ENVIRONMENTAL and SOCIAL REPORT 2005

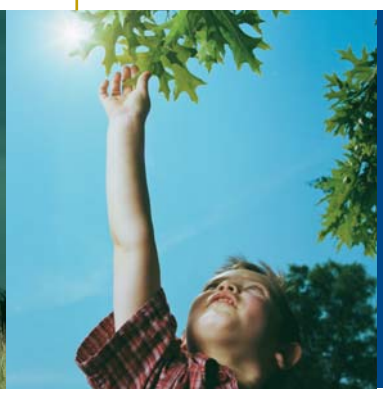
planning for a sustainable future

MOTOR OIL (HELLAS)

ENVIRONMENTAL and SOCIAL REPORT 2005

MOTOR OIL (HELLAS)
CORINTH REFINERIES S.A.

Contents



Introduction

MOTOR OIL's annual Environmental and Social Report, first published in 2002, is now established as a special publication. This report for 2005, the fourth in the series, is intended to demonstrate the great importance we place on the social dimension of our activities.

At MOTOR OIL we are not simply aware of the company's responsibilities to society. As a responsible corporate citizen we hold a strong belief that our commitment to the principles and objectives of Corporate Social Responsibility provide a strong foundation for the creation of business value in the long term, and we translate this belief into firm commitments and activities that produce results.

This MOTOR OIL Environmental and Social Report presents in detail the activities of the company and those of its subsidiary AVIN OIL, in 2005, in caring for their employees, and in matters of workplace health and safety, and environmental protection. Its collaboration with local communities in the areas where it conducts its business operations, as well as its contribution to society as a whole, is also described.

MOTOR OIL'S profile

MOTOR OIL's financial strength has been underpinned by continuous and dynamic growth and a modern corporate philosophy. This has allowed the company to attract and retain competent staff and management, and to perform its social role effectively, enhancing its contribution to society and guaranteeing its future growth prospects.

MOTOR OIL'S PROFILE

Mission, principles and values

Since 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 realization of its dynamic growth. Moreover, all its operations are guided by a set of firm principles and values that underpin its business activities.

The company's **vision** is to establish itself as a major oil refiner and oil trading enterprise in the greater Eastern Mediterranean region.

MOTOR OIL's **corporate mission** is to carry out its business activity so as to increase its enterprise value for the benefit of all stakeholders – shareholders, personnel, clients, suppliers, associates and partners, as well as the local and regional community – through practices demonstrating its responsibility and integrity, as well as its respect for people and the environment.

MOTOR OIL's vision and corporate mission are underpinned by three basic **principles**:

- **Respect for labour rights**
- **Respect for the environment**
- **Transparency**

The realization of the vision and corporate mission is based on the following four company **values**:

- **Efficacy**
- **Responsibility**
- **Social responsibility**
- **Integrity**

MOTOR OIL (HELLAS)

Efficacy

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

Social responsibility

- Respect for people and their needs
- Pursuit of sustainable growth
- Ensuring that the company is an active and responsible corporate citizen

Responsibility

- Clients
- Personnel
- Associates
- Society

Integrity

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

MOTOR OIL'S PROFILE

About the company

Main features of the refinery...

- Refining capacity of 115,000 barrels a day and the capability to produce the full range of fuel products. It is one of the most complex and technologically advanced in Europe, having both Hydrocracking and Catalytic Cracking units and a Nelson Complexity Index of 13.1.
- Production of clean fuels (gasoline and automotive diesel) complying with EU clean fuels specifications for 2009.
- Environmental management certification to ISO 14001: 2004 and quality management certification to ISO 9001: 2000.
- The only Greek refinery producing lubricants.
- Energy self-sufficiency, through installed capacity of 62 MW.
- Tank farm capacity of 2,200,000 cubic metres.
- Berthing facilities for tankers capable of handling vessels up to 450,000 DWT capacity.

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 ATHEX Composite Index, and in other sector indices. Since May 2006 it has been a component of the MSCI Index.

The company plays a leading role in the oil refining sector, supplying the region with a wide range of high quality products. With a consolidated income, in 2005, equivalent to approximately 1.9% of Greece's GNP, it has developed into one of the main pillars of the national economy and a leading player in the broader region.

INVESTMENTS

SUBSIDIARIES	Percentage
AVIN OIL	100%
AVIN ALBANIA S.A.*	100%
CORINTH POWER S.A.*	100%
ASSOCIATED COMPANIES	**Percentage**
OLYMPIC FUEL COMPANY S.A.	28%
HELLENIC AVIATION FUEL COMPANY 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.

The company owns 100% of AVIN OIL shares and, directly or indirectly, is a shareholder in five other companies. One of these companies, CORINTH POWER S.A., has obtained an electricity production license from the Ministry of Development.

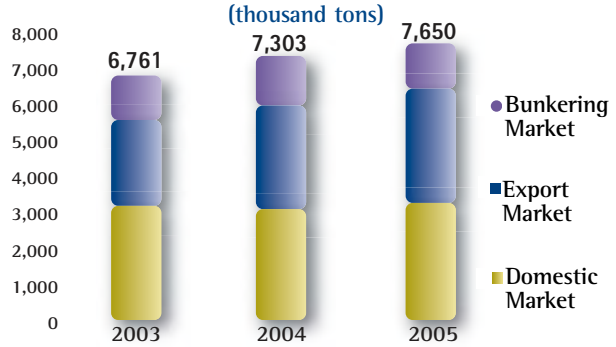
MOTOR OIL's successful strategy has resulted in increased sales and high profitability. The charts show the evolution of MOTOR OIL's sales volume by market, and the progress of three key indicators of consolidated performance – Turnover, EBITDA (earnings before interest, taxes, depreciation and amortization) 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 company AVIN OIL with the "full consolidation" method, and Olympic Fuel Company and Athens Airport Fuel Pipeline Company with the "net equity" method.

500
million euros

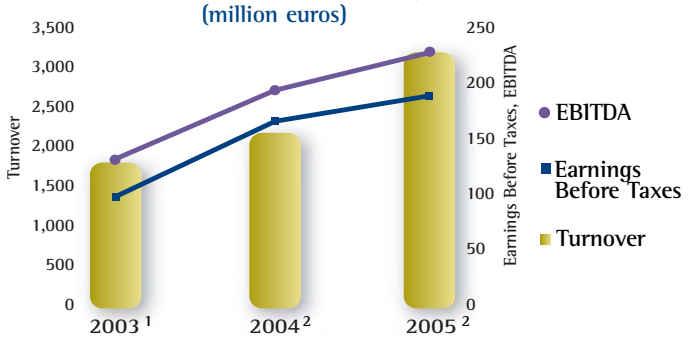
In contributions to welfare projects and in productive and environmental protection investments over the past three years.

MOTOR OIL's contribution (on the basis of the consolidated results) to the "social product" – analysed in the chapter *Economic Benefits to Society* – has been in proportion to its financial performance. Indicative of this is the fact that, in the past three years, it has contributed in excess of 156 million euros revenue to the state budget, through taxes and other payments, and has paid its personnel, in net salaries and other benefits, over 167 million euros. Furthermore, during the past three years, its contribution to public welfare projects and its productive and environmental protection investments amount to about 500 million euros.

Evolution of MOTOR OIL Sales Volume by Market
(thousand tons)



Evolution of Key Consolidated Figures
(million euros)



(1). According to Greek Accounting Standards
(2). According to International Financial Reporting Standards

In 2005, MOTOR OIL won an important award: the first place in the MONEY 2005 awards for *"The Best Company in the FTSE/ATHEX-20 Index"*.

The company's refinery is located in Aghioi Theodoroi, Corinth, approximately 70km outside Athens. Together with the auxiliary facilities, its marine and truck loading terminals, it is the largest private industrial complex in Greece and is regarded as one of the most flexible refineries of Europe. It processes crude oil of various types, producing a wide range of oil products, complying with the most stringent European and international specifications, and supplies major oil companies in Greece and abroad. Moreover, it is the only Greek refinery that produces base oils.

MOTOR OIL'S PROFILE

Highlights of MOTOR OIL's development

2005	A new Hydrocracker unit is commissioned, facilitating the production of clean fuels conforming to European Union specifications for 2005 and 2009 (Auto Oil II). Motor Oil Holdings S.A. acquires the stake in MOTOR OIL previously held by Aramco Overseas Company B.V.
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.
2003	Development of a Quality Management System, which was certified compliant with ISO 9001:2000 in January 2003.
2001	Increase of the company's equity capital through public offer of shares and listing in the Athens Stock Exchange. Installation of a new gas turbine in the power production plant. Upgrade of the lubes vacuum distillation unit.
2000	Completion of a capital investment programme for the 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. At the same time, a new central control room was built and a fully computerised Distributed Control System was installed, with full replenishment of the electronic instruments. The Environmental Management System is ISO 14001:1996 certified.
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.
1993	ISO 9002 quality certification for the entire range of the company's commercial and manufacturing activities.
1984	Construction of a power plant, burning fuel gas. Surplus energy is sold to the Public Power Corporation.
1980	Installation of a catalytic cracking unit (for converting fuel oil to higher-value products).
1978	Construction of a catalytic reformer unit (further processing of naphtha for gasoline production).
1975	Construction of a 100,000 barrels/day crude distillation unit and new storage facilities with a capacity of 1.5 million cubic metres.
1972	Refinery begins operations. It comprises a crude oil distillation unit, base oils production unit and a loading/unloading jetty.

Strategic targets

MOTOR OIL's strategic target for the next few years is its establishment as a leading refining and fuel products marketing company in the broader eastern Mediterranean region. In order to achieve this target, it implements a consistent but flexible business strategy, based on the following key points:

- **Continuous upgrading of the refinery**, in order to achieve the best possible financial performance.
- **Presence in three markets** (domestic, export and bunkering) in a way that enables the company to attain optimal overall profitability in marketing its products.
- **Implementing technical, operational and organizational improvements in the refinery**, so as to achieve the highest possible standards of quality, health and safety, and environmental protection.

Achieving MOTOR OIL'S strategic aims – particularly of value creation by producing and marketing oil products conforming to the stringent EU and international specifications without compromises to health and safety or environmental protection – has required major investments. Up to 2002, capital investment was mainly directed towards technical upgrading of the refinery, in terms of vertical integration, automation and energy sufficiency. As a result, it is now considered one of the most technically advanced refineries in Europe and worldwide, with ISO 14001:2004 and ISO 9001:2000 certifications for its environmental and quality managements practices, respectively. It is the only refinery in Greece, and one of the few in Europe, with these two certifications.

The company's investment programme for the three-year period 2003-2005 exceeded 490 million euros. The major part of this investment was for the construction of the Hydrocracker complex (more details about this new facility, as well as about three other important anti-pollution units, are discussed in the *Environment* section of this report). The commissioning of this plant in November 2005, has allowed the production of clean fuels compliant not only with European Union specifications for 2005 but also with the stricter specifications that will apply from 2009. At the same time, production of middle distillates of which there is a shortage in Greece and in Europe was increased. The refinery has also gained more flexibility, allowing the maximization of either diesel or gasoline production, according to seasonal demand. Moreover, the refinery's environmental performance has been further improved on the basis of reduced emissions. With the completion of the investment programme in 2005, the complexity of the refinery as measured by the Nelson Complexity Index increased considerably, classifying it amongst the most complex in Europe.

Significant investments completed during 2001-2004 included the following: the installation of a gas turbine at the refinery's power production station to ensure energy independence; installation of a Distributed Control System and an Advanced Process Control System (ongoing); the upgrading of the Custody Transport System at the refinery's jetty and the construction of a new Truck Loading Terminal at the refinery; the construction of a new Sulphur Recovery Unit; and the under way upgrading of the Waste Water Treatment Unit.

ISO 14001: 2004 for the Environment Managemnt System

ISO 9001: 2000 for the Quality Managemnt System

The company's wide-ranging investment programme, one of the largest private investments in Greece in recent years, was publicly acknowledged by the investing community (Mutual Funds' administrators, market analysts and individual investors) in 2003, 2004 and 2005, with the presentation of MONEY Business Awards in the category *"High Investments"*.

MOTOR OIL'S PROFILE

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


BVQI

Certification

Awarded to

MOTOR OIL HELLAS (CORINTH REFINERIES) S.A.
Agioi Theodoroi, P.O. Box 23, 201 00 Corinth
HQ Maroussi, Athens
GREECE

BVQI certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

Standards

ISO 9001:2000

Scope of supply

PRODUCTION AND DELIVERY OF FUELS, LUBRICANTS, WAXES AND OILS.

Original Approval Date: 10 December, 1993

16 February, 2009

N. TRILIZAS

Date: 9 March, 2006

Certificate Number: 188652

Responsibility towards customers – quality

Quality is a vital element of MOTOR OIL's strategy. Since the start of its operations, the company, with respect and responsibility towards its clients, 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. Quality is everyone's business.*

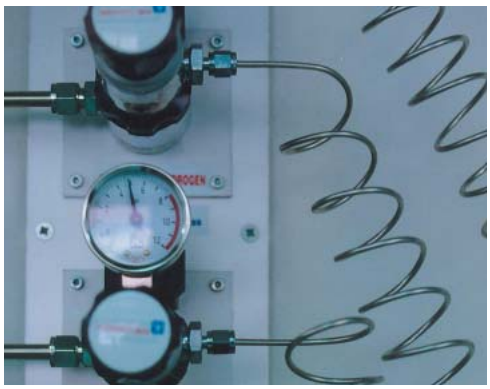
The quality policy is applied through preventive management procedures, which allow potential problems to be pre-empted before they arise.

In 2005, the ongoing development of the *Integrated Management System* included the addition of a new Quality Control Procedure, so that the company's quality system becomes compliant with ISO 17025:2005. This new documentation will certify the technical and scientific capability of the refinery's chemical laboratory to conduct reliable measurements. The laboratory's certification means it will be able to issue Quality Certificates bearing the stamp of the National Accreditation System for almost all the company's products (gasoline, automotive diesel, aviation fuels and fuel oil), guaranteeing the quality of its products and giving the company an additional strong competitive advantage.

2004
MONEY Business Award in the category: *"Investor Relations"*

Responsibility towards customers – service

MOTOR 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 in every two years a quantitative and qualitative customer satisfaction research covering the full spectrum of its clientele. This is aimed at establishing an objective view of the level of their



satisfaction in their relation with the company, in learning about their perceptions of the quality of the company's services and in acquiring knowledge about their overall impression of MOTOR OIL's corporate image.

The basic objectives of this research are:

- The evaluation of customer satisfaction.
- The evaluation of the perceived quality of the whole range of services offered by MOTOR OIL.
- The determination of the aspects of MOTOR OIL's current products, services and offers that need to be improved.
- The determination of the criteria that are used by those selecting MOTOR OIL as a supplier and of the impression they have of MOTOR OIL's image as a supplier or partner.
- The determination of MOTOR OIL's corporate image.

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

Responsibility towards stakeholders – corporate governance

The company's management and control is based on the modern principles of corporate governance, as prescribed by legislation, international best practice codes and auditing standards. Its strategy and operations are deployed within the framework of corporate governance principles, which govern issues like: the structure of its board of directors; its compliance with regulatory provisions; the respect for, and protection of, shareholders interests; the reliability of information disseminated; and the quality of risk assessment and control procedures. In 2004, the continuous effort of the company for equally reliable information to its shareholders resulted in the award of the MONEY Business Award in the category of *"Investor Relations"*.

MOTOR OIL'S PROFILE

About AVIN OIL

MOTOR OIL is present in the retail fuels market, through its wholly-owned subsidiary AVIN OIL, which began operations in 1977. AVIN OIL has a dynamic presence in the Greek oil market, aiming in marketing products that meet all modern fuel and lubrication requirements. It markets high quality fuels for automobiles, aviation and industry, as well as domestic heating diesel, asphalt, liquefied petroleum gas and lubricants, which comply with the API and ACEA international product specifications, as well as with those of major automotive manufacturers. In 2005, AVIN OIL – in response to market trends and to consumer demand – introduced the new automotive diesel oil, *DIESEL Best*, into the Greek market. This product secures excellent performance and protection of the engine, a cleaner environment and greater economy.

AVIN's main supplier is MOTOR OIL, and its most significant business advantage is the ability to market products of high quality that comply to modern specifications at competitive prices. Since 1987, AVIN OIL has operated its own Truck Loading Terminal at Aghioi Theodoroi which is directly connected by pipeline with the MOTOR OIL refinery. It has constructed and operates the Megara Twin Petrol Station and holds a 14% stake in Olympic Fuel Company S.A., which has built and operates the Aviation Fuel Supply System (Hydrant System) at Athens International Airport. Also, the company has a 50% stake, together with Chevron/Texaco, in the Hellenic Aviation Fuel Company S.A. (HAFCO S.A.), which currently operates at three Greek airports.

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, etc.) in order to ensure both the safe transportation and the quality for the final consumer. Since 2000, the company has run a quality campaign, conducted by a specialist research company, aiming at improving its brand image and the image and reputation of its network of petrol stations, and the standard of service they offer.

Its network comprises of more than 550 petrol stations throughout Greece, and with annual sales (for 2005) of 1.2 million tons AVIN OIL holds the 4th position among oil marketing companies in the Greek market. It also exports significant fuel quantities to neighbouring countries. The company's turnover for 2005 was 705 million euros, with a net profit of 6.4 million euros before taxes.

Commitment to Corporate Social Responsibility

Corporate Social Responsibility (CSR) emerged as a prominent issue for the business world in the early 1990s, although social responsibility – in the sense of initiatives by businesses to integrate community and environmental activities into their programmes – was adopted by businesses in both the United States and the European Union many years before the development and establishment of the concept of CSR as a part of modern business practice.

Corporate Social Responsibility indicates a balanced approach to the economic, social and environmental impact of business operations and is based on the three pillars of economic growth, sustainable development and social cohesion.

In the past few years, 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 staff – 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.

Since its establishment, MOTOR OIL's business activity has been characterized by responsibility and social awareness. Today, as a modern multi-stock company, listed on the Athens Stock Exchange, its activity complies with the current code of business ethics and meets contemporary demands for more openness, and the reliable and timely dissemination of information to all stakeholders. As a founding member of the Greek Network for Corporate Social Responsibility, it systematically supports the application of best practices and promotes the concepts of social sensitivity, corporate responsibility, social cohesion and sustainable development – namely, development that meets today's needs, without depleting resources for future generations.

HELLENIC NETWORK for CORPORATE SOCIAL RESPONSIBILITY

MOTOR OIL'S PROFILE

MOTOR OIL's commitment to Corporate Social Responsibility – in the sense of achieving balanced growth, based on the three pillars, "community-environment-economy" – is an integral part of its business strategy and operations.

MOTOR OIL:

as a responsible employer,

cares about developing and optimizing its human resources, investing in their training, ensuring a creative and supportive workplace, where health and safety constitute major priorities, assured through state-of-the-art technical support and management practices.

having a responsible attitude towards the environment,

tries to ensure the minimum possible impact of its activities on the environment, utilizing the most advanced systems for environmental protection and for the management and saving of energy.

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 takes part in activities that benefit society as a whole.

having a responsible position in the market,

respects market rules and produces top quality products; it focuses on relations of trust with its clients and associates, and strives – through systematic and consistent achievement of its business targets – to ensure satisfactory returns to shareholders.

The above commitments are realized through specific programmes and activities detailed in the Annual Operating Plans and in the Five-year Business Plans, as explicit short- and long-term goals of the company's overall strategy, on the basis of which we operate and assessed.

The four areas of activities involved in the Corporate Social Responsibility programmes, in accordance with internationally accepted standards– particularly the Global Reporting Initiative, whose main principles and guidelines are the basis for the publication of our Environmental and Social Reports – are:

- The environment
- The workplace
- Society
- The market

Each one of these areas has its respective stakeholders. The following diagram indicates the areas, the respective stakeholders and the current issues of interest on which MOTOR OIL's activities are focused.

MANAGING CORPORATE SOCIAL RESPONSIBILITY

PEOPLE
Our people

THE ENVIRONMENT
The general public

- Health and Safety
- Equal opportunities
- Training
- Discretionary benefits

The workplace
Improving the work environment

The environment
Making further improvement

- Clean fuels
- Carbon dioxide and other emissions
- Energy management
- Solid and liquid waste management

The marketplace
Promoting responsible and ethical practices

Society
Ensuring a positive impact on society and the economy

- Quality
- Reliability
- Integrity
- Control/ Assessment
- Information availability
- Corporate governance

- Meeting the demand for petroleum products
- Contribution to the economy
- Contribution to society

OUR ASSOCIATES
- Shareholders
- Customers
- Suppliers
- Associates

THE PUBLIC
- Consumers
- Shareholders
- Non governmental organizations
- Bodies
- Opinion-makers

MOTOR OIL'S PROFILE

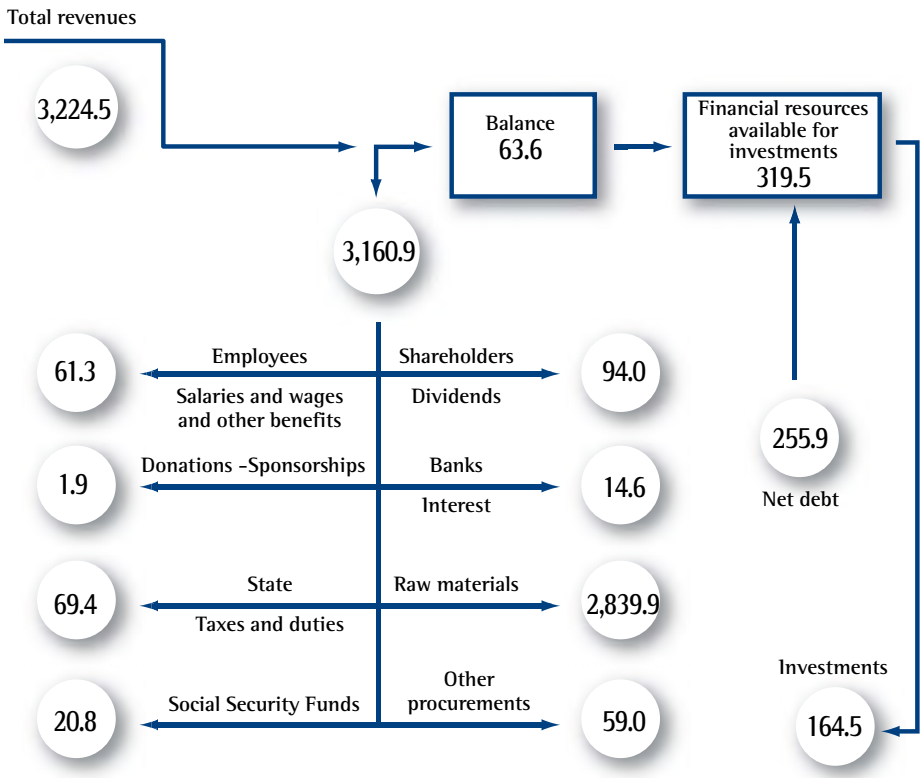
Economic benefits to society

By adopting a prudent approach to corporate governance, MOTOR OIL and AVIN OIL create value for their shareholders, their stakeholders and society as a whole.

The scale of their operations, combined with their consistent orientation for steady growth, has yielded a very significant contribution to the national economy. This contribution, linked directly to the effectiveness and commercial success of the companies' industrial operations, encompasses wealth creation and generation of jobs, with the simultaneous implementation of measures to protect the quality of the environment and of measures that contribute to social development and cohesion.

In 2005, the two companies' income totaled 3,224.5 million euros, equivalent to approximately 1.9% of Greece's gross national product (GNP) that year. Of this, 2,839.9 million euros were allocated to the purchase of raw materials (crude oil and fuel products), accounting for 88.1% of the two companies' total revenue, this high proportion being an inevitable consequence of the nature of the two companies' activities.

Financial Social Report of 2005 (million euros)



The extent of the two companies' contribution to society is clearly defined by the magnitude and the constituents of their *social product.*

The *social product* can be defined as that part of the companies' income that is allocated to the various stakeholders, that is: company employees, the state, shareholders and society in general. It encompasses: payroll expenditure and various other employee benefits, over and above those required by legislation (such as health insurance and 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; and dividends paid to shareholders.

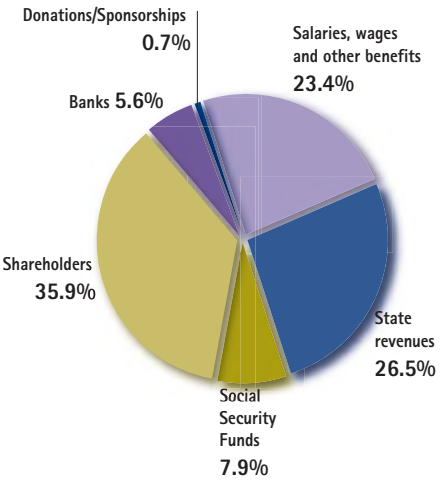
Special Olympics Hellas

Golden Sponsors:

Coca Cola 3E · Vodafone · Motor Oil · ELPA

On the basis of the above data for 2005, the *social product* allocated to stakeholders was 262.0 million euros (compared with 239.3 million euros in 2004).

2005 Social Product Components
Total 2005: 262.0 milllion euros



Workplace

In MOTOR OIL and AVIN OIL, we place particular importance on the proper management, development and efficient use of our human resources, which we consider a crucial factor in achieving our corporate objectives, in implementing our growth business plans and in ensuring our long-term competitiveness. The success of our operations, and the quality of our products and services, depend on employee performance which, in turn, is dependent on a workplace that ensures good terms and conditions of employment and a safe and healthy work environment.

WORKPLACE

2005
the fully computerized Training Simulator was commissioned, constituting a high efficiency tool for training the operators.

MOTOR OIL and AVIN OIL believe that the concern for the welfare of employees and their families, is a vital social and corporate obligation. This concern is manifested in the companies' continuous efforts to develop and motivate employees; to support, encourage and offer them equality of opportunity; to create a work environment in which they can pursue their professional and personal development and achieve their full potential, while at the same time, attracting competent people to work for the companies. This philosophy underpins policies and programmes aiming at fostering a coherent corporate culture, at safeguarding jobs, at increasing employees' satisfaction and at allowing them to achieve a healthy balance between work and family life.

Equal opportunities policy

All aspects of human resources management are pursued with transparency, fairness and on the basis of meritocracy. Recruitment, transfers, promotions, remuneration, and education and training programmes are governed by equal opportunity principles, the avoidance of any form of discrimination and the respect for employees' dignity. The equal opportunities policy is applied so as to ensure that:

- The composition of management reflects the composition of the workforce.
- 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 ensuring a balance between their professional and personal lives.

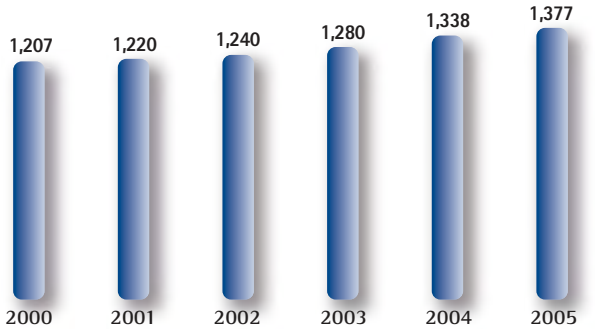
Labour relations

Labour relations have been particularly good at both MOTOR OIL and AVIN OIL, because they have been developed not only to meet legal requirements, but also on the basis of mutual trust and co-operation and as a result of a progressive human resources management policy, which enshrines clarity and fairness in matters of recruitment, transfers, promotion, remuneration, education and training, benefits, holidays and leaves. A reflection of the harmonious state of industrial relations is the fact that there have been no strikes in recent years. Terms and conditions of employment are covered by a company collective labour

agreement, approved by the Ministry of Labour, which has been in place (for MOTOR OIL) since September 1974. Refinery employees have their own union which since 1986 has signed a collective labour agreement with the Federation of Greek Industries. This agreement lays down the terms regulating employment and pay levels in the refinery, and is supplemented by an annual local agreement between the company and the union.

Total personnel employed by MOTOR OIL and AVIN OIL rose in 2005 to 1,377 (averaged over the year). MOTOR OIL remains one of the biggest employers in Greece.

Evolution of MOTOR OIL's and AVIN OIL's Personnel Numbers 2000-2005



The workforce

In 2005, and on an average over the year basis, 980 of MOTOR OIL's 1,168 employees were based at its main site, the refinery in Aghioi Theodoroi, Corinth (the remaining 188 were based at the company's head office in Maroussi). About half the refinery personnel live in the area of Aghioi Theodoroi, where MOTOR OIL is the biggest employer. AVIN OIL, by comparison, employed 209 people in 2005. Besides employees directly employed by the two companies, it should be noted that a significant number of people are indirectly employed through sub-contractors. As a whole, personnel levels have been increasing, despite new investments aiming at enhancing the level of refinery automation. The significant rise in the total number employed since 2003 reflects an increase in personnel required to implement the extensive investment programme made necessary by the clean fuels product specifications of 2005 and 2009.

Avoiding the exclusion of disadvantaged groups, such as the disabled, from the workforce, is a fundamental aspect of HR policy. In 2005, both companies were employing disabled people, offering them equal access to training and other

KEY ASPECTS OF HR POLICY

- Compliance with legislation in force and with established principles of human and labour rights.
- The creation of strong bonds between the workforce and the organisation, through openness and meaningful communication.
- Fairness in all aspects of employee relations.
- Operation of an equal opportunities policy.
- Sharing responsibility for achievement of the company's business goals.
- Fair and competitive remuneration, linked to productivity and in line with prevailing market conditions.
- Offering employees opportunities for professional and personal development.
- Continuous training to ensure that the necessary skills are acquired, so that work is carried out effectively and safely.
- Extending welfare provisions to include employees' family members.

WORKPLACE

means of personal development.

Composition of the workforce

Gender profile of the workforce

The two companies do not discriminate on grounds of gender, although the nature of most refinery jobs means that few are taken by women. Thus, in 2005, across both companies, 14% of the workforce was female, rising to 35% for head office personnel. Among management, women made up 12% of the total, while in other office and technical jobs the percentage is 14%.

Educational level of the workforce

Considerable importance is attached to the educational level of the employees. The companies' aim is to attract, and retain, suitable and competent personnel. In order to develop the qualifications of personnel, to maximise productivity and maintain a high output culture in the workplace, the companies operate various educational, vocational training and personal development programmes. The personnel is encouraged to follow courses leading to recognized qualifications. Approximately 23% of the workforce holds graduate academic qualifications.

Management, technical and administrative staff

In 2005, across the two companies, management grades made up 13% of the total workforce, while technician and administrative staff accounted for 87% of the total. It is an indication of MOTOR OIL's responsible HR policy that the

Composition of the Workforce

Personnel by gender	
Male	86%
Female	14%
Educational level of Personnel	
Graduate	16%
College (TEI)	7%
Secondary/technical	72%
Elementary	5%
Personnel categories	
Managerial	13%
Office personnel	22%
Technical personnel	65%
Age profile	
< 25	3%
25 – 45	55%
> 45	42%
Average age	42.3 years
Length of service	
< 5	29%
5 – 10	7%
10 – 15	17%
15 – 20	15%
20 – 25	19%
> 25	13%
Average length of service	14.3 years

majority of workers, even on the refinery site, are regular full-time employees.

Age profile of the workforce and personnel turnover

The average age of the companies' employees in 2005 was 42.3 years, while 58% of the two companies' workforces were aged less than 45 (as indicated in the table). As far as length of service is concerned, the average length of service was 14.3 years, reflecting the low level of personnel turnover. Some 47% of the combined workforce of the two companies have more than 15 years' service, while only 29% have less than five years' service.

In 2005, MOTOR OIL and AVIN OIL recruited 63 new employees while 66 left for various reasons. Recruitments in 2003 and 2004 were significantly higher than previous years, reflecting the scale of the investment programme under way at the refinery related to the new 2005 product specifications.

The remarkably low level of personnel turnover (averaging less than 4.8% across the two companies' workforces) reflects the long-term and harmonious relationship established between the companies and their workforce. The fact that personnel turnover did in fact rise compared to 2003 is a reflection of a particularly high level of retirements in the subsequent two years.

Personnel Mobility

Hirings	2003	2004	2005
New Hirings	101	150	63
Resignations by reason			
Retirement	25	49	50
Resignation	14	15	10
Other	3	2	6
Total	**42**	**66**	**66**
Personnel Mobility*			
	3,3%	4,9%	4,8%

Personnel Mobility (Turnover Index)=

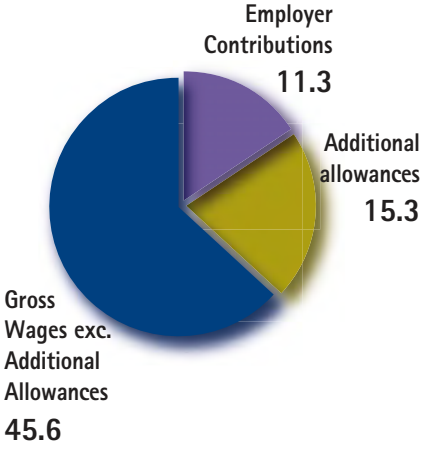
$$\frac{\text{Number of personnel leaving}}{\text{Average personnel number}} \times 100$$

Salaries

MOTOR OIL's and AVIN OIL's approach to remuneration policy is to set and manage salary levels in a consistent and objective way. Competitive and performance- linked remuneration is offered to all employees. Total personnel expenditure during 2005 amounted to 72.2 million euros. This includes the costs of both regular and overtime working, various mandatory employer's contributions to Social Security Funds, and other additional employee allowances not required by legislation. The additional, non-statutory payments comprise various allowances intended to considerably enhance employee income, foster performance and support long-term relationships. The most important additional allowances are:

- A long-service supplement to base salary which is first paid after three years' service and increased after every further three years' service, up to a maximum of 47% of base salary.
- A further long-service supplement comprising a double annual leave allowance

2005 Expenditure on Employees Salaries (million euros)

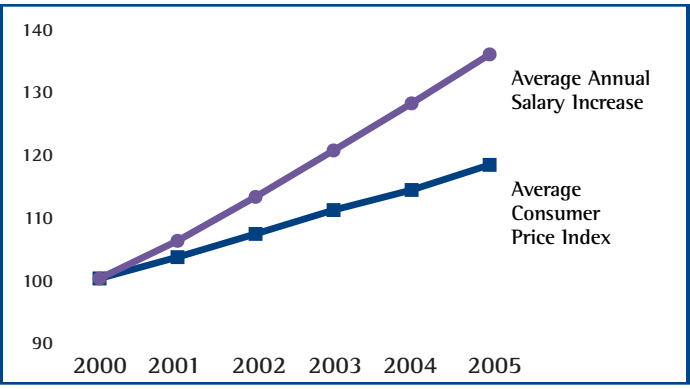


WORKPLACE

for those who complete five years of employment, and a double Easter bonus for those who complete ten years of employment. This means that an employee with ten years of employment receives the equivalent of 15 months pay each year.

- An uninterrupted attendance allowance (for refinery employees) to reward those with no absenteeism.

The average annual salary increments, as a rule, exceed the average Consumer Price Index (CPI), as shown in the diagram of average annual increments in comparison with the evolution of the average Consumer Price Index.



Evolution of the average Annual Salary Increase in comparison to the average Consumer Price Index (Base Year 2000 = 100.0)

- One-off payments of one year's base salary to refinery employees completing 25 years' service, which is paid, again, when 30 years' service is completed.
- Marriage allowance.

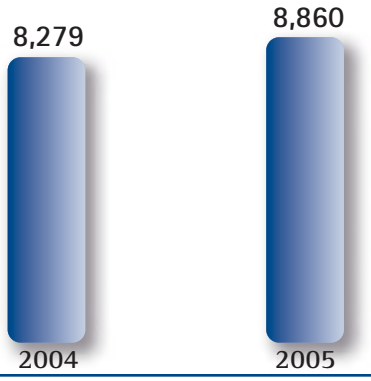
The average annual salary increments, as a rule, exceed the average Consumer Price Index (CPI), as shown in the diagram of average annual increments in comparison with the average Consumer Price Index.

Discretionary benefits

The discretionary non-wage benefits available to employees and their families encompass a wide range of provisions intended not only to provide for their welfare and security over and above legal requirements, but also to strengthen their bonds with the companies, to cultivate co-operation and team spirit and help towards achievement of a healthy work/life balance. Among the benefits introduced on the companies' initiative are:

- A private health and life insurance scheme.

- A company pension scheme.
- Child-friendly working arrangements for working mothers.
- Availability of three occupational physicians to deal with both occupational and personal health concerns.



Expenditure on Discretionary Benefits for Employees and their Families

- Financial support of the employees' football team to compete in Corporate Games.
- Operation of the refinery canteen.
- Organization of excursions.
- Provision of financial facilitations to cover emergencies.
- Provision of a wedding presents.
- Special leave arrangements covering bereavement, childcare needs, etc.
- Organization of Christmas parties for employees' children.
- Provision of "name-day" gifts.
- Transportation of employees to work by bus.
- Other benefits for refinery employees.

VARIOUS DISCRETIONARY NON-WAGE BENEFITS TO REFINERY EMPLOYEES IN 2005

- 89 performance awards for secondary-school children.
- 108 educational grants for university students.
- 54 participations in children summer camps.
- 79 long-service awards.
- 25 wedding presents.
- 35 allowances covering child care.
- 890 allowances to an equal number of children for the start of the school year.

WORKPLACE

SCHEMES COVERING RETIREMENT BENEFITS AND LIFE AND HEALTH INSURANCE

Since 2002, in the framework of the effort to provide upgraded and flexible benefits in line to contemporary trends and requirements, the employee benefits programme has been enriched with a group health insurance scheme providing employees with protection and financial support in cases of unforeseeable medical emergencies. This scheme covers spouses and dependants as well as employees.

This health insurance scheme provides compensation in the following cases:

- Loss of life caused by illness or accident
- Permanent total disability caused by illness or accident
- Permanent partial disability caused by accident
- Loss of earning capacity caused by illness or accident
- Hospital 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 two companies.

The MOTOR OIL employees' football team is a "major force" in the Athens' Corporate Games Football League. It has competed for 14 consecutive years and achieved several major trophies: 7 doubles (championship and cup), 3 championships, 1 cup, and 2 ethos awards. In 2005, it participated in the 17th European Corporate Games tournament held in Athens - involving more than 2,500 athletes in 70 company teams from various countries, who participated in 14 different field events. The team of MOTOR OIL participated as the champion of the Athen's Corporate Games Football League, and repeated its previous successes by winning the gold medal.

At the same time, the AVIN OIL football team participated for a second consecutive year in the "5x5" football competition between oil companies, achieving second place.

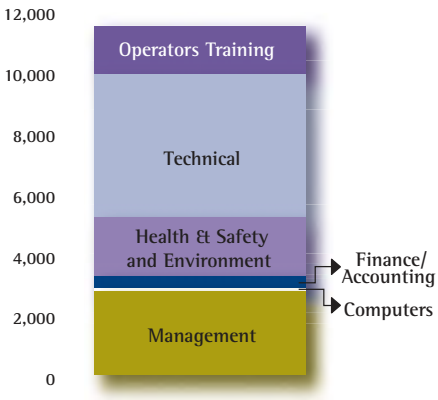
Training

Education and training of personnel, both in respect of personal development and professional training, is a matter of strategic importance for MOTOR OIL and AVIN OIL. The growth strategy of the two companies requires matching training with business objectives. This is achieved by investing in the improvement and development of employee skills. To achieve this objective:

- In-company training seminars are regularly organised.
- Employees participate in 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 Conference.
- Employees are given the opportunity to continue their education and to follow postgraduate courses.
- Employees are encouraged to follow foreign language courses in accordance to business requirements, and are supported financially in this.
- The companies pay for magazine subscriptions and professional society membership fees.

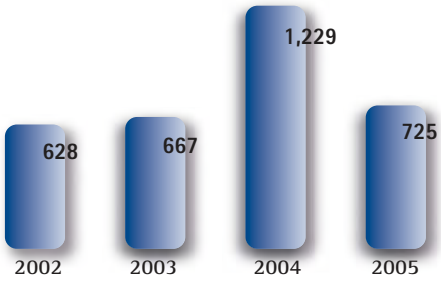
The companies' training policy aims to ensure that each employee's knowledge and skills match their job function; this is achieved through continuous, flexible and comprehensive vocational training and personal development.

Training Man-hours
by Subject 2005
Total Training Hours = 11,476



During 2005, 315 employees participated in training programmes (74 managers and engineers and 241 other grades). The total training man-hours were 11,476, equivalent to 36.4 hours of tuition per person. The total cost (including indirect cost) was 725,000 euros. Both companies are subject to a 0.45%-of-payroll levy administered by the state employment and training body (OAED) which applies to all employers. This levy is paid back to the employers, if they are able to prove that they have carried out training of an equivalent value. The training activities carried out during 2005 were focused on the operators' training, and on technical, management, health and safety and environmental protection matters, finance and accounting and computers, in accordance to the core business activities of MOTOR OIL and AVIN OIL.

Expenditure on Training
(thousand euros)



WORKPLACE

COMPUTERIZED TRAINING SIMULATOR

2005 saw installation of a fully *Computerized Training Simulator* (CTS), of a total cost of 1.2 million euros. The primary purpose of this high efficiency training tool was to facilitate the training of operators on the new production units (i.e. the Hydrocracker and its associated units) before the start-up of the facility itself.
This project, the first of its type in the Greek industry, also included the simulation of the full operation of the Fluid Catalytic Cracker, the most complex plant in the refinery, the operation of which was expected to be greatly affected by the coming on stream of the Hydrocracker.
The installation of the CTS was carried out by the supplier of the system in close collaboration with the MOTOR OIL department responsible for the operation of the Distributed Control System of the refinery.
The CTS is housed in the training facilities of the refinery's New Centralized Control Room. It consists of a network of computers and work stations similar to those used for the actual control of the refinery units. The software and hardware of the CTS is highly sophisticated, allowing an almost accurate artificial replication of the simulated refinery processes. This fact, in combination with the identical to the actual work environment, provides the company with a high efficiency training tool. In view of the complexity of process start up and control, as well as the sophistication of the Distributed Control System, the CTS is an indispensable training facility for both operating and newly recruited staff.
The company gains many benefits from the development of the operation simulator, including:

1. The ability to train the operators on the new process units before they actually come into operation, thus, minimizing the start up problems and difficulties, and ensuring a safer start up and normal operation.
2. The ability to provide realistic training for new operators without the restrictions that apply during the actual operation of the process units.
3. The capability of organising regular training on emergency procedures.

Training using the CTS, following the start up of the new units, is regularly planned. Both new and experienced operators are being trained on a regular basis in all aspects of operational procedures. *It is clear that the CTS represents a major advance in ensuring the safe operation of the refinery.*

The in-company training seminars are carried out in dedicated in-house training facilities, equipped with state-of-the-art IT and presentation systems, available at both the refinery and the head office.

In line with the policy of paying tuition fees to employees pursuing educational qualifications, a number of grants were made in 2005, including those to three employees who attended the postgraduate Management Course at the Hellenic Management Association, one employee who attended an Administration Assistants Course, and to another employee who attended a course on Internal Audit and Control. Furthermore, the tuition fees were paid for seven employees who followed foreign language courses.

Training the new operators

It is MOTOR OIL policy that, when refinery operators are retiring, 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 hiring of new operators is effected about one year before the retirement of their predecessors, so that there is ample time for their effective training and acquisition of the required skills. The training takes the form of a specially organized multifaceted and comprehensive induction programme, including both

technical and theoretical components. The programme ensures that the refinery's technical personnel have acquired both technical skills and competencies and a full understanding of the responsibilities associated with their future 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. The training schedule and subjects covered include:

- Two months training on fundamental subjects (health and safety, environment, fire protection, quality, first aid, properties and specifications of petroleum products, refining processes, maintenance, 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 the assumption of actual operational responsibilities.

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

REFINERY TRAINING MANUALS

A new, four-volume set of training manuals was published during 2005 (Vol. I – *Fundamentals and Lubricants' Processes,* Vol. II - *Fuels' Processes,* Vol. III – *Products,* Vol. IV – *Electromechanical Equipment*) aiming at providing comprehensive and reliable support material for the training of refinery personnel. They replaced earlier documentation published during the 1980s that had become out of date following the recent upgrading and extension of the refinery. The new manuals, produced by MOTOR OIL refinery engineers, constitute single and integrated sources of information, covering all aspects of the refinery's processes and products, including both theoretical and technical documentations. It is obvious that this comprehensive new documentation is important not only for the company; as a unique training aid it can offer much to the training of the technical staff of the country on issues related to the highly specialized sector of the refining industry.

T-B112

Health, Safety and the Environment

Occupational health and safety and environmental protection are fundamental strategic aims for MOTOR OIL and AVIN OIL. That is, we strive to carry out our industrial and commercial operations without compromising the health and safety of our employees or of subcontractors' employees, while maintaining the highest standards of environmental protection and respecting the quality of life of those living in the vicinity of our industrial facilities.

HEALTH, SAFETY AND THE ENVIRONMENT

The importance that MOTOR OIL attaches to its policy on health and safety management and environmental protection, and its commitment to the continuous improvement of performance in these areas, is set forth in the relevant policy, and is reflected in its *Environmental Management System* and *Health and Safety Management System*, that lay down the detailed programmes and auditable targets to be achieved.

Health, Safety and Environment policy

MOTOR OIL operates with due respect for health and safety, and protection of the environment.

To that end, the company is committed to:

- Setting goals compatible with continuous improvement of its health, safety and environmental management systems.
- Complying with, or exceeding, the requirements of relevant legislation and official guidance.
- Producing high-quality products, conforming to up-to-date environmental standards, through the efficient use of raw materials, energy and technology.
- Reporting its performance, good or bad, and thus helping to promote the concept of socially responsible business and of the responsibility of enterprises.
- 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 those of 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 interested parties for developing health, safety and environmental protection programmes

At MOTOR OIL whatever we aspire to achieve, or plan to implement, we do it:

- Safely,
- Without risk to the environment, and
- In an economically acceptable way.

2005

The refinery expansion investment of 350 million euros for the construction of the Hydrocracker complex was completed without any serious accident.

Health and Safety

A fundamental commitment of management, arising out of the company's Health, Safety and Environment policy, is to take all necessary measures and institute all appropriate projects, programmes and procedures for achieving the company targets on health and safety. Furthermore, management provides full support to programmes and actions that foster the safety awareness of employees and contractors, which is a primary prerequisite for a safe workplace.

Delivering on this commitment was put on a entirely new base in 2003 when a comprehensively revised *Health and Safety Management System* was introduced. This was developed by MOTOR OIL's own specialists and was based on best practice elements of other internationally-recognized safety management systems.
The system comprises a four-stage *(Plan → Do → Check → Act)* management cycle, that operates as a self-checking and self-correcting mechanism, designed to ensure continuous improvements in the system's operation.

In 2005, the programmes of the company for achieving the health and safety targets can be grouped in five principal areas:

- Completion of construction, and commissioning of the Hydrocracker complex, without any accident.
- Completion of the 2005 planned refinery shut-down for maintenance purposes, without any accident.
- Further improvements in safety and in the quality of the working environment.
- Consolidation and further improvements in operating procedures.
- Training and fostering safety awareness, preparedness and cooperation with the various stakeholders.

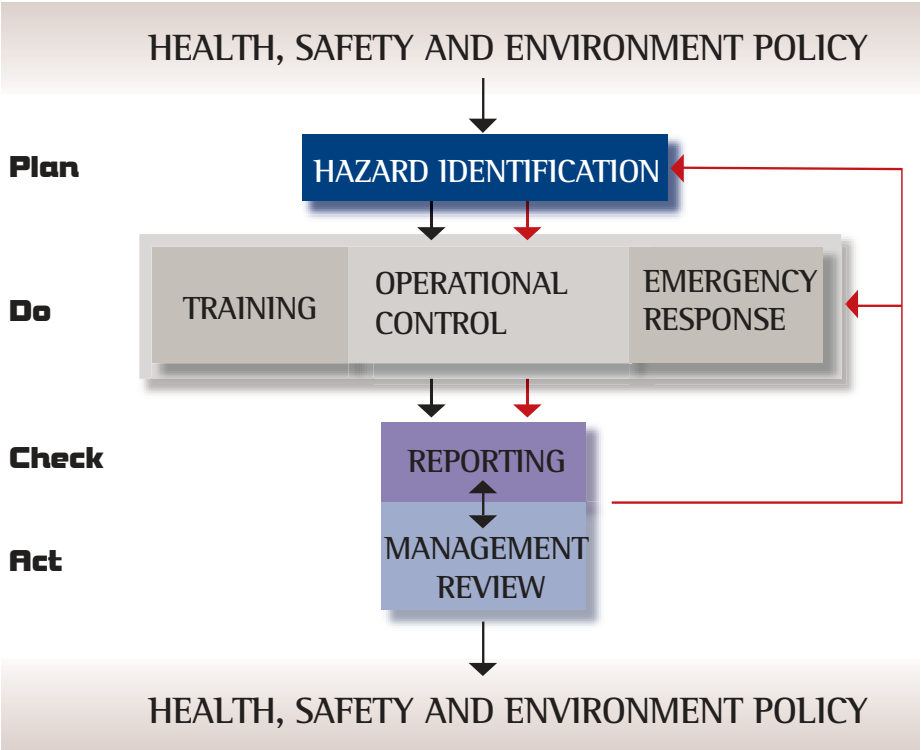
MOTOR OIL runs its operations and business activities according to a set of guiding principles and values, principal among which is the maintenance of a high standard of health and safety throughout its sites and premises.
Protecting the health and safety of all those employed on company premises is a core policy which is implemented through rigorous and systematic procedures and management practices.

HEALTH, SAFETY AND THE ENVIRONMENT

MOTOR OIL's health and safety targets for a safe workplace

- To minimize the risk of major accidents to the lowest level possible.
- To eliminate occupational accidents.
- To achieve continuous improvement in working conditions.
- To ensure that all employees (including subcontractors' employees), the quality of life of neighbouring communities, the environment and the company's own installations, are protected from any harm that might arise from its activities.

Diagram showing the integrated *Health and Safety Management System* of MOTOR OIL



Main features of the Health and Safety Management System

1. Management commitment for setting goals, responsibilities and accountabilities.
2. Strict compliance with relevant legislation, with international standards and codes of practice and with established operational rules.
3. Systematic identification, control and assessment of all risks associated with the hazards arising from the refinery's operations.
4. Continuous monitoring of equipment and workplaces for potential risks.
5. Provision of appropriate and full training to all employees.
6. Ensuring that all operations are carried out in full compliance with safety rules and regulations.
7. Continuous review and updating of the company's *Emergency Response Plan.*
8. Systematic recording, investigation and analysis of all incidents.
9. Active involvement of all employees.
10. Excellent cooperation with public authorities and other stakeholders, including providing them with all relevant information.
11. Systematic monitoring of safety performance, using established industry indicators, so as to ensure constant improvement in performance and the highlighting of malfunctioning and vulnerabilities.

Completion of construction, and commissioning of the Hydrocracker complex, without any serious accident

2005 was a landmark year for MOTOR OIL's refinery: the largest ever expansion and upgrade investment of the refinery that started in 2003, was completed with the commissioning of the Hydrocracker complex, which came into full operation in November 2005.

The scale of work involved was enormous, and is reflected in the number of Permits to Work issued. Whereas normally approximately 80 are issued daily, during the peak of activity, this number rose to 350 permits per day. Similarly, the number of subcontractor personnel engaged on the project rose up to 3,000 daily; the number of man-hours on site rose to 2.6 million in 2005, for the new facilities alone, whereas total man-hours in the refinery for MOTOR OIL employees was approximately 2.2 million.

Despite this major increase in the level of activity, the lost-time injuries (both in year 2005 and in the previous two years) were very few, and those that did occur were not serious (see below).

Completion of the 2005 planned refinery shut-down for maintenance purposes, without any accident

The planned refinery shutdown to allow for scheduled maintenance to be carried out, took place in April 2005. This type of extended interruption of a refinery's operation has to be associated with special vigilance and precautionary safety measures due to the greatly increased risk of accidents. It was an exceptionally satisfactory outcome that no accidents occurred during the course of the 2005 shutdown.

Further improvements in safety and in the quality of the working environment

- 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 technical upgrades, taking account of engineering developments, aimed at maintaining the highest possible standards of safety and accident prevention. The cost of the company's capital projects for improving health and safety standards and for maintaining safety equipment and medical centres was 3.05 million euros in 2005, a significantly increased expenditure over the previous two years. This amount included investments for:

The successful completion, in 2005, of both the construction/ commissioning of the new process units (Hydrocracker complex) and the major refinery maintenance shutdown was the result, in each case, of a well-organized plan of work, including:

raising awareness, among all those involved, of the increased risk level; daily site safety inspections; daily meetings with site managers to identify hazards and initiate re-medial measures; and invest-ments in various general im-provements to the safety of the work environment.

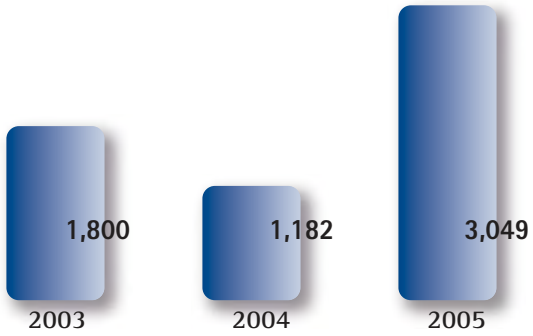
HEALTH, SAFETY AND THE ENVIRONMENT

- operational improvements to the Distributed Control System and fire resistant protection of its wiring,
- upgrading of the wireless communication devices to improve reliability in emergency situations,
- replacement of essential Personal Protective Equipment (PPE) and procurement of new equipment necessary to cover the requirements of the new process units,
- installation of security and emergency communication equipment in the area of the new units,
- fire protection of the pump station of the Catalytic Cracking unit with fixed fire-extinguishing foam system which significantly improves safety by reducing reaction times,
- purchase of an additional state-of-the-art fire tender,
- purchase of a second (backup) diesel-powered fire pump,
- installation of automatic safety valves on fuel and lubricant production units which can be operated by remote control in case of emergency,
- replacement of fire fighting systems at the jetty and in the tank farm.

2005 Health and Safety Investments

	thousand euros
Fire safety	1,175
Emergency response	470
Personal Protective and medical Equipment	301
Risk reduction	485
Security	618
Total	3,049

Health and Safety Investments (thousand euros)



■ At the same time, many of the major capital investments of the period 2002-2005, whose main purpose was the production of clean fuels, 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.

2002 -2005

- Continuous monitoring of equipment and workplaces for potential risks through regular health and safety inspection programmes, involving both internal inspection teams and external safety specialists. The internal inspections are carried out on the basis of an annual schedule, by teams consisting of refinery managers and operators. Recommendations arising from these audits lead to appropriate technical and/or organizational measures being taken to achieve long-term improvements in working conditions. Projects under construction are inspected on a daily basis. In 2005, 416 suggestions for improvements were recorded, while 514, including some from the previous year, were put into effect.

Major safety related capital projects implemented in 2002 – 2005

- In 2005 the installation of a fully *Computerized Training Simulator* was completed. The cost of this investment was 1.2 million euros, and its primary purpose was to facilitate the training of operators on the new process units (refer to chapter *Workplace* for more details).
- The installation of a *Power Management System* was commissioned in 2005; this system improves the reliability of the refinery power network, also directly improving safety levels (cost: 3.1 million euros).
- The installation of the *Advanced Process Control* system continued in 2005. This system constitutes an extension of the Distributed Control System, and up to now it has been implemented in the Catalytic Cracking complex, while it is planned to be deployed in the other refinery units as well (budget: 8.8 million euros).
- 2004 saw the commissioning of the *Custody Transfer System* at the jetty, which has enhanced the reliability, safety and effectiveness of product loading (cost: 1.6 million euros).
- 2004 also saw the commissioning of the new *Truck Loading Terminal*, which incorporates innovative safety technology with positive health and safety implications, including state-of-the-art automatic loading system and improved fire extinguishing devices operating independently from the refinery fire safety network.
- Although installed earlier (in year 2000), the 20.9 million euros project for installing the *Distributed Control System* by which the control of refinery operations was fully computerized, is a sine qua non achievement that directly improved the safety and reliability of refinery operations

HEALTH, SAFETY AND THE ENVIRONMENT

Consolidation and further improvements in operating procedures

Continuous efforts are made to implement best practices by identifying hazards in all workplaces, and applying practices and procedures for their mitigation or elimination. Main activities include:

- The provision of appropriate and adequate training to all workers covering: information and instruction relevant to the hazards arising from their work, correct use of Personal Protective Equipment, safe working practices, appropriate emergency response procedures and first aid.
- Ensuring enforcement of safety rules in all situations, including the implementation of all required protective measures and compliance with safe working procedures.
- The systematic recording, investigation and analysis of incidents (fires, accidents, near-misses) with a view to effecting corrective measures to prevent repetitions. In parallel, established industry indicators are used for monitoring safety performance, so as to ensure constant improvement in performance and the highlighting of malfunctioning and vulnerabilities.
- The active involvement of all workers in health and safety arrangements, both individually and through their being represented on the health and safety committee.
- Refinery personnel are offered regular medical examinations (including blood tests, X-rays, cardiograms and eye tests) and benefit from a comprehensive occupational health service including medical and first aid services and the following support facilities:
  - A main infirmary for the refinery personnel, occupying modern premises covering 100 square meters, staffed by an occupational physician and a nurse, with appropriate equipment and facilities at their disposal including five beds for treatment and for first aid procedures, and a separate room for longer-term treatments.
  - A suitably-equipped first aid station at the Alkylation unit where there is medical assistance available on a 24-hour basis.
  - Three further first aid stations sited at the Central Control Room, at the Chemical Laboratory and at the Hydrocracker complex.
  - Three fully-equipped ambulances.

  The members of the fire-fighting teams are also trained in rescue practices and in first aid provision .
  An infirmary, staffed by two doctors, is available for MOTOR OIL and AVIN OIL personnel at the company's head office premises
- The contingency arrangements for emergencies are fully detailed in the *Emergency Response Plan*. This plan is regularly reviewed and updated so as to take account of the refinery's expansion or of other changes to its configuration, changing legal requirements, technical developments and the experience gained by others in reducing the risks related to major accidents. The 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* are:
  - A Mutual Aid Agreement, dating from 1988, whereby all Greek refineries co-operate in the event of an emergency. The effectiveness of this collaboration is ensured through six-monthly joint exercises involving MOTOR OIL, the local fire brigade and the other refineries.

2005

- Safety drills, organized weekly, and preparedness exercises concerned with the consequences of major accidents that are organized several times a year. During these exercises, the Major Incident Response procedure is activated and all relevant public services are involved.
- The fixed and portable equipment for fire detection, fire-fighting, and leakage detection, 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, operated by trained fire-fighters.

The following actions are indicative of the consolidation and further improvement of operating procedures:

- In June the procedure of the *Emergency Response Plan* for dealing with a Major Technological Accident was subjected to a two-day audit by a state committee comprising members from the Fire Brigade, the Ministry of Development, the Ministry of Employment & Social Protection, and the Ministry of Environment, Physical Planning and Public Works. The purpose of the audit was to evaluate its conformance to the Seveso II directive and to the Common Ministerial Decision 5697/590/2000, while its conclusion confirmed its compliance with the regulations.
- The personnel of the refinery sections in which no accidents were recorded, or whose safety performance was significantly improved over last year, were rewarded with appropriate gifts.
- Particular emphasis was given to auditing and inspecting hot works and confined space works.
- Continuation of the mapping of noise levels in processing and loading areas, and the resulting implementation of noise reduction and/or exposure control measures where necessary.
- Continuation of the development of the database which consolidates the Greek regulatory health and safety requirements relevant to the refinery's operation.
- Continuation of the update and republication of the Material Safety Data Sheets for refinery products.
- Continuation of the work to develop specifications for all health and safety related work equipment in use (personal protective equipment, fire-fighting equipment, etc.)

HEALTH, SAFETY AND THE ENVIRONMENT

Training and fostering safety awareness, preparedness and cooperation with the various stakeholders

The regular training of our own and contracted personnel, the creation of high safety awareness, together with the technical and organisational measures, are the essential pillars for accident prevention and the maintenance of a safe workplace. This fundamental approach governs the *Safety Management System* of MOTOR OIL. In this area, some indicative actions and initiatives are the following:

- The operation of the *Computerised Training Simulator,* significantly improves the effectiveness of operator training (refer to *Workplace* chapter).

- The main subjects covered by the organized in 2005 health and safety training courses included the following general and specialized themes:

  - A refresher training for supervisors and foremen on the safety aspects of permit-to-work systems.
  - Continuation of the programme to train refinery personnel (those issuing and receiving work permits) on particular safety aspects.
  - Specialist training for personnel from all shifts, on carrying out rescue operations at heights, under the direction of the Fire Brigade Rescue Team.
  - Desk-top exercises for retraining all refinery duty engineers on the appropriate response in the event of a major incident.

- The structured and focused efforts to train employees of subcontractors, and to raise their safety awareness continued in 2005, covering:

  - Training of new subcontracted personnel who receive work permits, on the safety aspects of permit-to-work systems.
  - Development of a new extensive training package on the safety aspects of permit-to-work systems, targeted to subcontracted personnel who receive work permits. This package will be used in 2006 training sessions, and includes a general introductory part, followed by a specialized section that covers 29 technician specialties.

- Safety drills and preparedness exercises are regularly rehearsed to improve the preparedness of personnel in handling emergencies, and for testing the

equipment and the procedures related to the *Emergency Response Plan*. During 2005, 53 exercises were carried out: 5 exercises involving response to a major incident; 7 non-planned safety drills involving the general mobilization of equipment; 32 smaller scale safety drills at particular refinery areas; and 9 exercises carried out in the fire-brigade teams training field, aiming at the theoretical and practical familiarization of personnel with the fire-fighting equipment and with the relevant personal protection equipment.

- In order to raise the awareness of safety issues, a training safety film was screened while various health and safety messages and posters are regularly publicised on 13 notice boards on the refinery site. In 2005, the safety specialists of the refinery produced five posters aimed at creating awareness on a number of safety issues.

- The co-operation with other organizations and stakeholders involved in the sector, is regarded as an essential part of a responsible approach to health and safety. During 2005:

  - MOTOR OIL organised the 26th Meeting of Greek Refineries on health, safety and environmental protection. This involved representatives from all Greek refineries, government and local authority officials, the emergency services and other interested parties. These meetings serve the purpose of promoting cooperation, of developing and exploiting synergies, in an area where there is an extended scope for exchanging knowledge and experience.

HEALTH, SAFETY AND THE ENVIRONMENT

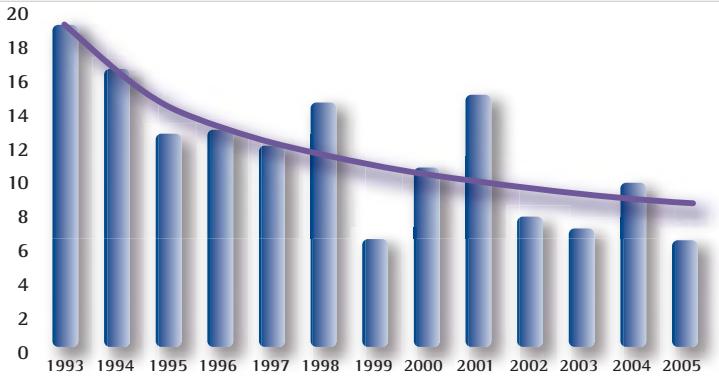
- MOTOR OIL participated in the development of the Municiplity of Corinth's Major Incident Response Plan through the supply of information and the transfer of its experience.

Accident statistics

The successful operation of the *Health and Safety Management System* is reflected in accident statistics (indicating both the frequency and severity of accidents) which have shown a clear downward trend over the years. The accident frequency index showed a reduction in 2005, despite the continuing major refinery expansion and upgrading programme, and the planned refinery shut-down. The accident severity index similarly declined. These statistics relate to our own employees and do not include accidents involving sub-contractors' employees, of which nine were recorded in 2003, four in 2004, and five in 2005.

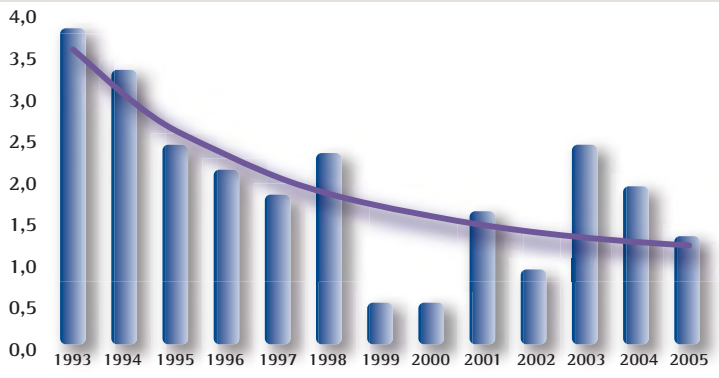
Accident Frequency Index

$$\text{Frequency Index} = \frac{1{,}000{,}000 \times \text{Number of Accidents}}{\text{Total Work Hours}}$$



Acicdent Severity Index

$$\text{Severity Index} = \frac{1{,}000 \times \text{Lost Hours}}{\text{Total Work Hours}}$$



AVIN OIL

In respect of health and safety, AVIN OIL, in its operations, follows equally strict standards as those described above, aiming to achieve equivalent high standards of health and safety and to avoid all types of accidents. The company:

- Fully complies with all relevant legal requirements.
- Regularly makes available to the authorities full and accurate safety data about the products it distributes.
- Provides its employees with a safe and healthy work environment.
- Ensures that health and safety issues are handled by competent and dedicated in-house personnel (occupational physician, safety engineer, etc.).
- Provides appropriate health and safety training to its employees and those with whom it collaborates.
- Keeps abreast, as far as possible, with international technical developments.
- Continuously strives to improve its health and safety performance.

During 2005:

- AVIN OIL codified the full spectrum of safety rules applying to all of its operations, from taking delivery of products, their storage, and distribution and delivery to its customers.
- The safety training of road tanker drivers was extended to cover not only AVIN OIL's own drivers, but also the contracted road tanker drivers involved in the distribution of the company's products.
- The thorough programme of annual inspection of all road tankers (owned and contracted) involved in the distribution of the company's products was continued, in line with state and petroleum industry regulations.

HEALTH, SAFETY AND THE ENVIRONMENT

Environment

Environmental protection is an integral part of MOTOR OIL's business strategy. Since it began operations, the company has been acting responsibly and sensitively in dealing with environmental issues. We operate competitively, but at the same time, as a responsible corporate organization, we espouse the principles of sustainable development, that is, development that satisfies today's needs without compromising the ability of future generations to enjoy access to the same resources. Our activities are planned and implemented within this framework.

MOTOR OIL's commitment to environmental protection is spelled out in the company's Health, Safety and Environment Policy and is implemented through the operation of its *Integrated Management System*.

The company's *Environmental Management System* was certified compliant with ISO 14001:1996 in year 2000 for all refinery activities, while today it is certified compliant with the stricter ISO 14001:2004 standard, by BVQI (Bureau Veritas Quality International). In the oil sector the achievement of the double ISO certification (ISO 14001:2004 for environmental protection and ISO 9001:2000 for quality management) is unique in Greece and rare even in Europe.
The *Environmental Management System* is an effective tool for implementing the company's environmental protection policy, and monitoring its environmental performance according to the set targets.

Environmental investments and costs

More than 80% of the total capital investment in 2005 was consumed in the construction of the Hydrocracker complex that produces clean fuels, and in other projects associated with improving the environmental performance of the refinery. Between, 2001 and 2005, the greater part of the company's total capital investment programme involved environmental protection projects, as shown in the table (which includes relevant investments made by AVIN OIL as well). Of the total 590.6 million euros capital investment during the period, 447.8 million euros (equivalent to 75.8%) concerned environmental investments.

2005 was a significant year because it marked the culmination of a number of major capital investment programmes initiated in previous years – part of the drive to upgrade and expand the refinery's processing configuration for clean fuels production, and to further improve its pollution control performance. Most significant was the commissioning of three new pollution control units during the year, that remediate at almost 100% the environmental impacts of the relevant operational activities.

2005

ENVIRONMENTAL INVESTMENTS AND COSTS 2001 - 2005 (million euros)							
Year	**2001**	**2002**	**2003**	**2004**	**2005**	**Total**	**Percent**
Total capital investment	39.2	47.4	88.5	251.0	164.5	590.6	
Environmental projects	13.6	9.3	58.3	234.6	132.0	447.8	75.8%
For clean fuels	*0.0*	*1.0*	*54.6*	*231.5*	*120.6*	*407.7*	*69.0%*
For improving performance	*13.6*	*8.3*	*3.7*	*3.1*	*11.4*	*40.1*	*6.8%*
Environmental costs	0.6	0.6	0.7	0.7	0.8	3.4	
Total	**14.2**	**9.9**	**59.0**	**235.3**	**132.8**	**451.2**	

Environment protection objectives

- Keeping abreast of legislative developments and ensuring full compliance with all Greek and EU environmental legislation in force.
- Including factors of minimal environmental impact in planning and implementing company projects and activities.
- Training of, and awareness raising of all our personnel and of subcontractors' employees who work on our premises, on the subject of implementing the company's environmental protection policy.
- Monitoring and minimizing gas emissions, as well as the solid and liquid waste, so far as technically and economically possible.
- Monitoring and, as far as possible minimizing, the consumption of energy and natural resources.
- Pre-empting any risk of environmental pollution and preparing, implementing and testing the appropriate emergency and mitigation procedures.
- Evaluating our environmental performance and continually improving our *Environmental Management System.*
- Developing communication and dialogue with all related stakeholders.

- Start supplying clean fuels conforming to European Union specifications for 2009.
- Commissioning of three new pollution control units classified amongst the *Best Available Techniques (BAT)* that remediate at almost 100% the environmental impacts of the relevant operational activities:
  - An electrostatic precipitator removing catalyst particles in the Catalytic Cracking unit.
  - An entirely closed-loop system for handling the sulphur by-product of the fuels' desulphurization processes.
  - A sour waste water treatment unit achieving a separation efficiency of 99.9%.

HEALTH, SAFETY AND THE ENVIRONMENT

The three new "Best Available Techniques" pollution control units

A tangible example of MOTOR OIL'S commitment to environmental protection was the commissioning in 2005 of three new environmental protection units, whose capital cost was 19.8 million euros. For these units the company selected technologies that are classified as "Best Available Techniques", in order to achieve the greatest improvement, *over and above* legal requirements.

1. Electrostatic precipitator that captures and removes catalyst particles in 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 which results in the production of coarse particles that if dispersed into the atmosphere, create particulate matter pollution that might cause health problems if inhaled. The usual and most economical method of controlling these emissions is through the use of cyclones, which are though not entirely effective. MOTOR OIL decided to install an electrostatic precipitator through which the stream of flue gases of the Catalytic Cracker is passed. This is the most environmentally efficient technology available for removing suspended particles. The process achieves reduction of suspended particles concentration to far lower levels than is required by legislation. The capital cost of the installation was 10.9 milion euros.

2. Closed-loop system for handling the sulphur by-product of the fuels' desulphurization processes

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

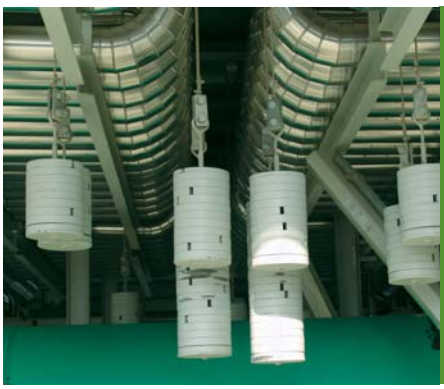
3. New sour waste water treatment unit

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

Compliance with environmental legislation

MOTOR OIL strictly complies with the environmental protection terms of its operating license, and with all its other relevant obligations. Thus the company:

- Submits annual reports to the competent authorities on the quantities of emissions to air, and the amounts of liquid and solid waste arising from the refinery's operation, in accordance to EU law (decision 2000/479/EC), as required for the implementation of the European Pollutant Emission Register (EPER).
- Reports to the competent authorities on total annual emissions of sulphur dioxide, nitrogen oxides and particulate matter from its major combustion units, as required by EU directive 2001/80/EC.
- Similarly, reports are made to competent authorities and the local authorities (Corinth Prefecture and Aghioi Theodoroi Municipality) on annual emissions to air, and on the amounts of liquid and solid waste, and on a monthly basis, in respect of liquid waste.
- Reports to the competent authorities are also made on the management of solid waste and, where appropriate, the company collaborates on this with licensed solid waste disposal companies to ensure the most effective handling



Clean fuels production - the Hydrocracker complex

The first phase of the company's capital investment programme for clean fuels production according to EU decisions for reducing the sulphur and benzene content of fuels, was completed in 2000, and amounted to a capital investment of 67 million euros. The aim of the EU regulation was to reduce the environmental pollution from motor vehicle emissions, on the basis of the outcome of the EU Auto Oil I programme. At MOTOR OIL, this investment had involved the construction of a new Benzene Hydrogenation unit for treating the reformate stream, a new Gasoline Hydrodesulphurization unit in the Catalytic Cracking complex, and the upgrading of the Naptha Reformer unit.

Subsequently, following the second stage recommendations of the EU Auto Oil II programme for further reducing the environmental impact of motor vehicle emissions, EU proceeded in regulating further reductions in the sulphur content of unleaded gasoline and automotive diesel: to 50 ppm (parts per million) by 1.1.2005 and to 10 ppm by 1.1.2009. To meet the challenge of conforming to the new product specifications in the most effective way, both from the environmental and the business aspect, MOTOR OIL implemented its biggest refinery expansion programme to date, involving the construction of the Hydrocracker complex.

HEALTH, SAFETY AND THE ENVIRONMENT

The Hydrocracker complex

The medium-pressure, 350 million euros Hydrocracker complex, commissioned in November 2005, is classified amongst the "Best Available Techniques" for the production of gasoline and diesel grades with extremely low (practically zero) sulphur content. All project targets were met: the facility came on stream on schedule, the products' specifications and quality were fully met, and costs remained within the budget. Following this investment, MOTOR OIL has the capability to produce fuels satisfying EU specifications both for 2005 and 2009. Actually, the company today produces and supplies fuels containing less than 50 ppm sulphur, ahead of its legal requirement, with consequent benefits for the environment. It already has the capability to produce fuels containing 10 ppm sulphur, helping in conforming to the EU requirement for the gradual penetration in the market of the 10 ppm sulphur gasoline and automotive diesel, as early as from 1 January 2005.

In total, the refinery expansion project comprised construction of the following units:

- a 37,000 barrels/day capacity medium pressure Hydrocracker unit (Mild Hydrocracker);
- a 32,000 barrels/day capacity, diesel-fuel polishing unit, integrated with the Hydrocracker;
- a 65,000 Nm^3/hr hydrogen production plant;
- a 150 KV sub-station for the connection of the refinery with the interconnected electricity transmission system, along with a newly-installed gas turbine, raising the installed power capacity to 62 MW (under ISO conditions);
- A new sulphur recovery complex.

Furthermore, an extensive revamp of the existing distillation units (atmospheric and vacuum) was carried out, as well as a restructuring of the refinery utilities, such as the installation of a new flare, of new desalination units, of new air and water treatment units, etc.

The Hydrocracker complex reduces the concentration of sulphur oxides and nitrogen oxides in the flue gases of the Fluid Catalytic Cracking unit. As a result of this, and of a number of other upgrades, adjustments and additions, the environmental performance of the refinery has been considerably improved, both in respect of gaseous emissions and in respect of the management of liquid effluents. Finally, considerable attention was paid, during the design and construction phase of the refinery extension, for reducing noise levels, by insulating all noise sources, such as pumps, for example.

Optimization in the consumption of energy and natural resources

The refinery's production processes are especially energy-intensive, with similarly large requirements in steam and water. The company aims to cover all the refinery's electric power requirements through self-generation of electricity and the use of alternative fuels; it also aims to prevent pollution of the environment through the use Best Available pollution control Technologies, wherever possible.

- During 2005, the installation of a 3.0 million euro Power Management System (PMS) was completed, increasing significantly the reliability and performance of the refinery's electrical power system, subsequently resulting to a positive effect on environmental performance as well.

- Also during 2005, the 2.7 million euro upgrading of the crude oil pre-heating furnace of the atmospheric distillation column was completed. This upgrade had the effect of increasing the thermal output of the process at 87% from a previously 80%, subsequently resulting to fuel economy in the order of 1 metric ton per hour. The final outcome is a significant reduction to the energy con-

sumption of atmospheric distillation and to the emissions of air pollutants.

- Work continued on the 1.0 million euros, phased renewal of all steam boilers of the refinery, with the upgrading of the largest of the four boilers. This project will reduce both fuel consumption and the emissions of air pollutants.

- The construction of a new desalination plant was completed during 2005. The plant feeds the steam boilers with water at an improved efficiency over the one existing before, thus reducing the energy requirements of the refinery.

- An agreement was signed in January 2004 with the state gas company DEPA, covering the connection of the refinery site with the new natural gas distribution network. As a result of MOTOR OIL becoming the principal prospective industrial consumer of natural gas in the region, it became economically feasible for the natural gas pipeline network to be extended to Corinth, Patras and the surrounding region, a project which will have significant positive economic and environmental consequences for the region.

The use of natural gas at the refinery will help to improve its economic efficiency, given that it is the best fuel for power production and the best raw material for hydrogen production, while its use as a fuel in refinery furnaces will lead to less polluting emissions. Natural gas use in the refinery concerns the following:

- 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 currently used feedstock by the hydrogen plant is naptha and LPG).
- An alternative fuel for the gas turbines of the refinery's power generation plant.
- An alternative or supplementary fuel for those refinery furnaces that currently use fuel gas.

Computerized control of refinery processes

The *Distributed Control System (DCS)*, that was commissioned in 2000, is the software system, along with the required hardware, used for the fully computerized control of the refinery processes. Although DCS was not primarily an environmental protection investment, having allowed the automation of production, has had a significant positive effect on environmental performance. Similarly, there will be 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 throughout the refinery. APC is a fundamental tool for optimizing the performance of the units and processes on which it is applied, resulting in cost benefits, better utilization of energy, raw materials water and steam, in the end leading to enhanced environmental performance. During 2003-2005, as part of an 8.8 million euros investment programme, APC was applied on a number of refinery units, and it was modified to cater for the new operational conditions after the commissioning of the Hydrocracker complex, while its migration to additional refinery units is under way.

HEALTH, SAFETY AND THE ENVIRONMENT

Management of gas emissions and monitoring the air quality

Climate change - the Kyoto protocol

MOTOR OIL is participating in the Greek National Allocation Plan on Emissions Trading following the coming onto force of the Kyoto Protocol, aimed at achieving agreed reductions in greenhouse gas emissions by 2010. In 2004, MOTOR OIL 's estimated carbon dioxide emissions were calculated so as to assemble baseline data for the National Allocation Plan, as required for by EU directive 2003/87/EC. In 2005, a report on actual carbon dioxide emission levels, verified by an accredited body, was prepared for submission to the competent authority. A series of measures are under way to reduce carbon dioxide emissions, and emissions of other greenhouse gases (which in the case of the refinery means methane and nitrogen dioxide), including:

- Covering the refinery's entire energy requirements through operation of four gas turbines (of an installed total capacity of 62 MW), and the planned use of natural gas as an alternative fuel for power generation.
- The planned use of natural gas as a feedstock for hydrogen production.
- The revamping of the crude oil pre-heating furnace.
- The under way phased renewal of all steam boilers.
- The reduction of sulphur and nitrogen oxides emissions from the Fluid Catalytic Cracking unit as a result of the installation of the Hydrocracker complex.
- The optimized control and operation of the refinery units following installation of the DCS and APC electronic control systems.

Quality of fuel gas

Fuel gas, before it is used as such, is pre-treated for the removal of hydrogen sulphide so that the emission of sulphur dioxide in the flue gases is minimized. Following the commissioning of the new sulphur recovery unit in 2003, the efficiency of this process was considerably improved. In 2005, as part of the improvements associated with bringing on stream the Hydrocracker complex,

further new sulphur recovery units were commissioned resulting in a recovery efficiency of more than 99.9% (Best Available Technique); practically, this means that the hydrogen sulphide content of fuel gas is reduced to zero percent.

Air quality

The monitoring of gas emissions is accomplished by three, appropriately placed fixed sampling points/analysers and a mobile analyser which measures the concentration of pollutants in the air. The principal pollutants – such as nitrogen oxides, hydrogen sulphide, sulphur dioxide, hydrocarbons, particulate matter PM_{10}, and total suspended solids – are monitored continuously. Furthermore, computational methods are also used, in combination with the measurement of specific parameters.

The control and minimization of leaks of volatile compounds from refinery equipment is achieved by applying the Leak Detection and Repair Program (LDAR) based on the EPA 21 method. By this technique, the concentration of volatile compounds is measured at the potential leak points and, when a reading above 5,000 ppm is registered, the relevant item of equipment is immediately repaired.

- During 2005, the 10.9 million euros project to reduce the emission of suspended catalyst particles from the Catalytic Cracking unit was completed. This project included, among other measures, the installation of an electrostatic precipitator for processing the flue gases from the unit, in accordance with the Best Available Techniques for refineries adopted by EU authorities. The electrostatic precipitator is not an imposed by the law method, nevertheless it achieves far greater reduction in suspended particulate matter than is required by legislation (refer also to the section *Environmental Investments and Costs* in this chapter).

- During 2005 the air quality monitoring stations were upgraded by the addition of new recording devices for improving the monitoring of air pollutants (dispersed emissions). Also, the programme of installing continuous monitoring analysers in the flue gases of the main combustion units was completed. These analysers measure the following parameters, the values of which are electronically transmitted in the Central Control Room: flow rate, temperature, oxygen, dust, humidity, nitrogen oxide, and sulphur dioxide. This programme makes possible the full monitoring and control (through the DCS) of the emissions from the main process units of the refinery.

- Finally, in 2005 the installation of continuous monitoring analysers in the flue gases of the burner that burns the gases produced by the sulphur recovery process was completed. These analysers measure the following parameters: hydrogen sulphide, sulphur dioxide, carbon disulphide, flow rates, temperature, carbon monoxide, and oxygen. The analysers are connected with the DCS, allowing the real time monitoring and control of the sulphur recovery process, so that the targeted recovery efficiency of more that 99.9% is achieved.

HEALTH, SAFETY AND THE ENVIRONMENT

Upgrading of the Waste Water Treatment plant

In 2004 a project was initiated to upgrade the Waste Water Treatment plant, involving installation of a new biological treatment unit and an upgrading of the primary and secondary treatment processes. The aim was to increase the plant's capability to take account of the new demands placed on it by the operation of the Hydrocracker complex; also to cater for extraordinary situations of heavy rainfall. Moreover, the project provides for the modernization of the unit by the implementation of new technologies in order to further improve the quality of effluents, and its availability. This 16 million euros project was nearing completion at the end of 2005.

Management of liquid waste

Various types of liquid waste, created by refinery operations have to be treated, including: water streams from the various production units, from the draining of storage tanks, rain water collected within the refinery area, and ballast water from oil tankers.

Liquid effluent before disposal to the sea, undergoes the following three stages of treatment, in accordance with the Greek environmental legislation:

- **Primary** treatment, involving a gravity separation process carried out in API oil separators to remove the oily components.
- **Secondary** treatment, involving sand filtration for the removal of suspended solids and the further removal of oily components, resulting to a reduction of the BOD (Biological Oxygen Demand) and of the COD (Chemical Oxygen Demand).
- **Tertiary** treatment (biological treatment with two biofilters), which achieves the oxidation and destruction of biological pollutants, through a physical process, under controlled conditions (pH 6.5 - 8.5). The biological treatment is based on the controlled use of micro-organisms for the biodegradation of organic material into simpler and demonstrably less-environmentally-harmful materials. Waste material, having passed through the biological treatment plant, complies with all current legal requirements.

The "sour water" from the process units undergoes special treatment – for the removal of toxic substances including hydrogen sulphide, ammonia and phenols – before it is passed to the waste water treatment plant. Similarly, the alkaline liquid waste ("spent caustic") is neutralized in the neutralization unit and the resulting effluent is channelled to the waste water treatment plant.

Monitoring the quality of coastal water in the area of the refinery

In 2005, MOTOR OIL completed three years' of cooperation with scientists from the Laboratory of Applied Geochemistry of the Geology Department of the University of Patras, who have been researching the quality of coastal waters in the region of the refinery.

For this research, measurements in the coastal water concerned, were made of: temperature, conductivity, dissolved oxygen and pH. The results were plotted to show the distribution of measurements at different locations. Measurements were also taken at different depths.

State-of-the-art monitoring and recording equipment was used, allowing very accurate measurements to be taken at minute and second intervals; the recorded measurements were subsequently transferred to a computer to be subjected to further analysis by statistical methods. The advantage of this modern methodology, as briefly described, is the clarity of its results. This sampling and analysis was carried out by experienced scientists from the University.

Furthermore, a large number of samples were brought to the laboratory where after being filtered by a vacuum pump, were analysed for suspended solid contaminants, including the following: Fe, Mn, Pb, Cu, Cd, Co, Cr, Ni, και Li. Dissolved Mg was also measured. Charts were drawn to illustrate the geographical spread of the various contaminants.

For the measurement of the basic parameters, five continuous monitoring stations were used, while 13 stations were used to obtain samples for measurement of suspended contaminants. During certain periods, such as during the summer when extreme conditions apply, the basic parameter measurements were taken from up to 10 sampling points. Statistical analysis of the data was carried out to determine correlations between the variables, including the correlations with conductivity and pH, and the respective graphs were drawn up.

From the three-years on-site and laboratory measurements, the statistical analysis of the accumulated data and the analysis of the charts and graphs, the following conclusions are drawn:

- *In respect of temperature and conductivity, the measurements were found to be within the same range of values as would be expected in other similar areas of the Mediterranean for the same time periods.*
- *The coastal waters were well oxygenated during all surveyed periods, including during the summer months.*
- *Levels of pH were found to be within a range that would be expected in a seawater environment.*
- *The comparison of the values of the parameters and of their geographical distribution over the three-years period, leads to the conclusion that no significant trends are apparent in the readings obtained, and the conditions are deemed to be as stable as would be expected for Mediterranean coastal waters.*
- *The concentration of the dissolved suspended matter and of the measured metals, was found to be low for the whole range of substances studied, and was similar to the concentrations found in other Greek coastal waters.*

In conclusion: The measured low concentration of dissolved substances and suspended materials, and the low concentration of metals were typical for such a coastal area.

Professor S. Varnavas
Laboratory of Applied Geochemistry
Geology Department
University of Patras

HEALTH, SAFETY AND THE ENVIRONMENT

The management of solid waste - recycling

The oily deposits from crude oil tanks are treated for oil removal at a yield of more than 90%, while the resulting solid residue is subjected to biological treatment in landfarms before disposal as filling soil. These landfarms, conform to the relevant API landfarming standard, and occupy an area of 36,000 square meters.

In 2004, a project of particularly important environmental significance was carried out. It concerned the dismantling of the facility used, in the past, for adding tetraethyl lead (TEL) to gasoline. This equipment, containing highly toxic lead residue, was dismantled by a firm specialized in handling lead-containing materials. The lead-containing mud residues were exported to Belgium where they were incinerated.

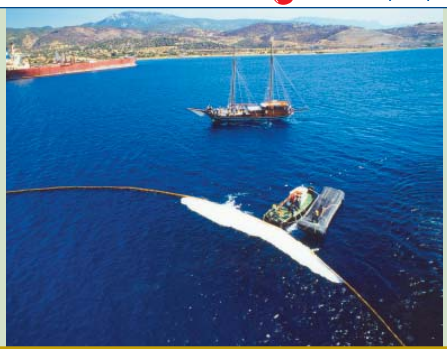
Exhausted catalysts are collected by firms licensed to handle solid disposals and are disposed of in a number of approved ways (sold abroad, regenerated, or disposed of at cement factories to be used in cement kilns). During 2005 waste catalyst material containing Ni-Mo and Co-Mo compounds were exported and disposed of by a licensed disposal contractor.

For used lubricants and their packaging, MOTOR OIL has contracts in place with a firm specialized in recycling used oils and with a firm specialized in handling used packages. These contracts provide for the recycling of used oils and of their packaging, contributing to the protection of the environment and the saving of raw materials. The company also collaborates with firms specializing in the recycling of batteries, motor vehicle tires and of computer equipment.

Forty tonnes of waste paper were sent for recycling during 2005.

Preparedness for mitigating the environmental impacts of oil spill accidents

The potential consequences of sea water pollution, depending on its scale, may be serious, in terms of the destruction of marine life, causing negative economic effects in affected areas and requiring extensive costs for the remediation of the environmental damage. Thus, the prevention of pollution of coastal waters is of particular concern to MOTOR OIL, requiring preparedness and contingency planning so that appropriate action can be immediately taken in the event of a



major incident.

MOTOR OIL is committed to taking all possible measures to prevent damage that may occur as a result of accidents – large or small – that could happen during the normal operation of its refinery, on the land or to the sea area for which is responsible. Should such as eventuality occur, however, the company is also committed to effectively and speedily respond to small and medium level pollution incidents (Tier-1 and Tier-2) in the coastal area around the refinery, using all its available expertise, know-how, equipment, and trained staff. The equipment the company is able to deploy in these situations exceeds by far the minimum requirements as laid down by legislation.

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 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 being continuously trained on the mobilization and use of this equipment. It also has appropriate stocks of oil dispersants, used at the final stage of clean-up operations, which it is authorized to use by the Port Authorities.

The oil spill response equipment is regularly upgraded in order to conform to state-of-the-art technologies and to pollution control requirements. Furthermore, the company is contracted with Southampton Oil Spill Response Limited, an international organization that provides know-how, equipment and materials and technical support in dealing with oil pollution, especially large scale (Tier-3) incidents. MOTOR OIL is also a member of the Mediterranean Oil Industry Group (M.O.I.G.), a regional oil industry forum on oil spill preparedness and response for the Mediterranean region whose aim is to ensure good coordination by the oil industry in cases of major oil spill incidents and to act immediately to prevent damage to coastal waters.

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

HEALTH, SAFETY AND THE ENVIRONMENT

Communication with neighbouring communities

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

Complaints expressed by refinery neighbours are recorded and analyzed, and short or long term measures are taken to address them. There were 36 such complaints in 2005, significantly more than the 23 received in 2004. However, it should be noted that 19 of these complaints were made during the months of August and September and were related to the increased annoyance associated with high noise levels due to the steaming of the piping of the Hydrocracker complex, before its commissioning. This annoyance was temporary; it does not any more exist, and will not happen again.

AVIN OIL

AVIN OIL has been operating responsibly and effectively in the oil products market for 28 years and respect for people and the environment has always been, and remains a priority. 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 Environment Management System* which provides for regular audits and management reviews to ensure its effectiveness and continuous

improvement.
The company has invested in its distribution network so as to comply with the requirements of EU directive 94/63 (Stage I) concerning the control of volatile organic compound (VOC) emissions from petrol storage and distribution. The company's fleet of road tankers that distribute its products has been equipped so as to control VOC emissions and the installation of similar equipment at AVIN

OIL's truck loading terminal at Aghioi Theodoroi means that the company's entire fuels distribution operation – including the truck loading terminal, the road tankers themselves and the service stations – is now equipped with VOC emission control technology.

AVIN OIL has contracted with a firm specializing in the recycling of used lubricants and with a company specializing in the recycling of lubricants packaging; these contracts provide for the collection and recycling of AVIN OIL's lubricants and packages after use.

During 2005:

- Revamping of operations at the Aghioi Theodoroi Truck Loading Terminal (TLT) were completed which will result in reduction in power consumption by 25%. In addition, the loading gantries of the terminal were replaced to comply with top loading.

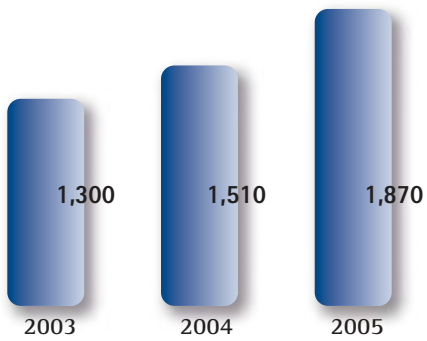
- As soon as the relevant regulatory requirements made it possible, AVIN OIL proceeded to the renewal of its entire fleet of owned road tankers, introducing new, environmentally-friendly vehicles using state-of-the-art emission control equipment, according to the legislation in place.

Community involvement

MOTOR OIL, as a responsible and active corporate citizen, strives to ensure that its activities have a positive and productive impact on the social environment in which it functions. Placing special emphasis on the community in its threefold "economy-environment-community" involvement, it recognizes the value of fulfilling its civic role, with the aim of contributing to economic growth and promoting communal and cultural life in the area where the refinery is located, as well as in society as a whole.

COMMUNITY INVOLVEMENT

In 2005, MOTOR OIL continued the long tradition created by the company with activities benefiting various recipients. Based on its corporate aims and values, this has been consistently demonstrated over the years through:



Community Investment (Thousand euros)

The community contribution of MOTOR OIL over the last three years was 4.7 million euros.

- cultural, intellectual, athletic, philanthropic and social activities and initiatives,
- financial contributions to education and the sciences,
- donations and sponsorships for international sports meetings and athletics associations,
- donations to hospitals and church-run aid agencies,
- support for the work of non-governmental organisations and charitable institutions, and
- general assistance in addressing the social needs of groups and individuals.

Contribution to local communities

Every year, MOTOR OIL actively and regularly contributes to social, cultural and athletic activities of the surrounding communities, offering to the municipalities near the refinery site – Corinth, Loutraki, Aghioi Theodoroi, Saronikos and Solygia:

- financial support for the organisation of cultural, social and sports events,
- financial aid to various associations in the area,
- support for social solidarity projects,
- assistance in the personal development of the local workforce through educational and cultural initiatives, and
- financial aid for local infrastructure projects which have a social impact.

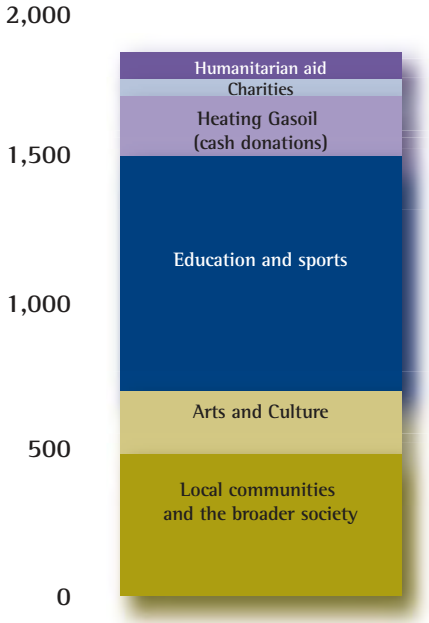
MOTOR OIL contributes to initiatives which promote these areas and facilitate their development. It seeks to upgrade its relations with local communities through creative dialogue, so as to utilize synergies, leading to more tangible results than merely meeting social needs.

Educational assistance

The company provides financial support for various school activities and programmes. The following are some examples of these activities in 2005:

- Financial aid for schools in Aghioi Theodoroi (2nd Kindergarten, Elementary School, and Junior and Senior High Schools) for educational visits, the purchase of equipment and teaching aids, the creation of a lending library, and for the provision of breakfast to destitute schoolchildren.
- Economic support for the Isthmia Elementary School and Kindergarten, for cultural events and educational excursions.
- Financial assistance to the newly established Special Professional Education and Training School for people with special needs, for the purchase of equipment.
- Economic aid for the Isthmia Junior High School to enhance its technical and material infrastructure, and for organizing cultural events.
- Financial support for the 3rd Corinth Integrated Senior High School, for the purchase of a photocopier.
- Financial aid to the Corinth Special

Our Contribution to Communities 2005 (thousand euros)



COMMUNITY INVOLVEMENT

Concert by the "Mikis Theodorakis" Orchestra

In 2002, a 1,600-capacity open-air theatre was inaugurated at Examilia, Corinth, named after renowned Greek composer Mikis Theodorakis. MOTOR OIL undertook exclusive sponsorship of a concert at the theatre by the *"Mikis Theodorakis"* Orchestra in 2005, as it had done in the previous three years. The continuation of this sponsorship expresses the company's esteem and appreciation of the composer's work. The concert on July 24, 2005, coincided with Mikis Theodorakis' 80th birthday and thus it was an extremely festive event. The concert, featuring the orchestra's musicians and well-known singers of the composer's works, was an important cultural event in the area, presenting high standard entertainment for its huge audience.

Elementary School for the purchase of equipment.

- Economic assistance for the 1st Corinth Integrated Senior High School's *"Inter-religious School Acquaintance"* programme, which aims at the schoolchildren's acquaintance and exchange of views and experiences with the pupils of Muslim schools in the Thrace region.
- Covering part of the expenses of an educational trip to Italy for young students in the Solygia Municipality.

Cultural contribution

MOTOR OIL's significant contribution to activities promoting the cultural level of local communities continued in 2005:

- The company sponsored the Corinth Municipal Cultural Centre's organisation of the summer events, *"Cultural Mosaics 2005"*, which included concerts and theatrical performances, with the participation of well-known, and distinguished performers.
- It supported the organisation of cultural events by the Aghioi Theodoroi Cultural Centre.
- It provided financial assistance for events organised by various local associations (the Aghioi Theodoroi *"Psiloreitis"* Cretan Club, the *"Mainalo"* Corinth Municipal Arcadians Union, the *"Pindos"* Epeirot Association of Corinth, etc.).

Contribution to sports

MOTOR OIL supports activities that promote the spirit of athleticism. Examples of this contribution to local communities in 2005 include financial aid for the *"Saronikos"* Sports Club for the construction of infrastructure projects at its football field, as well as economic aid for numerous associations such as: the *"Corinthos"* Pan-Corinthian Athletics Club, the Corinth Gymnastics Sports Union, the *"Aghioi Theodoroi"* Sports Association, the *"Theseas"* Athletics Club, the *"Ethnikos"* Football and Sports Club of Xylokeriza, the *"Loutraki"* Football and Athletics Club, the *"Tiron"* Sports Association, the Corinth Marine Club, the *"Isthmiakos"* Sports Club, etc.

Social solidarity projects

- Significant financial aid was given to the Aghioi Theodoroi elderly people's home, for its annual programme of excursions and other events.
- Economic assistance for the *"Efthymeion Centre"* for Treatment and Rehabilitation of People with Special Needs, in Corinth.
- Distribution of Christmas gifts for schoolchildren in Aghioi Theodoroi and Isthmia.
- The company provides assistance to neighbouring communities in emergency situations, placing at their disposal the refinery's technical, fire-fighting and medical equipment whenever necessary, as well as its personnel buses to meet the occasional transport needs of schools and sports clubs.

Support for local infrastructure improvements

- Financial aid to the Aghioi Theodoroi Municipality for the purchase of an excavator and for drilling operations for the water supply of local dwellings.
- Donation to the *"Nea Zoi"* Katsiviri Development Association for the construction of its offices.
- Donations were also given to a number of developmental and other associations in the region (mainly in the Aghioi Theodoroi Municipality) for infrastructure works. These associations included: the *"Glykia Zoi"*, *"Kavos Isthmia"*, *"Filothei"*, *"Ano Kinetta"*, *"Kiafa Beka"*, *"Panorama"* and *"Nea Zoi"* development associations, as well as the *"Aghioi Theodoroi"* Forest Protection Association, the Federation of Aghioi Theodoroi Residents Associations and the *"Geraneia"* Hunting Club.

Contribution to heating expenses

The company offered significant financial assistance to meet part of the heating expenses during the winter for schools, orphanages, public kindergartens, childcare centres, churches and religious institutions in the neighbouring municipalities, as well as of a large number of similar recipients in other regions of the country, mainly in the Athens area. Examples of these were the *"Corinth Special Elementary School"* for children with special needs, the *"Smile of the Child"* charity organisation, and the *"Efthymeion Centre"* for Treatment and

COMMUNITY INVOLVEMENT

Rehabilitation of People with Special Needs. In addition, the refinery's canteen provides a free daily lunch for residents of the Corinth elderly people's home.

Support for the Corinth market

The company – apart from being the area's biggest employer, providing direct or indirect income for a large number of families – also participates in the overall economic development of the region around the refinery, boosting 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.

Broader social contribution

MOTOR OIL's civic activities are not limited to local communities, but cover a broader spectrum in many sectors, such as:

- supporting education and the sciences, literature and the arts,
- providing economic support for sports,
- providing financial aid for charity events,
- assisting church-run activities and non-governmental/non-profit organisations,
- supporting healthcare services, and
- providing humanitarian aid to the victims of natural disasters.

Thus, in 2005, the company continued its multifaceted activities, of which the following are some examples:

Supporting education and the sciences, literature and the arts

MOTOR OIL, as a company wholeheartedly committed to the concept of Corporate Social Responsibility, is interested in bolstering and promoting education, research and technology as the three main pillars constituting the driving force for progress and the basis of society's future. It also believes in the role of art and culture as the components of healthy social development, based on solid intellectual foundations. For this reason, it provides multifaceted support for activities included within this framework as well. Examples in 2005 of this long-standing and consistent interest are:

"Vardinogiannis Foundation"

The *"Vardinogiannis Foundation"*, sponsored primarily by MOTOR OIL – the other sponsors are other companies in the Vardinogiannis Group – has been operating since 1989. Its mission is to grant scholarships and provide financial assistance for low-income candidates, who have distinguished themselves academically, for graduate or post-graduate studies at tertiary education institutions both in Greece and abroad. Through these scholarships and financial aids, the candidates are assisted in overcoming any financial problems for the smooth continuation of their studies. In the past five years, the number of new scholarships and financial aids granted has exceeded 70 annually.

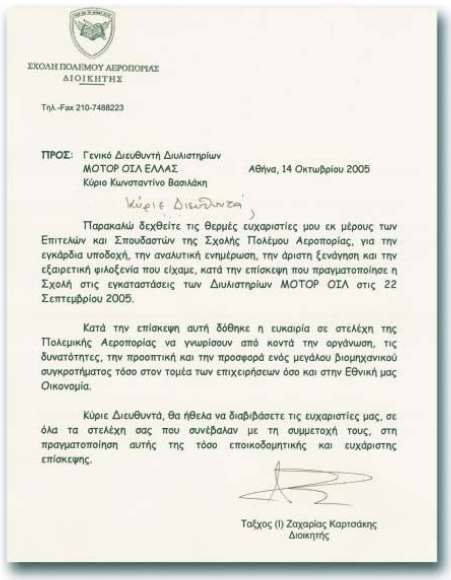
Grant to the Athens College Scholarships Programme

In 2005, MOTOR OIL made a significant grant to the Athens College Scholarships Programme. Athens College, which belongs to the Greek-American Educational Foundation, a non-profit body, was established in 1925 by a group of enlightened Greeks (spearheaded by Emmanuel Benakis and Stephanos Deltas), backed by American philhellenes. It offers primary (elementary school) and secondary (junior and senior high school, International Baccalaureate) education. Prominent figures in contemporary Greek society have completed their secondary education at Athens College.

The founders' vision – which was implemented from the outset of the College's operation – was to create a school where "the pupils' intellectual, moral and physical strengths, and especially their character, would develop harmoniously" through enhancement of the existing education system "with modern educational methods, adapted to the history, tradition, psychology and national needs of the country."

Since the College was established, the Scholarships Programme has been a keystone of its pedagogical-social philosophy and a fundamental element of its special character. The aim of this programme – unique in Greece in terms of its type and extent – was and is to offer gifted children (whose families face economic problems) the opportunity to study at the College. The creators and original sponsors of the scholarship fund were Stephanos and Penelope Deltas.

COMMUNITY INVOLVEMENT



ΣΧΟΛΗ ΠΟΛΕΜΟΥ ΑΕΡΟΠΟΡΙΑΣ
ΔΙΟΙΚΗΤΗΣ

Τηλ.-Fax 210-7488223

ΠΡΟΣ: Γενικό Διευθυντή Διυλιστηρίων
ΜΟΤΟΡ ΟΙΛ ΕΛΛΑΣ
Κύριο Κωνσταντίνο Βασιλάκη

Αθήνα, 14 Οκτωβρίου 2005

Κύριε Διευθυντά,

Παρακαλώ δεχθείτε τις θερμές ευχαριστίες μου εκ μέρους των Επιτελών και Σπουδαστών της Σχολής Πολέμου Αεροπορίας, για την εγκάρδια υποδοχή, την αναλυτική ενημέρωση, την άριστη ξενάγηση και την εξαιρετική φιλοξενία που είχαμε, κατά την επίσκεψη που πραγματοποίησε η Σχολή στις εγκαταστάσεις των Διυλιστηρίων ΜΟΤΟΡ ΟΙΛ στις 22 Σεπτεμβρίου 2005.

Κατά την επίσκεψη αυτή δόθηκε η ευκαιρία σε στελέχη της Πολεμικής Αεροπορίας να γνωρίσουν από κοντά την οργάνωση, τις δυνατότητες, την προοπτική και την προσφορά ενός μεγάλου βιομηχανικού συγκροτήματος τόσο στον τομέα των επιχειρήσεων όσο και στην Εθνική μας Οικονομία.

Κύριε Διευθυντά, θα ήθελα να διαβιβάσετε τις ευχαριστίες μας, σε όλα τα στελέχη σας που συνέβαλαν με τη συμμετοχή τους, στη πραγματοποίηση αυτής της τόσο εποικοδομητικής και ευχάριστης επίσκεψης.

Ταξχος (Ι) Ζαχαρίας Καρτσάκης
Διοικητής

- Informative visits to the refinery of MOTOR OIL are organized annually for technical, university, military academy and high school students. At these events, the students are briefed on technical, commercial and career matters, according to their specific interests. During 2005, over 400 students visited the refinery within the context of these events.

- Each year, the company offers summer jobs or work experience training – partial or complete – for a large number of university and technical school students at the refinery and the head offices. In 2005, 130 students were involved in this activity.

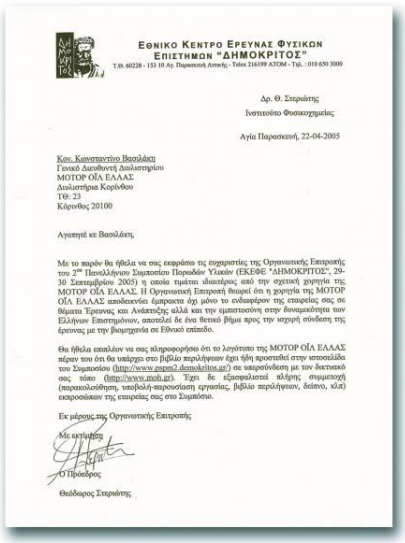
- Since 1971, MOTOR OIL has been the primary publisher of the magazine, "OIL", which is still circulating today. It features high-standard articles on historical, sociological, religious, energy, environmental, scientific and technological topics, and promotes specific important company activities with a broad public impact. The magazine is read by a significant number of both public and private organizations, as well as by higher educational institutions.

- Through sponsorship, the company supported the 2nd Panhellenic Porous Materials Symposium, which was organised on April 14-15, 2005, by the Environmental Research Laboratory of the *"Democritos"* National Center for Scientific Research. The aim of the symposium was to present the evolution and perspectives of research in Greece concerning the composition and characterization of porous materials (sorbents, catalysts, membranes, etc.) the applications (environmental, industrial, biological, etc.) of these materials, as well as the theoretical/numerical study of the relevant processes. With this grant, the company demonstrated its interest in issues of research and development in relation to state-of-the-art technologies, in a sector of special interest to the oil industry, such as the sector of innovative materials for catalysis and separations.

- The company also supported, through sponsorship, the 7th International Congress of the International Plutarch Society (one of the biggest scientific societies worldwide in the field of classical studies), which was organised by Crete University's Philosophy Department at its Rethymno campus on May 4-8, 2005, entitled "The unity of Plutarch's work". Over 80 speakers from 15 countries participated in this conference with original scientific announcements and the sessions were attended by a large number of Greek and foreign scholars.

- MOTOR OIL undertook the exclusive sponsorship for the reproduction of 15,000 DVD copies of a TV documentary on the contribution and action of the Hellenic Navy and Merchant Marine during World War II, "dedicated to those who lost their lives and those who fought to keep the seas free...".

- Financial aid was given for the creation of a monument commemorating the Battle of Crete in the park of the same name in Lagonissi.



ΕΘΝΙΚΟ ΚΕΝΤΡΟ ΕΡΕΥΝΑΣ ΦΥΣΙΚΩΝ ΕΠΙΣΤΗΜΩΝ "ΔΗΜΟΚΡΙΤΟΣ"

Τ.Θ. 60228 - 153 10 Αγ. Παρασκευή Αττικής - Telex 216199 ATOM - Τηλ. : 010 650 3000

Δρ. Θ. Στεριώτης
Ινστιτούτο Φυσικοχημείας

Αγία Παρασκευή, 22-04-2005

Κον. Κωνσταντίνο Βασιλάκη
Γενικό Διευθυντή Διυλιστηρίου
ΜΟΤΟΡ ΟΙΛ ΕΛΛΑΣ
Διυλιστήρια Κορίνθου
Τθ: 23
Κόρινθος 20100

Αγαπητέ κε Βασιλάκη,

Με το παρόν θα ήθελα να σας εκφράσω τις ευχαριστίες της Οργανωτικής Επιτροπής του 2ου Πανελλήνιου Συμποσίου Παραδόξου Ύλικών (ΕΚΕΦΕ "ΔΗΜΟΚΡΙΤΟΣ", 29-30 Σεπτεμβρίου 2005) η οποία τιμάται ιδιαιτέρως από την σχετική χορηγία της ΜΟΤΟΡ ΟΙΛ ΕΛΛΑΣ. Η Οργανωτική Επιτροπή θεωρεί ότι η χορηγία της ΜΟΤΟΡ ΟΙΛ ΕΛΛΑΣ αποδεικνύει έμπρακτα όχι μόνο το ενδιαφέρον της εταιρείας σας σε θέματα Έρευνας και Ανάπτυξης αλλά και την εμπιστοσύνη στην δυναμικότητα των Ελλήνων Επιστημόνων, αποτελεί δε ένα θετικό βήμα προς την ισχυρή σύνδεση της έρευνας με την βιομηχανία σε Εθνικό επίπεδο.

Θα ήθελα επιπλέον να σας πληροφορήσω ότι το λογότυπο της ΜΟΤΟΡ ΟΙΛ ΕΛΛΑΣ πέραν του ότι θα υπάρχει στο βιβλίο περιλήψεων έχει ήδη προστεθεί στην ιστοσελίδα του Συμποσίου (http://www.exem2.demokritos.gr/) σε υπερσύνδεση με τον δικτυακό σας τόπο (http://www.moh.gr). Έχει δε εξασφαλιστεί πλήρης συμμετοχή (παρακολούθηση, υποβολή-παρουσίαση εργασίας, βιβλίο περιλήψεων, δείπνο, κλπ) εκπροσώπων της εταιρείας σας στο Συμπόσιο.

Εκ μέρους της Οργανωτικής Επιτροπής

Με εκτίμηση

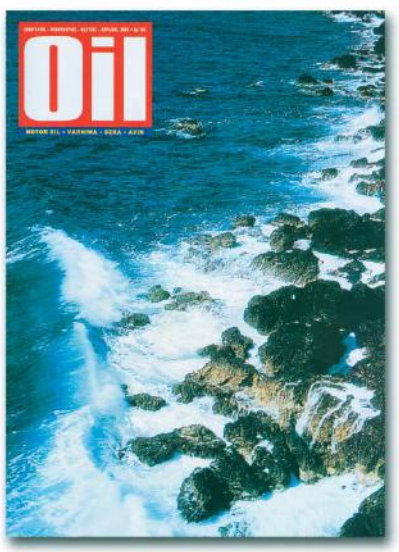
Ο Πρόεδρος

Θεόδωρος Στεριώτης

- Funding was granted to the Old Maps and Etchings (from year 1492 to this day) Archives-Museum Foundation, located at the Papagou Cultural Centre. This grant is the fourth since 1998 and indicates the company's interest in the foundation's work.

- Financial support was given to the *"Kougi"* Epirotes Association for the organisation of a cultural event attended by over 3,000 people.

- Funds were granted to *"Kritiki Estia"* for the organisation, on June 7, 2005, of a cultural evening, featuring music, poetry and dances from Crete, with the participation of performers such as Psaradonis, Vassilis Skoulas, Loudovikos of Anogeia and the Anogeiano Dance Group.



COMMUNITY INVOLVEMENT

"Vardinogiannis Foundation" at the Panagia Kalyviani Women's Monastery

For more than 27 years, MOTOR OIL – within the context of its charitable work – has been the main patron of the *"Vardinogiannis Foundation"*, based at, and supervised by, the Panagia Kalyviani Women's Monastery in the Heraklio prefecture of Crete. It covers part of the foundation's expenses, while the monastery is responsible for the remainder of the operating costs. The foundation was set up and funded by the company's founder, Nikos Vardinogiannis, 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 3-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.

Support for the charity activities and work of church-run and non-governmental/non-profit organisations

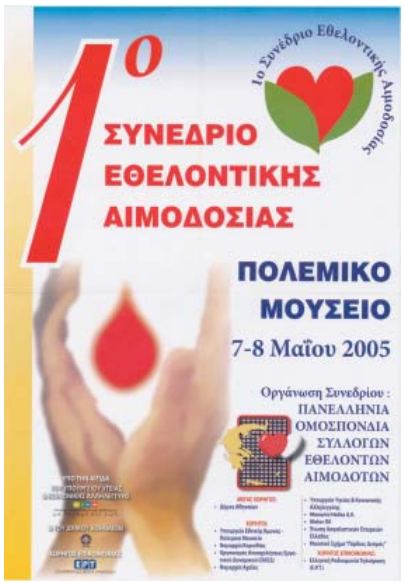
- Donation to the *"Mitera"* Infant Centre, on the occasion of its 50th anniversary, to facilitate its work: the care and protection of abandoned children, unmarried mothers and of the children of families in crisis.
- Donation for the construction of the Presentation of the Virgin Mary church in Goudi.
- Donation to the Diocese of Rethymno and Mylopotamos for the purchase of a minibus.
- Donation to the Transfiguration of the Saviour monastery in Livanates, to assist in the construction of a new wing.

Support for healthcare services

MOTOR OIL supports the provision of high-quality healthcare services through financial aid granted to bodies, which operate in this sector, and the purchase of medical devices and equipment for hospitals. MOTOR OIL has fully equipped a clinic at the Hospital of Crete University, and in previous years donated high value medical equipment to the Corinth General Hospital, essential in providing specialized treatments (including a blood transfusion device, a cryogenic centrifuge, an electrocardiograph, an electrical diathermic device, a gallbladder endoscope, etc.).

In 2005:

- It donated to the Corinth General Hospital extremely useful surgical equipment (surgical drill with a full range of attachments, and other specialised surgical devices), as well as a series of important medical books to enrich its library.
- The company offered financial assistance to the Corinth Association of Thalassemics, which – since 1985 – has been representing the approximately 50 people suffering from thalassemia, who receive transfusions and medical care at the Corinth Hospital, thus ensuring their improved care and facilitating their social integration and rehabilitation.



- It provided economic aid to the Association for Combating Youth Diabetes.

- It gave a donation to the *"Amymoni"* Panhellenic Association of Parents, Guardians and Friends of People with Visual Problems and Additional Special Needs for the operation of its hospice.

- A donation was offered to the humanitarian organisation *"Lifeline Hellas"*,

which was founded by Princess Ekaterini of Yugoslavia, with the aim of providing medical equipment and consumables for the relief of suffering people, especially children. The organisation's activities in 2005 aimed at collecting funds for the urgent upgrading of the intensive care units for newborns at the children's hospitals of Serbia and Montenegro, where deficiencies are so enormous, that the mortality rate of treated newborns in these units is the highest in Europe.

- It donated funds to the *Programme Against the Stigma of Mental Illness* of the Mental Health Research Institute of the Athens University Medical School

- The company encourages its personnel to participate in blood donation programmes, arranged in cooperation with the Corinth Hospital, for refinery employees, and with the *Metaxa* Hospital for head office staff. MOTOR OIL personnel have been voluntarily donating their blood for over 21 years, and this humanitarian initiative has become a sort of an institution. It also granted financial aid to the Panhellenic Federation of Blood Donors Associations for the organisation of its first congress, which took place on May 7 and 8, and was attended by a MOTOR OIL representative.

COMMUNITY INVOLVEMENT

Support for sports

MOTOR OIL's sponsorships and donations for activities promoting the spirit of athleticism are among the keystones of its social contribution policy.
Some examples of this contribution in 2005 include:

The *"Vardinogianneia"* International Track and Field Meeting

The company is one of the main sponsors of the *"Vardinogianneia"* International

Track and Field Meeting, held every year, since 1985, in Rethymno, Crete, in honour of the memory of Pavlos Vardinogiannis. Organised by the Atromitos Union of Rethymno, it is held under the aegis of the European Athletics Association (EAA) and observes International Association of Athletics Federations (IAAF) rules. The meeting is hosted at the Olympic-standards *"Pavlos I. Vardinogiannis"* Gallos Municipal Athletics Centre stadium in Rethymno. For the maintenance and upgrading of the stadium's infrastructure, MOTOR OIL annually provides a significant amount of special funding.
All major Greek athletes and many foreign sports champions have competed in this meeting and 26 national records have been established, as well as a world record in women's javelin throwing by the Cuban athlete, Osleidys Menendez. Because of the wide participation, the outstanding performances and the excellent organization, in 2004, the *"Vardinogianneia"* – for the third consecutive year – achieved the highest IAAF ratings, and were declared the best European outdoors sports meeting.
At the 21st *"Vardinogianneia"* – held on July 10, 2005 – 161 athletes from 36 countries competed, including Olympic and world champions. The most spotlighted event in the meeting was the women's pole vault, in which the athletes, Yelena Isinbayeva (holder of the world record and gold medalist at the Athens Olympic Games), Stacey Draguila, Klonika Pyrek, Jill Schwartz, Tracy O'Hara, Pavla Hamackova, Mary Sauer, April Steiner, Antigone Asteriou, Anna Fytidou and Angeliki Kanoula, participated.

Special Olympics

In 2005, MOTOR OIL was a Golden Sponsor of the Special Olympics, within the context of its long-standing policy of being a Golden or Silver Sponsor of Greek teams competing in the games.
The VIII World Special Olympics Winter Games took place from February 26 to March 5 in Nagano, Japan, with the participation of 2,500 athletes. The vision of the games was to create an appropriate environment for athletes with special needs (or special skills), in which they could demonstrate their abilities, achieve their goals, draw strength from their fellow athletes, and share the joy and excitement offered by pure athleticism. The Greek section of Special Olympics winter sports was represented by 32 athletes.

In addition, the company supported the following with significant sponsorships in 2005:

- The 4th International Diplomatic Football Tournament, which took place at the Athens Olympic Stadium on June 5, 2005, under the aegis of the United Nations and with the participation of diplomats who represent their countries in Greece.

- The Atromitos Union of Rethymno, for the maintenance of the *"Pavlos I. Vardinogiannis"* Gallos Municipal Sports Centre of Rethymno.
- The basketball team of the Rethymno Athletic Gymnastic Club.
- The football team of Episkopi community in Rethymno.
- The Rethymno Union of Football Teams, which incorporates D' League teams, Women's Football teams, as well as coed teams (Junior, Pre-Childrens, Children and Juvenile).
- The department of classical athletics of the Heraklion Sports Fans Club.

Provision of humanitarian aid to the victims of natural disasters

MOTOR OIL made a generous donation within the framework of the Radio-Television Marathon of Love, organised by Greek state radio and television, ERT, to assist humanitarian efforts following the destruction caused by the Asian tsunami on December 26, 2004, which hit 12 countries, leaving hundreds of thousands of victims in its wake.
A similar donation was also made for the Solidarity Marathon, organised to help victims of the strong earthquake in Pakistan on October 8, 2005.

TRANSLATION SERVICES PROVIDED BY GRECOFILE

ALL THE MATERIALS USED FOR PRINTING THE MOTOR OIL ENVIRONMENTAL AND SOCIAL REPORT ARE FRIENDLY TO THE ENVIRONMENT

MOTOR OIL (HELLAS)
CORINTH REFINERIES S.A.

12A IRODOU ATTIKOU STREET, 15124 MAROUSSI, ATHENS
TEL.: +30 210 809 4000, FAX: 210 809 4444
www.moh.gr