# ENVIRONMENTAL and SOCIAL REPORT 2009



planning for a sustainable future



# Vision, Mission, Principles and Values

# Respect for our people

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



# **Our Principles**



# **Respect for the environment**

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

# **Transparency**

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

# Vision

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



# **Corporate Mission**

- To conduct our business operations so as to increase the company's corporate value for the benefit of all stakeholders – shareholders, personnel, customers, suppliers, associates and partners, as well as the local and greater community – applying technological and commercial innovations.
- To meet our customers' needs responsibly and effectively, while expanding our share in the domestic market.
- To function reliably, swiftly and flexibly in our relationships with our people, customers, suppliers, and the general public, utilising practices that demonstrate responsibility and integrity, as well as respect for people and the environment.

# **Our Values**

# **Efficiency**

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

# Responsibility

- Customers
- Personnel
- Associates and partners
- Society

# **Social Responsibility**

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

# Integrity

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

# Timeline of Motor Oil's Growth

# 1972

Refinery begins operations. It comprises a crude oil distillation unit, base oils production unit and port facilities.

# 1975

Construction of a 100,000 barrels/day crude distillation unit and storage facilities of 1.5 million cubic metres capacity.

# 1978

Construction of a catalytic reformer unit (further processing of naphtha for gasoline production).

## 1980

Commissioning of a catalytic cracking unit (for converting fuel oil to higher-value products).

# 1984

Construction of a power plant, burning fuel gas.

# 1993

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

### 1996

Purchase of 50% of the company's shares by Saudi Arabian Oil Company (Saudi Aramco). Relocation of head office to new modern facilities in Maroussi.

# 2000

Production of fuels conforming to EU specifications for 2000. New units were constructed and the naphtha reformer was upgraded into a continuous 103-octane number catalyst regeneration unit. New central control room and installation of a Distributed Control System. The Environmental Management System is ISO 14001:1996 certified.

# 2001

Increase of the company's equity capital through public offer of shares and listing on the Athens Stock Exchange. Installation of a new gas turbine in the power plant. Upgrading of the lubes vacuum distillation unit.

# 2002

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

# 2003

Certification of the Quality Management System of the company compliant with ISO 9001:2000.

## 2004

Commissioning of the new Truck Loading Terminal at the refinery. The Environmental Management System is recertified, according to ISO 14001:2004.

# 2005

The Hydrocracker Complex is commissioned, facilitating the production of clean fuels conforming to European Union specifications for 2005 and 2009. Repurchase of Saudi Aramco's stake in the company.

## 2006

Recertification, according to ISO 9001:2000. ISO 17025:2005 certification of the refinery's Chemical Laboratory.

# 2007

ISO 14001:2004 recertification of the Environmental Management System. Registration of the company in the Hellenic Register of EMAS (Eco-Management and Audit Scheme).

# 2008

Health and Safety Management System is certified compliant with OHSAS 18001:2007. Beginning of the works for the construction of the New Crude Distillation Unit.

# 2009

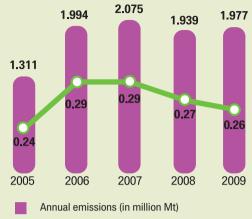
- Deal concluded with SHELL International Petroleum Company for the acquisition of its downstream business in Greece, in terms of fuel marketing through the network of SHELL branded retail stations, its owned fuel terminals, the lubricants oil blending plant, storage and marketing of chemicals, bottling and marketing of Liquified Petroleum Gas and 49% of the aviation fuels trade.
- Ongoing construction works for the complex of the New Crude Distillation unit, to be operational by mid-2010.
- \* Construction began on a natural gas power plant from KORINTHOS POWER S.A., in which MOTOR OIL holds 35% of shares.
- Increase of the participation of MOTOR OIL in the share capital of OFC AVIATION FUEL SERVICES S.A. from 28.0% to 92.06%.
- Entry into natural gas trading in collaboration with MYTI-LINEOS S.A.
- Re-certification of the Integrated Quality Management System with the new ISO 9001:2008 standard, valid up to 2012.
- \* MOTOR OIL achieves all times highs in sales and production (9.5 and 7.7 million Mt, respectively).

# Key Group Data

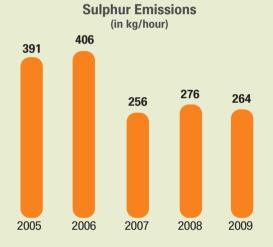
Turnover	<b>3,939</b> million euros
Earnings before Interest, Taxes, Depreciatio and Amortisation (EBITDA)	n 212 million euros
Total assets	1,583 million euros
Refinery production	7.7 million tons
MOTOR OIL sales	9.5 million tons
Employees (annual average)1	1507
Man-hours of training	<b>15,300</b> hours
Total investments 2002-2009	924 million euros
Environmental investments and expenses 2002-2009	<b>538.3</b> million euros
Health and Safety investments and expenses 2002-2009	43.7 million euros
Social contribution 2002-2009 <sup>2</sup>	25.8 million euros
Social product <sup>3</sup>	312.7 million euros
Crude oil refining capacity <sup>4</sup>	<b>172,000</b> barrels/day
Refinery tanks capacity	2.3 million cubic metres
AVIN OIL petrol stations	580
Refinery certifications	ISO 9001:2008 ISO 14001:2004 ISO 17025:2005 EMAS ER 761/2001 OHSAS 18001:2007

- 1. Includes employees of MOTOR OIL and AVIN OIL.
- 2. Refers to donations and sponsorships.
- 3. The portion of revenues distributed to stakeholders.
- 4. Refers to the design capacity and includes the New Crude Distillation Unit, which increases the refining capacity by 54%.

# CO<sub>2</sub> Emissions







# **Energy Consumption**



Energy consumption per crude and feedstock thousand tons (TJ/kMt)

# ENVIRONMENTAL and SOCIAL REPORT 2009

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# **ABOUT THIS REPORT**

MOTOR OIL's annual *Environmental and Social Report* – this being the eighth consecutive edition – is an independent source of information, which presents the strategic and systematic approach to challenges that emerge from the pursuit of sustainable development by applying the principles of Corporate Social Responsibility.

The 2009 Environmental and Social Report details all the actions of the year, related to the material issues managed by the company. Apart from a brief presentation of the MOTOR OIL Group and its subsidiary, AVIN OIL, the main sections of the Report focus on MOTOR OIL's corporate responsibility practices, and record in detail all issues we deal with, relevant to the areas of Corporate Governance, Communication with Stakeholders, Human Resources, Health and Safety, the Environment and Social Contribution. The sections on Human Resources and Social Contribution include AVIN OIL, while initiatives taken by the subsidiary company in Health and Safety, and the Environment, are presented separately.

The *Environmental and Social Report* demonstrates, in the best possible way, MOTOR OIL's commitment to creating value with respect for people, the environment and society, and reporting on its actions and performance in these sectors.

# Global Reporting Initiative – UN Global Compact

Concerning the choice of subjects for the *Environmental and Social Report*, we are systematically following – since the 2008 edition – the G3 guidelines of the Global Reporting Initiative (GRI), as well as the ten principles of the UN's Global Compact. At the end of the *Report*, there are correlation tables in which the GRI indicators and the Global Compact principles are displayed against the sections or pages where the relevant data are reported. Supplementary data are also contained in the *Annual Financial Report 2009*, the *Environmental Statement 2009*, as well as on the company's website, *www.moh.gr.* 

### Contact us

Your views and comments on the structure and content of the Environmental and Social Report 2009 help us in our effort to ensure continuous improvement. Please contact us by telephone: 210.809.4345, or send your remarks to our email address: *csr@moh.gr*.

# **MANAGEMENT MESSAGE**

The Continual improvement of our social impact is irrevocably linked to responsible business practices, and together they constitute a lasting commitment which is embraced in our vision and strategy. Our business activities are planned and conducted with due respect for the environment and our stakeholders – that is, the community, our personnel, our associates, our shareholders.

This Environmental and Social Report 2009 gives us the opportunity, for the eighth year, to share with you the continuous endeavour of our Group, our employees' disciplined and systematic work, the measurable results, and the strategic approach to challenges, that arise from the pursuit of sustainable growth through the application of Corporate Social Responsibility principles.

Over the past year, Greece has been confronted with the most serious post-war economic crisis, a crisis which – although played out on the economic scene – affects the value system of our society. Although this difficult year has brought, as future years will also, tough fiscal adjustment measures, MOTOR OIL did, and will be doing its best to support the country's economic and social structure. Our most serious duty is to try to help our country through this crisis with hard work, investments, intelligence, with greater efforts to improve our social and environmental footprint, with a firm commitment on business responsibility. Now, as we plan the Group's future, we know that our task is more significant than ever.

2009 was a landmark year. In an extremely unfavourable international climate, with rapid developments taking place in the Greek oil market, we achieved better financial and operational results than in 2008. MOTOR OIL's sales and production reached all-time high records (9.8 and 7.7 million tons, respectively). The deal with SHELL International for the acquisition of its downstream business in Greece established our Group in the domestic fuel market lending it potential for dynamic growth. Construction began on a natural gas power production plant from KORINTHOS POWER S.A., in which MOTOR OIL holds 35% of shares, in collaboration with MYTILINEOS S.A., while in cooperation with the latter the first free natural gas import has been attempted. The Group acquired 92.06% of shares in OFC AVIATION FUEL SERVICES S.A. Finally, construction work on the New Crude Distillation

Unit complex, the design of which meets the latest European specifications for safety and environmental protection, incorporates Best Available Techniques and places particular emphasis on energy saving, was nearing completion.

In the field of occupational safety, our performance in 2009 was exceptional, as all accident indices showed all-time low records. This fact encourages us in our effort to achieve our objective of zero accidents and lost hours.

Environmental protection is always a primary issue and the effort to reduce our environmental footprint is never ending. In 2009, we invested 22.7 million euros in large and small projects which directly or indirectly protect the environment. Our environmental footprint, as measured by the specific energy consumption and carbon dioxide emissions, continues to diminish. We published the annual non-compulsory Environmental Statement 2008, in accordance with regulation EMAS ER 761/2001, and we supported international initiatives on climate change.

In the sphere of social contribution, we disbursed 6.6 million euros in supporting the activities of various foundations and bodies, both in local communities and within the broader society.

Immediately after the August 2007 wildfires, we pledged to undertake the repair of homes destroyed by the blaze in Makistos village of Eleia, which was one of the most ravaged villages. This pledge was a commitment we honoured, as the project was completed at the end of 2009.

In the following pages, you will be able to peruse in more detail the subjects outlined above.

The acceptance of our Report by all of you, our stakeholders, and your comments (favourable or unfavourable) help us in our endless quest to become better.

Thank you for your contribution and your confidence in our Group.

The MOTOR OIL Group Management

# I. CORPORATE PROFILE

9.7 million tons in MOTOR OIL sales: a new all times high

Acquisition deal for SHELL's downstream business in Greece

312.7 million euros the Social Product

Since 1972, when MOTOR OIL began operating as an oil refiner and oil products marketing company, it has always functioned with responsibility and integrity, aiming at sustainable profitability and growth in a socially responsible manner. Combining a progressive perception on corporate responsibility with an efficient business model, competent people and management, MOTOR OIL is on a course of continual growth and value creation for all stakeholders, while it effectively fulfils its social role, enhancing its contribution to society and paving the way for its future development.

Its Corporate Vision and Mission define the context which drives the planning and implementation of its dynamic growth. Moreover, its operation is founded on a set of firm Principles

and Values that underpin its business activity.

2009 was a landmark year, as a series of important strategic moves shaped up: concluding a deal with SHELL International Petroleum Company for the acquisition of its downstream business in Greece, except for the distribution of lubricants, starting construction on a natural gas power plant from KORINTHOS POWER S.A., in which the Group holds 35% of shares, increase of the participation of the Group in the share capital of OFC AVIATION FUEL SERVICES S.A. to 92.06%, and entry into natural gas trading. At the same time, construction work on the complex of the New Crude Distillation Unit is nearing completion, while MOTOR OIL achieved record fuel sales and production (9.8 and 7.7 million tons, respectively).

# 1. MOTOR OIL GROUP

With a personnel count of 1,507 people, a consolidated income in 2009 equivalent to approximately 1.7% of Greece's GDP, and total assets of 1.6 billion euros, MOTOR OIL Group is one of the main pillars of the national economy. It plays a leading role in the crude oil refining sector and the marketing of petroleum products in Greece, as well as the greater Eastern Mediterranean region, supplying this region with a wide range of high quality products.

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

The company owns 100% of AVIN OIL shares and, directly or indirectly, is a shareholder with various holdings in eight other companies, details of which are included in MOTOR OIL's Annual Financial Report 2009.

In 2009, KORINTHOS POWER S.A. – in which MOTOR OIL has a holding of 35% and MYTILINEOS S.A. of 65% – started construction, within MOTOR OIL's Aghioi Theodo-

SUBSIDIARIES	Share
AVIN OIL S.A.	100%
MAKREON S.A.	100%
OFC AVIATION FUEL SERVICES S.A.	92.06%
ELECTROPARAGOGI SOUSSAKI S.A.*	70%
NUR-MOH HELIOTHERMAL S.A.*	50%

KORINTHOS POWER S.A.	35%
ATHENS AIRPORT FUEL PIPELINE COMPANY	16%

<sup>\*</sup> Inactive.

roi/Corinth facilities, of a 436.6 MW natural gas combined-cycle plant for electrical energy production, scheduled for commissioning in 2011.

HOLDINGS (as at 31.12.2009)

**ASSOCIATED COMPANIES** 

# 2009 Results

2009 was a very important year in terms of achieving financial results, realising investments and contracting strategic partnerships.

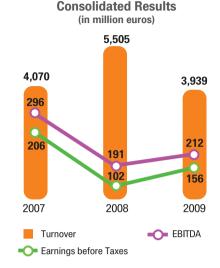
By consistently and effectively pursuing its strategic goals, MOTOR OIL has succeeded in continuously expanding its sales, while its profitability is unavoidably impacted by the particular conditions prevailing in the global crude oil and petroleum products markets, the international oil refining margins, as well as the euro/dollar parity.

Share

The relevant chart shows the progress of three key indicators of consolidated performance – Turnover, EBITDA (Earnings before Interest, Taxes, Depreciation and Amortisation) and EBT (Earnings before Taxes). The consolidated financial statements of the Group – apart from MOTOR OIL, the parent company – also incorporate the results of AVIN OIL,

MAKREON and OFC AVIATION FUEL SERVICES on the «full consolidation» method, KORINTHOS POWER on the «net equity» method, and those of ATHENS AIRPORT FUEL PIPELINE COMPANY, ELECTROPARAGOGI SOUSSAKI and NUR-MOH HELIOTHERMAL at cost.

1.7% of GDP the 2009 Consolidated Revenues



MOTOR OIL's sales for 2009, in the three markets in which it operates – domestic, exports and bunkering (marine-aviation) – reached 9.5 million metric tons, achieving a record high in the company's history. The quantities supplied to each of these markets

are determined by the relevant demand, but also by the company's aim of supplying its products in markets offering higher margins.

In 2009, exports to over 45 countries were realised.

**MOTOR OIL Sales by Product Group MOTOR OIL Sales by Market Sector** (in thousand Mt) (in thousand Mt) 9,321 9,511 9,511 9.321 8,314 8,314 2007 2008 2009 2007 2008 2009 Domestic Market Export Market Asphalt Gasoline Fuel Oil I PG Public Power Corporation Bunkering Market Diesel Oil (Automotive-Heating) Lubricants Jet Fuel Other

MOTOR OIL SHARE IN THE INLAND MARKET			
Year	2007	2008	2009
Domestic Market	20.6%	27.5%	27.0%
Bunkering Market	25.7%	21.4%	19.7%
Lubricants	44.3%	47.7%	37.2%
INLAND MARKET TOTAL	21.9%	25.9%	25.3%

### 2. THE REFINERY

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

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

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

The operation of a refinery requires auxiliary supplies of electric power, water and steam. The refinery's electric energy requirements are fully met by the four gas turbines in the Power Co-generation Plant, while a fifth turbine is currently being installed. Needs for high pressure steam are covered by four boilers, combined with the steam produced in some refinery units, while the seawater desalination units produce water of a suitable quality for supplying the boilers, and at sufficient quantities for fully satisfying the refinery's water requirements. Thus, significant quantities of the precious natural resource of

# **Refinery Features**

- It has a processing capacity of 112,000 barrels of crude oil /day (the new unit will increase the total capacity to 172,000 barrels/day).
- It produces all types of fuel products and is one of the most complex and state-ofthe-art refineries in Europe, with Hydrocracking and Catalytic Cracking units and with a Nelson Complexity Index of 11.95 – the highest in the region.
- It produces clean fuels (gasoline and diesel) in accordance with EU specifications for 2009.
- It has ISO 9001:2008 certification for Quality, ISO 14001:2004 and EMAS ER 761/2001 for the Environment, OHSAS 18001:2007 for Health and Safety, while the refinery's Chemical Laboratory is also certified as per ISO 17025:2005. This five-fold combination is found at few European refineries.
- \* It is the only Greek refinery that produces base oils.
- It is energy-independent installed power 68.3 MW.
- Its tanks have a capacity of 2,300,000 m<sup>3</sup>.
- It has modern facilities for tanker docking, suitable for tankers of up to 450,000 tons DWT.

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

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

The refinery has a modern Truck Loading Terminal, which significantly improved MOTOR OIL's competitive position in the market of Southern Greece. Additionally, in order to increase its market share in Northern Greece, and ensure better access to the markets of Balkan countries, the company has obtained a long-term lease for a storage and distribution facility in the vicinity of the city of Kavala.



The new Crude Distillation Unit at the final construction stage.

In 2009, the 60,000 barrels per day capacity, 180 million euros budget New Crude Distillation Unit was under construction, scheduled for completion and commissioning in mid-2010. Its design meets the latest European specifications in relation to environmental protection and safety; it incorporates Best Available Techniques and places particular emphasis on energy saving. Additional benefits are expected from the substitution of imported Straight Run Fuel Oil with proprietary production, and the optimisation of crude oil supplies due to its capability of processing a wider range of crude qualities, including sour crude oil (containing substantial amounts of sulfur), as well as non-conventional crude oils. At the same time, two new sulphur recovery units are being constructed, of an approximately 170 Mt per day total sulphur production capacity, a new reverse osmosis water desalination unit, as well as the requisite new storage facilities for handling the additional production.

3. ECONOMIC BENEFITS TO SOCIETY - SOCIAL PRODUCT

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

The overall scale of our operations, combined with our consistent focus on steady growth, result in a very significant contribution to the national economic development. This contribution, based on efficient and successful business operations, encompasses value production and job creation, facilitating social progress and cohesion, while protecting the quality of the environment.

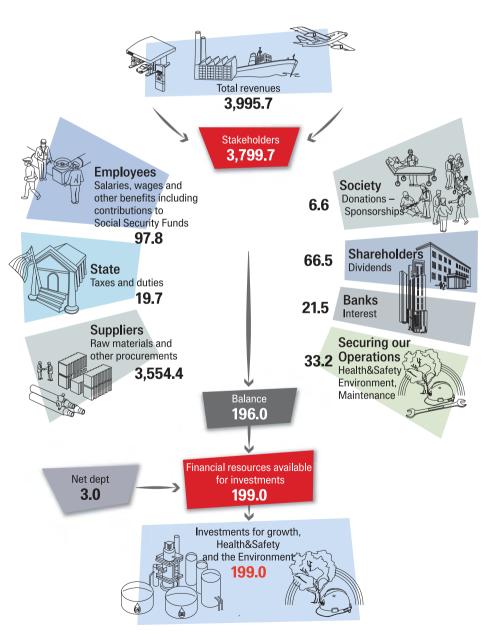
Our operations in the exceptionally important energy sector, reduce the country's dependence on foreign suppliers of oil products. Firstly, our interaction with stakeholders creates primary value for all those concerned and, secondly, it contributes to the creation of value by these same stakeholders for the benefit of the national economy and

the whole society. This is achieved by creating jobs and continuously improving our production processes, as well as by investing in the expansion or upgrading of our own facilities.

In 2009, the Group's revenues totalled 3,995.7 million euros, equivalent to approxima-

tely 1.7% of Greece's Gross Domestic Product (GDP) that year. Of this, 3,554.4 million euros were allocated to the purchase of raw materials (crude oil) and fuel products, accounting for 89.0% of the total income, which is justified by the nature of the Group's activities.



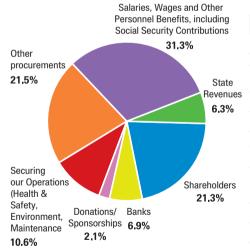


The magnitude and constituents of the *Social Product* we produce clearly determines the extent and composition of our economic contribution to society.

# 312.7 million euros the 2009 Social Product

The *Social Product* is the part of our income allocated to a selected group of stakeholders, comprising company employees, the state, shareholders, banks, suppliers and society in general (donations and sponsorships). It encompasses payroll expenditure and other employee benefits, over and above

# 2009 SOCIAL PRODUCT COMPONENTS Total: 312.7 million euros



those required by law (such as additional health coverage for hospital treatment and additional pension allowances); social insurance contributions made to the various social security funds; corporate income taxes and duties paid to the state; donations and sponsorships; interest paid to credit institutions; expenses related to securing our operations (involving Health and Safety, the

Environment, as well as repairs and preventive maintenance); payment of suppliers, and dividends paid to shareholders.

Based on the above, the *Social Product* paid to stakeholders in 2009 was 312.7 million euros, while the amounts paid in previous years can be seen in the following table:

# Social Product (in million euros)

2005	321.0
2006	380.0
2007	409.1
2008	411.4
2009	312.7

# 4. CORPORATE GOVERNANCE

The company's supreme administrative body is the 12-member Board of Directors, which is elected by the Annual Ordinary General Assembly of Company Shareholders. It functions in accordance with the provisions of Law 3016/2002 on Corporate Governance and the company's Articles of Association.

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

Two three-member committees – which were set up by a Board decision taken on 1.6.2009 – operate within the framework of the Board of Directors: the *Compensation Committee* and the *Internal Audit Committee*.

Name	<b>Board Position</b>	Member Status
Vardis J. Vardinoyannis	Chairman and Managing Director	Executive
John V. Vardinoyannis	Vice Chairman	Executive
Panayotis Kontaxis	Vice Chairman	Non-executive
John Kosmadakis	Deputy Managing Director	Executive
Petros Tzannetakis	Deputy Managing Director	Executive
Demosthenes N. Vardinoyannis	Member	Non-Executive
Nikos Th. Vardinoyannis	Member	Non-Executive
George Alexandridis	Member	Non-Executive
Eleni-Maria Theodoroulakis	Member	Non-Executive
Despina Manolis	Member	Non-Executive
Konstantinos Maraveas	Member	Non-Executive- Independent
Antonios Theoharis	Member	Non-Executive- Independent

<sup>\*</sup>As elected on 28.5.2009 by the Annual Ordinary General Assembly, organised as a Body Corporate on 1.6.2009 and re-organised on 26.8.2009.



The three-member *Compensation Committee* comprises the following non-executive Board members:

- P. Kontaxis, Chairman
- G. Alexandridis, Member
- K. Maraveas, Member
- A. Theoharis, Alternate Member

It advises the Board of Directors and deals with issues relating to staffing of the Group's companies, as well as proposes the policy on salaries, benefits and incentives for their executives and personnel.

Similarly, the three-member *Internal Audit Committee* comprises the following non-executive board members:

- P. Kontaxis, President
- G. Alexandridis, Member
- A. Theoharis, Member
- K. Maraveas, Alternate Member

Its members have expertise and experience in matters relating to financial reporting, accounting and auditing.

The *Internal Audit Department* reports directly to the Board of Directors, and is supervised by the *Internal Audit Committee*. The

company's independent internal audit system aims at ensuring compliance with the company's procedures for managing financial and operational matters, as well as at securing that issues related to the efficient management of business risks are given proper attention. The company's financial results are also audited by independent chartered auditors, in view of complying with its legal obligations.

# 5. MANAGING CORPORATE RESPONSIBILITY

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

Corporate Social Responsibility (CSR) indicates a balanced approach to the economic, social and environmental impact of business operations that is consistent with the trian-

gular concept of "society – environment – economy". This is widely and universally accepted by responsible members of the global business community, as encompassing the main aspiration of corporations in terms of creating value for their shareholders, while satisfying customers, ensuring employee welfare, protecting the environment and contributing to society. It also embraces the notion of sustainable development, the kind of development that aims at meeting current needs without jeopardising the availability of resources for future generations.

We fully acknowledge the importance of these issues and demonstrate our corporate responsibility by our commitment to pursue our business activities with due respect for people, the environment and society. A natural consequence of this commitment is the adoption of a holistic approach to implementing Corporate Social Responsibility principles, by considering the protection of the environment, and fulfilling our obligations to all stakeholders (our employees, shareholders, customers, suppliers and society as a whole).

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

- human rights,
- labour relations.
- \* the environment, and
- transparency (anti-corruption measures).

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

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

Each one of these sectors has its respective **stakeholders**. The chart indicates these sectors, the respective stakeholders and the current material issues on which MOTOR OIL's activities are focused.

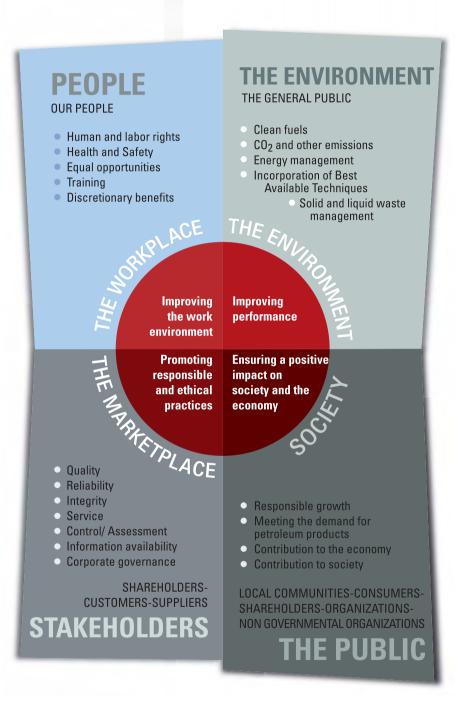
The **evaluation** of material issues and challenges, relating to sustainable development and concerning MOTOR OIL, is implemented by taking the following into consideration:

- \* The company's Principles and Values, Vision and Mission.
- The company's strategy.
- The Corporate Governance and General Business Principles applied by the company.
- The company's policies (Health, Safety and Environmental policy, Quality Policy, Human Resources management policies).
- The views of stakeholders and especially those of local communities.

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

- \* Follows the procedures set out in the company's Annual Operating and the Five-year Business Plans, where the programmes and actions are stated as explicit short and long-term goals of our overall strategy, on the basis of which we operate and we are assessed.
- Is implemented and monitored through the certified Management Systems for Quality (ISO 9001:2008), the Environment (ISO 14001:2004, EMAS ER 761/2001) and Health and Safety (OHSAS 18001:2007) on the basis of specific procedures and work guidelines.

# **Corporate Social Responsibility Model**



### MOTOR OIL:

### as a responsible employer,

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

# having a responsible attitude towards the environment,

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

### as a responsible corporate citizen,

seeks fruitful social dialogue, in a climate of mutual trust and respect, with the local communities in which it chiefly operates. It supports these communities, by participating in programs that enhance their economic, social and cultural life, and becomes involved in similar activities that benefit society as a whole:

# having a responsible position in the market,

respects market rules and produces top quality products; it focuses on relations of trust with its customers, suppliers and partners, and strives – through the systematic and consistent achievement of its business targets – to ensure the best possible return for its shareholders without compromising its corporate social responsibility and sustainable development standards.

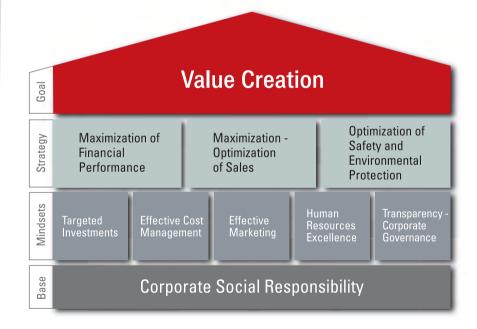
### 6. GROWTH - INVESTMENTS

The core of MOTOR OIL's business model comprises the company's responsible growth and creation of value for the benefit of all stakeholders. This is achieved through the company's strategy, involving employees' loyalty, effective corporate governance, a continuous and duly targeted investment programme, and the application of effective organisational and management systems, leading to high operational efficiency in all sectors, subsequently achieving high financial returns. At the same time, the company's principles and values impose the element of sustainability

priate investments, hard work, constant effort to ensure the dedication of its employees, safety and protection of the environment – in other words, being a responsible corporation, is imperative for the next difficult years.

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

# **Responsible Growth of Company Value**



on this growth, which means that pursuit of the best possible results is attained with respect for people and the environment, and by ensuring safe working conditions.

If the above approach is rational under normal economic conditions, today – in the midst of a severe economic crisis – it is more than necessary. MOTOR OIL remains firmly oriented towards the Group's responsible development, and committed to the principles of Corporate Social Responsibility. Appro-

- Maximising economic performance (the refinery's profit margins) by means of:
  - Expanding the refinery distillation capacity by 60,000 barrels per day.
  - Producing high quality products in accordance with new specifications as cost-effectively as possible, utilising state-of-the-art technologies.
  - Improving the refinery's energy-ef-

ficiency, thus reducing its operating cost as well as  $CO_2$  emissions (see chapter III).

- Full automation of refinery operations.
- Increasing the efficiency of production processes and the availability of process units.
- \* Sales maximisation and optimisation by effective product marketing, exploiting opportunities in all three available markets (domestic, bunkering and export), for achieving the best possible profitability, by means of:
  - Maximising domestic market share by improving the distribution network.
  - Developing export sales, particularly targeting high potential developing markets of significant profit margins.
  - Expanding and exploiting the company's storage facilities to more effectively meet the demand for products and related services.
- \* Achievement of the highest possible level of Health and Safety, Environmental protection and Quality, through technological, operational and organisational innovations at the refinery, such as:
  - Implementing programmes concerning the Environment, and Health and Safety.
  - Enhancing preventive safety measures through investments in automated prevention and protection systems, fulfilling or exceeding the specifications laid down by Hellenic law and international regulations.
  - Upgrading the reliability of the process units' support systems, such as the Power and Steam Co-generation Plant and other critical utilities.
  - Implementing personnel training pro-

grammes based on the use of the most advanced technology systems, such as

simulators for training the operators of process units.

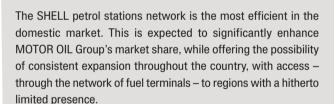
# **Acquisitions - Strategic Alliances**

For MOTOR OIL Group, 2009 was a year of significant acquisitions and strategic agreements:

**A.** The most important was the 245.6-million-euros deal with SHELL in September 2009, for the Group to acquire its business activities in Greece, involving:

- \* Fuel distribution and sales through the SHELL-branded network of about 700 petrol stations, which will continue to bear the SHELL brand.
- \* The 137,000 cubic metres aggregated capacity of SHELL owned fuel terminals in Kalochori, Amfilochia, Perama, Chania, Alexandroupoli and Rhodes.
- \* The Perama Lubricants blending and filling plant.
- \* The supply and distribution of chemicals.
- \* 49% of the aviation fuels trading.
- \* The bottling and distribution of Liquefied Petroleum Gas.

The above contract was concluded in June 2010, following its approval by the Hellenic Competition Commission.



- **B.** Acquisition of an additional 64.06% stake in OFC AVIATION FUEL SERVICES S.A., resulting in MOTOR OIL's participation in OFC's share capital increasing to 92.06%. OFC has constructed and operates the aviation fuel storage and distribution facilities at Athens «Eleftherios Venizelos» Airport.
- **C.** Implementation of MOTOR OIL's deal with MYTILINEOS S.A. for share participation in KORINTHOS POWER S.A., with 35% and 65% respectively and the start of construction by the latter within MOTOR OIL's Aghioi Theodoroi/Corinth facilities of a 436.6.MW natural gas combined-cycle plant for electrical energy production, scheduled for completion in 2011.
- **D.** Finally, MOTOR OIL's entry into the natural gas market, following its deal with MYTILINEOS S.A. for the establishment of a joint company, in which the partners will participate with equal stakes, for importing and trading natural gas of all types (LNG, CNG, etc.). The natural gas will be intended for use in both companies' industrial facilities and power plants, as well as for sale to third parties in Greece and abroad.



Our strategic objectives for value creation through the expansion of our distillation capacity, and the production and marketing of oil products conforming to the most stringent international specifications – without compromising environmental protection, and the health and safety of our own employees and subcontractors – are implemented through major capital investments. Our investment programme for the eight-year period 2002-2009 reached 924 million euros (see chapter III).

Our most recent major investment is the construction of the **new 180-million-euros Crude Distillation Unit**, described on page 9.

However, the greater part of this investment was spent on the construction of the Hydrocracker complex (2005), which facilitated the production of clean fuels, complying with 2009 European Union specifications. At the

the following, amongst other:

- Expenditure for the new Crude Distillation Unit (128.9 million euros), for which a total of 155.5 million was spent of the budgeted 180 million euros.
- Works to increase storage capacity (18.0 million euros), with the construction of tanks for LPG (5 tanks), fuels (6 tanks), lubricants (2 tanks) and desalinated water (1 tank). By the end of 2009, 26.4 million euros of the budgeted 30.2 million was spent on these projects.
- Project to upgrade the lubricants production complex (9.3 million), for which a total of 10.7 million was spent from the budgeted 15 million euros.

924 million euros the total investments over the last eight years of which 516 million euros were spent on environmental protection projects

same time, it helped to increase the production of middle distillates of which there is a shortage in Greece and, generally, in Europe. The refinery has also gained more flexibility, allowing the maximisation of either diesel or gasoline production, according to seasonal demand, and helped to reduce the refinery's environmental footprint by reducing emissions of certain pollutants.

The rest of the capital investment programme was focused on technical upgrading of the refinery, in terms of vertical integration, automation, energy sufficiency and environmental protection. As a result, it is now considered as one of the most technically advanced refineries in Europe and worldwide (based on the Nelson Complexity Index achieved, which is 11.95).

Overall, the group's investments for 2009 amounted to 198.5 million euros and involved

- \* Works to increase the capacity of the refinery's Co-generation Power Plant (4.8 million euros), which entailed expenditure to order gas turbine No. 5. It now has four gas turbines and, with the addition of a fifth, its power output will increase to 85 MW (from 68 MW), ensuring the refinery's energy independence, at the higher power demand levels following the expansion of the refinery, and at the same time improving its energy performance. The project's overall budget is approximately 30 million euros and it will be completed in 2011.
- Construction of a new Sulphur Recovery unit (6.5 million euros of a budgeted 19.5 million), that will further improve the refinery's environmental performance.

# 7. QUALITY, HEALTH, SAFETY AND ENVIRONMENTAL MANAGEMENT

Ensuring occupational Health and Safety and Environmental protection is part of our corporate Principles and Values and constitutes a fundamental strategic aim. Thus, we strive to conduct our industrial and commercial operations without compromising the health and safety of our employees and associates, while maintaining the highest standards of environmental protection and respecting the quality of life of those living in the vicinity of our industrial facilities.

The importance we attach to the management of Health, Safety and Environmental protection, and our commitment to continuous improvement in these areas, is set out in the relevant policy that governs the operation of the *Environmental Management System* (ISO 14001:2004 and EMAS ER 761/2001 certified), and the *Health and Safety Management System* (OHSAS 18001:2007 certified), which specify the detailed programmes and measurable targets to be achieved.



# Health, Safety and Environmental Protection Policy

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

To achieve this, the company is committed to:

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

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

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

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

 MOTOR OIL will produce and sell products that satisfy its customers, always taking into consideration all stakeholders' interests. MOTOR OIL focuses on its customers, examines and evaluates their requirements and applies all necessary technologies and actions, in order to avoid compromises in quality matters and constantly strives to improve the effectiveness of its Quality Management System.

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

The customer-oriented Integrated Mana-

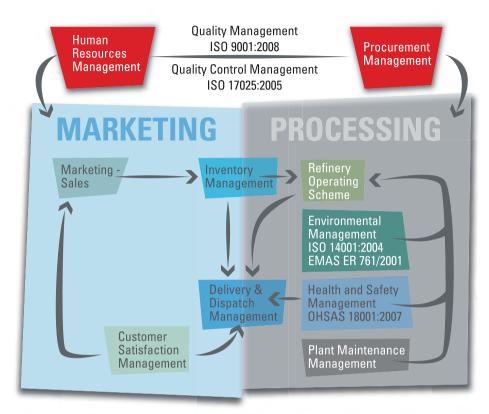


gement System takes systematic and full account of quality issues in all operational and management processes, as shown in the diagram. The consolidation of the Environmental Management System and the Health and Safety Management System, into the Integrated Management System confers an overall coherence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

The company's *Integrated Management System*, through which its Quality policy is implemented, was re-certified in 2009 by Bureau Veritas (BV) according to ISO 9001:2008, valid until 2012.

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

# **Integrated Management System**



- rent products, services and offers that require improvement.
- Determining the criteria applied by those selecting MOTOR OIL as a supplier, and assessing the impression they have of MOTOR OIL's image as a supplier or partner
- Assessing MOTOR OIL's overall corporate image.

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

Such surveys were carried out in years 2003, 2004 and 2007. The processing of responses and recommendations from these surveys led to a series of interventions that resulted in a reduction in oral or written complaints from customers, despite the fact that sales volumes increased by over 40% between 2009 and 2003.

AVIN OIL, responsibly conducting its business activities, is committed to distributing high quality and, within this context, applies a *Quality Management System*, certified according to ISO 9001:2000, for Fuels and Lubricants Storage, Marketing and Distribution, as well as Retail Network Management.

# 8. CUSTOMER SERVICE

MOTOR OIL strives to systematically meet its customers' needs by applying customer-focused criteria. Apart from direct contact with customers, it conducts a quantitative and qualitative customer satisfaction survey approximately every two years, covering the full spectrum of its clientele. This aims at establishing an objective view of their level of satisfaction, by obtaining feedback about

their perception of the quality of services rendered and their overall impression of MOTOR OIL's corporate image. Within the context of the survey, customers are asked to respond to seven groups of questions on the following: defining the customer's relationship with the company, satisfaction about the quality of the company's products, speed of order processing, issuance of bills of loading and invoices, loadings on ships or trucks, handling of complaints, and general evaluation of the company's image by the customer.

The basic objectives of this survey are:

- \* Assessing customer satisfaction.
- Evaluating the perceived quality of the entire range of MOTOR OIL's services.
- \* Determining aspects of MOTOR OIL's cur-

# 9. COMMUNICATION WITH STAKEHOLDERS

The communication and cooperation we have developed with stakeholders indicates the importance we attach to this issue, and our desire to openly discuss and take into consideration their needs, so that any arising issues can be handled in as far as possible mutually acceptable ways. After all, our common aim is sustainable growth, so communication with trust and respect, facilitates this common objective, and the results are mutually beneficial.

MOTOR OIL's stakeholders, as well as their interaction with the company (in italics) and the method of communication with each of them, are shown in the following chart:

### Interaction and Communication with Stakeholders

# **Employees**

In 2009, the MOTOR OIL Group directly employed 1,507 people, of whom more than 65% work in the refinery (details are given in chapter IIA).

Employees offer their labour and skills in return for salaries, additional benefits, and opportunities for professional and personal development.

A two-way communication between employees and management is in place, and various communication methods are in use, such as corporate announcements, briefings, the intranet, work groups, and different events organised for personnel (dinners and excursions).

Moreover, the refinery employees are represented by their Trade Union and the Health and Safety Committee. Through these two organisations, official dialogue is regularly conducted, and the employees are also encouraged to submit their proposals for improvements in working conditions on an individual basis.

# Local communities

MOTOR OIL's industrial activities (oil refining), as expected, impacts local communities in the vicinity of the refinery.

MOTOR OIL produces value for society with the creation of jobs, its investments and social contribution, by which supports local and broader social activities.

Communication (with emphasis on local communities affected by the company's operations) takes place mainly through Local Authorities, as well as other bodies, such as private associations and organisations (see chapter IV and p. 68).

### **Customers**

Due to the nature of its business, MOTOR OIL has a relatively small number of customers.

With its extensive and continuous investment programme, MOTOR OIL offers its customers high quality service and products, that satisfy their requirements, and is duly recompensed with the income it receives.

Communication with customers is mainly the task of the Marketing Division, which may involve other company departments if necessary. Information about products can be found on the company's website, as well as in the *Material Safety Data Sheets*. In addition, customer satisfaction surveys are regularly conducted (see p. 17).

# Partners and suppliers

These are providers of products and a broad range of contractor services, mainly at the refinery.

Partners and suppliers are paid for the products and services they provide to MOTOR OIL, ultimately resulting in contribution to economic development.

There is a structured communication programme at the refinery offering them appropriate information on Health, Safety and Environmental protection issues, for which compliance requirements are exceptionally strict and closely monitored (see chapter IIB)

# Shareholders, Investors and Analysts

At the end of 2009, 61.6% of the company's shares belonged to its founding family (the Vardinoyannis family), while the remaining 38.4% belonged to investors. MOTOR OIL's business activities are covered by Greek and foreign financial analysts.

Shareholders invest their capital in MOTOR OIL and are issued dividends in return.

Regular communication with shareholders is conducted in various ways: through the company's website, with press releases and announcements issued by the Corporate Communications Section, through the *Annual Financial Report* and the *Environmental and Social Report*, through the operation of an Investors' Relations Section, through presentations of financial results in conference calls, and with regular participation in roadshows.

Non-Governmental Organisations, Academic and Scientific Bodies Cooperation with these bodies involves supporting NGO programmes, conducting specialised studies at the refinery, or subsidising scientific activities. The most important collaborations in 2009 were:

- \* Support for the Foundation for the Child and the Family to help organise the international conference, «Climate Change and the Challenges for Future Generations», in cooperation with the *UN's Intergovernmental Panel on Climate Change* and the World Sustainable Development Forum (see p. 58).
- \* A study conducted by Patras University to determine the chemical conditions in sea waters along the refinery's coastal zone.

More information about collaborations developed in 2009 with these stakeholders is available in chapter IV and on p. 69.

# **The State**

Public Authorities on a local and national level.

MOTOR OIL generates revenues for the state through the payment of taxes and duties. The state grants operating licences and provides support in emergency situations.

There is open, forthright and bilateral communication and cooperation with the relevant Public Authorities, for the provision of information required by each party, as well as for documented discussion on any issues arising.

# 10. MEMBERSHIPS - AWARDS

# **Memberships**

MOTOR OIL supports and is a member of international and national bodies, as well as business organisations on a national and European level. In 2009, it was a member of:

- Global Compact Network Hellas (of which it became a founding member in 2008 when it endorsed the United Nations Global Compact).
- \* Hellenic Network for Corporate Social Responsibility (of which it is a founding member).
- Hellenic Federation of Enterprises (SEV).
- \* Athens Chamber of Commerce and Industry (EBEA) and other regional chambers.
- \* CONCAWE (CONservation of Clean Air and Water in Europe, see p. 69)
- \* MOIG (Mediterranean Oil Industry Group, see p. 69)
- \* OCIMF (Oil Companies International Marine Forum, see p. 69).

	Awards
2009	
Greek Investor Relations Awards	«Best IR Officer Buy Side» Award presented to Banking Manager and Investors Relations Officer, Mr Spyros Balezos.
HELEXPO	«Exports Turnover» Award.
Aegean University	The 2008 Environmental and Social Report awarded for the proper application of GRI principles
Accountability Rating Greece 2009 (Corporate Responsibility & Accountability ranking)	9th place among the major Greek companies.
2008 NGO Ecocity	«ECOPOLIS 2008 – Environmental Investment» Award.
2007 NGO Ecocity	«ECOPOLIS 2008 – Environmental Investment» Award.
Corinth Chamber of Commerce	«Entrepreneurship Award 2007».
MONEY Business Awards	«High Investments» Award.
<b>2006</b> LEADERS OF THE YEAR	«Consistent Business Achievements» Award to MOTOR OIL's Chairman and Managing Director, Mr Vardis J. Vardinoyannis.
MONEY Business Awards	«Investor Relations» Award.
2005 MONEY Business Awards	«Best Company in the FTSE/ATHEX-20 Index» Award.
MONEY Business Awards	«High Investments» Award.







# 11. AVIN OIL

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

At the same time, the AVIN OIL network continued to expand throughout Southern Greece, and particularly in the regions of Evia, Central and Western Greece, as well as most of the Ionian Islands. The first AVIN OIL petrol stations in Northern Greece opened in 1984. and specifically in the prefectures of Thessa-Ioniki and Serres. Its Northern Greece network grew quickly and continues to develop rapidly.

Today, with more than 580 petrol stations throughout Greece and with annual sales of around 1,200,000 metric tons in 2009, AVIN OIL ranks 4th in the Greek market, among more than 20 retail companies. Its turnover for 2009 was 879 million euros, with a net profit of 2.8 million euros before taxes.

AVIN OIL's sole shareholder is MOTOR OIL.

AVIN OIL markets high quality fuels for automobiles, aviation and industry, asphalt, Liquefied Petroleum Gas and lubricants, which comply with the international API, SAE, CCMC, ACEA technical specifications, as well as the specifications of major car manufacturers

Since 2008, AVIN OIL has implemented an

EN ISO 9001:2000-certified Quality Management System for the Storage, Marketing and Distribution of Fuels and Lubricants, as well as Retail Network Management.

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

AVIL OIL sells its fuels in the Greek market, mainly through its owned Storage and Truck Loading Terminal in Aghioi Theodoroi, Corinth. The facility in Aghioi Theodoroi was inaugurated in 1987 and is a sophisticated Loading Terminal, equipped with comprehensive safety and environmental protection systems. Our partners are also served by other 3rd party Terminals in other parts of Greece (Attica, Thessaloniki, Kavala, etc.), with which AVIN OIL has throughput agreements in place. The company also exports fuels and lubricants to neighbouring countries (Albania, Bulgaria, FYROM, Romania and Cyprus).

AVIN OIL has constructed and operates the Megara Twin Petrol Station and was recently awarded the contract for the construction and operation of the Twin Petrol Stations of Platanos on Egnatia motorway, and of Leptokarya on the Lamia-Thessaloniki National Highway. The Platanos station is scheduled to begin operating in the summer of 2010, while the Leptokarya station is due to open in autumn 2010. Construction of the two stations, including the restaurant areas, will have been completed by late 2010.

AVIN OIL holds a 46.03% stake in OFC AVIATION FUEL SERVICES S.A., which constructed and exclusively operates the Aviation Fuel Supply System at the «Eletherios Venizelos» Athens International Airport.

# II. RESPONSIBILITY TOWARDS OUR EMPLOYEES

A. Human Resources

1,507 employees

15,280 training hours

466 recruitments in the last five years

We aim at providing a first class, safe and fair workplace, which promotes trust, team spirit and respect for people.

We recognise that our value as a company is created by the efforts of our people. Achieving our strategic goals, implementing our growth business plans and safeguarding our long-term competitiveness require the active contribution and involvement of all employees. Their performance determines the success of our business operations, the quality of our products and the service provided to our customers. Therefore, we strive to provide excellent working conditions and implement policies that enshrine respect for human rights, freedom for trade unions to operate, non-discrimination and equal opportunities. We also ensure that all employees are given opportunities for learning and personal development and pursue a comprehensive training programme.

In 2009, we:

- \* Enhanced our human resources with further recruitment.
- Offered an extended educational programme for staff training and development.
- Continued to reward employees by means of a structured pay and benefits package that includes significant discretionary benefits.

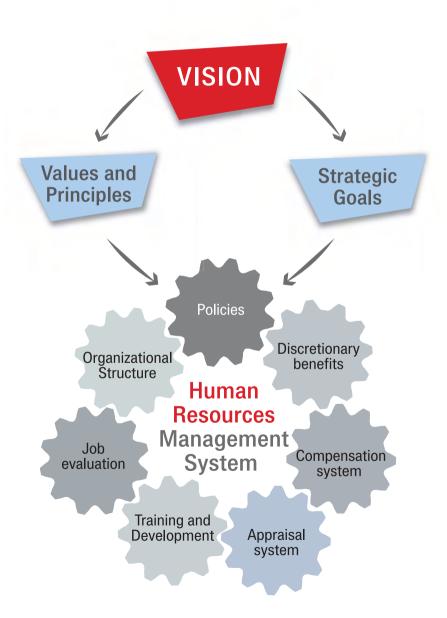
# A1. HUMAN RESOURCES MANAGEMENT SYSTEM

Respect for our employees and care for their needs is one of our corporate principles, so we consider the welfare of our people and their families as one of our primary business and social obligations. This concern is demonstrated by our ongoing efforts to develop and motivate our employees and, through responsible management, to create an equal opportunities workplace, in which they can be creative, productive and fulfilled in their work and have their potential fully utilised. This same philosophy underpins our policies and programmes aimed at fostering a coherent corporate culture, and at the maintenance of a healthy balance between work and family life.

These aims are delivered through the application of a modern and integrated *Human Resources Management System*, based on our corporate values and principles and aligned with our corporate mission and strategic objectives.

Its main components are the human resources policies, the organizational structure – which aims at encouraging employees to communicate, cooperate assume responsibilities and be personally involved in meeting corporate objectives – the assessment of all jobs aligned with a system of appraisal of employees' individual performance, the training and personal development programmes, and the structured pay and discretionary benefits package.

This approach ensures that the company is able to recruit competent young people with a professional approach to work, who share our values: reliability, dedication, creative thought, integrity and personal responsibility.



# Objectives of the Human Resources Management System

- Compliance with existing legislation and universally established principles of human and labour rights.
- Fairness and meritocracy in employee relations.
- Providing for equal opportunities and for the professional and personal development of employees.
- \* Accountability of employees for achieving the company's business goals.
- \* A competitive and fair remuneration system linked to employee performance and expectations, but consistent with prevailing market conditions.
- Offering pay and benefits exceeding those provided for by law and by collective labour agreements.
- \* A programme of targetted education and training aimed the development of employees, at ensuring that the workforce have the skills appropriate for the company's strategic development goals, and that work is being carried out effectively and safely.
- \* Welfare provisions covering employees' families, and promotion of a healthy balance between work and family life.
- Creation of strong bonds with employees, through open, candid and reciprocal communication.
- Enhancement of corporate culture and corporate values.

# A2. EQUAL OPPORTUNITIES AND HUMAN RIGHTS

We offer a workplace of no exclusions, in which all are treated fairly and are offered equality of opportunity, and where diversity is valued.

All aspects of human resources management are pursued with transparency and are based on meritocracy. Recruitment, transfers, promotions, pay and benefits, education and

training, etc, are governed by the principles of our equal opportunities policy, the avoidance of any form of discrimination, and respect for employees' dignity. In applying the equal opportunities policy, we strive to ensure:

- \* That the composition of management reflects the composition of the workforce.
- That education and training programmes are available to all personnel, in accordance with business needs.
- \* Equal pay for men and women.
- That welfare and benefits programmes provide additional support for employees and their families, while ensuring that a healthy balance is maintained between their professional and personal lives.

Moreover, we acknowledge the importance of the role played by businesses in the collective effort to create an inclusive society, where those with special needs are protected, not simply through the provision of welfare, but primarily through efforts made for their productive integration into society. Thus, we offer jobs to disabled people, providing them with equal opportunities with respect to employment, education and professional development. In year 2009 we employed 20 people in this category.

Protection and respect for labour and fundamental human rights is a logical extension of our corporate principles and corporate culture, and is reflected in our commitments, policies and practices. Our company respects international principles of human rights, in particular those set out in the United Nations Declaration of Human Rights and in the UN Global Compact's 10 principles, to which we are signatories. Moreover, it is relevant that MOTOR OIL's activities take place exclusively on Greek territory, and that the relevant Greek labour law that it complies with, is consistent with the requirements of the 1998 Declaration of the International Labour Organisation (ILO) on Fundamental Principles and Rights at Work, with references to the Greek Constitution and labour law. The eight fundamental ILO conventions have been ratified by the Greek Parliament and constitute Greek law. Included in these are the two conventions concerning the protection of freedom of association and the right to collective bargaining. In conclusion, it goes without saying that there is no compulsory or child labour in our operations, nor does the company tolerate such practices.

# **A3. LABOUR RELATIONS**

Labour relations are at a particularly good level, as they are based not only on compliance with legal requirements, but on respect for human rights and labour freedoms, on cultivating a spirit of mutual trust, understanding and co-operation, and on establishing human resources management policies which define clearly and fairly all issues relating to recruitment, transfers, promotion, education and training, remuneration, additional benefits, holidays and other types of leave. Indicative of this is the fact that there have been no strikes in recent years. At MOTOR OIL, the terms and

97.9% of employees at the end of 2009 were on open-ended contracts

conditions of employment are regulated by a collective labour agreement, which was drawn up in September 1974 and is approved by the Labour Ministry.

Employees are free to participate in trade unions and professional associations without restriction. Refinery employees are represented through their trade union and the Health and Safety Committee. The union has had a collective labour agreement with the Hellenic Federation of Enterprises since 1986. This agreement, which lays down the terms of employment and pay levels at the refinery, is supplemented by annual local agreements between the company and the union. We be-

lieve that cooperation with the employees' union is very important – much more so in difficult times like the one we experience since the last quarter of 2008, due to the international financial crisis – and therefore hold regular meetings with its representatives, the common aim being to ensure harmonious bilateral relations and the improvement of the overall quality of the work environment, while avoiding disputes and preserving labour peace.

# **A4. EMPLOYMENT**

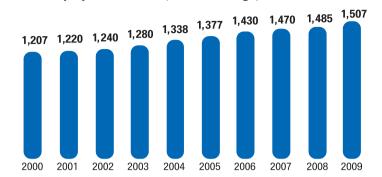
In 2009, the combined workforce of MOTOR OIL and AVIN OIL amounted to an average of 1,507 people, of which 1,318 were men and 189 were women. Compared to 2008, this represented a net increase of 22 posts. As a result of pursuing successful business growth opportunities and its effective management, the Group is one of the Greece's most important employers.

In addition to personnel directly employed by the two companies, a significant number are indirectly employed through sub-contractors. Undoubtedly, our business activities create a significant amount of secondary employment.

Due to the continuous growth of the Group, personnel levels have been steadily increasing since 2000, despite investments aimed at increasing the level of refinery automation and efforts made to simplify tasks. The significant rise in the total number employed since 2003 is due - on the one hand to hiring at the refinery, in order to implement the major investment programme that involved the production of fuels conforming to 2005 and 2009 EU specifications (completed in 2005 when the new units were incorporated into the refinery's production process) and - on the other hand - to the need for timely and adequate training of new employees, to cover vacancies created by the relatively high number of retirements in the past few years.

The main site of MOTOR OIL's activities is

**Employed Personnel (annual average) 2000-2009** 



were employed by MOTOR OIL and AVIN OIL in 2009

the refinery in Aghioi Theodoroi, Corinth, where an average of 1,107 were employed in 2009 out of a total of 1,297 employed by the company (the remaining 190 were based at the company's head office in Maroussi). Approximately half of the refinery personnel live in the region of Corinth, where MOTOR OIL is the biggest employer. AVIN OIL, by comparison, employed 210 people in 2009.

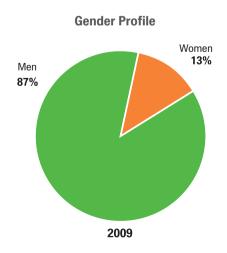
# Gender Profile

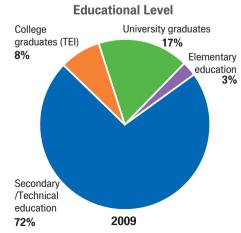
In order to fill job vacancies and ensure our employees' professional development, we support equal treatment of both genders and offer equal opportunities without discrimination. However, due to the nature of most refinery jobs, the ratio of women to men is re-

latively low. Thus, in 2009, 13% of all employees were female – a percentage that has remained stable for some time. In the head office, the number of women goes up to 33%. Among management, women made up 12% of the total, a satisfactory reflection of the general percentage of women in overall staff numbers, while in other office and technical jobs the percentage was 14%.

# **Educational Level**

We place great importance on the educational level of our personnel, and our aim is to attract, develop and retain suitable and competent employees. Some 25% of our employees are university or college (TEI) graduates.





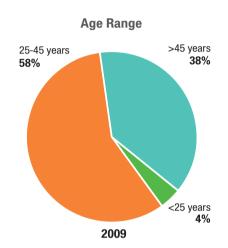
466 recruitments in the 5-year period 2005-2009

In order to develop the skills of personnel and maintain a high-output culture in the workplace, we implement various educational and vocational training programmes, and personnel are encouraged to participate in long-term external courses leading to the acquisition of recognised degrees.

# **Personnel Categories**

In 2009, management comprised 11% of

# Personnel Categories Management 11% Technical employees employees 67% 2009



We aim at maintaining an overall balance across the spectrum of our employees' ages,

taking account of our particular business re-

quirements. We place specific emphasis on

Age Range

total personnel, while technicians and administrative personnel accounted for 89%.

Each employee has opportunities for promotion in the management hierarchy, depending of course on their qualifications, performance and skills, as the main aim is to fill vacant managerial positions from within the company, wherever and whenever this is possible.

# Length of Service (2009)



recruiting young people, with the aim of ensuring we remain a dynamic, fast-growing Group that can offer employees prospects of professional advancement and opportunities for acquiring expertise and experience.

Over the past few years, the average age of the Group's employees has remained around 41.5 years, dropping slightly to 41.4 in 2009, compared to 41.7 in 2008, 41.4 years in 2007, 41.6 in 2006, and down from 42.3 in 2005. Sixty-two percent of the employees were aged less than 45.

# Length of service and turnover

As far as the length of service of the personnel with the Group is concerned, the average was 14.2 years in 2009 (compared to 14.6 in 2008 and 14.1 in 2007), indicating a relatively low rate of staff turnover. Some 51.7% of employees have considerable ex-

5.4% the very low personnel turnover in 2009

perience in the Group, as they have more than 10 years of service, while 35.6% have less than five years' service. These figures indicate a healthy balance in the service profile of our personnel, combining the experience of older employees with the renewal and dynamism brought by more recent recruits. In addition, the low turnover rate demonstrates our employees' dedication and the strength of ties with the Group, which is one of our main competitive advantages.

Long-term employment at MOTOR OIL is rewarded through additional compensation benefits and, at the refinery, with commemora-

Personnel Turnover			
Recruitments	2007	2008	2009
Number of recruitments	139	57	84
Resignations by reason			
Retirement	44	37	64
Resignation	20	11	11
Other	8	11	6
Total	72	59	81
Personnel Turnover*	4.9%	4.0%	5.4%

\*Personnel Turnover = Number of Personnel Leaving x10

Average Number of Employees

tive gifts for employees completing 15 and 20 years of service.

A high percentage of employees (29.7%) is in the 1-5 years category of service length. This figure is due to the increased number of recruitments since 2003, mainly to meet additional personnel requirements arising from the operation of new units at the refinery, and the need to fill vacancies created by the relatively high number of retirements, because of legal changes in pension provisions.

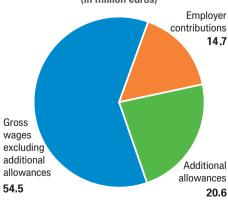
In 2009, the total of employed personnel was increased by 84 new employees, while 81 left for various reasons. The number of recruitments in 2006 and 2007 was particularly high, for the reason mentioned above, ie in preparation for increased retirements. Recruitments in 2009 were also high, because of preparations for the operation of the new crude distillation unit in 2010.

Personnel turnover averaged 5.4% across the workforce as a whole in 2009, a particularly low figure reflecting the mutual trust that exists between the workforce and the company, the professional satisfaction of employees and the harmonious, long-term labour relationships that exist.

## **A5. REMUNERATION SYSTEM**

One of MOTOR OIL's main objectives is to offer its employees competitive and high level salaries, so as to reward their contribution to the company and maintain high employee satisfaction levels. The system we implement in

Payroll Cost Breakdown 2009 (in million euros)



(Annual total: 89.8 million euros)

# The Basic Principles of Our Remuneration System

- Salaries that are competitive, compared with market rates, and that exceed current minimum levels of the job type related collective agreements.
- \* A reliable and objective salary review process.
- \* Consistency and meritocracy in pay policy.

order to set, manage and review salary levels is in line with current company and sector-specific agreements, as well as with national practices, and is consistent, transparent and objective. Negotiations for the drafting of collective agreements relating to salary readjustments are based on the industry practices applied at national level. Moreover, the payroll structure ensures equal pay for men and women for the same job, and rules out any other kind of discrimination.

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

Total expenditure on personnel salaries in 2009 amounted to 89.8 million euros (compared to 88.5 million euros in 2008). This includes pay for regular and overtime work, various mandatory employer contributions to social security funds and other additional employee allowances not required by legislation.

These additional non-statutory wage allowances, which constitute discretionary payments by the company to employees and comprise various benefits (eg, long-service supplements, continuous attendance allowance paid to refinery personnel, marriage allowances, etc), significantly boost salaries and are aimed at rewarding hard work and acknowledge the contribution of individuals to the company's performance, as well as encouraging long-term employment with the company.

### **A6. DISCRETIONARY BENEFITS**

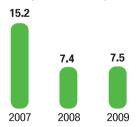
Apart from the normal pay and benefits package, we have developed a wide range of supplementary discretionary allowances and insurance benefits for employees and their family dependents. MOTOR OIL's discretionary benefits plan has been established for many years, while its current structure has been in place since 2002.

These discretionary allowances aim at making provision for improving employees' insurance over and above legal requirements, as well as facilitating their personal development, further strengthening their ties with the company for the development of the corporate culture, cultivating co-operation and team spirit, and helping towards achieving a balance between their personal and professional lives.

The cost of the discretionary non-wage benefits in 2009 came to 7.5 million euros, just over 2008 levels, but significantly lower than the 15.2 million euros in 2007, due to the unforeseen factor of extraordinary payments to the pension plan. Such an extra payment was made in 2007 to cover differences from previous years.

The table on page 28 shows the complete structure of the discretionary benefits programme.

Discretionary non-Wage Benefits for Employees and their Families (in million euros)







# Retirement, Life Insurance and Hospital Treatment Programmes

We endeavour to support our personnel and their families with improved and flexible benefits adapted to contemporary trends, and provide protection and financial assistance in the event of unforeseeable medical emergencies and related unexpected financial costs. In this context, since 2002, we have operated a group health insurance scheme covering employees and their dependent family members.

This health insurance scheme provides compensation in the following cases:

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

To further assist our personnel on retirement, we offer a private pension scheme which pays out a lump sum to those retiring at normal retirement age, or earlier due to disability.

The cost of both these programmes is covered entirely by the Group.

2,900 people (employees and their family members) participated in 47 excursions organised to various places of the country in 2009.

	Discretionary non-Wage Benefits
Personal development and welfare	<ul> <li>Pension plan (see p. 27).</li> <li>Study subsidies (see p. 31).</li> <li>Financial facilities to cover emergencies.</li> </ul>
Corporate culture and team spirit	<ul> <li>Organization of very successful, widely-attended excursions and dinner events organised for em- ployees and their families. In 2009, 47 excursions were made to various parts of the country, with over 2,900 people participating.</li> </ul>
	* Financial support for employees' football teams to compete in Corporate Games (see p. 29).
	Organisation of Christmas parties for employees' children, with gifts and events for youngsters (se- parate celebrations for the children of personnel at the refinery, and the head offices of MOTOR OIL and AVIN OIL). These events have become a major company tradition and are very popular among employees.
	* Organization of New Year celebrations with lotteries and gifts.
	<ul> <li>For the refinery in particular, an "Annual Employees' Ball" is organised – a major corporate social occasion and entertainment, dispensing with workplace formalities.</li> </ul>
	* Provision of "name-day" gifts.
	* Long-service gifts – at 15, 20, 25 and 30 years – for workers at the refinery (104 gifts in 2009).
Health	* Hospital care and supplementary life insurance scheme for employees and their dependent family members (see p. 27).
	* Full compensation for the first three days of illness within the year.
	<ul> <li>Availability of three occupational physicians to deal with both occupational and personal health issues (see p. 44).</li> </ul>
Family	<ul> <li>Implementation of more favourable maternity policies – compared with those legally required – for working mothers, with the aim of achieving a better professional/personal life balance.</li> </ul>
	* Wedding presents (31 gifts in 2009).
	Paid leave for special occasions (eg for parents to oversee children's schooling, for bereavement, or other serious situations).
	<ul> <li>Free tickets for employees to attend various cultural events.</li> </ul>
	* For refinery personnel
	<ul> <li>financial awards for scholastic excellence by secondary school children of employees (76 awards in 2009).</li> </ul>
	<ul> <li>educational grants awarded for employees' children who are university students (110 grants in 2009).</li> </ul>
	<ul> <li>full coverage of participation in summer camps for children aged 6-13 (45 instances in 2009).</li> </ul>
	• nursery day care allowance (46 allowances in 2009).
Facilities	<ul> <li>financial assistance for employees with children at the start of the school year (856 cases in 2009).</li> </ul>
racilities	Operation of a restaurant at the refinery, with a token contribution paid by employees; and at head of- fices, where prices for personnel are low.
	<ul> <li>Free bus transportation to/from work for employees.</li> </ul>
	<ul> <li>Special agreements with other companies ensuring privileged treatment of employees regarding the provision of goods and services.</li> </ul>

## Football teams

The employees are encouraged to participate in sports activities. Company football teams have been established for many years and take part very successfully in corporate games.

In 2009, the MOTOR OIL employees' football team came third, among 28 teams, in the amateur Athens Corporate Games Football League, and was a Cup finalist. In 2008, for the 13th consecutive year, it earned first place in the championship, in which it has participated for 16 consecutive years, having won eight «doubles» (championship and cup), five championships, one cup, and two other awards. Its competitive performance has been equally impressive abroad, as it won the World Corporate Championship in 2004 and the European Corporate Games tournament in 2003 and 2005.

In 2009, the equivalent AVIN OIL football team won the «double» (championship and cup) in the Corporate Championship 8-a-side among 28 teams. Previously, it participated in the 5-a-side championship and was champion in 2006.





# A7. EDUCATION AND TRAINING

In a globalised and highly specialised sector, such as the oil sector, our growth path and business strategy is closely linked with the development of the skills and capabilities of our staff. Thus, the professional and personal training of our employees are of paramount importance and we allocate significant resources to those activities, both in terms of money and time.

# **Education and Training Policy**

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

- \* The ongoing, responsible and comprehensive technical education and training of employees.
- The continuous expansion of professional expertise and the development of employees' personal skills.
- The internal designation and promotion of competent employees to managerial positions.
- The cultivation of a unified corporate culture.

# Education and Training Programmes

Education and training programmes are planned and delivered according to the specific needs arising each year. The following factors are taken into account when planning annual training activities:

- \* The current corporate priorities and goals.
- \* The training programmes conducted in previous years.
- Health and Safety training requirements, both from a technical viewpoint and in terms of raising awareness of the importance of safety at all levels.
- The requirements for training in matters involving specialised technical skills, Environmental Protection and Quality Management.
- Employees' personal development needs.

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

# 5.6 million euros

invested in education and training programmes in the 5-year period 2005-2009

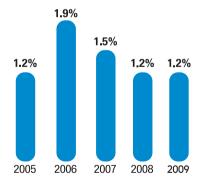
# **Training Performance in 2009**

- Training Activity Ratio<sup>1</sup>: 10.1 hours/person
- \* Training Cost Ratio<sup>2</sup>: 1.2%
- \* Training Participation Ratio<sup>3</sup>: 29.3%
- 1. Total training hours to total number of employees.
- Total training expenditure to total payroll expenditure including employer's social security contributions
- 3. Total number of trainees to total human resources.

# 1.4 1.2 1.1 1.0 0.9 2005 2006 2007 2008 2009



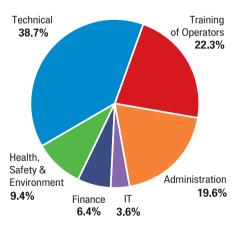




Total training expenditure to total payroll expenditure including employer's social security contributions.

The high value of the Training Cost Ratio in 2006 is due to the extensive Health and Safety training programme conducted that year.

# Training Man-Hours by Subject in 2009 Total hours = 15,280



- \* Induction training for newly-hired unit operators and maintenance technicians.
- Induction training for newly-hired engineers
- Training of technical personnel on the specific scope of their tasks, as well as the use of personal protective equipment (PPE) and work equipment. This training involves the expertise each employee needs in order to complete their duties successfully.
- Training of technical personnel in Health, Safety, Environment and Quality, with emphasis on the special features of each workplace.
- Training of non-technical staff on basic Health and Safety regulations, use of firefighting equipment and first aid.
- Training in business and computer skills, as well as personal development issues.

Preparation for emergencies with regular scheduled or unscheduled drills. This

80,300

man-hours of training in the 5-year period 2005-2009

training also includes joint drills with other Greek refineries, and with the participation of the Fire Brigade.

- \* Foreign language learning.
- Health and Safety training for subcontractor personnel.

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

- In-house training seminars, with instruction by company executives or external consultants.
- Participation of employees in international seminars organised by internationally recognised educational and training centres, such as the Institute of Petroleum and the Oxford Princeton Programme, in local seminars organised by competent training bodies, and in local or international conferences, such as the European Refining Technology Conferences (ERTC).
- Offering employees the opportunity by covering the relevant cost – to attend academic courses (graduate or postgraduate programmes), as part of their personal development, or as preparation for undertaking increased responsibilities.
- Encouraging and funding foreign language learning for personnel, according to business requirements.
- Paying technical magazine subscriptions and covering professional society membership fees.

It should be noted that:

- \* A Computerised Training Simulator (CTS) is used to train operators of the refinery's most complex plant (i.e. the Fluid Catalytic Cracking Complex), as well as the operators of the Hydrocracker Complex. It is an exceptionally effective training tool, which contributes greatly to the refinery's safe operation.
- A four-volume set of technical training manuals is used primarily to meet the induction training needs of newly recruited engineers and unit operators, as well as for other training activities, which cover the requirements of refinery personnel with respect to structured and specialised information for this specific refinery. These manuals were written entirely by MOTOR OIL refinery engineers and are fully adapted to the refinery's current structure, covering all aspects of processes and products, with the requisite theoretical and technical documentation, so as to constitute comprehensive sources of information.

In both the refinery and head office, the inhouse training seminars are conducted in special facilities, fully equipped with state-ofthe-art IT and presentation systems.

# Training in 2009

In 2009, a total 15,280 man-hours of education and vocational training were conducted, at an overall cost (including indirect costs) of 1.1 million euros.

The number of employees participating in the training programmes was 442 (29.2% of the total workforce), of which 176 were managers and 266 other personnel. This number does not include training hours relating to emergency drills. On the basis of these data, the average length of training undertaken was 34.6 hours per participant (compared to 26.6 in 2008 and 64.9 in 2007). In 2008, there

was no requirement to train new operators (hence the reduced number of training hours per trainee), while in 2007, apart from the training of new unit operators, existing operators hired in the previous two years received retraining (hence the increased number of training hours per trainee).

# In-house Training Subjects at the Refinery in 2009

The instructors for these seminars are – according to the subject – refinery executives or highly specialised external instructors, who are usually invited from abroad.

- \* Training of new unit operators.
- Methods of improving the functional reliability of equipment.
- \* Effective Project Management.
- \* Best practices for turnarounds.
- Business English.
- Maintenance of ship loading equipment.
- Refining Processes and Petroleum Products (from the Institut français du pétrole, IFP).
- \* Advanced Process Control Maintenance.
- \* Use of laser alignment tools.
- Management principles for young engineers (from Hellenic Management Association, EEDE).
- Operation of the Crude Distillation Unit.

Emphasis was placed on the certification of refinery staff in various techniques and the training of existing technical personnel, aimed at further developing and improving the skills of employees in various specialised technical matters and personnel management. Health and Safety in the workplace, as well as Environmental Protection, were also the main subjects of the 2009 training process.

Moreover, training also focused on administration, sales and marketing, accounting and finance, quality, foreign languages and information technology, in order to develop the administrative and technical skills of ther personnel.

In 2009, in line with our policy of paying tuition fees for employees for studies leading to graduate or post-graduate degrees, we covered the cost of the following:

- three employees for participating in a post-graduate Business Administration course run by the Hellenic Management Association (EEDE),
- one employee for acquiring a professional diploma in Taxation from ALBA,
- one employee for acquiring a degree in Accounting and Finance from the Piraeus Technical College (TEI),
- one employee for specialising in Computerised Bookkeeping and Income Tax,
- two employees for specialising in Administrative Accounting and Cost Accounting,
- one employee for specialising in Chartered Accounting,
- one employee for specialising as a Computer Systems Technician, and
- two employees for attending foreign language courses.

# Training and Induction of New Operators and Maintenance Technicians: an Integrated Programme

MOTOR OIL's policy regarding the replacement of retired refinery operators, and also the filling of new jobs arising from its investment programme, requires that new operators be properly trained and experienced before they undertake their duties. To achieve this, new operators are hired about one year before the retirement of their predecessors, or the activation of new positions. Subsequently, a specially organised multifaceted induction programme is followed to ensure their training and practice. This programme, with the appropriate theoretical and practical training, ensures that the refinery's future technical personnel acquire the requisite technical skills and capabilities, together with a sense of responsibility, which are vital for their work in a demanding and potentially hazardous environment. The approximately twelve-month induction training is conducted entirely in-house by refinery executives, engineers and skilled operators from various units of the refinery, according to the duties each new recruit will take on.

In the case of newly hired operators – as with any other form of training – evaluation takes place on completion of the programme, in view of identifying weaknesses and implementing improvements for the future delivery of the training programme. Thus, an evaluation of the training experience gained in previous years has led to partial restructuring of the new operators' induction programme, in terms of the emphasis placed on practical training at the initial stage of the programme; this is no longer limited solely to theoretical coverage of the curriculum, but also includes practical demonstrations/exercises on site.

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

- One month's training on fundamental subjects (Properties and Specifications of Crude Oil and Petroleum Products, Refining Processes, Plant Equipment, Maintenance, Health and Safety, Environment Protection, Quality, Fire Protection, First Aid, Technical English, introductory computer course, etc.).
- \* Five months' morning shift with analytical on-the-job training.
- Six months' shift-working, without assuming actual operational responsibilities, in order to gain experience. This also facilitates evaluation of new recruits' knowledge and experience, as well as their interest and dedication to the job, in view of a final assessment of their suitability for the specific position.

At the end of each of the three training stages, the new operators take a written test for their step-by-step evaluation.

After completion of the above programme, the new operators take up their jobs, working initially with experienced operators and undertaking simple tasks, before going on to assume their full duties.

A similar programme, adapted as appropriate, is also applied for the induction of newly-hired maintenance technicians.

# II. RESPONSIBILITY TOWARDS OUR EMPLOYEES

B. Health and Safety

1.3 the Accident Frequency Index

Vertical Inspections procedure applied

8.3 million euros invested in Safety projects

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

We carry out our industrial and commercial operations according to set of key Principles and Values: one of our fundamental values is respect for people, which gives rise to our commitment to ensuring a safe working environment and continuous improvement of health and safety in the workplace. We accomplish this commitment by applying a soundly structured system for managing all Health and Safety issues.

Our activities in the field of Health and Safety in 2009, in addition to other projects, focused on consolidation, within our standard working practices, of the principles of the OHSAS

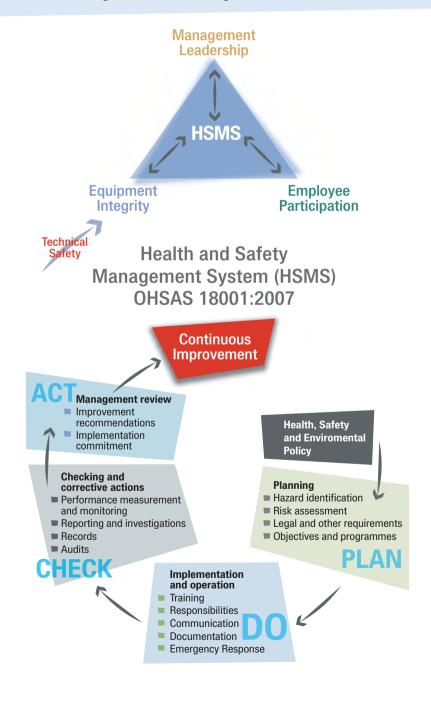
18001: 2007 standard – with which the company was certified compliant in 2008 – and also on developing the corporate safety culture and further enhancing safety consciousness and accidents' prevention mentality among our employees. We also made investments in facilities improvements and work equipment that will reduce the risks of accidents, in improving fire prevention measures and in training. Particularly noteworthy was the continued downward trend in our Accident Frequency and Accident Severity Indices, which reached their lowest-ever levels in 2009, taking us a step closer to our long-term aim of achieving «zero» accident rates.

# B1. HEALTH AND SAFETY MANAGEMENT

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

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

The company's management and all its executives are committed to providing support for implementation of whatever measures are necessary to ensure constant improvement of occupational health and safety standards in the workplace, and further development of the al-



ready soundly-based **safety culture** and accidents' prevention mentality that exist.

Delivering on this commitment relies on the effective operation of the integrated Health and Safety Management System, which is certified compliant with the internationally recognised occupational health and safety standard OHSAS 18001:2007. Furthermore, since the company's Health and Safety Management System constitutes an integral part of its Integrated Management System – which is certified compliant with the quality standard ISO 9001:2008 – the various internal operations and procedures of the Health and Safety Management System are themselves subject to the strict documentation imposed by the ISO 9001:2008 standard.

The **operational structure** of the *Health* and *Safety Management System* continues to be based on the four-stage «Deming» cycle (**Plan** → **Do** → **Check** → **Act**), – a well-established quality management tool – that is applied so as to achieve continuous improvement in the system's operation.

The Health and Safety Management System comprises a series of component parts, each of which is separately essential to the system's operation but which together act synergistically to significantly increase the system's overall effectiveness.



# Component parts of the Health and Safety Management System

#### **People**

- Visible and systematic management by competent executives at all management levels.
- \* The setting of goals and defining of responsibilities and accountabilities.
- \* Active involvement of all employees.
- \* Provision of appropriate and full training to all employees.

#### **Equipment**

- \* Continuous inspections of all mechanical and other equipment in use, to ensure its operational integrity throughout its life-cycle.
- \* An equipment upgrading plan to ensure optimum performance with respect to both productivity and safety.

#### **Procedures**

- \* Strict application and documentation of procedures for operational safety and efficiency.
- Strict compliance with relevant legislation, with international standards and codes of practice and with established operational rules.
- Systematic identification, control and assessment of all risks associated with the hazards arising from the refinery's operations.
- Ensuring that all operations are carried out in full compliance with safety rules and regulations.
- \* Systematic recording, investigation and analysis of all incidents.

#### Communication

\* Excellent cooperation and communication with public authorities and other stakeholders, including providing them with all relevant information.

#### Results

\* Systematic measurement of results and target setting using established industry indicators, so as to ensure constant improvement in performance and identification of malfunctioning and of vulnerabilities.

#### **Risk control**

- Occupational risks and the protective measures required to control them are understood by all, and at all management levels.
- \* Continuous review and updating of the company's *Emergency Response Plan*.

### Health and Safety Management System An integrated system with OHSAS 18001:2007 certification

The operation of the *Health and Safety Management System* is assigned to the refinery's Health, Safety and Environment Section. Moreover, the Health and Safety organisation includes in-house safety engineers, occupational physicians and nursing staff, both at the refinery and at the company's head office, at a level that goes beyond the requirements of the relevant Greek legislation (Law 1568/1985 and Presidential Decree 17/1996).

During 2009, our efforts to achieve our Health and Safety goals were focused on the following:

- Investments related to the upgrading and improvement of the safety and quality of the work environment.
- Upgrading and improving work practices and procedures so as eliminate hazards and control risks.
- Training and cultivating safety awareness in our own personnel, and in contractors' staff, developing emergency preparedness and encouraging cooperation with stakeholders.
- Implementing suitable measures for the prevention of accidents during the course of the shutdowns of refinery units, for maintenance purposes, scheduled for 2009.
- Compliance with the requirements of the European Union's REACH (Registration, Evaluation and Authorization of Chemicals) Regulation.

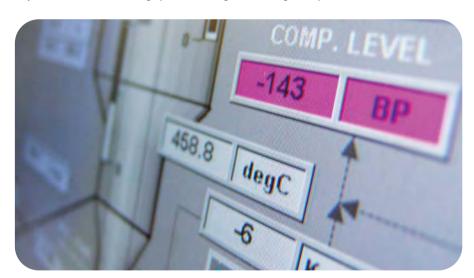
# **B2. TECHNICAL SAFETY – INVESTMENTS**

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

The refinery was designed, built, and operates, in accordance with Greek and international regulations and standards. Nevertheless, significant investment in the proper maintenance of mechanical, electrical, and electronic equipment and in technical upgrading and renewal of that equipment continues, taking account of developing technology, so as to maintain the highest possible standards of safety and accident prevention. The cost of the company's investment programme (including AVIN OIL investments) for improving health and safety standards, and for setting up and servicing

of safety and medical equipment, was 5.3 million euros in 2009, while the cost of all other types of expenses was 3.0 million euros. Therefore, the overall 2009 cost of investments and running costs amounted to 8.3 million euros, representing a reduction of 25% compared to 2008. The reduced overall cost reflects the fact that a major maintenance shutdown of the refinery took place in 2008 - the biggest maintenance shutdown in the refinery's history that was associated with higher-than-normal costs and investments, costs that were much higher than those incurred the following year, ie in 2009. (It should be noted that the abovementioned figures do not include costs of routine maintenance, which have direct implications for safety, nor safety-related components of investments related to work on major new projects, or extensions and upgrades to the refinery, the total cost of which amounts to several million euros.)

The greater part of the above-mentioned in-



#### 2009 Investments and Expenses for Health and Safety (in thous. euros)

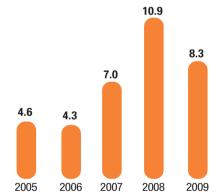
Investments	5,276
Fire Safety	716
Emergency Response	186
Personal Protective and Medical Equipment	286
Risk Reduction	3,988
Security	100
Expenses	2,990
Total in Investments and Expenses	8,266



flows at such facilities.

- \* The construction of a new pipeline tunnel alongside the Old National Road parallel to an existing tunnel in order to relieve congestion, and provide sufficient space for the carrying of inspections and maintenance of pipelines, as well as for providing access for fire-fighting operations. A similar project has been completed in respect of one of the pipeline tunnels within the refinery complex.
- Continuation of the project involving the fitting of double-block bleed valves to the fuel oil lines that supply the furnaces of the refinery's process units.
- The installation of relief safety devices on product pipelines.
- \* The installation of a new system to control

Investments and Expenses for Health and Safety (in million euros)



vestments are associated with projects whose aim is to reduce the risk of accidents and to improve working conditions, as well as projects aimed at upgrading fire prevention measures.

Among other things, safety investments at the company's facilities in 2009 covered:

\* The start of works to set-up an interconnection between the Power Co-Generation 8.3 million euros the 2009 investments and expenses for improving Health and Safety

Plant (PCGP) and the Distributed Control System (DCS). This important project will allow the exploitation of DCS's capabilities in upgrading the monitoring and control of PCGP, greatly improving the efficiency of its operation, while at the same time leading to a higher level of operating safety through the avoidance of unexpected shutdowns (budget: 2.6 million euros).

- The continuation of works on the construction of a new electric power substation on the jetty, incorporating state-of-the-art safe operation technologies, with a budget of 3.2 million euros.
- The continuation of works to fit a High High Level Alarm (HHLA) system on all storage tanks. HHLA operates independently of the existing Automatic Gauging System, and provides complete protection against over-

the operation of boilers that provides for their safe shut-down in the event of faults occurring.

- The installation of hydrogen sulphide detectors at a Sulphur Recovery unit, by means of which illuminated warning signs are activated when unacceptably high levels are detected.
- The elevation of the guard station at the second products' pump station in order to improve the safety level.
- The further improvement of the safety conditions in the Alkylation unit under ground facility used for the more secure storage of hydrogen fluoride tanks, including the addition of hydrogen fluoride detectors, pH meters and system for providing protective water curtains.

- \* The improvement of the fire safety system by means of various projects, including: (a) construction of a permanent foam generating system at a pipe trench near the second products' pump station, (b) the phased replacement of underground sections of the fire safety network by new facilities above ground, (c) the phased programme to cover metal structures with special fire-resistant coatings, and (d) the replacement of old portable fire extinguishers, with a parallel effort so far as possible, towards achieving consistency in this type of fire-fighting equipment.
- The installation of protected access facilities at various points of the refinery (ladders, platforms, etc) in order to provide safe access for operators to manipulate valves or make checks; also improvements in lighting and signposting of the refinery site's road network.
- The renewal of wireless communication devices to improve communications within the site, especially at times of emergencies.
- \* The renewal and upgrading of the basic Personal Protective Equipment (PPE), and of equipment at the refinery's Medical Centre; also the procurement of special safety devices to facilitate the tasks of monitoring, supervising, maintaining and repairing items of plant equipment.

#### **B3. INSPECTIONS**

Planned Health and Safety inspections are essential procedures by means of which equipment and workplaces are continuously monitored to identify potential hazards, and they are given the highest priority. At the refinery, planned inspections are carried out by both internal inspection teams and external safety auditors, including Greek and foreign consultants.

Projects under construction are subjected to daily, ad hoc inspections, while planned **Horizontal Inspections** – carried out by teams of different composition and mandate, comprising refinery executives and other

competent personnel – are performed according to an annual schedule, as follows:

- \* Safety and Environment Inspections carried out by a four-member team headed by a Section Head and including Engineers and Supervisors as members. There are 24 such teams, each responsible for inspecting, during the year, six of the 23 sections into which the refinery is divided for this purpose.
- Executive Safety and Environment Inspections – carried out by a team headed by the refinery General Manager and including Departmental Managers and the Head of the Health, Safety and Environment Section.

In addition, there are also two institutional committees – the Safety and Environment Committee, consisting of refinery Section Heads, and the Employee Health and Safety Committee, established in accordance with the requirements of Law 1568/1985, whose members are elected every two years by refinery employees. Meetings of these committees give rise to recommendations for the improvement of health and safety conditions.

The findings and recommendations arising from the above-mentioned Horizontal Inspections' procedures, and the recommendations arising from the meetings of the two Committees, after evaluation, lead to appropriate technical or organizational measures being taken to achieve long-term improvements in the level of health, safety and environmental protection. In 2009, 834 new recommendations were put forward, while 1031 were implemented (including some pending from the previous year), with another 148 recommendations pending at the end of the year.

In 2009 a new form of safety inspections was introduced – known as **Vertical Inspections** – as a result of which 457 new recommendations were recorded for all refinery sections, of which 139 were implemented and 318 remained under consideration.

#### **Vertical inspections**

Efforts to further improve the *Health* and *Safety Management System* led, in 2009, to the introduction of the inspection procedure known as Vertical Inspections, whereby expert assessment of potential hazards is carried out within the responsibility zone of each refinery Section.

Vertical Inspections are performed by the Section Heads, Engineers and Supervisors of the Section on a three-monthly basis, ie each Section of the refinery will undergo four such inspections each year, one for every shift.

The following information is gathered, both by means of a workplace survey and from answers to questions put to operators on each shift:

- Instances of unsafe plant operation or unsafe conditions.
- \* Possible weaknesses of the safety arrangements with respect to:
  - safety equipment,
  - safety procedures,
  - Personal Protective Equipment (PPE),
  - workers' knowledge about the correct use of PPE,
  - safety signage,
  - personnel training.
- \* Comments about hazard identification and risk assessment.

Whenever any of the above-mentioned situations arises, appropriate corrective measures are proposed, an individual is designated with responsibility for putting them into effect and a date is set for their completion. Progress towards completion of corrective measures is monitored by both the relevant Section and by the Health, Safety and Environment Section, which in turn informs the refinery General Manager and the Safety and Environment Committee.



In addition to the above, **technical inspections and monitoring** of work equipment carried out by the Technical and Maintenance Departments also have a safety dimension in that they lead to measures which reduce hazard and risk and contribute to the improvement of occupational health and safety conditions. The scheduling and management of such inspection/monitoring and maintenance activity is based on the use of sophisticated computer systems – such as the Plant Condition Management System – that help to determine the most effective and safe technical operating conditions of equipment, combined with the most efficient use of resources.

Finally, the company takes special care to the operational readiness its fire prevention system and the installed fire-fighting equipment. The routine, and periodically scheduled checking of these facilities is carried out according to a very carefully planned annual programme under the supervision of the Fire Prevention Service.

#### **B4. SAFETY PROCEDURES**

The technical integrity of equipment and safe working conditions are important factors affecting safety in the workplace. Personal attitudes (the "human factor") are even more important. Through the establishment of strict work procedures and the provision of suitable training to ensure that the necessary skills and competencies are acquired, and that the safety awareness is maintained, refinery employees are equipped with the attitudes and competencies necessary to perform their work safely.

#### Complying with Legislation

The company is fully aware of, and strictly complies with, all relevant Greek and European Health and Safety legislation and also applies any relevant international standards, codes of practice and other operational norms where these are judged likely to help achieve even higher standards of protection than would be achieved by legal compliance alone.

An online database of legal provisions is maintained on the company's intranet, available to all employees, containing all Health and Safety provisions of Greek law relevant to the refinery's operations. This database is exceptionally important, not only for the legality of our operations, but also for the wealth of information it contains on a wide range of issues, for example on risk identification and control, drafting of Emergency Preparedness Plans, maximum acceptable levels of exposure to hazardous substances, etc.

The company's full compliance with regulatory requirements was validated by an external inspection during 2009. The process was designed to confirm MOTOR OIL had implemented all relevant legal requirements relating to Health, Safety and the Environment as specified, respectively, in the occupational safety and environmental management standards OHSAS 18001: 2007 and ISO 14001: 2004.

# Hazard Identification, Risk Assessment and Control

We continuously seek to implement best practice in the identification of hazards to health or to safety in our workplaces, and to apply practices and procedures to eliminate them or to mitigate the risk of harm. The framework for hazard identification and control is provided by Greek legislation (Presidential Decree 17/1996) and by other European and international codes of practice.





- Systematic risk assessment studies have been carried out for all jobs, all workplaces and all hazard types within the refinery site and appropriate measures to eliminate hazards - or to control risks to acceptable levels – have been taken. Whenever changes are made to workplaces or to working practices, these risk assessments are reviewed so as always to be up-to-date. In 2009, in order to align practices with the requirements of OHSAS 18001:2007, this procedure underwent a further process of systematisation. Within each refinery section, occupational hazards and risks identified are classified into three categories according to the hazard level: low, medium or high. For each hazard category, a schedule for the completion of measures to eliminate hazards, or to reduce risk to as low as practicable, is determined as follows:
  - Low risk: measures to be put into effect within one year.
  - Medium risk: measures to be put into effect within six months.
  - High risk: measures to be put into effect within one week.

Personal responsibility for completion of these actions is allocated and compliance

- with these schedules is monitored by the Health, Safety and Environment Section, and senior management kept informed accordingly.
- \* We provide appropriate and adequate training to all our workers covering: information and instruction relevant to the hazards arising from their work, measures for the elimination of hazards or control of risk, correct use of Personal Protective Equipment, safe working practices, appropriate emergency response procedures and first aid provision.
- \*\* We enforce safety rules in all situations so as to ensure full implementation of protective measures and compliance with safe working procedures. In this context, the protocol related to the issue of Permits to Work is particularly important in ensuring high levels of worker protection during the repair and maintenance operations; for this reason, the issuing of Work Permits is the subject of continuous training activity, covering both those who issue them and those who receive them, both company employees and any sub-contractor personnel who may be involved in work activities on the refinery site.
- \* European (ATEX Directives) and Greek leg-

- islation (Presidential Decree 42/2003) are applied with respect to the protection of workers from explosions. The measures foreseen concern in particular: the prevention of leaks of flammable substances, the prevention of sources of ignition, the training of employees, and specifications for safe work equipment and personal protective equipment.
- We encourage the active involvement of all workers in health and safety arrangements, both individually and through their being represented on the Employee Health and Safety Committee.
- In order to properly assess risk associated with particular refinery operations, detailed hazard and operability (HAZOP) studies are carried out as a matter of absolute necessity, for all new facilities and for all modifications to existing facilities, on a case-by-case basis.
- \* Specifications have been issued for all types of safety equipment (ie Personal Protective Equipment, fire-fighting equipment, etc) in order to facilitate its effective replacement as and when necessary, and the so far as possible standardisation of equipment types. Safety equipment specifications are amended and updated in line with technological developments.

# Examples of actions taken during 2009 to improve operating procedures

- \* A major project involving thorough review and inspection of all procedures of significance for refinery safety was carried out involving 86 refinery executives (Section Heads, Engineers and Supervisors). A total of 57 procedures were examined of which several were the subject of comment and review.
- \* The programme of intensive auditing and inspection of selected hot work areas and work in confined spaces continued. Between five and seven such audits are carried out each day, and close to 3,000 such audits took place in year 2009, including those carried out on facilities that were temporarily shut down.
- A new technique (introduced despite the higher cost involved) that allows crude oil tanks to be cleaned without the necessity for personnel to enter them, thus entirely eliminating the associated hazards, continued in operation.
- Within the framework of the continuous Emergency Response Plan update, a study was carried out for reviewing the site requirements for staff assembly points. As a result, 17 main as well the corresponding alternative assembly points were designated, and appropriate signage was installed and measures taken to ensure that all staff were aware of the relevant arrangements.
- A review of training materials associated with Permit to Work arrangements covering 29 different job functions was initiated. The aim is to ensure that training takes account of recent changes to refinery installations and of other relevant events. At the same time, an «Activity Controls List» was issued, in which details of all checks required to be carried out by supervisors are recorded.
- A system of imposing penalties on contractors, who breach the company's Health and Safety site regulations while working on refinery premises, introduced in 2006, continued in operation. Persistent breaches lead to a graduated scale of sanctions been applied, depending on the seriousness of the breach. Since 2008, a sub-contractor reliability index has also been maintained, based on the evaluation of ascertained breaches.
- Within the framework of our policy to reward the personnel in refinery Sections where no accidents have occurred and where safety performance has significantly improved over the previous year (2008 in this case) the company issued memorial gifts to the personnel of four Sections of the refinery (Fuels Production-Gasoline, Port, Security and Transport).
- Review and re-issuance of the Material Safety Data Sheets (MSDS) for the refinery products continued, as required by the European Union REACH Regulation. This work is ongoing, according the phased implementation of REACH.

# Reports, Measurements and Indices

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

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

#### **Emergency Response Plans**

Our emergency response arrangements are based on our *Emergency Response Plan*, which is regularly reviewed and updated taking account of refinery expansions and other changes to its configuration, of changing legal requirements, and of best practices resulting from technical developments or experience gained by others in dealing with major or non-major accidents. We have also prepared and submitted studies to the competent authorities, which comply with the European SEVESO II Directive, as regards the most important potential accident scenarios and the respective prevention and confrontation measures.

In July 2008, the refinery was inspected by a special committee of competent Authorities, established in accordance with the provisions of article 16, SEVESO II. The committee's report was submitted in 2009.

The Emergency Response Plan, especially for major accidents, specifies public health protection measures, including instructions for neighbouring communities, and related advice, that would be put into effect in the event that any of Major Technological Acci-

dents Response Plans (SATAME) were activated; these plans are drafted by the competent Authorities and determine how the state might intervene in emergency situations.

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

- The Mutual Aid Agreement whereby all Greek refineries co-operate in the event of an emergency, which dates from 1988. The effectiveness of this collaboration is ensured through joint exercises involving MOTOR OIL, the local fire brigade and the other refineries.
- The safety drills, organized weekly, and the preparedness exercises on dealing with major accidents that are organized several times a year. During these exercises, the Major Incident Response procedure is activated. Nine such exercises were carried out in 2009. Safety drills and major exercises contribute greatly to the training and preparedness of employees, and the evaluation and modification of the plan itself. They also contribute to the assessment and upgrading of fire safety equipment, since one of the outputs from these exercises, as far as fire safety is concerned, are recommendations for further improvements to fire safety facilities.
- The fixed and portable equipment for fire detection, fire-fighting, and leakage detection and containing, which are upgraded according to a regular annual investment plan.
- The availability on the refinery site of six fire engines and one 12,000-litre bulk foam tender, that are available on 24-hour standby, and are operated by trained firefighter crews.

The existence of alternative locations for the Incident Control Room at four different strategic points on the refinery site and the use of a state-of-the-art emergency telephone system that provides for refinery staff to be contacted at times of emergency outside of normal working hours.

# Joint emergency preparedness exercise involving MOTOR OIL and the Corinth Fire Brigade

On 9 April 2009 an impressive joint emergency preparedness exercise was held during which MOTOR OIL and the Corinth Fire Brigade rehearsed their contingency plans for dealing with a major refinery fire. This involved:

- \* Strengthening the already good operational cooperation that exists between the two bodies,
- \* testing the coordination of the two bodies' fire-fighting forces in conditions as close as possible to a real-life fire situation,
- \* checking other aspects of emergency response activities that would be triggered in the event of a major fire, and
- \* checking the sufficiency of human resources available and the availability of appropriate equipment.

The local Fire Brigade participated with 11 fire-fighters and three manned vehicles: one 10-ton foam generating vehicle, one 13-ton water-carrying vehicle and one vehicle carrying an articulated foam monitor.

MOTOR OIL participated with a 27-strong fire-fighter crew and all its fire-fighting vehicles (FFVs) as follows: one powder FFV, five foam/water FFVs and one bulk foam tender. Refinery medical personnel and the refinery ambulances were at operational availability throughout the exercise. During the exercise, the refinery Shift Supervisor had responsibility for coordinating the fire-extinguishing activities.

The emergency scenario – involving a fire at the seal of the floating roof storage tank T-765 after which the alarm was raised at 11.05 am – was played out as follows:

- 1. Immediate activation of the water deluge system of the affected tank (T-765), as well as those at the neighbouring tanks (T-766) and (T-764).
- 2. Activation of the foam-generating system at the affected tank for covering the seal with foam.
- 3. Additional cooling of the tank so as to protect the integrity of its shell.
- 4. Protection of the nearby 150 kV power substation from the radiated heat generated by the fire.
- 5. Declaration of an emergency and summoning of the Corinth Fire Brigade.
- 6. Arrival of the Fire Brigade crew, incident briefing, taking up positions to fight the fire by the combined fire services, fighting the fire.
- 7. Fire-fighters from both teams, in fire-proof clothing, climb on the roof of the affected tank to apply extinguishing foam directly.
- 8. Use of a Fire Brigade's articulated foam monitor for directly projecting foam on the seal of the tank.

Total duration of the exercise was 50 minutes during which period the cooperation between the two services was deemed to be highly successful. At a debriefing discussion held after the event, particular aspects of the response were discussed – including the tactics adopted to extinguish the fire, the techniques and equipment used and some problems that had arisen. The usefulness of such joint emergency preparedness exercises was underlined.













#### **Medical Services - Health**

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

- \* A main Medical Centre, housed in modern premises covering around 100 sq. metres, staffed by an Occupational Physician and nursing staff, and equipped with all necessary hospital equipment for emergency treatment. It has five patient examination/first-aid beds, as well as one fullyequipped, short-term treatment ward.
- A pharmacy stocked with all necessary medicines, surgical dressings and other medical equipment.
- A suitably-equipped first-aid station at the Alkylation Unit, where there is medical assistance available on a 24-hour basis.
- Three suitably-equipped first-aid stations (located in the Central Control Room, the Chemical Laboratory and the Hydrocracker Complex).
- Equipment for carrying out tele-electrocardiograms (ECG), in circumstances where there is an emergency requirement for a cardiological examination, which makes it possible for complete ECG reports to be tele-transferred to a special Cardiology Centre to provide immediate diagnosis and recommendation for treatment from a specialist Cardiologist.
- Three fully-equipped ambulances.

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

The quality of drinking water is subject to periodical analysis by independent laborato-



ries and the staff at the refinery's restaurant is subject to periodical medical checks as required by law.

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

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

Finally, the non-exposure of workers to concentrations of noxious substances that can be harmful to their health is confirmed by carrying out relevant concentration measurements, in accordance with the provisions of the relevant legislation. The monitoring that was carried out in 2009 demonstrated that, in respect of all samples of chemical substances taken, the concentrations were below official occupational exposure limits.

# B5. PLANNED SHUTDOWNS OF REFINERY UNITS

Every year, planned shutdowns of refinery units take place which are necessary to allow for periodic maintenance to be carried out and thus ensure their reliable operation – both in respect of efficiency and in respect of safe operation. These shutdowns can be large-scale and lengthy – as was the case with the major shutdown that took place in 2008 – or smaller, as was the case with those that took place in 2009.

Such extended shutdowns of refinery units

require vigilance and special precautionary safety measures because of the greatly increased risk of accidents. Careful planning and continuous supervision are required during the shutdown period, including the following: provision of information to all those involved to remind them of the necessary safety measures and promote a heightened sense of safety awareness; daily co-operation with site managers to identify hazards and unsafe conditions and jointly develop remedial measures; and daily site safety inspections.

Inspection teams are established at such times, headed by executives from the Health, Safety and Environment Section and staffed by engineers from the Technical Department, according to the circumstances and the type of unit being shut down. The teams are charged with the duty of continuous monitoring of the maintenance work with respect to application of safety rules so that immediate corrective measures can be taken if any irregularities arise.

In 2009, seven planned refinery unit shutdowns were successfully completed without incident. Six unplanned shutdowns were also completed without incident through the application of a similar range of preventive measures.

# B6. TRAINING, SAFETY AWARENESS AND COOPERATIONS

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

Considerable emphasis is placed on the systematic supply of Health and Safety information to sub-contractors materially involved in carrying out various refinery site works, in particular relating to safe working procedures and general principles of accident prevention,



In 2009, special emphasis was placed on: fire safety training; training of new operators of refinery units; the training/certification of those issuing Permits to Work (ie company personnel) and those being issued with them (ie sub-contractor personnel); training for engineers on HAZOP studies; and on a number of other themes, as follows:

Fire safety training

2009 saw the construction of a Fire Safety Training Centre (FSTC) designed to provide more effective fire safety training for refinery personnel and fire-fighting crews. The FSTC has an appropriately-equipped demonstration area where practice sessions can be held allowing equipment and techniques for fighting fires at fuel tanks to be rehearsed, as well as fires in enclosed spaces which - through the use of special equipment - may be approached and accessed (entry in - exit from the enclosed space). The FSTC has available a wide range of fire-fighting equipment (fire-fighting monitors, fire hydrants, dry-foam fire extinguishers of various sizes, etc).

In order to improve the readiness of refinery personnel to respond to emergency situations, as well as to rehearse the procedures of the Emergency Response Plan and check the operability of equipment, regular emergency preparedness exercises are carried out. The 2009 programme included 12 field training sessions and 52 actual drills (one per week), of which nine evolved into Major Incidents, for testing the preparedness to respond to such emergencies. About half of these drills were pre-announced and pre-scheduled, while the rest were impromptu – ie with no warning of the date, time, location or scenario, involving the deployment of emergency response equipment as well. The pre-scheduled drills took place in various areas of the refinery and the fire crew training field, involving rehearsal of fire crews in the theoretical and practical aspects of their duties, and their familiarisation with fire-fighting equipment and related Personal Protective Equipment.

The main focus of training of duty engineers is on response to Major Incidents and on the available fire-fighting equipment, at both theoretical and practical levels; this is achieved through reallife fire-fighting drills and desktop exercises.

In addition, in 2009:

- \* A joint emergency preparedness exercise, involving MOTOR OIL and the Corinth Fire Service, was organised (see page 42).
- \* Following their fire-fighting training in 2008, refinery engineers underwent repeat training in the use of fire extinguishers. In 2008, all refinery personnel in management positions (including foremen, supervisors, engineers, section heads and managers) had received training across a broad range of fire safety themes including all appropriate training about fires, fire prevention and the fire fighting facilities available on the refinery site.
- In order to improve the level of training given to fire fighting crews, a six-monthly programme of courses is routinely been organised, involving 120 sessions in every six-month period. In view of staffing fire-fighting crews with new members, training was carried out in fire-fighting procedures and operation of the equipment, for all crew members.
- \* All shift-workers were trained in the use of Respiratory Protective Equipment.
- As part of the company's collaboration with other major Greek companies, two seminars on the subject of fire prevention – with emphasis on natural gas fire safety – were organised for the benefit of the fire-fighting team of Aluminium of Greece SA.

the aim being to ensure the safe execution of their assignments.

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

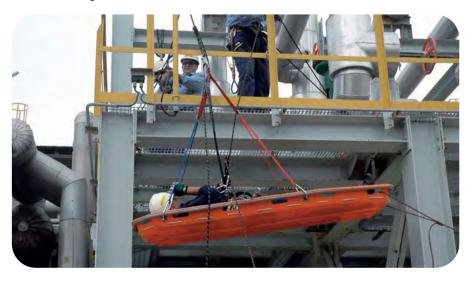
- \* Fires fire safety use of fire-fighting equipment.
- \* Work Permits.
- Work in confined spaces.
- Identification of occupational hazards and risk evaluation.
- Personal Protective Equipment.
- Classification, packaging and marking of hazardous substances.
- Material Safety Data Sheets.
- Emergency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

- Induction training for new operators of refinery units and new maintenance technicians (see page 32).
- \* A two-day training seminar, given by a specialist foreign consultant, covering HAZOP awareness training (on the fundamentals of carrying out a HAZOP study) that was attended by 40 engineers. Following this seminar, seven of those participating progressed to a three-day more detailed course (HAZOP Leader training).
- A three-day training seminar attended by 21 engineers, concerned with optimal procedures for turn-around operations.
- Training and certification of 13 company employees who are involved in the issue of Permits to Work.
- The structured and focused efforts to provide information to employees of contractors continued in 2009, covering:
  - A training programme (including provision of information, question and answer sessions, recording results in a database, issuing certificates of attendance on the course) covering all employees of contractors who are issued with Permits to Work. The general component of this training concerns Health and Safety matters relevant to aspects of refinery work, while a further, specialist component addresses 29 different types of jobs. Approximately 220 people attended the eight-hour programme in 2009, adding to the 570 who had received the training in the previous three years.
  - Toolbox Meetings that are held on the first Monday of every month, attended by the subcontractors working on the refinery site at that time; they are concerned with Health and Safety issues relevant to the work they are engaged on and provide an opportunity for discussion about irregularities noted during workplace inspections.

Following the setting up of a number of crews trained to deal with the rescue of people working at height - continuing similar training that had been carried out in 2006 and 2007 - a number of rescue exercises were organised under the supervision of officers of the First Search and Rescue Team (EMAK) of the Elefsina Fire Brigade. In these exercises, crew members - working in groups of seven or eight - first reviewed theoretical aspects of rescue operations (ie rescue tactics, methods of litter ascent and descent, different fall arrest devices, special rope knots, use of rescue equipment, safe transfer of the injured, etc); subsequently, practical exercises were carried out at locations on the refinery site that are potentially hazardous. A total of 35 individuals covering all shifts, participated in this training.

ing applied. Operators are able to watch the video tapes at a time that is suitable for them, but on the basis of a predetermined schedule. In 2009, the aim was to encourage all technical refinery staff to watch the tapes, which was achieved. Themes covered by the films broadcast included: Personal Protective Equipment; the safe use of electrical machinery; avoiding falls; techniques for avoiding injury when falling; hearing protection; safe use of scaffolding; transport safety; good workplace house-keeping as a safety factor; work in enclosed spaces; work at heights; and testimonies of injured in work related accidents.

Cooperation with other stakeholders is a necessary element of the responsible handling of Health and Safety issues. For this purpose, Greek Refineries Cooperation Meetings



- In order to raise safety awareness among refinery personnel, safety messages and posters, the results of accident and nearmiss investigations, etc, are displayed on 13 Health and Safety notice boards, reserved for this purpose, located throughout the refinery site.
- Since the end of 2008, the approach of instructing unit operators on specific safety issues using short-duration (10-20 minute) training video tapes shown on TV monitors located in the various refinery Sections is be-

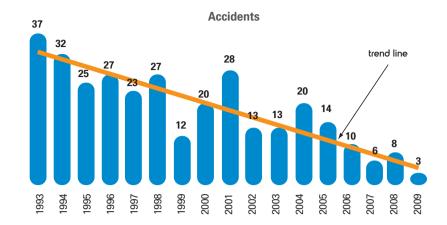
on Health, Safety and Environment issues are organized and attended by representatives of Greek refineries, the competent ministries, local government, the fire department and other stakeholders. MOTOR OIL specialists attend these meetings and play an active part in making presentations on various topics. These Meetings promote cooperation and synergy in a field where there are great possibilities for exchange of knowledge and experience. The 29th cooperation Meeting in this series, held on 14 December 2009, was organised by Hellenic Petroleum.

#### **B7. SAFETY INDICES**

The extent to which the *Health and Safety Management System* operates successfully is reflected in trends in the most important safety indices, i.e. the number, frequency and severity of accidents, which have shown a clear downward trend in recent years.

Safety performance at the refinery was the best on record in 2009, with all accident indices showing historically low results, while their 2009 values were also lower than targeted.

Three accidents were recorded in year 2009, compared with eight in 2008, six in 2007 and 10 in 2006. (It should be noted that the largest planned maintenance shutdown in the refinery's history took place in 2008.) The 2009 accident prevention performance was 67% better than targeted (the target had been to reduce the level to below nine accidents).



The Accident Frequency Index, which had been low in recent years (4.5 in 2006, 2.6 in 2007 and 3.4 in 2008) was 1.3 in 2009, a 62% improvement over the targeted 3.4.

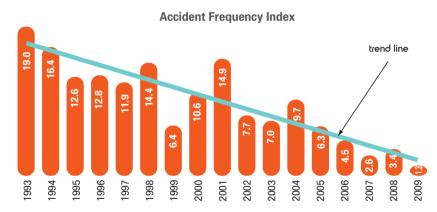
These results should be correlated with the value of the *Accident Severity Index*,

2008

which also showed a significant improvement over 2008, since it dropped from 0.5 to 0.1 (an 80% improvement), the lowest in the refinery's history and against a target of 0.6. This very low value indicates that accidents in 2009 were much less severe than in 2008 and previous years (smaller number in work hours lost).

These statistics relate to our own employees and do not include accidents involving sub-contractors' employees, which showed a marked reduction, despite the one lost time accident in 2009: no accidents were recorded in 2008, against one in 2007, one in 2006, five in 2005, four in 2004 and nine in 2003.

The above data concern the refinery workplace only; it should be noted that no accidents were recorded in any of the company's other sites (ie MOTOR OIL head office, and AVIN OIL offices and facilities).



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

# 

2001

2002

**Accident Severity Index** 

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

666

966

997

994 995

#### **B8. THE REACH REGULATION**

The European Union REACH Regulation (Registration, Evaluation and Authorization of Chemicals) came into force on 1 June 2007. During the subsequent three-year period, numerous research institutes and other bodies of the chemical and related industries have been working intensively to register on time chemical substances which are produced and supplied in the European Union onto the relevant Registry, having characterised and quantified the risks to human health and to the environment that might arise during the

course of the use or disposal of those materials. The ultimate goal is to prohibit the import into, or the production within, the EU of any unregistered substance at any quantity above one ton a year.

2008 was a key year in the implementation of the Regulation, with the passing of the deadline for preliminary registration of substances by importers/producers. MOTOR OIL completed the necessary procedures, according to the relevant deadlines, for pre-registration of its candidate substances and as a result has the right to continue to produce and trade in those materials within the EU.

As a socially responsible company, MOTOR OIL is committed to complying with the requirements of the REACH Regulation and to taking all necessary action for the registration of the substances it produces and distributes within the prescribed deadlines, which fall within the period 30 November 2010 to 31 May 2018, depending on the produced/imported quantity and the hazard classification for each substance.

#### Within this framework:

- We have mobilized our in-house expertise and resources for harmonising with the provisions of REACH. In recognition of the importance of the participation of all stakeholders in the production and distribution of our end products, the company discusses and analyzes all individual issues that arise in the application of the Regulation, with both suppliers and customers.
- \* Furthermore: we are active participants of the CONCAWE organization, which provides technical advice to European refineries on matters of Health, Safety and Environmental protection; we participate in the Fuel Ethers Reach Consortium (FERC), the core organization assisting ether (MTBE/ETBE/TAME/TAEE) producers in their preparation for the registration of these substances; and in the Methanol Reach Consortium which is doing similar preparatory work on the registration of methanol. Through these forms of partic-

ipation, we can ensure that the chemical properties of the products we produce and distribute are systematically analysed and scientifically studied with respect to their safety and the associated protective measures relevant to their uses, throughout their life-cycle.

#### **B9. SECURITY - PORT**

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

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

The revised *Port Information & Regulations* became applicable in year 2007. We consider the existence of the *Port Information & Regulations* for our port, which codifies in a single volume all the requirements for the safe docking of vessels at our terminal – according to Ministry of Mercantile Marine guidelines, and international codes and conventions – to be a prerequisite for the best possible protection of both our installations and the vessels themselves. The *Port Infor-*



We give the highest priority to security measures aimed at the protection of our port facilities in order to prevent any incident whatsoever, which apart from any other consequences, may also cause marine pollution. It should be noted that, in 2004, MOTOR OIL be-

mation and Regulations consolidates all provisions arising from the ISPS Code while also describing clearly and in detail the minimum requirements relating to safety and security, as well as the measures to be taken to avoid pollution.

#### **B10. AVIN OIL**

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

AVIL OIL is committed to the following:

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



Among significant operational developments in 2009 were the following:

- \* The Integrated Transport Safety System came into operation.
- \* The phased implementation of the EU REACH Regulation, which came into force on 1 June 2007, proceeded. AVIN OIL, as a downstream user of refinery and other products, has obtained relevant information from its suppliers and communicated relevant information to its customers.
- Thorough training was provided to all AVIN OIL employees at the Aghioi Theodoroi terminal, Corinth, on Health and Safety in order to complete their technical knowledge and heighten their safety awareness when carrying out their duties. This training includes modules concerned with: safety concept and terminology; accident prevention; managing change; good working practices; chemical factors; safe transportation; hazard identification and risk assessment; safe storage and transport of fuels; permit to work systems; supervision of subcontractors; hot work; and Per-

sonal Protective Equipment.

- A wider programme of training for all employees at AVIN OIL petrol stations concerned with their safe operation and begun in 2008 continued. This training is carried out separately at each petrol station in order to ensure that every facility participates.
- Two training seminars were also organised on the subject of safe operation and maintenance of petrol stations; they were attended by those with relevant responsibilities within AVIN OIL, and also by maintenance contractors cooperating with the company.

In respect of Health and Safety investments in 2009, the programme of commissioning new fully equipped Road Tankers for the distribution of heating fuel continued. This programme involved the acquisition and putting into service of 10 road tankers in total.

In addition, the Health and Safety investment programme of 2009 relating to AVIN OIL terminal, included the following:

- The relocation of pipe-line safety valves to safer positions, so that in case of gas or fuel release, these would be within a controlled closed system for eliminating any safety hazard or pollution.
- The upgrading of fire-fighting system through the extension of the fire-fighting network and the addition of hydrants at the Road Tankers parking area – and the installation of an automated fire suppression and control system with fire detectors in the computers room of the terminal.
- The erection of additional working platforms at the pump station for improving safe access to difficult of approach areas.

#### The Integrated Transport Safety System (ITSS)

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

- Maintenance of a high technical standard of transport equipment, in particular the safety and reliability of Road Tankers.
- Promulgation and implementation of strict safe procedures and the monitoring of their implementation.
- Continuous training of Road Tanker drivers.

AVIN OIL, in running its business operations in a responsible manner, has always strived to ensure that the above precautions are always taken and that the regulations prescribed by the state and by the oil industry itself are maintained. Nevertheless, in order to place its safety efforts on a more systematic basis, in 2009 the company established an Integrated Transport Safety System (ITSS) - a regime encompassing the registration and monitoring of all Road Tankers that carry the company's fuel products (a regime that applies both to its own vehicles and to those owned by subcontracted freight companies); also the training of all drivers who are involved in the operation of these Road Tankers. The management of this project has been delegated to a specialist road safety consultancy company. Formal agreements of participation have been signed with all involved freight companies.

#### The ITSS envisages:

- The preparation of a database containing full details of all Road Tankers involved in the carriage of the company's products.
- The maintenance of a detailed register of all drivers of Road Tankers carrying the company's products.
- \*\* The carrying out of a thorough annual safety check on all Road tankers involved in the carriage of the company's products, in accordance with the requirements of regulations applying to Safe Road Tanker Loading at Fuel Terminals, issued by the Hellenic Petroleum Marketing Companies Association (SEEPE). These checks extend to the full compliance with the terms included in the European Agreement concerning the Carriage of Dangerous Goods by Road (ADR). Road tankers are then



issued with an annual Safe Pass card, permitting their entry in AVIN OIL facilities.

- \* Annual training for all registered drivers on the following themes: driving skills; loading and unloading procedures; anti-skid precautions, including the handling reactions in a skidding incident; anti-rollover precautions, including the handling reactions for avoiding a rollover; the chemistry of fuels; and dealing with customer complaints.
- Special training for newly recruited drivers (on the above-mentioned themes excluding anti-skid and antirollover), in order to ensure that they are competent according to the standards promulgated by AVIN OIL.
- Investigation of any accidents that might involve Road Tankers.
- Annual training and the provision of information to Road Tanker operators (i.e. owners).
- \* The provision of services relating to the duties of the Advisor on the Safe Transport of Dangerous Goods.

The above arrangements cover by and large all the Road Tankers operated, and drivers employed by the company itself

During 2009, within the framework of the ITSS implementation, drivers were trained on defensive driving.

# III. RESPONSIBILITY FOR THE ENVIRONMENT

Specific carbon dioxide emissions and energy consumption in steady downward trend

22.7 million euros in investments and expenses for the Environment

Approval of the new - directive 96/61 compliant - environmental terms of the refinery

Caring for the future: we minimise our environmental footprint, we protect the environment.

Respect and care for the environment is a common denominator of all our activities. We operate competitively but, at the same time, as a responsible corporate organization we espouse the principles of sustainable development; that is, development which is based on environmental protection, mutual respect and on our responsibility towards future generations. For these reasons we continue with investments aimed at further reduction in our environmental footprint. We recognise that the land, sea and air are resources that must be bequeathed, unpolluted, to future generations.

In 2009 we invested 22.7 million euros in small and large projects, which directly or indirectly contribute towards environmental protection (these included the project of upgrading and expanding the sulphur management system, in which works in adding two other Sulphur Recovery units were in progress). Our environmental footprint, as measured by the declining specific energy consumption and carbon dioxide emissions, improved. We published our voluntary Environment Statement 2008 in accordance with the EMAS ER 761/2001 regulation, and supported international initiatives related to climate change.

# 1. ENVIRONMENTAL MANAGEMENT

As a society, as a company and as individuals we find ourselves confronted by the challenge of dealing with environmental protection responsibly and decisively. Otherwise, human activity has the ability to quickly and irreversibly destroy our natural resources and our entire eco-system, that have been created over millions of years.

Respect and care for the environment are the common denominators of all aspects of our activity. We seek to ensure that our facilities operate in the most energy efficient possible manner, to minimize emissions of greenhouse gases and other pollutants, to function within the framework of approved environmental terms, to rigorously adhere to the relevant Greek and European legislation, and to implement projects and actions that go beyond the basic legal compliance.

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

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

maximized through the allocation of necessary resources.

# Environmental Management System

Our company's commitment towards the minimization of the environmental impact resulting from its operation, is expressed through our *Health, Safety and Environmental Protection Policy*. Our commitment could not be realised without the application of an effective environmental management system that has been certified compliant with international standards. This system ensures that environmental performance is measured systematically and that activities requiring intervention and improvement are identified. Thus, the allocation of resources to actions with the maximum possible environmental benefit is ensured.

#### Environmental Management System

- \* ISO 14001: 2004 certified
- EMAS ER 1221/2009 certified
- Included in ISO 9001:2008
  Integrated Management System





#### **Environmental objectives**

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

- \* Keeping abreast of, and compliance with, all Greek and EU environmental protection legislative requirements.
- Distributing products that comply with European environmental protection norms, by taking steps in upgrading production facilities accordingly.
- \* Operating the refinery facilities within the framework of approved environmental terms.
- Planning and implementing investment projects with due regard for the need to minimise environmental effects.
- \* Applying Best Available Techniques to the greatest possible extent.
- Monitoring and continually minimizing the emissions of greenhouse gases, as well as those of other pollutants, and of solid and liquid waste, as far as technically and economically possible.
- \* Monitoring and, as far as possible, minimizing, the consumption of energy.
- Pre-empting risks of environmental pollution, reducing the probability of environmental accidents, and preparing, implementing and testing the appropriate emergency response procedures.
- Training of, and awareness-raising among, all our personnel and contractors' employees who work on our premises, on the implementation of the company's environmental protection policy.
- Evaluating our environmental performance and continuously improving our Environmental Management System.
- Developing communication and dialogue with all stakeholders, especially with local communities in areas around the company's facilities.

The company's *Environmental Management System* was first ISO-certified in 2000, according to ISO 14000:1996. Since 2004 it has been certified compliant with the ISO 14000:2004 standard that imposed new, stricter requirements for environmental management issues, but at the same time providing the tools required for its more efficient operation. In 2007, MOTOR OIL was re-certified compliant with the new version ISO 14001:2004, while in 2008 the certification expanded to include the production, trade and delivery of biofuels, asphalt and specialized petroleum products that had not been previously covered. In 2010, the system was re-

certified by Bureau Veritas, always compliant with ISO 14001: 2004.

The Environmental Management System is part of the Integrated Management System, which is ISO 9001:2008 certified for quality. Therefore, the various internal operations and procedures of the Environmental Management System are themselves subject to the strict documentation imposed by the ISO 9001:2008 standard.

Our commitment to making public any data relating to our environmental performance and the effects arising from the operation of our facilities, as expressly mentioned in our *Policy for the Environment*, has led to

the voluntary adoption and application of the *European Eco-Management and Audit Scheme* (*EMAS*), as foreseen by European Regulation 761/2001. This system ensures that companies or organizations adopting it, identify the environmental impacts arising from their activities, and define strategies and implement plans to mitigate them, insofar that it is reasonably possible.

Additionally, within the framework of EMAS, the company is committed to publishing, on an annual basis, information about its environmental performance in the form of an Environmental Statement, as required as a result of its membership of the *Eco-Management and Audit Scheme System*, an arrangement that has to be endorsed annually by decision of the Ministry of the Environment, Energy and Climate Change. In 2009, MOTOR OIL issued its BV-certified *Environmental Statement 2008*, its third such annual report.

It should be noted that, in the oil refining sector, the triple combination of certified compliance with ISO 14001:2004 and EMAS, in respect of environmental performance, and ISO 9001:2008, in respect of quality management, is particularly significant and provides many advantages. Such multiple certification is unusual among European refineries of a complexity such as MOTOR OIL's.

# 2. ENVIRONMENTAL INVESTMENTS AND EXPENSES

The company's investment policy is oriented towards producing products, according to relevant specifications, while using technologies that minimize environmental impacts. Projects for the improvement and enhancement of the refinery's environmental performance absorb resources, having the maximization of expected benefits as the main criterion.

During the last eight years, as shown in the table below (which includes the corresponding AVIN OIL data), MOTOR OIL has implemented a massive investment programme totalling 924.3 million euros. The major part of this investment is the construction of the New Crude Distillation Unit, and its associated facilities, planned for commissioning in mid 2010 (see page 9), as well as the Hydrocracker complex (and its associated facilities), which produces «clean fuels» (i.e. of low sulphur content) satisfying the EU specifications that came into force on 1.1.2009. Investments in «clean fuels» absorbed 44.2% of total investment, while investments for the further improvement of environmental performance absorbed an additional 11.6%. In total. environment-related investments amounted to 515.6 million euros or 55.8% of the total investment programme.

ciency of the sulphur recovery system. Also progressed was the construction of the fifth gas turbine at the Power Co-Generation Plant, while the replacement of the air intake ducts for two of the existing gas turbines and an extended maintenance programme on the third turbine were completed. In addition, a series of other, smaller projects were implemented during the year, for example those concerned with reducing energy consumption and, as a result, carbon dioxide emissions as well; and improvements to environmental monitoring systems through the installation of new measurement devices.

a set of criteria - including legislative requirements and stakeholders views - which lead to the classification of impacts according to their significance and their characterisation as significant or non-significant. This classification procedure is also carried out whenever there are any changes to the refinery's configuration, re-evaluating the classification and characterisation of the impacts.

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

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

ENVINONITIENTHL II	AAFSIIIIFIA	13 HIAL	) LAPL	.INJLJ	2002 -	<b>2007</b> (in it	illion euros)
Year	2002-2005	2006	2007	2008	2009	Total	Percent
Total Capital							
Investments	551.4	44.6	51.4	78.4	198.5	924.3	
Environmental							
Projects	434.2	15.1	21.9	16.7	27.7	515.6	55.8%
- For clean fuels	407.7	0.0	0.0	0.0	0.5	408.2	44.2%
- For improving performance	26.5	15.1	21.9	16.7	27.2	107.4	11.6%
Environmental Expenses	8.9	2.6	2.9	4.0	4.3	22.7	
Total of Environmental Investments and Expens	443.1	17.7	24.8	20.7	32.0	538.3	

ENIVIDONIMENTOL INIVECTMENTS OND EVOENCES 2002 2000 (

Total investments in 2009 amounted to 198.5 million euros, of which 27.7 million euros (14.0% of the total) concerned projects whose main purpose was the improvement and protection of the environment.

In 2009, the construction of the New Crude Distillation Unit was in progress, the design of which satisfies the latest European specifications for environmental protection and safety, incorporates Best Available Techniques and provides for better energy efficiency. Other major projects progressed during 2009 were: upgrading of the Lubricants production unit, that involves the replacement of compressors and heat exchangers with new and more energy-efficient units; the construction of a new Sulphur Recovery unit, and upgrading of the Amine (MDEA) regeneration unit, that together improve the effi-

# 516 million euros

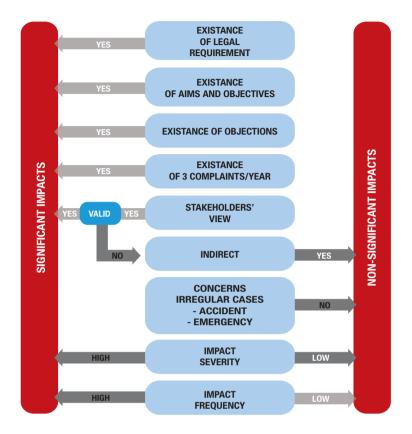
#### 3. MATERIAL ISSUES **IDENTIFICATION**

MOTOR OIL, in striving to continuously improve its environmental performance, over and above basic legal compliance, implements a programme of measures to prevent or at least mitigate the environmental impacts that unavoidably result form its operations. An important tool in this endeavour is the measurement and regular evaluation of results. and the systematic assessment of the environmental impacts at all stages of the production process. This assessment is based on

The above environmental impacts are recorded on a regular basis, and suitable environmental indexes are used for their monitoring, on the basis of which the appropriate actions are planned and implemented aiming at the proper measures being taken, and the effective management and improvement of the company's environmental performance.

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

#### **Environmental Impacts' Evaluation Criteria**







#### 4. BEST AVAILABLE TECHNIQUES

The Integrated Pollution Prevention and Control (IPPC) Directive (96/61/EC), prescribes an integrated system for prevention and control of pollution caused by industrial activities.

This directive introduced the concept of *Best Available Techniques BATs*) into legal requirements. BATs are techniques that can prevent (primary prevention measures that are intrinsic to the production process itself), or most effectively control (secondary measures or "end-of-pipe" techniques) the pollution caused by an industrial activity, while also being economically feasible and technically practicable. Best Available Techniques for various sectors are prescribed in the relevant *Best Available Techniques Reference Documents (BREFs)*.

MOTOR OIL incorporates the above-mentioned techniques both during the design of new refinery units and when existing facilities are upgraded, in order to minimise the impacts arising from their operation. At the same time, the company incorporates automations and control systems in the operation of the refinery that contribute to efficient management of raw materials and energy, while ensuring high levels of reliability and safety in the units. Finally, Best Available Techniques that reinforce pollution prevention capacity have been adopted and are applied in the refinery's daily operations.

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

#### **Production of Fuels and Lubricants**

- Hydrocracker Complex
- Upgraded pre-heating furnaces
- Maximization of refinery-gas recovery
- \* Upgrading of amine regeneration unit
- \* Closed-circuit sulphur production

#### **Ancillary Facilities**

- Introduction of natural gas at the refinery
- \* Electricity co-generation
- \* Installation of low-NO<sub>x</sub> burners
- \* Reverse osmosis desalination unit

#### **Environmental Protection Systems**

- \* Sour water treatment units
- Waste water treatment plant
- Electrostatic filter at the fluid catalytic cracking unit
- Vapour recovery system at the Truck Loading Terminal

#### **Control Systems**

- Power Management System (PMS)
- Distributed Control System (DCS)
- Advanced Process Control (APC)

#### **Daily Operation**

- Leak Detection and Repair (LDAR) programme for detecting and controlling fugitive emissions
- \* Automated tank cleaning method
- \* Heat exchangers maintenance and cleaning programme

#### 5. CLIMATE CHANGE

Climate change is one of the most important global challenges – for human health, for social cohesion, for economic development and for the security of food supplies.

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

It has been widely accepted that the main cause of climate change is the increase of the concentration of anthropogenic greenhouse gases in the atmosphere: most importantly, that is carbon dioxide  $(CO_2)$ , but also methane  $(CH_4)$ , chlorofluorocarbons (CFCs), sulphur hexafluoride  $(SF_6)$  and nitrous oxide  $(N_2O)$ . The urgency of the situation is underlined by the fact that carbon dioxide emissions have increased approximately 12-fold in the last 100 years.

In order to avoid increases to the earth's temperature, it is necessary to stabilize the greenhouse gas concentrations in the atmosphere, which means that by 2020 the emissions will have to be reduced by at least 20% compared with 1990 levels.

#### International Initiatives

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

Within this framework, the European Union committed itself to limiting anthropogenic emissions by 8% within that same period, while Greece was given a margin to increase emissions by 25% compared to the base year. For the achievement of these objectives, the Greenhouse Gas Emissions Rights Trading Scheme, as established by Directive 2003/87, was adopted as the main mechanism. Through this scheme, member states were invited to submit National Emission Allocation Plans for different types of industrial activity and, subsequently, for particular enterprises.

In 2008, the European Commission announced a new package of measures by means of which it aims to achieve ambitious targets for reducing emissions and promoting renewable energy sources by year 2020. The Commission adopted the so-called «20-20-20» targets on the basis of which, by 2020: emissions were to be reduced by 20% compared to 1990 levels; energy efficiency measures were to be implemented so as to reduce consumption by 20%; and the contribution of energy from renewable sources was to rise to 20% of the total over the same period.

In 2009, the above targets were enshrined in Directive 2009/29 that also strengthened and extended the *Emissions Rights Trading Scheme* – intended to be the main tool for facilitating achievement of the above objectives. In addition, the directive provides: that the free allocation of emissions allowances to enterprises will be organised at the European, rather than member state level; that these allowances will be progressively reduced over time; that emissions trading rights will be auctioned, and that a benchmarking regime should be established.

Also in 2009, Directive 2009/28 was adopted concerning measures to promote the use of energy produced from renewable resources, and the introduction of sustainability criteria in the production and use of biofuels.

Finally, in December 2009, there was convened, on the instigation of the European Union, the UN Climate Change Conference in Copenhagen. The intention had been to achieve a binding international agreement on the reduction of emissions of greenhouse gases, which however, was not realised. Nevertheless, there was an acknowledgement on the part of the participating nations that average ambient temperatures should not be allowed to increase by more than 2 degrees Centigrade. In addition 55 countries that together produce 78% of atmospheric emissions of greenhouse gases undertook to introduce limits on their emissions.

#### **MOTOR OIL's Position**

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

Our belief is that measures to confront the phenomenon of climate change, of necessity, have to extend beyond national and political boundaries and require cooperation, and coordinated action, at a global level; also that a strong commitment to action is required from all stakeholder groups, including consumers. Intensive and targeted dissemination of information on issues related to the rational use of energy – as well as of the other resources that are becoming insufficient, such as water – and associated attitudinal changes, are necessary if these initiatives are to succeed.

To address these challenges – in line with our principle of carrying out our business in a responsible manner and according to the principles of Corporate Social Responsibility and sustainable development – we are committed to:

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

#### Support for International Initiatives

#### Copenhagen Communiqué

The Copenhagen Communiqué campaign was an international initiative – jointly sponsored by the University of Cambridge Programme for Sustainability and The Prince of Wales's Corporate Leaders Group on Climate Change – that succeeded in involving more than a thousand senior corporate leaders from all parts of the world to sign a submission to world leaders, ahead of the December 2009 United Nations Climate Change Conference held in Copenhagen, encouraging them to reach an agreement of the issue. The aim of the campaign was to raise public awareness and, particularly, to encourage conference delegates to achieve an ambitious, robust and equitable global deal on climate change that would be a credible response, appropriate to the scale and urgency of the crisis facing the world today. MOTOR OIL, having environmental protection as one of the cornerstones of its development strategy, supported and participated in the campaign, underlining the imperative need – both for the future of the planet and of the human race – for urgent measures to be taken.





# International Conference: «Climate change and challenges for future generations»

«Climate change is the biggest challenge of our time and mitigating its effects, as well as repairing the damage that has already been done, is an urgent global priority», official speakers at the international conference titled: «Climate change and challenges for future generations», which took place on 2-3 June 2009 and the Athens Megaron concert hall.

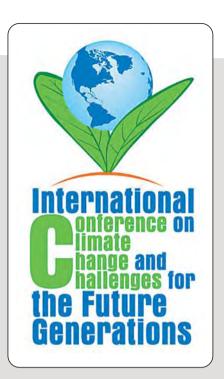


Conscious of societal concerns about the consequences of climate change and having environmental protection as a main focus of its corporate development strategy, MOTOR OIL supported the organisation of the conference, which was jointly inspired by the UNESCO Goodwill Ambassador and president of the *Foundation for the Child and the Family*, Mrs Marianna V. Vardinoyiannis, and the president of the *UN Intergovernmental Panel on Climate Change*, Nobel Peace Prize winner in 2007 and director of the *Energy and Resources Institute*, Dr Rajendra Pachauri, in cooperation

with the *World Sustainable Development* Forum (WSDF) and UNESCO.

In her speech opening the conference, Mrs Vardinoyiannis said:

«The human race only has one planet and all peoples of the earth share the same living space. So the implications of climate change are inextricably linked with wider development challenges. Coordinated action in response to these issues should act as a common 'call to action' and thus the global challenge of climate change should act as a real positive force for international cooperative action. Such action is not just an issue for leaders, but involves everybody. Saving the planet involves both collaborative and personal actions. Everybody has to play their part – nothing is impossible if we all cooperate».



During the course of the conference, climate change experts from various countries and delegates from research bodies, from the world of industry, from non-govern-



mental organisations and form Greek political and cultural life discussed the following themes:

- The implications of climate change for societies, including its effects on health, with particular reference to vulnerable population groups.
- The strategy needed to ensure appropriate adjustments are made internationally and at national level.
- The role of technological development and technology transfer, and the need for participation of the investment and financial sectors in responding to, and mitigating, the consequences of climate change.

Mrs Marianna V. Vardinoyiannis closed the conference by announcing the statement, "The Athens Declaration on Vulnerable Children and Climate Change", to which all speakers were signatories and which was supported by Greek political leaders present during the event.



#### 6. ENERGY EFFICIENCY

Refining of crude oil and conversion of its fractions into end products are particularly energy-intensive processes. Requirements for energy (i.e. electric power, fuel oil, fuel gas and natural gas) are such that the rational use of energy is of particular importance, both for the environment and for the company's economic results. The refinery's energy footprint, therefore, is an important consideration that leads us in actively seeking the identification of areas where there is potential for enhancing energy efficiency, and in implementing the appropriate projects through the use of Best Available Techniques or equivalent technologies.

Steady progress has been made in recent years in reducing the refinery's overall energy consumption, even though production levels have increased. A number of projects completed in 2009, and in earlier years, made this possible (e.g. the introduction of natural gas into refinery's fuel mix, replacement and extensive upgrading of gas turbines, upgrading of preheating furnaces, improvements in the ratio of condensates recovery, installation of Advanced Process Control, etc), in conjunction with the continuous monitoring of energy performance and various preventive maintenance programmes. As a result, in 2009, the refinery achieved a reduction of 10.8% in the specific energy consumption, compared with 2007

#### **Energy Consumption** 29,033 27.491 27,550 26.952 20,042 3,68 3,61 3,56 3.22 2005 2006 2008 2009 2007 Annual energy consumption (in TJ) Energy consumption per crude and feedstock thousand tons (TJ/kMt)



(3.22 TJ per crude and feedstock thousand tons, down from 3.61 TJ in 2007).

# Introduction of Natural Gas to the Refinery

The introduction of natural gas to the refinery in 2008, was a major advance towards reducing the refinery's «energy footprint», which not only had the effect of improving the economics of its operation, (providing for the most efficient means of power generation and of hy-

drogen production), but also of ameliorating its environmental protection performance, (by reducing the emissions of carbon dioxide and other pollutants in flue gases).

Within the refinery, natural gas is used:

\* As an alternative raw material for the hydrogen production unit. The production of environmentally-friendly fuels involves hydrogen processes that require the consumption of large quantities of hydrogen, the production of which is based on the catalytic reformation of hydrocarbons (naphtha or LPG) with steam, with carbon dioxide being produced as a by-product. Utilization of natural gas as an alternative feedstock allows the quantities of carbon dioxide emitted to be reduced by approximately 8% to 19%, respectively, compared to the quantities generated when LPG or naphtha are used.

- As an alternative fuel for the Power Co-generation Plant gas turbines, which consume either fuel gas or propane, depending on the refinery's mode of operation. The use of natural gas allows the plant to operate with carbon dioxide emissions being reduced by as much as 16%.
- As an alternative or supplementary fuel for pre-heat furnaces and steam boilers in the place of heavy fuel oil fractions, thus both increasing energy efficiency and significantly reducing emissions of air pollutants.

# Electricity and Steam co-Generation

The reliable and uninterrupted operation of the Power Co-Generation Plant (PCGP) is of decisive importance for the refinery's operation. The four gas turbines, with a total capacity of 68.3 MW – in conjunction with the boilers that recover waste heat from the generated flue gases, producing 100 tons of steam per hour – provide the refinery with the required power supply independence, while at the same time supplying a significant proportion of its steam requirements.

The total efficiency ratio of the PCGP's combined-cycle process is 80%, compared with the 30-40% efficiency that would be associated with steam and power production without co-generation. This approach ensures an optimum combination of environmental and economic advantages, given that the energy remaining in the super-heated flue gases of the gas turbines is utilized in the boilers to produce high pressure steam. Through

its ability to utilise either fuel gas produced by various refinery units or natural gas, as an alternative fuel, the PCGP is one of the most important contributors to energy efficiency on the refinery complex.

Besides the independence it provides, the operation of the PCGP contributes to the reduction of greenhouse gas emissions at a national level. Its operation drastically reduces electricity imports from Public Power Corporation (PPC), the production of which would require the conventional fuel mix of PPC, with multiple adverse results for the environment. The resulting benefit for the environment – in terms of lower  $\mathrm{CO}_2$  emissions – is indicated in the following table:

#### CO<sub>2</sub> emissions avoided (tons)

2007	38,700
2008	61,000
2009	94,000

These year-on-year increases in  ${\rm CO_2}$  emissions avoided, take account of both the reduction in electricity imports from PPC and of factors related to the PCGP's operation (i.e. the proportion of natural gas in the overall fuel mix, energy efficiency, etc).

In addition:

- The co-production of 100 tons of steam per hour by the PCGP is translated into a benefit for the environment amounting to around 200,000 tons of CO<sub>2</sub> per annum, which would have otherwise been released from the burning of additional fuel in the refinery's steam boilers.
- The environmental benefit is enhanced from the PCGP's increased use of natural gas (19,000 tons in 2009 compared with13,000 in 2008), and corresponding reductions in the burning of fuel gas and LPG.

The refinery's electricity network is controlled by an automated Power Management System – Best AvailableTechnique – which increases the reliability of the electricity network significantly, thus improving the environmental performance as well.

2009 saw the successful completion of the Level II preventive maintenance programme for the 3rd gas turbine, which in conjunction with the replacement of the two older units (1st and 2nd) that took place in 2006 and 2007, and the replacement in 2009 of the air intake ducts of these same units (1st and 2nd), further enhanced the overall energy efficiency of PCGP.

#### Upgrading of pre-heating Furnaces

The upgrading of furnaces provides for the more efficient exploitation of the heat content of flue gases for achieving reductions in fuel consumption and in emissions of CO2 and of other air pollutants. Following the upgrading of the pre-heating furnace of the Crude Distillation Unit in 2007 (the largest furnace on the refinery complex) - which allowed the thermal output to be increased from 80% to 87% and as a result reduced fuel consumption by one ton per hour - a programme to upgrade other refinery's furnaces as well is in progress; this involves introducing Forced Draft technology and replacing existing burners with more energy-efficient low NOx units that emit lower levels of nitrogen oxides. The above-mentioned furnace upgrades provide for a 6% increase in the efficiency of furnaces, while reducing their fuel requirements accordingly.

# Gas and Condensates Recovery

Levels of condensates recovery – which are fed into steam generation boilers for steam production – increased by 3%. The exploitation of the energy content of condensates contributes towards the reduction of fuel gas and liquid fuels volumes that would otherwise be used for steam generation by the steam boilers.

Finally, there is an ongoing programme for maximising of gas recovery (BAT) to use gases as fuel and thus minimizing flaring.

#### **Desalination**

Reverse osmosis is the most energy-efficient desalination technology. Following the commissioning of one desalination unit using that technology, there is a project in progress for the construction of a further reverse osmosis unit for replacing an existing Multi-Stage Flash unit.

#### Monitoring and Daily Practice

Besides the major projects taking place at the refinery aimed at saving energy, the daily practice of monitoring the energy performance of the units and the timely intervention for the correction of any weaknesses appearing, makes a major contribution to this end. The recently installed Advanced Process Control (APC) system provides for optimisation of energy use through continuous monitoring of the operation of production units.

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

- Systematic retubing, repair and cleaning of heat exchangers and air coolers in order to increase the percentage of heat recovery.
- \* Replacement, through annual programmes, of pipeline and equipment insulation, thus minimizing losses to the environment.
- Maintenance and/or replacement of rotating equipment whose energy performance has fallen below specification, as a result of length of use.
- Repair and/or replacement of refractory, burners and tubes of pre-heating furnaces.

#### 7. CARBON DIOXIDE EMISSIONS

2009 was the second year of the second stage of implementation of Kyoto Protocol decisions for the period 2008-2012. Apart from the reguirements in respect to the reduction of CO<sub>2</sub> emissions, the 2nd implementation stage imposes stricter specifications relating to the accuracy of measurements and the evaluation of their relative uncertainty.

In order to comply with these requirements, MOTOR OIL:

- \* Operates suitable methodology for monitoring emissions of CO2 from its facilities, that combine computational methods with the results of measurements taken by CO<sub>2</sub> monitors installed on the flares of Fuels and Lubricants.
- The accreditation of the refinery's Chemical Laboratory as per the EN 17025:2005 standard, includes the calculation of the carbon quantity in the refinery fuel gas using the gas chromatography.
- \* Installed appropriate device for the continuous measurement of airflow and molecular weight at the flare of the Hydrocracker complex.

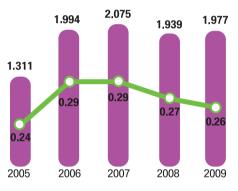
In accordance with legal requirements, annual reports on carbon dioxide emissions are produced and submitted to the competent ministry. These reports are verified by an accredited body as to their accuracy and validity.

As a result of a year-on-year increase in the refinery's output, total carbon dioxide emissions increased by 2% in 2009 (to 1,977 million tons) compared with 2008. However, the specific carbon dioxide emissions (expressed as tons of CO<sub>2</sub> per ton of refinery production), fell slightly (from 0.27 to 0.26) over the same period. Both the annual and the specific emissions over the two-year period 2008-2009 were lower than in previous years (except for 2005, when the configuration and complexity of the refinery were totally different) - a direct

result of the company's investment in energy efficiency measures (described in the preceding section).

Finally, the company contributes indirectly towards mitigating the effects of climate change by operating a bus service for use by employees travelling to and from work - a facility that helps reduce automobile carbon dioxide emissions from the private vehicles of those employees that take advantage of this facility, which in the case of the refinery is 50% of all employees.

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



Annual emissions (in million Mt)

Emissions per product ton (Mt/Mt)

#### 8. AIR QUALITY MANAGEMENT

Securing air quality, both within refinery's boundaries and in the surrounding area, is an obligation for the company, as well a legal requirement, and reflects its commitment to Corporate Social Responsibility.

#### **Gaseous Emissions by Source and Type**

- Furnaces
- Boilers Burners
- \* Gas Stripping Unit
- Sulphur Recovery Units (Catalytic conversion of hydrogen sulphide into sulphur followed by incineration of flue gases).
- Fuels storage
- \* API Oil Separators
- Feedstock and products receipt and delivery
- \* Piping network leakages

#### CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>2</sub>, Suspended Solids

Gaseous emissions from fixed combustion sources.

#### SO<sub>2</sub>, H<sub>2</sub>S

Hydrogen sulphide emissions are minimal due to their full conversion to solid sulphur.

#### **VOCs' emissions**

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

#### **Emissions Monitoring**

Air pollutant emissions, in view of protecting and improving air quality, are monitored using a wide range of techniques; state-of-the-art measurement equipment – continuously renewed and upgraded – is employed. The measurement programme, including both continuous and intermittent readings, covers both point source and diffuse emissions.

**In the peripheral zone** of the refinery, air quality is monitored by four appropriately equipped stations:

- By three fixed monitoring stations capable of continuously measuring the concentration of hydrogen sulphide (H<sub>2</sub>S) and sulphur dioxide (SO<sub>2</sub>).
- By a mobile station, equipped with automated state-of-art measuring and recording devices, which can perform a wide range of measurements, including meteorological parameters and the concentrations of nitrogen oxides (NO and NO<sub>2</sub>), sulphur dioxide (SO<sub>2</sub>), hydrogen sulphide (H<sub>2</sub>S), carbon monoxide (CO), total hydrocarbons, hydrocarbons excluding methane (CH<sub>4</sub>), benzene, and particulate matter PM<sub>10</sub> and PM<sub>2.5</sub>. Equipment for monitoring benzene

was installed at this station in 2009, one year earlier than required by regulations; similarly, equipment for measuring  $PM_{2.5}$  – installed at the station in 2008 – was over and above what was required by law.

Within the refinery, flue gases from the chimneys of the main combustion plants (point emissions) of the Fuels, Hydrocracking and Lubricants complexes are continuously monitored by online analysers. The parameters measured are: temperature, flow, and the concentrations of oxygen, nitrogen oxides, sulphur dioxide and suspended particulates (PM<sub>10</sub>). At the Catalytic Cracking unit, continuous monitoring of temperature, carbon monoxide, and of all the above pollutants is carried out. It should be noted that



the analysers are connected to the refinery's *Distributed Control System (DCS)*, a configuration that allows for the complete control of the combustion taking place in the furnaces.

An automated performance control system operates at the Sulphur Recovery units, which continuously monitors and records H2S concentrations at the entry points, and H<sub>2</sub>S and SO<sub>2</sub> concentrations at the exit points of those units. Also, the H<sub>2</sub>S/SO<sub>2</sub> ratio is continuously measured, recorded and adjusted, so as to ensure maximization of recovery performance (which is 99% in the case of the two existing units, and at least 99.5% in the case of the new, SCOTtype unit that is to commissioned in 2010, as an ancillary unit in the complex of the new Crude Distillation Unit). The operation of sulphur production units and of the respective afterburners is automatically controlled via the refinery's Distributed Control System (DCS).

As in the case of the main refinery chimneys, the supply lines of the flares of both the Fuels production unit and the Hydrocracker unit, are subject to continuous measurement of total sulphur concentration. The analysers installed are also connected to the DCS.

Emissions from the refinery's other chimneys are monitored every three months by a suitably accredited external organisation.

#### Leak Detection and Repair (LDAR)

An industrial facility such as a modern refinery, comprises different types of installed equipment, through which circulate large quantities of crude oil and feedstock, as well of intermediate and final products. In such a system, it is to be expected that there will be particular points with a higher risk of hydrocarbons being accidently released into the atmosphere. In order to contain such fugitive emissions from equipment, a programme of periodic checks of selected equipment points is implemented for detecting fugitive emissions, and repairing the leaks causing these emissions. This *Leak Detection and Repair programme (LDAR)* is based on the EPA 21 method of the United States Environmental Protection Agency.

Fugitive emissions may arise from valves, pumps, flanges, safety valves and other related equipment installed on pipelines, pressure vessels, reactors or storage tanks on the site.

In 2009, the LDAR programme at MOTOR OIL's refinery included 5,252 predetermined control points, covering all production units, truck loading terminals, port facilities, storage tanks and oil separators. These points are regularly checked by refinery personnel at least once a year, the frequency depending on the process being controlled, using portable volatile hydrocarbon concentration measurement equipment. In the event that concentrations are found to exceed 5,000 ppm, a repair request is issued for the equipment checked.

In 2009, 10,635 checks were carried out as a result of which 101 points were detected, requiring some sort of intervention.

- Fuel gases used as fuel in the refinery are desulphurised (as a result of which sulphur dioxide emissions are minimised) before entering the refinery fuel gas system. The hydrodesulphurization units which treat the fuel gas, and the sulphur recovery units, have been expanded as part of the Hydrocracker construction project in 2005, while further expansion is to be achieved in 2010, due to the commissioning of the complex of the New Crude Distillation Unit, in the framework of which, the sulphur recovery system is upgraded with the addition of new units. Finally, the project of upgrading the Amine (MDEA) regeneration unit, which is expected to further improve the efficiency of the sulphur recovery units, is in progress.
- Upgrading of the four steam boilers at the refinery's steam production facility included the installation of low NO<sub>x</sub> burners, reducing the level of nitrogen oxides emissions by approximately 50%.

#### **Controlling Emissions**

Besides the above-mentioned measures for monitoring concentrations of particular air pollutants, a series of measures to actively reduce air pollution are in operation within the refinery complex, including:

- \* Reduction of emissions of suspended catalyst particles in flue gases from the Catalytic Cracking unit is achieved by means of an electrostatic precipitator, which treats the flue gases stream; this preventive measure achieves far greater reduction in suspended particulate matter than the acceptable limits.
- The commissioning of the Hydrocracker complex has led to the reduction of sulphur and nitrogen oxide emissions in the flue gases of the Catalytic Cracking unit.



\* The reduction and control of fugitive hydrocarbon emissions by applying various measures, such as the installation of closed circuits in gas processes, the rooting of gases released from safety valves to the flares, the installation of secondary seals in floating roof tanks, the installation of floating covers on oil separators and the installation of a vapour recovery system in the Truck Loading Terminal at the same time as the application of the bottom loading system.

#### In Numbers

The results of the emissions monitoring programme during 2009, as in previous years, has shown that air quality in the vicinity of the refinery is highly satisfactory. The detailed records for the past five years demonstrate that neither average hourly nor daily recorded concentrations of pollutants have exceeded legal limits — which for the hourly values are 200  $\mu g/m^3$  for NO $_x$  and 350  $\mu g/m^3$  for SO $_2$  and for the daily values are 50  $\mu g/m^3$  for PM $_{10}$  and 125  $\mu g/m^3$  for SO $_2$  — and that recorded values were well below these limit values.

As for hydrogen sulphide emissions (which have been minimized by virtue of upgrading the sour gas processing systems and sulphur recovery units), these are monitored daily by all 4 air quality monitoring stations.

Sulphur Emissions
(in kg/hour)

406

256

276

264

2005

2006

2007

2008

2009

The analysis of results shows that the concentration of H<sub>2</sub>S at the station located in Aghioi Theodoroi, outside the Refinery, and therefore in the broader region of the facilities, is particularly low.

Sulphur emissions have shown a significant decrease since 2007compared with earlier years, despite the fact that the refinery production increased the period, a fact that can be attributed to the use of low sulphur fuel in the refinery's fuel mix. This trend continued in 2009, with sulphur emissions (264 kg/h) being at a lower level than in 2008.

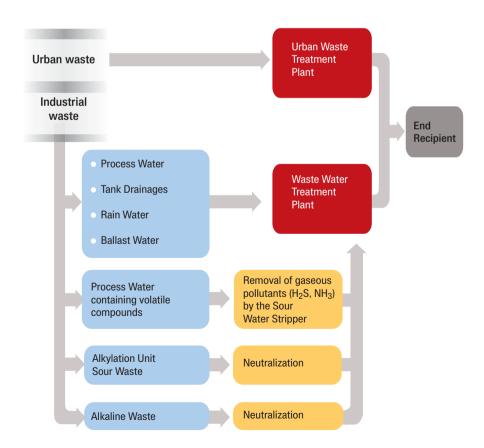
Further related information on control of emissions during 2009 can be found in the *Environmental Statement 2009*, which contains many illustrations and other data relating to particular types of air pollutants and other emissions.



# 9. LIQUID WASTE MANAGEMENT

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

The origin and processing of liquid waste at the refinery



Due to their different pollutant load, these waste types undergo different types of processing prior to their final disposal. Industrial liquid waste is pre-processed in the refinery's specialised units and then transferred to the Waste Water Treatment Plant, while urban waste is transferred directly to the Urban Liquid Waste Treatment Plant. After the waste is processed, processed liquid waste is transferred to its final destination, while the residual sludge is dehydrated and compressed prior to final disposal, according to the approved refinery environmental terms.

Significant attention is paid to the management of residual sludge and in 2009 a study was carried out, in cooperation with the Geology Department of Athens University, on the evaluation of alternative treatment processes that might be applied before the final disposal of this material. The scope of this study is the scientific contribution in the selection of the most appropriate sludge stabilisation method, so that it can be converted into a soil-like, odourless material – free of harmful microbiological agents – which could be safely disposed of in Sanitary Landfills sites or used as soil additive.

Trends in the hydraulic and pollutant load borne by the *Waste Water Treatment Plant* over the last five years are shown in the table below. The fact that this facility operates satisfactorily – besides the data shown in the table – is evidenced by the fact that concentrations of various hazardous substances at the outlet of the unit have been shown to be below relevant legal limit values. In the case of some substances (including benzene, toluene, ethyl benzene, xylene and a number of heavy metals), their concentrations are very much below these limit values, approaching the limits of detection in some cases.

In 2009, as part of the company's effort for continuous environmental improvement, a hydro-geological study was carried out – submitted to the Ministry of the Environment, Energy and Climate Change – the object of which was to determine the number and location of required bores for the moni-

# Hydraulic and Pollutant Load of the Waste Water Treatment Plant (annual averages)

Parameter	2005	2006	2007	2008	2009
Discharge Rate (m³/day)	7.565	8.976	10.385	10.297	10.224
BOD <sub>5</sub> (Kg/day)	266	305	286	265	241
Suspended solids (Kg/day)	75.0	143.0	208.0	174.0	177.0
Phenols (Kg/day)	3.10	2.51	2.58	3.79	3.71

toring and control of the quality of subsoil and aquifers. The results of the study have been taken account of in setting the limits of the refinery's operation. Finally, in 2009 an online chlorine analyser was installed at the exit of the *Urban Liquid Waste Treatment Plant*, with the aim of improving the monitoring and control of this unit.

#### Monitoring the quality of water in the coastal zone of the refinery

MOTOR OIL is especially concerned with sea water quality in the coastal zone of the refinery. For this reason it has collaborated for a number of years with the Laboratory of Applied Geochemistry at the Geology Department at the University of Patras, which carries out systematic measurement of appropriate parameters, using four sampling stations, with a view to monitoring the conditions that pertain in the coastal waters of the region.

The results of this independent research in 2009 are summarised as follows:

- «...From the on-site measurement of parameters and laboratory experiments, the analysis of the accumulated data, and form the charts and graphs, the following conclusions are drawn:
- With respect to 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, leads to the conclusion that 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, and 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

# 10. SOLID WASTE MANAGEMENT - RECYCLING

The management of solid waste produced during the operation of the refinery is founded on an integrated process that covers all stages of the life cycle of refinery waste, from its collection, packaging, labelling, processing (where necessary), temporary storage and its final exploitation or disposal via one of the following alternative means: recycling outside the refinery; recovery outside the refinery; final disposal outside the refinery; or processing within the refinery and reuse.

The main aims of a solid waste management programme are:

- \* reduction of quantities produced, at source,
- separation into hazardous and non-hazardous waste at source, wherever possible,
- maximum exploitation prior to final disposal, through recycling or re-use or recovery of useful components or regeneration, and finally,
- safe transportation and final disposal without putting at risk human health or the environment.

Disposal of solid waste is carried out only by licensed companies specializing in handling particular types of solid waste.

Spent catalysts, which, depending on the case may be classified as hazardous solid waste, are disposed of by a number of ways (either exported, or regenerated for re-use, or used in the cement manufacture). In 2009, 158.3 tons of spent catalysts were removed by a specialist company. Also disposed of – again by licensed contractors – were 26.0 tons of packaging material that had contained hazardous materials and 439.9 tons of contaminated soil.

At this point, we refer to the programme for the removal of asbestos components from MOTOR OIL's facilities. In 2009, 1,500 m2 of asbestos sheets (20.5 tons) were removed, following 1,075 m2 that had been removed in 2008, and 4,150 m2 in 2007. Its dismantling

#### In 2009, the following were recycled:

- \* 1,012.1 tons of iron (scrap)
- \* 158.3 tons of spent catalysts
- \* 15.2 tons of wood
- \* 35.7 tons of paper1
- # 4.5 tons of used lubricants<sup>2</sup>
- \* 3.1 tons of batteries and accumulators
- \* 1,800 toner cartridges
- \* 0.4 tons of empty plastic containers
- \* 3.9 tons electrical/electronic equipment

The money raised from paper and toner cartridges recycled at Head Office is donated to the *«Elpida»* foundation.

- The use of recycled and non chemically-bleached paper was initiated in 2008.
- These quantities refer to the refinery alone, since corresponding reliable figures for the AVIN OIL retail network are not available.

was carried out by a specialist company appropriately licensed both for collection and export for disposal abroad. Stringent precautions were taken during the dismantling process to ensure no hazard is created for company employees.

The company, as a solid waste producer, submits an annual report to the Ministry of the Environment, Energy and Climate Change, in which all types of solid waste arising from its operations, their handling approaches, and the end legally approved recipients.

As far as used lubricants and their packaging is concerned, contracts are in place with a firm specialised in used mineral oil recycling and with a firm specialised in handling packaging materials. These two contracts provide for recycling of used lubricants and their packaging, thus contributing to the protection of the environment and raw material savings. We also collaborate with accredited firms specialised in the recycling of batteries, ink toner cartridges, motor vehicle tyres and computers.

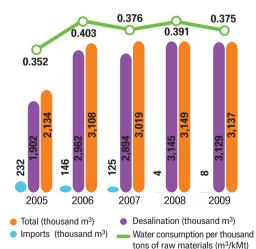
#### 11. WATER MANAGEMENT

The importance of sound management of water resources is a major issue of our time because the supply of this natural resource is constantly under threat of shortage, underlined by the frequency of drought in some parts of the world. We recognise the reality and have taken steps to ensure the rational and responsible water management at the refinery.

Water used by various process operations at the refinery is sourced through the processing of sea water at desalination units. The upgrading of these units has led to the nearly full coverage of water requirements at the refinery, so that complementary imports of fresh water have practically been brought to zero. Thus, while it was necessary to import 125 thousand m³ of water in 2007, this requirement fell to below 10 thousand in each of the following two years.

It should be noted that in 2006, following the completion of the refinery expansion project, the quantity of water consumed per ton of raw material used increased at 0.403. Subsequently, this ratio reduced to 0.375 – except in 2008, when it rose to 0.391 as a result of the thorough preparation of the equipment during the extensive turn around for preventive maintenance.

#### **Annual Water Consumption**



#### 12. NOISE MANAGEMENT

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

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

# 13. PROTECTION OF THE MARINE ENVIRONMENT

Due to its location, the operation of MOTOR OIL's refinery is completely linked with the marine environment. Owing to the extensive impacts of a potential pollution incident, both for the marine ecosystem and the economic and social life of adjacent areas, as well as the tremendous expense that rehabilitation would involve, extensive prior planning and preparation for successfully responding to such incidents is imperative.

Within this framework, MOTOR OIL:

- Implements all necessary active and passive protection measures to minimize the risk of oil spills during the operation of its refinery.
- Implements all necessary measures and provides all equipment for the safe arrival and departure of tankers at its facilities, as well as for the safe loading/unloading thereof.
- Has drafted an Oil Spill Contingency Plan, which is harmonized with the Local Contingency plan and the National Contingency Plan drafted by the competent state agencies.

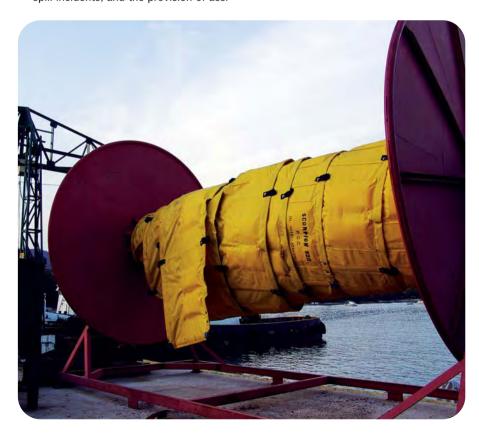
- \* Maintains all necessary equipment for responding to local small and medium scale water pollution incidents (Tier 1 & 2), such as absorbents, booms, skimmers, coastline cleaning equipment and vessels (boats, tugboats and a special vessel equipped with tanks for storing the collected oil). There are also appropriate stocks of oil dispersants, used at the final stage of clean-up operations, when authorised by the port authorities.
- \* Audits its preparedness and the suitability of the above plans and maintains personnel response capability at a high levels, with an annual drill schedule, which includes eight Tier 1 (small scale) pollution drills and two Tier 2 (medium scale) pollution drills.
- Is a member of international and regional organizations, whose aim is to coordinate the cooperation for preventing major oil spill incidents, and the provision of assi-

stance for responding to such incidents should they occur (see p. 69).

# 14. COMMUNICATION WITH STAKEHOLDERS

MOTOR OIL uses various means of keeping Local Authorities and other stakeholders informed of its activities, either by involving its own staff in conferences and meetings, or by organising meetings at the refinery. The aim of such meetings is the regular briefing of Local Authorities about its investment plans and its programmes relating to environmental protection.

Besides briefing Local Authorities, the company also maintains open communication lines with refinery neighbours, hearing any complaints they may have. Such complaints expressed by neighbours are recorded, investigated and evaluated according to the refinery's complaint-handling procedures and short or long-term corrective measures



taken to address them, depending on the cause of the disturbance. Typical examples of actions to reduce disturbance are: the selection of low noise-emitting equipment wherever possible; the installation of sound curtains on the compressors at the Waste Water Treatment Plant; installation of a foam breakdown system at the same facility, and the installation of a silencer on a steam exhaust line at the Hydrocracker complex.

### Complaints recorded

2005	36
2006	24
2007	35
2008	27
2009	28

# 15. PARTICIPATIONS – COLLABORATIONS

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

\* We are an active member of the CON-CAWE organisation (CONservation of Clean Air and Water in Europe), which provides technical support to European refineries on Health, Safety and Environmental protection issues. Our participation



ensures constant, complete and systematic information provision on matters concerning Environmental protection, during production, distribution, handling and use of the products we produce. The conclusions of research projects are evaluated and incorporated in our daily business practices in the most suitable manner, thus further improving the company's environmental performance.

\* We are a member of the Oil Companies International Marine Forum (OCIMF), an association of petroleum companies with an interest in the marine transportation of crude oil and petroleum products, as well as the operation of oil terminals. The forum's activities are aimed at promoting the safe and environmentally-friendly operation of facilities and oil tankers, through the continuous improvement of design standards and operating practices.



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

We support the academic community both in carrying out pure science research projects and in applied research projects related to environmental protection refining industry issues.

Within this framework, MOTOR OIL:

Provides finacial support for the programme entitled «Study of the distribution and chemical behaviour of toxic pollutants in a marine area affected by industrial activities. Application of mild catalytic pollution control technologies», carried out by the Athens University Chemistry Department and the National Centre of Scientific Research «Demokritos» Within the framework of this programme two doctoral theses are being elaborated. The programme concerns the study of the levels, distribution and environmental behaviour of basic pollutants in the marine area of the North-western Saronic Gulf, where the MOTOR OIL refinery is located. It also concerns a deeper analysis of environmentally significant chemical processes typical to the area, and the investigation of the possibility to apply mild pollution control/decontamination technologies.

- Continues to cooperate with the Applied Geochemistry Laboratory of the Geology Department, Patras University, for the determination of prevailing chemical conditions in the sea water in the refinery's coastal zone.
- Supports the research programme of the Institute of Technology and Solid Fuels Applications, concerning the use of solid waste for energy production.
- \* Participates in the research programme entitled «Development of new chemical processes for the production of biodiesel from biomass and its uses on the Greek market»; apart from MOTOR OIL, eight other parties are involved, including the National Technical University, the Centre for Research and Technology Hellas (CE.R.T.H.), and the Agricultural University of Athens. The aim of this programme is to examine the basic operating parameters of a hydrogen-processing plant for mixtures of vegetable oils and de-sulphurised diesel, the possibility of using conventional catalysts for this purpose and finally, the examination of the possibility of simultaneous processing of gas oils and vegetable oils.

# 16. COMPLIANCE WITH ENVIRONMENTAL LEGISLATION

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

The most significant legal development of 2009 was the approval, (ministerial decree 145996/22.6.2009), by the then Ministry of Environment, Urban Planning and Public Works of the Environmental Operating Terms of the refinery. As a result of this decision:

- The refinery was brought within the scope of the directive 96/61/EK, relating to the Integrated Pollution Prevention and Control (IPPC), and directive 2001/80/EC, on the control of atmospheric emissions of large combustion plants. Following this decision, the environmental permits applying to the refinery were renewed, for incorporating an integrated monitoring and control system aiming at preventing the pollution of air and water and the contamination of soil.
- The environmental operating terms of the complex of the New Crude Distillation Unit are set.

### **During 2009:**

- The annual report on greenhouse gas emissions for 2008 was submitted to the Ministry of the Environment, Energy and Climate Change.
- The annual report on hazardous and nonhazardous wastes (liquid and solid) production for year 2008 was submitted to the same ministry and to the Peloponnese



Regional Authorities; the corresponding year 2007 report was submitted to the National Statistical Service.

The annual report on gaseous and liquid pollutant emissions for year 2008 to the same ministry and the competent Prefecture Council.

### Additionally:

- The plan for the collection of waste generated by ships at MOTOR OIL's port facilities, was approved by the Ministry of Mercantile Marine.
- A hydro-geological study was submitted to the Ministry of the Environment, Energy and Climate Change – the object of which was to determine the number and location of required bores for the monitoring and

control of the quality of subsoil and aquifers.

- A study was submitted to the Ministry of the Environment, Energy and Climate Change concerning the determination of sampling frequency and of the location of sampling points in the coastal area near the company's port facilities and the pipeline discharging the treated liquid waste, for assessing water quality.
- \* The Environmental Statement 2008 was submitted to the Ministry of the Environment, Energy and Climate Change, in accordance with the requirements of EMAS ER 761/2001. The company is registered with the European Eco-Management and Audit Scheme (EMAS) and in the Hellenic Register of EMAS-registered organizations, under number EL 000067.

### 17. AVIN OIL

For 32 years, AVIN OIL has been operating in the oil sector – marketing quality products and services – with respect for people and for the environment. Its *Health, Safety and Environmental Protection Policy* summarizes the principles the company consistently adheres to in all of its activities. The policy requires compliance with all legal obligations, regulations and codes of practice. AVIN OIL operates a comprehensive *Health, Safety and Environmental Management System* which provides for regular audits and management reviews to ensure its effectiveness and continuous improvement.

The company has invested in its retail network so as to comply with the requirements of EU Directive 94/63 (Stage I), concerning the recovery of volatile organic compound (VOC) emissions during unloading of road tankers at fuel storage tanks, and is gradually investing in the installation of devices for the early detection of tank leakages at its petrol stations. State-of-the-art technology is applied in this system, allowing the detection of very small changes in fuel levels in storage tanks (+/-0.01 millimetres). In 2009 this project was in the im-

plementation phase, and is expected to be completed before the end of 2010.

The programme for renewal of the company's fleet of Road Tankers ensures the safe transportation of products, and the protection of the environment in parallel. Within the framework of this programme, all Road Tankers have undergone the necessary modifications and are suitably equipped with the required systems for recovering VOC emissions. Seven new Road Tankers were added to AVIN's fleet in 2009, completing a programme of acquisition of a total of 10 Road Tankers. The new Road Tankers are fully equipped for environmentally-friendly operation, in accordance with current legislative provisions. Finally, AVIN OIL's Road Tanker drivers - both its direct employees and other drivers working for sub-contracted freight companies - were trained for defensive driving in 2009, in the framework of the newly established Integrated Transport Safety System (see page 50), aiming at minimising the risk of their being involved in accidents - that not only represent a safety risk but also a risk of environmental pollution.

The Truck Loading Terminal at Aghioi Theo-

doroi is fully equipped for bottom loading, not only reducing the risk of accidents but also helping to prevent pollution, and as required by legislation it is equipped with a Vapour Recovery Unit. In addition, its upgraded pump station makes a major contribution to the reduction of its energy consumption. Finally, in order to ensure the quality of the soil, two monitoring wells have been constructed in order for soil samples to be taken, on a monthly basis, for the early detection of a potential contamination with oil products.

In 2009, investments were made at the Aghioi Theodoroi Truck Loading Terminal providing for the relocation of pipe-line safety valves (see page 49), for upgrading the storage of fuel dyes and tracing substances, and for operational improvements to the vapour recovery system so as to minimise the risk of fuel leaks occurring as a result of over-filling.

AVIN OIL has a contract with a specialist firm covering the recycling of used lubricants and another with a specialist recycler of lubricants' packaging materials. These contracts provide for the collection and recycling of AVIN OIL's lubricants and packaging materials after use.



# IV. SOCIAL CONTRIBUTION

- 6.6 million euros in social contribution projects
  - Restoration of homes in Makistos completed
  - 98 student trainees worked at our facilities

Our responsible position towards society is demonstrated primarily through our contribution to the country's overall economic development and our efforts to benefit the local communities in the vicinity of our facilities, by way of job creation, fostering the local entrepreneurial activity, and by purchasing goods and services from local suppliers.

Moreover, we believe that our business activities should be based on positive and productive interaction with the social environment in which we operate. Our responsibility towards society is to participate actively in enhancing social values and helping to improve social cohesion and optimism for the fu-

ture. For these reasons, we implement a comprehensive programme of donations and sponsorships that benefit local communities, improve quality of life, protect the environment and promote social and cultural activities in these areas, as well as enriching the social and cultural life of society as a whole.

In 2009, we invested 6.6 million euros in social contribution projects. These included: completing the restoration of homes in fire-ravaged Makistos; providing daily meals for 89 under-privileged elderly people in the Corinth region; offering paid internships at our facilities for 98 students; and implementing several other projects which are described below.

### 1. CONTRIBUTION TO SOCIETY

Our social contribution is a measure of our commitment to Corporate Social Responsibility, and we attach the same importance to this as we do with human resources management, environmental protection, occupational health and safety and corporate governance.

Through social contribution and community involvement projects, we aim at building consistent ties with society and at staying in touch with the local population and, in line with our corporate objectives and principles, to provide support to initiatives that improve the quality of life and promote education, healthcare, sports and culture.

During 2009, in line with our long-standing tradition as a socially active corporate citizen, we sponsored and donated to a broad range of activities organised by worthy organisations and foundations. The activities we supported were selected by company executives at local and corporate level, implementing the relevant policy procedures and applying our strategy for community involvement, which is structured around the following main objectives:

- supporting cultural, athletic and social activities and initiatives,
- donating to hospitals and church-run aid agencies,
- contributing to education and the sciences,
- supporting the work of non-governmental organisations, associations and charitable foundations,

# 6.6 million euros for social contribution projects in 2009

# 6.1% of the Group's net earnings after tax

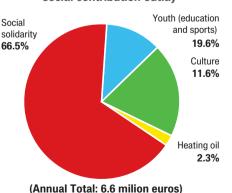
- helping to address the social needs of groups and individuals,
- supporting projects to improve local infrastructure, and
- employing students as trainees and organising educational visits to the refinery.

With respect to **local communities** adjacent to or within the broader refinery area, our social responsibility is demonstrated through our consistent aspiration and efforts to ensure that we remain a solid source of prosperity not only by offering a large number of job opportunities, and fostering entrepreneurial activity, but also through our efforts to protect their general welfare. We thus develop constructive

relationships, which we constantly strive to enhance, aiming at maintaining our continued balanced and harmonious coexistence.

Our concern for the health and welfare of local communities is manifested in our support for numerous programmes and initiatives. These are selected through a process of dialogue, communication and cooperation with the various competent authorities and organisations in the municipalities of Aghioi Theodoroi, Corinth, Loutraki, Saronikos and Solygeia. The main factors we take into consideration when selecting particular programmes are: their potential contribution to the development and promotion of these communities, the enhancement of their social fabric, and the extent to which they help develop and exploit synergies that produce real improvements in quality of life, rather than merely meeting basic societal needs.

## Distribution of the 2009 social contribution outlay



### 2. SOCIAL SOLIDARITY

Supporting various bodies involved in significant social welfare activities is a principal means of applying our company values, and implementing our Corporate Social Responsibility policy in particular. In this context, health is a major objective of our social contribution, because promoting a healthy society means promoting both the physical and mental health, and the general well-being, of its citizens. We support activities related to health care and we donate medical equipment to hospitals. We have systematically supported the Corinth General Hospital for many years and, in the past, we undertook the entire cost of fitting out a clinic at the University Hospital of Crete.

### 2a. Broader society

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

For the last 30 years MOTOR OIL – within the context of its charitable work – has been the main patron of the «Vardinoyannis Foundation» based at, and supervised by, the Panagia Kalyviani Women's Holy Monastery in the Heraklion Prefecture of Crete. We cover part of the Foundation's expenses, while the Holy Monastery is responsible for the remainder of the operating costs. The mission of this Foundation is the accommodation and social/professional rehabilitation of orphaned girls and those from under-privileged families

# «Child – the centre of world attention»

We supported the Athens Municipal Nursery - on the occasion of its 150th anniversary - in its organisation of the conference «Child - the centre of world attention», held on 24 June 2009, at the Athens Concert Hall. The nursery is one of the country's most historic, and - over the many years of its operation - has offered assistance to families and neglected children. Today, its aim has expanded and it now constitutes one of the largest pre-schooling networks, operating 97 day-care centres catering for some 5,800 children. At this event, Athens Mayor Nikitas Kaklamanis and the president of the nursery, Ira Valsamaki-Ralli, presented an award to UNESCO's Goodwill Ambassador and the President of the Foundation for the Child and the Family, Marianna V. Vardinoyannis, for her charitable work.





### «For a hospital in Gaza»

MOTOR OIL is a long-time supporter of UNICEF's social work. In 2009, it offered significant donatioon for the television marathon appeal, «For a hospital in Gaza», co-organised on 23 February 2009, by the General Confederation of Greek Labour, UNICEF and other bodies. The funds raised will be used to rebuild the Christian Hospital in Gaza, which was completely destroyed in recent bombardments, depriving Gaza citizens of hospital care and assistance. After the repairs, the hospital will be handed over to all inhabitants and will be capable of treating all those who need medical help, irrespective of religion.

### X-ray machine at the Kranidi Health Centre

In 2009, we made a financial donation to the Kranidi Health Centre, in response to a request by the centre's director, for the purchase of a complete X-ray apparatus. The 25-year-old equipment, in use at the time, had been constantly breaking down and necessary X-rays of patients were not being carried out. Attempts to obtain replacement equipment through the regular state procurement channels had proved extremely problematic and, ultimately, unsuccessful.



### We kept our promise: Life returned to Makistos

In the summer of 2007, when raging wildfires wiped out entire families and razed homes and properties, devastating whole villages, one of the first to show an interest in our fire-stricken fellow citizens was the Chairman and Managing Director of MOTOR OIL, Vadis J. Vardinoyannis and his wife, Marianna V. Vardinoyannis, a UNESCO Goodwill Ambassador. Mrs Vardinovannis immediately went to Makistos - one of the hardesthit villages – and announced that the Group would undertake the entire repair cost of homes that had been destroyed. This promise was a commitment that we honoured. The project was completed and in early 2010, life returned to Makistos, to the great joy of its inhabitants.

The preliminary works for the restoration of Makistos housing began immediately. The project was assigned to a construction company, which appointed permanent engineers in Makistos as of 10 September 2007, to en-

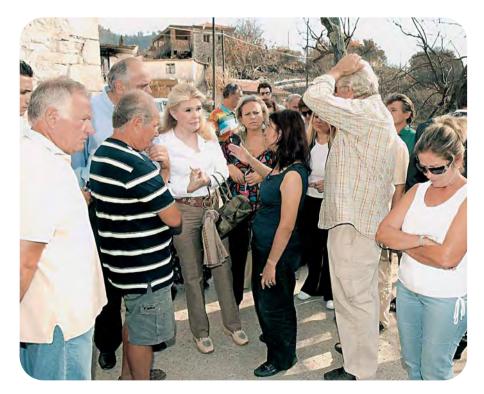
sure the best possible work plan. The preliminary site surveys (house plans, listing of properties, examination and assessment of damage to buildings, etc) indicated that the best means of repairing the damaged buildings would be to restore their external structures according to the original designs and specifications, while at the same time enhancing their structural strength so as to reduce their vulnerability to earthquakes in the future. From an architectural viewpoint. this method was also the most appropriate. as it ensured preservation of the building façades, thus restoring the village's architectural character to the condition it was before the disaster.

Assessments of damaged buildings were then carried out, including a thorough structural assessment for each property. Plans were drawn up for: (a) structural reinforcement work where necessary, and (b) in each case, a full architectural plan for the complete re-design and restoration of the internal structure according to modern stan-

dards for comfortable, modern homes. In January 2008, contractors moved in and clearance work began; as soon as permits had been issued by the competent Town Planning authorities, rebuilding work commenced.

On 17 May 2008, the inhabitants and the local municipal authorities were briefed on the progress of works at an open meeting during which the surveyors gave details of the specifications and methods that were to be used for the restoration work.

The post-fire rebuilding project involved repair of two churches and restoration work being carried out on 45 different sites within which were 70 separate dwellings. An antiflooding project was also constructed. Apart from sub-contractors and their staff, the repair work involved over 25 engineers of all specialities, architects, civil, mechanical and ground engineers, and professors from the National Technical University. The total cost came to 4.6 million euros, which was paid entirely by the MOTOR OIL Group.





















### Ambulance boat

We contributed to an extremely original, worthwhile and particularly beneficial initiative by the Worldwide Union of Sfakians, who acquired an inflatable, polyester, heavy-duty boat of excellent floating characteristics, which was converted into an ambulance. It safely accommodates two stretchers and has medical equipment for patient transportation, as well as GPS, radar and searchlights for night sailing. Its purpose is to transfer patients or the injured, who require emergency treatment, to a hospital from anywhere along the entire coastline of Palaiochora-Chora Sfakion and Gavdos. So far, road access to this region has been difficult, almost impossible, due to the rough terrain, resulting in increased suffering, or even the death, of patients requiring emergency hospitalisation.



25.8 million euros or social contribution projects in the past seven years



We systematically support the humanitarian organisation, "Lifeline Hellas", which was established in 2003 as the Greek branch of "Lifeline", a non-profit body. Princess Katherine of Yugoslavia has been the

head of *«Lifeline»* since its establishment in 1993. It is mainly active in Serbia and Montenegro, where it cooperates with local and foreign NGOs to assist children, the elderly, hospitals and social welfare foundations, as well as all those who are in need.

Its principal objective is to combat infant mortality in Serbia, which is the highest in Europe, due to the antiquated equipment and major shortages in obstetric and paediatric wards. In 2009, we assisted *«Lifeline Hellas»* in its programme for the provision of modern medical equipment for infant care in Serbian hospitals.

- We supported the Rethymno Children's Cultural Centre, whose experienced staff offer daily care – from 7am to 9pm – to 55 children of under-privileged families.
- We provided individual financial aid to some 150 destitute people, who needed assistance.
- \*\* We donated towards the humanitarian-charitable work carried out by the Scandinavian Church in Piraeus, the "Vithania" Philanthropic Foundation, the Action Against Breast Cancer Foundation, the "Arogi" Welfare Association, the European Network for the Development of Cooperation and Culture, the Panhellenic Union for the Fight Against Youth Diabetes, the General Consulate of Ivory Coast, the Organisation Against Drugs (OKANA), the "Nostos" Therapeutic Programme, the Greek Office of the NATO HQ for Allied Forces based in Naples, Italy, the

«Elpida» Association, the Hellenic Society for the Protection and Rehabilitation of Disabled Children (ELEPAP), the «Paremvasi» Alternative Family Community Association, the «Argo» Association for Seafarer Parents of Children with Special Needs, the «Fos ton Tyflon» Organisation to Assist the Destitute Blind, the Northern Greece Spastic Society, the «Anadysi» Society for the Protection of Autistic Children, the Special Occupational Education Centre for the intellectually challenged, the «Aghios Haralambos» elderly people's home in Aigion run by the Agapis Melathron Ecclesiastical Foundation, and others.



### Voluntary blood donation

Voluntary blood donation is an act of generosity and love, and one of the best ways to demonstrate our social solidarity on a personal level. Thousands of patients requiring blood transfusion are saved thanks to such donations. We encourage our personnel to participate in blood donation programmes, arranged in cooperation with the Corinth General Hospital, for refinery employees, and with the «Metaxa» Hospital for head office staff. MOTOR OIL's personnel have been voluntarily donating their blood for over 24 years and this humanitarian initiative has become an established custom. The resulting blood bank covers the needs of volunteer blood donors and their close relatives, as well as the needs of others in emergency cases. During 2009, 107 blood units were collected, bringing the total number since 1991 to 2,560.

### 2b. Local communities

- \* We have offered significant economic aid to the Aghioi Theodoroi Protection Centre for Elderly People which has around 400 members every year since its establishment in 2000, to meet part of its operational expenses and to enrich the events it organises for the elderly in the area. In 2009, this assistance facilitated the organisation of numerous events, including excursions and conferences on medical issues relevant to geriatric illnesses.
- \* We financially assisted the *«Efthymeion Centre»* for Treatment and Rehabilitation of People with Special Needs, in Corinth, for the organisation of an annual cultural event at the *«Mikis Theodorakis»* theatre in Examilia, in which the children of the *«Efthymeion Centre»* played the leading roles, and we also offered their Easter candles. The Centre, which accommodates around 150
- people with special needs, through both its therapy programme and its occupational workshops, provides assistance and relief and is recognised for the quality of its services. People with special needs require constant and specialised support, with ongoing medical and social care. MOTOR OIL's interest in the *«Efthymeion Centre»* is longstanding, stemming from our conviction that exclusion has no place in contemporary society, and that people with special needs should be accommodated in society through appropriate actions and programmes.
- \* We offered economic assistance to the Hellenic Red Cross, Aghioi Theodoroi Regional Department, to meet part of the operational costs of the ambulance and the coastal First Aid station, which are staffed with volunteer lifeguards. Moreover, we assisted the corresponding Corinth and Loutraki Regional Departments.



### Meals for destitute elderly people

About nine years ago, MOTOL OIL launched a very important social solidarity initiative in cooperation with the Corinth Municipality Protection Centre for the Elderly (K.A.Π.Η.), which the company continues unfailingly. The initiative involves a meals programme for Corinth's destitute elderly people, within the framework of which complete lunches and dinner supplements (milk and yoghurt) are offered 365 days a year. The meals are prepared at the refinery's restaurant and are the same as those offered to refinery employees. In 2009, the refinery restaurant extended its assistance by adding to the 75 servings for the Corinth centre, another eight servings for the Aghioi Theodoroi Protection Centre for the Elderly and four servings for other destitute people cared for by the Corinth Holy Diocese.

### **Heating oil supply**

In 2009, through the allocation for heating oil during the winter months, over 250,000 litres - worth some 155,000 euros were provided free of charge to more than 200 recipients. The objective of this social contribution is to meet part of the heating expenses of schools, orphanages, public kindergartens, municipal childcare centres, public elderly people's homes, churches, church institutions, etc, in the neighbouring municipalities, as well as the similar expenses of a large number of other recipients in other regions of the country. Such recipients included the Aghios Athanasios Church's elderly people's home, the SOS Children's Villages, the «Floga» Association of Parents of Children with Neoplasia, the «Theofilos» Organisation for Social Care, the «Smile of the Child» charity organisation, the «Efthymeion Centre» for treatment and rehabilitation of people with special needs, the «Corinth Special Elementary School» for disadvantaged children, the «Pegasos» Rescue Squad of Corinth, the Corinth elderly people's home, the schools of Aghioi Theodoroi, Corinth and other adjacent municipalities, and the «Vissarioneio» elderly people's home in Evia.





- We donated to the "Pegasos" Rescue Squad of Corinth for the acquisition of a special vehicle to transport its members and equipment.
- \*\* We offered Christmas gifts to schoolchildren in Aghioi Theodoroi, Isthmia and Kyra-Vryssi, as well as to the teachers of elementary schools and kindergartens in Aghiou Theodoroi. We also financially supported the organisation of a number of Christmas events by the Isthmia Special Vocational Training Workshop, the Corinth Special Elementary School, and for the children of the Corinth Police force.
- During the Christmas and Easter periods,

- we made some monetary contributions to over 640 destitute people in Corinth, Aghioi Theodoroi, Isthmia, Loutraki, Saronikos and Solygeia, as well as donations to charity organisations in the region. At Easter, we provided roasting lambs for various institutions in the Corinth prefecture.
- We offered machinery packaging wood to the Aghioi Theodoroi Municipality for the construction of fire-fighting guardhouses and, as every year, provided the lubricants for the municipality's vehicles and work machines. We also provided lubricants for the Solygeia Municipality.
- \* We donated to various bodies, including the "Aghia Irini" Union of Security Service

- Veterans in the Corinth prefecture, the Federation of Aghiou Theodoroi Settlers Associations and the Panhellenic Union of Refinery Retirees.
- \* We provide assistance to neighbouring communities in emergency situations, placing at their disposal the refinery's personnel and its technical, fire-fighting, anti-pollution and medical equipment whenever necessary, as well as its personnel buses, to meet the occasional transport needs of schools and sports clubs.

### 3. CULTURE

We believe in the role of the arts, culture and history as the mainstays of healthy social development, based on solid spiritual foundations, and we provide multi-faceted support for activities that highlight and promote our cultural and historical heritage.

### 3a. Broader society

# Underwater excavations of a Mycenaean shipwreck

We offered economic assistance to the Hellenic Institute of Marine Archaeology (H.I.M.A.), a well-established body that conducts and promotes underwater archaeology in Greece through ground-breaking research and educational work, which we have also supported in the past.

Specifically, funds were made available to facilitate the underwater research and study of a shipwreck from the Mycenaean period (13th-12th century BC), which was found south of Poros island. According to research carried out in previous years, the cargo of the shipwreck was linked to the life of a Mycenaean maritime settlement, located on the rocky islet of Modi. It was the second shipwreck dating from the Late Copper Period to be found by H.I.M.A. in Greek waters, following systematic underwater archaeological research, and is con-



- \* We supported the "Hellespont" Charitable Association of Madytians an organisation with a 90-year history, comprised of the descendants of the Madytians and friends of Madytos, a coastal town in Eastern Thrace in the Hellespont straits for the organisation of a conference on 6 May 2009, with the aim of promoting the history, traditions, culture and contribution of Madytos to Hellenism. The Dean of Sorbonne University, Eleni Glykatzi-Arveler, was a speaker at the conference.
- We funded publication of the minutes of a scientific conference, «Hellenistic Alexandrian



Period as Part of Egypt's History», held on 3 December 2007 in Athens, by the Association of the Friends of the Bibliotheca Alexandrina. The conference was attended by Egyptian President Mohammed Hosni Mubarak, accompanied by his wife, Susan, who are the main initiators of the Bibliotheca Alexandrina. UNESCO Goodwill Ambassador and Library board member Marianna V. Vardinoyannis also addressed the conference.

\* We donated to the Athanasios V. Botsis
Foundation for the Advancement of Journalism, which has been carrying out a great
deal of important work since its inception in

1980, including the annual presentation of Journalism Awards and prizes for the best school magazines, the operation of the only Electronic Archives of Press Publications in Greece, and scholarship grants to young reporters for studies abroad.

- We supported efforts by the organisation, «Ecumenical Hellenism Programme», for the publication of the book «21st century – Great Greeks».
- \* We offered a donation to the Rethymno Prefecture's Reserve Officers Association for the repair and restoration of a historic building which houses its offices (former guardhouse of the Rethymno Western Gate). In 2009, the association unveiled the statue of the Reserve Officer, which was erected in the Vardinoyannis Park. The construction of the statue was entirely funded by MOTOR OIL in 2007.
- \* We donated to the Group *«Vrakoforoi»* of Crete the biggest organisation for the preservation and spread of Cretan traditions for its established annual three-day summer events at the Fortezza fort in Rethymno.



sidered to be of major importance because it dates from a period of radical re-structuring of the Mycenaean world, after the decline and fall of Mycenaean palaces.

The aim of additional research undertaken by H.I.M.A. in 2009 – under extremely de-

manding conditions, due to the great depth (over 40m) and exposure to strong winds and currents – was further examination of the shipwreck, in order to bring new data to light about a particularly important prehistoric period of the Aegean Sea.



### «Monument to Europe»

Zeus, the father of the Olympus gods, fell in love with the famous for her beauty Princess Europa, daughter of Aginoras and Telephassa, the rulers of Phoenicea, from where he abducted her, transformed into a white bull. He coupled with her in Crete and one of their three sons. Minos, laid the foundations for the marvellous Minoan civilisation, while Europa gave her name to our continent.

The scene of the kidnapping is depicted by a statue entitled «The Abduction of Europa», which was erected outside the European Parliament in Strasbourg in October 2005, a gift to the people of Europe from the Aghios Nikolaos Municipality and the Region of Crete.

MOTOR OIL has undertaken the exclusive sponsorship for the execution of an ambitious initiative by well-known film director Nikos Koundouros to set up the non-profit organisation, «European Routes», in order to craft a «Monument to Europe» which will depict Europa's abduction by the sacred bull, along the lines of the statue in Strasbourg. The «Monument to Europe» will be erected in 2010 in Zakros, on the eastern coast of Crete, as a reminder through the centuries of the presence of the Greek Spirit and its influence on the generations who led Europe, from the Classical Greece of Pericles, Thucydides and Aristotle, to Byzantium and up to today. The impressive 2.80m statue - constructed of stainless steel and casted bronze - will be erected on a 3.5m-high base, dominating the archaeological site of Zakros. Ruins still stand there of the ancient Minoan town of Zakros, which was one of the four main administrative centres of the Minoans. The Palace of Zakros was originally built around 1900 BC, rebuilt around 1600 BC, and destroyed around 1450 BC, along with the other major centres of Minoan civilisation. Zakros is considered to be the eastern gateway to Europe and the Western world.





Above: The model of the «Monument to Europe». Below: The «Abduction of Europa» at the European Parliament entrance.

- \* We donated to the Hellenic Maritime Union for the magazine, «Nautical Hellas», a traditional shipping publication - the oldest of its kind - circulating since 1928. This magazine is printed at the printery of the Greek Navy, and is published every month. It is illustrated, and contains literary articles, historical material and old naval stories. Its contributors are distinguished writers and journalists.
- The company donated to the «Arkadi» Association of Rethymnians in Attica, to meet the cost of transporting the miraculous icon of the «Virgin of Myriokefalon» from Rethymno to Athens and the purchase of a suspended silver oil-lamp dedicated to the Virgin Mary, within the context of events celebrating the association's 80th anniversary.
- \* We undertook the exclusive sponsorship of the performance of Beaumarchais's «The Barber of Seville», by the Municipal Regional Theatre of Crete, within the framework of the Kifissia Municipality's «Menandreia 2009» cultural events, which the company regularly sponsors.
- 113/9 OTOP OTA
- \* We have frequently supported the Ermioni Music Club in its intensive efforts to organise high-standard cultural events in picturesque Ermioni. In 2009, we supported the 3rd International Ermioni Festival, held on 11 July – 2 August, with many outstanding performances.



### «OIL» Magazine

The saying attributed to the Athenian, Solon, *«Rule, after you have first learned to be ruled»*, was the title of a special edition of *«OIL»* magazine, which contained the topics: «The philosophy of administration» and «Leaders and rulers». A very significant archive edition, it featured important excerpts from the work of the world's greatest thinkers in relation to the philosophy of management, as well as the main achievements of the most impressive leaders of global history.

The quarterly magazine, *«OlL»*, was first published in 1971 and has circulated on a regular basis since then, published by MOTOR OIL and other companies from the Vardinoyannis Group. The magazine 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 has a run of 3,000 copies and is read by a significant number of both public and private organisations, as well as by higher education institutions.









### «Hellenic Submarines»

«The immortal Proteus, who knew the depths of every sea»

Odyssey IV 385-386

«Hellenic Submarines» is a monumental two-volume and bilingual (Greek-English) work by two retired Vice-Admirals of the Greek Navy, Timotheos Masouras and Thomas Katopodis. It was published by the Maritime Museum of Greece and we are very proud to have supported it through sponsorship. This 700-page double volume presents the history of the 34 Greek submarines, from their initial inclusion into the Greek Navy in 1880, up to 2009. The historic documents and 600 photographs - many of which are being presented for the first time to the reading public - are unique historical

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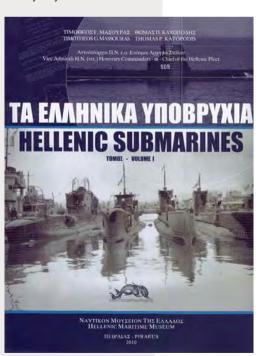
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data which are extensively described in the book.

This publication is a respectful tribute to the fallen heroes of our four submarines that sank during World War II, who remained trapped inside their shells, immortal men, never buried, lying on the bottom of the seas that lap the country's shoreline. With their eternal resonant silence, they assure the indefeasible Greek rights on the insular lands on the sea surface above their corpses.



### «History of Sfakia and their mythology»

With MOTOR OIL covering the entire cost, a 2-volume work by journalist Paris Kalaidis, entitled «History of the Sfakia and their mythology», was published. This is the 42nd book by this tireless chronologist-historian of Sfakia, whose vast written work refers primarily to the Sfakia region through the centuries, focusing on personalities who played a leading role in sh-



aping its history. Starting from the Sfakian mythology, Paris Kalaidis' latest work presents a chronological collation of all the events that historically impacted the region up to the present time with the German occupation and the Resistance, concluding with references to the monuments and prominent modern-day personalities of the Sfakia region.

The following sponsorship activities in 2009 should also be mentioned:

- \* Donation to the Hellenic Submarines As-
- \* Support for the American Hellenic Institute to organise the 5th annual Hellenic Heritage Meeting.
- Donation to the Lyceum of Greek Women to meet the cost of participation by its dance group in the opening ceremony of the international conference on «Climate change and challenges for the future generations», which took place at the Athens Concert Hall in June 2009.
- Donation to the «Anagnostis Skalidis» Cultural Association of Perivoli, Kissamos, for the enhancement and renovation of the grave of Anagnostis Skalidis, a heroic figure in Crete's struggle against Turkish rule.
- Support for «Prespes 2009» events, organised by the Prespes-Florina Cultural Events Organisation.
- Economic aid to the Atalanti Municipality for the organisation of cultural events.
- Donation to the Sailor Scouts System of Drapetsona.
- \* Financial assistance to the Association of Greek Frogmen for the purchase of diving equipment.
- \* Donations to the magazine, «Circumnavigation of Maritime History», (nautical history and tradition); the newspaper, «Cretan

News», for an annual special edition on Crete's economy; the Chief Captains' Club magazine. «Sextant»: the newspaper. «Cvcladic Light», as well as other important but of small circulation local publications and newspapers.

- A grant to the «Tourtouloi» Cultural Association of Aghios Georgios, Siteia, for the restoration of the «Electriki», the premises of an electrical energy production plant with a waterfall, which operated from 1947 to 1960.
- \* Support for cultural and other events staged by numerous organisations, such as the National Youth Council, the Association of Chanians of Attica, the Association of Perivolians, the Panhellenic Union of Retired Merchant Marine Captains, the Association of Mygdaliotans, the Association of Asigoniatians, the Pancretan Union, the Worldwide Union of Sfakians, the Graduates Club of the Hydra Maritime School, the «Crytagenis Zeus» Association, and the Ekali Municipality Employees' Association.

### 3b. Local communities

In 2009, we contributed to many cultural events, assisting the work of many local associations, which offer traditional dancing courses and theatre workshops, organise concerts and theatrical performances and present prizes to outstanding students, thus boosting in these and other ways the cultural level of the region.

### **Aghioi Theodoroi Cultural Centre**

As every year, in 2009 we supported events organised by the Aghioi Theodoroi Cultural Centre, which - since 1988 - has been developing multi-faceted cultural activities that are not limited only to the prefecture.

Many different departments operate under the umbrella of the Cultural Centre, such as: guitar (40 children), traditional dance (150 children - 80 adults), adult and children's theatre workshop (60 people), a small orchestra (25 people), adult and children's modern dance (70 adults -90 children), family advice centres, an art workshop for elementary school and kindergarten (53 children), puppet theatre for kindergarten and an adult and children's choir (120 people).

Numerous events were organized in 2009, including Carnival celebrations with 10 floats and 1,000 participants from the Smile of the Child and municipality schools, also various art exhibitions, concerts and theatre and dance performances.

### **Cultural events of Solygeia Municipality Cultural Centre**

In the past, we financially assisted the Cultural Centre of Solygeia Municipality in its earnest effort to acquire its own open-air theatre, which materialized in 2008. This 1,500seats open-air theatre has been built at a picturesque site of Sofico village, and the Municipality's aspiration is for this theatre to become an active centre of culture in the region of Corinth, by hosting notable theatrical performances and other cultural events.

In the summer of 2009, residents and visitors in the region had the opportunity of enjoying quality recreation including concerts, art exhibitions, movie shows, theatre and dance performances, etc. during the «Solygeia Cultural Summer 2009» events, which MOTOR OIL supported very generously.



### **Corinth Municipal Cultural Centre**

The Corinth Municipal Cultural Centre is the official body for the municipality's cultural activities, which include concerts, theatre and dance performances, art exhibitions, scientific conferences and sports events. In 2009, we sponsored the centre's organisation of «Carnival 2009», and the summer events «Cultural Routes 2009». which included concerts (by Eurydice and Korgialas, Yannis Kotsiras and Rallia Christidou, as well as the «Gordios Desmos» and «Pantos Kairou» groups) and theatre performances («The Barber of Seville» by the Municipal Regional Theatre of Crete and «Curtain and let's go...» by the Cultural Centre's Theatre Workshop).





### «The Church of God's Wisdom» (Hagia Sophia)

On 9 March 2009, at the Alexandreio Congress Centre of Loutraki, the Corinth Prefecture, the Loutraki-Perachora Municipality and the Union of Greek Physicists organised a superb presentation of the book by writer Marinos G. Tsamis, *«The Church of God's Wisdom»* (Hagia Sophia), which refers to the Holy Church of Hagia Sophia in Constantinople. This church was a crossroads of

the world for 1,500 years. One of the world's masterpiece's of Orthodox Christian ecclesiastical architecture, it has survived earthquakes, wars, conquests and destruction, and has served the faith of Christianity. It constitutes the supreme architectural expression of Eastern Christianity and is considered as one of the greatest construction achievements of all time. The book – a compre-

hensive scientific study – allows readers to follow the monument's historic course and understand the irrefutable position that it holds in the consciousness of Hellenism, as well as all Christian peoples of the East.

MOTOR OIL sponsored the publication of this book and donated 200 copies to the General Secretariat for Hellenes Abroad for distribution to Orthodox Patriarchates and ethnic Greek schools abroad.



- In 2008, we responded with a major donation to an appeal by the Bishop of Corinth to raise funds for the restoration of the Zoodochou Pigis Holy Monastery and the repair and refurbishment of the *«Krokideios Hall»*, in order for the historical hall to reopen its doors to the Corinthian Church and the public. We donated once again in 2009 towards these projects, which are underway, as well as a new project by the Holy Diocese, that involves the renovation of the Conference Centre in Ancient Corinth.
- We donated to a series of cultural events organised by various local associations, such as the «Irida» theatre in Corinth, the Loutraki-Perahora Municipal Cultural Centre for the organisation of Carnival events, the Isthmia Cultural Club for the Greek Traditional Dances Festival, the «Pindos» Epirots Association of Corinth, the «Cosmas o

Aitolos» Aitoloakarnanians Association, the «Aghios Dimitrios» Cultural Association of Xilokeriza for the publication of its annual magazine, the Union of Messinians of the Corinth Prefecture, the Asia Minor Shelter of Corinth, the «Aghios Panteleimon» Angelokastritians Association of the Corinth Prefecture, the «Th. Kolokotronis» Arcadians Association of the Corinth Prefecture, the «Ap. Pavlos» Cultural and Enhancement Association of Kegchraians, the «Arakoukia» Saronikos Municipal Cultural Association for the organisation of a musical evening, the «Mainalo» Arcadians Union of the Corinth Prefecture for the operation of a blood bank and a children's basketball team, the Examilia Cultural Association for events organised by its dance group, the Aghioi Theodoroi Women's Association, the «Prathi» Aghioi Theodoroi Cultural Association and the «Psiloritis» Aghioi Theodoroi Cretan Association.

# Concert by the *«Mikis Theodorakis»* Orchestra

For the seventh consecutive year, since the beautiful 1,600-seat open-air theatre was inaugurated in Examilia, Corinth, and named after the renowned Greek composer Mikis Theodorakis, the Lysippeion Cultural Centre of the Corinth Prefecture organised a large popular music concert featuring the «Mikis Theodorakis» Orchestra. The 2009 concert took place on 29 July.

MOTOR OIL sponsors this event each year. The purpose of this ongoing sponsorship is to pay tribute to the unique musical heritage of Mikis Theodorakis, who – apart from his large number of orchestral works – has also composed 94 song cycles that promote poetry in a simple and authentic way, originating from the roots of our popular tradition. In addition, the company supports this orchestra, which, for many years, under the composer's supervision, has presented major productions, cooperated with renowned artists, musicians and singers, and has travelled throughout the world, promoting the power of Mikis Theodorakis' music.

The 2009 concert was dedicated to Yannis Ritsos and the great poet's historic collabora-

tion with Mikis Theodorakis. Ritsos' poetry became known to the general public when it was set to music by Theodorakis. The result of this creative collaboration is a wealth of songs that remain indelibly etched on the pages of contemporary music history.

The «Mikis Theodorakis» Orchestra played the three outstanding works of this collaboration: «Epitaphios», «Romiosyni» and «18 Songs from the Bitter Homeland», sung by Nena Venetsanou, Dimitris Basis, Calliope Vetta and Alexandros Hatzis, in a performance which received a heartfelt reception from the audience that evening.





### 4. EDUCATION - THE SCIENCES

Education and the sciences have always enjoyed our company's support. We believe in the power of knowledge as a factor that cultivates and fosters the development of both individuals and groups, and this is why we are interested in boosting and promoting education, research and technology – the three main pillars that constitute the driving force of progress and enhance the future of society.

### 4a. Broader society

### The «Vardinoyanneion Foundation»

The «Vardinoyanneion Foundation», sponsored primarily by MOTOR OIL – the remaining sponsors being other companies of the

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

The supported study fields vary in each academic year. A total of 10 scholarships were awarded for the academic year 2009-2010:

- one postgraduate scholarship for an Engineering school abroad;
- four postgraduate scholarships for studies in Greek universities, in the fields of Chemical Engineering, Business Administration, Maritime studies, and Geology/Geophysics; and
- five undergraduate scholarships in Greek universities in the fields of Geology, Medicine, Naval Engineering, and Economics.

In addition to the scholarships, 109 annual assistantships were also awarded in the academic year 2008-2009.

Since its establishment, the Foundation has awarded 132 scholarships and 1,373 annual assistantships.

### Informative visits to the refinery

Every year, we organise informative oneday seminars and visits to our refinery for university, technical, military academy and high school students. Visitors are given guided tours of the production and work areas and are briefed on the operation of a modern refinery, as well as on the environmental protection programmes that MOTOR OIL is implementing or developing, and the company's diverse and ongoing contribution to both local communities and society in general. Within the framework of these events, some 300 people visited the refinery in 2009.







### Internship programme

Each year, we accept a large number of university and technical school students for paid internships for 1-2 months in various positions in the refinery and in the head office. During their stay, trainees are introduced to the company's work environment and take part in projects involving teamwork with our experienced members of staff who are tasked for this particular purpose. Furthermore, a number of students are offered the possibility of six months' practical work experience, relevant to their specific areas of study. We also accept foreign students for practical work, who are registered with the International Association for the Exchange of Students for Technical Experience (IAESTE). During 2009, within this context, 87 month-



long internship positions and 10 six-month positions were offered, as well as one position for a student in the IAESTE programme, at a total cost of around 170,000 euros.

- \* We supported the Hellenic Surgical Society in organising the scientific conference, «Recent developments in molecular biology and surgery for cancer of the large intestine», held in Athens on 4 April 2009.
- The Panhellenic Association of Chemical Engineers organised the conference, «Energy Planning» on 13 October 2009, with our sponsorship support. The conference highlighted concerns about energy saving and environment protection.

### The 1st Rethymno High School's pupil exchange programme

We have «adopted» and we support the 1st Rethymno High School's annual pupil exchange programme. This school employs dedicated and inspired teachers, who do not limit teaching and learning to the boundaries of a small classroom. With our financial support, a pupil exchange programme has been implemented for the past few years with the Finsterwaltergymnasium in Rosenheim, Germany, which involves visits to Rosenheim by the Rethymno schoolchildren, ho-

sted by the German pupils. They stay with German families, experiencing their daily lives and getting acquainted with their mentality and culture. They also visit museums, palaces, sports facilities and schools in Bavaria, broadening their horizons at the tender age of 15. By communicating with their German peers, sharing their concerns and exchanging views, they return home intellectually and emotionally richer. Similar visits are made by the German schoolchildren, who are offered hospitality in Rethymno.





- We financially assisted the 3rd Symposium, «Green Chemistry and Sustainable Development», organised on 25-27 September 2009, by the Greek Network of Green Chemistry, the Aristotle University of Thessaloniki's Chemistry Department and other bodies. The purpose of the symposium was to examine applications of Green Chemistry and Green Chemical Technology in industry, as well as the research currently being conducted in these sectors in Greece.
- We offered economic support to the Episkopi-Rethymno Senior High School to carry out a 5-day educational/recreational excursion to Cyprus in 2009.
- We offered financial aid to the 8th Rethy-



- \* We donated three computers to the Anavryta Experimental Senior High School.
- \* The company supported the Sunday schools in the Aghios Constantinos & Eleni parish in Rethymno.



### 4b. Local communities

We offer financial support to schools in the region for the enhancement of their technical infrastructure and for various educational activities and programmes that boost the level of their educational work.

Some examples of such initiatives in 2009 were:

- \* Economic support for the 2nd Corinth Junior High School's cultural programme, «Cultural, economic and social development through sport - the example of Barcelona».
- Financial aid for the Corinth Special Elementary School, in which 48 children with special needs are enrolled, for the purchase of equipment for the gymnasium and the independent living classroom.
- \* Purchase of a photocopier for the 2nd Corinth Senior High School.
- Donation to the 3rd Corinth Senior High School for an educational excursion.
- \* Financial aid for schools in Aghioi Theodoroi: to the 3rd Kindergarten, which ope-

ned in 2008, for the acquisition of equipment and educational material; to the 1st Day Nursery for the purchase of equipment; to the 1st and 2nd Kindergarten to meet school needs; to the Junior High School for renovations to the premises and the acquisition of a photocopier; to the Senior High School for educational visits, and to the Elementary School for the creation of a physics and chemistry laboratory, as well as for purchasing books for the school library.

- Economic support to the 3rd Loutraki Elementary School for the acquisition of electronic teaching aids.
- Purchase of books for the Vochaiko Elementary School and Kindergarten.
- Financial aid to the Isthmia Junior High School for educational excursions and landscaping of the schoolvard.
- Economic assistance to the Almyri Elementary School and Kindergarten for maintenance of its facilities.
- Support for the Isthmia Elementary School and Kindergarten Parent Association, for organising cultural events and educational trips.
- Financial assistance to the Corinth Union of Police Employees for awards to 11 children of police officers, who enrolled in tertiary education institutions in 2008.



# 5. ENVIRONMENT PROTECTION – INFRASTRUCTURE

We apply Responsible Business policies and implement Corporate Social Responsibility programmes. Within this context, we support activities that contribute to improving infrastructure and raising society's awareness of environment protection and sustainable development.

### 5a. Broader society

One of our most important initiatives was MOTOR OIL's participation as a sponsor of the international conference, *«Climate change and challenges for the future generations»*, which is referred to extensively in the *«Environment»* chapter (page 58).

### Green File - GREECE 2020

We offered sponsorship support for the project, *«Green File – Greece 2020»*, by the non-profit organisation, Greentank, which aims to substantively contribute to planning a strategy for the development of a green economy in Greece.

The year 2020 is the target date for completion of all necessary infrastructure that will make Greece a producer and not merely a consumer of the global green economy. To achieve this, a credible strategy must be planned for the re-structuring of the coun-

try's productive sectors, so as to respond to the consequences of the economic crisis, the implications of climate change and the need for national energy security.

«Green File – Greece 2020» will contain 40 proposals related to strategy, objectives, policies, organisation, budget, projects, infrastructure, investments and jobs appropriate for green development.

TIn 2009, we donated to a campaign by the Amorgians Association for the construction of a church in honour of the local martyr, Saint Neophytos of Amorgos. This mone-

tary gift was the continuation of a generous donation that we made in 2002, for the acquisition of land to build the church and the publication of a collection of hymns comprising the Mass of the Saint, who was martyred on the Dodecanese island of Leipsoi in 1558 and was pronounced a Saint by the Constantinople Ecumenical Patriarchate in 2002.

\* We offered a donation to the Holy Diocese of the Dodecanese for renovations and repairs to the Saint Nectarios Church in Skala, on Patmos island.





We supported construction works for the churches of Aghia Ekaterini in Nea Chora, Hania; Aghia Paraskevi in Daphne, Nafpaktos, and Three Hierarchs in Pigadia, Drama.

### 5b. Local communities

- \* We met the needs of some 200 local households, in terms of water for garden irrigation and sanitation, with quantities produced by the refinery's desalination plants. This water is a source of life for the area's vegetation. MOTOR OIL has built and maintains the water supply mains to these homes, as they are not covered by the existing Aghioi Theodoroi water supply network. In 2009, 71,000 cubic metres of water were provided free of charge, exceeding 220,000 euros in value.
- In September 2009, the Corinth Prefecture's first Environment Education Centre opened in the Sikyonia Municipality, which we assisted financially for the acquisition of the necessary equipment. The centre aims to raise awareness among pupils and young people so that they may develop a responsible attitude, thus contributing to protection of the eco-balance and sustainable growth.
- We offered a donation to the Aghioi Theodoroi Cultural Centre towards the purchase of seats in the events hall, and to the Saronikos Municipality for benches and garbage bins, which were installed on the municipality's beaches.
- We supported the "Paradisos" Cultural Association of Isthmia for fencing and tree-planting in public areas and for adding playing equipment in the two children's playgrounds.
- We provided economic aid to the «Aghioi Theodoroi» Forest Protection Association, which owns three fire engines and other equipment, to facilitate its important work involving direct and effective intervention

- by its volunteer firemen in the event of a forest fire in the region.
- \* We also made donations to various local development and other associations for infrastructure projects. These associations included: «Klara Elias», Sousaki; «Pika», Kinetta: «Galini». Isthmia: «Panorama». Aghioi Theodoroi, for irrigation and roadmaking works; «Arion», Kyra Vryssi, for upgrading the association's facilities: «Galini», Katsiviri, for paving of the churchyard and the purchase of seats; «Nea Zoi», Kitsiviri, for road-paving works; «Apostolos Pavlos», Keghraia; «Glykia Zoi», Sousaki, for road-paving works and municipal lighting; «Philothei», Keghraia, for street lighting; «Aghios Charalambos», Kalamaki, for a children's sportsground, and «Kiafa Beka». Aghioi Theodoroi, for the fencing of a children's playground.

# Κορινθία Ιδουνθία Ιδουν

### 6. ENTREPRENEURSHIP

MOTOR OIL, as the largest economic entity and employer in the Corinth Prefecture, provides income, directly or indirectly, to a large number of families in the area. And as the main pillar of the region's economic growth, the company supports local initiatives aimed at promoting entrepreneurship.

Moreover, we implement a policy of preference for local businesses in order to meet the refinery's needs in services, consumables, food, etc., even if cheaper sources for the procurement of these goods are available elsewhere. In this way we provide further support to the Corinth market.

\* We donated to various bodies, such as the Labour Ministry Employees Association, the Customs Officers Federation, the Hellenic-American Chamber of Commerce, the Aghioi Theodoroi Trade Association, the Corinth Trade Association, the Corinth Prefecture IKA Employees Association, the Argolida-Corinth Public Finance Services' Employees Association, the Corinth Labour Centre, and the Technical Chamber of Greece's Peloponnese Regional Department, for the publication of the journal, "The Engineer Today".

### «Corinthia 2009» exhibition

On 16 to 20 September 2009, the Corinth Chamber of Commerce organised the 3rd regional exhibition, *«Corinthia 2009»*, which we supported. The exhibition, with 190 exhibitors and 22,000 visitors, was an important economic, social and cultural event for the Corinth region. Its aim was to highlight and endorse economic activities, promote products both locally and abroad, facilitate commercial agreements



lel activities included interesting conferences and cultural events, such as a cooking contest, an exhibition of Corinthian books and authors, career and education presentations, a conference on the economic crisis and franchising, and meetings with business delegations from Russia and Albania.



### 7. SPORTS

Supporting sports means embracing young people, because athletic activities cultivate the mind and the body, enhance a spirit of sportsmanship and create healthy personalities. We sponsor team sports and championships, as well as less popular athletics, supporting small clubs and amateur sports associations.

### 7a. Broader society

# «Vardinoyanneia» EAA Premium International Track and Field Meeting

Strong competition and outstanding performances were the highlights of the 25th «*Vardinoyanneia*» organised in Rethymno on 20 July 2009. The event was a real celebration of world-wide classic athletics and an occasion for top athletes from all over the globe to meet. The programme included 15 events, in which 160 athletes from 38 countries participated. Of these, 35 were from Greece and 36 from the United States.

Competing athletes were of an exceptionally high standard, with 27 Beijing Olympic champions (1st – 8th places) and some of Greece's best champions, such as Pericles lakovakis. One month later, at the 12th IAAF World Championships in Athletics held in Berlin, of these athletes, 47 competed in the finals of their events and 30 won medals.

EVENTS			
Men	Women		
100m	100m		
200m	200m		
110m hurdle	400m		
400m hurdle	100m hurdle		
Long jump	400m hurdle		
Discus throw	Pole vault		
Hammer throw	Triple jump		
	Javelin throw		

At the 25th «Vardinoyanneia», by 20 July, four stadium records were set and

two best performances in the world for 2009. The overall score of the meeting once again earned it first place in its category in European Athletics Association events.

The 25th «Vardinoyanneia» aroused great interest throughout Europe and beyond, as it was televised and broadcast live in



Pericles lakovakis, speaking about the 25th «Vardinoyanneia»

Greece, Sweden, Portugal, Cyprus, Romania, Poland, Ukraine, Russia and South Africa.

In the competition, American athlete Lolo Jones made a major impression with a time of 12.47 in the 100 metres – the world's top performance for 2009 – followed by American Cherry Damu with a personal best performance of the year (12.53).

The second top performance of the year was by Debby Ferguson McKenzie from the Bahamas in the 200 metres with 22.32, while Russian Tatyana Polnova won the pole vault with the jump of 4.56m.

In the men discus throw, the usual Titan battle between the two top athletes in the world – Lithuanian Virgilijus Alekna and Estonian Gerd Kanter – ended in victory for the latter, with a throw of 69.10m, and the Lithuanian runner-up with 68.94m.

In the 400 metres hurdle, the winner was American Bershawn Jackson with a time of 48.55. Pericles lakovakis came in third with 49.35.

In the women's triple jump, top athlete Yargelis Savigne from Cuba won an easy victory with a jump of 14.80m.

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

International Association of Athletics Federations (IAAF).

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

All major Greek athletes and many foreign sports champions have competed in the «Vardinoyanneia» meetings. Twenty-seven

### Milestones

- 1985: First games on dirt track
- 2000:Inclusion in the EEA Permit category
- 2001: World record in women's javelin throw
- 2006: Inclusion in the EEA Premium category
- The best EAA Permit games 2002, 2003, 2004, 2005
- The best EAA Premium games 2006, 2007, 2009

national records have been set, as well as one European Junior record, and a world record in 2001 by Cuban Javelin thrower Osleidy Menendez. Reflecting the wide participation of athletes

from all over the world, the outstanding scores achieved and the high standards of organisation, the «Vardinoyanneia» meetings were promoted to the EAA Premium category in 2006. Every year since 2002 (with the exception of 2008), the meetings have enjoyed the highest scores of the European Athletics Association, which ensure that they are top in their category.

















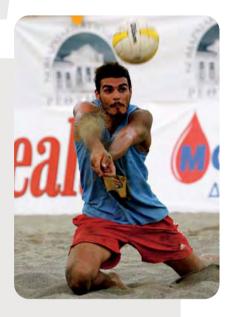
### **Street Soccer**

In 2009, we supported three games of Street Soccer in Athens, which began a few years ago and is rapidly spreading throughout the world. Open spaces in neighbourhoods were once places where one could play and enjoy the soccer. Now that such spaces in urban centres are limited, children aged 6-17 who are seeking an outlet can enjoy Street Soccer, played on grounds with 12m x 22m plastic lawns, laid down in town squares.



# Beach Volley National Tour 2009 – Masters

We supported the Lampi Municipality, which co-organised, together with the Panhellenic Volleyball Federation, the Beach Volley National Tour 2009 – Masters, held on 12-14 July 2009, in the picturesque port of Aghia Galini, with the participation of the country's leading men and women athletes. Through this initiative, the municipality sought to promote a spirit of sportsmanship, as well as attract tourists to Aghia Galini, by offering an impressive 3-day event for the region's inhabitants and visitors.



### «Spartathlon 2009»

Each year, we contribute towards the organisation of the famous long-distance race known as the «Spartathlon», by providing a physician and a fully-equipped ambulance, as well as assisting the Control and Supply Station in front of the refinery. The 27th event was held in 2009, on the 245.3-km historic Athens-Sparta route, run by the Athenian messenger, Pheidippides, in 490 BC, to enlist Sparta's support against the Persian army in Marathon. The marathon began on 25 September from the Acropolis Propylaea, with 320 athletes (both men and women) participating from 33 countries. Of these, 133 crossed the finishing line, including 11 women and 12 Greeks. The winning athlete's time was 23:48:24 and the last athlete's time was 36:11:00. The athletes are awarded an olive branch and water from Evrotas River.





In 2009, we continued our tradition of sponsoring the following sports clubs:

- \* The Heraklion Amateur Sports Club (OFI), which is one of Greece's first (founded in 1925) and largest amateur clubs, with 1,500 registered male and female athletes, eight active departments (basketball, track, weightlifting, chess, volleyball, water polo, swimming, football academy). Track is the OFI's most important department, with many significant distinctions over the last few years. In 2008, it was listed 4th in the national classification of the Hellenic Amateur Athletic Association an excellent position for a regional club and it consistently retains a place among the top ten clubs.
- The basketball team of the Rethymno Athletics and Gymnastics Club (AGOR), which is competing in the A2 National League in 2009-10.



- \* The Athletic Club of Episkopi, Rethymno.
- \* The Rethymno Union of Soccer Associations.
- \* The Spili Sports Club.

\* The Rethymno Volleyball Club, whose teams dominate in regional championships, and its women's team is competing in the A2 National League in 2009-2010.



We also supported the following associations:

- \* The Lamia Sports Association
- \* The Rethymno Tennis Club
- \* The Atalanti Yacht Club
- \* The Rethymno Athletics Club

### 7b. Local communities

We support activities that promote a spirit of sportsmanship among young people in the local community. Some examples of such contributions in 2009 were:

- A significant donation to the football team of the «Corinthos» Pan-Corinthian Athletics Club, which we have been supporting for a number of years.
- The support for the «Saronikos» Galataki Sports Association, on the occasion of its 50th anniversary.
- The economic assistance for the "Tiron" Basketball Club of Aghioi Theodoroi, which was established in 1988 (many of the founding members being former employees of MOTOR OIL) and has more than 100 active athletes of all ages, to support its good performance in the C National League championship.

- \* The donation to the Aghioi Theodoroi «Theseas» Karate Sports Club to partially cover costs of its relocation.
- \* The support for efforts by the Corinth Athletics and Gymnastics Union's men's volleyball team, which competes in the A2 National League. Also the donations to the *«Loutraki»* Football Sports Club, the Corinth Tennis Club, the *«Isthmiakos»* Athletics Club, the *«Corinthos 2006»* Sports Club, the Aghioi Theodoroi Tennis Club, the Corinth Athletics and Football Academy, the *«Corinthos»* Volleyball Sports Association, the *«Palaimon»* Basketball Club, the *«Kypselos»* Football Association, the *«Pamvochaikos»* Sports Association, and the Corinth Yacht Club.
- \* The financial support offered to numerous other local sports clubs, such as the Corinth Prefecture Football Veterans Association, the *«Corinthos»* Football and Gymnastics Association, the *«Teneatis»* Athikia Football Sports Association, the *«Aias»* Agionori, the Poros Yacht Club, the *«Diagoras»* Velo Athletics Club, the Corinth Union of Football Clubs and the *«Aghioi Theodoroi»* Sports Association,

# V. GLOBAL COMPACT: COMMUNICATION ON PROGRESS 2009

MOTOR OIL participates in the voluntary United Nations Global Compact, which constitutes the most extended global Corporate Responsibility initiative. In year 2008, MOTOR OIL became a signatory of the UN Global Compact; at the same time the company became a member of the Global Compact Network Hellas.

The Global Compact incorporates ten fundamental principles relating to human rights, labour rights, environmental protection and anti-corruption. We are committed to these principles, which we have integrated in the policies and processes of the company. MOTOR OIL's *Environmental and Social Report* contains information relating to our social and environmental practices and their results, which underline our commitment to the Global Compact. The following chart lists the compliance of MOTOR with the ten Global Compact Principles, by making reference to the relevant chapters of the *Environmental and Social Report*, and to the GRI indicators taken into account in compiling the Report.

The Ten Principles of the Global Compact		Reference in the <i>Environmental and Social Report</i> or Description of the Implementation Approach	GRI Indicator (G3)	
Human Ri	ghts			
Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights.	Chapters IIA and IIB. Full compliance with relevant Greek legislation and international conventions.	LA4, LA6-7, LA13-14, HR4-9, SO5, PR1-2, PR8	
Principle 2	Businesses should make sure that they are not complicit in human rights abuses.	Chapter IIA. Full compliance with relevant Greek legislation and international conventions.	HR4-9, SO5	
Labour				
Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	Chapter IIA.	LA4, HR5, SO5	
Principle 4	Businesses should uphold the elimination of all forms of forced and compulsory labour.	Chapter IIA. Full compliance with relevant Greek legislation and international conventions.	HR7, S05	
Principle 5	Businesses should uphold the effective abolition of child labour.	Chapter IIA. Full compliance with relevant Greek legislation and international conventions.	HR6, SO5	
Principle 6	Businesses should uphold the elimination of discrimination in respect of employment and occupation.	Chapter IIA.	EC7, LA2, LA13-14, HR4, SO5	
Environment				
Principle 7	Businesses should support a precautionary approach to environmental challenges.	Chapter I and III.	EC2, EN18, EN26, EN30, SO5	
Principle 8	Businesses should undertake initiatives to promote greater environmental responsibility.	Chapter I and III.	EN1-9, EN11-12, EN16-23, EN26, EN28 EN30, SO5, PR3-4	
Principle 9	Businesses should encourage the development and diffusion of environmentally friendly technologies.	Chapter I and III.	EN2, EN5-7, EN18, EN26, EN30, SO5	
<b>Anti-corruption</b>				
Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery.	Chapter I.		

### VI. GRI COMPLIANCE LEVEL

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

The Environmental and Social Report 2009 mainly concerns MOTOR OIL and its subsidiary, AVIN OIL, and has a similar structure as previous editions, so as to ensure the comparability of results over time. In drafting the report, we have taken into consideration the principles of the UN Global Compact, and the 3rd revised edition (2006) of the Global Reporting Initiative (GRI) guidelines, which constituted the sound basis for the selection of the material issues included in the Environmental and Social Report, for an effective communication with stakeholders. We believe that we have achieved the application of the GRI guidelines at level B.

The Environmental and Social Report 2009 is not certified by an external certification authority.

Whenever numeric data or performance indicators are reported, the method of collection and calculation of such data is mentioned. The Environmental and Health and Safety performance indicators are specifically calculated on the basis of internationally acclaimed procedures. However, the following clarifications are also useful:

- The information and indicators in chapter «IIA. Responsibility Towards Our Employees – Human Resources», include data for MOTOR OIL and AVIN OIL, on a consolidated basis.
- In chapter «IIB. Responsibility Towards Our Employees – Health and Safety», the value details of the relevant capital investments refer jointly to MOTOR OIL and AVIN OIL, but the accident indicators refer only to the MOTOR OIL refinery workplace; i.e. they do not include AVIN OIL or MOTOR OIL Head Office. This differentiation is immaterial, given that the critical area in this particular case is the refinery.

- In chapter «III. Responsibility for the Environment», the value details of the relevant investments, as well as the data on recycling, refer jointly to MOTOR OIL and AVIN OIL. The other indicators concern the MOTOR OIL refinery only.
- In chapter «IV. Social Contribution», the value details of donations and sponsorships refer jointly to MOTOR OIL and AVIN OIL.

The following table records the GRI Indicators, and in the column entitled «Reference» the references to sources of information relating to each indicator. There is no reference to the compliance level (full or partial) for each indicator.

The symbols used in the table are:

- p. indicates the page(s) of the Environmental and Social Report 2009 that include information on the indicator.
- indicates reference to the Annual Financial Report 2009.
- indicates reference to the company's website.

### C C+ В B+ A A+ Mandator Report Application Levels Self Checked Report Externally Assured Report Externally Assured Report Externally Assured Third Party Checked Optional **GRI** Checked

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

Indicator	Description	MOTOR OIL Reference
Company	y Profile	
1.1	Management statement	p. 4
1.2	Description of key impacts, risks, and opportunities	p. 11-13, 54-55
Organisa	tional Profile	
2.1	Name of the reporting organisation	p. back cover, we back cover
2.2	Primary brands, products, and/or services	p. 6-7, 🎹 12-13, 22-25, 🤏
2.3	Operational structure of the organisation	p. 6, 🛺 22-25, 61, 🧸
2.4	Location of organisation's headquarters	p. back cover, 📠 back cover, 🗸
2.5	Countries where the organisation operates	p. 6-7
2.6	Ownership structure and legal form	22-26, ~
	Markets served	p. 6-7, <b></b> 11-12
	Scale of the organisation	p. iii, 6-10, 24-25, 🛶 9-20, 74-75, 82-8
	Significant organisational changes in the reporting period	p. ii, 6-7, 13-15, 96, 720-2
	Awards received in the reporting period	p. 19
	arameters	
	Reporting period	p. cover, 3, 96
	Most recent previous report	p. inside back cove
	Reporting cycle	p. inside back cove
		·
	Contact point for questions	p. 3
	Process for defining report content	p. 3
	Boundary of the report	p. 3, 96
	Limitations on the scope or boundary of the report	p. 3, 96
	Joint ventures, subsidiaries and outsourcing	p. 3, 96
	Data measurement techniques	p. 96
	Explanation of the reasons for re-stating information provided in earlie	r reports p. 96
3.11	Changes from previous reports	p. 96
3.12	Location of the Standard GRI Disclosures	p. 97-100
3.13	External assurance	p. 96
Governa	nce, Commitments and Engagement	
1.1	Corporate governance structure	p. 10-11, 🎹 34, 82, 🗹
1.2	Role and function of the Chairman of the Board of Directors	p. 10-11, 🎹 34, 82, 🧸
1.3	lindependent and non-executive members of the Board of Directors	p. 10-11, 🤏
1.4	Co-determination right of employees and shareholders	p. 17-19, 23-24, 🞹 30-3
1.5	Linkage between Executive compensation and achievement of corpora	ate goals p. 10-11, 🚃 33
.6	Processes in place to avoid conflicts of interest in the Board	The majority of the non-executive
		and independent Board Members safeguard
		the avoidance of conflicts of interest
		Assurance is also provided by the internal control system
l.7	Qualifications and expertise of Board Members	The professional experience of Board Members
	regarding sustainability issues	along with their educational leve
	regarding sustainability issues	-
		and social status provide assurance for an unbiased glob
		and objective view of the issues

### VI. GRI COMPLIANCE LEVEL

Indicato	or Description	MOTOR OIL Reference
4.8	Corporate policies, mission	
	and value statements related to sustainability	p. i, 4, 11-13
4.9	Board procedures for sustainability management	p. 10-13
4.10	Evaluation of the Board's performance regarding sustainability	Performance evaluation is anticipated
		in the Rules of Company Procedures.
4.11	Application of the precautionary principle	p. 15-17, 34-36, 52-53
4.12	Voluntary support for external economic,	
	environmental and social charters or initiatives	p. 11-13, 19
4.13	Memberships in associations and advocacy organisations	p. 19, 69
4.14	Stakeholder groups engaged by the organisation	p. 17-19
4.15	Stakeholder identification	p. 17-19
4.16	Approaches to stakeholder engagement	p. 17-19
4.17	Topics raised by stakeholders	p. 11-13, 17-19
Econom	iic Performance Indicators	
DMA EC	Disclosure on Management Approach EC	p. i, iii, 6-7, 9-10, 13-15, 🎹 18-21
EC1	Directly generated and distributed economic value, including revenues,	p , , o , ,
	operating costs, employee compensation, donations and other	
	community investments, taxes, and payments to capital providers	p. 6-7, 9-10
EC2	Climate change financial implications, risks or opportunities	Climate change impacts regarding the possible
LUZ	omitate origing marious implications, note or opportunities	financial implications, risks or opportunities,
		constitute parameters thoroughly taken into account
		in the process of analysing, evaluating, approving
		and planning for investments or other initiatives.
EC3	Organisation's defined benefit plan obligations	THE 74-75
EC4	Significant state financial assistance	MOTOR OIL has not received any
L04	orginicant state intancial assistance	significant financial assistance by the state.
EC6	Local suppliers approach	p. 90
EC7	Local recruitment	p. 30
EC8	Infrastructure investments and services for public benefit	p. 9-10, 74
EC9	Indirect economic impacts	26-29, 76-79
	mental Performance Indicators	
DMA EN	Disclosure on Management Approach EN	p. i, 11-13, 15-17, 51-53, <b></b> 30-31, √ <del>1</del>
EN1	Materials used by weight or volume	p: 1, 11 is, is 11, st 33, am 33 st, 13
EN2	Percentage of materials used that are recycled materials	The various slops resulting from the refining
,	1 ordentage of materiale about that are recycled materials	processes may be considered as recycled materials;
		these slops are reprocessed as feedstock.
		The reprocessing ratio in 2009 was 1.4%.
EN3	Direct energy consumption by primary energy source	p.iii, 60
EN4	Indirect energy consumption by primary energy source	43,051 MWh, from Public Power Corporation.
EN5	Energy savings	p. 60-62
EN6	Initiatives to produce energy-efficient	μ. 60-62
LINO		- 67
 EN7	or renewable energy based products and services Initiatives to reduce indirect energy consumption	p. 67
		p. 60-62
EN8	Total water withdrawal by source	p. 67

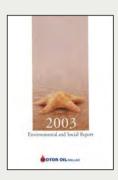
	or Description	MOTOR OIL Reference
EN9	Effects of water withdrawal	p. 67
EN11	Land management in, or adjacent to sensitive areas, and	The refinery is not adjacent to
	in areas of high biodiversity value outside protected areas	protected or high biodiversity areas.
EN12	Significant impacts of activities, products and services	Refer to EN11, in conjunction with the described
	upon biodiversity in protected areas, and in areas	in the Environmental and Social Report efforts
	of high biodiversity value outside protected areas	for reducing the environmental footprint.
EN16	Direct and indirect greenhouse gas emissions	p. 61-62
EN17	Other relevant greenhouse gas emissions	42,190 Mt (estimation of the Public Power Corporation
		emissions for its energy consumed at the refinery
EN18	Initiatives to reduce greenhouse gas emissions	p. 53-62
EN19	Emissions of ozone-depleting substances	Non-existent
EN20	NOx and SOx emissions	p. iii, 63-65
EN21	Total water discharge	p. 65-66
EN22	Solid waste	p. 67
EN23	Significant spills	There were no significant spills.
EN26	Environmental impacts mitigation	p. 53-56, 60-62
EN28	Significant fines and sanctions for	p. 00 00, 00 0E
	non-compliance with environmental laws	No such fines or sanctions.
EN30	Environmental protection investments and expenses	p. 53-54
DMA LA	Disclosure on Management Approach LA.  Workforce profile	p. i, 21-23
ι Λ 1		
	·	·
LA2	Employee turnover	p. 25
LA2 LA3	Employee turnover Benefits provided to full-time employees	p. 24-26 p. 25 p. 26-28
LA2 LA3	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered	p. 25 p. 26-28
LA2 LA3 LA4	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements	p. 25 p. 26-28 p. 23
LA2 LA3 LA4	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation	p. 25 p. 26-28 p. 23 The Health and Safety Committee of
LA2 LA3 LA4	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation in occupational health and safety committees	p. 25 p. 26-28 p. 23 The Health and Safety Committee of the refinery employees represents all the employees
LA2 LA3 LA4 LA6	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation in occupational health and safety committees  Occupational injuries and lost day rates	p. 25 p. 26-28 p. 23 The Health and Safety Committee of the refinery employees represents all the employees p. 47-48
LA2 LA3 LA4 LA6 LA7 LA10	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation in occupational health and safety committees  Occupational injuries and lost day rates  Average hours of training per year per employee	p. 25 p. 26-28 p. 23 The Health and Safety Committee of the refinery employees represents all the employees p. 47-48 p. 29-32
LA2 LA3 LA4 LA6 LA7 LA10	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation in occupational health and safety committees  Occupational injuries and lost day rates  Average hours of training per year per employee  Programs for skills development and lifelong learning	p. 25 p. 26-28 p. 23 The Health and Safety Committee of the refinery employees represents all the employees p. 47-48 p. 29-32 p. 29-32
LA2 LA3 LA4 LA6 LA7 LA10 LA11	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation in occupational health and safety committees  Occupational injuries and lost day rates  Average hours of training per year per employee  Programs for skills development and lifelong learning  Employee performance and career development reviews	p. 25 p. 26-28 p. 23 The Health and Safety Committee of the refinery employees represents all the employees. p. 47-48 p. 29-32
LA2 LA3 LA4 LA6 LA7 LA10 LA11	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation in occupational health and safety committees  Occupational injuries and lost day rates  Average hours of training per year per employee  Programs for skills development and lifelong learning  Employee performance and career development reviews  Breakdown of employees by category according to gender, age group,	p. 25 p. 26-28 p. 23 The Health and Safety Committee of the refinery employees represents all the employees. p. 47-48 p. 29-32 p. 29-32 p. 22-23
LA2 LA3 LA4 LA6 LA7 LA10 LA11 LA12	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation in occupational health and safety committees  Occupational injuries and lost day rates  Average hours of training per year per employee  Programs for skills development and lifelong learning  Employee performance and career development reviews  Breakdown of employees by category according to gender, age group, minority group membership, and other indicators of diversity	p. 25 p. 26-28 p. 23 The Health and Safety Committee of the refinery employees represents all the employees. p. 47-48 p. 29-32 p. 29-32 p. 22-23
LA2 LA3 LA4 LA6 LA7 LA10 LA11 LA12 LA13	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation in occupational health and safety committees  Occupational injuries and lost day rates  Average hours of training per year per employee  Programs for skills development and lifelong learning  Employee performance and career development reviews  Breakdown of employees by category according to gender, age group,	p. 25 p. 26-28 p. 23 The Health and Safety Committee of the refinery employees represents all the employees. p. 47-48 p. 29-32 p. 29-32 p. 22-23
LA2 LA3 LA4 LA6 LA7 LA10 LA11 LA12 LA13 LA14  Social F	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation in occupational health and safety committees  Occupational injuries and lost day rates  Average hours of training per year per employee  Programs for skills development and lifelong learning  Employee performance and career development reviews  Breakdown of employees by category according to gender, age group, minority group membership, and other indicators of diversity  Men to women basic salary ratio	p. 25 p. 26-28 p. 26-28 p. 23 The Health and Safety Committee of the refinery employees represents all the employees. p. 47-48 p. 29-32 p. 29-32 p. 22-23 There is no differentiation
LA2 LA3 LA4 LA6 LA7 LA10 LA11 LA12 LA13 LA14 Social F	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation in occupational health and safety committees  Occupational injuries and lost day rates  Average hours of training per year per employee  Programs for skills development and lifelong learning  Employee performance and career development reviews  Breakdown of employees by category according to gender, age group, minority group membership, and other indicators of diversity  Men to women basic salary ratio  Performance Indicators: Human Rights  Disclosure on Management Approach HR	p. 25 p. 26-28 p. 26-28 p. 26-28 p. 23 The Health and Safety Committee of the refinery employees represents all the employees. p. 47-48 p. 29-32 p. 29-32 p. 22-23 p. 24-25 There is no differentiation
LA2 LA3 LA4 LA6 LA7 LA10 LA11 LA12 LA13 LA14 Social F	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation in occupational health and safety committees  Occupational injuries and lost day rates  Average hours of training per year per employee  Programs for skills development and lifelong learning  Employee performance and career development reviews  Breakdown of employees by category according to gender, age group, minority group membership, and other indicators of diversity  Men to women basic salary ratio  Performance Indicators: Human Rights  Disclosure on Management Approach HR Incidents of discrimination	p. 25 p. 26-28 p. 26-28 p. 23 The Health and Safety Committee of the refinery employees represents all the employees p. 47-48 p. 29-32 p. 29-32 p. 22-23 p. 24-25 There is no differentiation p. 21-23 No such incidents
LA2 LA3 LA4 LA6 LA7 LA10 LA11 LA12 LA13 LA14 Social F DMA HR HR4 HP5	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation in occupational health and safety committees  Occupational injuries and lost day rates  Average hours of training per year per employee  Programs for skills development and lifelong learning  Employee performance and career development reviews  Breakdown of employees by category according to gender, age group, minority group membership, and other indicators of diversity  Men to women basic salary ratio  Performance Indicators: Human Rights  Disclosure on Management Approach HR  Incidents of discrimination  Operations that limit freedom of association and collective bargaining	p. 25 p. 26-28 p. 26-28 p. 26-28 p. 27 The Health and Safety Committee of the refinery employees represents all the employees p. 47-48 p. 29-32 p. 29-32 p. 22-23 p. 24-25 There is no differentiation p. 21-23 No such incidents No such operations
LA2 LA3 LA4 LA6 LA7 LA10 LA11 LA12 LA13 LA14  Social F DMA HR HR4 HP5 HR6	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation in occupational health and safety committees  Occupational injuries and lost day rates  Average hours of training per year per employee  Programs for skills development and lifelong learning  Employee performance and career development reviews  Breakdown of employees by category according to gender, age group, minority group membership, and other indicators of diversity  Men to women basic salary ratio  Performance Indicators: Human Rights  Disclosure on Management Approach HR  Incidents of discrimination  Operations that limit freedom of association and collective bargaining  Child labour	p. 25 p. 26-28 p. 26-28 p. 26-28 p. 27 The Health and Safety Committee of the refinery employees represents all the employees p. 47-48 p. 29-32 p. 29-32 p. 22-23 p. 22-23 There is no differentiation p. 21-23 No such incidents No such operations p. 23
LA2 LA3 LA4 LA6 LA7 LA10 LA11 LA12 LA13 LA14 Social F DMA HR HR4 HP5 HR6 HR7	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation in occupational health and safety committees  Occupational injuries and lost day rates  Average hours of training per year per employee  Programs for skills development and lifelong learning  Employee performance and career development reviews  Breakdown of employees by category according to gender, age group, minority group membership, and other indicators of diversity  Men to women basic salary ratio  Performance Indicators: Human Rights  Disclosure on Management Approach HR  Incidents of discrimination  Operations that limit freedom of association and collective bargaining  Child labour  Forced or compulsory labour	p. 25 p. 26-28 p. 26-28 p. 26-28 p. 27 p. 28 The Health and Safety Committee of the refinery employees represents all the employees. p. 47-48 p. 29-32 p. 29-32 p. 22-23 p. 24-25 There is no differentiation p. 21-23 No such incidents No such operations
LA1 LA2 LA3 LA4 LA6 LA7 LA10 LA11 LA12 LA13 LA14  Social F DMA HR HR4 HP5 HR6 HR7 HR8	Employee turnover  Benefits provided to full-time employees  Percentage of employees covered by collective bargaining agreements  Workforce representation in occupational health and safety committees  Occupational injuries and lost day rates  Average hours of training per year per employee  Programs for skills development and lifelong learning  Employee performance and career development reviews  Breakdown of employees by category according to gender, age group, minority group membership, and other indicators of diversity  Men to women basic salary ratio  Performance Indicators: Human Rights  Disclosure on Management Approach HR  Incidents of discrimination  Operations that limit freedom of association and collective bargaining  Child labour	p. 25 p. 26-28 p. 26-28 p. 26-28 p. 23 The Health and Safety Committee of the refinery employees represents all the employees. p. 47-48 p. 29-32 p. 29-32 p. 22-23 p. 22-23 There is no differentiation p. 21-23 No such incidents No such operations p. 23

### VI. GRI COMPLIANCE LEVEL

Indicator Description		MOTOR OIL Reference	
Social Performance Indicators: Society			
DMA SO	Disclosure on Management Approach SO	p. i, 73-74	
SO1	Impacts on local communities.	p. i, 73-94	
S05	Participation in public policy development	We are members of business associations	
		which participate in public policy development.	
Social P	erformance Indicators: Product Responsibility		
DMA PR	Disclosure on Management Approach PR	p. 47-48	
PR1	Health and safety impacts of products and services	p. 47-48	
PR2	Non-compliance incidents with regulations and codes		
	concerning health and safety impacts of products and services	No such incidents	
PR3	Products information and labelling	Material Safety Data sheets for all our products.	
PR4	Non-compliance incidents with regulations		
	and codes concerning labeling and product information	No such incidents	
PR5	Customer satisfaction	p. 17	
ПР6	Legal compliance of marketing communication programs	Marketing communication programmes are legally compliant.	
PR7	Non-compliance incidents of marketing		
	communication programs with regulations and codes	No such incidents	
PR8	Complaints regarding breaches of customer privacy	No such complaints	
PR9	Fines for non-compliance of products	No such fines	

### Environmental and Social Reports of previous years























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