



2013

Sustainability report SOL Group

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SOL Spa

Registered office

Via Borgazzi, 27
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Share Capital

Euro 47,164,000.00 fully paid up.

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n° 04127270157
R.E.A. n° 991655
C.C.I.A.A. Monza e Brianza

Compiled by

SOL Group Industrial Risk Management Office
SOL Group Quality, Safety
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Comments and suggestions
are particularly welcome

May 2014



Our commitment

On the following pages we present, by now for the fifth consecutive year, the SOL Group Sustainability Report. This document is very important for all of us in SOL, because sustainable development for us is not a declaration of intent but a conscious choice that guides our decisions, our strategies and our day-to-day decisions.

The compilation and presentation of the report mean a chance to verify what has been done, the progress that has been made and future objectives, aiming for continual improvement.

The 2013 Report contains more data than earlier editions, both because of the continual enlargement of the perimeter of the countries where the Group operates and because we are aiming for increasingly transparent information for readers. To this end there are also new indicators which have been introduced to measure the quality, safety and environmental levels attained.

2013, despite widespread hopes of an improvement in the economic situation in Italy and Europe, where the SOL Group mainly operates, it has again been a year of recession or at least of stagnation. Despite this, the Group has grown and maintained good profitability, thanks also to its ability to innovate and the sizeable investments made in continuing its process of internationalisation and diversification.

In the technical gases sector, new investments, particularly in plant in Italy, Macedonia and Bulgaria, have extended the production capacity of the Group, while in the home care sector VIVISOL has established an important presence, after its entry into England and Turkey, also in Spain.

Also in 2013, interventions aimed at improving energy efficiency in the production and distribution of our products in the market continued. SOL asked for and received collaboration in this effort from its employees, customers and suppliers, for it is convinced that sustainable development is an objective to pursue together with all interested parties.

Thanks to these efforts, the SOL Group has been able to create development and employment, increasing the number of staff, both in Italy and abroad, by more than 100 units.

SOL continued in 2013 in its commitment to renewable source energy projects in south-east Europe. The two hydroelectric power stations in Murdhari, Albania, have been completed and start-up tests are underway. The initiative has received significant financial contributions, because of the sustainability of the project, from the Italian and Albanian Governments. In Macedonia construction has started on four power stations, and these will be completed in 2014 and 2015.

In the biotech sector, which SOL has entered only recently, the foundations have been laid for the new challenges waiting for us in a sector with great potential.

Finally, during the year, SOL adopted a new image and a payoff: "SOL Group, a breath of life", meaning that we intend to pursue, with our air-derived products, a mission of support for our patients in the health sector aimed at a better quality of life, and of attention to our industrial customers, offering solutions that can improve the sustainability of their production processes.


Aldo Fumagalli Romario
 Chairman, SOL Group


Marco Annoni
 Vice-chairman, SOL Group



Awareness in how we act

In presenting the Sustainability Report last year we underlined that teamwork is one of the main values that characterise our organisation and our modus operandi.

In 2013 the information and data collected and illustrated in the Report demonstrate a further element that is an essential part of our conduct: awareness in how we act.

In fact we note with satisfaction that SOL Group personnel are well aware that their day-to-day actions have effects on the environment, on society and on company results, not just immediately but above all in the medium and long term.

This is true for all activities, from design to production, technical, sales or administrative actions, whether in the more consolidated sectors of technical gases, medical gases and home care, or in the more recently developed sectors of biotechnologies and energy production from renewable sources.

Underlying this awareness is the communication, sharing and application of the Group's ethical principles and values, which have

become a heritage of all employees and collaborators, thanks also to the adoption of an integrated Management System and continual training.

The considerations accompanying the collection of data for the compilation of the Sustainability Report are also an important chance to reflect on the results achieved and the conduct that has allowed them to be achieved.

The 2013 Sustainability Report is, in essence, a snapshot of the work and the contribution of all our staff and collaborators, and we invite you to explore it to get a better understanding of where the SOL Group is going along the road to sustainability.

And so, thanks to all those who, by sharing our values and our principles, have adopted them and thus made it possible to achieve the results illustrated here. These results are not only excellent in numerical terms, but have above all the merit of being repeatable over time and of being, at the same time, the outcome and the demonstration of the quality of the work done.



Alessandro Castelli
Quality, Safety, Environment
and Regulatory Affairs Manager,
SOL Group



Roberto Mariotti
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Industrial Risk and Insurance
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1

The SOL Group



The SOL Group is made up of more than 50 operating Companies, with more than 2600 employees, active in 24 countries in the sectors of technical, pure and high purity gases, medical gases and medical devices, home care, biotechnology and energy production from renewable sources

1.1. Group structure

Turnover in the financial year 2013 was €596.3 million.

The parent company SOL Spa is quoted on the Milan Stock Exchange with a market capitalisation, at 31.12.2013, of €514.7 million.

The Group's production is spread over about 100 plants, divided into primary processing plants, which produce gases from raw materials (electrical energy, atmospheric air, natural gas, calcium carbide and ammonium nitrate), and secondary processing plants, which bottle, store and distribute gases in general (mostly coming from the primary processing plants) and produce high purity gases and high precision mixtures.

In 2013 the Group revamped its image, and now has a new logo and a new visual identity. The unified image of the SOL Group has been reinforced with the design of a new logo and the introduction of a payoff: "SOL Group, a breath of life". This sums up well our identity as an organisation that is constantly committed, with its air derived products and its services, to improving the quality of life of humanity on our planet: that of the patients we serve and care for every day in their homes and in hospitals, and that of our customer companies, which we support with our products and technologies in their search for sustainable development.

The logos of all Group Companies have been redesigned to make them more modern and legible, and clearly define the various sectors in which these companies operate.

1.2. New initiatives and acquisitions

2013 saw the formation of the SOL TK company, which will operate in Turkey in the technical and medical gas sector.

There were no other significant company operations, apart from the incorporation in Germany of the Boesch company by Vivisol D.

The most significant investments, particularly in terms of environmental impact, were:

- In Italy, the start of work to increase the production capacity of the Mantova plant, which will become operational in the first half of 2014.
- In Bulgaria, the start of construction of a new technical gases production plant at the Agropolychim fertiliser pole in Devnja on the Black Sea.
- In Macedonia, the enlargement of the primary production plant in Kavadarci.
- In Albania and Macedonia, work continued on the construction of hydroelectric energy plants.
- The modernisation and rationalisation of the secondary processing plants in Padova, Italy, Tilburg, Netherlands, Gersthofen, Germany, Saint Savin, France and Thessaloniki in Greece.





1.3. Sectors of activity

1.3.1. The technical gases sector



Data on the technical gases sector:

- 31 Companies
- 22 countries
- 1.330 employees
- more than 40,000 customers

Activities:

Production and marketing of industrial, medical, pure and high purity technical gases.

The design, construction and operation of on-site gas production plants, storage and distribution plants, apparatus and usage systems including, for example, apparatus for cryogenic applications, freezing tunnels, oxy-fuel burners, ozonisers, welding machines and apparatus.

The supply of services related to the use of the gases produced.

Gases produced and distributed:

Oxygen, Nitrogen, Argon, Hydrogen, Carbon dioxide, Acetylene, Nitrous oxide, Gas mixtures, High purity gases, Medical gases, Food grade gases and gaseous Helium.

Main gases marketed:

Liquid helium, Gases for electronics, Ammonia and Combustible gases for industrial use.

Our commitment to the environment and safety

SOL's concern for environmental and safety problems is not limited just to its own production activities, but for more than 30 years has also concentrated on developing technologies and services for customers.

We have thus perfected gas applications and plant solutions whose strong points include the safety of the user and the defence and protection of the environment.

On-site plant

The installation on customer premises of plant for producing gas in situ makes a significant contribution to environmental protection.

These "on-site plants" bring two important results:

- a reduction of atmospheric pollution, thanks to lower mileages, since they replace the traditional supply in bottles or tanks delivered by road
- a reduction of energy consumption, since the production process specialising in a single gas with specific characteristics consumes less energy than a traditional centralised plant.

The environmental impact of these reductions in terms of lower atmospheric emissions of CO₂ can be calculated using the "Life Cycle Assessment" method: in 2013 production in on-site plant instead of the same quantities produced by traditional plant reduced CO₂ emissions by 16,001 t.



FOOD & BEVERAGE

Industries served

- Agriculture
- Fish
- Red and white meat
- Fruit and vegetables
- Milk and derivatives
- Ready meals
- Bread and pastries
- Ice cream
- Beverages
- Wine and oil
- Catering

Technologies and solutions for:

- Carbonic fertilisation with CO₂: increase in production and in quality and look of the product
- Fumigation and pest control with CO₂ of biological agricultural products for which no chemical products, such as phosphine, can be used
- Fish and mussel farming with O₂: increase in production and quality of the finished product.
- Cooling, flash freezing, cryogenic freezing, IQF with Lin o LCO₂: improved quality of frozen product, taste characteristics maintained, better aesthetic aspect, reduced freezing times and space saving.
- Packaging in atmosphere modified with N₂ and CO₂: shelf life optimisation, improved aesthetic aspect, freshness maintained
- Transport at temperature controlled with Lin or dry ice: safeguarding of freezing chain to preserve quality of food and avoid spread of bacteria
- Gassing, pressing with nitrogen, water dosage: plastic bottle weight reduction.



METAL PRODUCTION

Industries served

- Carbon and stainless steel
- Aluminium
- Ferrous products and cast-iron
- Nonferrous products: zinc, lead, copper, magnesium
- Semifinished products and forges
- Mineral extraction
- Precious metal processing
- Glass and ceramics
- Cement and lime

Technologies and solutions for:

- Oxy combustion and hyper oxygenation with oxygen: reduction of exhaust gas volumes and methane used for combustion, helping safeguard the environment and at the same time increasing productivity
- Wall and fall burners, with conforming flame, low NO_x: plant designed to optimise emission reduction and limited environmental impact, adaptable to the various types of furnace present.
- Inertisation and degassing with argon, nitrogen and SF₆: maintenance and improvement of quality of metals produced, reduced waste. Substitutes such toxic chemical compounds as chlorine
- Controlled protective and reactive atmospheres with nitrogen, hydrogen, Solmix: production of high-quality metal products in line with design specifications.
- After burners with oxygen: complete treatment of emissions, limiting quantity and environmental impact



METAL FABRICATION

Industries served

- Thermal treatments
- Carbon and stainless steel processing
- Aluminium and nonferrous metal processing
- Automotive industry
- Aeronautical and railway construction
- Shipyards
- Construction sites
- Boilers
- Tools

Technologies and solutions for:

- Controlled protective and reactive atmospheres with nitrogen and hydrogen
- Endothermic and exothermic atmospheres with solmix controlled carbon potential
- Keying with Lin: products made not using heat but cold, limiting fuel consumption.
- Lin soldering of electronic cards: reduced waste and manual elimination of defective cards, increasing production quality
- Cutting and laser welding with nitrogen and oxygen: increased productivity and product quality
- Oxy cutting and oxyacetylene welding, Mig/Mag, Tig and plasma welding and welders.
- Gas distribution automation and plant: reduced manual operations help reduce risk of accidents
- Pressure & fugitive tests with helium and nitrogen: guarantees tightness of components treated, reducing risks of leakage of products, also toxic products, from plant where they are used (e.g. offshore oil wellhead valves).

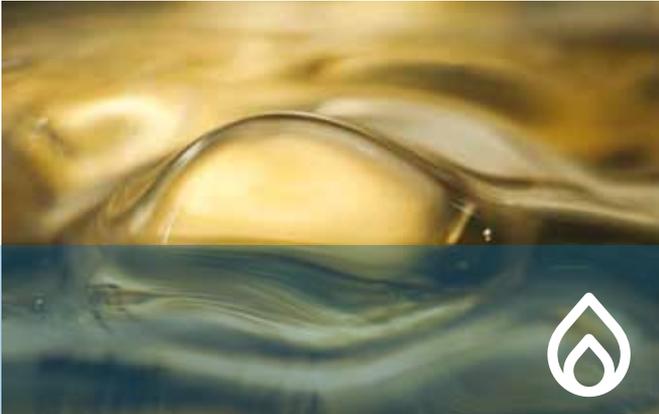
CHEMISTRY & PHARMA

Industries served

- Basic and inorganic chemistry
- Synthetic intermediates
- Polymers
- Fine chemistry
- Bulk pharmaceuticals
- Pharmaceutical specialities
- Cosmetics
- Herbalism
- Plastics and rubber

Technologies and solutions for:

- Inert and protective atmospheres with nitrogen: reduction of risk of accident from contact of products with oxygen, at the same time preserving their quality.
- Fluxing, pressurisation and stripping with nitrogen: plant cleaning with reduced use of polluting chemical additives.
- Grinding and micronisation with Lin and gaseous nitrogen: increased quality of ground product.
- Packaging in inert and sterile atmosphere of pharmaceutical products: preserving and guaranteeing product quality.
- VOC treatment and solvent recovery with Lin: reduced environmental emissions and at the same time recovery of the chemical products they contain
- Cryogenic cleaning with CO₂: replaces cleaning methods using water, solvents or sandblasting, thus limiting the environmental impact of residues.



OIL & GAS

Industries served

- Extraction
- Transport and pipelines
- Refining
- Raw materials and finished products stocking
- Off-shore
- Components and equipment

Technologies and solutions for:

- EOR processes with nitrogen and CO₂: increased extraction productivity avoiding the need for new wells
- Fluxing, pressurisation and stripping: plant cleaning with reduced use of polluting chemical additives.
- Controlled cooling with Lin: reduced plant maintenance times, faster cooling and less risk for operators.
- Inertisation and drying with nitrogen: plant maintained in controlled stand-by, limiting accident risks and permitting fast restart
- Cryogenic cooling with Lin: permits work on filled pipes without need for emptying.
- Claus processes with oxygen: improved and optimised recovery of sulphur from refinery flows and lower emissions.
- Control and regulation of technical and special gases, management and maintenance of emission control units: emission control units are kept efficient, reducing the risks of accidental emissions.



ENERGY & ENVIRONMENT

Industries served

- Multiutility
- Wastewater purification
- Purification
- Waste Management
- Special waste management
- Incineration
- Chemical, pharmaceutical, fabric and leather, food, paper, petrochemical and extraction industries.

Technologies and solutions for:

- Treatment of wastewater with O₂: better purifying and purifying capacity with less environmental impact and better control of treatment
- Treatment of wastewater with ozone: reduced colour, micro contamination, nitrates: treatment optimisation with less environmental impact
- AOP processes with ozone: on-site environmental clean-up, less removal of terrain and combustion treatments with higher environmental impact
- Wastewater deodorisation with oxygen: reduced environmental impact
- Disinfection with oxygen: watercourses receiving wastewater after treatment are protected from bacterial pollution without the use of chlorine compounds
- Surplus sludge reduction with oxygen: less surplus sludge to send to dump, reduced environmental impact
- pH control with CO₂: replaces mineral acids (sulphuric and hydrochloric) that pollute the water
- Re-carbonisation and re-mineralisation of drinking water with CO₂: drinking water can be made to meet legal requirements using a certified food additive
- Oxy combustion of refuse with oxygen: reduction of gaseous emissions and increased control of incinerator plant with widely varying refuse loads (tourist areas)
- After burners with oxygen: full treatment of emissions, limiting their quantity and environmental impact
- VOC treatments and solvent recovery: low environmental emissions and at the same time recovery of the chemical products they contain

1.3.2. The medical gases and medical devices sector



Data on the medical gases sector:

- countries in which companies in the Technical Gases Sector operate
- more than 500 customers
- 38 pharmaceutical plants, 20 in Italy and 18 elsewhere in Europe

Activities:

The production, distribution and sale of mono gases and gas mixtures classified as Active Pharmaceutical Ingredients, pharmaceuticals with MA and Medical Devices.

The design, manufacturing, management and maintenance of Medical Devices: centralised plant for distributing medical gases, for endocavitary aspiration and for the evacuation of anaesthetic gases; complementary materials and accessories for the use and administering of pharmaceuticals.

The design, manufacturing, management and maintenance of on-site plant for medical air Ph.Eu., of self-producers of very high purity gas for laboratories and of fixed and mobile devices for handling gas emergencies.

The design, production and management of processes for handling supplies, services, materials, including the sanitising and accounting of consumption, costs and inventories.

The design and management of integrated hospital services: Total Gas Management, Cryo-management, Cell-management, management of the distribution of pharmaceuticals and patient records in health structures, hospital environment monitoring, disinfecting of water, air, plant, surfaces and rooms.

The management and maintenance of electro-medical apparatus and spirometry machines.

The design and management of ECM accredited training services, both residential and distance training.

Gases produced and distributed:

Oxygen, Nitrous oxide, Synthetic and compressed air, Nitrogen, Carbon dioxide.

Gases and certified mixtures for respiratory and therapeutic use

Gases and certified mixtures for diagnostic and instrumental use

Special gases and mixtures



Our commitment to the environment and safety

We pursue our aim of guaranteeing the highest safety conditions for patients and for those who work in customer structures through a constant search for innovation in the products and services supplied.

Management services

The risks relating to the supply and handling of medical gas containers are kept under control thanks to services, custom designed for each customer, such as Total Gas Management or Disaster Recovery, which guarantees the safeguarding of biological material stored on customer premises in the case of catastrophic events or emergencies.

Training services

Training in the safe use of medical gases, their containers and accessories is fundamental for correct product handling and administration.

Training is provided through ECM courses, both residentially and at a distance, with theoretical and practical sessions and learning assessment. All professionals are encouraged to contribute their experience and express their opinion on

the effectiveness and appreciation of the events. These data are then analysed and used to identify areas for improvement to maintain an increasingly high level of satisfaction following the evolution of technologies and procedures in the health sector which today are increasingly rapid and stimulating.

Plant and accessories for gas usage

Plants for medical gas distribution are designed to meet the essential requirements of the European Directive on Medical Devices and the related technical regulations, with the main aim of safety: the right gas must arrive with the right quality and the right quantity to each patient that needs it.

All accessories needed for the use of gases are designed and manufactured to guarantee safe administration to the patient.

On-site plant

As with technical gases, in the medical gases sector too on-site plant are increasingly common thanks also to the possibility of reducing not only acoustic and atmospheric pollution but also energy consumption and the production of waste, at the same time improving product quality.

1.3.3. The home care sector



Data on the home care sector:

- 16 companies
- 11 countries
- 1,252 employees
- more than 250,000 customers
- 19 pharmaceutical plant, six in Italy and 13 elsewhere in Europe

Activities:

The supply of services, apparatus and products for home oxygen therapy with liquid or gaseous oxygen and concentrators

The supply of services and apparatus for home mechanical ventilation

Home treatment of the obstructive sleep apnoea syndrome (OSAS)

The supply of products and apparatus for home artificial feeding

The supply of integrated home care services

The supply of apparatus and services for home care of bedsores

Our commitment to the environment and safety

VIVISOL operates with awareness of the need to maintain and further develop a quality management policy aimed at continuously improving home care services and with an overall management vision of its activities.

In this way home solutions and services have been perfected with strong points including the safety of the user and the defence and protection of the environment. Principal among these are:

- a logistics system that optimises the routes of delivery vehicles, reducing atmospheric pollution thanks to lower mileage
- progressive substitution of delivery vehicles with the introduction of euro 4 and Euro 5 certified vehicles
- a system that optimises home visits by nursing and medical personnel and the routes of the vehicles they use
- an emergency telephone helpline for patients who have technical problems with the apparatus
- a technical assistance service with ready availability

1.3.4. The energy production from renewable sources sector



HYDROSOL



Data on the energy production sector:

- 3 companies
- Energetika doo, with 6 hydroelectric power stations operating;
- Hydroenergy Sh.p.k, with 2 reservoir fed hydroelectric power stations in start-up;
- SOL Hydropower d.o.o.e.i., with 4 hydroelectric power stations, three in start-up and one under construction
- 3 countries: Slovenia, Albania and Macedonia
- 12 employees

Activities:

Production of electrical energy in hydroelectric power stations

The exploration and identification, design, construction and management of hydroelectric power stations connected to the national high tension electricity distribution network with energy vectored for the Group's production establishments

Our commitment to the environment and safety

The production of technical gases is strongly dependent on electrical energy, mostly produced from such fossil fuels as gas, carbon and petrol which have a considerable negative impact on the environment.

Among the objectives the SOL Group has long had is to meet part of its energy needs by itself producing electrical energy from renewable

sources, so as to benefit the environment by reducing its dependence on fossil fuels. Various projects have been launched, some still under development, which have led over the years to the construction of a number of hydroelectric power stations that are already able to meet part of the Group's energy needs. The reduction in CO₂ atmospheric emissions thanks to the electrical energy generated in the Group's power stations is estimated at more than 35,000 t per year.

1.3.5. The biotechnologies sector



BIOTECHSOL



Data on the biotechnologies sector:

- two companies in Italy: BiotechSol e Diatheva
- 16 employees
- more than 300 customers
- 1 pharmaceutical plant

Activities:

The design, construction and management of bio banks, cell factories and cell and tissue processing and conservation centres

Biological sample transport and conservation services for third parties

Pre- and post natal diagnostic services

Production and sale of diagnostic systems and services

GMP production of monoclonal antibodies and recombinant proteins

Scientific, pre-clinical and clinical research on new biological pharmaceuticals

Our commitment to the environment and safety

The service of designing and creating structures for the minimal and extensive manipulation of cells and tissues is aimed at all public and private structures engaged in scientific research and the manipulation and conservation of cells and tissues for transplants.

The service includes the design of Cell Factory laboratories and conservation centres for biological samples to the highest technological standards.

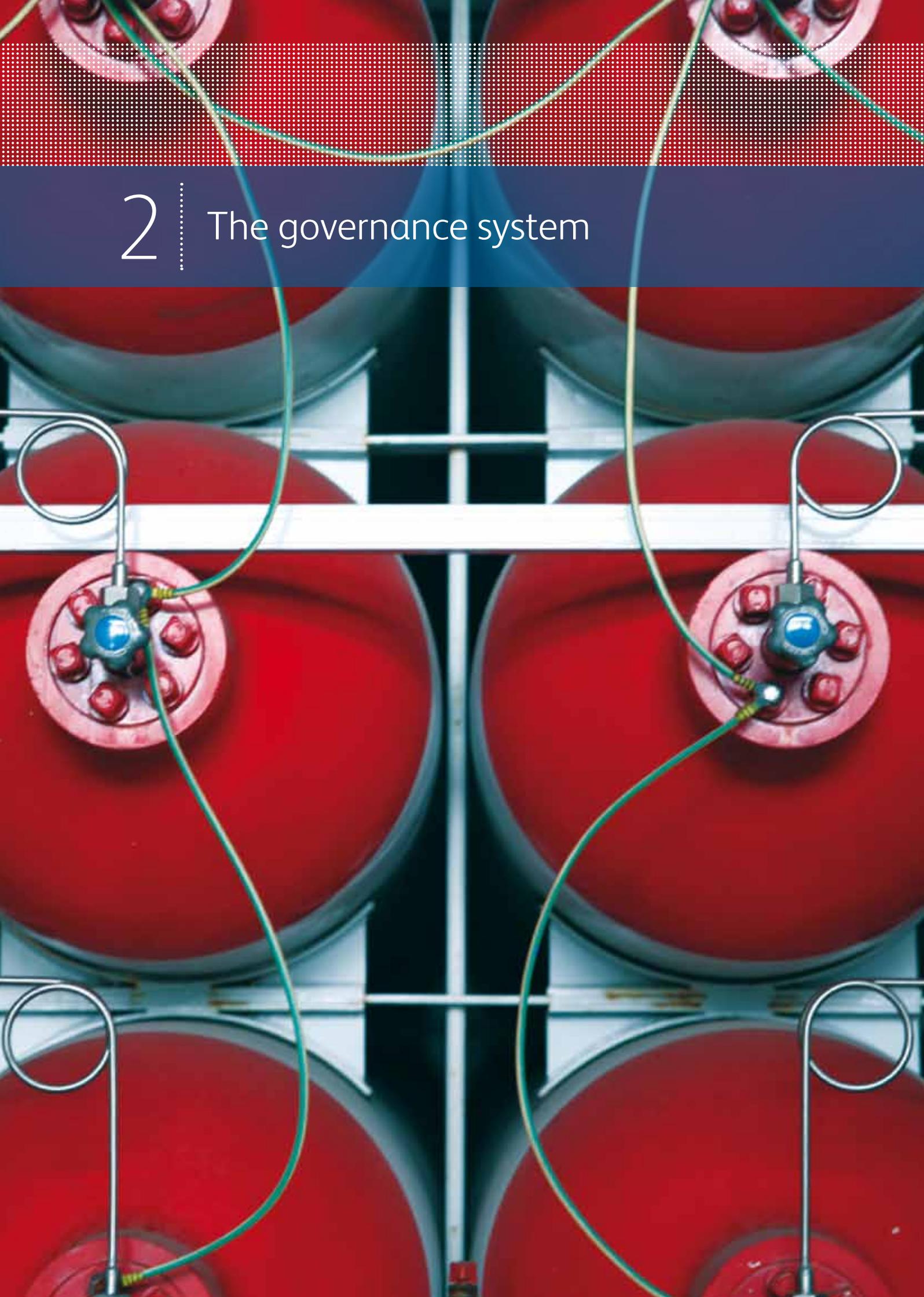
The disaster recovery service for third parties guarantees to the customer rapid restoration of security conditions for samples threatened by catastrophic events, also by emergency transport to safe sites.

The pre- and post natal diagnostic screening services are important for ensuring correct

development of the newborn baby since they permit early diagnosis of numerous and insidious diseases which can be cured if diagnosed in time. The bioshipping service provides transport of biological samples between health structures in conditions of total security and traceability, with continuous control of parameters.

Through its subsidiary Diatheva the SOL Group began developing, producing and selling diagnostic systems for clinical, diagnostic and analytical application.

Diatheva diagnostic systems are innovative because they permit identification and quantification using DNA amplification techniques of food pathogens and legionella in water. The systems reduce the waiting time for analytical results from 5-6 days to a few hours and are aimed principally at sectors where fast analytical results are of fundamental importance for the safety of people and the environment.

The image shows a 2x2 grid of red circular components, likely part of a scientific or industrial system. Each component has a blue central connector and several red side connectors. Green wires are connected to these components and loop around them. The background is a dark blue gradient with a white grid pattern.

2

The governance system



The SOL Group sustainable development model aims to create economic growth while minimising the impact of its activities on the environment and safeguarding the health and safety of its employees, ensuring their professional development.

All this is done with the awareness that the expectations of shareholders must be balanced with those of all parties who interface with the company, since they have legitimate interests.

2.1. Governance and sustainability

The governance model adopted to guarantee the attainment of the sustainability objectives is based on the corporate governance system, that of internal control and on the integrated quality, safety and environment management system.

This latter system manages development plans in all company environments, aiming for continuous improvement and at the same time guaranteeing that in company operations potentially at risk, preventive action is taken not only against known risks but also against remote possibilities, in a precautionary approach.

2.1.1. The Corporate governance system

The parent company SOL Spa has adopted a model of corporate governance that it feels is substantially adequate for its structure and characteristics (in particular, its size and market capitalisation) and can continue to guarantee, at this time, the transparency required by market practice and a balanced and effective system of controls.

The organs making up the governance structure of SOL Spa are:

- the shareholders' assembly
- the Board of Directors
- the Board of Statutory Auditors
- the Auditing Company.

For further information, see the section "Investor relations" on www.solworld.com.

2.1.2. The internal control system

The Board of Directors of the parent company SOL Spa has created the internal control function, with the job of ensuring that internal procedures, both operational and administrative, are effectively respected. These procedures were laid down to ensure clean and efficient management and to identify, prevent and handle risks of a financial and operational nature and attempts to defraud the company.

Those responsible for the internal control function do not answer in hierarchical terms to any operational area managers but directly to the Board of Directors.

Both SOL Spa and Vivisol Srl have also instituted a “Vigilance Body”, with suitable means and the necessary autonomy, which verifies that the organisation, management and control model under D.Lgs. 231/2001 is respected.

The internal control system is integrated by the Code of Ethics and the regulations and procedures in the integrated system of quality, safety and environmental management.

The Code of Ethics

The Code of Ethics defines the values on which the activity of the SOL Group is founded and with which Group employees and collaborators comply.

The Board of Directors of SOL Spa confirmed in a meeting on February 19, 2009 the validity of the Group Code of Ethics, which came into force on January 1, 2006 and was progressively adopted by all Group companies.

The document, in particular:

- expresses the values on which SOL Group activity is based: correct and loyal behaviour, the circulation of information, a willingness to listen, a readiness to understand that the problems of those we have to deal with are our problems and an awareness that the economic process must be continually coordinated with a system of values
- highlights the principles of behaviour to be followed by all employees and collaborators
- highlights the principles of behaviour the SOL Group follows in managing business activities, both internally and externally
- identifies the stakeholders of the Group and describes the approach to each of them
- expresses the principles that inspired the “personnel policies” and the activities for the “safeguard of safety, health and the environment”
- expresses the commitment to a prudent and responsible use of resources and information
- lays down the sanctions for failure to respect the Code.





The model of organisation, management and control under D.Lgs 231/01

SOL Spa and Vivisol Srl have each adopted their own Model for organisation, management and control as laid down by Legislative Decree 8/06/2001 n. 231.

The first versions of the two Models date back to 2006 and have been subsequently updated to take account of the experience built up in management, the introduction of new offences and the related jurisprudence.

During 2013 the SOL Spa Model was updated following the introduction, among the offences laid down by D.Lgs. 231, of other criminal offences laid down by certain European Community Directives on environmental crimes (n. 2008/99/CE and n. 2009/123/CE) and the extension to companies, with article 25-undicies of D.Lgs 231, of the administrative responsibility for certain environmental crimes.

The updating of the Model was approved by the Board of Directors on March 29, 2013 (that of Vivisol Srl had been approved in 2012 by the Board of Directors on December 13). Both the Code of Ethics and the Model are distributed to all employees and collaborators of the companies concerned, and also published on www.solworld.com.

Every employee is encouraged to report to his superior possible violations of the Code of Ethics. In particular for SOL Spa and Vivisol Srl a specific email address has been created for reports to the Vigilance Body.

2.1.3. The Management systems

The SOL Group has devised and adopted an integrated Quality, Safety and Environmental (SHEQ) Management System, which guarantees coverage of all its activities, eliminating pointless duplication and emphasising synergies.

Application of the Management System is aimed at improving the quality, efficiency and effectiveness of the various company processes, thus continuously reducing impacts on the health of employees, safety conditions in the workplace and the external environment.

The organisational structure

The *governance* of the Management systems is entrusted to the "Quality, Safety and Environment Management System Steering Committee" (CGQS) made up of the executive directors, general managers and central directors. This has the task of re-examining the Management system to ensure its efficacy and adequacy over time.

The CGQS:

- examines the progress of the SHEQ Management System;
- evaluates and define strategic interventions;
- verifies and, when necessary, updates the quality, safety and environmental management policies;
- deliberates objectives and activity programmes for quality, safety and environmental management that appear necessary after Committee discussions.

In operational terms, the Management systems are under the responsibility of Central Quality, Safety and Environment Management (DIQS), which reports annually to the CGQS. Progress and any updates are presented by DIQS to top management at quarterly report meetings and the investment summit.

Matters relating to organisation, labour and industrial relations are handled by Central Personnel and Legal Affairs Management, which presents the following data on personal management annually to the managing directors and general managers:

- the main indicators relating to human resources and their cost
- data on turnover, absenteeism, over time, hours worked, holidays
- the types of contract used
- the state of industrial relations with union representatives and any disagreements
- the principal training initiatives and investments for improving human resources management.

Policies

The basis of the Management system is the Policies.

The Policies are documents underwritten by the President and General Managers of the Group that outline the principles behind the operations of Group companies and define the objectives that top management intends to pursue in the various sectors.

SOL Group companies quality management Policy: this document from the integrated quality, safety and environment management system was published for the first time in 1993 and revised and updated in March 2013.

It is made available to the entire Group through publication on the company intranet. The Policy expresses the concept that SOL Group companies carry out their activities aware of the need to maintain and further develop a quality management policy oriented towards continuous improvement, in an overall vision of their activities, in the conviction that quality is a value that everybody creates together, day by day, through dialogue, participation, agreement and involvement.

SOL Group companies safety and environment Policy: this document from the integrated quality, safety and environment management system was published for the first time in 1993 and revised and updated in June 2013.

The commitments and fundamental principles expressed in the Policy are:

- respect for health, safety and environmental rules, laws and regulations
- the carrying out of activities with the aim of preventing all accidents and injuries
- a review of performance aiming for continual improvement
- the identification, elimination or control of potential risk situations connected with activities
- continual improvement in personnel training at all levels, technical updating of plant and the sharing of best practices with partners and in category associations.

Because, as the “Policy” states:

- safety and respect for the environment mean consciousness and awareness
- safety and respect for the environment mean teamwork
- safety and respect for the environment mean a sense of responsibility
- safety and respect for the environment mean professionalism.



The safety and environment policy document is published on the Group website and is distributed internally, at all levels, and to suppliers.

It is periodically revised to ensure that any needs to update objectives are recognised and integrated in the document.

Units to which the “Seveso Directive” applies or which are certified BS OHSAS 18001 or under the ISO 14001 standard also issue their own documents of environmental and safety policy which include the principles of Group policy and integrate them with the specific objectives of the site.

Responsible Care

SOL Spa was, in 1995, one of the first companies in Italy to subscribe to Responsible Care, the voluntary programme of the world chemical industry supported, in Italy, by Federchimica, in which it plays an active part, with its own representative on the managing Committee.



As part of this programme, several environmental and workplace safety performance indicators are collected each year, and are also used in this report.

The Charter of principles for environmental sustainability

SOL has adopted the “Charter of principles for environmental sustainability” produced by Confindustria and proposed at the beginning of 2012 to member companies.

SOL played a leading part in the drafting of the Charter of principles and of the relative Operational guidelines, with company directors participating in the working group set up by Confindustria.



Certifications

ISO 9001: starting from the certification of the first Units in 1994, the Group has subsequently extended the perimeter and also in 2013 new Units were added. The certifications cover 89 (79 and 2012) Units in the various European countries, more than 75 % of the total.

BS OHSAS 18001: certification becomes even more important as a guarantee for top management with the coming into force in Italy of Legislative Decree 81/2008, which lays down the adoption of a Management system in line with Regulation OHSAS 18001, as a necessary condition for exemption from application of the sanctions laid down by Decree 231/01, SOL Spa and Vivisol Srl obtained certification of the Safety management system for all their Units, as laid down by Regulation OHSAS 18001.

Certification was completed in July 2010 for SOL Spa. and in February 2013 for Vivisol Srl Outside Italy, in addition to the SPG Jesenice plant, in 2013 certification was obtained for the three plants of Vivisol Iberica and the Romanian subsidiary GTH.

ISO 14001 and EMAS: considering the importance attached to respecting environmental issues, though the Group's production activities have a quite limited direct impact on the environment, the correct adoption of the Group Management System was verified with certification of some particularly significant Units.

14 Units were certified (12 in 2012).

The new Units certified are those in Ravenna and Ancona, in Italy.

Two Italian Units have also adhered to the EMAS regulation.

Responsible care: the implementation of the "Responsible care" scheme in SOL Spa was successfully submitted, in 2011, to an "Audit of the verification scheme by Federchimica".

ISO 50001: the Frankfurt plant of SOL Spa Branch Deutschland is certified ISO 50001, the international standard whose adoption helps organisations to improve their energy performance, increasing efficiency and reducing climatic and environmental impact.

ISO 27001: the ISO 27001 standard defines the requirements for creating and running an Information security management system (logical, physical and organisational security), with the aim of protecting data and information from threats of all kinds, ensuring its integrity, confidentiality and availability.

Certification under this standard was obtained in 2012 for the headquarters of SOL Spa, Vivisol Srl and Biotechsol Srl, in the two distinct areas of management and monitoring of centrally distributed IT services and the development of applications to support business processes.

The table below shows the situation at December 31, 2013 of the certifications obtained by the SOL Group, subdivided by country and company.



Company	Country	ISO 9001	OHSAS 18001	ISO 14001	EMAS	ISO 50001	ISO 13485	ISO 27001	FSSC 22000
Technical gases sector									
SOL Spa	Italy	23	29	6	2	-	2	1	2
ICOA Srl	Italy	1	-	1	-	-	-	-	-
SOL Welding	Italy	1							
SOL Spa Belgium	Belgium	1	-	1	-	-	-		-
SOL Spa Deutschland	Germany	1				1			1
BTG BVBA	Belgium	1							
NTG BV	Netherlands	2							2
TGS AD	Republic of Macedonia	3	-	-		-			3
SOL SEE doo	Republic of Macedonia	2							2
SOL TG GmbH	Austria	1	-	-			1		
UTP doo	Croatia	2							
Kisikana	Croatia	3							
SOL France SA	France	1					1		
SPG doo	Slovenia	1	1	1					
TPJ	Slovenia	1							
SOL Hellas	Greece	2					1		3
IMG	Serbia	1							
GTS	Albania	1							
TGP	Bosnia-Herzegovina	1		1					1
TMG	Germany	2							2
GTH	Romania	1	1						
SOL Bulgaria	Bulgaria								1
Home care sector									
Visisol Srl	Italy	20	20	1			1	1	
Visisol Napoli Srl	Italy	1							
Visisol Silarus Srl	Italy	1							
Visisol Calabria Srl	Italy	1							
Visisol Deutschland GmbH	Germany	5					3		
Visisol Nederland	Netherlands	1							
Visisol Austria	Austria	1							
Visisol Hellas	Greece	2							
Dolby Visisol	United Kingdom	1						1	
Visisol Iberica	Spain	3	3	3					
Biotechnologies sector									
Biotechsol Srl	Italy	1					1		

2.2. The dialogue with stakeholders

The SOL Group is aware that no company organisation should conduct its activity without taking into due account the indications and expectations of all its stakeholders.

It is the stakeholders who guide our behaviour and drive us to continual improvement: for this reason we keep channels of communication constantly open with all those who can influence our decisions and actions and whose actions and decisions can be influenced by us.

We have analysed, on the basis of potential interest and reciprocal priorities, all categories of potential stakeholders, selecting the ones below. Relations with them will be described in the sections of this report indicated in the table.

Stakeholder	Section of Report
Customers	Social sustainability
Employees	Social sustainability
Authorities	Social sustainability
Associations	Social sustainability
Shareholders	Economic sustainability
Suppliers	Economic sustainability
Community	Social sustainability



Charter of Environmental Sustainability Principles

Companies are called to operate in an increasingly globalised market. As they grow, they are faced with the internationalisation of the economy, which they strongly support.

In their path towards development and economic growth, companies pursue a strategy for generating wealth, while ensuring the combination of competitiveness, environmental sustainability and social responsibility, as crucial criteria for success and core elements of a genuine enterprise culture.

Companies are aware that the protection of the natural and social environment is a primary community interest. Therefore, their aim is to achieve development goals while improving their environmental performance.

Environmental sustainability is one of the pillars of development.

It should be pursued through a synergy between the industrial system, the institutions and the social partners, with the aim to promote a shared pro-active and responsible commitment, which will drive a virtuous cycle of "mutual emulation".

In this effort, companies hope to be increasingly supported by a smooth and consistent regulatory framework which will be clear and enforceable both at national and international level, to respond quickly and effectively to emerging challenges and opportunities. For this purpose, promoting rewarding instruments for voluntary initiatives is useful.

In line with the above principles, Confindustria has decided to adopt a Charter of Environmental Sustainability Principles. The Charter is meant as a signpost to direct member companies and has taken stock of their differences in size and in the activities they conduct. The Charter sets out shared principles and indicates the actions needed for a uniform and gradual progress towards greater environmental sustainability by outlining realistic and achievable goals for Italian companies.

Therefore, member companies and organizations that voluntarily adhere to the Charter commit themselves to integrate these principles and commitments in their activity and their growth paths.

10 "Principles" for 10 "Commitments"

1. Achievement of short, medium and long term environmental sustainability objectives

Set environmental protection as an integral part of company activity and growth path.

2. Adoption of a precautionary approach

Assess the impact of activities, products and services to manage the environmental aspects according to a preventive approach and promote the use of best available technologies.

3. Efficient use of natural resources

Promote the efficient use of natural resources, with particular attention to the rational management of water and energy resources.

4. Control and Reduction of environmental impacts

Control and, where possible, reduce emissions into air, water and soil; achieve further reductions of waste production and more efficient waste management by privileging recovery and reuse against disposal; take steps to limit the effects of industrial activities on climate change; promote the protection of biodiversity and ecosystems.

5. The central role of innovative technologies

Invest in research, development and innovation to develop processes, products and services which have increasingly reduced environmental impacts.

6. Responsible product management

Promote responsible management of products or services throughout the entire life cycle to improve performance and reduce environmental impact, including information to customers on product "end-life" management.

7. Responsible management of the supply chain

Promote the preservation of the environment in the management of the supply chain by involving suppliers, customers and stakeholders as primary actors in their own sustainability policy.

8. Awareness and training

Promote activities of information, awareness and training to involve the company and its organisation in implementing their own environmental policy.

9. Transparency in relations with stakeholders

Foster relationships with stakeholders based on transparency to promote a shared approach in environmental policies.

10. Consistency with international activities

Act consistently with the principles endorsed in this Charter in all the Countries where the company carries out its activities.



General Manager



Chairman



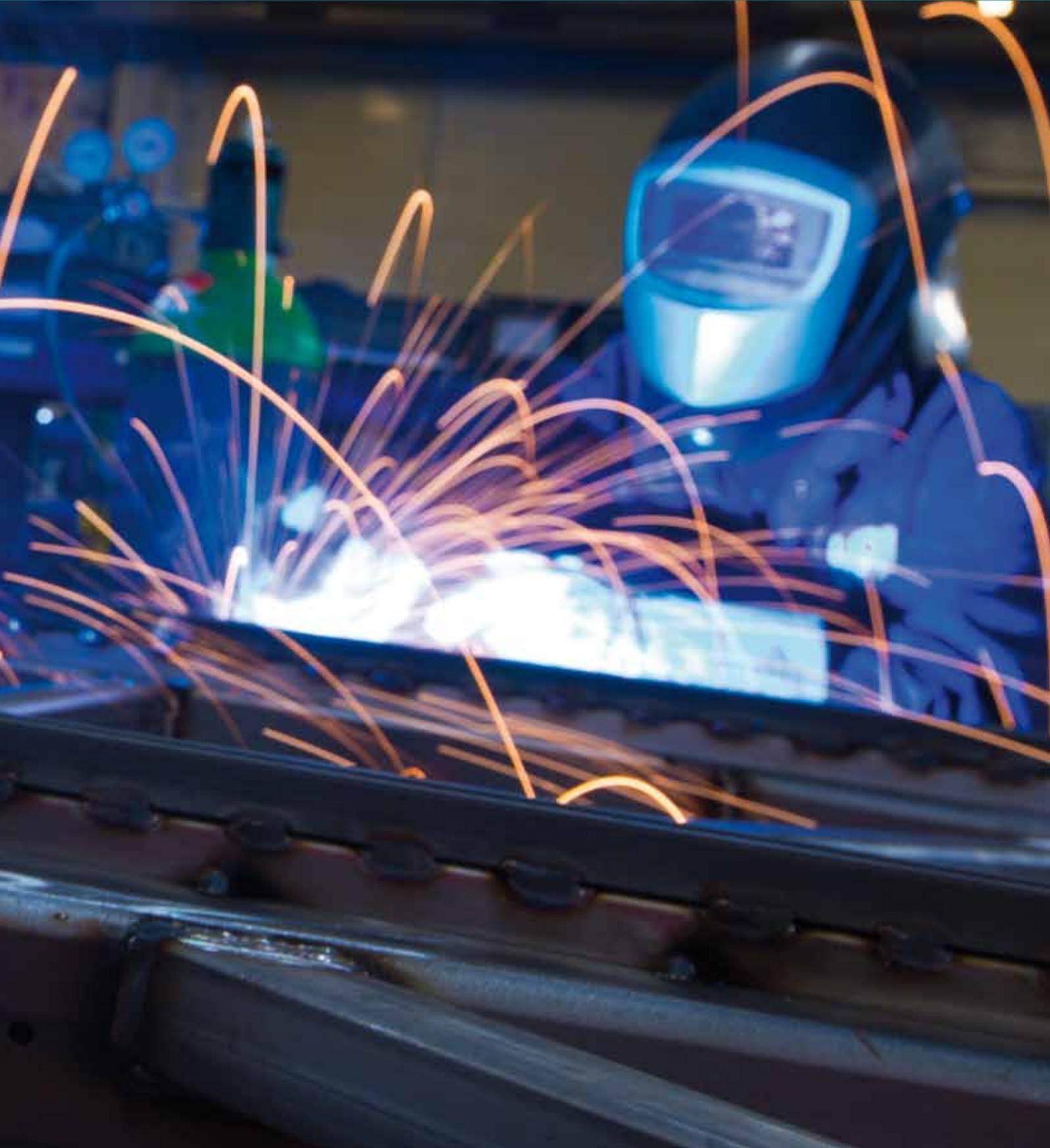
HSE Manager



General Manager

3

Economic sustainability



3.1. Financial data

Net sales in 2013 grew to

596.3 million euro

↑ + 2.3 %
on 2012

Net sales in 2013 grew to €596.3 million (2.3 % up on 2012).

In more detail, turnover in the technical, special and medical gases sector (€342.7 million), despite a generalised and significant drop in production in almost all European countries, is only slightly down (minus 0.6 %) on 2012.

The drop in production and sales concerns gases for industrial use, above all those for the steel, engineering, glass and petrochemical industries, while sales are holding up in the food and health industries, despite widespread policies for containing health expenditure that has had an effect on price dynamics.

This phenomenon has also had an impact on the home care sector, where growth, especially in Italy, has been lower than that of previous years. Growth was however 6.1 %, with a turnover of €281.2 million, created above all in foreign countries, thanks to a continual commitment to developing new products and services alongside and integrating oxygen therapy activities.

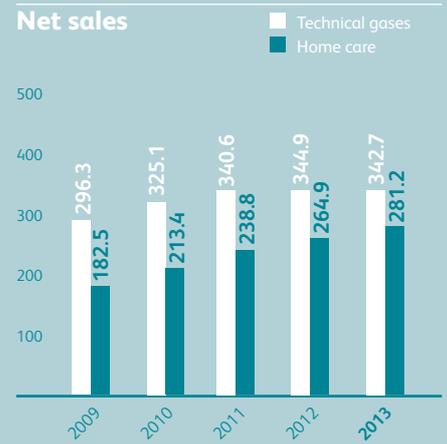
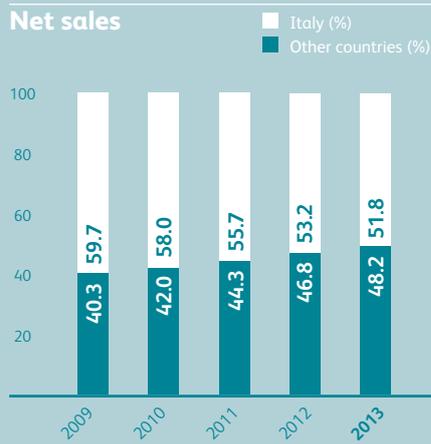
Cash flow was €92.6 million (15.5 % of sales), down €5.9 million on 2012.

Cost accounted investments totalled €92.0 million (€85.4 million in 2012).

For further information on Group Management performance, see the consolidated balance sheet published on www.solworld.com.

Revenue
million Euro

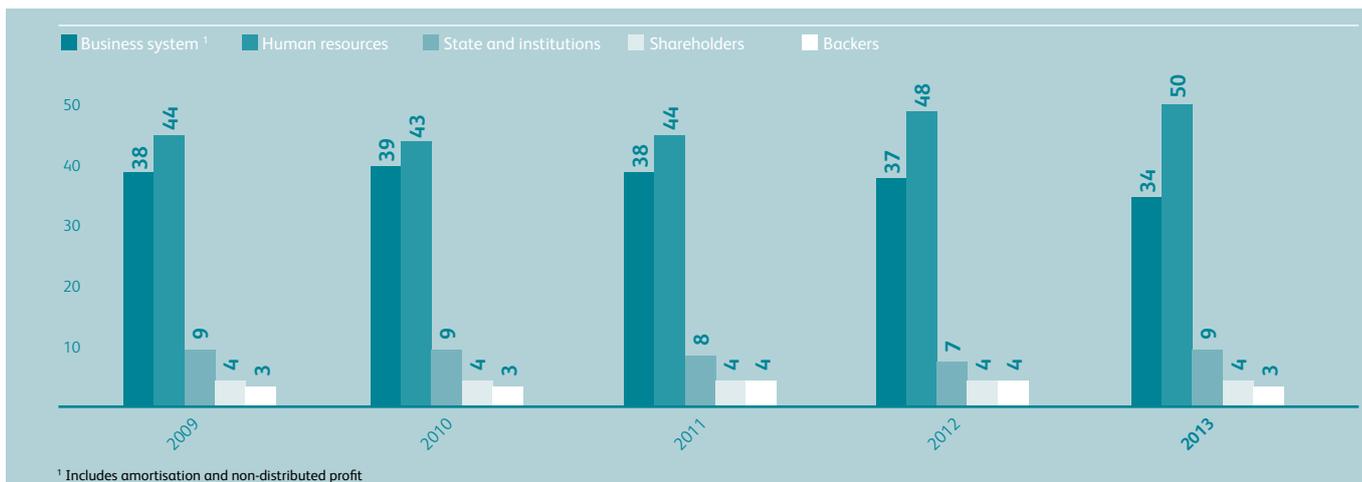




	2013	2012	2011	2010	2009
Net sales	596.3	583.0	555.7	518.9	462.6
EBITDA	131.8	132.2	130.4	123.6	109.7
EBIT	53.5	56.5	59.6	59.6	49.9
Net profit	21.6	29.0	31.1	31.9	25.1
Cash-flow	92.6	98.5	97.0	92.6	81.7
Investments	92.0	85.4	84.7	62.1	63.4
Employees	2,610	2,506	2,268	2,115	1,944
Number of countries	24	23	21	21	17

3.2. The distribution of added value

The distribution of added value allows the relationships between the SOL Group and the main stakeholders to be expressed in monetary terms.



¹ Includes amortisation and non-distributed profit

3.3. The shareholders

The strategic success of a company is pursued also by maximising value for shareholders

Code of ethics, article 2 – Conduct of business activity management

The principal means of communication with shareholders is the Balance Sheet, published in the “Financial info” section of the company website www.solworld.com. For this reason, as well as fulfilling legal requirements, it has been expanded, especially in the sections “Additional notes” and “Management report”, with information giving greater detail on the activities carried out.

Communication with shareholders and investors also includes:

- the periodic publication of press releases on the company website and their transmission to institutional investors
- participation in conferences promoted by financial institutions
- meetings and conference calls with investors and analysts
- roadshows.

SOL’s commitment and the results it has achieved in Sustainability have led to Sol Spa being included in the Kempen “Socially Responsible Investment” Index (SRI) since 2005. Being part of the SRI universe means that the company has been recognised as going beyond the mere application of legal requirements in the way it relates with the communities in which it operates and in its commitment to its collaborators and the environment.

3.4. Suppliers

Relations with suppliers are handled with impartiality, correctness and openness to competition.

Code of ethics, article 2 – Conduct of business activity management

The SOL Group implements a supply policy that guarantees to all potential suppliers equal opportunity to propose their products and services and that relationships with them are managed with the criteria of impartiality, correctness and openness to competition.

In the selection of partners for the supply of goods and services that are critical for safety, quality and the environment, SOL uses a qualifying process that verifies the possession of requisites demanded by company procedures.

Possession of these requisites is verified by objective methods such as the compilation of questionnaires and, where it is felt necessary, the carrying out of audits at supplier headquarters. Suppliers are required to acquaint themselves with the Group Code of Ethics and, in Italy, with the Organisation, management and control Model under D.Lgs 231/01, and with the safety and environment Policies, and must adopt their content in carrying out their activities.

The responsible management of the Group means both constant attention to cost optimisation, including efficiency in purchasing, and the safeguarding of local interests and the maintaining of equitable and correct relationships with suppliers, aimed at creating value in the long term. Concerning the parameter of supplier provenance, the SOL Group favours local suppliers, which for the Group’s Italian companies, represent 90% of the overall value of the purchase of goods and services (a value equal to that of 2012).

Similar data are not available at this time for other countries, but it can be reasonably supposed that local suppliers represent similar percentage values.



4

Environmental sustainability



In tackling environmental issues, the SOL Group adheres to the principles expressed in the Code of Ethics and the commitments made in the “Safety and Environmental Policy of SOL Group companies”.

4.1. Production activities, their environmental impact and the raw materials used

The process of materiality analysis carried out shows that, given the characteristics of SOL production activities, emissions into the atmosphere and water do not constitute a critical factor and, in any case, shows significant values only in primary process plants.

On the other hand, consumption of electrical energy is significant in the primary process Units, as is fuel consumption by vehicles used for gas deliveries.

The environmental indicators presented in this section thus relate to:

- Air separation plant
- Hydrogen producing plant
- Acetylene producing plant
- Nitrous oxide producing plant
- Plant for purifying and liquefying carbon dioxide

The environmental parameters are shown separately for Italy and for the other countries where the Group is present, since production activities in Italy represent more than 50% of the total.

The table shows the most significant information on plant whose environmental indicators are taken into consideration in the Report.

AIA ⁽¹⁾

The plant has Integrated Environmental Authorisation as it falls in the field of application of the IPPC

Certification ⁽²⁾

The plant is certified under one or more of the following standards: ISO 9001, ISO 14001, OHSAS 18001 or EMAS Registration.

Seveso Directive ⁽³⁾

The plant falls in the field of application of Directive 96/82/CE (“Seveso Directive”)

Company	Country	Unit	Plant type	AIA ⁽¹⁾	ISO 14001 ⁽²⁾	EMAS ⁽²⁾	OHSAS 18001 ⁽²⁾	Seveso Directive ⁽³⁾
SOL Spa	Italy	Mantova	Air separation (ASU)					X
		Verona	Air separation (ASU)					X
		Cuneo	Air separation (ASU)					X
		Piombino	Air separation (ASU)					X
		Salerno	Air separation (ASU)					X
		Ravenna	Hydrogen production	X				
		Cremona	Nitrous oxide production	X				X
		Ancona	Acetylene production	X				X
		Caserta	Nitrous oxide production	X				X
		Pisa	Cylinder filling unit					X
SPG	Slovenia	Jesenice	Air separation (ASU)					X
SOL France	France	Cergy Pontoise	Cylinder filling unit					X
		Saint Savin	Cylinder filling unit					X
SOL Spa Branch	Belgium	Feluy	Air separation (ASU)					X
SOL Spa Branch	Germany	Francforte	Gas liquefying from air separation					X
NTG	Netherlands	Tillburg	Nitrous oxide production					X
UTP	Croatia	Pola	Acetylene production					
Kisikana	Croatia	Sisak	Air separation (ASU)					
SOL SEE	Republic of Macedonia	Kavadarci	Air separation (ASU)					
TGS	Republic of Macedonia	Bitola	Carbon dioxide production					
		Volkovo	Carbon dioxide production					
		Lotepro	Air separation (ASU)					
		George Petrov	Acetylene production					
SOL BG	Bulgaria	Varna	Carbon dioxide production					
TGP	Bosnia-Erzegovina	Petrovo	Carbon dioxide production					



Air separation plant

The process of air separation for the production of oxygen, nitrogen and argon is a physical one. These processes use atmospheric air as raw material and have a high consumption of electrical energy, as shown in detail below.

Environmental aspects: air separation plant emit into the atmosphere negligible quantities of CO₂, sulphur oxides (SO_x) and oxides of nitrogen (NO_x) and can be considered particularly compatible with the environment.

Hydrogen production plant

These use natural gas and water as raw material in a chemical reaction that produces hydrogen.

Environmental aspects: hydrogen production plant emit CO₂ and oxides of nitrogen (NO_x).

Nitrous oxide production plant

These use as raw material ammonium nitrate, either solid or in water solution, in a thermal decomposition process.

Environmental aspects: not significant

Acetylene production plant

These use as raw material calcium carbide, a solid that decomposes in water.

Environmental aspects: the process produces calcium hydroxide, which is normally recycled for use in industry or agriculture.

Carbon dioxide purification and liquefying plant

The raw material is carbon dioxide itself, obtained as a sub product of chemical plant or from natural underground deposits. The carbon dioxide is purified and liquefied, through the use of energy.

Environmental aspects: the carbon dioxide obtained in this way is reused in industrial applications and not emitted directly into the atmosphere.

Units subject to I.P.P.C. and Integrated Environmental Authorisation

Some Units of SOL Spa fall into the field of application of D.Lgs. 18/02/2005 n. 59 on the integrated prevention and reduction of pollution (I.P.P.C.- Integrated Pollution Prevention and Control), which governs the granting, renewal and re-examination of Integrated Environmental Authorisation.

The company has obtained this authorisation for its hydrogen (Ravenna), nitrous oxide (Cremona and Caserta) and acetylene (Ancona) production plants.

With respect to 2012, the Salerno plant no longer falls into the field of application of I.P.P.C., since hydrogen production has ceased.

4.2. Energy resources

95% of Group energy consumption is concentrated in the ASU

The consumption of electrical energy is one of the key factors in the process of air separation for the production of cryogenic gases, since both the compression and the liquefaction of gases consume a great deal of energy. In fact, the energy consumption of the ASU represents almost 95% of Group energy consumption.

The Group is particularly careful to monitor energy consumption, not just for the economic aspects but also to meet the sustainability criteria that are a fundamental part of SOL Group culture.

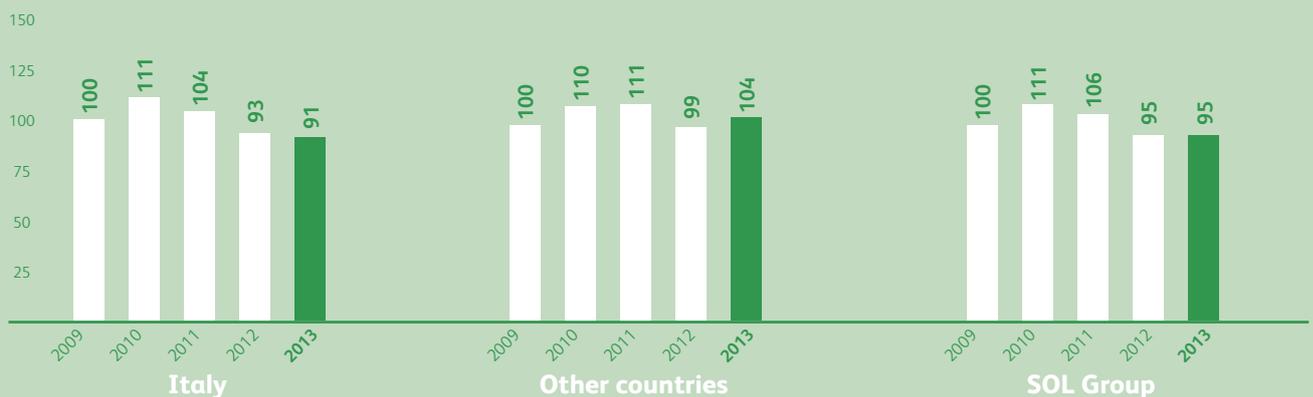
Activity in the energy production from renewable sources sector is a further demonstration of the Group's commitment to defend the environment. Already this production represents more than 8% of the overall energy need.

Interventions to contain energy consumption are not limited to the optimisation of processes and careful plant operation, but also extend to the design and choice of solutions for plant and the renewal of machinery used in the plant, to which an important slice of investments is destined annually.

Consumption is however considerably influenced by customer demand and the start-up (or shutdown) of production plant.

Customer demand is the main factor behind the trend of consumption in Italy, while in other countries the increase in 2013 is linked to the bringing to full operation of the Frankfurt plant, the restarting of the plant in Sisak, Croatia, and the start-up of the carbon dioxide production plant in Varna, Bulgaria.

MWh of electrical energy consumed base 2009 = 100



4.3. Transport

4.3.1. Deliveries to customers



- 4 %

Kilometers per unit of product transported

Attention to transport is of fundamental importance for environmental and safety aspects. Products are distributed mainly by road and to a widespread customer base.

The chemical and physical characteristics of the main products also make it necessary to use special vehicles for transport (super isolated tankers for cryogenic liquids) or special containers (cylinders for compressed gases and base units for liquid oxygen for home use), and their basic characteristics mean lower efficiency in fuel consumption terms per unit of product transported.

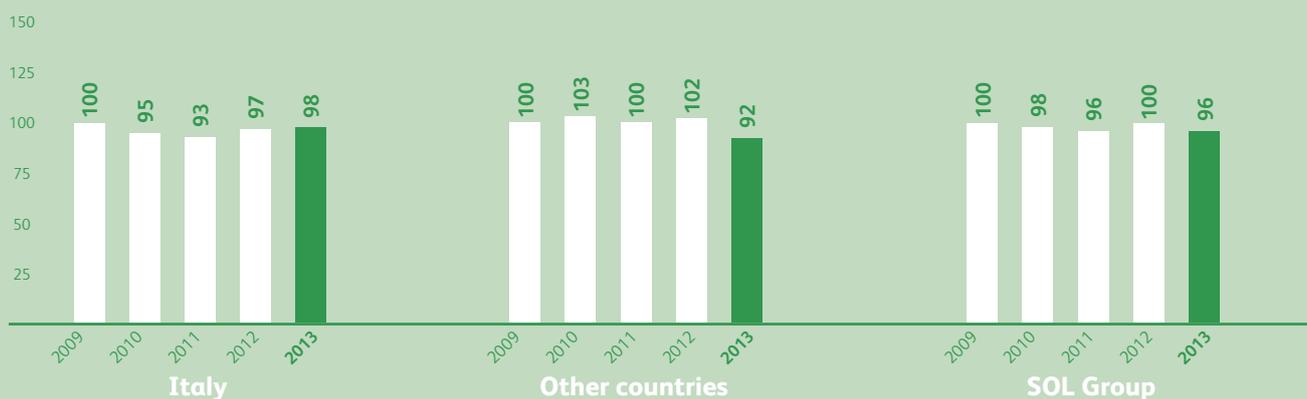
SOL action to reduce fuel consumption and hence environmental impact consisted of:

- the creation of production units spread as widely as possible over the territory, to reduce vehicle mileage
- investments to purchase new generation super isolated tankers, with a better ratio between weight of product transported and total weight
- the adoption of logistics management methods aimed at optimising routes.

The graph shows the trend in the ratio between kilometres driven and product units transported (mc/kg), with the base reference 2009 = 100.

The extension to all countries of Rainbow, a software for planning the distribution of liquid products adopted and perfected in Italy in 2012, and the rationalisation of the sources of product loads were the main initiatives that permitted a considerable improvement in the index.

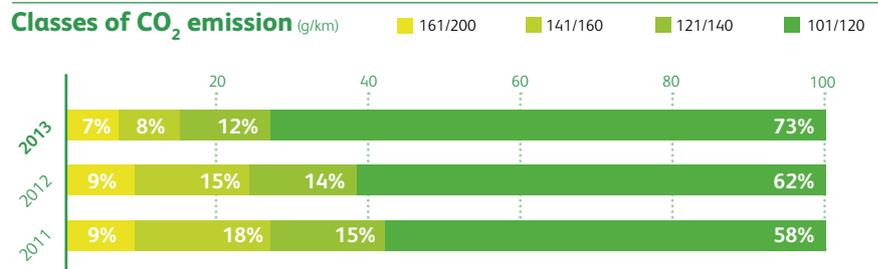
Ratio between kilometres driven and product transported (mc/kg) base 2009 = 100



4.3.2. Mobility of technical and sales staff

The environmental impact of the mobility of technical and sales staff operating in Italy is also kept under control through a policy of renewing the fleet of company vehicles acquired through leasing, favouring models with reduced CO₂ emissions.

In 2013 the percentage of vehicles in the middle-lower categories, between 81 and 140 g/km, rose from 76% to 84.7%, an increase of 11.4%. In the 101/120 g/km category the improvement was even greater: 17.7%.



4.4. Acoustic emissions

Acoustic pollution is mainly caused by machinery such as compressors and turbines, by the loading of tankers and by evaporation towers used to cool industrial water.

To reduce emissions, which already in the plant design phase have been limited by certain technical measures (for example, the encapsulation of compressors), further interventions have been carried out over the years, including the installation of silencers along the tanker loading lines and the soundproofing of evaporation towers.

For all plant, thanks above all to the above interventions, daily noise levels at the perimeter wall have been recorded as lower than 70 dB(A), thus within the limits allowed by law in industrial areas.

The company is however committed to monitoring constantly the levels of acoustic pollution and acting, where technically possible, to reduce it further with additional interventions on plant.

4.5. Emissions into the atmosphere

The nature of the production processes is such that no significant quantities of nitrogen (NO_x) or sulphur (SO_x) emissions are generated.

The levels of emissions are however periodically controlled, but are always found to be well below legal limits.

4.6. Climate protection: greenhouse gases

The emission of greenhouse gases is made up of:

- carbon dioxide, a sub-product in plants producing hydrogen by steam reforming of methane, emitted from plant producing CO₂ from wells
- nitrous oxide, emitted from plant producing N₂O from ammonium nitrate
- HFC (hydrofluorocarbons), used in plant refrigeration circuits.

Gas emissions from production units (tCO₂ equivalent/year)

	2013	2012	2011	2010	2009
Italy	17,702	11,618	11,765	13,840	15,926
Other countries	8,650	8,361	7,289	7,575	n.a.

The table shows the quantities of greenhouse gases emitted by production units, in equivalent tons of carbon dioxide.

The peak of emissions in Italy is due to accidental events in an air separation plant, which involved substantial replenishment of Freon 507.

Without this replenishment, emissions would have been 11,242, in line with previous years.

The CO NOT Project

This is a project financed by the European Commission for the construction in Slovenia of the first infrastructure for hydrogen supply with the completion of two supply stations by the end of 2014. These will be used to supply an initial nucleus of H₂ powered vehicles (buses and cars).

The project was proposed and coordinated by the Slovenian Hydrogen Technology Development Centre (RCVT) of which our subsidiary TPJ is a member together with PETROL (an oil company), DOMEL (a fuel cell producer), INEA (Slovenian leader in industrial automation systems), Mebius (a new company specialising in the production of fuel cell components) and the Slovenian National Chemistry Institute.

The project, after completion of the authorisation, design and system assembly phases, became fully operational from September 2013, when the first hydrogen

service station was completed near to Jesenice (a city 50 km north-west of the capital Ljubljana, chosen by Petrol, which is responsible for the service station, for its siting on one of the main roads) and experimental circulation of the first vehicles began.

SOL is deeply involved in the project through TPJ, which is the consortium partner responsible for the supply of hydrogen for the station (using bundles of compressed H₂), of nitrogen for the reclamation phase and preliminary tests, of plant for distributing the hydrogen from the source in bundles up to the battery limits of the supply apparatus (compressor and H₂ column) and one of the hydrogen vehicles that will take part in the experiment (a FIAT Multipla Hygen).

Experimental circulation of the vehicles, including the Multipla, is expected to last until the end of 2014, unless extended.

The CO NOT project is clearly the most visible hydrogen project in Slovenia, and the deep involvement right from the first steps has allowed TPJ to build privileged relationships both with the partners and with the local institutions involved, which will allow us to play an active part in future hydrogen initiatives in Slovenia.



MHybus project: Hydrogen mobility to reduce carbon dioxide emissions

Interest in hydromethane is easy to explain: the hydrogen in the mixture increases combustion efficiency which means lower consumption and polluting emissions. Data so far collected by ENEA have shown a drop in CO₂ emission of 15.6% and 13.7% compared with a vehicle powered by methane alone.

SOL is in pole position in the perfection of hydrogen-methane mixtures: it is a partner in the MHyBus project, together with ENEA, START, the Romagna public transport company, the Emilia Romagna Region and ASTER. The aim of the project is to verify on-road the advantages of using hydromethane (a mixture of hydrogen and methane) as fuel for buses that were originally powered by methane alone.

As has been shown in the MHyBus experience, hydromethane powered vehicles can be derived, with minor modifications, from traditional pure methane fuelled vehicles, keeping the fuel cost per kilometre substantially equal or, in some conditions, slightly lower.

The MHyBus project thus has an important pioneering value, both for the conversion of the entire fleet of methane fuelled public buses and for the spread of hydrogen in the transport sector. SOL played a key role in the project with the design, construction and management of service stations: that for the MHyBus project was housed in our Ravenna plant.

From the start of the experiment more than 250 refuellings have been carried out

without interruption, allowing the vehicle to drive more than 45,000 km: this means that during the project emissions of more than 5 t of CO₂ into the atmosphere have been avoided.

The SOL Group has been involved for years in new technologies for the use of hydrogen in the automotive sector. Activities include:

- the Multipla Hygen petrol-hydrogen bi-fuel car
- car refuelling systems with hydrogen in liquid or gaseous form at 200 bar
- a contribution to the construction of a fuel cell bus refuelled at 350 bar.

Hydromethane completes this picture, and is an important element in our presence in the application of hydrogen as an energy vector.



4.7. Waste

The production processes used in Group Units do not directly produce waste. The only significant exception is the acetylene production process, which generates calcium hydroxide, sold as a sub-product (in Italy) or sent for disposal (Croatia and Macedonia).

The objective for the coming three years is to find users of calcium hydroxide also for Croatia and Macedonia so that it can be considered a sub-product in these countries too.

The Report gives the quantities of waste produced:

- in the primary process plants:
- non-harmful waste produced by maintenance activity: prevalently scrap iron, packaging and insulating materials
- harmful waste produced by maintenance activities: prevalently oil formerly used for machine lubrication
- calcium hydroxide, a sub-product in the production of acetylene and ammonia solution, a sub-product of the conditioning of ammonia, both considered dangerous waste.

Starting from the 2012 edition of the Report we have extended the gathering of data on waste produced to the following categories:

- testing of cylinders and cryogenic recipients
- repairer of electrical and electronic apparatus
- activities on customer premises:
 - harmful waste from maintenance activities: prevalently oil formerly used to lubricate machines and plant filtering systems
 - sanitary waste from home care activities.

Note that, given the origin of the waste produced, the type and quantity varies from year to year with the number and type of maintenance interventions carried out.

Waste (t/year)

		2013	2012	2011	2010	2009
Italy	<i>Non-harmful waste</i>	401.0	329.5	79.8	197.7	90.0
	<i>Harmful waste</i>	101.2	184.0	61.2	87.5	123.4
Other countries	<i>Non-harmful waste</i>	31.7	14.4	15.1	242.0	
	<i>Harmful waste</i>	2,320.0 ⁽¹⁾	2,025.0	2,668.7	1,319.6	

⁽¹⁾ 99% calcium hydroxide from acetylene production

The destinations of the waste produced are the following:

Dump (t/year)		2013	2012	2011	2010	2009
Italy	<i>Non-harmful</i>	0.0	5.0	0.0	0.0	1.7
	<i>Harmful</i>	0.0	5.3	0.0	1.0	0.7
Other countries	<i>Non-harmful</i>	16.8	3.5	10.6	24.8	
	<i>Harmful</i>	2,309.3	2,019.0	2,566.9	1,306.9	

Treatment (t/year)		2013	2012	2011	2010	2009
Italy	<i>Non-harmful</i>	28.6	85.3	16.6	159.4	14.1
	<i>Harmful</i>	65.6	44.3	54.4	26.5	40.9
Other countries	<i>Non-harmful</i>	1.6	1.2	0.0	2.1	
	<i>Harmful</i>	4.0	5.6	100.1	0.4	

Recovery (t/year)		2013	2012	2011	2010	2009
Italy	<i>Non-harmful</i>	327.4	239.2	64.2	38.3	63.4
	<i>Harmful</i>	35.6	134.4	6.8	60.0	76.0
Other countries	<i>Non-harmful</i>	13.3	9.7	4.5	215.1	
	<i>Harmful</i>	6.7	0.6	0.8	12.3	



4.8. Water resources

SOL Group strategy in managing water resources is aimed at optimising usage in its own plants, by reducing withdrawals to a minimum also through investments in recycling, and in the research and application on customer premises of technologies which by using technical gases can improve processes such as wastewater treatment or making it drinkable for civil uses.

4.8.1. Water usage

Water is prevalently used in the cooling circuits of machinery in production plant. In the majority of plant, water is recycled and consumption is thus prevalently related to the integration of the quantities evaporated.

The slight increase in usage in “Other countries” is due to the restarting of the plant in Sisak, Croatia.

Water usage (m³ x 10³)

	2013	2012	2011	2010	2009
Italy	1,053	1,094	1,215	1,199	1,174
Other countries	1,990	1,616	5,560	7,253	7,255



4.8.2. Water discharge

Plant implement monitoring and control programmes on the quality of water discharged. For the first time, in addition to data on Italian primary process plant, data have also been collected on those in the other countries where the Group operates.

In both cases, the analyses show that, over and above the absolute values of the quantity of pollutants shown in the tables below, their concentration is well below legal limits.

Water discharge (t/year)

		2013	2012	2011	2010	2009
Italy	COD	15.59	24.61	22.15	10.45	10.62
	Total nitrogen	4.97	4.27	6.64	3.83	4.32
	Suspended solids	6.50	4.88	4.24	7.69	5.16
	Total phosphorus	0.54	0.37	0.46	0.88	3.08
	Heavy metals	0.12	0.09	0.11	0.10	0.10
Other countries	COD	1.64	2.77			
	Total nitrogen	0.35	0.65			
	Suspended solids	1.76	0.76			
	Total phosphorus	0.11	0.41			
	Heavy metals	0.0	1.50			

4.8.3. Technologies for customers

Among the principal technologies perfected by the Group for the management of water resources are:

- the treatment of wastewater with O₂, which makes purification more effective and increases purification capacity, reducing the environmental impact and giving better control over treatment
- the treatment of wastewater with ozone, which reduces colouration, micro-pollutants and nitrates and so reduces the environmental impact of the treatment
- disinfection with ozone, which protects the watercourses where wastewater is re-emitted after treatment from bacterial pollution and also avoids the use of chlorine compounds
- control of the pH with CO₂, which substitutes mineral acids (sulphuric and hydrochloric) which leave pollutants in the water



4.9. Terrain and groundwater

Oxygen, nitrogen and argon are produced by a process (air separation) which is of a physical nature and excludes the possibility of the presence of substances that could contaminate terrain or groundwater.

Nor does the production of hydrogen with the steam reforming process involve chemical pollutants.

In the production of nitrous oxide, ammonium nitrate, as a concentrated liquid or solid, is used as the raw material. It is stored using methods designed to prevent any dispersal in terrain or groundwater.

In acetylene production, the reaction produces calcium hydroxide as a sub-product, and this is stored in special tanks before being transferred to users in various market sectors or sent for disposal.

Some SOL Units have been constructed in locations that have terrain and groundwater contamination problems, but these have other causes and predated the arrival of SOL.

Mantova

Part of the SOL plant in Mantova, constructed inside the chemical Park, falls within the boundary of the "Mantova Lakes and chemical Park site of national interest".

Again in 2013 SOL took part in the annual "Planned groundwater monitoring campaign" promoted by the Mantova ARPA.

Ravenna

The SOL plant is located inside the Ravenna chemical Park, which has a groundwater pollution problem.

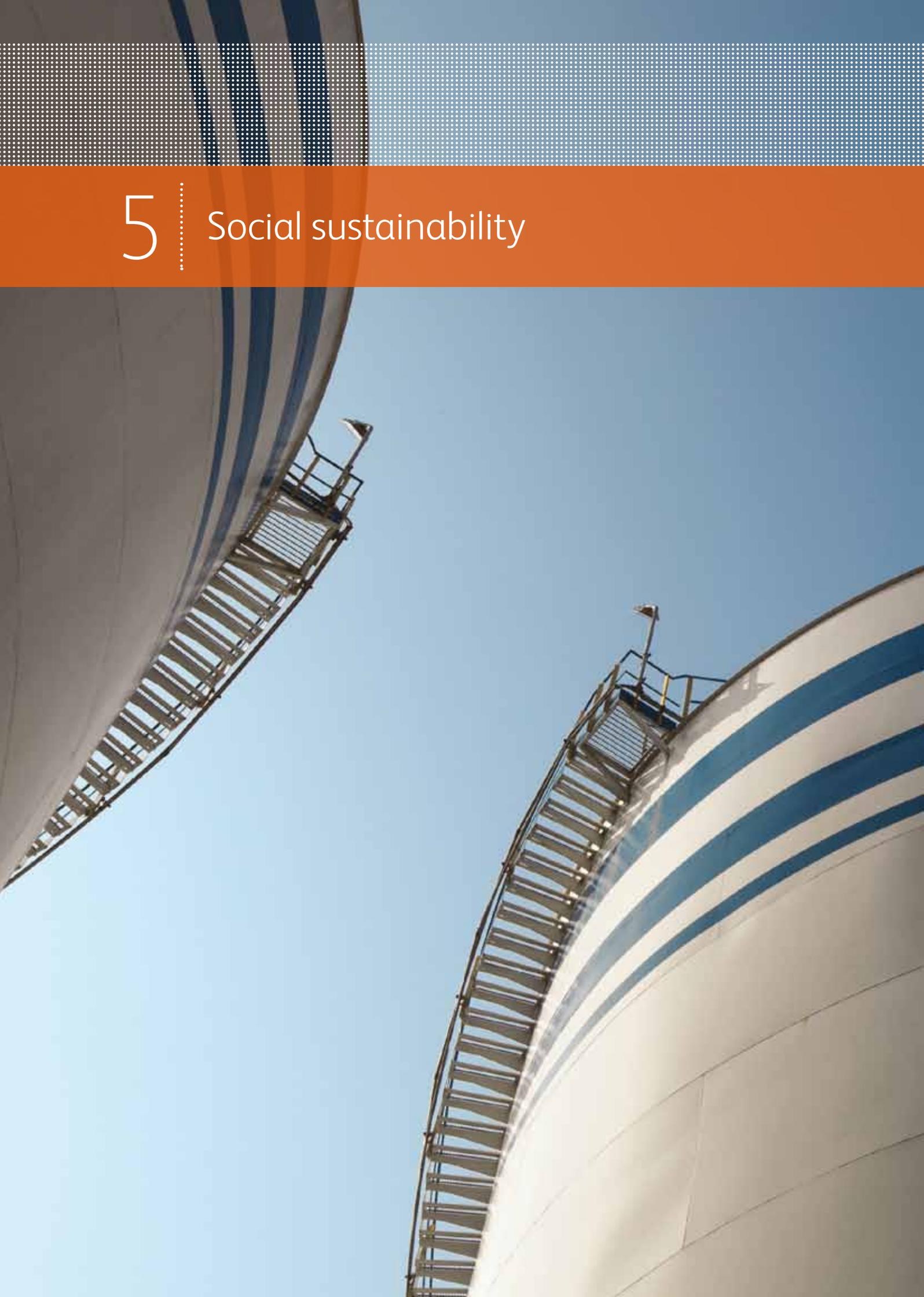
SOL has constructed a piezometer on its own land, as requested by the Ravenna ARPA, and takes part in periodical monitoring campaigns.

4.10. Biodiversity

The activities of the SOL Group have a very limited impact on biodiversity, since the production units are relatively small in size and located in industrial areas.

5

Social sustainability



Transparency, loyalty, impartiality, honesty, integrity, a continual commitment to quality, continual improvement of safety and respect for the environment are fundamental values that the SOL Group wishes to find and constantly encourage in all its employees.

5.1. Human resources management

5.1.1. Management policies

SOL attaches the maximum importance to those who work within the Group, contributing directly to the development of the company

Code of Ethics, article 4 – Personnel policies

To operate responsibly, respecting the environment and safeguarding health and safety, it is indispensable to involve all personnel.

For this reason the SOL Group favours free communication at all levels, regardless of hierarchical relationships.

Frequent meetings between headquarters management and operational personnel, the maintenance and continual enrichment of the company Intranet and publication of the company magazine “SOL News” are all instruments designed to exchange information and experiences, and their aims include the spreading of greater ecological awareness and more responsible conduct, at the same time receiving observations and suggestions. It is above all through human resources that the SOL Group is able to develop and improve its performance.

All SOL Group employees, whatever their roles and with whatever type of contract they operate within the Group, are responsible for the objectives entrusted to them and must thus have the possibility, within the limits of their responsibility and with respect for the organisation, of taking decisions and working with a high degree of autonomy, in a strong relation of trust with the company.

In this sense the SOL Group undertakes:

- to develop the abilities and competences of its employees so that the commitment and the creativity of each of them can find full expression in realising their own potential, in harmony with the requirements of the organisation;
- to maintain a close connection between the Holding company and the various subsidiaries, with a spirit of partnership;
- to stimulate the exchange of information through internal communication media that are increasingly varied thanks also to the use of modern Informatics technology;
- to make the most of human capital through the sharing of the main values on which the Group identity is based and the integration of diversity and best practices within the Group;
- to guarantee to all its collaborators psycho-physical integrity with respect for their moral personality. In this sense the SOL Group is constantly committed to respecting national labour regulations, international conventions and recommendations, including the resolutions of such international organisms as the ILO (International Labour Organization) and the UN (United Nations Organization).

5.1.2. Employment and the management of diversity

Employees at 31.12.2013
2.610

↑ + 4.2%
 with respect to 2012

Below are some general data, referring to the situation at 31.12.2013, on the personnel within the SOL Group.
 The few cases where the data refer only to companies operating in Italy are duly indicated.

Employment trends

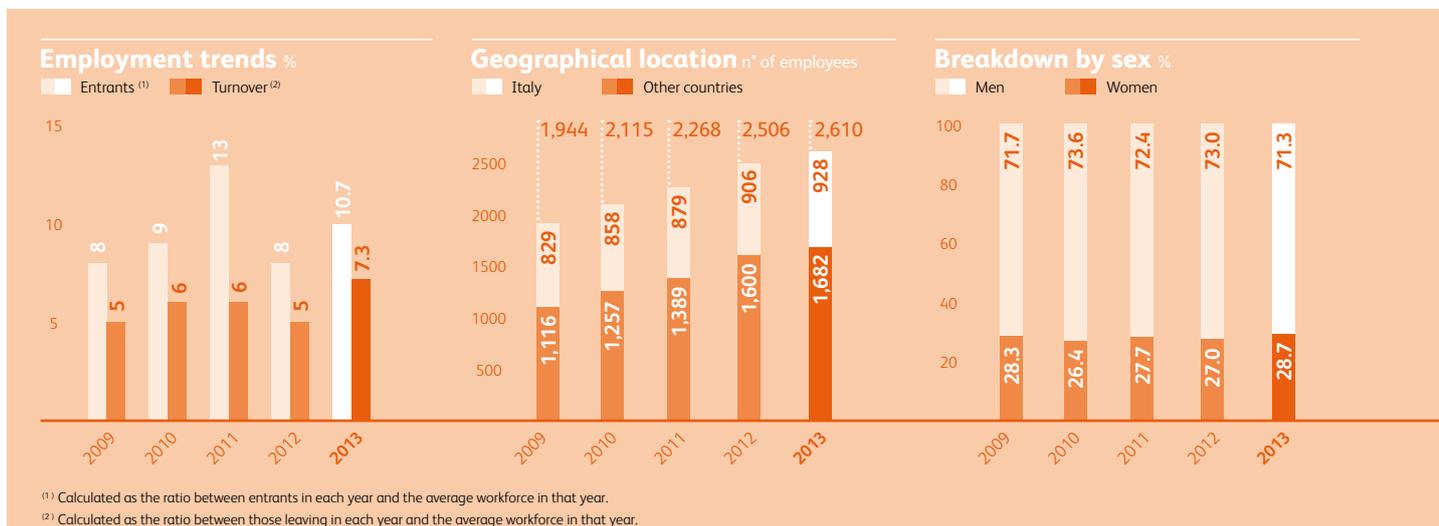
Despite the lasting market crisis, again in 2013 the number of employees grew both in Italy and in the other countries where the group operates.
 Overall growth with respect to 2012 was 104 units, 4.2%.
 Of the 104 units, 82 (+ 5.1%) relate to overseas companies while the remaining 22 (+2.4%) to those operating in Italy.
 The increase in turnover is principally due to companies operating in countries outside Italy. In Italy the level of turnover is very low, at 1.9%

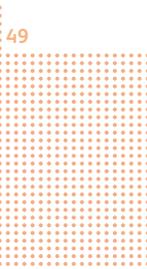
Work-life balance

The SOL Group, compatibly with technical and production organisational needs, is sensitive to the needs of its employees to balance their working life with personal and family requirements, even of a temporary nature.
 In fact the SOL Group operates forms of flexible working hours, is favourable to granting periods of leave on request, even beyond what is laid down by law or the collective contract, has had positive experiences of tele-working, has formalised its readiness to offer loans on favourable conditions and, above all, has a percentage of part-time workers that is close to 6% of the average Group workforce.

Management of diversity and demographic trends

The graphs show the breakdowns by sex, length of service and age group of Group personnel.
 The percentage of women has been increasing since 2009, and in 2013 represented 29% of the total workforce. Compared with the previous year, in 2013 the number of women grew by 57.





Absenteeism

The SOL Group has for years in Italy had a level of absenteeism far below both the national average for the sector and the average for industry generally.

The 2013 figure for the Italian companies in the Group was 3,53%.

The phenomenon is under control also in the overseas companies and does not represent a critical factor.

5.1.3. Remuneration and social benefits

The SOL Group operates with the aim of constantly developing, in its human resources management policies, optimal management of its personnel through the combined use of a series of instruments.

The SOL Group makes no distinctions of sex in the management of remuneration policies which, for each role, are based on competences and results.

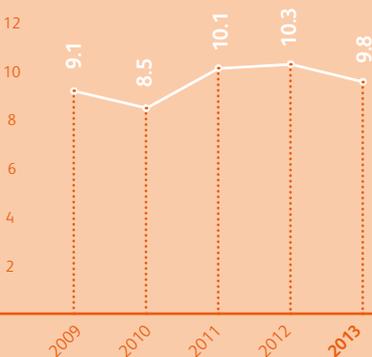
The SOL Group applies to personnel the collective contracts laid down by the laws of the countries of reference.

Remuneration policies

In the Group companies both in Italy and abroad, great attention is paid to the use of remuneration development incentives both at collective level (normally guaranteeing the increases agreed in collective sector bargaining, where this is applied, and negotiating integrating contracts that can, as in Italy, provide for production/participation incentives related to the trend of productivity and company profitability parameters) and at individual level (merit policy and bonuses for individual performance).

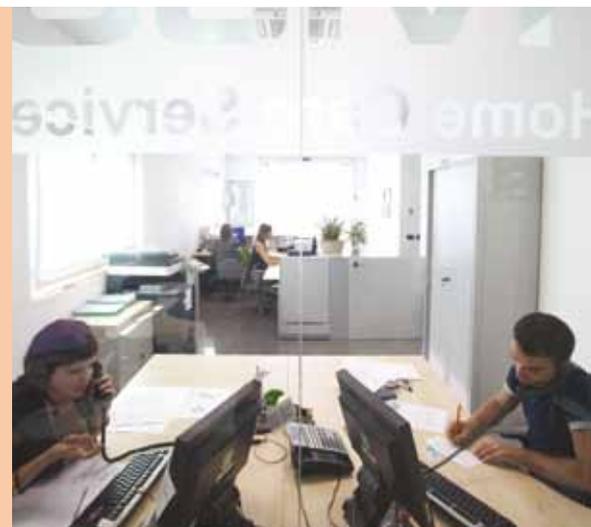
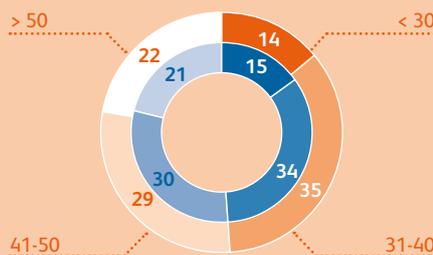
Breakdown by length of service

Average years of service



Breakdown by age group %

■ 2013 ■ 2012



Supplementary pension plans

In Italy, as part of the chemical industry national collective contract, there is the “FONCHIM” pension fund (to which SOL subscribed right from the start) which, with joint contributions from the employee and the company, creates individual pensions that supplement public pensions. The level of participation in the fund by personnel in the Group’s Italian companies is quite high, considering both the validity of the initiative and the constant promotion and information activity by the company both at the moment of hiring and afterwards.

FONCHIM	Average participants	%	Contribution from the company
2013	582	73 %	390,800
2012	567	77%	414,000
2011	569	77%	378,000
2010	570	77%	315,000
2009	572	80%	286,000

In line with differing practices in the various European countries, many Group subsidiaries also contribute to similar plans.

Supplementary health plans

The supplementary health fund for the Italian chemical industry “FASCHIM”, also created by the national collective contract, is more recent.

The chemical sector was among the first to introduce this coverage, being well aware of that the public health system would find it increasingly difficult to meet public health needs. The majority of the contribution is paid by the company. Employees can also add their families. The fund has been an undeniable success, with about 80 % of employees subscribing.

In this sector too similar initiatives have been taken by the principal overseas Group subsidiaries.

FASCHIM	Average participants	%	Contribution from the company
2013	613	79 %	150,400
2012	574	79%	157,000
2011	572	79%	156,000
2010	578	83%	153,000
2009	524	74%	159,000

Insurance

Personnel required to travel to countries outside the EU are protected by a specially stipulated insurance policy to cover medical expenses, theft of baggage and all other misfortunes.

5.1.4. Personnel selection and talent attraction

To recruit for its staff a team of collaborators who are qualified and of professional value, particular attention is paid by the company to recruitment and selection.

In addition to the direct operational involvement of the central and local Human Resources functions, contact is often made with the leading universities, training bodies, schools and professional associations, with participation also in special recruiting events (“career fairs”) and publication of the company profile in some of the leading career directories. These contacts lead each year to university students entering the company, for professional orientation stages or thesis material gathering.



Master “Scientists in the company”

As part of the policies of selection and talent attraction, in 2013 SOL hosted a class of 35 students of the Scientists in the Company Master at the ISTUD Foundation.

The students took part in a day of training and orientation, where thanks to the accounts of managers of the various company functions they gained an in-depth view of a complex and diversified Group.

The initiative also allowed them to get to know the professional figures present in the company and receive advice on professional and career opportunities within the Group.

The aim of the Group was to bring a target of young professionals who were well-prepared for future development needs as close as possible to the reality of the company. They were invited to send their CVs.

An assessment questionnaire reported very positive opinions at the end of the event.

5.1.5. Training, development and communication

Learning and training, in the broadest sense, are an integral part of SOL Group culture.

For this reason, the companies in the Group attach great importance to the training and development of personnel at both the technical and managerial levels.

In the SOL Group we believe that the main stimulus to improving our professionalism is to be found within ourselves: in our curiosity, in the determination with which we face new challenges, in the desire to learn and face up to new things.

In this context, in our Group training is primarily “in the field”, with more experienced colleagues constantly at one’s side.

In addition to technical and safety training, Human Resources Management organises and coordinates each year special training plans dedicated, with an international viewpoint, to knowledge of the company and its culture.

The most important training events of 2013 were:

- foreign language studies, particularly in English, the language used for communication between Group companies
- the financing of a number of Masters for employees
- public speaking courses
- coaching courses for executives and directors

Particular attention was also attached to managerial training courses with those responsible for resource management in Group companies.

Below is a summary of data on training carried out in Italy in 2013 and coordinated directly by HR Management:

	Training hours	Participants
New recruits training	3.750	50
Management training	210	7
Coaching	96	6
Languages	300	10

5.1.6. Industrial relations

Central Personnel and Legal Affairs Management directly handles industrial relations for all Italian companies in the Group and coordinates them for overseas companies, intervening when necessary.

SOL is an active member of the chemical industry Confederation (Federchimica) and takes part in negotiations for the renewal of the national contract and in other joint initiatives.

At company level, SOL has periodical meetings with union representatives aimed at maximum collaboration and transparency, and negotiates a company contract which, as provided for by the national contract, aims to reward objective improvements in productivity and profitability.

5.1.7. Health and safety in the workplace

Conformity with legal requirements is a priority requisite for SOL and for all its collaborators and employees. SOL is constantly engaged in the safeguarding of the environment, health and safety in the workplace.

Code of Ethics, article 5 – Safeguarding of safety, health and the environment

Safeguarding the health and safety of its human resources are basic, inalienable values for the SOL Group. These values are based on an ethical vision of work which guides daily action in all Group companies.

Organisation

The importance of the subject led to the creation back in 2005, as part of central Quality, Safety and Environmental Management, of a specific function serving all the companies in the Group, that has the job of handling all activities safeguarding:

- people: health, accident prevention and workplace hygiene;
- company property: fire prevention, plant safety and environmental hygiene;
- administrative company responsibility pursuant to D.Lgs 213/01: company management system for health and safety, in accordance with BS OHSAS 18001.

The Function defines the lines of action, verifies their application and coordinates operations of the territorial Units and the other Functions.

In every Group company, each unit has one or more people trained to acquire specific competences in the areas of safety and the environment, and so able to implement company directives and ensure they are correctly applied.

For each company in the Technical Gases Sector, a “Safety and Environment Reference Person (SERP)” has been unequivocally nominated. The SERP:

- is the first point of reference for all communications regarding safety and the environment
- is responsible for distributing these communications within the company and the consequent training activity
- takes part in periodical training meetings where experiences are also shared.

In 2014 this initiative will be extended to the main companies in the Home Care Sector.

Seveso directive

Seventeen Group Units, because of the kind of gases they produce and the quantities stocked, fall into the field of application of Directive 96/82/CE (“Seveso directive”), implemented in Italy by D.Lgs 334/01.

They are the Italian units in Piombino and Mantova (art. 8), in Cremona, Cuneo, Salerno, Ancona, Marcianise, Verona and Pisa (art. 6), and those in Feluy (Belgium), Frankfurt, Gersthofen and Krefeld (Germany), Cergy Pontoise and Saint Savin (France), Tillburg (Netherlands) and Jesenice (Slovenia).

Directive 96/82/CE makes it obligatory to adopt a specific safety management system (which has much in common with the provisions of OHSAS 18001), and this further reinforces the commitment of the units involved, which are periodically subjected to controls by the Authorities (five during 2013, four of them in Italy and one in Netherlands, all with positive outcomes).

Training and awareness

Workforce training plays a fundamental role in the correct application of the company Management System.

All employees are thus involved in constant awareness and training activity aimed at avoiding or at least minimising the impact of our activities on the environment and ensuring a high level of safety.

The training needs of individual Units are determined annually by their managers and take concrete form in customised training programmes for personnel of all levels.

The training and updating of managers is also crucial.

To this end, periodical meetings are organised, with interventions also from outside specialists, to extend competences and also to stimulate collaboration among Units and share management methods.

A further reminder of safety problems comes from the periodical publication (in Italian and English) of:

- “Safety alerts”, documents which, starting from incidents that have happened in the sector, encourage the respect of rules of correct conduct;
- “Quarterly Accident Reports”, documents which illustrate and analyse any incidents that have occurred during the period within the Group and in other companies in the sector belonging to Assogastecnici and EIGA.

10,937 hours
of safety training

Safety training

During 2013, the Italian companies of the Group organised 718 training meetings, with 3860 people taking part, and a total of 10,937 hours.

Environmental training

During 2013, the Italian companies of the Group organised 163 training meetings, with 861 people taking part, and a total of 5,098 hours.

Audits

Audits are the main instrument for verifying that the health, safety and environmental management system is working properly and for identifying and implementing any corrective measures.

Audits may be internal, carried out by SOL Group staff, or external, carried out by outside organisations, normally when certifications have to be renewed or obtained.

The aim of the internal audits is:

- to verify that activities are carried out in accordance with company rules and procedures, taking corrective action if this is not the case;
- to assist the Units subjected to audit in making improvements, making use of the experience of other Units and reinforcing company health, safety and environmental culture.

During 2013, internal safety and environmental audits were carried out on 38 days. External audits are carried out by the certifying body, with methods similar to those of the internal audits, and are designed to verify the correct application of the management system and observance of the regulations of reference (ISO 9001, ISO 14001, OHSAS 18001, EMAS, etc.).

During 2013, the activities of Group Units were subjected to 24 days of external audits by the Certiquality certification body.

Injury rates

The trend in injury rates shown below shows that the entire organisation is constantly engaged in respecting good company practices, as laid down by the Management System.

In 2013 the frequency (IF) and severity (IG) indices of accidents within the Group (accidents that involved absence from work for at least a day, excluding that of the accident) were, respectively 9.3 and 140, both up on the previous year.

The frequency rate index for Italy is about 80% of that of the chemical industry (as determined by INAIL which, however, only considers accidents leading to an absence of more than three days, while SOL also considers absences of more than one day). This is about 50% of the average for manufacturing industry.

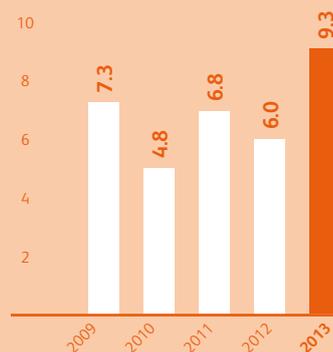
The tables show the indices for countries where at least 100 workers operate.

The indices of all the countries taken into consideration show a generally positive trend and reflect accidents that were not serious and due to occasional factors or operator distraction.



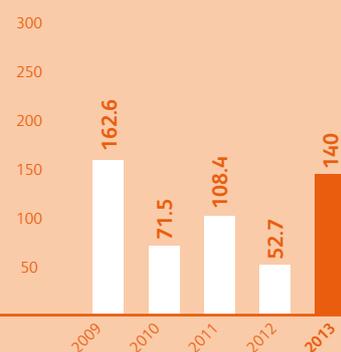
Frequency rate (SOL Group)

Accidents/10⁶ hours worked



Severity rate (SOL Group)

Days lost/10⁶ hours worked



Frequency rate Accidents/10⁶ hours worked

	Italy	France	Germany	Netherlands	Belgium	Republic of Macedonia	UK
2013	5.6	15.2	16.7	3.5	0.0	22.5	24.1
2012	6.0	0.0	8.3	4.0	14.6	0.0	18.9
2011	6.8	4.0	6.2	4.0	29.8	0.0	n.a.
2010	4.5	6.7	2.5	0.0	0.0	0.0	n.a.
2009	6.9	10.5	3.0	0.0	0.0	6.5	n.a.

Severity rate Days lost/10⁶ hours worked

	Italy	France	Germany	Netherlands	Belgium	Republic of Macedonia	UK
2013	75.2	284.2	159.8	34.5	0.0	472.8	334.5
2012	46.5	0.0	108.8	8.0	114.4	0.0	163.4
2011	80.3	57.8	141.7	87.7	268.5	0.0	n.a.
2010	82.3	64.8	24.7	0.0	0.0	0.0	n.a.
2009	41.9	425.2	71.9	0.0	0.0	502.3	n.a.

“Zero accidents” objective
achieved by 85 %
of the Group’s production units

“Zero accidents” objective

Retaining the “Zero accidents” objective is the challenge that each Unit of the SOL Group sets itself each year, almost always with success, thanks to the commitment of the entire workforce.

The success is closely linked to an awareness that safety in the workplace is above all an ethical matter, because it involves the quality of life of the people working in our Group.

This is how we are able to create and maintain over time a shared culture that makes safety the basis of all activities carried out.

During 2013, the “Zero accidents” objective was attained by 64 Group Units, representing 85 % of the Group’s production units.

Many Units have been able to repeat this result over time, as shown by the fact that, in the past three years:

- 15 Units have reached **five consecutive years** without accidents
- 7 Units have reached **ten consecutive years** without accidents
- 3 Units have reached **15 consecutive years** without accidents
- 4 Units have reached **20 consecutive years** without accidents



Worker health

All personnel potentially exposed to health risks are given medical checks, as laid down by law in the various countries and at intervals fixed by the doctor involved.

To maximise the quality of these checks in such complex organisations as SOL Spa and Vivisol s.r.l, a coordinating Doctor has been nominated to set guidelines and verify the health protocols followed by local doctors.

Starting from 2012, health control monitoring, formerly limited to SOL Spa e Vivisol Srl, was extended to all Group companies. The percentage of employees undergoing health surveillance is shown in brackets.

	Italy	Other countries
Medical examinations (n° of employees)	360 (38.8%)	347 (20.6%)
Clinical analyses (n° of employees)	295 (31.8%)	250 (14.9%)
Further checks (n° of employees) ⁽¹⁾	256 (27.6%)	156 (9.3%)

⁽¹⁾ electrocardiograms, spirometry audiometry etc

The lower percentages of employees subjected to health monitoring in “other countries” is mainly due to a difference in regulations.

The outcomes of the checks carried out revealed 31 cases of pathologies deriving from work activity, mainly from manual load handling.

There were no positive results in tests for the assumption of psychotropic or narcotic substances.

There was no evidence of professional illnesses.

5.2. Customers and products

5.2.1. Customers

The ability to realise that our customers' problems are our problems; complete satisfaction of their requirements; a commitment to work together on single objectives to reach the most advanced results. These have always been the goals that SOL pursues in managing customer relationships.

Code of Ethics, article 2 - Conduct in managing business activities

A qualifying element in the activities of the SOL Group in all the sectors where it operates is the satisfaction of customer requirements, not only with the punctual supply of specified products but also and above all with assistance in identifying the best conditions and methods of use of the gases and apparatus supplied.

Given the growing sensitivity of customers to environmental and safety matters, SOL has invested in the identification and development of technologies which, during usage of the products supplied, permit an improvement of working conditions, reducing for example atmospheric emissions or making water purifying processes more efficient.

In addition, our customers increasingly often ask us to demonstrate the implementation of a management system, in particular for quality and the environment, sending questionnaires and carrying out audits in our production Units.

The rapid response to these requests that SOL habitually gives is a further qualifying element for customers.

5.2.2. Product safety

5,918 Safety data sheets
12 languages

Management of the Safety Data Sheets (SDS) of all substances for all companies operating in the European Community is centralised in the Monza headquarters.

All these SDS have been revised following the coming into force of the CLP (Classification, Labelling and Packaging) regulations, aimed at standardising the classification and labelling of dangerous substances and preparations in Europe.

A similar revision was carried out on the labels applied to mobile containers.

As far as REACH is concerned, the only substance registered so far is calcium hydroxide (a sub product in the production of acetylene).

The registration required for other substances that have been preregistered (acetylene, nitrous oxide and calcium carbide) has been postponed until the 2018 deadline after verification that the quantities produced or imported are below the limit of 100 t per year. An exception is the registration of acetylene in Croatia, which became necessary after Croatia entered the European Community in June 2013 and will be effected in the course of 2014.

The SOL Group takes part in national and international working groups on these matters so as to be constantly updated on the evolution of regulations and operate in harmony with other companies in the sector.

5.3. Social commitment

5.3.1. Authorities and Public Administration

Relationships with the Public Administration must always be conducted by each employee and/or external collaborator with the principles of loyalty, correctness and transparency

Code of Ethics, article 2 - Conduct in managing business activities

The Group's activities involve frequent contact with the Authorities and Public Administration, both for the handling of authorisation processes and for periodical verifications that laws are being respected.

On the second point, during 2013 Group Units were subjected to 75 days of audits by the Authorities on safety, environmental and pharmaceutical GMP issues (in 2012: 59 days).

In handling relationships with local and national Authorities, the SOL Group endeavours, while respecting the roles of the parties involved, to set up a constructive dialogue aimed at constant improvement, on the basis of objective data and technical and scientific evidence.

5.3.2. The community

About **380,000 €**
of contributions paid in 2013

The characteristics of the production processes and of most products do not normally create problems in managing relationships with local communities. The SOL Group is however always committed to maintaining a frank dialogue, seeking to understand the needs and requests of the communities in the neighbourhood of its production Units in order to obtain better acceptance of its presence. Active participation in the preparation of External Emergency Plans (where required) is further evidence of sensibility to the needs of the community.

An important initiative is the “Open Factory” events, promoted in Italy by Federchimica, which periodically allow the public (on different occasions: inhabitants, students, authorities, customers, suppliers etc) to visit a production unit and see with their own eyes how a complex industrial reality is managed.

The SOL Group gives its support to bodies, institutions, associations and sports clubs operating coherently with Group values, both with financial contributions and by making available its competences.

Among the projects worthy of mention:

Italy: both **SOL Spa** and **Vivisol Srl** contribute to various non-profit organisations. SOL is a sponsor and partner of Progetto SLancio, promoted by the La Meridiana Cooperative in Monza, which supplies assistance to those suffering from invalidating neurological and neuromuscular illnesses. Among projects developed in 2013 there was in particular the award of scholarships for the IRC Foundation.

Austria: **Vivisol Austria** supports the “Charity Care Award” of the ÖGP (Austrian Pneumology Association) which helps patients with economic problems.

Bulgaria: **SOL Bulgaria** sponsors the initiatives of the Italian embassy, the Italian Cultural Institute and the ICE office in Sofia

Germany: **Vivisol D** supports, among others, the Deutsche Sauerstoffliga LOT eV (Association of patients in home oxygen therapy) and the QVH (Association for quality in home respiratory care).

Greece: **Vivisol H** supports the research activities of the University Hospitals of Athens and Thessaloniki.

Macedonia: **TGS** participates in research projects with the Mechanics faculty of the University of Sts Cyril and Mthodius in Skopje.

Netherlands: **Vivisol Nederland** supports several projects and bodies, particularly significant among which is the “EOLUS” research project of the Medical Centre of the University of Groningen, which carried out remote monitoring of a sample of patients receiving pulmonary ventilation and demonstrated that home treatment is just as safe as that applied in hospital structures, and costs less. The research will be repeated, as the “Homerun project”, in other centres (Utrecht Maastricht and Rotterdam).

NTG supports the non-governmental organisation Stichting NGO, which provides medical support of sporting events.

Spain: **Vivisol I** supports the Spanish Pneumology and Thoracic Surgery Society (SEPAR), the European Respiratory Society (ERS) and the World Association of Sleep Medicine (WASM).

5.3.3. Associations

The SOL Group takes an active part in the activities of the main associations of companies in the technical and medicinal gases sector, in the home care and biotechnologies sector in Europe and in various European countries.

Group experts take part in several working groups in these associations, contributing to the exchange of technical knowledge and the drafting and updating of sector standards.

International Oxygen Manufacturers Association (IOMA)

SOL Spa is a member of the IOMA, which includes all the world's main operators in the technical and medical gases sector. IOMA's principal objective is to coordinate the harmonisation of safety rules so that operational practices are the same throughout the world.

European Industrial Gases Association (EIGA)

In addition to SOL Spa, members of EIGA, which includes all the main European operators in the technical and medicinal gases sector, are also Group companies NTG, BTG, TMG and Vivisol Austria.

During 2013 the SOL Group has further increased its involvement with associations and today has its own representatives on the Board of EIGA, in the four Councils, in eight working groups and in 12 ad hoc Groups, contributing to the definition of standards and best practices in the sector.

National category associations

Among the national Associations of which Group companies are members we mention:

- industry and chemical and pharmaceutical industry associations: Confindustria, Assolombarda and Federchimica (Italy), UIC (France), Essenscia, Febeliec and Pharma.be (Belgium), Spectaris, VCI and BVMW (Germany), HACI (Greece)
- technical gases industry associations: Assogastecnici (Italy - SOL Spa), IGV (Germany - TMG), ÖIGV (Austria - SOLTG), VFIG (Netherlands - NTG), BIMGA (Belgium - BTG), AFGC and APHARGAZ (France - SOL France), HAIMG (Greece - SOL Hellas), GIZ TP (Slovenia - TPJ), BCGA (United Kingdom - Dolby Vivisol), BIGA (Bulgaria - SOL BG)
- associations for biotechnology development: Assobiotec (Italy - Biotechsol)
- associations of home care sector operators: HCP (Austria - Vivisol A); Deutschen SauerstoffLiga LOT and QVH (Germany - Vivisol D); FHI (Netherlands - Vivisol Nederland); SYNALAM and FFAIR (France - Vivisol F)
- other associations: Unamec "Association of producers, importers and distributors of medical devices" (Belgium - Vivisol Belgio); ARTP "Association of Respiratory Technology and Physiology" (United Kingdom - Dolby Vivisol)

Various

Group companies are part of prestige associations, with their own representatives who, in many cases, hold positions of responsibility in governing Councils:

- FBN – Family Business Network, includes more than 6.000 companies from 56 countries and has the aim of helping family companies to grow, succeed and prosper through the exchange of new ideas and “best practices”
- AIDAF – Associazione Italiana Delle Aziende Familiari, which includes Italian family companies that shared the guide values of business ethics, meritocracy, social responsibility and sustainability
- Aspen Institute Italia which promotes and encourages the development of enlightened leadership that is open to dialogue and able to face the challenges of a global society
- IAI – Istituto Affari Internazionali, which aims to promote an awareness of international problems in the fields of foreign policy, the economy and safety through research, conferences, publications and training
- ISPI – Istituto Studi di Politica Internazionale, one of the most ancient and prestige Italian institutions specialising in international activities which, among other things, constitute a point of reference for companies and institutions intending to extend their range of action abroad, offering materials and ad hoc encounters



SOL Spa wins Assogastecnici's 2013 Kelvin Prize

SOL Spa has won the 2013 edition of the Kelvin Prize, instituted by Assogastecnici. The Prize aims to stimulate the development of new projects for improving safety performance in the technical gases sector. The winning project was entitled “Mobile, sustainable and self-sufficient sanitising”.

The innovation lay in the use of mobile units to sanitise electro-medical apparatus in hospitals, eliminating the need to transport

it from one department to another or to an external facility.

This considerably reduces the health risks for all involved.

This solution, which has been patented, also has the advantage of being completely self-sufficient with its incorporated fuel cell and a cylinder of medical air for cleansing after each cycle.

6

Methodological note

Reference guidelines

In drafting the Report reference was made to the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines, aiming to progress towards complete conformity. The standard used is G3.1 (2011 edition).

Analysis of materiality

To define the scope of the report, a process of materiality analysis was carried out with the aim of identifying, on the basis of the impact that the various activities have, the most material topics both for Group companies and for the stakeholders of reference. The content of this edition of the Report already takes into account the initial results of this analysis, which will be further developed in the years to come.

Scope of the report

The data given generally refer to all Group companies.

Data referring only to certain companies in the Group have been highlighted in the comments on the individual sections or in the index table below.

All data refer to the period 1/1/2013 - 31/12/2013, except for information on certain events during the first months of 2014 which are felt to be particularly significant.

Data collection

Data were collected using a standardised form sent to and used by all managers of the companies involved.

Balance

The parameters used reflect the progress of performance, regardless of whether this has improved or worsened with respect to the past, and are objectively and systematically presented.

Accuracy

The data have been checked by the managers responsible.

The reference for economic and Group data is the Group's Consolidated Balance Sheet.

Variations and corrections concerning previous editions

It has not been found necessary to revise the information supplied in the previous edition of the Report.

The subjects dealt with in this edition are in line with those in the previous edition.

7 GRI - G3.1 - Indicators

The symbols in the “Coverage” column have, with reference to the GRI standard, the following meanings:

- the data and information given satisfy the requirements of the standard
- the data and information given partly satisfy the requirements of the standard
- no data or information given
- n.m.** The data and information required by the standard are not considered material

The “Page” column indicates the pages of the Report where the subject is covered.

The “Notes” column gives additional information and clarification

Rif.	Description	Coverage	Page	Notes
1. Strategy and analysis				
1.1	President's declaration	<input checked="" type="checkbox"/>	1	
1.2	Main impacts, risks and opportunities	<input type="checkbox"/>	33	See also the “Director's report” section of SOL Group Annual Report
2. Organisation profile				
2.1	Name of organisation	<input checked="" type="checkbox"/>	5	
2.2	Main brands, products and/or services	<input checked="" type="checkbox"/>	From 5 to 16	
2.3	Operating structure	<input checked="" type="checkbox"/>	5	
2.4	Headquarters	<input checked="" type="checkbox"/>	5	
2.5	Countries of operation	<input checked="" type="checkbox"/>	7	
2.6	Ownership and legal form	<input checked="" type="checkbox"/>	5	
2.7	Markets served	<input checked="" type="checkbox"/>	From 5 to 16	
2.8	Size of the organisation	<input checked="" type="checkbox"/>	From 5 to 16	
2.9	Significant changes	<input type="checkbox"/>	6	
2.10	Recognition/prizes received	<input checked="" type="checkbox"/>	61	
3. Report parameters				
PROFILE				
3.1	Reporting period	<input checked="" type="checkbox"/>	62	
3.2	Date of previous report	<input checked="" type="checkbox"/>		2013
3.3	Reporting cycle	<input checked="" type="checkbox"/>		Annual
3.4	Contacts and addresses for information on report	<input checked="" type="checkbox"/>	Inside front cover	
REPORT SCOPE AND BOUNDARY				
3.5	Process for defining content	<input checked="" type="checkbox"/>	62	
3.6	Boundary of the report	<input type="checkbox"/>	62	
3.7	Limitations on scope or boundary of report	<input type="checkbox"/>	62	
3.8	Information on other related companies	<input type="checkbox"/>		
3.9	Data measurement techniques and basis of calculation	<input type="checkbox"/>		
3.10	Modifications with respect to previous report	<input checked="" type="checkbox"/>	62	
3.11	Significant changes with respect to previous report	<input checked="" type="checkbox"/>	62	

Rif.	Description	Coverage	Page	Notes
GRI CONTENT INDEX				
3.12	Table of reference	<input checked="" type="checkbox"/>	63	
ACCREDITATION OF THE REPORT				
3.13	External assurance	<input type="checkbox"/>		
4. Governance, commitment, involvement of stakeholders				
GOVERNANCE				
4.1	Governance structure	<input checked="" type="checkbox"/>	19	
4.2	Is the President also an executive officer	<input checked="" type="checkbox"/>		See "Annual report of the Board of Directors on company Governance and ownership structure" on www.solworld.com
4.3	Independent and non-executive officers	<input checked="" type="checkbox"/>		See "Annual report of the Board of Directors on company Governance and ownership structure" on www.solworld.com
4.4	Mechanisms for shareholders and employees to provide recommendations	<input type="checkbox"/>		
4.5	Connection between compensation of officers and top management and performance	<input type="checkbox"/>		
4.6	Conflicts of interest	<input checked="" type="checkbox"/>		See "Annual report of the Board of Directors on company Governance and ownership structure" on www.solworld.com
4.7	Qualifications of officers	<input checked="" type="checkbox"/>		See "Annual report of the Board of Directors on company Governance and ownership structure" on www.solworld.com
4.8	Mission, values, codes of conduct and principles	<input checked="" type="checkbox"/>	20	
4.9	Procedures for identifying and managing economic, environmental and social performance	<input checked="" type="checkbox"/>	21	
4.10	Process for evaluating the performance of the Board of Directors	<input type="checkbox"/>		
Commitments to external activities				
4.11	How the precautionary principle or approach is applied	<input checked="" type="checkbox"/>	19	
4.12	Adoption of external codes and principles in economic, social and environmental matters	<input checked="" type="checkbox"/>	From 21 to 24	
4.13	Participation in category associations	<input checked="" type="checkbox"/>	60	
Involvement of stakeholders				
4.14	List of stakeholders involved	<input checked="" type="checkbox"/>	26	
4.15	Principles for identifying the stakeholders to involve	<input checked="" type="checkbox"/>	26	
4.16	Involvement of the stakeholders	<input checked="" type="checkbox"/>	31/57/58/ 59/60	Formalised only for certain stakeholders
4.17	Activities involving stakeholders	<input checked="" type="checkbox"/>	31/57/58/ 59/60	Formalised only for certain stakeholders
Economic performance				
ECONOMIC PERFORMANCE				
EC1	Economic value directly generated and distributed	<input checked="" type="checkbox"/>	30	
EC2	Financial implications and other risks and opportunities connected with climate change	<input type="checkbox"/>		
EC3	Coverage of obligations assumed when pension plan was drawn up	<input checked="" type="checkbox"/>	50	
EC4	Significant financing from Public Administration	<input checked="" type="checkbox"/>		No significant financing
MARKET PRESENCE				
EC5	How standard new employee wages compare with local minimum	<input type="checkbox"/>		
EC6	Policies, practices and percentage of spending with local suppliers	<input checked="" type="checkbox"/>	31	Italy only
EC7	Procedures for hiring management locally	<input type="checkbox"/>		
INDIRECT ECONOMIC IMPACTS				
EC8	Development and impact of investments in public utility infrastructures and services	n.m.		
EC9	Indirect economic impacts	<input type="checkbox"/>		

Rif.	Description	Coverage	Page	Notes
Environmental performance				
RAW MATERIALS				
EN1	Raw materials used	<input checked="" type="checkbox"/>	33	
EN2	Percentage of materials used deriving from recycled material	n.m.		
ENERGY				
EN3	Energy consumption by source	<input checked="" type="checkbox"/>	36	
EN4	Indirect energy consumption by source	<input checked="" type="checkbox"/>	37	
EN5	Energy saving	<input checked="" type="checkbox"/>	36/37	
EN6	Products and services for energy efficiency or based on renewable energy	<input checked="" type="checkbox"/>	9/10/11/ 39/40	
EN7	Initiatives for reducing indirect energy consumption	<input checked="" type="checkbox"/>	37	
WATER				
EN8	Water consumption by source	<input checked="" type="checkbox"/>	43	Consumption only
EN9	Water sources significantly affected by usage	<input type="checkbox"/>		
EN10	Percentage in total volume of water recycled and reused	<input checked="" type="checkbox"/>	43	
BIODIVERSITY				
EN11	Land owned, rented or managed in protected areas of significant value for biodiversity	n.m.		
EN12	Description of major impacts on biodiversity	n.m.		
EN13	Habitat protected or restored	n.m.		
EN14	Strategies for managing the impacts on biodiversity	n.m.		
EN15	Number of species listed in the IUNC red list	n.m.		
EMISSIONS, EFFLUENTS AND WASTE				
EN16	Greenhouse gas emissions	<input checked="" type="checkbox"/>	39	Production units only
EN17	Other indirect emissions of greenhouse gas	<input type="checkbox"/>		
EN18	Action to reduce greenhouse gas emissions	<input checked="" type="checkbox"/>	39	
EN19	Emissions of substances harmful for the ozone layer	<input checked="" type="checkbox"/>	38	
EN20	Other atmospheric emissions	<input checked="" type="checkbox"/>	38	
EN21	Water discharge	<input checked="" type="checkbox"/>	44	
EN22	Production of waste and disposal methods	<input checked="" type="checkbox"/>	41	
EN23	Total number and volume of polluting spills	<input checked="" type="checkbox"/>	45	
EN24	Weight of waste classified as dangerous under the Basel Convention transported, imported or treated	<input checked="" type="checkbox"/>	41	
EN25	Characteristics of biodiversity of aquatic fauna and flora significantly hit by effluents and dispersion from the organisation	<input checked="" type="checkbox"/>	45	
PRODUCTS AND SERVICES				
EN26	Impacts of products and services on the environment	<input checked="" type="checkbox"/>	9/10/11	Qualitative
EN27	Percentage of products sold and packaging material recycled or reused	<input type="checkbox"/>		
CONFORMITY				
EN28	Amount of fines and number of sanctions for environmental offences	<input type="checkbox"/>		
TRASPORT				
EN29	Significant environmental impact of transport of products and goods/materials and for staff movement	<input checked="" type="checkbox"/>	38	
GENERAL				
EN30	Expenses and investments for environmental protection, by type	<input type="checkbox"/>		

Rif.	Description	Coverage	Page	Notes
Social performance				
EMPLOYMENT				
LA1	Personnel by type, contract and region	<input checked="" type="checkbox"/>	48/49	
LA2	Turnover by age, sex and region	<input checked="" type="checkbox"/>	48	
LA3	Benefits offered to full time, but not to part-time workers	<input type="checkbox"/>		
INDUSTRIAL RELATIONS				
LA4	Coverage of collective contracts	<input checked="" type="checkbox"/>	52	
LA5	Minimum for warning for operational modifications	<input type="checkbox"/>		
HEALTH AND SAFETY IN THE WORKPLACE				
LA6	Percentage of workers represented on the health and safety Committee	<input type="checkbox"/>		
LA7	Accidents at work and illnesses	<input checked="" type="checkbox"/>	55/56/57	
LA8	Training programs for the prevention and control of risks to help personnel avoid disturbances or serious illnesses	<input checked="" type="checkbox"/>	54	
LA9	Formal agreements with the unions on health and safety	<input checked="" type="checkbox"/>		Where laid down in collective contracts
TRAINING AND INSTRUCTION				
LA10	Staff training	<input checked="" type="checkbox"/>	51	
LA11	Programmes for development of competences and career advancement	<input checked="" type="checkbox"/>	49	
LA12	Percentage of staff who receive regular assessments on their performance and career development	<input type="checkbox"/>		
DIVERSITY AND EQUAL OPPORTUNITIES				
LA13	Staff by sex and other diversity indicators	<input checked="" type="checkbox"/>	48	
LA14	Relationship between men's and women's basic wages	<input checked="" type="checkbox"/>	49	Qualitative
Human rights				
INVESTMENT AND SUPPLY PRACTICES				
HR1	Operations with human rights clauses	n.m.		
HR2	Suppliers evaluated for respect of human rights	n.m.		
HR3	Hours of training on human rights policies and procedures relevant for the organisation	n.m.		
NONDISCRIMINATION				
HR4	Cases of discrimination	<input type="checkbox"/>		
FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING				
HR5	Risks for right to freedom of association and collective bargaining	<input type="checkbox"/>		
CHILD LABOUR				
HR6	Use of child labour	n.m.		
FORCED LABOUR				
HR7	Use of forced labour	n.m.		
SAFETY PRACTICES				
HR8	Percentages of safety personnel who have received training on human rights policies and procedures relevant for the organisation	n.m.		
INDIGENOUS POPULATION RIGHTS				
HR9	Number of violations of rights of local community and actions taken	n.m.		

Rif.	Description	Coverage	Page	Notes
Impacts on society				
COMMUNITY				
S01	Management of impacts on community	<input checked="" type="checkbox"/>	59	
CORRUPTION				
S02	Monitoring of risk of corruption	<input type="checkbox"/>		Italy – D.Lgs 231/01
S03	Staff trained in corruption crime prevention	<input type="checkbox"/>		Italy – D.Lgs 231/01
S04	Action taken following cases of corruption	<input checked="" type="checkbox"/>		No reported cases
POLITICAL CONTRIBUTIONS				
S05	Position on public policy and lobbying	n.m.		Not part of Group policy
S06	Total financial contributions and benefits to parties by country	n.m.		Not part of Group policy
ANTI-COLLUSION CONDUCT				
S07	Number of legal actions for non-competitive behaviour, anti-trust and monopoly practices	<input type="checkbox"/>		
CONFORMITY				
S08	Money value of sanctions for non-conformity with laws or regulations	<input type="checkbox"/>		
Product responsibility				
CONSUMER HEALTH AND SAFETY				
PR1	Products and services health and safety	<input checked="" type="checkbox"/>	58	
PR2	Nonconformity with regulations and voluntary codes	<input checked="" type="checkbox"/>		None on record
LABELLING OF PRODUCTS AND SERVICES				
PR3	Information on products and services	<input checked="" type="checkbox"/>	58	
PR4	Number of cases of nonconformity with regulations or voluntary codes concerning information on products/services	<input type="checkbox"/>		
PR5	Customer satisfaction	<input type="checkbox"/>		
MARKETING COMMUNICATION				
PR6	Laws, standards and voluntary codes on marketing and advertising	n.m.		
PR7	Number of cases of nonconformity and marketing communications	n.m.		
RESPECT FOR PRIVACY				
PR8	Number of complaints on privacy and data loss	<input checked="" type="checkbox"/>		No complaints
CONFORMITY				
PR9	Sanctions for nonconformity with laws or regulations	<input type="checkbox"/>		

8

Glossary

Accident: a chance event that could lead to injury or material damage.

Air separation: process of separating out the gases contained in air by distillation, producing both liquid and gaseous products.

Audit: A systematic, independent and documented process for objectively evaluating to what extent the management criteria of reference have been satisfied.

BS OHSAS 18001: an international standard issued by the British Standards Institute that establishes the requirements of a health and safety management system. It allows organisations to be aware of and keep under control risks deriving from operations in normal and extraordinary conditions and to improve safety performance.

Cold converter: container with insulated vacuum chamber for highly refrigerated cryogenic gases, complete with interception, measuring and safety instruments.

Conditioning: a production operation that consists in taking gas from a secondary storage tank and compressing it in a gaseous or liquid state and transferring it to mobile containers. Conditioning also includes the sequence of operations carried out on the containers from when they arrive at the centre to storage of full containers ready for delivery.

Cylinder basket: steel structure containing a number of cylinders, normally 8 or 16, in a vertical position to facilitate their handling with normal forklift trucks.

Cylinder bundle: set of interconnected cylinders supported by a metal structure. The outlets of the cylinders are led to a single manifold.

Cylinder: container in steel or light alloy for compressed, liquefied or dissolved gases.

EMAS (Eco-Management and Audit Scheme): European Community regulation 761/2001. A voluntary instrument for implementing Community Environmental Policy aimed at continually improving environmental performance of the companies and businesses adopting it.

Food safety: the concept that food must not cause harm to consumers if prepared in accordance with its intended use.

Frequency index: ratio between the number of accidents and hours worked multiplied by 1 million. It measures the frequency of accident occurrence.

Global Reporting Initiative (GRI): a multi-stakeholder network instituted in 1997 and made up of companies, NGOs, associations of accountancy experts, business organisations and other international stakeholders involved in subjects relating to Corporate Social Responsibility. GRI's mission is to develop, supply and promote global reference guidelines for the drawing up of Sustainability Reports that describe the economic, environmental and social impacts that companies or organisations cause with their activities.

Injury: undesired event in the workplace that provokes bodily damage or objectively verifiable illness.

IPPC (Integrated Pollution Prevention and Control): Strategy instituted with Directive 96/61/CE for minimising the pollution caused by various sources throughout the EU. All types of installation listed in Appendix 1 of the Directive must obtain integrated authorisation from the authorities of the various countries. It is based on the premise that the failure to adopt

a common approach for controlling emissions into air, water and terrain could lead not to a reduction of pollution but to its transfer from one compartment to another.

ISO 50001 standard (Energy Management): an international standard aimed at helping organisations improve their energy performance, increasing energy efficiency and reducing climate and environmental impact.

Major accident: event such as a serious spill, fire or explosion due to uncontrolled developments in activities in the presence of dangerous substances, that could cause grave danger for human health or the environment.

Medical device (MD): any instrument, apparatus, equipment, machine, device, plant, reagent in vitro or for calibration, computer software, material or other similar or related product for use, alone or in culmination, on persons for one or more specific purposes of diagnosis, prevention, control, therapy or attenuation of an illness; for diagnosis, control, therapy, attenuation or compensation of a wound or handicap; for studying, substituting or modifying anatomy or a physiological process; for intervening on conception where the main desired action in or on the human body is not carried out with pharmacological or immunological means or through metabolism, but whose function can be aided by these means.

Medical gas: any medication consisting of one or more active gaseous substances that may or may not be mixed with excipient gases.

Mobile container: container for compressed, liquid, dissolved and cryogenic gases used for transporting products. Mobile containers are: cylinders, drums, gas cylinders, cylinder bundles, dewars, base units and portable units.

Policy (quality, safety, environment): general principles and guidelines of an organisation, formerly expressed by top management.

Primary process units: units where gases are produced from raw materials.

Primary storage: liquefied cryogenic gas container filled directly by the production plant. Quality, safety and environmental management system.

Quality, Safety and Environment Management System (SHEQ/MG): that part of the general management system that includes the organisational structure, planning, responsibilities, procedures, processes and resources for drawing up, implementing and maintaining active well-defined quality, safety and/or environmental policies.

Raw materials – primary process units: atmospheric air, for the production of oxygen, nitrogen and argon; natural gas, for the production of hydrogen and carbon dioxide; calcium carbide for the production of acetylene; ammonium nitrate for the production of nitrous oxide.

REACH: EC regulation n. 1907/2006 (Registration, Evaluation, Authorization and Restriction of Chemicals). Its main aim is to improve the awareness of the dangers and risks deriving from chemical substances, aiming to attain a high level of protection of human health and the environment.

Responsible Care: a voluntary program of the world chemical industry based on the implementation of principles and conduct concerning the safety and health of employees and environmental protection, and the commitment to communicate the results obtained aiming for continual, significant and tangible improvement.

Sale equipment: technical/technological equipment purchased from third parties and supplied for use to customers as part of a service, but destined to remain the property of SOL; for example mobile containers, cold converters etc.

Secondary process units: units where gases are conditioned, normally using gases coming from primary process units, into their physical form (which may be compressed gas or cryogenic liquid) in the containers (cylinders, cylinder bundles, drums or tanks) best suited for distribution to end users. Some units also produce pure and high purity gas mixtures.

Secondary storage: liquefied cryogenic gas container filled by tankers, normally installed in secondary process units.

Severity index: ratio between days of absence due to injury and hours worked multiplied by 1 million. It measures the severity of injuries.

Seveso Directive (CEE/82/501 and later modifications): European regulation aimed at preventing and controlling the risk of serious accidents. It governs industrial activities that involve the stocking and/or use of certain quantities of dangerous substances.

Stakeholder: all categories of subjects, private or public, individual or collective, internal or external, that can influence the success of a business or whose interests are involved in business decisions: customers, suppliers, investors, local communities, employees, unions, public administration, future generations etc.

Steam reforming: process in which methane reacts with steam, in the presence of a catalyst, to produce hydrogen and CO₂.

Sustainability (see Sustainable development)

Sustainable development: development that can satisfy current economic, environmental and social needs, without compromising the chances of future generations being able to satisfy theirs.

UNI EN ISO 13485 standard (Medical devices – quality management systems): an international standard that aims to maximise the probability that organisations operating in the medical devices sector satisfy the legal requirements existing at world level on quality management, and so supply safe and effective medical devices.

UNI EN ISO 14001 standard (Environmental Management): an international standard that lays down the requisites for an environmental management system. It allows organisations to be aware of that and keep under control activities that have significant environmental impact, and improve their environmental performance.

UNI EN ISO 22000 standard (Food Safety Management Systems): an international standard that defines the requirements for a food safety and hygiene management system.

UNI EN ISO 27001 standard (Information security): an international standard that defines the requirements for setting up and running an information security management system (logical, physical and organisational security), with the aim of protecting data and information from threats of all kinds, ensuring the integrity, confidentiality and availability.

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