.
- We supported the American-Hellenic Institute for the organization of its annual conference, on November 28th, 2007.

- We made a large donation to the Holy Diocese of Lambi and Sfakia 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.

- Within the framework of our initiatives for promoting entrepreneurship:

- We made a donation to the Arab-Hellenic Chamber of Commerce & Development for the refurbishment





was enclosed by a wooden fence. The result is a modern Playground that blends harmoniously with the surroundings and allows children to play in complete safety.

- We donated 2 computer systems to the Foundation for the Child and the Family.
- We supported the European Network for Development, Cooperation and Culture, which hosted two hundred children from the Greek village Izvoarele in Romania, in the period 12-25 August 2007. Izvoarele was established in 1810 by Greeks from Eastern Thrace and its inhabitants have preserved the Greek language and traditions intact, in the face of much adversity and poverty.

- We supported the «*Help at Home*» programme of the Municipality of Phoenikas (Crete), which provides vulnerable population groups with regular social, nursing and family care at home.
- We provided financial support to the Municipality of Hydra for reinforcement works in the island's port, and the Association of Greek Frogmen in order to purchase diving equipment.
- We provided economic assistance to the Scandinavian Church in Piraeus, in view of supporting its multi-faceted parish work.
- We supported the Association of Families of the «*Strofi*» Treatment Community, the «*Oasis*» Addicted

Persons Support Centre, the «*Nostos Programme*» of the Addicted Persons Treatment Centre, the Hellenic Association of the Blind and Amputees, the Non-Governmental Association «*Kivotos tou Kosmou*», the old people's home of the Ecclesiastical Institution «*Agapis Melathron Saint Charalambos*», the Foundation for Children - Persons with special needs of Magnesia Prefecture «*White Butterflies*», the Union of Seamen-Parents of Children with Special Needs «*Argo*», the Hellenic Association for the Protection and Rehabilitation of Disabled Children, the «*Happy Children - Happy Youth*» Foundation, the «*Annousakeion*» Treatment Centre of the Holy Diocese of Kissamos and Selinos, and the «*HELLAS*» orphanage in the Ivory Coast.



## Education, science, and culture

We provide consistent and creative support for education, the sciences and culture. We believe to 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 2007, we focused our interest on the following:

### 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 ten scholarships were awarded for the academic year 2007-2008:

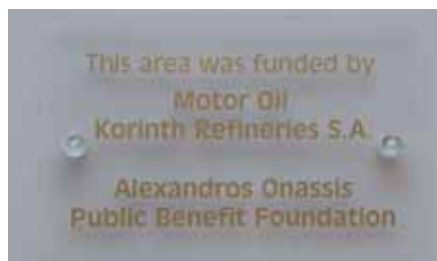
- two postgraduate scholarships for studies abroad, in the fields of Philosophy and Architecture (Bio-climatic Design),
- four postgraduate scholarships for studies in Greece, in the fields of Medicine (Cancer Biology and Ophthalmology), Maritime Studies and Engineering (Design and Construction of Subterranean Works),
- four undergraduate scholarships for studies in Greece, in the fields of Agronomy, Medicine, Archaeology and Philology.

In addition to the scholarships, 140 annual assistantships were also awarded in the academic year 2007-2008.

Since its establishment, the Foundation has awarded more than 110 scholarships and 1,150 annual assistantships.

- The «*British School at Athens*» is a top research institute established in 1886. It is dedicated to the systematic study of Hellenic culture from antiquity to the present day, with emphasis on archaeology, architecture, art, history, language, literature and religion. It is based in a neoclassic building in the centre of Athens, which accommodates amongst others, a rich library, a small museum and an archaeological laboratory.

In year 2007, we made a large donation to the «*British School at Athens*» which, according to a decision of its Board of Directors, will be used to establish an Early Career Scholarship for the first stages of the career of young scholars. The scholarship will cover all accommodation expenses for one researcher at the School for three months each year, as well as the related travelling expenses from

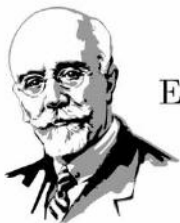


Britain to Greece. Priority will be given to candidates who are at the beginning of their career, enabling them to conduct their studies at the School without limitations on the scope of research. In order to achieve concordance with academic schedules in Britain, the first scholarship will be granted in academic year 2009-2010. The establishment of this particular scholarship allows the School to offer a range of scholarships at all career stages, from undergraduate to senior academic.

- The «Arts Centre at ACS» in Halandri, which we supported in year 2007 with a major donation. In 2003, the company linked its name with the «Arts Centre at ACS», as Golden Sponsor for its construction. The «Arts Centre at ACS» is one of the most important cultural and sports centres in the capital of Greece. It includes a 550-seat venue that can host all types of events (theatrical and musical performances, conferences, exhibitions, etc.), a world-class 300-seat indoor gymnasium for basketball, volleyball, wrestling and gymnastics, an indoor Olympic-

sized heated swimming pool, and catering and reception facilities. The aims of the association that manages the Centre are to develop culture and sports, to promote young artists and to create a scholarship fund for underprivileged but gifted Greek students.

- Our assistance in the struggle of the National Research Foundation «Eleftherios K. Venizelos» to restore the historic house of Eleftherios Venizelos in Chalepa, Chania. The house was built in 1877 and was at the epicentre of political and social developments in Crete during the 19th and 20th centuries, and the great moments of Modern Greek history. This Foundation was established in year 2000 and its aim includes the research and the study of the life of the great politician, as well as his work and the events of his era. The restoration of his house is incorporated in the framework of these aims; the structure has serious static problems, but will eventually be converted into a place of historic memory and a contemporary museum, containing exhibits, objects and works of art and



## ΕΘΝΙΚΟ ΙΔΡΥΜΑ ΕΡΕΥΝΩΝ ΚΑΙ ΜΕΛΕΤΩΝ "ΕΛΕΥΘΕΡΙΟΣ Κ. ΒΕΝΙΖΕΛΟΣ"



tradition of a significant historical value, related to Eleftherios Venizelos himself and the history of the period in which he lived and acted.

- The «*2nd International Conference on Engineering for Waste Valorisation*» which we sponsored. This conference will be organized by the Department of Chemical Engineering of Patras University in July 2008 at the University's Conference Centre. The main theme of the conference concerns the valorisation of waste of natural, chemical, thermal and biological processes, the valorisation of wastes of the construction sector, the valorisation of industrial by-products and the recycling of various materials. Participating scientists and engineers from the academic, private and public sectors will work

on the global investigation of the subject, examining its economic, environmental, social, regulatory, legislative and educational aspects.

- The «*First International Conference on Environmental Management, Engineering, Planning and Economics - CEMEPE*», organized by the Engineering Department of Planning & Regional Development of the University of Thessaly in Skiathos, between the 24th and the 28th of June 2007. This conference, which we sponsored, was attended by 500 delegates. Its aim was the presentation by specialized scientists of the results of current scientific research and projects on issues relating to sustainable development, environmental management, waste management, water resources management, ecosystem analysis and protection, environmental economics, ecotoxicology, environmental legislation and policy, etc.
- The 6th Hellenic Chemical Engineering Conference, which took place in Athens between May 31st and June 2nd, 2007, which we sponsored. The main aim of the Conference was to document the contribution of Greek scientists to the novel research and applications of Chemical Engineering, through the presentation of 400 papers, and with the participation of more than 800 delegates.



- The International Symposium «*Hydrocarbon and Catalytic Engineering: Present Status and Perspectives*», which we sponsored. It was organized by the Chemical Process Engineering Research Institute of the Centre for Research and Technology Hellas in honour of professor Iakovos Vasalos at his birthplace, the island of Sifnos, between 21 and 30 July 2007. Within the framework of this conference, top scientists from Greece and abroad presented the latest developments in the field of environmental fuels and hydrocarbons.
- The «*2nd Hellenic Conference on Alternative Fuels and Biofuels*», which we sponsored. The conference was organized by the Hellenic Association of Chemical Engineers, the Centre for Research and Technology Hellas and other entities, in Neohori, Karditsa, on 26-27 April 2007. The 63 scientific





papers presented at the conference, and its 180 delegates proves the rapidly increasing interest in biofuels amongst the academic community, Universities, Research Centres and businesses in Greece.

- The «5th International Symposium on Wild Fauna», which we sponsored and which was co-organized by the School of Veterinary Medicine of Thessaly University and the Greek branch of WAVES (Wild Animals Vigilance Euro-Mediterranean Society) in Chalkidiki between September 22nd and 27th, 2007. The conference was attended by 350 delegates, who discussed the protection of biodiversity from the environmental impacts of human activities, the protection of wild fauna and the use of molecular techniques which can help to control pathogenetic agents in wild fauna.

## Informational visits to the refinery

The hosting, as we do in every year, of 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 400 people participated in such visits during 2007.



## 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 offices. During their stay, trainees are introduced to the company's work environment and take part in projects involving teamwork 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 2007, 163 month-long internship positions and 10 six-month positions were offered in the framework of this programme, with a total cost of 169,000 euros.







## «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 is read by a significant number of both public and private organisations, as well as by higher education institutions.



- The sponsorship of a painting exhibition by Ms Argyro Valari-Saounatsou in Athens, between 6 and 20 March 2007; the exhibition of vivid works of art was entitled «*Compositions in the colours of nature*» and included three sections. The first section depicted pebbles in the sand, in wonderful colour combinations, the second included a series of wildflowers in their natural environment, and the third included seascapes and Venetian corners of the town of Rethymnon.
- The offering of financial support to the High School of Episkopi – Rethymnon (Crete) to organize an educational visit to Thessaloniki, and to the 1st Junior High School of Rethymnon to cover the cost of a visit by 10 students to the Finsterwaltergymnasium in Rosenheim, Germany, within the framework of an educational student exchange programme.
- The assistance to the Communication and Education Foundation of the Holy Archdiocese of Crete, aiming at seconding the diverse work it has been doing since its establishment in 1997. The Foundation consists of 10 departments, including a Radio Station, a Byzantine Music School, a Historic Archives section, Multimedia and Internet section, a Library and a Cultural Centre. In addition, the

Foundation publishes major works.

- The donation to the Holy Church of Saint Constantine of Hydra in the island of Hydra, for completion of the hagiography works in the church of the island's patron saint.



- 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.
- The additional donation – besides the one in 2006 – 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 support to the Cultural Foundation «Kritiki Estia» for the maintenance and upgrading of its hall of residence, which houses 180 low-income students, providing shelter, food, medical care, cultural and athletic education. In its 38 years of operation, the hall of residence has made a major social contribution, having hosted more than 4,000 current scientists.

- The assistance to the Holy Diocese of Mesogaia and Lavreotiki for the construction of a Holy Church at Athens Airport.

- The donation for the purchase of gym equipment to the Fire Department Academy.

- The donation to the Municipality of Ermioni for establishing a Municipal Philharmonic Orchestra. The donation covers the cost of purchasing the musical instruments and of hiring three musicians to teach music and how to play the instruments.

- The sponsorship to the Elliniki Thalassia Enosi (Hellenic Maritime Union) for the organization of a cultural event entitled «The Light of the

*Aegean»*, an exploration into the history, the tradition, the art and the light of the Aegean Sea, through the perspective of the Nobel-prize winning poet Odysseus Elytis, the poet of light and the Aegean (...*The archipelago/And the prow of its foams/And the gulls of its dreams/On its highest mast the sailor waves/A song...*).



- The donation to the Cretan Society of «Vrakoforoi», the biggest body in the field of traditional Cretan music, to cover part of the expenses for sending a twenty-member group from the Society to Johannesburg, to participate in the celebrations commemorating the 141st anniversary from the Arkadii holocaust, organized by the Association of Cretans in South Africa.

- The donation to the Rethymnon Prefecture Association of Reserve Officers, for construction of the bronze





statue of the «Reserve Officer», which will be placed in a park in the town of Rethymnon, next to the monument dedicated to the Australian Fighters of the Battle of Crete.

- The exclusive sponsorship of the Municipal Regional Theatre of Crete performance of «Kapetan Michalis» by Nikos Kazantzakis, within the framework of the «Menandreaia» cultural events organized by the Municipality of Kifissia. The proceeds from the performance were donated to victims of the summer's fires.
- The sponsorship to the Chania, Crete, Women's Association for staging a musical performance at the Athens Concert Hall, entitled «Nikos Xylouris – the Archangel of our Remembrance». The proceeds were donated to the victims of the summer's fires.

Other significant sponsorships we made in 2007, included:

- Donation to the scholarship programme of the American Farm School in Thessaloniki.
- Donations to the magazines «Amyntikoi Fakeloi» (defence policy), «Iamvos» (literature and art) and «Periplus Naftikis Istorias» (maritime



history and tradition), and the newspaper «Kritika Nea» for the special edition entitled «The Economy of Crete in the 21st Century».

- Financial aid to the Organization for the Internationalization of the Greek Language, for the publication of the magazine «Hellenic International Language», which is published and sent, since 1990, free of charge to more than 5,000 recipients in Greece, to Chairs of Classical Studies in foreign universities, Greek Communities and Philhellènes from 76 foreign countries.
- Donations to the Holy Cathedral of Saint Barbara in Vyronas, the Holy Church of Zoodochou Pigis in Arzos

village in Evros, the Holy Church of Saint George in Nikaia, the Holy Church of the Holy Trinity in Vyronas, the Holy Church of Saint George in Zografou, and the Holy Church of Saint Luke in the University General Hospital of Heraklion, for renovation or completion works.

- Sponsorship for the Municipality of Papagos for the realization of cultural events in the framework of the «Papagos Festival 2007».
- Contribution to the realization of the «Prespes 2007» cultural events in Florina.
- Financial assistance to the Pan Cretan Association and the Society of the Sfakian Diaspora.
- Financial assistance to the Cultural Society of Perivolia-Myssiria for the collection of funds aiming at restoring the damage caused by a fire in the Holy Church of Saint Nickolas Perivolion in Rethymnon.



## 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:

#### 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 principle 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 2007, we assisted «*Lifeline Hellas*» in its programme for the provision of modern medical equipment for infant hospitalization in Serbian hospitals, as well as for supporting orphanages and

institutions for children with special needs.

- We supported the «*Hellenic Cancer Conference*», organized by the Hellenic Cancer Society between November 28th and December 2nd 2007 in Athens, which was attended by around 3,000 scientists from various medical fields, and provided information on the latest developments in the rapid progress being made in the diagnosis and treatment of cancer. The Hellenic Cancer Conference coincided with two major milestones in year 2007: the 50th anniversary of the establishment of the Hellenic Cancer Society, and the inauguration of the «*Special Centre for the Treatment - Rehabilitation of Patients with Cancer*» in Paiania, Attica.
- We supported the 1st Laboratory of Pathological Anatomy of the Athens University Medical School, for the

upgrading of its technological equipment. High level teaching, clinical and research work is carried out at this laboratory, which serves the Hospitals of Athens as well as 12 regional hospitals that do not have their own Anatomy Laboratories.

- We provided financial support for the «*3rd Educational Breast Imaging Symposium*», organised on 26-27 October 2007 by the Hellenic Radiology Society. The Symposium was addressed to Radiologists and physicians of other specialties interested in breast imaging, and aimed at the presentation and discussion of the current situation in the field of Breast Imaging, as well as at developing physicians' skills in all imaging and intervention methods concerning the breast, through participation in practical training seminars.
- We provided assistance to the



Association «Pnoe - Friends of Intensive Care for Children» for the acquisition of a special respirator for the Infants Department of «Alexandra» Hospital, and the Psychogeriatric Society «Nestor», which offers assistance to patients suffering from Alzheimer's disease.

## 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 2007, the company's main sponsorship activities included:

## 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 22 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 2007, 71 blood units were collected; their total number since 1991 is 2,370.

In 2007, we supported the Hellenic Association of Volunteer Blood Donors for the publication of its periodical.

*...I have suffered from a kidney disease for 22 years now, and I have needed 170 units of blood over these years. Often, while I'm walking down the street, I think that some of the people walking beside me may have saved my life at some point. That is the essence of volunteering; never forgetting that taking things may fill the hands, but giving things fills the soul...*

**A kidney patient**

## The «Vardinoyiannea» International Track and Field Meeting

A total of 70 athletes for Greece and another 152 from 30 foreign countries competed at the 23rd «Vardinoyiannea», held on July 18th, 2007. During the games, contestants competed in 15 different events, and although there was a lack of superior scores, the sports fans who filled the stadium had the chance to watch some of the top athletes in classical sports, Olympic medallists and world champions in action.

The distinct Greek participants included 400 m European Champion Perikles Iakovakis, and Chrysopigi Devetzi and Stella Pilatou in long jump.

The men's Discus Throw event included the crème de la crème of the sport, since Lithuanian Virgilijus Alekna, Estonian Gerd Kanter, Spanish Mario Pestano, Hungarian Zoltan Kovago and Americans Jarred Rome and Ian Waltz are among the top ten in the world.

American Torri Edwards participated in the Women's 100 m race, while 18-year-old Nevin Yanit of Turkey broke a national record in the 100 m Women's Hurdles.

Besides Chrysopigi Devetzi and Stella Pilatou, Russian athletes Tatyana



Lebedeva and Oxana Udmurtova, and Ukrainian Victoriya Rybalko participated in the Women's Long Jump.

Distinct participations in the Men's 200 m race were those of the Americans Jeremy Wariner, Joshua Johnson and Rodney Martin.

The «Vardinoyiannaia» International Track and Field Meeting has been held every year in Rethymno, Crete, since 1985, in honour of Pavlos Vardinoyannis. MOTOR OIL is the official sponsor of the event. 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 «Vardinoyiannaia» 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, Osleidys Menendez. Reflecting the wide participation of athletes from all over the world, the outstanding scores achieved and the high standard of organisation, the

«Vardinoyiannaia» were promoted to the EAA Premium category in 2006. In 2005, the games were rated, for the fourth consecutive year, as the best outdoors sports meeting in Europe in the EAA Permit category, having been scored top by the European Athletics Association.

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



## The 21st European Basketball Championship U16/Men

MOTOR OIL provided financial assistance to the town of Rethymnon in its significant and brave undertaking of the 21st European Basketball Championship U16/Men, between 20 and 29 July 2007. This championship is the top European event in its category, and was attended by the 16 best teams in Europe, bringing more than 400 athletes and their escorts to the town.

MOTOR OIL's sponsorship contributed to the excellent organization of this internationally renowned sports event, the competitive part of which was complemented by a series of parallel cultural events entitled "Culture unites Europe", which linked the promotion of the athletic spirit with the promotion of culture, naturally with an emphasis on the culture of our country.

Everyone who attended the athletic and cultural events of the nine-day championship experienced unique moments and had the opportunity to watch top quality basketball played by the sixteen-year-old team players.

The championship ended with an unbeatable Serbia winning the trophy, after beating the Spanish team in the finals.



## Support for the Special Olympics Hellas

MOTOR OIL is a consistent supporter of the Special Olympics institution, within the framework of our care for providing assistance to people and social groups that need support. The Special Olympics are a particularly symbolic global movement, in which 172 countries participate, and which totally expresses the principles of MOTOR OIL. They are an institution that promotes the acceptance of diversity, inspires thousands of people around the world, arming them with courage and confidence, spreading the message that all difficulties and adversities can be overcome with patience and insistence. Support for the Special Olympics sends a message of love and solidarity to people with mental deficiencies, so that they can believe that they can compete and win, that they can leave behind their isolation and become useful and productive citizens.

The Special Olympics were established in Greece in 1987 and to date more than 10,000 children and adults have been trained and participated in sports events and races, while more than 2,000 volunteers have undertaken the difficult task of their ongoing daily training.

In year 2007, MOTOR OIL was awarded a special parchment by Special Olympics Hellas for its social contribution, while its support for the Special Olympics was expressed in two ways in 2007:

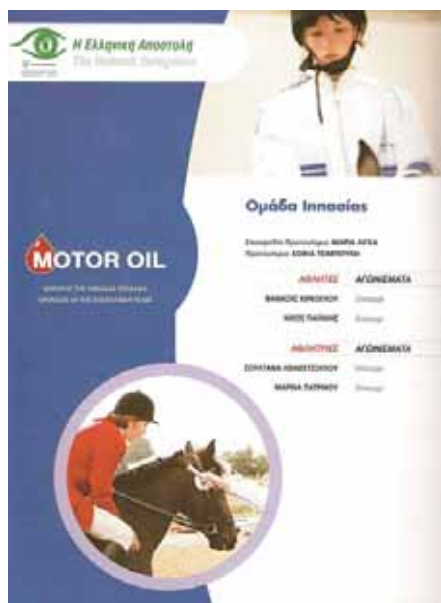
- With financial aid through the «*Passing the baton to love*» telethon that took place on February 14th, marking the 20th anniversary since 14.2.1987, when the Special Olympics





Hellas act of establishment was signed.

- With a sponsorship covering all expenses for the participation of the six-member Equestrian team (4 athletes and two trainers) in the 12th World Special Olympics Games, which took place in Shanghai between 2 and 11 October 2007. 7,500 athletes, 3,500 trainers and 45,000 volunteers from 160 countries participated in the games, whose slogan was «I know I can». The Greek delegation, with 145 members, participated in 16 events and collected a grand total of 43 medals: 12 gold, 16 silver and 15 bronze.



- 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 25th event was held in 2007, with the participation of 319 athletes (men and women) from all over the world, of whom 125 passed the finishing line, including 18 women. The athletes are rewarded with an olive branch and water from Evrotas river.

- The department of classical athletics of the Heraklion Sports Fans Club (OFI), which has been making significant progress is classical athletics over the last few years. In 2007, it came 7th in the national classification of the Hellenic Amateur Athletic Association, a particularly good 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 Volley-Ball Club, of which the Men's team participates in the A2 National League, and the Women's team in the B National League.

- Major sponsorships to the following sports clubs:

- The Rethymnon Union of Football Teams, which incorporates D League teams, Women's Football teams, as

well as mixed teams (Junior, Pre-Children, Children and Juvenile).

- The Asteras Rethymnou FC.
- The Athletic Club of Episkopi, Rethymnon, Crete.
- The Athletic Club of Anoixi, Athens.
- The Poros Troizinia Sailing Club, which allows more than 80 athletes to train in rowing and kayaking.
- The Pyrgos «Iralkis» Sports Club, which has a team in the local football championship of Ilea Prefecture.
- The «Poseidon» Geraniou Sports Club in Rethymnon prefecture, for the completion of its football field.



*View of the football court of the Gerania Sports Club.*



# 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 2007* 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. The *Environmental and Social Report 2007* is

not certified by an external certification authority.


In each chapter of the *Environmental and Social Report 2007* 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 Offices. This differentiation is not critical, 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.

## Report Application Levels

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

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

Indicator	Description	Env. and Social Report 2007 (page)	Annual Report 2007 (page)
1.1	Statement from the most senior decision-maker of the organization.	2	
1.2	Description of key impacts, risks, and opportunities.	20-22, 69	
2.1	Name of the organization.	cover	cover
2.2	Primary brands, products, and/or services.	9-11	15, 19, 35
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	9	55-59, 128
2.4	Location of organization's headquarters.	back cover	back cover
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	9-10	
2.6	Nature of ownership and legal form.		15, 20
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	10	33-35
2.8	Scale of the reporting organization.	9-10, 29	23, 33-35, 46
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	120	24, 61
2.10	Awards received in the reporting period.	23, 68	
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	front cover, 120	
3.2	Date of most recent previous report (if any).	127	
3.3	Reporting cycle (annual, biennial, etc.).	120	
3.4	Contact point for questions regarding the report or its contents.	inside front cover	
3.5	Process for defining report content.	22	
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	120	
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).	120	
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	120	
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols.	120	



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

Indicator	Description	Env. and Social Report 2007 (page)	Annual Report 2007 (page)
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	120	
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	120	
3.12	Table identifying the location of the Standard Disclosures in the report.	121	
3.13	Policy and current practice with regard to seeking external assurance for the report.	120	
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	17	21-22
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.		21-22
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.		21-22
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	19-20	21
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	17	
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	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 the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	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	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	7-8, 17, 20-22	
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	17, 20-22	
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.		21

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

Indicator	Description	Env. and Social Report 2007 (page)	Annual Report 2007 (page)
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	15-17, 46-48, 66-67	
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	19-22	
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: Has positions in governance bodies, participates in projects or committees, provides substantive funding beyond routine membership dues, or views membership as strategic.	19-20, 88	
4.14	List of stakeholder groups engaged by the organization.	19-20	
4.15	Basis for identification and selection of stakeholders with whom to engage.	19-20	
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	19-20	
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	18-20	
DMA EC	Disclosure on Management Approach EC	7-8, 10, 12-14	60-62
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	10, 12-13	
EC3	Coverage of the organization's defined benefit plan obligations.		111
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	98	
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	29-30	
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	12-13, 92	
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.		115-118
DMA EN	Disclosure on Management Approach EN	7-8, 15-17, 20-22, 66-67	
EN2	Percentage of materials used that are recycled input materials.	not relevant	
EN3	Direct energy consumption by primary energy source.	77	

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

Indicator	Description	Env. and Social Report 2007 (page)	Annual Report 2007 (page)
EN5	Energy saved due to conservation and efficiency improvements.	75-78	
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	86-87	
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	75-78	
EN8	Total water withdrawal by source.	86-87	
EN9	Water sources significantly affected by withdrawal of water.	86-87	
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	not existing	
EN16	Total direct and indirect greenhouse gas emissions by weight.	78	
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	75-78	
EN19	Emissions of ozone-depleting substances by weight.	not existing	
EN20	NOx, SOx, and other significant air emissions by type and weight.	81	
EN21	Total water discharge by quality and destination.	83	
EN22	Total weight of waste by type and disposal method.	86	
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	72-73	
EN30	Total environmental protection expenditures and investments by type.	70	
DMA LA	Disclosure on Management Approach LA	7-8, 28, 30	
LA1	Total workforce by employment type, employment contract, and region.	29, 33	
LA2	Total number and rate of employee turnover by age group, gender, and region.	32	
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	33-37	
LA4	Percentage of employees covered by collective bargaining agreements.	33	
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	The Health and Safety Committee of the refinery employees represents all the employees.	
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	60-61	

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

Indicator	Description	Env. and Social Report 2007 (page)	Annual Report 2007 (page)
LA10	Average hours of training per year per employee by employee category.	38-43	
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	38-43	
LA12	Percentage of employees receiving regular performance and career development reviews.	28	
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	31-32	
LA14	Ratio of basic salary of men to women by employee category.	There is no differentiation	
DMA HR	Disclosure on Management Approach HR	28	
HR4	Total number of incidents of discrimination and actions taken.	no incidents	
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	not any operations	
HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	30	
HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.	30	
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	62	
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	not relevant	
DMA SO	Disclosure on Management Approach SO	7-8	
SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	92-93	
SO5	Public policy positions and participation in public policy development and lobbying.	We are members of business associations which participate in public policy development.	
DMA PR	Disclosure on Management Approach PR	61	



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

Indicator	Description	Env. and Social Report 2007 (page)	Annual Report 2007 (page)
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	61	
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	no incidents	
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	Material Safety Data sheets for all our products.	
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	no incidents	
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	18	
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	not relevant	
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	no incidents	
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	no complaints	
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	no fines	

## Environmental and Social Reports of previous years



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