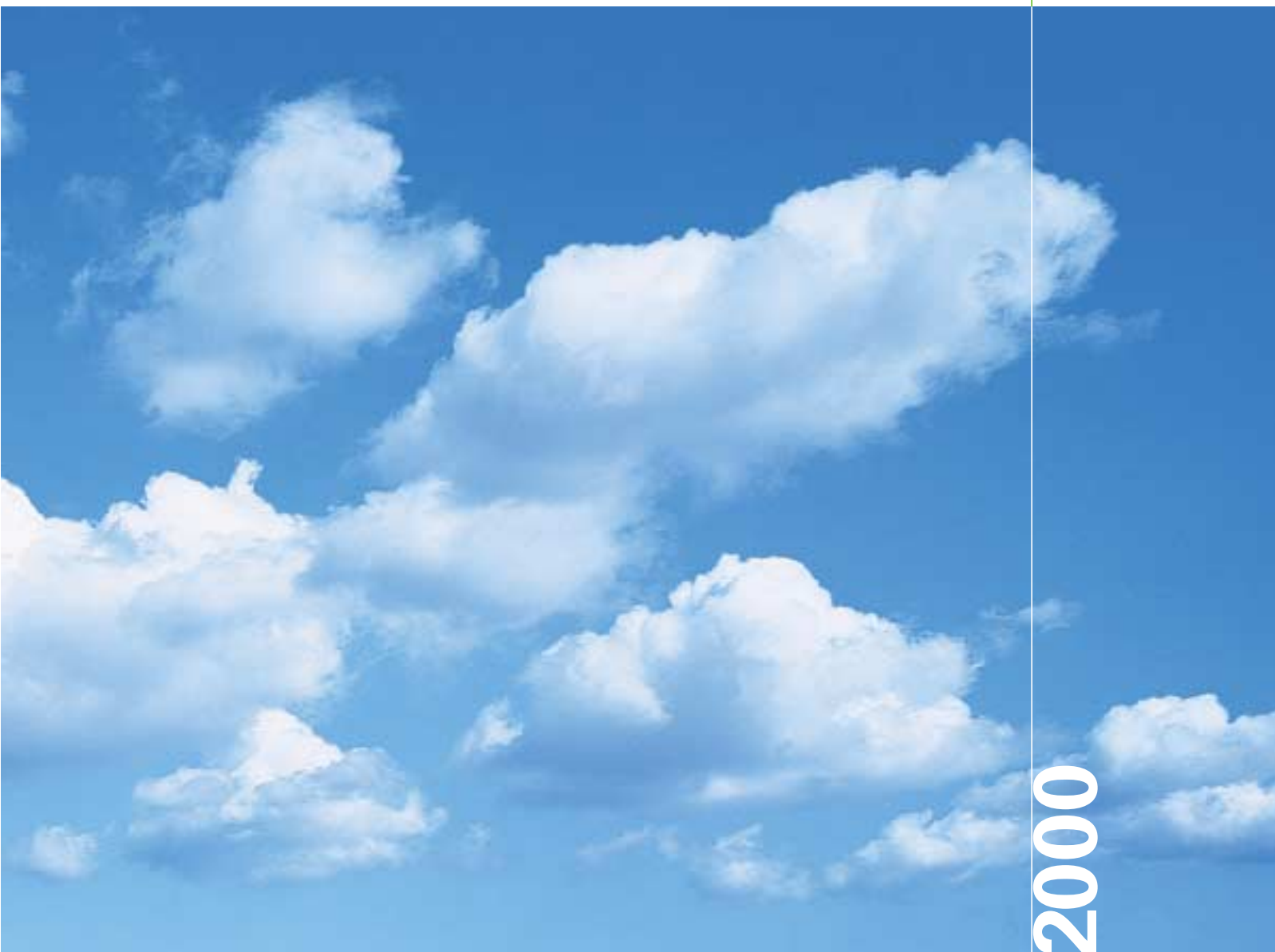




Health – Safety – Environment



1999 2000



Highlights

- In 2000, OMV achieves the best operating result in the history of the Company and plans the further consolidation of its position as the leading oil and gas group in Central and Eastern Europe.
- The industrial medicine service records some 14,000 medical consultations annually, with a similar number of physiotherapeutic interventions and 5,000 preventive examinations. The focus is on preventive programmes, such as medical check-ups or eye dysfunction screening.
- The emergency plans of many facilities are revised and several safety drills are carried out.
- High investments in environmental protection have already brought considerable reductions in atmospheric pollutants. Despite rising productivity the OMV Group registers falling environmental impacts.
- A model is developed for the assessment and evaluation of the environmental impact of deep well drilling.
- Three new natural gas filling stations promote the further development of the use of natural gas as a fuel.
- During the course of the "Emission field measurement" project, the emissions occurring during the distribution and transit of natural gas are measured.
- In March 2000 OMV becomes the first Austrian petroleum company to make the new sulphur-free fuel Super Plus i-motion available country-wide, thus already complying with future automobile industry specifications.
- A new plant configuration in the Schwechat refinery takes significant steps towards compliance with the Auto Oil II Programme and contributes to the raising of environmental standards.
- The commissioning of the new aromatics unit as well as modification works in the tank farm and unloading and loading area of the Burghausen refinery are boosting the quality of the refinery products.
- The solar-powered filling station situated on the A4 airport link road sets new environmental standards; the roof structure of the parking area is Vienna's largest photovoltaic plant and the filling station is also Vienna's first public natural gas filling station.
- Agrolinz Melamin signs an agreement involving several companies and official agencies for cooperation in the event of emergencies at the Chemiepark Linz – a unique arrangement in Austria to date.
- OMV Proterra ist stepping up its services abroad. Since March 2000 the Company is certified in accordance with ISO 9002, ISO 14001 and SCC.



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Our corporate mission

We are—at the core—an Austrian oil and gas group with integrated companies in plastics and chemicals.

We operate worldwide and focus our activities on strengthening our position in the European market.

We work with energy to improve man's mobility and quality of life.

We measure the quality of our performance by the success in our businesses and for our shareholders.

We are guided in our work by the responsibility for man, the environment, and technical advance.

We are open to innovations and persistent in seeking and seizing opportunities.

We strive to be, as a whole, a company of competent, reliable and efficient people.

Our environmental policy

RESPONSIBILITY

We are committed to employing the best available economically viable technology, and to our responsibility for health, safety and the environment.

OBJECTIVES

We set ourselves challenging objectives for resource conservation through improved energy efficiency, increased recyclability, and minimization of emissions and waste.

PLANTS AND PROCESSES

We develop our plants, processes and products in accordance with the latest findings of environmental and safety research, and strive to strike an optimum balance between ecology and economics.

STAKEHOLDERS

We encourage our suppliers, business partners and customers to join us in responsible care of the environment, and attach great importance to information and advice.

COMMUNICATIONS

We pursue a policy of open dialogue on all aspects of health, safety and the environment at all levels within our organization, and with the general public.

STAFF

All staff members share responsibility for health and safety at work, and proactive environmental protection, and receive ongoing training in these aspects of their work.

Wien, im Juli 2000

GD Dr. Richard Schenz

GDSv. Dr. Wolfgang Rutenstorfer

VD Tassilo Peyrer-Heimstätt

VDDr. Gerhard Roiss



Statement by the Chairman and Chief Executive Officer

This is now our third environmental performance report. In addition to the environmental activities of the OMV Group, for the first time it also deals with health and safety, providing a more comprehensive insight into our company and its operating methods.

The construction of new and upgrading of existing plants, as well as the development of improved OMV products such as fuels or lubricants, has helped us to achieve major reductions in the environmental impacts over the entire product life cycle. We are especially proud of the fact that OMV's Schwechat and Burghausen refineries are still among the European front-runners as regards their environmental standards and emissions. Among the highlights of the past five years are the further reduction in atmospheric emissions – SO₂ by 17% and VOCs by 21% – and the comprehensive remediation of contaminated sites. Despite increasing output our energy consumption, thus CO₂ emissions remain virtually unchanged.

A major challenge for the future will certainly be addressing the issues arising from climate change, and coming to terms with the new product specifications laid down by the Auto Oil II Programme. Our efforts and R&D activities will focus on using oil and gas more efficiently and on new technologies.

Due to the OMV Group's expansion into countries where the regulatory environment in respect of health, safety and environment (HSE) is relatively permissive, it is our intention to establish a standard approach to implementing OMV's philosophy and its high HSE standards.

The purpose of this report is also to make a conscious effort to indicate where and when weaknesses emerged in the past two years and how we have set about solving the problems that have arisen in order to protect people and the environment. While the number of injuries had fallen sharply in previous years, in 2000 we registered an increase due to the many plant shutdowns and the work on production plants. Following a detailed analysis of the causes, we are now launching a new safety offensive that will continue in coming years. With all these measures we will continue to develop in keeping with our corporate mission.



Richard Schenz
Chairman of the Executive Board

A handwritten signature in blue ink that reads "Richard Schenz". The signature is fluid and cursive, with a stylized flourish at the end.

Richard Schenz



OMV Group

International know-how, made in Austria

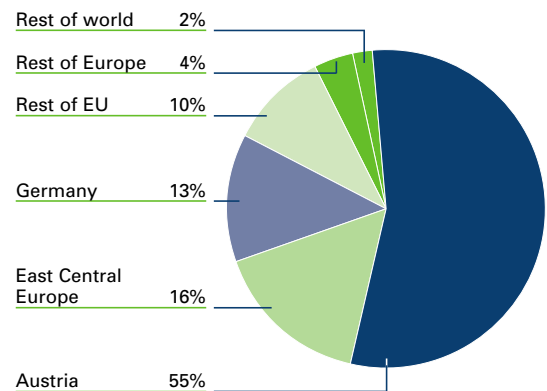
Thanks to the strengthening of all Group segments and to streamlined business processes, in 2000 OMV posted the best results in its history. In the next few years we plan to consolidate our position as the leading oil and gas group in Central and Eastern Europe.

With consolidated sales of EUR 7.45 billion and a workforce of some 5,700, OMV is the largest listed industrial company in Austria. The oil and gas group is the market leader in Central and Eastern Europe, and is active around the world in exploration and production. By focusing on its core businesses and steadily increasing its efficiency it has significantly improved its competitiveness. In 2000 OMV posted the best results in its 45-year history. Earnings before interest and tax rose by 72%, from EUR 285 mn to EUR 491 mn.

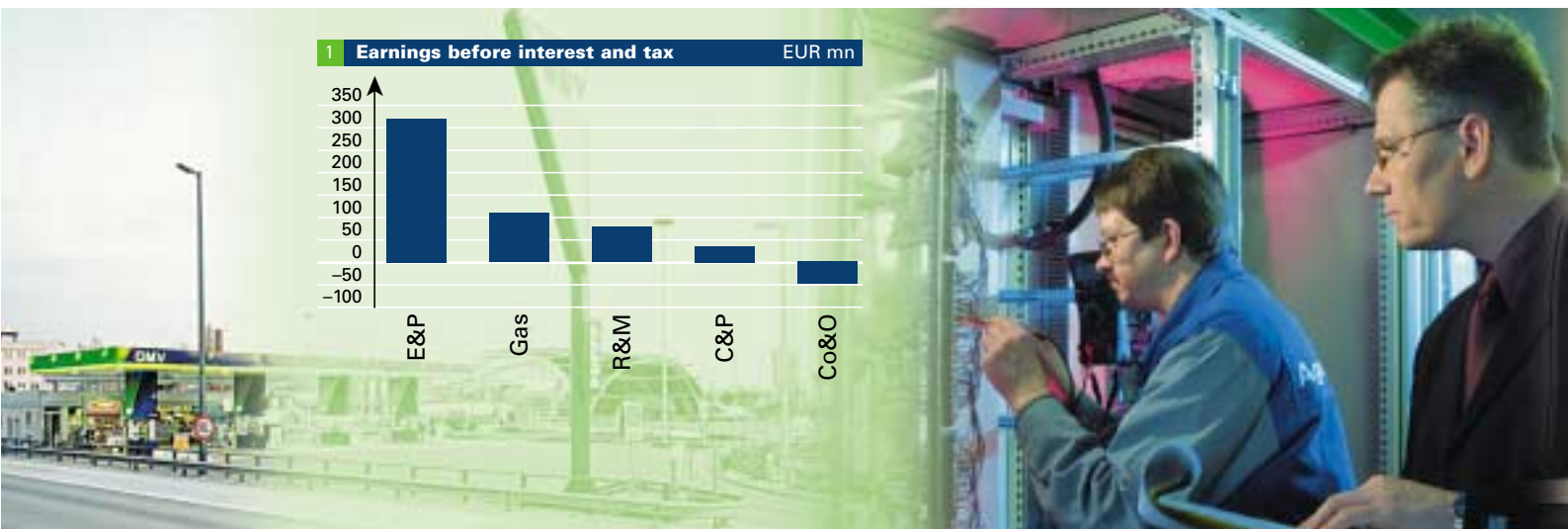
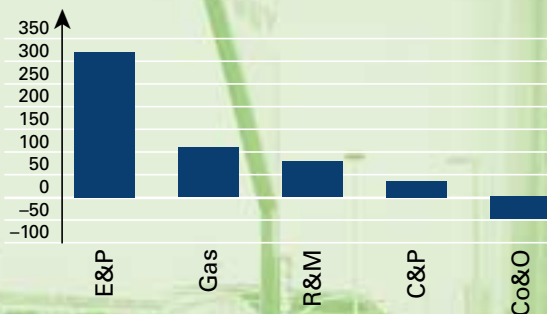
Exploration and Production

In 2000 OMV produced 20 million barrels of crude oil (1999: 19 mn bbl) and some 52 billion cubic feet of natural gas (1999: 48 bcf). Almost half of the Company's output comes from Austria, and the rest from Australia, Libya and the United Kingdom. As an operator or partner, we are involved in exploration projects in our five core areas, Austria, Australia/New Zealand, Libya, Pakistan and UK, as well as in Albania, Sudan, Tunisia and Vietnam. Proved reserves amount to 338 mn boe.

2 Group sales 2000 by region EUR 7.45 bn



1 Earnings before interest and tax EUR mn



Gas

OMV's gas business covers some 90% of Austrian requirements from domestic reserves and imports from Germany, Norway and Russia. Its location at the hub of the international transmission business gives it a major competitive advantage. The OMV pipeline network has a total length of some 2,000 km.

Refining and Marketing

OMV operates two refineries – in Schwechat (Austria) and Burghausen (Germany) – with a total capacity of 270,000 bbl/d per day. The Schwechat plant is one of the largest inland refineries in Europe and produces high-grade petroleum products and basic petrochemicals. The Burghausen refinery in southern Bavaria mainly produces middle distillates and basic petrochemicals.

OMV petroleum products are sold via its international filling station and dealer networks. OMV transport and heating fuels meet more than half of Austria's needs. In addition, some 1.2 mn tonnes are exported to neighbouring countries. Last year the Group's forecourt network grew to a total of 1,136 filling stations. In Central and Eastern Europe, OMV's market shares are second only to those of the respective national oil companies.

Chemicals and Plastics

The strengths of Agrolinz Melamin lie in the efficiency of its integrated capacity for the production of fertilizers and melamine from natural gas. This OMV subsidiary, which has production facilities in Austria and Italy, is market leader in plant nutrients in Austria and in Bavaria. It is the world number two in melamine output. The most important application of melamine is as a coating for boards used in furniture and flooring.

Polyfelt develops and produces geotextiles which are marketed worldwide. In 2000 the capacity of the company's Austrian and French plants was 26,000 tonnes. During the period under review a new plant was commissioned in Malaysia.



HSE management

Taking advantage of synergies

All environmental, industrial safety and plant safety specifications are implemented on the basis of established business processes; this has brought significant improvements.

The fundamental principles for health, safety and the environment are laid down in the Company's mission statement. Our segments and subsidiaries use this statement as a basis for improving the quality of the environment and raising safety standards throughout the group.

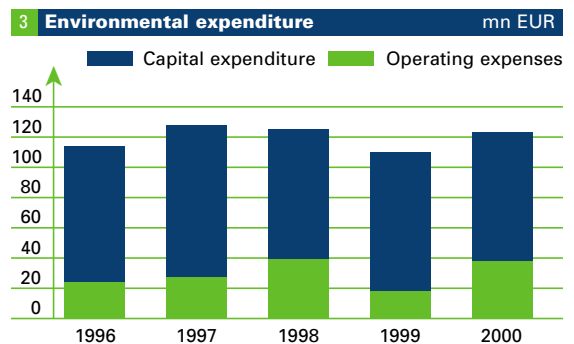
OMV Germany, Agrolinz Melamin, OMV Proterra and OMV Cogeneration are certified in accordance with the international environmental standard ISO 14001. In the other segments, work is continuing on the systematic adaptation of existing management systems and standards to ISO norms. Our target is to progressively integrate environmental measures and safety standards in all operational processes.

Open to innovative ideas

Health, Safety and Environment in the OMV Group affects every segment at all levels of the group and is an OMV service department alongside Quality. All members of the management board and segment heads regularly evaluate reports submitted from within the group. Decisions on further development of

processes and measures to be taken are then made based on the submitted reports. The HSEQ corporate department organizes external and internal reporting, offers support to individual segments, further promotes synergies and encourages innovative ideas. At the same time, the department takes on a lobbying function when new laws are being passed and applied.

In line management, HSEQ accountability is to the executive manager level, which employs doctors, HSEQ managers and any other staff required by law such as waste inspectors, safety experts, emergency breakdown staff, etc. Although we are working towards creating the best possible synergies at group level, individual segments are nevertheless given the option to develop their own systems, enabling new and innovative approaches to be tested quickly and with maximum flexibility. These approaches may then turn out to be of benefit to other departments. Regular meetings and a



well-established team culture help to ensure that the interdisciplinary information flow between the health, safety, environment and quality segments takes place in a structured way.

Performance evaluation

Each division is required to monitor national and international HSE trends: these include EU programmes, international standards and legal developments, economic trends, best technologies and developments of competitors. Analysis and forecasts based on this information are then compiled setting out required action in terms of organization, production, products and group image. If targets are defined, detailed action plans are drawn up and the corresponding budgets are prepared.

An HSE review is carried out monthly at Executive Board level. The review contains information on successes, failures, safety data and other significant events. The annual review contains current performance indicators from the operative companies, such as the key performance indicators in the balance score card, the energy efficiency or the maintenance of limit values. The combination of a well-defined reporting system and comprehensive training courses at all group levels creates transparency and the confidence to react to changes quickly.

Public work

The individual segments generally have very good public relations. An environmental advisory council has been created at the Schwechat refinery, consisting of OMV employees, local residents and representatives of the local community. Local residents and interested members of the public are invited to open door days at the Schwechat and Burghausen refineries, the factory at the Chemiepark Linz and tank farms. These open days help to inform the public about our work in HSE. In addition to this, local residents are sent written information on appropriate action in the event of an emergency. Joint exercises with the local emergency services also help to build public confidence.

OMV is a founder member of the Austrian Business Council for Sustainable Development (ABCSD). Chief Executive Officer Dr. Richard Schenz holds the office of president of the ABCSD, so OMV is in a strong position to promote ecological development among the managing strata of other Austrian companies.



Helga Pražak-Reisinger
Head of Health, Safety,
Environment, Quality

“ Our HSE measures take

OMV a significant step

closer to sustainable business

practice.”



Industrial medicine and health care

Care at home and abroad

The OMV Group attaches great importance to comprehensive and top-quality industrial medical care.

In 1999 and 2000 the main focus of our industrial medical care was on health check-ups and eye tests.

Activities of the OMV Group industrial medical service include some 14,000 medical consultations annually and almost as many physiotherapeutic interventions, as well as 5,000 preventive check-ups and participation in a number of inspections, opinion papers and expert opinions. While the Austrian Employee Protection Act defines minimum requirements relating to primary prevention in the OMV Group, the company also conducts additional measures which contribute substantially to the promotion of staff health. Secondary preventive measures also include preventive check-ups, keep-fit gymnastics, physiotherapy, nutrition and movement advice. During the period under review OMV won an award from the European Agency for Safety and Health at Work for good

practices in the prevention of work-related musculoskeletal disorders.

Health and fitness

In 1999 the medical examination programme was extended to include additional blood tests, ENT examinations, lung function tests and ECGs. Eye and memory dysfunction screenings and a short diabetes check-up were carried out. Men working in the Schwechat refinery and the Lobau tank farm were offered a urological check-up. A health block was incorporated in the training programme for chemicals workers and distillers in the refinery, focusing on the handling of dangerous working media. In addition, a medical emergency service far in excess of statutory requirements was set up and is available round-the-clock, while the facility's medical equipment was substantially extended. The professional fire service at the Schwechat refinery also recently commenced participation in a systematic fitness programme. Non-group companies operating on the OMV operational site are also involved in information activities relating to industrial medicine. In conjunction with appropriate safety programmes, accident rates have been significantly reduced.

Rescue of an unconscious person as part of a sour gas drill



First aid drills in the field (Pakistan)



Model project for workplace health promotion

In 1999 the holistic resolution developed as part of the PROFIT project was adopted by the European Conference for Workplace Health Promotion as a model for "good practice" as well as behavioural and proportional prevention. In a quality circle with some 50 members of staff, specially-trained health moderators evaluate problems and develop solutions. Staff in the OMV Group are allowed some two days release from duties on full pay for this workplace health promotion measure.

Health standards abroad

In many countries where OMV is active there is no appropriate legislation. The existing system in the Group includes an assessment of medical personnel for the Exploration and Production segment, the selection of recommended local doctors and hospitals, compilation of evacuation plans and general international assignment guidelines and medical preparation for international assignment. Foreign assignment seminars are held for staff and partners or children travelling with them. Besides the physical and psychological aptitude

test for planned periods of residency abroad, preparation of staff also includes information on diseases, food and drinking water hygiene in the countries in question. In the event of longer foreign assignments, intermediate examinations as well as a medical examination after travel are carried out at intervals of two years. Plans are in hand to also apply these medical standards for periods of residency abroad for other segments.

The industrial medicine service was also involved in preparing the list of questions for compiling the Human Capital Index.



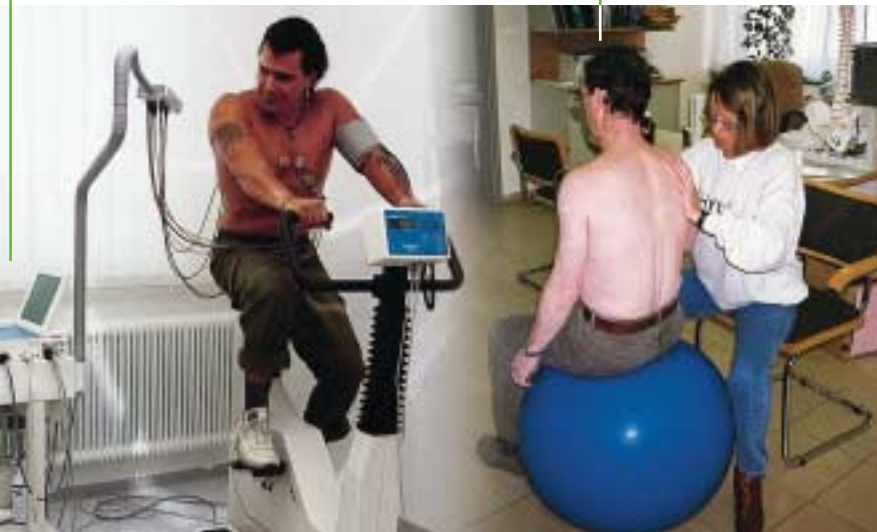
Gabriela Payer-Neundlinger
Head of Works Medicine Coordination

// Optimization of the Group's industrial medicine service calls for structured problem solutions which can only be accomplished by a highly skilled team. //

Ergonomic advice – correct way to lift and carry



Electro-physical therapy



Individual gymnastics – rehabilitation and preventive measures for work-related musculo-skeletal disorders



Safety for mankind and the environment

High standards worldwide

The health and safety of the workforce and safety plant operation is an important corporate objective of OMV. Thus the individual business segments undertake measures which are specially tailored to their requirements.

OMV's worldwide exploration and production, activities involve countries where safety, health and environmental legislation is still in its infancy and striving to achieve international standards. OMV is therefore committed to observing the high international standards regardless of national legislation. Plant safety is governed by the ALARP principle (as low as is reasonable practicable). Here E&P acknowledges the Safety Case procedure: this means that in those countries where the government agencies are not involved in the procedure, Headquarters assumes the role of controlling agency.

Safety for local residents

As a result of having refineries and tank farms near densely-populated areas and Schwechat airport, a site in the Chemiepark Linz and transit pipelines through conservation areas, OMV is an international know-how contributor regarding safety precautions in densely-populated areas and attaches great importance to the continuous further development of protective

measures. During the period under review the emergency plans at many sites such as Schwechat refinery, Graz tank farm, Agrolinz Melamin were revised and new alarm plans drawn up with the official authorities in addition to existing information. A further priority area was the implementation of the requirements of the Seveso II Directive.

OMV Deutschland has added safety management to the integrated management system and is the first Bavarian company to have an OHRIS (Occupational Health and Risk Management System) certification. In order to increase operational safety as well as avoid incidents in the Schwechat refinery, over and above the statutory requirements of the Hazard Incident Ordinance and the Seveso II Directive plant parts were shut down or modified and subjected to a detailed and systematic HAZOP analysis.

Industrial safety

The safety of the workforce is vigorously pursued in all segments of OMV. Training courses, safety inspections and analyses have resulted in a significant improvement in injury rates in recent years. The Burghausen refinery has had no reportable accident since 1996 – corresponding to some 3.5 million injury-free working hours.

In recent years, intensive safety training courses have significantly reduced the injury rate at the



Schwechat refinery. The incidence of reportable accidents was reduced from 7.7 (1996) to 1.4 (2000). Activities during the period under review were focused particularly on training courses for partner companies during the extensive building works involved in the restructuring project.

Annual priority programmes and training courses on specific topics such as "Avoiding falls", or dealing with the risk involved in outdoor training, have helped to raise safety consciousness in the E&P segment in Austria. Agrolinz Melamin too is aiming for a further reduction in injury figures by boosting safety consciousness with the "Take your time" and "I go home healthy" programmes. Further priority areas include a safety pass for contractors and the intensive training of leasing personnel and vacation trainees, the introduction of a safety hour for shift workers and a five-shift system.

Nevertheless industrial injury figures were up again last year. This situation was used as an opportunity for launching a comprehensive offensive programme focusing on safety culture in 2001.

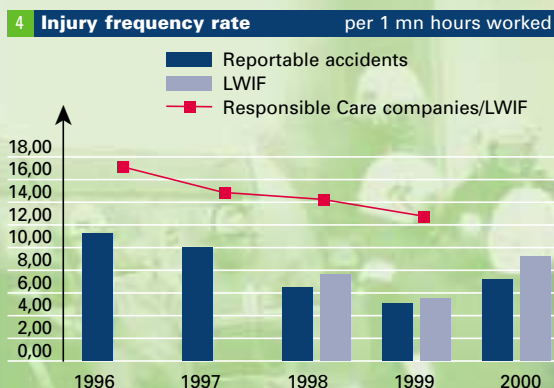
Well prepared

Despite every technical and organizational precaution, breakdowns or accidents cannot be completely ruled out, so emergency response plans have been drawn up in conjunction with responsible authorities to minimize the impact

of any such incidents. All major facilities have their own on-site fire service, whose operations range from investigating the origins of fires and hazardous materials operations and technical attendances to scheduled fire fighting drills. The reliability performance of all plans are put to the test annually in large-scale drills. In 2000 in the Burghausen refinery a large-scale emergency drill was carried out with the OMV Deutschland fire brigade supported by seven voluntary fire brigades and two further works fire brigades. The object of the drill was to test the alarm system, the interaction of the emergency services and the structure and effectiveness of the management organization as well as the effectiveness of the lines of communication.

Regular fire drills – in conjunction with other emergency services and the neighbouring population – are also part of the emergency plan of Agrolinz Melamin at the Chemiepark Linz, the tanks farms and the Exploration & Production segment. The last major drill took place at the Schwechat refinery in the spring of 2001 involving approx. 600 firefighters, under the assumption that an HGV had collided with a goods train, setting fire to large quantities of methanol, gasoline and diesel fuel.

All in all the various drills ensure the best possible state of readiness for emergencies while keeping danger for humans and the environment to an absolute minimum.



Total commitment to the environment

Priority areas and highlights

In 1999/2000 environmental protection expenditure in the OMV Group totalled some EUR 122 mn. More than half of the investments addressed emission-reducing measures; in this way major reductions in the air pollutants SO₂, NO_x and VOC have been achieved since 1990.

Thanks to these investments and incorporation of relevant environmental protection measures in all business processes, the environmental impact of the OMV Group was significantly reduced despite increasing production output. Environmental aspects play an important role not only at all stages in the product life cycle of OMV products, but also at all facilities at home and abroad.

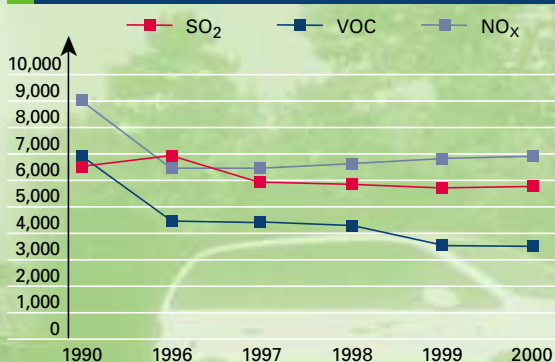
Climate protection

The signing of the Kyoto Agreement in December 1997 was a milestone in international climate protection. This committed the industrial countries to the reduction of emissions of a total of six greenhouse gases by an average of -5.2%. Austria has committed itself to the EU target of -8%, thus contributing to an above-average reduction of greenhouse

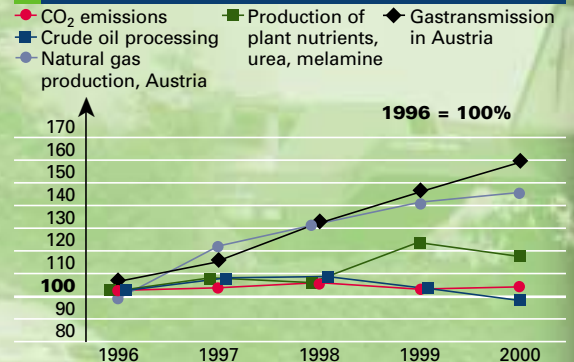
gas emissions totalling -13%. In addition, work started in 2000 on devising a national strategy for the achievement of the Kyoto target 2000-2008/2012, which provides for measures in the space heating, transport, energy supply, industry and agriculture sectors as well as "other greenhouse gases". OMV is actively involved in this process. The Group sees the priority area in the implementation of the Kyoto target particularly in measures aimed at the improvement of energy efficiency and exploitation of international flexible instruments for climate protection. Several working parties within OMV are concerned with possible reduction opportunities in all business segments.

Due to advances industry has already made, there is relatively little scope for the implementation of further potential reductions in CO₂. This also applies for the OMV production facilities, although all segments conduct comprehensive energy saving programmes. Improvements in product quality often mean an increase in emissions at the facility. Energy-intensive plants are necessary for the production of improved fuel qualities for low-consumption vehicles as part of the Auto Oil Programme, and the reduction of lead, benzene and sulphur content, thus resulting in higher local CO₂ emissions. In the space heating sector, OMV focuses its support particularly on heating modernization, which represents one of the most cost efficient measures for CO₂ reduction.

5 Atmospheric emissions 1990-2000 in t



6 Production - Gas transmission - CO₂ emissions in %



Greenhouse gases and energy consumption

During the course of its business activities the OMV Group emits the greenhouse gases (GHGs) CO₂, CH₄ and N₂O. A total of some six million tonnes of GHGs were emitted annually in 1999 and 2000, around five million tonnes a year in Austria alone. CO₂ accounts for the major share at 81%, or 4.8 (1999) and 4.9 (2000) million tonnes in absolute terms. The CO₂ emissions result from the energetic utilization of fossil energy sources, and to a lesser degree also from the production of gas, fertilizer and petrol coke. The CO₂ output has remained almost constant since 1996, despite significant increases in production and transport services. OMV's energy consumption has also remained stable at 73 PJ for some years.

Continuous reduction of pollutants

Emissions of the major pollutants – SO₂, VOC and NO_x – have been drastically cut in the past ten years; the output of SO₂ has been reduced by 11% since 1990, VOC by 50% and NO_x by 24%. A major share of investments is accounted for by measures aimed at further reduction of emissions, in 2000 some 71% of total environmental expenditure.

Remedial treatments

OMV owns several historic industrial sites which were heavily damaged, particularly during World War II and before takeover by the Group. The extensive pollution has been progressively remedied by OMV. The remediation of the St. Peterstrasse tank farm (Carinthia) was successfully completed in 1999. During the war this location served as a transfer site for petroleum products and showed heavy soil pollution. In the spring of 1998, and in cooperation with OMV Proterra, OMV commenced extensive investigations of the 18,000 sqm site. Soil excavation was deemed to be the most suitable remedial treatment for this location. The predominantly oil-polluted soils were transported to a biological treatment plant.

During the period under review a comprehensive shut-down programme was carried out in the E&P and Marketing business segments in Austria. During 1999 (2000) some 15 (17) filling stations and 88 (51) wells were shut down. These measures were stipulated and supervised by official authorities, and OMV's high standards were maintained both at home and abroad.



Exploration and Production

Environmental protection right down the line

The main regions for exploration and production of oil and gas are Australia, Austria, Libya and the United Kingdom. Further priority areas are exploration and development in Albania, Iran, Pakistan, the Sudan, Tunisia and Vietnam. OMV's high environmental standards apply in all these operational areas.

At present OMV is producing some 80,000 barrels oil equivalent per day. In Pakistan, OMV will shortly commission a major gas field and as operator will have primary responsibility for safety and the environment.

High standards worldwide

OMV environmental policy calls for compliance with local regulations and applicable international standards for safety and environmental protection in all countries where OMV is active. This also applies for those countries where safety and environmental legislation is still in its infancy. For international

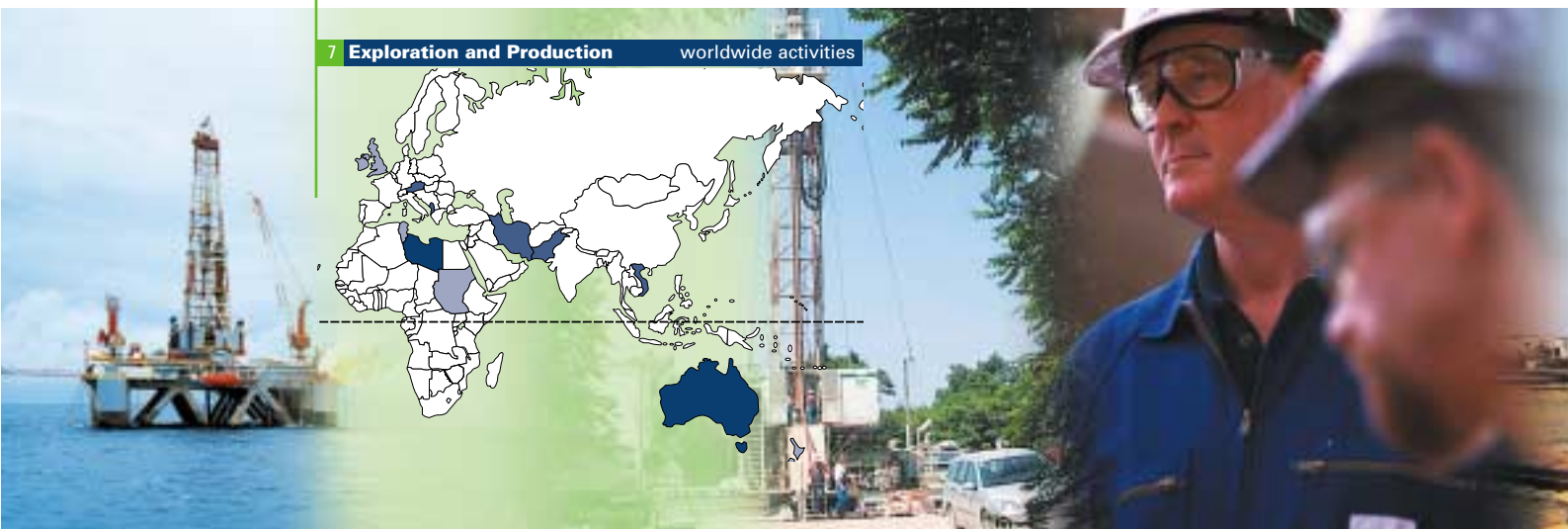
projects an Environmental Impact Assessment is carried out to obtain information concerning the environmental relevance of the planned activity.

OMV facilities are engineered to reduce risks to a safety level which reflects the ALARP principle (as low as is reasonably practicable), and E&P is committed to the Safety Case procedure which demonstrates how the risks are controlled. In those countries where the local authorities are not involved in the procedure, Company Headquarters assumes a regulatory role.

OMV staff who are on foreign assignment for a longer period undergo a special programme in Austria beforehand as preparation for the stay abroad. In addition, safety and environmental training courses tailored to local conditions are provided on site at the facilities. In countries with non-operative participation, activities focus on traffic safety, fire protection and first aid. In all countries where OMV is active, a specially-designated health, safety and environmental protection representative is appointed. An integrated HSEQ programme is being prepared and will include a comprehensive database containing currently valid statutory requirements. Safety and environmental protection are an integral part of all invitations to tender for material and services, and contracts only awarded to suppliers who are committed to implementing OMV's policy on safety and environmental protection.

- **OMV operated:** Albania, Australia, Libya, Austria, Pakistan, Iran, Vietnam
- **OMV joint ventures:** Australia, the United Kingdom, Libya, New Zealand, the Sudan, Tunisia

7 Exploration and Production worldwide activities



In Austria, activities of the business segment cover the exploration, production and the storage of oil and gas. Besides seismic measurements, exploration in 2000 focused on a 2D seismic campaign in the vicinity of Tulln in the Vienna Woods which entailed obtaining approval from some 1,200 landowners.

During the period under review and as preparation for the introduction of ISO 14001 throughout the segment, a model was generated for the assessment of the environmental impact of deep well drilling. The assessment is carried out using the ecological shortage model and the allocation of environmental loading points. The model is used for the weak point analysis of drilled wells and to identify possibilities for improvement.

Soil and groundwater protection

The produced well fluids are separated into water, oil and gas phases. The produced formation water is processed and injected back into the reservoir to enhance oil recovery. In conjunction with University of Agricultural Sciences, Vienna, during the period under review a plant for the microbiological treatment of saline formation water was developed and commissioned in the Schönkirchen (Lower Austria) waterflood system. The object is to reduce the use of biocides and energy consumption in the injection of water.

The transport of oil field media – crude oil, accompanying gas and formation water – takes

place in a widespread network of pipelines with a total length of some 2,000 km. The pipelines are between 2 and 20 inches in diameter in pressure stages between 10 and 100 bar. The pipeline material is chosen according to the medium being transported: internally coated steel pipelines, polyethylene plastic pipes or cement pipes. The effect of corrosion is reduced considerably by the use of chemical corrosion inhibitors and electrical protection measures. In particularly sensitive areas, oil transport pipelines are made increasingly secure by having a polyethylene liner inserted to create a double-walled pipe.

The complete pipeline system is subject to regular testing. The individual oil well pipelines are subjected to hydrostatic pressure tests as part of a regular, comprehensive testing programme. In the past ten years pipe bursts have been reduced by 80% while throughput has remained constant.

If, despite these preventive safety measures, there is a pipe burst with oil escape in the field, appropriate instructions are in place to ensure



Anton Baumgartner
Vice President Production

“ The mindset comes from the top, the actions come from people. Environmental improvement goes not only with greater personal safety, but with profitability too. ”



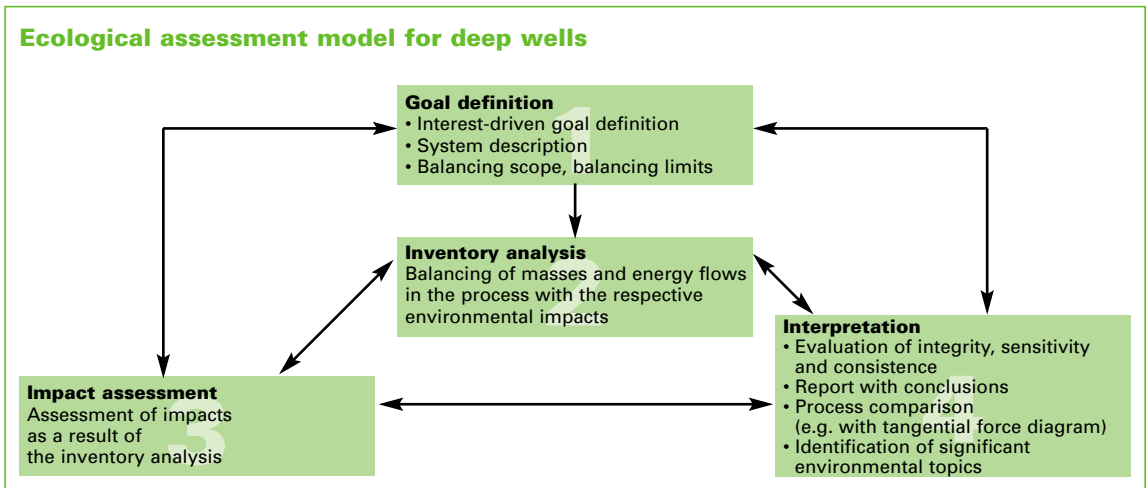
that damage is rectified and the remedial works commenced without delay.

One example was an incident in March 2000 in Reyersdorf (Lower Austria). A burst pipeline with escaped oil caused contamination of the soil and the ground water near the surface. The pipeline operation was immediately stopped, the affected area exposed and sealed off. Contaminated material was excavated and disposed of in the Company's own landfill. The remedial measures were carried out under official supervision and completed in the shortest possible time.

In 2000 a potassium carbonate drilling fluid replaced the potassium chloride-polymer fluid for drilling below the freshwater area, thus

reducing the chloride loading and minimizing the risk of corrosion on the drillstring. A further and considerable contribution to environmental protection is the drilling in clusters from just one location using directional drilling processes to reduce the space required for drilling locations.

In 1999 (2000) some 88 (51) wells were decommissioned. Following termination of exploitation of the drilling sites, areas will be reinstated to their original use. The technical basis for this remedial work is a guideline from the Federal Environment Agency concerning the reconnaissance, appraisal and rehabilitation of soils polluted with liquid hydrocarbons. If no specific stipulations exist at international level, then the principle of "Good Oil Field Practice" is applied.



Life Cycle Exploration and Production



Gas

Energie of the Future

OMV's natural gas division imports, stores and supplies the Austrian provincial gas distribution companies. During the course of the liberalisation of the energy market OMV also plans to be increasingly active on the end consumer market.

Some 120 mn cbm of natural gas are distributed daily via a pipeline network some 2,000 km in length. With the geographical location of Austria at the hub of European gas flows between the major gas exporter in the East and the growing markets in Southern and Western Europe, OMV has a central role in the European Natural Gas business. OMV covers some 90% of the Austrian natural gas supply from Germany, Norway, Russia, and the production from domestic reservoirs. Some 6.0 bn cbm of natural gas were imported in 2000. Austria still covers around 23% of its gas demand with natural gas from domestic fields north of Vienna and in western Upper Austria. In the Baumgarten on the March gas station in Lower Austria, Russian natural gas is imported and distributed to meet Austrian and international demand.

Production and storage

No external pressure is required to produce natural gas. When a reservoir is explored, the natural gas rises to the surface under its own pressure. Any impurities also carried from the interior of the Earth are removed by filters. If the proportion of water is high, the gas is dried. The characteristic gas odour is added for safety reasons just before entering the local networks – in its original state, natural gas is odourless.

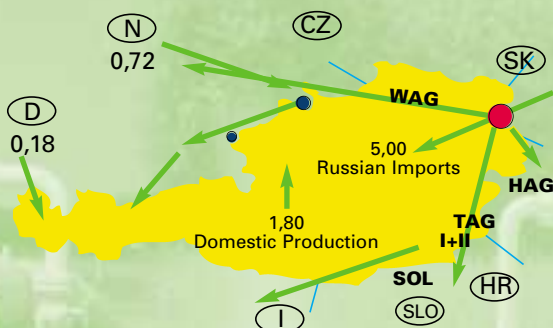
Natural gas flows silently in underground pipelines which are checked at regular intervals for tightness, integrity and ageing. Intermediate storage of the natural gas is necessary in order to cover daily fluctuations and consumption which is seven times higher in winter. This is done in depleted reservoirs, where the natural gas is stored safely in the porous rock until it is required.



Hartmut Heidinger
Head HSE and NGV

// Natural gas provides a lot of potential for emission reduction by the use of specific technologies. OMV is the guarantee for the necessary gas quality in Austria. //

8 Gas flows to supply Austria 2000 in bcm



9 Natural gas

		1999	2000
Key figures			
Sales	mn EUR	837	1.192
Employees		175	177
Gas transmission volumes	mn cbm	31,908	34,824
Safety figures			
LWIF	per 1 mn hours worked	7.2	10.8
Environmental indicators			
Energy consumption	TJ	8,551	11,300
NO _x	t	1213	1605
VOC	t	16	19
CH ₄	t	2,187	2,535
CO ₂	mn t	0.5	0.6

Natural gas as heating fuel

Natural gas has high ecological potential as, due to its chemical composition, it produces lower specific CO₂ emissions than other fuels, with special technologies bringing a significant ecological bonus in climate protection. Thus the condensing boilers technology results in a 15–20% increase in the efficiency, or flameless catalytic burners achieve emission reductions of powers of ten. In general, the lower CO₂ emissions mean a significant contribution to environmental protection.

Natural gas as vehicle fuel

Natural gas-powered vehicles produce considerably lower pollutant emissions than conventional engines, with some components achieving a reduction of up to 98%. More than 1.5 million vehicles worldwide are powered by natural gas and there is a lot of potential. Natural gas is suitable not only for buses and cars, but also for forklifters and other special vehicles. But gas is not simply gas. LPG (Liquid Petroleum Gas) is produced during the crude oil distillation in refineries. This is heavier than air and is used as fuel by the bus fleet of the Vienna public transport, for example. Compressed natural gas (CNG) is highly compressed natural gas which is lighter than air and, because of its significantly lower emissions, is particularly suitable as a fuel for vehicles in densely populated areas.

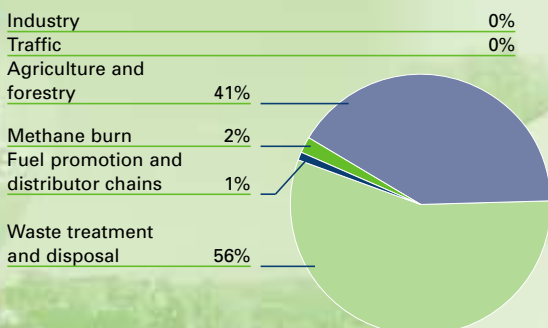
Natural gas burns more gently than other fuels, thus reducing noise. The human ear registers this reduction as a halving in volume compared with diesel engine noise. In addition, burnt natural gas is particle-free and odourless. In natural gas-powered vehicles CO pollution is reduced by up to 90% and CO₂ up to 30%, with NO_x up to 90% and NMHC by as much as 98%.

Engines optimised for natural gas can now achieve a performance increase of five to ten percent. At present the natural gas fuelling station network, which is still in its infancy, is the greatest obstacle to the further development of natural gas as a vehicle fuel. In Austria, OMV opened three new natural gas filling stations in 2000; at present there are six public natural gas filling stations in operation throughout the country. The aim is to provide country-wide supply facilities as soon as possible.

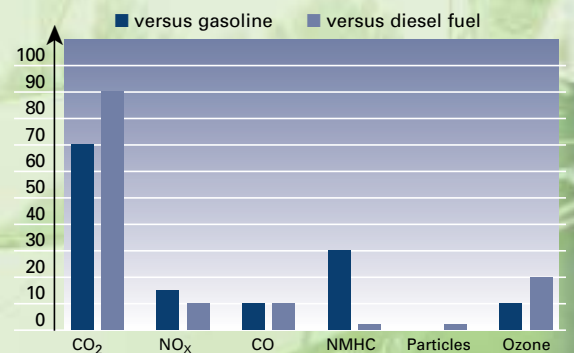
Emission avoidance with natural gas transport

Energy is required for the transport of gas in pipelines and for filling storage facilities. Thanks to improved technology and the use of turbo-compressor technology, CH₄ emissions have been reduced by 90% and NO_x emissions to approx. one-third of their previous value. As not all compressors are used simultaneously for gas transport, attention is increasingly focusing on the commissioning of more powerful models as well as progressively backfitting older plants with turbo-compressors.

10 CH₄ emissions in Austria 1999 in %



11 Potential of emission reduction using NGV in %



OMV's Emission Field Measurement project during the period under review involved the measurement of emissions during natural gas distribution and transit. Following the development of a measurement concept, individual sites were chosen and test measurements as well as a complete measurement programme carried out. In principle, three forms of emissions occur in relation to natural gas transport:

1. Pyrogenous emissions consist of unburnt natural gas in the exhaust gas flow from combustion processes;
2. "Vented gas" escapes into the atmosphere from machines during the venting of pressure vessels or during intentional blow-outs before repair work on pipelines;
3. Diffused emissions occur during leakages or from systems which are permanently vented.

A wide range of reduction possibilities were discovered, and these will now be implemented. These potential weak spots include fittings and joints of small pipework elements. The conversion of gas-pneumatic equipment from low-pressure gas to compressed air operation has resulted in reductions of CH₄ emissions and will continue

to do so. Cold starts of compressor plants should be avoided and compressor units are now equipped with electric starter motors. The blowing-out of gas before repairs and connection works is only necessary on a localised basis.

The transit pipelines themselves are welded steel pipes which are fully insulated and corrosion-protected. The tightness of the transport pipelines is monitored continuously.

Conservation and EIA

Additional demand for natural gas in Austria and Italy necessitated the increase in capacity from 23 bn cbm/a to 33 bn cbm/a and thus a third line of pipe for the Trans-Austria Gas Pipeline (TAG Loop II). The pipeline underneath the Danube river with the crossing of the Danube flood plains was a particularly sensitive section, so the new pipeline was laid as close as possible to the existing one in order to minimize damage to vegetation. In 2000, expenditure on environmental measures as part of the TAG Loop II project totalled some EUR 0.7 mn. The project is to be implemented in three stages, with the first three sections being commissioned as the first stage in October 2001. The entire pipeline is expected to be completed by 2007.

TAG Loop II, laying a gas pipeline under the Danube river



OMV Products

High quality for the environment

OMV sets standards in the further development of its products. Fuels, heating oils, lubricants and bitumen are continuously adapted to new technical and environmental specifications and significantly improved for environmental protection.

Utmost importance is attached to environmental aspects at all stages in the product life cycle. Improved, low-pollutant OMV products help to protect natural resources – from research and product development through utilization to their final disposal. With the implementation of the waste oil study OMV has proven that responsibility for products is assumed far beyond their actual use.

All developments are tested in laboratories, test beds and in the field and comply with high quality standards. Many field tests are carried out in close cooperation both with the industry and customers themselves. Components for future fuels can be produced in batches in pilot plants and tested for their applicability. State-of-the-art engine test beds and the latest vehicle test bed exhaust gas measurement technology far in excess of statutory requirements ensure the measurement of environmentally relevant

factors. In addition, OMV is a member of national and international standards committees and working groups, thus not only ensuring closeness to market, but also the swift implementation of the latest technical findings in product development.

Fuels

Advances in the field of liquid, gaseous and alternative fuels reflect a high level of quality and environmental awareness. In March 2000 OMV became the first petroleum company in Austria to market a sulphur-free fuel (Super Plus i-motion) nation-wide, and so complying now with future automobile industry sulphur content specifications dictating a maximum of 10 ppm. OMV was awarded the Environmental Prize of Industry 2000 for this fuel. Together with engine experts at the renowned AVL List Company in Graz we are developing fuels for future emission- and consumption-optimized gasoline engines with direct injection.

Our diesel fuels are continuously updated, our refinery components modified, and our products adapted to the performance specifications of the automobile industry as well as vehicle operators, with new additives being evaluated and adapted to engine and exhaust aftertreatment system specifications.

Thanks to its low pollutant and CO₂ emissions, compressed natural gas (CNG) is gaining



12 Distribution of unleaded gasoline status 2000

Germany	100%
Austria	100%
Italy	72,3%
Slovenia	85%
Croatia	60%
Romania	33%
Bulgaria	29,9%
Hungary	100%
Slovakia	100%
Czech Republic	81,4%



ground in the alternative fuel sector. OMV continuously delivers proof of technical know-how in the fuel sector with the drawing up guidelines for the certification and safety of natural gas vehicles and in the solution of operational problems. The Schwechat refinery supplies Vienna Transport with LPG (Liquefied Petroleum Gas). The environmentally sound drive concept with three-way catalytic converter for city bus fleets was developed by MAN together with OMV's R&D group.

Renewable fuels are the focal point of the EU Biostab project launched in March 2001 to study effects on long-term stability when mixed with diesel fuels.

Heating fuels

Odour masks for the new OMV brand Future Plus alleviate the typical heating oil odour of extra-light heating oil. New additives reduce the risk of filter blockages and increase the operational safety and stability of furnaces under load. Carbon deposits on the jets are extensively reduced, thus ensuring uniform combustion. Stability components prolong storage life while maintaining product quality.

OMV is playing a pioneering role regarding the sulphur content of heating oils and is already complying with the EU target of the Sulphur in Liquid Fuels Directive for the years 2003 (for heavy fuel oil) and 2008 (for extra-light heating

oil). During the period under review, two R&D projects were completed for the implementation of novel combustion concepts for the low-emission combustion of light heating oil – a specifically Austrian fuel used predominantly in small enterprises and industry. At the same time a training programme was launched for plumbers, chimney sweeps, service engineers and heating oil dealers as well as OMV heating partners to promote the use of light heating oil.

Lubricants

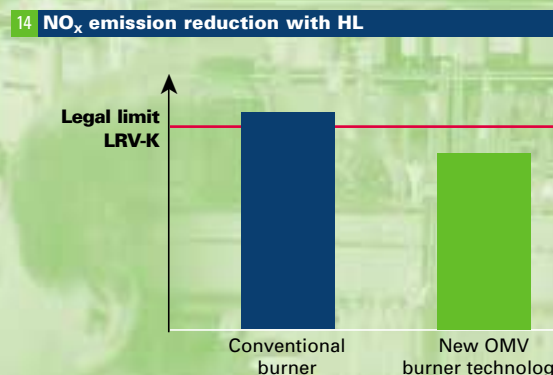
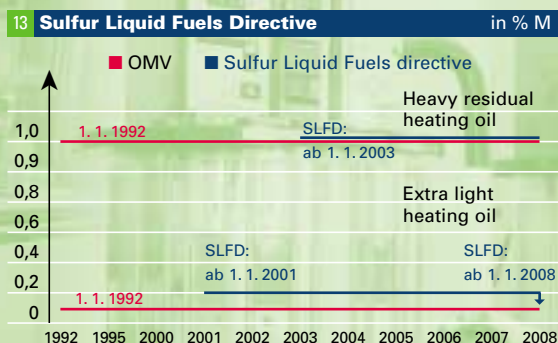
OMV operates a lubricant blending plant with an annual capacity of 25,000 tonnes. The location of the production facility close to a groundwater protection zone means compliance with strict conditions regarding surface sealing.

OMV fuel economy oils and gear oils save up to five percent fuel, thus reducing exhaust and particle emissions. The long service



Ingela Bruner
Head of Research, Development and Application

// **Respect for the environment is an integral part of how we view ourselves in the research and development field. So I am all the more pleased to be working in OMV, a company in which quality also involves commitment to the environment.** //



life and the container concept – some 80 percent are reconditioned – reduce waste arisings.

In conjunction with the construction of the Lambach power station an environmentally sound high-performance turbine oil (OMV bioturb WK 68) was developed, complying with high technical and environmental specifications. In environmentally sensitive areas such as skiing resorts or water protection zones fast-degradable biological lubricants do not endanger ground or surface water. Thanks to its environmentally sound manufacturing technology and product quality, OMV's biosegarol E 100 chainsaw oil bears the Austrian eco-label.

Storage and distribution of petroleum products

Some 800,000 cbm per year of crude oil as well as other intermediates and finished products are transhipped or temporarily stored in the Lobau tank farm per year. Fuels and extra-light heating oil are treated in the blending plants. The tank farm is connected to the Schwechat refinery by 19 pipelines. Western Austria is supplied with OMV petroleum products via the

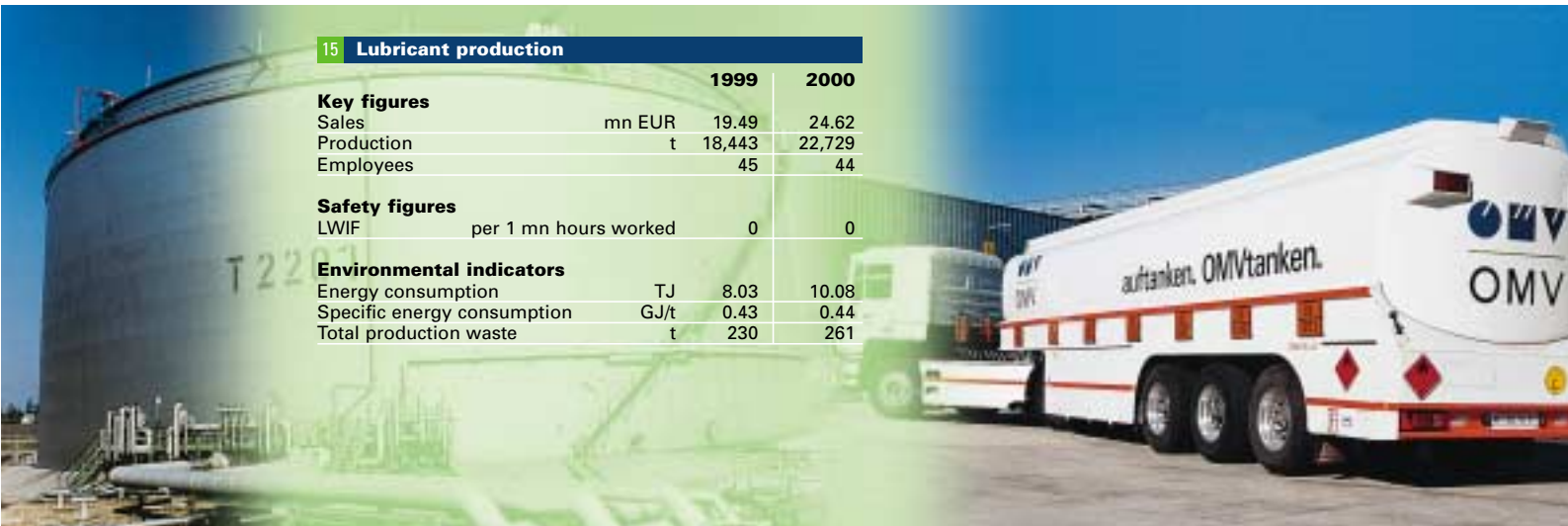
St. Valentin tank farm. The products – some 35,000 cbm gasoline, 120,000 cbm diesel and extra-light heating oil – are supplied from the Schwechat refinery by means of the West pipeline, stored and transferred to road tankers. Further supply stores are located in Graz and Lustenau.

The products reach the consumers and customers by pipeline, road tanker, rail tanker or ship. An up-to-date vehicle fleet and short routes as well as regular safety checks on freighters ensure high environmental standards in the distribution of products. Last year with approx. 80,000 collections some 60 loading stop orders were imposed on carriers (for infringements of the Hazardous Materials Transport Act). The stricter OMV internal checks have resulted in a significant improvement in freighters' fleet quality.

During the period under review a total of some EUR 0.5 mn was invested in the replacement of a vapour recovery plant (VRU) in the Lustenau tank farm, contributing to a significant reduction in emissions. In the St. Valentin tank farm the tank troughs have been renovated and provided with a special state-of-the-art coating.

15 Lubricant production

		1999	2000
Key figures			
Sales	mn EUR	19.49	24.62
Production	t	18,443	22,729
Employees		45	44
Safety figures			
LWIF	per 1 mn hours worked	0	0
Environmental indicators			
Energy consumption	TJ	8.03	10.08
Specific energy consumption	GJ/t	0.43	0.44
Total production waste	t	230	261



OMV refineries

Leaders in Europe

In a European comparison, the OMV refineries in Schwechat (A) and Burghausen (D) achieve extremely low figures for air and water emissions. Environmental protection as part of an integrated management system ensures that also in future this high standard will be maintained.

On a site of some 1.4 km², the Schwechat refinery is one of the largest and most complex inland refineries in Europe and is situated near the densely populated areas of Vienna and Schwechat, the airport and on the edge of a conservation area. The Schwechat plants produce high-grade petroleum products as well as basic chemicals by distillation and refining crude oils and intermediates. Crude oils are primarily delivered from Trieste (Italy) via the Transalpine and Adria Wien Pipeline. The crude oil capacity of the refinery is some 9.6 mn tonnes a year.

Since its foundation, the Burghausen petrochemical refinery has developed into one of the most important production facilities for petroleum basic chemicals in southern Germany, processing mainly low-sulphur crude oil which

is sent from Trieste via the Transalpine Pipeline across the Alps, through Italy, Austria and Bavaria to the Steinhöring intermediate storage tank farm, and from there over a special pipeline to Burghausen. In contrast to conventional refineries, Burghausen does not produce gasoline. By using other processing stages, ethylene and propylene are produced. The crude oil capacity of the refinery is some 3.4 mn tonnes per year.

Schwechat refinery — improved plants, less pollution

In 1999 and 2000 a restructuring project was conducted in the Schwechat refinery in order to optimize available plant capacities. Simultaneously, the plant infrastructure was adapted to the best available technology. Investment volume of some EUR 145 mn included the construction of an up-to-date crude oil distillation plant and the modification of the plants for the gasoline refining components. The new plant configuration is a major step towards



Johann Kaltenbrunner
Executive Manager,
Schwechat Refinery

// The great importance attached to HSE aspects in the refinery ensures optimum background conditions for an efficient production cycle. //

OMV Homepage:
Virtual refinery tour for kids



compliance with the Auto Oil II Programme and the improvement of refinery environmental standards.

In a comparison with similar refineries throughout Europe (benchmarked via the so-called Solomon Index), Schwechat has improved from 107% (1996) to 94% (2000). Rather than being flared, refinery gas is now, but utilized to cover some 50% of the energy requirement. Despite increasing processing capacities and growing product demands, CO₂ emissions are being reduced. The CO₂ output is heavily dependent on the quality of fuel produced.

The equipping of several plants with the latest low-NO_x burners in the summer of 1999 has resulted in reductions in NO_x emissions of some three percent to date (compared with 1997). The replacement of further burners is planned.

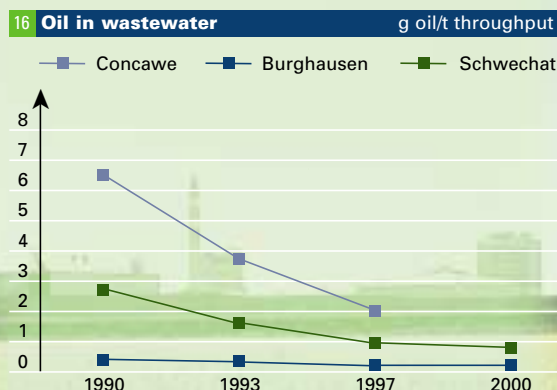
As a result of measures which included the shut-down of a Claus plant in April 1999, SO₂ emissions from the refinery were reduced by seven percent (compared with 1997). In October 1999, the construction of a Regenerative Thermal Oxidation plant for cleaning the exhaust air from the wastewater treatment plant, has led to a reduction of 23% in VOC emissions (compared with 1997). With 0.58 g of

oil in wastewater per tonne of throughput the Schwechat refinery is among the leaders in the treatment of wastewater.

The location of the Schwechat refinery is historically a contaminated site. Since 1987 petroleum products have been extracted from the groundwater by means of remedial wells. The extractions are subsequently recycled. There are plans for a manganese and iron removal plant so that this water can be used as a coolant.

In order to minimize the environmental risk from leaks, over and above compliance with statutory requirements and checks, tanks are being fitted with double bottoms and laminated inner linings. Furthermore, pipeline trenches feature additional seals. During the period under review oil leaks have not constituted a threat to groundwater.

The environmental priority at the Schwechat refinery is the preparatory work for the production of new fuel qualities. The objective is the production of gasoline and diesel fuels with 30 and 10 ppm of sulphur respectively. A further increase in energy efficiency will be achieved by optimization of the production process. As a performance yardstick the Schwechat refinery is aiming to improve by three points in the Solomon Index.



Burghausen Refinery concludes environmental pact

OMV Deutschland has an integrated management system. The Burghausen refinery, Feldkirchen and Steinhöring tank farm facilities are certified or validated in accordance with ISO 9001, ISO 14001, BS 8800, EMAS and OHRIS. Burghausen refinery publishes its own environmental report. The company is a founder member of the Bavarian Environmental Pact, a voluntary combination of the Bavarian State Government with business enterprises to step up environmental protection measures over and above the statutory level. In return the companies are accorded administrative concessions. The continuation of that agreement, Environmental Pact II, was signed in autumn 2000.

Since the commissioning of the works in 1967, wastewater has been treated in a sophisticated three-stage process. To comply with the latest legislation, the plant was converted at a cost of EUR 10 mn. The main features achieved with this project include improved oil separation, minimization of the nitrogen freight as well as an increase in the storage capacity for atmospheric water in the event of heavy rainfalls. In cooperation with the Freilassing company Aicher a recovery process was developed for the treatment of wastewater sludges from the biological wastewater treatment plant and the refinery's cleaning processes.

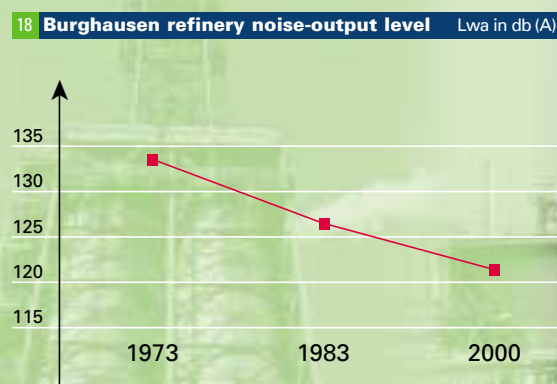
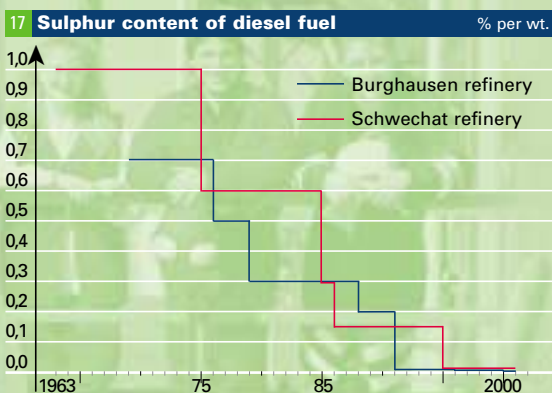
The commissioning of a new aromatics unit as well as the conversion in the tank farm and in the unloading and loading area resulted in a quality improvement of the refinery products. For example, the content of non-aromatics in the benzene was reduced from <700 ppm to <250 ppm and the sulphur content in the C7 cut – as a component of the gasoline production – reduced from <0.22% to < 0.003%. Airborne pollution emissions from the consumption of fuels was reduced as a result of the shut-down of the pyrotol plant.



Walter Fritsch
Managing Director, OMV Deutschland

The refinery's hydrocarbon emissions were mainly attributable to diffused sources and the tank farm. A major contribution towards the avoidance of hydrocarbon emissions from diffused sources is the annual tightness check of fittings. The annual loads of SO₂ and NO_x emissions from the Burghausen refinery are stipulated by the local authority as "bubble" limits and were undercut by 17% for SO₂ and 23% for NO_x in 2000.

“ Our integrated management system enables optimum exploitation of potentials for the environment and safety. ”



OMV Filling Stations

A by-word throughout Europe for high environmental standards

OMV sells petroleum products via its own filling station

network in Austria, Bavaria, Bulgaria, the Czech Republic,

Hungary, Italy, Romania, Slovakia and Slovenia.

In 1999 (2000) a total of 1,080 (1,136) filling stations were in operation, with 548 in Austria alone. OMV and its leaseholders have formed a partnership to promote environmental responsibility, with the Company assuming responsibility for environment-oriented architecture, ecologically sound products and comprehensive training for environmental conscious operations. Active environmental protection is the responsibility of partners and leaseholders.

Partners are informed of environmental protection requirements on taking over a filling station and are then continuously updated on recent changes at regular training courses. Wide scope for action is permitted for improvements in waste management and in finding practical solutions to any environmental problems that might arise.

Soil and groundwater protection

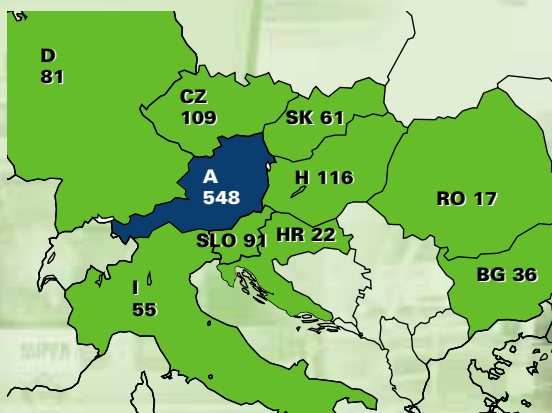
Soil and groundwater protection is ensured by the provision of a proven technology which, when applied correctly, eliminates any hazard to humans or the environment. Pumps are fitted with leak-proof drip pans. Storage tanks and product pipelines from subterranean tanks to the pumps are double-walled and are equipped with a leak monitoring system. All systems are monitored constantly for leaks. Both visual and acoustic alarms are triggered in the event of a problem arising.

The forecourt apron is sealed so that it is impermeable and petroleum product resistant. Filling cabinets and filling shafts are also sealed. Surface water and any spilled liquids are collected and only disposed of only after being treated in oil separators. Filling stations with self-service car wash bays and automatic car wash tunnels contain wastewater treatment and recycling plants.

Reducing emissions

Petrol vapours normally released into the atmosphere during filling are returned to the tanker and not allowed to escape into the atmosphere (gas displacement). Thanks to an activated carbon process, fuel can be recovered from the vapour. Volatile organic compounds (VOCs) released when a vehicle is refuelled are sucked back into the storage tanks (vapour

19 Number of filling stations 2000



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recovery system) and thus rejoin the production process. All domestic OMV filling stations are equipped with vapour recovery systems and gas displacement systems. Abroad this technology is included as standard in all new and refurbished filling stations.

Customer safety

Devices installed on each pump automatically cut off supply to the fuel tank as soon as the tank is full. The nozzle will only dispense fuel when it is in a horizontal position and a predetermined breaking-point located beneath the pump valve automatically cuts off supply in the event of the nozzle being forgotten in the filler neck when the vehicle drives away. Further safety measures include prohibition of refuelling while the engine is running, while smoking or handling naked flames. OMV filling station shops are run in accordance with retail and restaurant hygiene requirements. There is no contact whatsoever between foodstuffs and oil products either in storage or at the point of sale.

OMV sets new standards in design

One of the most up-to-date filling stations in Austria opened in June 2000. On a 7,000 m² site and completed in just four months, this solar-powered filling station sets new structural

and environmental standards. The roof of the parking area is also Vienna's largest photovoltaic plant. A significant proportion of the filling station's power requirement will be provided by electricity generated by solar energy. Another important innovation: it is the first public natural gas filling station in Vienna.

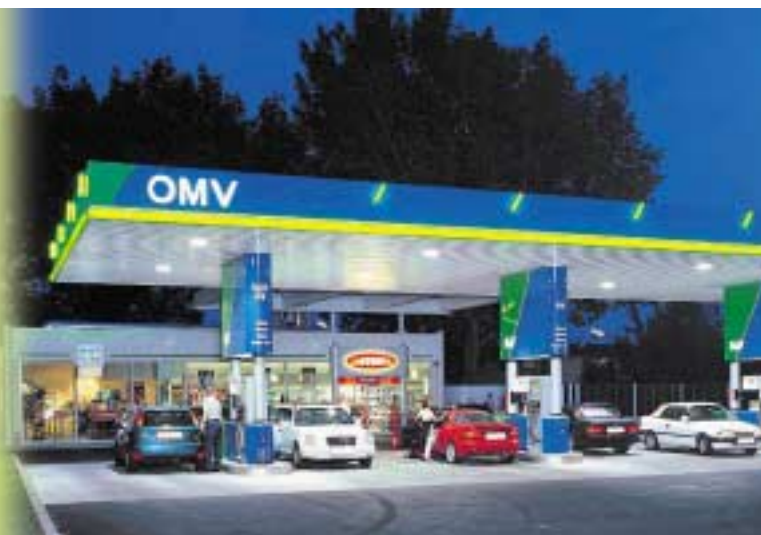
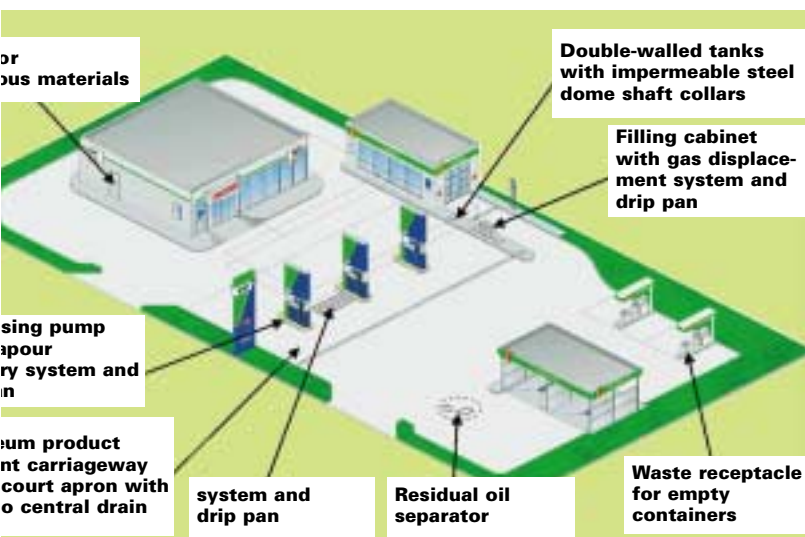
Environmental ideas with a future

At haulier meetings, particular importance is attached to safety regarding hazards when refilling underground storage tanks. All in all OMV makes every effort to achieve the same environmental and safety standards when renovating old filling stations as with new equipment. International technician meetings at OMV headquarters in Vienna ensure that filling stations built abroad also conform to those high planning and building standards implemented in the domestic market.



Wolfgang Haring
Marketing Austria – Asset Management

“ With the focus on environmental protection and safety, OMV forms a strategic partnership with its leaseholders in the interest of mankind and the environment. ”



Agrolinz Melamin

Pioneering role in the Chemiepark Linz

Safety does not stop at the works gate, which is why Agrolinz Melamin actively supports the development of the HSEQ management system at the Chemiepark Linz and is responsible for the optimum application of its products in agriculture.

At its sites in the Chemiepark Linz and Castellanza, Italy, Agrolinz Melamin produces plant nutrients, primary chemicals, melamine, urea and feed additives for European and sometimes even worldwide distribution. Agrolinz Melamin is the Austrian market leader in the fertilizer sector, and the world's second largest melamine producer. With a workforce of over 1,000 the Agrolinz Melamin subgroup produces a turnover of some EUR 360 mn.

HSEQ management system in the Chemiepark Linz

Environmental protection measures and objectives are embedded in all Company planning and evaluation cycles. One significant aspect of Agrolinz environmental policy is the relationship with the Chemiepark Linz. In this respect, the agreement on cooperation in the event of emergencies between the Province of Upper Austria, the provincial capital Linz, Steyregg town council and twelve companies in

the chemicals park signed in 1999 was unique for Austria. The focal point of the binding agreement is the organization of cooperation in emergencies and the joint approach to relevant topics relating to safety management.

Organization of safety in the Chemiepark Linz is the responsibility of a steering group and a working party which also maintains contact with external partners, local residents and the general public. The core element of the safety management scheme is a warning and information system which has been running since 1985, but which was placed on a completely new basis with the 1999 agreement and augmented by an up-to-date siren and loudspeaker system in 2000.

Investments for the environment

Some EUR 25 mn is being invested in the optimization of plant nutrient production. This project will result in significant improvements in wastewater and dust emissions. A wastewater treatment plant has been provided for the



Sicherheitspaß Chemiepark Linz
für Kontraktoren

Gemeinsam sicher

Verabbarung zwischen
Land Oberösterreich – Landeshauptstadt Linz – Stadtgemeinde Steyregg und den Unternehmen
am Chemiepark Linz über die Zusammenarbeit bei Schadensereignissen

AGA, asofa, Borealis, chemserv, DSM, novoflor, Nulim, polyfelt, asofa, DSM Fine Chemicals, ECRATUM

Logo: Partnerverbände für den Chemiepark Linz

- Gefährdungen
- Alarmierung – Warnung – Benachrichtigung – Information
- Bekämpfungsmaßnahmen
- Gefährdungsmaßnahmen und Führungsgangarten

melamine production plant in order to comply with the industry's wastewater emission regulation. A revision of the contractual and water statutory situation concerning cooling water discharge into the Danube clearly apportions responsibility for the wastewater inlets of the individual Chemiepark Linz companies.

The previous suspect site of the Chemiepark Linz has now been identified as a registered contaminated site. Agrolinz has voluntarily carried out investigations at its own expense. The waste management concept was classified by the official authorities as exemplary, as it is far in excess of statutory requirements and the potential for financial savings is very attractive. In order to comply with the requirements of Responsible Care and ISO 14001, the existing quality management system was stepped up to an integrated management system. Environmental protection activities are incorporated in a self-assessment process similar to the EFQM (European Foundation for Quality Management) TQM model.

Responsibility for products

The most significant environmental impacts from the use of plant nutrients are ammonia emissions, evolution of nitric oxide and nitrous oxide gases, nitrate loading of the groundwater and the eutrophication of the surface water due to phosphor loss. Agrolinz Melamin is aware of the problem of large-scale fertilizer use and therefore product development is aimed at compliance with ecological requirements. These

focus on the optimum composition of the contents, use at the right time and the right quantity of fertilizer. Thus the plant nutrients are formulated so that the plants can assimilate all the available nutrients. Apart from the four or five main nutrients, the whole grain fertilizer products contain no excess ballast or carriers, actively supporting plant growth and avoiding unnecessary spreadings or excessive fertilizer quantities. Since the mid-Eighties, the progressive adaptation of the range of autumn and spring fertilizers has contributed significantly to the reduction of eutrophication and the climatic effect of nitrous oxide emissions. Thus the nutrient requirement of the plants and the time for fertilizer spreading closely coincide.

To protect water and soil, particular attention must be paid to the precise measurement of the fertilizer requirement, so Agrolinz Melamin is focusing on advising consumers on optimization of the use of fertilizers. In addition, in 2000 the fertilizer marketing, production and HSEQ departments launched the "Sustainable Agriculture" project in conjunction with selected farmers with the object of evaluating measures



Gerhard Ketscher
Member of the Board

“ We are responsible neighbours. Our aim is that all our employees go home healthy. ”

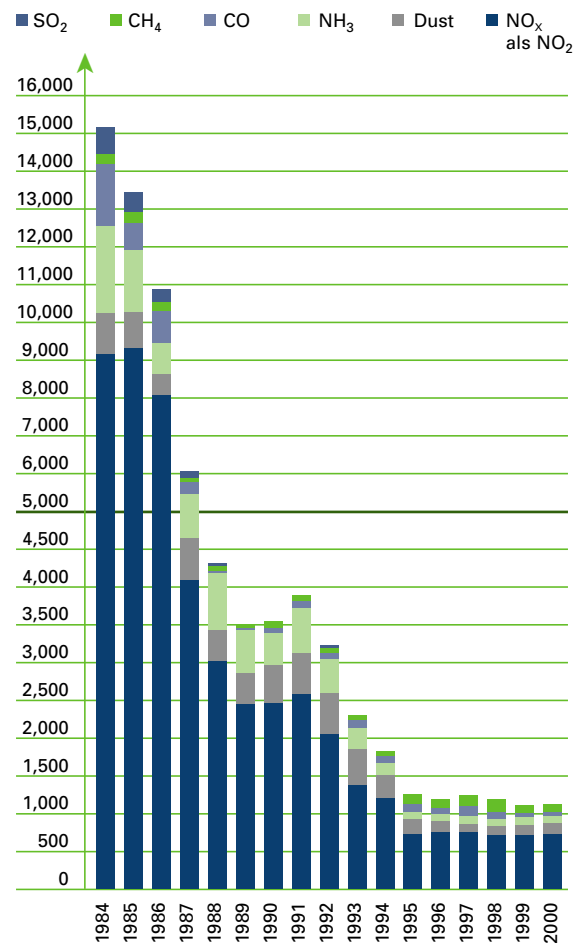


and procedures whereby the products and services of Agrolinz can contribute to sustainable agriculture.

Stimulus for industry and science

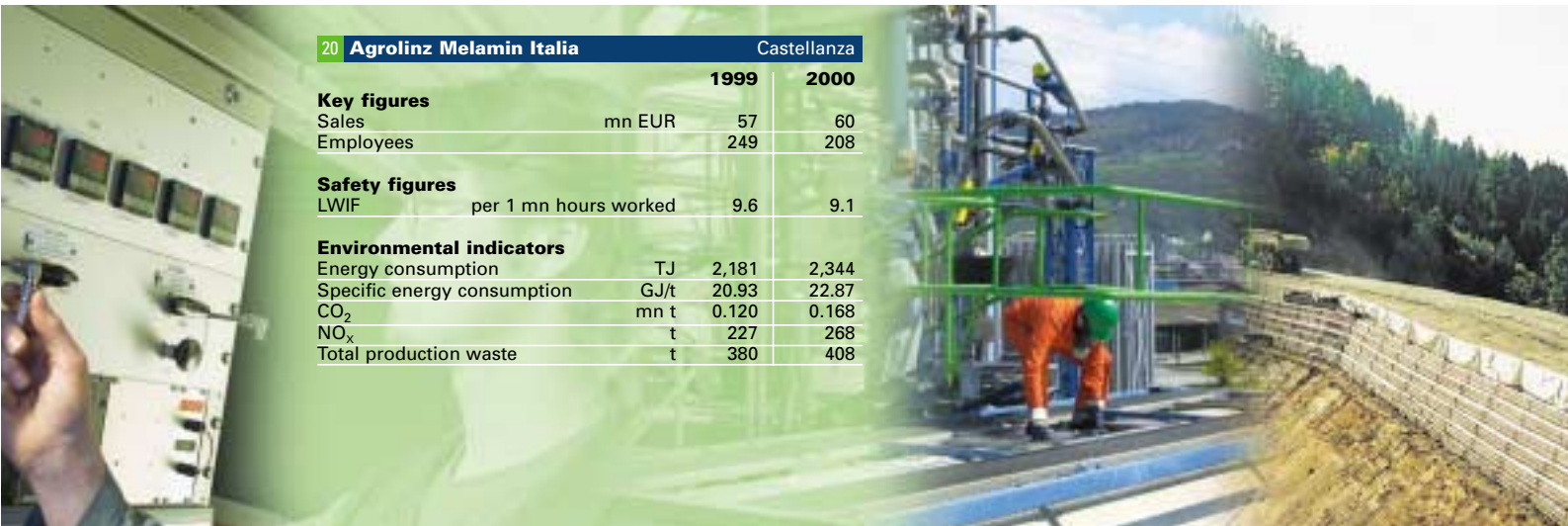
The Timber Competence Centre (Kplus) was founded as a initiative of OMV with Agrolinz Melamin as a partner representing industry. The object of this platform is the promotion of cooperation between industry and science for the development of future-oriented product and the swift implementation of scientific research findings regarding market requirements, with Kplus providing a significant stimulus for the domestic wood industry, whose research and development quotas are around 0.6%. The Vienna University of Agricultural Sciences is responsible for the scientific supervision of the project, while research topics will include the modification of raw wood for high-grade wood composite materials, melamine resin composite materials, optimized bonding solutions and wood chemistry. More than 40 scientists and technicians are employed by Kplus Holz GmbH – some in premises made available by Agrolinz Melamin. Research projects totalling more than EUR 12 mn are being implemented in conjunction with partner companies.

21 Atmospheric emissions Linz site in t



20 Agrolinz Melamin Italia Castellanza

		1999	2000
Key figures			
Sales	mn EUR	57	60
Employees		249	208
Safety figures			
LWIF	per 1 mn hours worked	9.6	9.1
Environmental indicators			
Energy consumption	TJ	2,181	2,344
Specific energy consumption	GJ/t	20.93	22.87
CO ₂	mn t	0.120	0.168
NO _x	t	227	268
Total production waste	t	380	408



Polyfelt

Geotextiles in harmony with nature

Polyfelt develops and produces geotextiles for many applications. With plants in Austria (Polyfelt GmbH) and France (Bidim S.A.), production in 2000 was some 26,000 tonnes. A further plant went on stream in Malaysia in the middle of 1999.

The raw material for Polyfelt's geosynthetic products is polypropylene, which is spun to endless fibres. These fibres are mechanically bonded to nonwovens. For applications requiring particularly high stability, such as in the construction of very steep slopes, these nonwovens are additionally reinforced with glass or polyester fibres.

The cycle back to production

No environmentally relevant emissions are released anywhere in the production process. Any production wastes arising during manufacture are recycled or further processed to other Polyfelt products such as insulation materials. In 1999 some EUR 0.1 mn was invested in the construction of a waste centre and an oil store. Over the next few years, as part of the HSE programme Polyfelt will be giving utmost priority to the further development of new technologies to reduce injuries from cuts, in the health segment to a programme to prevent spinal injuries, as well as to the continuance of the health weeks.

Environmentally sound in practice

Geotextiles are used worldwide for separating, filtering, draining and reinforcing earthworks, normally as an alternative to concrete. In road and railway construction, for example, the Polyfelt products form a separating and filter layer between the subsoil and fill material, so preventing contamination of the fill material and maintaining its stability and thus also its longevity. At the same time the quantity of fill material is reduced, as the material is prevented from sinking into the subsoil. The reduction in the use of fill material cuts transport costs and environmental burdens; thus the use of one HGV load of geotextiles replaces some 2,000 HGV loads of ballast.

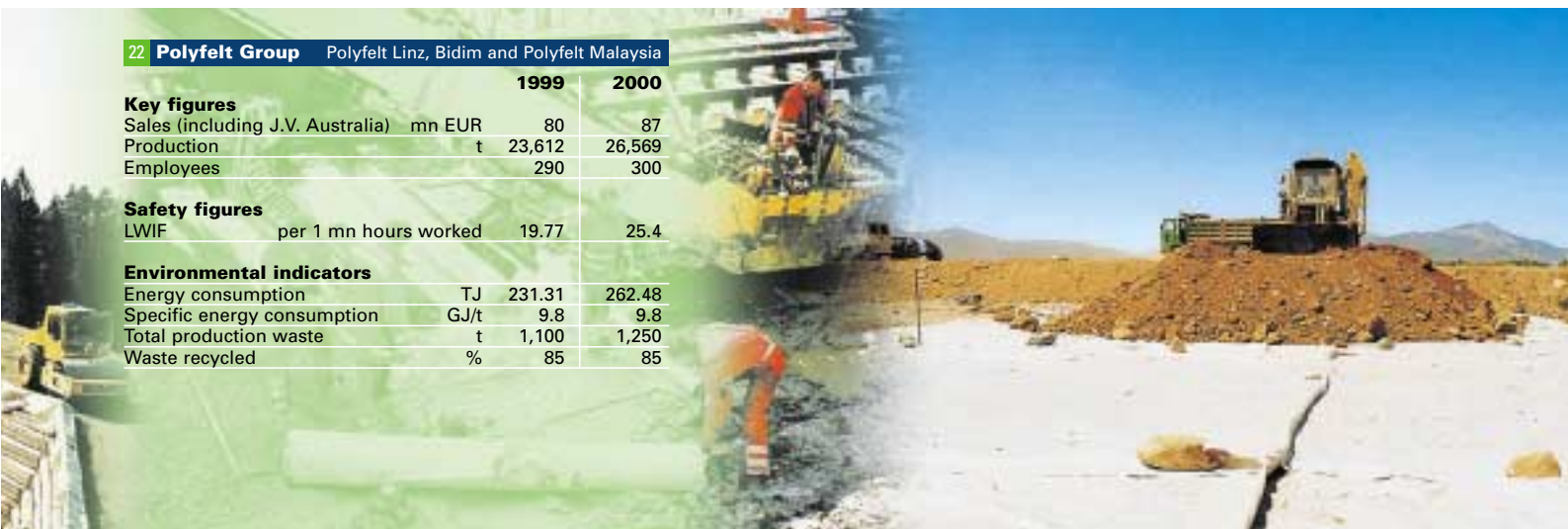
In landfill construction, the stability of geotextiles adds considerably to the stability of the sealing system. The puncture-resistance of a plastic membrane is doubled or tripled with a geotextile, accordingly reducing the risk of mechanical damage and the resultant environmental impacts.



Heinz Bocksrucker
Managing Director, Polyfelt

“ With our products we make a worldwide contribution to environmental protection. ”

22 Polyfelt Group		Polyfelt Linz, Bidim and Polyfelt Malaysia	
		1999	2000
Key figures			
Sales (including J.V. Australia)	mn EUR	80	87
Production	t	23,612	26,569
Employees		290	300
Safety figures			
LWIF	per 1 mn hours worked	19.77	25.4
Environmental indicators			
Energy consumption	TJ	231.31	262.48
Specific energy consumption	GJ/t	9.8	9.8
Total production waste	t	1,100	1,250
Waste recycled	%	85	85



OMV Proterra

One-stop shopping for environmental services

OMV Proterra's turnkey solutions in the eco-consulting water and waste management sector have earned it a leading market position in the environmental services segment. Clients range from industrial and commercial companies to local authorities and government agencies.

The four main business areas of the OMV subsidiary founded in 1990 are consulting, site recycling, waste management and water management. With a workforce of 54, in 2000 the company produced a turnover of 11 mn EUR, thus achieving the 50% mark for non-group clients for the first time.

The consulting business is focused on the evaluation of soil and ground water contaminations at filling stations, tank farms, oil spills and decommissioned industrial sites. Besides data collection and geophysical, geotechnical, geological and hydrological surveys, information is networked and presented using geographical information systems (GIS).

Safe disposal chains protect the environment

In the context of an efficient waste management system, OMV Proterra plans waste treatment plants and landfills, provides advice on plant closures, supports environmental consultants in the event of legal and administrative procedures

or assumes responsibility for site supervision in the adaptation and construction of landfills and the implementation of contaminated site rehabilitation works. OMV Proterra is a pioneer in the research and implementation of environmentally sound and cost-effective waste treatment and disposal. From reception to recycling or tipping, wastes pass along secured disposal chains, thus avoiding environmental damage as a result of improper handling. The recycling of wastes takes place in the company's own facilities, while complete solutions are implemented for industrial sites. Contaminated soils and oil sludges are processed in the Soil Technology Research Centre in Neusiedl an der Zaya. A plant in Gänserdorf specialises in the treatment of sewage sludges and oily wastes.

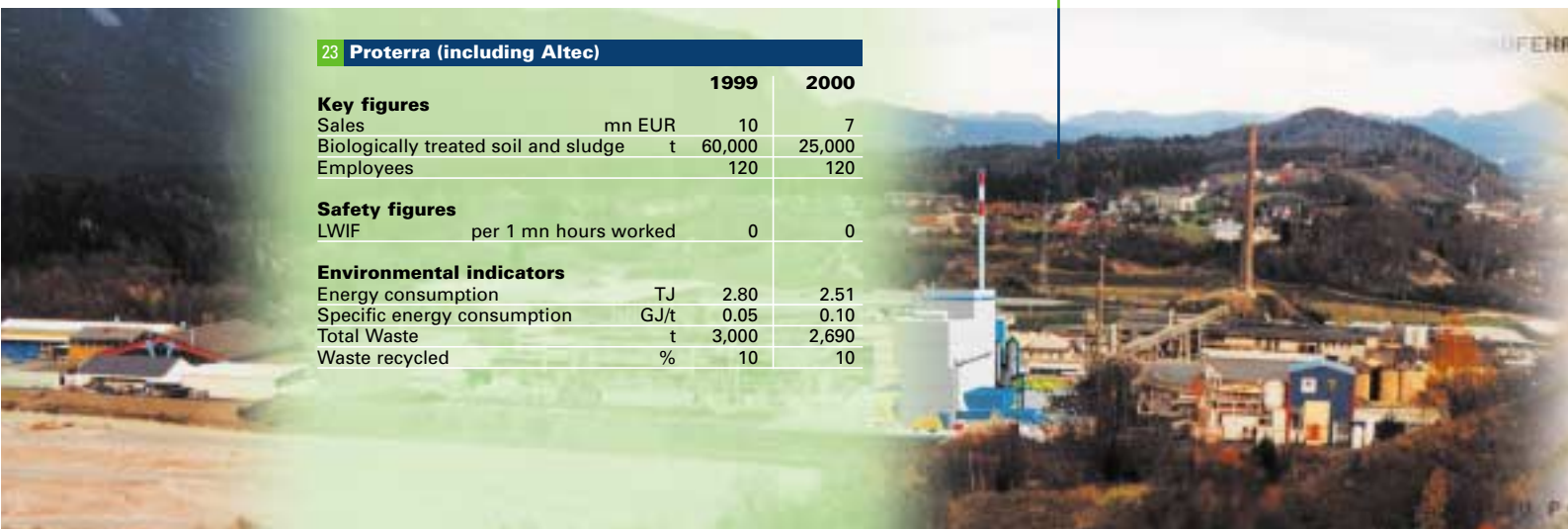
OMV's specific know-how in the detection, tapping and rehabilitation of potential water resources and ground water reservoirs is based on decades of experience in oil production. For example, comprehensive water management skills include the tapping of wells, installation of ground water probes, implementation of pump tests, well inspection and cleaning works via video or the rehabilitation of contaminated ground water and wells.

Integrated management system

OMV Proterra has been certified in accordance with ISO 9002, ISO 14001 and SCC since March 2000, and is thus the first company in the

Biological soil treatment plants, Arnoldstein (Altec)

23 Proterra (including Altec)			
		1999	2000
Key figures			
Sales	mn EUR	10	7
Biologically treated soil and sludge	t	60,000	25,000
Employees		120	120
Safety figures			
LWIF	per 1 mn hours worked	0	0
Environmental indicators			
Energy consumption	TJ	2.80	2.51
Specific energy consumption	GJ/t	0.05	0.10
Total Waste	t	3,000	2,690
Waste recycled	%	10	10



environmental industry to boast a process-oriented management system for quality, environment and safety. All processes and instructions are gathered together in integrated form and laid out clearly in a single management manual. This integrated management system provides Protterra with a platform for continued improvement in all segments of its business activity, so the client can confidently expect not only high quality, but also environmentally sound processes and safety in the implementation of the services.

In the consulting segment, also in future the focus will be on the skilled and legally incontestable planning and site supervision of rehabilitation projects, entailing increased emphasis on client counselling and staff training as well as risk assessment, so that the overall environmental impacts of various planning variations can be better evaluated. For example, during the period under review the Goldberg landfill project in south-eastern Lower Austria was not implemented, as environmental aspects give preference to a thermal utilisation of the wastes. Similarly, the treatment of contaminated soils in the soil research centre helps to protect landfill resources.

Environmental highlights at a glance

- During 1999 and 2000 a waste oil study was carried out on behalf of the Federal Ministry for Environment, Youth and Family Affairs.

The object of the study was to evaluate the economic feasibility of a recycling plant for waste oil in Austria.

- The “Carinthian residual waste utilisation project” was contractually agreed during the period under review. The licensing procedure is progressing on schedule.
- The rehabilitation of the Kiener landfill in Bachmanning near Wels was completed successfully. OMV Protterra was the prime contractor for the waste disposal.
- OMV Protterra carried out geophysical studies for the Fischer landfill in Lower Austria.
- More than 2,000 soldiers with the KAFOR troops in Kosovo were supplied with drinking water by the drilling of wells.
- OMV Protterra played a leading role in the EIA process for the LOOP II gas pipeline.
- OMV Protterra was responsible for the rehabilitation of the contaminated soil following a heating oil spillage as a result of a goods train accident on the Eastern Railway track.



Alois Fürnkranz
Executive Manager OMV Protterra

“ Services provided by Protterra meet the requirements of the recycling industry and reflect an intelligent multiple use of resources. ”

Well remediation in Kosovo



OMV Group

Address

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Contact person

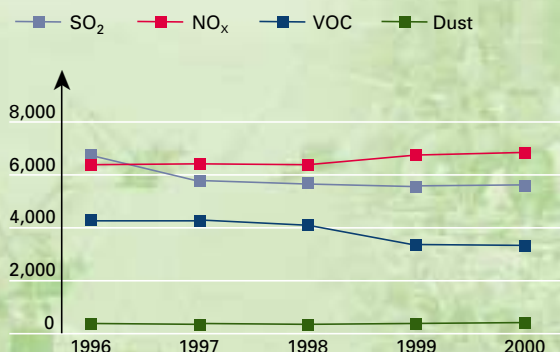
Dr. Helga Pražak-Reisinger
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E-mail: helga.prazak-reisinger@omv.com

Key figures	1996	1997	1998	1999	2000
Employees	8,491	7,934	6,360	5,953	5,757
Return on average capital employed ROACE %	8	14	9	9	12
Return on fixed assets RofA %	9	16	9	10	16
Return on equity ROE %	11	12	11	12	18
Equity ratio %	29	29	32	33	34
Gearing ratio %	11	15	17	35	28
Payout ratio %	32	33	36	33	36
Market capitalization in EUR bn as of 31 December	2.40	3.43	2.17	2.61	2.23
Statement of income	mn EUR				
Sales	5,688	6,034	4,720	5,179	7,455
Earnings before interest and tax (EBIT)	212	419	220	285	491
Financial items	4	-30	2	-6	-38
Income from ordinary activities	216	389	223	278	453
Extraordinary income (loss)	0	-127	-6	0	0
Taxes on income	-72	-97	-48	-84	-130
Nett income	144	165	169	194	323
Balance sheet	mn EUR				
Fixed assets	2,815	3,082	3,240	3,624	3,929
Current assets	1,739	1,702	1,371	1,495	1,705
Stockholders' equity	1,335	1,495	1,549	1,715	1,968
Provisions	1,133	1,209	1,117	1,070	1,120
Liabilities	1,804	1,581	1,827	2,183	2,412
Balance sheet total	4,573	4,994	4,814	5,278	5,834
US GAAP	mn EUR				
US Generally Accepted Accounting Principles					
Net income	142	148	50	194	359
Stockholders' equity	1,600	1,717	1,701	1,854	2,117
Key figures by segment	1996	1997	1998	1999	2000
Group sales	mn EUR				
Exploration and Produktion	128	136	118	155	255
Gas	799	872	868	837	1,192
Refining and Marketing	3,719	3,896	3,313	3,808	5,574
Chemicals ¹⁾ and Plastics	371	359	408	366	425
Plastics ¹⁾	661	763	0	0	0
Corporate and Other	9	8	13	13	8
Group	5,688	6,034	4,720	5,179	7,455
Production and products	1996	1997	1998	1999	2000
Exploration & Produktion	mn bbl				
Crude oil and NGL production	14.2	15.1	15.8	19.2	20.0
Whereof in Austria	6.7	6.6	6.9	7.0	7.0
Natural gas production	bfc				
Whereof in Austria	26.9	35.3	38.0	41.0	42.3

Notes:

1) Turnover not included due to sale of the PCD Group (plastics) in 1998; Summary of the further processing (geotextiles) with the chemicals segment to Chemicals and Plastics.

24 Atmospheric emissions in t



25 Waste water - COD in t



Gas						
Transmission volume in Austria	mn cbm	22,288	25,064	28,802	31,908	34,824
Imports	mn cbm	6,404	5,858	6,050	5,942	5,909
Gas sales in Austria	mn cbm	6,961	6,316	6,564	6,540	6,567
Refining and Marketing						
Crude oil imports	1,000 t	9,389	10,051	9,869	9,187	8,432
Crude oil processing	1,000 t	1,420	13,066	13,135	12,564	11,891
where of crude oil	1,000 t	10,275	10,872	10,777	10,109	9,403
Sales volume 1,000 t						
Total		11,221	12,012	11,935	11,440	10,843
Petrochemicals		1,423	1,475	1,494	1,485	1,325
Gasoline		2,305	2,417	2,180	2,149	1,802
Jet fuel		817	889	921	920	894
Diesel fuel		2,239	2,581	2,825	2,895	3,012
Extra light heating oil		2,115	2,294	2,166	1,963	1,825
Fuel oil		1,445	1,451	1,425	1,127	1,148
Bitumen		254	303	291	330	341
Coke		206	213	207	211	167
Others		400	389	426	360	329
Retail networks						
Austria		1,058	983	1,033	1,080	1,136
		726	575	566	558	548
Chemicals and Plastics						
Plant nutrient sales	mn t	0.95	0.94	0.94	1.10	1.06
Urea, melamine	mn t	0.34	0.32	0.30	0.35	0.32
Environmental Indicators²⁾						
		1996	1997	1998	1999	2000
Energy consumption	PJ	75	73	74	76	73
Groundwater consumption	mn cbm	26.2	25.6	22.5	22.6	20.9
Atmospheric emission						
SO ₂	t	6,813	5,833	5,762	5,613	5,671
NO _x	t	6,349	6,378	6,518	6,723	6,810
VOC	t	4,367	4,316	4,189	3,439	3,408
Dust	t	341	308	310	331	320
CO ₂	mn t	4.8	4.8	4.9	4.8	4.8
Waste water						
COD	t	1,997	2,302	2,053	1,931	1,313
Hydrocarbons	t	8	5	6	8	7
Waste³⁾						
Non hazardous production waste	t	11,684	11,482	11,055	12,425	13,399
Hazardous production waste	t	6,601	4,608	7,322	6,241	12,370
Waste oil	t	295	113	95	278	383
Safety figures						
Reportable accidents	per 1 mn hours worked	11.1	10.0	6.4	5.1	7.2
LWIF	per 1 mn hours worked	n. r	n. r	7.6	5.5	9.3

Notes:

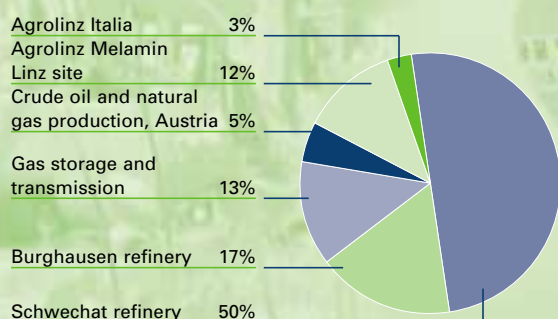
2) OMV Aktiengesellschaft and holdings, (>50% share (fully consolidated group). Data of PCD Polymere (1996, 1997) are not included.

3) Waste without E&P Austria due to another legal situation; will be included from 2001

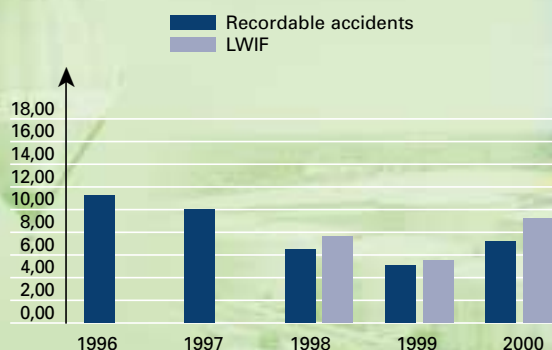
n. r = not recorded

26 CO₂ emissions

by sites

**27 Injury frequency rate**

per 1 mn hours worked



OMV Aktiengesellschaft

Schwechat refinery and Lobau tank farm

Address

Mannswörtherstraße 20
A-2320 Schwechat

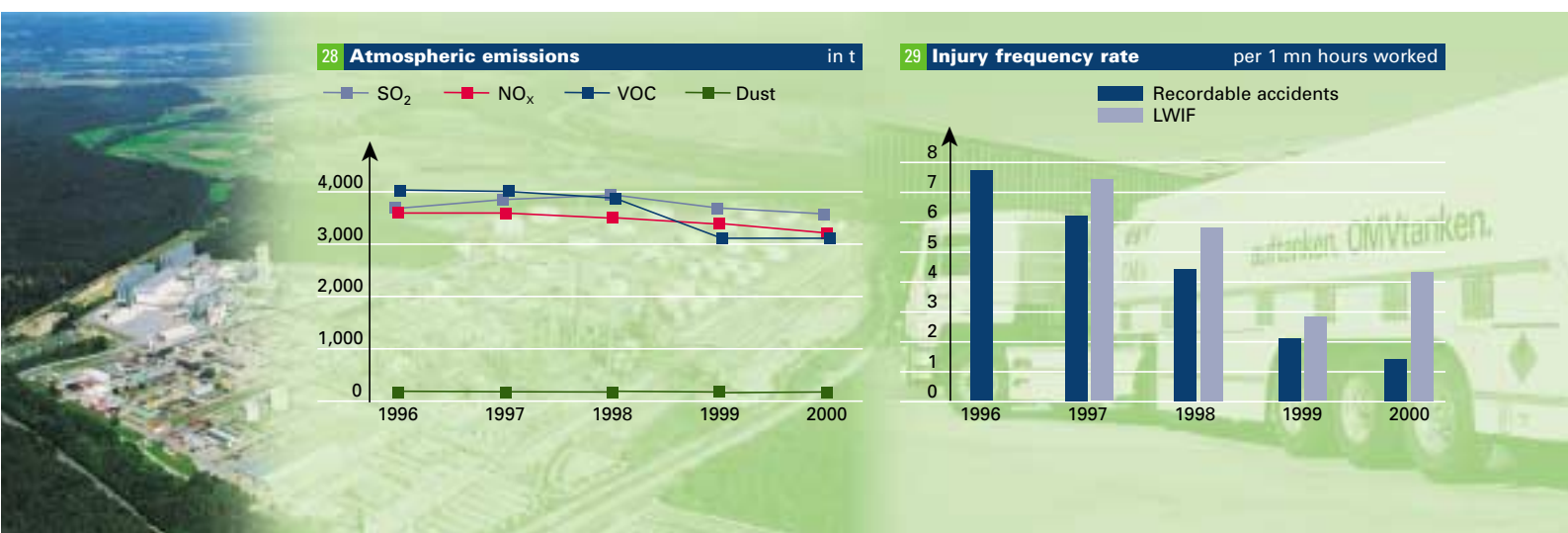
Contact person

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Main production plant	capacity mn t/a	Main utilities	capacity
Crude oil distillation plant	9.60	Water treatment (reverse osmosis, total desalination)	cbm/h 660
Vacuum distillation plant	3.67	Power stations (power and steam supply for all plants)	t/h 1,250
FCC plant and gas postprocessing plant	1.36	Circulatory cooling system (circulation)	cbm/h 55,000
Ethylene plant	0.35	Wastewater treatment plants	cbm/h 3,130
Isomerization	0.54		
Naphtha hydrotreater	0.96		
Platformer	0.94		
HDS units	2.26		

		1996	1997	1998	1999	2000
Employees		1,124	902	839	814	763
Main products						
Petrochemicals	1,000 t	603	616	636	594	481
Gasoline	1,000 t	2,305	2,417	2,180	2,123	1,842
Jet fuel	1,000 t	492	510	531	509	561
Diesel fuel	1,000 t	1,914	2,288	2,527	2,547	2,643
Extra light heating oil	1,000 t	1,026	1,179	1,016	934	881
Fuel oil	1,000 t	1,445	1,451	1,425	1,189	1,042
Bitumen	1,000 t	254	303	291	340	320
Environmental indicators						
Energy consumption	TJ	40,623	39,213	37,775	37,456	33,615
Groundwater consumption	mn cbm	10.0	10.0	9.5	11.5	11.1
Atmospheric emissions						
SO ₂	t	3,576	3,744	3,824	3,572	3,458
NO _x	t	3,479	3,471	3,387	3,274	3,093
VOC	t	3,910	3,900	3,750	2,997	2,991
Staub	t	115	112	111	120	108
CO ₂	mn t	2.79	2.73	2.65	2.48	2.39
Wastewater emissions						
COD	t	252	232	266	246	209
Hydrocarbons	t	6	4	5	7	6
Waste						
Non-hazardous production waste	t	6,280	5,477	3,681	6,664	5,391
Hazardous production waste	t	5,331	3,505	3,299	4,358	8,731
Waste oil	t	242	60	56	38	87
Safety figures						
Reportable accidents	per 1 mn hours worked	7.7	6.2	4.4	2.1	1.4
LWIF	per 1 mn hours worked	n. r	7.4	5.8	2.8	4.3

n. r = not recorded



OMV Germany

Burghausen refinery and the Feldkirchen and Steinhöring tank farms

Address

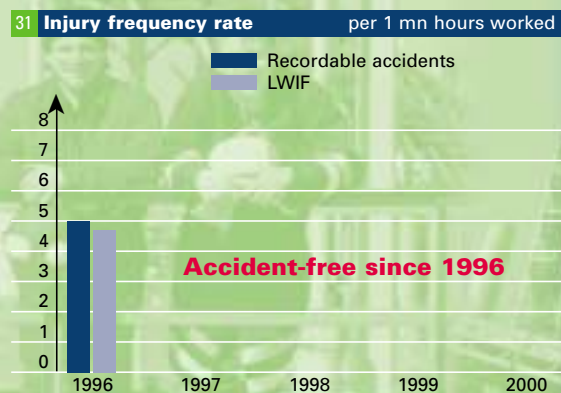
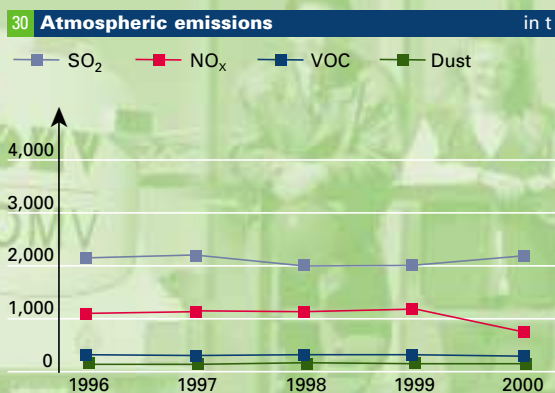
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D-84489 Burghausen

Contact person

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Main production plant	capacity mn	Hauptbetriebsmittelanlagen	capacity
crude oil distillation plant	3.40	Power station (power and steam supply for all plants) Steam	t/h 240
Ethylene plant	0.33	Circulatory cooling system	cbm/h 18,000
Aromatics unit	0.16	Wastewater treatment plant	cbm/h 400
Coking plant	1.60	Water treatment (total desalination)	-
Calciner	0.33		
HDS unit	0.96		
Claus unit	0.01		

		1996	1997	1998	1999	2000
Employees		633	637	650	556	484
Main products						
Extra light heating oil	1,000 t	1,083	1,153	1,147	1,035	988
Diesel fuel	1,000 t	337	258	315	431	364
Jet fuel	1,000 t	332	342	384	408	365
Petrochemicals	1,000 t	601	639	635	652	592
Coke	1,000 t	230	218	214	220	203
Environmental indicators						
Energy consumption	TJ	16,459	16,840	16,588	16,645	15,470
Groundwater consumption	mn cbm	4.2	4.2	4.5	4.3	3.7
Atmospheric emissions						
SO ₂	t	2,034	2,019	1,893	1,896	2,063
NO _x	t	982	1,022	1,011	1,071	923
VOC	t	400	380	400	400	370
Dust	t	93	77	78	81	74
CO ₂	mn t	0.82	0.85	0.84	0.86	0.80
Wastewater emissions						
COD	t	117	126	110	89	90
Hydrocarbons	t	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Waste						
Non-hazardous production waste	t	450	4,716	3,833	3,857	5,498
Hazardous production waste	t	732	866	3,832	1,365	688
Waste oil	t	0	0	0	0	0
Safety figures						
Reportable accidents	per 1 mn hours worked	5	0	0	0	0
LWIF	per 1 mn hours worked	4.7	0	0	0	0



OMV Aktiengesellschaft

Exploration and Production, Austria

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Main production plants		capacity	Main utilities		capacity
Producing wells crude oil and natural gas		1,035	20 Gas turbine-driven compressor units (installed power production and storage site)		MW 58.5
Live oil meter stations		18	Formation water flooding plants		mn cbm 10
Oil production plants		16			
Gas storage wells		166			
Crude oil tank farm		cbm 25,000			
Production line and formation water pumping line mains		km 2,500			
Sour gas desulphurization plants (MDEA gas treating unit, Claus plant)		2			
Typical raw gas throughput of sour gas treating plants		mn cbm/a 600			
Underground gas storage facilities		3			
Storage withdrawal rate		max cbm/h 1,155,000			
Typical storage turnover		bn cbm/a 1.7			
Gas storage capacity		max bn cbm 2.32			
Glycol dehydration units					

	1996	1997	1998	1999	2000
Employees	1,233	1,217	1,091	820	793

Main products

Crude oil and NGL	t	916,699	909,764	931,770	952,205	940,874
Natural gas	mn cbm (Vn)	723	945	1,017	1,098	1,105
LPG	t	20,638	16,637	33,067	39,689	32,816
Sulphur	t	n. r	n. r	9,991	9,438	9,542

Notes:

1) Due to differing statutory requirements, previous records relating to hazardous and non-hazardous wastes are not compatible with the other conventional waste management data and are therefore not stated here. An allocation in accordance with international statutory requirements relating to waste will be carried out from 2001.

n. r = not recorded

Environmental indicators

Energy consumption	TJ	1,439	1,834	1,851	1,942	1,924
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Atmospheric emissions

SO ₂	t	1,200	67	42	143	145
NO _x	t	167	204	205	219	213
CO ₂	mn t	0.153	0.226	0.248	0.282	0.258

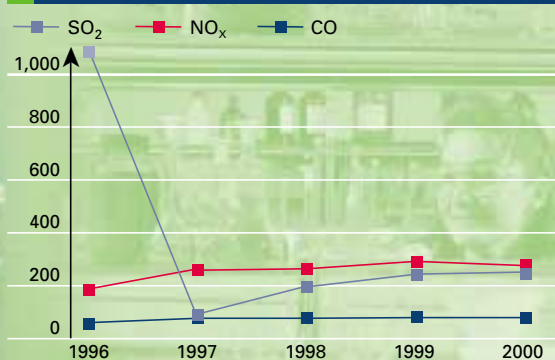
Waste¹⁾

Non-hazardous production waste	t					
Hazardous production waste	t					
Waste oil	t	n. r	n. r	n. r	n. r	6.85

Safety figures

Reportable accidents	per 1 mn hours worked	14	12	9.5	7.6	11.5
LWIF	per 1 mn hours worked	14.3	12.8	9.9	8.8	13.7

32 Atmospheric emissions in t



33 Injury frequency rate per 1 mn working hours



Agrolinz Melamin

Linz site

Adress

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Contact person

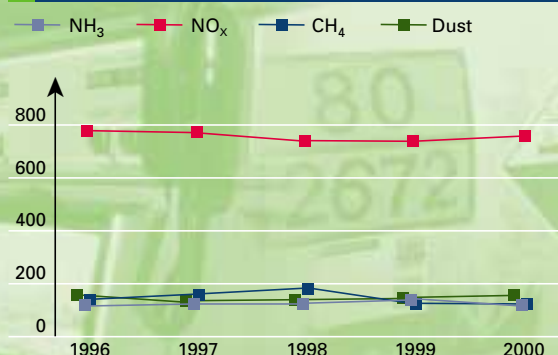
Dr. Werner Auer
Tel. ++43/732/6914-3253
E-mail: werner.auer@agrolinz.com

Main production plants	capacity in 1,000 t/a	Main utilities	capacity
Ammonia plants	500	Cooling water inlet and sandfilters	cbm/h 42,500
Nitric Acid plants	520	Deminerlization plant	cbm/h 400
Urea plant	400	Steam generator	t/h 50
Melamine plant	80	Air compressors	cbm/h 20,000
Complex fertilizer plant	350		
Calcium ammonium nitrate Plant	640		

		1996	1997	1998	1999	2000
Employees		1,172	1,130	1,081	878	830
Main products						
Plant nutrients	mn t	0.96	0.94	0.94	1.10	0.98
Urea and melamine	mn t	0.34	0.32	0.30	0.35	-
Environmental Indicators						
Energy consumption	TJ	7,888	7,397	7,412	8,021	7,912
Specific energy consumption	GJ/t	n. e.	8.91	8.59	8.54	8.38
Groundwater consumption	mn cbm	5.0	5.0	2.0	1.9	1.0
Atmospheric emission						
NH ₃	t	95	101	101	116	98
NO _x	t	754	749	718	716	735
CH ₄	t	117	136	159	101	100
Dust	t	133	113	115	125	133
CO ₂	mn t	0.556	0.557	0.612	0.564	0.579
Wastewater emissions						
COD	t	558	461	461	474	452
N-total	t	1,515	1,187	1,194	1,194	1,107
Waste						
Non-hazardous production waste	t	1,087	539	840	768	652
Hazardous production waste	t	109	152	95	34	76
Waste oil	t	46	42	29	20	49
Safety figures						
Reportable accidents	per 1 mn hours worked	n. r	14.9	9.2	5.5	9.8
LWIF	per 1 mn hours worked	14.5	14.9	9.2	6.2	11.5

n. r = not recorded

34 Atmospheric emissions in t



35 Injury frequency rate per 1 mn working hours



Auto Oil Programme

Auto Oil Programme I – EU joint project to define the impacts of vehicle technology and fuel quality on air quality (in European urban areas)

Auto Oil Programme II – EU joint

project to define and evaluate various technical measures in road transport to improve air quality (in European urban areas)

Benzene

A highly volatile, aromatic hydrocarbon; classified as a carcinogenic material.

BIOSTAB

EU Project to study the long-term stability effects in the mixture of biological fuels with diesel fuels.

Bottom loading

Tank loading or unloading process in which hydrocarbon vapours are recirculated.

Bubble limit

The permissible limit value for the complete site.

Carbon dioxide (CO₂)

The main man-made greenhouse gas; arises from all combustion processes involving fossil and biogenic energy sources.

Chemical oxygen demand (COD)

A unit of measurement used to quantify organic contaminants in waste water.

Compressed Natural Gas

Highly compressed natural gas used as fuel.

CONCAWE

The Brussels – based Oil Companies' International Study Group for Conservation of Clean Air and Water in Europe, founded in 1963.

Contaminated sites

Old landfills of wastes and sites of plants which represent considerable hazards for human health and the environment; entered in the contaminated site atlas.

ELHO

Extra-light heating oil

European Agency for Safety and Health at Work

European network of representatives of the EU Commission, governments, employees and employers, situated in Bilbao.

Greenhouse gases (GHG)

The Kyoto Protocol lists CO₂, CH₄, N₂O, HFC, PFC and SF₆ as greenhouse gases.

HAZOP – Hazard and Operability Study

Systematic analysis of the design of plants which could create hazards in operation.

HFO

Heavy fuel oil

IPCC Intergovernmental Panel on Climate Change

Intergovernmental committee on climate changes, founded in 1988 with the object of developing reaction strategies to expected climate changes.

ISO 14 000 ff

International series of standards for operational environmental management.

Kyoto Protocol

In December 1997 the signatory states at the Kyoto climate protection conference agreed to reduce their greenhouse gases by 5.2% by the years 2008–2012.

LHO

Light heating oil

Low-NO_x burners

Low-nitrogen burners.

LPG Liquefied Petroleum Gas

Liquid gas.

LWIF (Lost Workday Injury Frequency)

Number of industrial accidents from the first day of loss of working time, related to 1 million completed working hours.

MHO

Medium heating oil

Melamine

A basic material used to produce synthetic resins; used by the wood processing, automotive and plastics industries.

Methane (CH₄)

A greenhouse gas 21 times more potent than CO₂.

Nitrogen oxide (NO_x)

Gaseous combustion products of nitrogen which are the precondition for the formation of smog and ground-level ozone.

Ozone precursors

NO_x, VOCs and CO react with oxygen to create ozone when exposed to sunlight.

Responsible Care

The international chemical industry health, safety and environment programme, launched in 1984.

SCC Safety Certificate Contractors

Management system for safety, health and environmental protection

Seveso II Directive

EU directive aimed at the prevention of major accidents which involve dangerous substances.

Solomon Index – EII (Energy Intensity Index)

An index developed in 1983 by Solomon Associates to compare the energy consumption of refineries.

Sulphur dioxide (SO₂)

Arises from the combustion of fossil fuels containing sulphur; such as oil and coal; chiefly responsible for acid rain.

Units of measurement

M = Mega = 10⁶ = 1.000.000 million
G = Giga = 10⁹
= 1.000.000.000 milliard
T = Tera = 10¹²
= 1.000.000.000.000 billion
P = Peta = 10¹⁵
= 1.000.000.000.000.000 milliard

Vapour displacement

Extraction of gasoline vapour from the tanker's storage tank. This vapour is subsequently reclaimed as a fuel using an active carbon process.

Vapour recovery systems

These return the volatile hydrocarbons (VOC) that arise when the vehicle is being refuelled back to the storage tank.

VOC**(volatile organic compounds)**

Volatile aliphatic hydrocarbons (called NMVOCs if no methane is present); as ozone precursors, these can contribute to the formation of ground-level ozone.



Open for more information

OMV publishes the following reports
in German and English

Annual Report 2000

OMV Group in figures 2000

Annual Report OMV Aktiengesellschaft 2000

HSE Report 1999-2000

For further information see the

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