# 2021

## SUSTAINABILITY REPORT SOL GROUP





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# 2021

## SUSTAINABILITY REPORT SOL GROUP

Consolidated Non-Financial Statement pursuant to Italian Legislative Decree 254/2016





#### LETTER TO STAKEHOLDERS

#### CONFIDENCE, DETERMINATION AND RESPONSIBILITY IN COMPLEX TIMES

The winds of Covid-19 are lightly abating thanks to massive vaccination campaigns around the world, while the winds of war, if possible even more threatening, are beginning to blow in the centre of Europe. We must open this letter conveying our thoughts going out to the millions of Ukrainian refugees fleeing their country as a result of the Russian invasion, and to their compatriots who remain in the country to fight for freedom. Our thoughts go out to them, together with the hope that this war will soon end, that we can resume building what has been destroyed, and that democracy, together with freedom, will return to all oppressed peoples.

In these difficult years - 2021 due to Covid-19, which still affected large periods of the year, and 2022 which began with Russia's invasion of Ukraine - the SOL Group was able to continue to **contribute to the fight against the pandemic**, especially in the most affected countries. It successfully reacted to the sudden, unexpected and violent increase in the cost of raw materials, especially natural gas and electricity, the latter being the raw material for the production of our gases, which began in the second quarter of 2021 and is still ongoing.

Group companies have carried out **coordinated interventions with the authorities** in various countries where there has been a **shortage of medical oxygen** in hospitals; in particular throughout South-East Europe (Albania, Kosovo, North Macedonia, Bulgaria, Romania and Greece), in Tunisia and in India, obtaining, for example in the latter case, various official awards for the support provided. This was also made possible by the great help and coordination work that all Group companies were able to put in place for the benefit of the SOL subsidiaries in the most affected countries.

Our **Biotech** companies continued to provide products and services such as diagnostic kits for detecting the Sars-CoV-2 virus and for the analysis and reporting of swabs and PCR tests to patients. The **VIVISOL** companies managed numerous Covid-19 patients at home, both in the early stages of the disease and in their recovery after the period spent in hospital, often in intensive care.

Our staff worked **safely** at all times. Our thoughts and our gratitude go above all to those among them who have worked on the front line: nurses, transporters, hospital technicians, bottlers. Remote working became an established practice during the pandemic and still is today after having surpassed the emergency period: an **agile working** component has been institutionalised for that group of employees without any impediments arising from their particular duties.

The year 2021 was characterised by a growth in turnover and investment volume that is unique in SOL's history: more than **14% growth in turnover** and no less than **€234 million in investments**, including acquisitions, indicating our Group's drive to develop, our confidence in the future, and our ability to relentlessly seek out and implement concrete growth projects. The strategic asset of **our employees** increased from 4,613 in 2020 to **5,101** at the end of 2021.

Among the main **investments** completed, the **expansion of the liquid oxygen and nitrogen production capacity** of the air fractionation and liquefaction plant at the Verona plant deserves mention, which started operations in June 2021. In November 2021, the new plant in Wanze, Belgium, which **recovers, purifies and liquefies BioCO**, (bio carbon dioxide), also went into production. This project was carried out together

with the Crop Energies Group, already our partner in Zeitz, Germany. We are particularly pleased to point out that with the Zeitz, Wanze and Ithiman plants in Bulgaria, more than 50% of the  $CO_2$  produced by our Group is now  $BioCO_2$ , i.e., from plant masses used in the production of bioethanol, which is therefore a renewable and sustainable source.

Significant **investments were also made in the area of home care**. VIVISOL companies in the **UK** extended home care services to several thousand obstructive sleep apnoea patients through new contracts with some of the UK's largest hospitals; a **new logistics hub** for the whole of **Germany** was completed in Arnstadt; and in **Brazil**, **new agencies** were opened in Brasilia and Recife. In Znin, Poland, a long-term care hospital for the chronically ill was purchased, renovated and opened, as well as in **Allershausen**, Bavaria, Germany. In the **Netherlands**, the **new ERP platform** became operational, which is the result of a significant IT investment. This pilot project will now be replicated in the Group's main companies, which are increasingly oriented towards the digital world.

But 2021 was also characterised by very important external **growth operations**. SOL made the most important acquisition in its history, taking over all the assets of the French multinational Air Liquide in **Greece**; it increased its stake in **SICGILSOL**, now SOL INDIA, from 60.82% to **86.37%** and increased its stake from 70% to **100%** in the two Polish home care companies **PALLMED and MEDSEVEN**. A small but strategic Home Care company in the Czech Republic, a carbon dioxide operator in Germany, and ISIMED in Italy, a major Home Care operator in Sicily and Lombardy, were also acquired.

Another strategic acquisition concluded by SOL in 2021 was that of the majority stakes in the two **Chinese companies SHANGHAI SHENWEI** and **MU KANG**, together with 30% of the company **JIAWEI**, all operating in the hospital and Home Care sectors in the very interesting Chinese market, the first in the world in terms of size. The three companies have 153 colleagues, of whom 109 are in the two consolidated companies.

We welcome all the new colleagues to the SOL Group.

In 2021, our Group adopted the **new Corporate Governance Code** for Italian listed companies, in line with the continuous improvement of our governance.

In 2021, the SOL Group's **2021-2030 Development Plan** entered its operational phase. Our company has always operated by setting long-term economic and financial objectives, but also by increasing job opportunities and the quality of staff training, by paying attention to stakeholders, and by improving the contribution we can make, directly and indirectly, to the circular economy and energy efficiency. The focus on sustainability in all its forms is a recurring and characterising element of the Plan, in all its dimensions.

With this in mind, the Group implemented two new projects in 2021:

the "safety campaign", with continuous initiatives aimed at increasing our level of awareness of the risks
that we run every day in conducting our work, and the necessary adoption of measures to address them;

the "Little Big Innovations" project, which emphasised the involvement of all the Group's people and their role as promoters of sustainability in the company and in their daily lives. The project was a success, gathering more than 200 ideas, the best 12 of which were awarded in February 2022. The implementation phase of many of these ideas is now underway, for an increasingly advanced SOL on its path to ESG excellence.

In recent months, the Group has also been working on its first Sustainability Plan, the strategic priorities of which include the sustainability of our processes and those of the customers we work with, innovation, promoting an inclusive working environment, dialogue and listening to our main stakeholders.

Finally, we would like to point out that VIVISOL has developed a new concept for 2021 which is intended to encapsulate the mission of the Group's Home Care companies in an even clearer and more explicit manner: "We care", signifying our specific role as those who bring care to our patients around the world.

In the following detailed report, you will find many figures and numerous well-addressed and explained topics, but also many practical, concrete and operational examples which we hope will effectively illustrate our commitment to sustainability along with our way of working in the company and of being citizens who are also daily committed to making their own serious and convinced contribution to a more balanced and sustainable world.

> Aldo Fumagalli Romario Chairman

Hero Luner Marco Annoni

Deputy Chairman





#### **THE KEY NUMBERS 2021**

	2017	2018	2019	2020	2021
ECONOMIC MEASUREMENTS (© million)					
Group's net sales	756.8	833.5	904.3	973.8	1,112.9
Technical gas area net sales	369.2	403.2	412.6	438.2	558.4
Home care area net sales	387.6	430.3	491.7	535.6	554.5
Gross operating margin	167.2	186.9	211.3	255.4	260.8
Operating result	76.2	89.7	88.7	140.0	135.8
Investments	99.3	99.8	103.3	112.9	132.3

#### **ENVIRONMENTAL MEASUREMENTS**

Specific consumption (ASU; base 2017=100)	100	102	101	102	105
Electrical energy produced (GJ)	276,437	365,775	322,072	318,136	327,920
Greenhouse gas emissions (tonnes CO <sub>2</sub> e)					
- Direct emissions	39,765	45,372	41,792	40,088	46,710
- Indirect emissions	244,910	260,214	272,317	252,279	288,193
- Direct and indirect emissions from product transportation	48,951	52,175	52,801	54,403	64,986

#### **OUR PEOPLE**

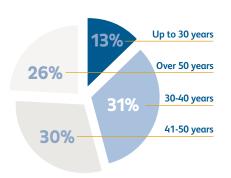
Employees as at 31/12	3,556	3,958	4,320	4,613	5,101
- Italy	1,136	1,194	1,218	1,248	1,350
- Other countries	2,420	2,764	3,102	3,365	3,751
Hours of training	50,501	64,739	71,821	61,150	67,281
Employees' injuries at work					
- Injury rate	3.1	4.6	3.4	3.6	3.8

#### **PEOPLE IN SOL IN 2021**

#### **DIVERSITY**

# By gender By region By employee category 2% Senior manager 10% Manager 10% Munager 59% White collar workers

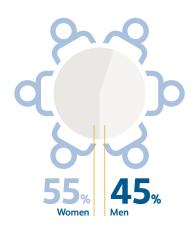
#### By age group



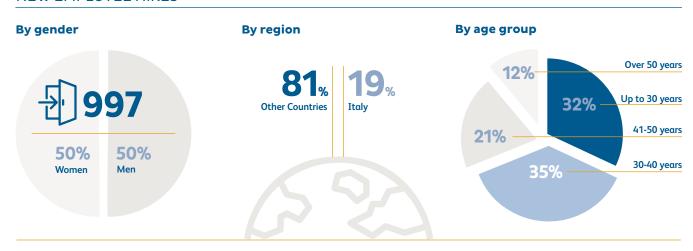
#### By employment contract



#### **Board of Directors Composition**



#### **NEW EMPLOYEE HIRES**





#### **ABOUT US**

Founded in Italy in 1927, the SOL Group operates in the area of the production, applied research and marketing of **technical and medical gases**, in the **home care services** sector, in the **biotechnologies** sector and in the production of **energy from renewable sources**.

It is present in 30 countries with 5,101 employees, serves over 50,000 industrial customers, 500 major medical customers and over 550,000 patients. In 2021, its net sales came to €1,112.9 million.

The parent company SOL Spa has been listed on the Italian Stock Exchange since July 1998.



In the **industrial sector**, the Group supplies technical gases (compressed, liquefied and cryogenic), equipment, systems and services to customers operating in most industrial sectors: steel, metallurgy, glass and ceramics, metal fabrication, chemistry and pharmaceuticals, food and beverage industry, oil industry and services for the environment and transport of goods and people.

In the **health sector**, it supports hospitals (public and private), Scientific Hospitals and Care Institutions, University Hospitals, Clinical Research Centres, Medically Assisted Procreation Centres, nursing homes and assisted-living centres, providing medicinal gases, medical devices for the administration and dosing of medicinal gases, equipment, gas distribution systems, plant management services, services for the healthiness of hospital environments, global service management services for electro-medical equipment, sterilisation plants and the turnkey construction of cryobiological rooms and laboratories.



In the **field of home care**, the Group provides services and therapies through VIVISOL for chronic patients who, on behalf of the Health Systems of the different countries, are cared for outside protected contexts such as hospitals. VIVISOL is able to comprehensively treat chronic patients who often have disabling diseases and are in socially vulnerable conditions, or who need life-support treatment and care, with the aim of maintaining their social and emotional context, thus improving their quality of life. VIVISOL provides home-based respiratory and infusion therapies as well as telemedicine and telemonitoring services and highly complex medical and nursing care. Thanks to its consolidated experience in the sector, VIVISOL is now one of the main Home Care Providers at European and non-European level.

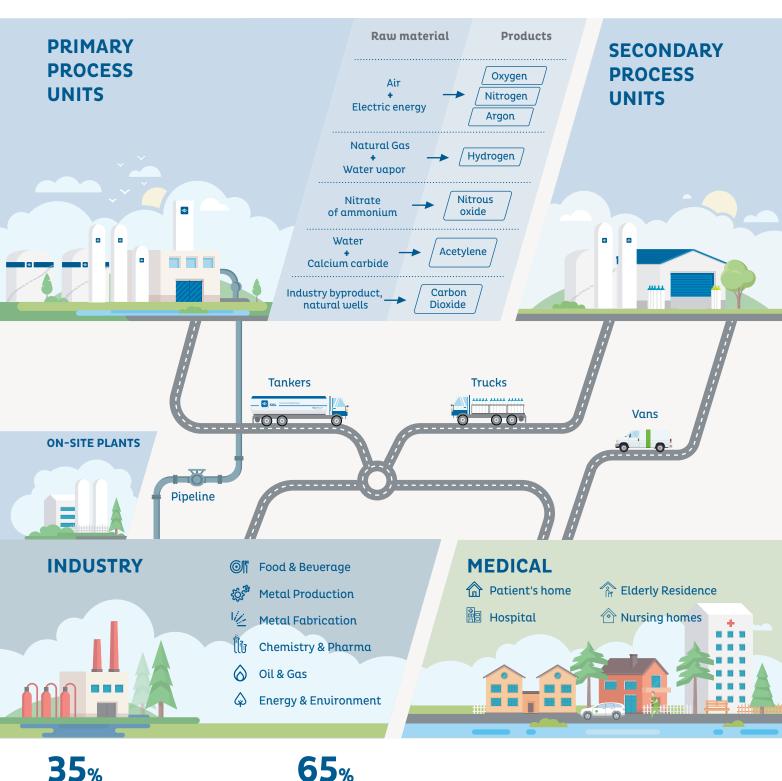


In the **biotechnology sector**, the Group develops tests and analytical services in the world of human and animal research and clinical diagnostics, carries out clinical studies aimed at developing proprietary biotechnological molecules, performs accredited genomic and molecular genetic diagnostic services, develops bioinformatics pipelines for clinical data management, and develops validated production processes for biotechnological molecules such as antibodies and recombinant proteins that it produces as medicinal products.



In the **production of energy** from renewable sources, the Group has managed 16 hydroelectric plants in Albania, Bosnia and Herzegovina, North Macedonia and Slovenia since 2002.

#### THE BUSINESS MODEL



**Industry** net sales

**65**% **Healthcare** net sales

Net sales **Italy** 

Net sales Other countries

## MISSION AND VALUES

We aim to contribute to improving the quality of life on the planet through the **development of innovative and technologically advanced solutions** for industrial and healthcare customers, and the **provision of the best care** for patients served in their own homes.

For more than 90 years, our mission and values have guided us on a path of constant and lasting growth based on respect for sound social, environmental and economic principles.

**Ethical behaviour:** in interpersonal relations, towards employees, customers, suppliers and all stakeholders.

**Safety:** we uphold workplace safety of all employees, as well as the safety of the products and services we provide to our customers and patients, as priority issues.

**Customer satisfaction:** we are committed to providing our customers with innovative and technologically advanced solutions at all times and to improving the quality of life of our patients, guaranteeing them the best treatment and the best possible home care.

**Balanced development:** we work to create balanced economic growth and constant development in the long term, employing resources in an efficient and diversified manner.

**Environmental protection:** we seek to safeguard the environment by optimising processes, and therefore using energy resources in the best possible way, and by developing technologies and services that help our customers improve their environmental efficiency.

**Development of human resources:** we view attracting and developing the loyalty of new talents and, in general, training and developing the skills of individuals, as key to the success of the SOL Group and the satisfaction of all its employees.

Since 2006, the SOL Group has adopted its own **Code of Ethics**. It serves as a reference tool for the members of corporate bodies, SOL Group collaborators, and for any third party (such as suppliers, business and industrial partners) who collaborates or works in the name, on behalf or in the interest of the SOL Group, wherever it operates and in any way contributes to creating value for the company. The document devotes particular attention to the protection of occupational health and safety, the prevention and fight against corruption, as well as the protection of the environment and respect for human rights.

In order to be disseminated and understood by all employees, the Code is translated into the different languages of the main countries where the Group operates.





Throughout the year, SOL has distinguished itself as one of the most virtuous companies in the field of workplace health and safety, winning the Responsible Care 2021 Award and a special mention at the EIGA Safety Innovation Awards.

Within the framework of **Responsible Care** (a voluntary commitment project of global chemical industry players for sustainable development), Federchimica awarded SOL for the **application of the Behaviour Based Safety** (BBS) protocol within the verification operations in the cylinder pre-filling phase. Thanks to the systematic collection of data and information via Google applications, SOL is able to observe the correct execution of filling activi-

ties and monitor behaviour. This analysis allows to detect unsafe behaviour and understand its causes, allowing targeted corrective actions to be taken.

Also in 2021, SOL received a special mention at the **Safety Innovation Awards** of **EIGA**, the European Industrial Gas Association that promotes best practices in safety and environmental protection at work and in the community. The winning project concerns the installation at the Operations Management Centre in Cremona of cameras connected to an artificial intelligence system capable of supervising logistics activities within the unit. The system locates subjects in space and "classifies" the detected actions based on predefined algorithms. It can generate messages, trigger alarms and/or perform actions, improving the safety of the operators in the workplace.

#### LITTLE BIG INNOVATIONS

#### Together for a better future

During 2021, the SOL Group launched the **Little Big Innovations** campaign, an initiative that involved all the Group's employees in a process of **growth and awareness on the subject of sustainability**.

The spirit of innovation, collaboration and sharing were all fundamental prerequisites that motivated all employees to submit their own initiative to help strengthen and implement the Group's activities with a view to sustainable growth.

To this purpose, the **4 thematic categories** Wellfeel, Environment, Social Initiatives and Circular Economy were identified to classify initiatives, and relevant **4 "Green Teams"** were created, each responsible for the collection of projects and, where necessary, to provide support in their development.  $% \label{eq:control_eq} % \label{eq:control_eq}$ 

Each initiative was then analyzed by the reference Team, and later submitted to the evaluation of an appointed Evaluation Committee that identified 12 winning projects that will be implemented.

A representative symbol of this campaign is the **SOL Group's new forest in Armenia**, the result of a forestation project carried out in cooperation with the local association My Forest Armenia.

**Each shared idea** has not only contributed to the SOL Group's research and innovation process, but **has also planted its roots** in the barren lands of the Jrašen area, helping to repopulate the flora of Armenia

Over the course of the campaign, the SOL Group has collected more than 200 sustainable growth initiatives, which will allow 50,000 trees to be planted in Armenia. The forest will be able to absorb 5,000 tonnes of CO<sub>2</sub>, replenishing the verdant Jrašen region.

#### SUSTAINABILITY, A GLOBAL GOAL

Recognising sustainable growth as a key element for development, the SOL Group integrates its corporate strategy with the priorities of its main stakeholders and the **goals set** by the United Nations 2030 Agenda.





#### SUSTAINABILITY FOR EMPLOYEES

#### Material topics

#### La nostra strategia

Ability to attract talent and human resources development

Health and safety of workers

Corporate welfare and employee well-being

Respect for human rights and workers' rights

The SOL Group has always invested in the **well-being of its people**, in favour of a meritocratic and inclusive climate, based on the principles of **equality** and **equal opportunities**, **where collaboration** and **listening** are considered essential.

The commitment to the **health and safety** of our people is performed through extensive training, regular inspections, internal audits, investments in vehicles and equipment, but above all thanks to the cooperation of all our employees.

Through the **Code of Ethics**, the SOL Group shares with all its collaborators the moral and social principles to which the people of the SOL world must refer for the adoption and implementation of good behavioural practices in line with the identity and spirit of the Group.



#### SUSTAINABILITY FOR CUSTOMERS AND PATIENTS

#### Material topics

#### Our strategy

Customer and patient centrality

Traceability of products and services

Sustainable solutions for customers

Sustainable supply chain

The **centrality of customers and patients** is a primary objective: we want to anticipate customer needs, working on **product and service innovation**, guaranteeing **high standards of quality and safety**.

In the **industrial sector**, solutions with high technological and innovative content offer safer, cheaper and more environmentally friendly performance.

In the **health sector**, the wide range of services offered to hospitals (in terms of services, equipment and facilities), and to patients (through the range of home care services) places the care of people at the centre.

In the **biotechnology sector**, innovative diagnostic products allow the prevention and early detection of possible health problems, significantly affecting the quality of life of patients and their treatments.

We ensure the traceability of products and containers of medical gases, allowing their immediate localisation and, in the event of problems, timely intervention measures.



#### SUSTAINABILITY FOR HEALTHCARE

#### **Material topics**

#### Our strategy

Energy efficiency and climate change

Environmental impact of products

Efficient use of raw materials

Environmental impact of transport

.Waste management

We work to reduce energy consumption and emissions by offering **highly effective and efficient oxy-fuel solutions**, which are widely used in the production processes of metals, ceramics and cements.

Thanks to the construction of **on-site production plants** (plants built directly at the customer's premises and managed remotely) of oxygen, nitrogen, hydrogen and syngas-type mixtures, we offer a solution with **lower environmental impact**, which reduces road transport and streamlines energy consumption.

We protect water resources by offering customers in the industrial sector a service to **improve waste water quality**, thanks to the use of oxygen in sewage treatment.

We promote **sustainable mobility** by investing in the development of technological solutions using hydrogen and Liquefied Natural Gas (LNG), including from renewable sources (BioLNG).

We contribute to the **reduction of food waste** and consumer safety, adopting preservative-free food freezing systems and promoting conservation technologies in a modified and controlled atmosphere, able to preserve the organoleptic characteristics of consumer products.

We invest in systems aimed at **recovering carbon dioxide**, which is otherwise released into the atmosphere.

The environmental impact from activities in the health sector is also reduced through the **streamlining of transport**, the **computerisation of accounting documents** and reporting, and **the optimisation of inventory**. We offer management systems that monitor tank levels and keep track of packages distributed within healthcare facilities.

#### A HISTORY IN CONSTANT EVOLUTION

1927

The SOL Group was founded under the management of Giovyears Annoni and Aldo Fumagalli, with **two initial plants** for the production of oxygen and acetylene based in Livorno and Ancona.



1984

The Group also began to grow in **Europe**, creating plants, **branches and joint ventures** in most European countries over the years, also seizing opportunities offered by the opening of new markets in south-east Europe.

1986

SOL was one of the first companies in Europe to introduce a new form of treatment, developed in the US, for patients affected by serious respiratory disorders. This treatment involves significant quantities of oxygen and a highly specialist **home care** service. In 1986 **VIVISOL** was established, a company dedicated to developing this market.

1960

Alessandro and Renzo Annoni, Giulio and Ugo Fumagalli Romario, the second generation, launched an ambitious project for the **innovative development** of SOL: these were the years of the first technical gas production plants, located close to the Group's major key customers, such as steelworks and glass-makers.

1970

SOL was among the **leaders in the sector in Italy** thanks to the transition from a regional market strategy to a national one. This was made possible by embracing the major transformations taking place in the technical gas industry at the time due to the development of technologies for the storage and distribution of gases in cryogenic liquid state.



1998

In order to be more competitive on the international markets, the parent company SOL Spa was listed on the **Milan Stock Exchange**. The arrival of the third generation of the Annoni and Fumagalli Romario families at the helm of the company, together with a young executive management team from outside the families, allowed the Group to pursue its internationalisation strategy.

## 2002

The Group entered the **renewable hydroelectric energy** production sector, acquiring and developing hydroelectric power plants in Albania, Bosnia Herzegovina, North Macedonia and Slovenia.

2014

With the acquisition of the German company SKS, SOL became one of the **most important players** in the market for **the production of CO**<sub>2</sub> **in Germany**.

2017

The Group continued along its path of promoting more sustainable mobility, entering the **Liquefied Natural Gas** market.

2020

The Group effectively contributed to the fight against the **Covid-19** pandemic by developing and producing **rapid serological tests and molecular kits** for the identification of Covid-19 in Italy. It also launched a full **service** for molecular swab **analysis** and rapid antigen swabs performed at home.



2010

Taking advantage of the experience acquired in the creation and management of cryobanks for the storage of biological samples, in 2010 the Group entered the **biotechnology sector**.

2015

Construction of the Capo d'Orlando station in Italy for the refuelling of **hydrogen vehicles**, produced solely by means of photovoltaic panels.

2018

The Group acquired two companies in Poland specialising in **palliative care**.

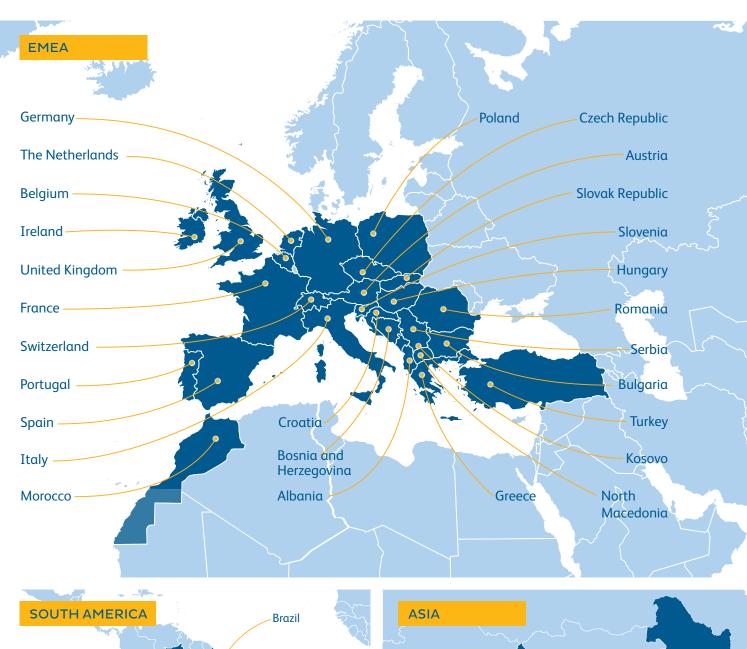
A **Centre for the testing and maintenance of cylinders and cylinder baskets** was created in Italy, with the aim of increasing container quality.

2021

The Group entered China, strengthening its international presence in the medicinal gases and healthcare services sector. Two companies active in the technical gas sector and in home care were acquired in Greece, consolidating the **Group's presence in South-East Europe**.



#### THE SOL GROUP WORLDWIDE





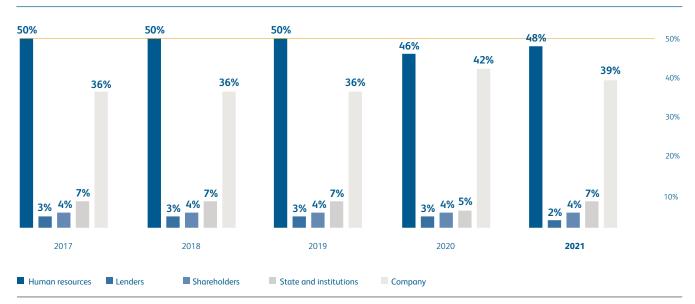


## VALUE GENERATED AND DISTRIBUTED

The economic value directly generated and distributed, understood as the economic added value produced by the SOL Group's activities and distributed to the main categories of stakeholders, makes it possible to associate the Sustainability Report with the financial results.

In 2021, the economic **value generated for stakeholders** was €492 million¹, an increase of €27 million compared to 2020 (+5.8%). This amount was then distributed to stakeholders as employee wages (human resources), returns on loans granted (lenders), return on risk capital (shareholders), taxes (state and institutions) and amortisation and non-distributed profits (investments).





 $The \ distribution \ of \ the \ economic \ value \ to \ shareholders \ for \ the \ 2021 \ fiscal \ year \ corresponds \ to \ the \ dividend \ that \ the \ Board \ of \ Directors \ will \ propose \ as \ investments \ to \ the \ Shareholders' \ Meeting.$ 

<sup>&</sup>lt;sup>1</sup> Figure excluding the share of profit of third parties

## THE GROUP'S DEVELOPMENT AND INVESTMENTS

#### MAIN CORPORATE OPERATIONS

In February 2021, the SOL Group finalised the **acquisition** of two companies in Greece, TAE HELLAS and VIVICA-RE HELLAS, which are active in the industrial and medical sectors, and in home care, respectively. This has accelerated the growth process in South-East Europe, creating numerous development opportunities.

The company **OXYTECHNIC** in the **Czech Republic**, which operates in the home respiratory care sector, was acquired. With this acquisition, the SOL Group has entered a new European market in the home care sector. **ISIMED**, a company active in the home care business in Italy, was acquired.

Furthermore, in August the SOL Group entered **China** with the **acquisition of three companies** active in the **medicinal gases** and **healthcare services sector**. In particular,

the Group entered into a partnership agreement with the entrepreneur SUN Aigun through the subscription of shares equal to 70% of the companies SHANGHAI SHENWEI MEDICAL GAS and SHANGHAI MU KANG MEDICAL DEVICE DISTRIBUTION SERVICE, and 30% of SHANGHAI JIAWEI MEDICAL GAS.

The Group increased its shareholding in the company **SOL INDIA** from 60.82% to 86.37% and in the Polish companies **PALLMED** and **MEDSEVEN** to 100%.

Finally, the German company KSD Kohlensäure-Dienst GmbH, active in CO<sub>2</sub> sales, was acquired.

#### MAIN INVESTMENTS

During 2021, €62.5 million of investments were made in the technical gases area, and €69.8 million in the home care sector.

In **Italy**, at the San Martino Buon Albergo plant, the construction works were completed on the new unit for the production of liquid nitrogen, the new liquid nitrogen storage section and the total production of oxygen and argon from



#### INVESTMENTS AND EXPANSION

## Modernisation of the SOL plant in Verona

During 2021, the SOL Group completed the project to modernise the technical and medical gas production plant located in San Martino Buon Albergo (Verona, Italy).

The work began in November 2019 and was completed in September 2021. It was aimed at maximising the production cycle through the recovery of nitrogen gas already purified but not yet used. Thanks to the use of a special liquefier, it is now possible to utilise the pure gas stream from the air separation unit (ASU), significantly increasing the production of final liquid nitrogen and maximising plant efficiency.

The investment also included the installation of a new process air compressor, a new purification line and the upgrading of the storage fleet.

Long-term investments allow for continuous improvements able to meet the growing demands of the market and simultaneously make the Group's business increasingly autonomous, significantly reducing the need to purchase products from third parties.

Thanks to these measures the SOL Group will not only have a more productive plant but also a more efficient one, with greatly enhanced capacities.

#### **INNOVATION**

## Solutions and innovation for hydrogen production

Together with its partners CNR-ITAE and Meridionali Impianti, SOL has developed an innovative system for the **trigeneration of hydrogen**, heat and electricity.

The plant was built as part of the Combined Heat, Power and Hydrogen distributed production project (CHeaPH2) and installed at the hydrogen vehicle refuelling station of the municipality Capo D'Orlando (Messina, Italy).

The system consists of several modular sections that are integrated and interconnected. The plant will enable the **production of hydrogen** through **autothermal reforming**, also from BioMethane. The hydrogen produced will be used to power an FCEV (Fuel Cell Electric Vehicle) **for public transport** 

and a **Stationary Fuel Cell** (FCS). In turn, the FCS will be able to generate and supply electricity to the **station's network**. This power supply will complement the already active energy production through **photovoltaic panels**, so that the station will operate even in conditions of low photovoltaic production.

The overall efficiency of the system developed in the project is superior to traditional processes due to the **recovery of heat** in the various sections of the process.



the existing plant were enhanced. At the Cremona branch, work is underway to upgrade the storage and compression of gaseous helium. In Verona, work continues at the company Il Point to modernise the entire site with the creation of the new area dedicated to orthopaedics and the new centre for orthopaedic prostheses.

The construction of a new plant for the production of Bio-CO<sub>2</sub> from biomass transformation processes at the Biowanze company's plant in the municipality of Wanze in **Belgium** was completed.

In Tilburg in the **Netherlands**, work began on modernising the nitrous oxide production plant.

In Burgbrohl, **Germany**, work began on modernising the carbon dioxide production plant, while in Arnstadt work is nearing completion on the new Home Care hub.

In **Poland**, the modernisation of the care facility in Znin was completed.

In **Slovenia**, the work to modernise and structurally consolidate the HE Gorje hydroelectric power plant was completed.

The improvement, modernisation and rationalisation programme in the primary and secondary technical gas production plants in Europe continued. This involved in particular the units in Augusta, Ancona, Marcianise and Padua in Italy, Skopje in North Macedonia, Jesenice in Slovenia and Krefeld in Germany.

Various on-site industrial and medical plants were built and put into operation in Italy and abroad, and the vehicles for the transportation, distribution and sale of products were enhanced with the acquisition of cryogenic tankers, cryogenic liquid tanks, cylinders, dewars and electromedical apparatuses. All this to accompany the Group's growth in the sectors and geographical areas it operates in.

Investments continued aimed at the improvement of information systems both in the technical gas sector and in the home care sector.





151

certified units ISO 9001

31

certified units ISO 14001

77

certified units ISO 45001

30

certified units ISO 22000

19

certified units ISO 13485

## CORPORATE GOVERNANCE

The Corporate Governance system is a key element of the SOL Group's business model and is designed to support the relationship of trust between SOL and its stakeholders and to contribute to the achievement of business results, creating sustainable value in the long term.

The system is based on the concept of **balance** in the representation and roles of corporate bodies, on **dialogue with shareholders**, **institutional investors and in general all the company's stakeholders**, **as well as** on **transparency** towards the organisation and towards the market.

The **SOL governance structure** comprises the following bodies: Board of Directors with its own Internal Board Committees, the Shareholders' Meeting, Board of Statutory Auditors and Independent Auditors, Employers regulated by workplace safety laws in addition to the Internal Control Function, the Supervisory Body pursuant to Italian Legislative Decree 231/2001 and the other business functions involved in the controls.

The **Board of Directors** has the main role of governance and management of the company, with the fundamental objective of pursuing the sustainable success of the company and the Group, always taking into account the interests of all stakeholders relevant to the company. All of the most significant projects, including those relating to sustainability performance, are assessed by the Board of Directors.

SOL has complied with the **Code of Conduct for Listed Companies** promoted by the Stock Exchange in the new version approved on 31 January 2020 (available at www. borsaitaliana.it) since 1 January 2021. The company therefore carried out a check of its governance system against the principles and recommendations of the Code during the year and implemented and/or adopted the appropriate tools and documents to be compliant with it. In particular, at its meeting of 18 February 2021, the Board of Directors approved a new Board Regulation that responds to some of the recommendations of the Code, and on 16 June 2021, an update of the Procedure relating to related parties. It also considered the content of the Code in the preparation of the Report on remuneration and compensation paid, approved by the Shareholders' Meeting on 15 May 2021.

For further information on Corporate Governance, please see the "Investors" section of the website www.solgroup.com.

#### THE INTERNAL CONTROL SYSTEM

The internal control system is the set of the corporate bodies and functions, protections, rules, procedures and standards aimed at monitoring and preventing fraud against the company and the market, as well as preventing offences that reflect an apparent interest or benefit of the company by either top management or, more generally, all its employees, thus ensuring compliance with laws in every area of the company's and the Group's activities, based on the principles of fairness, transparency, effectiveness, reliability and sustainability of corporate management.

The system is guided by the **Code of Ethics** and all the standards, directives and internal procedures which, taken as a whole, constitute the Integrated Quality, Safety and Environmental Management System.

Furthermore, SOL Spa, VIVISOL Srl and the subsidiaries REVI Srl and STERIMED Srl have adopted the Organisation, Management and Control Model established by Italian D.Lgs. 231/2001 and subsequent amendments and supplements, which forms an integral part of the internal control system. The companies have formed their own autonomous and independent Supervisory Bodies, either collegiate or single-person, which verify compliance with the Organisation, Management and Control Model pursuant to Italian Legislative Decree 231/2001 and, more generally, oversee respect for the Code of Ethics. On the occasion of the review of the Model in 2018, the reporting methods towards the Supervisory Body were integrated with a specific protocol for the management of reports, also in light of Italian Law 179/2017 on whistleblowing. The addition of new crimes to the list of those relevant under Italian Legislative Decree 231/2001 and, in particular, tax crimes, led to a revision of the Model, the new version of which was approved by the SOL Board of Directors on 20 May 2021.

The SOL Group is also strongly committed to protecting and respecting the **principles of free market and competition**. In 2017, a specific **Antitrust Compliance Programme** was adopted and the Antitrust Code and Operational Guidelines were approved and circulated by the Board of Directors. These documents have been translated into English, disseminated to all Group companies and have been divulged in specific training sessions dedicated to all recipients of the Programme. Recently, in view of both the experience gained and the entry into force of the AGCM guidelines on compliance, the Antitrust Compliance Programme was revised and implemented with the support of a leading law firm, resulting in the approval by the Board of Directors on 17 February 2022 of a specific Policy, a New Manual and more guidelines on specific topics of particular interest in view of the Group's specific activities. A more structured training and audit activity will therefore be planned and entrusted to a Compliance Manager who has already headed the Antitrust Department since 2017 and the Legal Affairs Department. This Manager, with his Office, is responsible for monitoring the implementation of the Antitrust programme and providing assistance in this area to everyone in the Group. Among his other duties, he also organises training events to promote the awareness and understanding of the topics governed by the regulation, annually reporting to the Board of Directors.

In 2018, following the entry into force of the European Directive on the **processing of personal data** (the so-called "GDPR"), a **DPO** (Data Protection Officer) **was appointed** in the countries where required by law and a Directive was published, valid at Group level, which defines the basic rules that all Group companies must uphold for the collection, processing and management of personal data. After this, the Group implemented a widespread training campaign, including via distance learning, using the communication tools available. The DPO periodically reports to the Board and the Board of Statutory Auditors on the work performed and any data breaches managed.

The systematic control of the correct application of the principles of corporate governance is carried out through a system that establishes an **Internal Control Department** that relies on the presence of corporate structures that carry out monitoring, control and management of corporate risks in the various Executive Departments. These controls are allocated in particular within the Corporate Executive Department for Administration and Finance, and the Corporate Executive Department for Quality, Safety and Environment and Regulatory Affairs.

The Board of Directors of parent company SOL Spa has appointed the above-mentioned **Internal Control Department** with the task of ensuring that internal operating and administrative procedures are correctly respected. Verification activities are performed both at the management offices of the Monza headquarters and at the offices of the Group's operating companies in Italy and abroad.

#### **TAX POLICY**

The Group's approach to tax risk is integrated into the broader corporate risk management framework. Tax risk management is carried out in a manner consistent with the applicable regulatory requirements and with the best long-term interests for shareholders, taking into account operational, economic and reputational factors.

The SOL Group's tax policy has two specific objectives. The first is to ensure the **correct and timely determination and settlement of taxes** (and execution of related obligations) in all countries where the Group is present. The second is to **contain the risk** of violating tax rules or abuse of the principles and purposes of the tax system.

In particular, the SOL Group is committed to formal and substantial compliance with all tax, domestic, international or supranational laws, regulations and practices, maintaining an attitude of collaboration and transparency with the tax authorities of the countries in which it operates. Given the complexity of tax legislation, to ensure the achievement of such objectives, the Group has a robust control system that enables us to verify the timeliness and formal and substantial correctness of tax obligations.

The responsibility for managing tax issues lies with the Administration and Finance Department of the SOL Group. Responsibility for compliance with the tax aspects of individual Group companies lies with the Company Managers and is supervised by the Group Administration and Finance Department.

The company channels for communicating any violation of the Code of Ethics can also be used to report any critical issues related to unethical or illegal behaviour and the integrity of the organisation in relation to tax issues.

## SUSTAINABILITY GOVERNANCE

Sustainability has been central to the SOL Group's strategy since it was founded, as it considers its growth to be closely linked to that of the world in which it operates. For this reason, it is committed to translating the principles of sustainable development into real actions and projects, with the aim of creating long-term value for the Group, its people, its customers, the community and the environment.

On 28 November 2016, the Corporate Social Responsibility (CSR) Committee was set up with the mandate of approving sustainability objectives as well as coordinating and stimulating the operational structures of all Group companies on the topic. Directors, General Managers and Central Managers are members of the CSR Committee. In 2021, the Sustainability and Communication service was set up as part of the Quality, Safety and Environment, and Regulatory Affairs Department, with the aim of coordinating the definition of the Group's sustainability objectives in the ethical, social, environmental and governance spheres, and communicating them internally and externally in collaboration with all the Departments concerned.

Also in 2021, the company **Mobility Manager (MM)** was appointed for the Monza office, in accordance with Italian Interministerial Decree no. 179 of 12/05/2021. The **MM** will work to identify and propose solutions to make corporate mobility more sustainable. The first step was the definition

of the Home-Work Commute Plan (**HWCP**) for the staff of the Monza office, which included the mapping of travel, involving all employees and the definition of a first series of initiatives.

#### **OUR RESPONSIBLE CARE COMMITMENT**

SOL Spa has subscribed to **Responsible Care** in Italy as far back as 1995: it is the voluntary programme of the world's chemical industry, supported in Italy by Federchimica, in which it plays an active part with its own representative on the Managing Committee.

On 7 January 2015, **SOL** also adhered to the "**Responsible Care Global Charter**", committing itself to promoting the principles and contents of the initiative in all countries where the Group is present.

On 23 April 2015 the subsidiary **FLOSIT** also subscribed to the programme, promoted in Morocco by the "**Federation** de la Chimie et de la Parachimie".

The implementation of the "Responsible Care" Programme at SOL Spa is verified every two years by a certification body: the verification carried out in 2020 was positive.

#### **SUSTAINABILITY**

#### Our sustainability strategy

In 2021, the SOL Group drew up its **first Sustainability Plan**, a fundamental tool to identify the main areas of intervention ("Pillar") at the base of the SOL Group's strategic vision on sustainability. On the basis of these priorities, both qualitative and quantitative objectives have been defined to be carry forward in time.

The **Sustainability Plan** responds to some of the global challenges (United Nations Sustainable Development Goals, or SDGs) and integrates initiatives proposed by Group employees that were collected from the Little Big Innovations project.

The plan objectives will be reviewed annually, taking into account the results achieved on the one hand and new initiatives that may be carried forward on the other, in light of changes in the market as well as the applicable legislation in the countries in which the SOL Group operates. The strategic priorities are outlined below.



#### Sustainable production process:

- increasing the percentage of energy consumed from renewable sources
- optimising the energy efficiency of the sites/ products supplied
- reducing CO<sub>2</sub> emissions from transport
- increasing circularity in our processes



#### Sustainability in the working environment:

- promoting an inclusive working environment
- maintaining high safety standards for our employees and partners working with us



#### Dialogue and listening

- strengthening the process of listening to patients and doctors
- listening to employees to improve the working environment with more systematic and regular processes
- · disseminating the principles of our Code of Ethics
- · supporting the community



#### Sustainable innovation:

- offering customers sustainable products/ services, such as BioCO<sub>2</sub>, BioLNG
- supporting our customers in improving the sustainability of their processes



## INTEGRATED MANAGEMENT SYSTEM

The Group's Integrated Management System is the instrument that guarantees the coordination of all the structures responsible for governing company processes, environmental performance and safety at work, which has been accompanied over time by further certifications and accreditations. It is an important risk management tool, as it highlights potential risks in the areas observed and identifies appropriate mitigation actions.

**Policies** are the basic documents of the Management System, signed by Top Management. They set out the principles underlying the work of the Group's companies and define the objectives that the Group intends to pursue in the various areas. The SOL Group has introduced a new corporate governance tool, **Directives**. These documents are issued at corporate level and are obligatorily received by all the Group companies.

The governance of the Management systems, the re-examination of their proper functioning and the verification of their effectiveness is entrusted to the **Quality, Safety and Environmental Management System Steering Committee** (CGSQ) made up of the Directors, General Manager, the Corporate and Business Executive Directors and the Internal Control Department. **Corporate Executive Department for Quality, Safety and Environment and Regulatory Affairs** (DIQS) instead deals with the operational aspect of the management systems, reporting annually to the CGSQ. The DIQS presents the progress of the projects and activities to the Directors and Executive Managers on a quarterly basis.

The SOL Group launched the **certification process for its units** in 1994. The main Italian locations were first certified according to ISO 9001, and other standards have gradually been implemented in relation to Group activities. The scope was then extended to other locations and countries. The table below summarises the main certification obtained by the SOL Group, divided by country and company, at as 31 December 2021.

		<b>ISO 9001</b> Quality	<b>ISO 45001</b> Health and safety of workers	ISO 14001 Environment	<b>EMAS</b> Environment	<b>ISO 50001</b> Energy	ISO 13485 Medical devices	<b>ISO 27001</b> Data security	<b>ISO 22000</b> Food safety
Country	Company		<b>ISC</b>	Env		<b>ISC</b>   Ene			18C
TECHNICAL GAS	ES SECTOR								
Albania	GTS	1	1	1			1		1
Austria	SOL TG	1					1		
Belgium	SOL Branch Belgium	1		1					1
	BTG	1							
Bosnia-Herzegovina	TGP	1		1					1
	TGT	1							
Bulgaria	SOL BULGARIA	2	2						3
Croatia	UTP	2							
	SOL CROATIA	2							
France	BEH FRANCE	1					1		
	SOL FRANCE	3							
Germany	SOL DEUTSCHLAND	3							2
	SOL Spa Francoforte	1				1			1
	SOL KOHLENSAURE	1				3			1
	CT BIOCARBONIC <sup>1</sup>	1				2			1
Greece	SOL HELLAS	2		1			1		2
	TAE HELLAS	5		5			2		4
India	SOL INDIA	2							
	SICGILSOL	1							
Ireland	IRISH OXYGEN	1							
Italy	SOL Spa	21	30	3			2	1	
	SGP	7	8	4	2			1	2
	ICOA	1		1			1		
	SOL GROUP LAB	1					1		
	CTS	1							
	CRYOS	1							
	BEHRINGER	2					2		
	MEDES	1					1		
	TESI	1	1	1					
	STERIMED	2	1	1			2		
	REVI	1	1	1			1		
North Macedonia	TGS	3							3
	SOL SEE	2							1

 $<sup>^1 \</sup> Jointly \ controlled \ company \ consolidated \ using \ the \ equity \ method \ and \ therefore \ excluded \ from \ the \ reporting \ scope \ of \ this \ Sustainability \ Report$ 

		<b>ISO 9001</b> Quality	<b>ISO 45001</b> Health and safety of workers	<b>ISO 14001</b> Environment	<b>EMAS</b> Environment	<b>ISO 50001</b> Energy	ISO 13485 Medical devices	<b>ISO 27001</b> Data security	<b>ISO 22000</b> Food safety
Paese	Società		<u>SI</u> ≚	SI 🖺	<b>6</b> 6		SI Ž		
Morocco	FLOSIT	1							
Netherlands	SOL NEDERLAND	2	2						2
Romania	GTH	1	1						1
Serbia	SOL SRBIJA	1							1
Slovenia	SPG	1	1	1	1	1			1
		1	1	1		1			1
Spain	SOL FRANCE ESPANA	1							
Turkey	GEBZE GAZ	1							
	SOL TK	1							1
Hungary	SOL HUNGARY	1							
HOME CARE SE	ECTOR								
Austria	VIVISOL AUSTRIA	2							
France	VIVISOL FRANCE		1						-
Germany	VIVISOL DEUTSCHLAND	4							
	WYEARSNGER	1							
	PIELMEIER	1							
Greece	VIVISOL HELLAS	2							
Ireland	DIRECT MEDICAL	1	-						
Italy	VIVISOL	19	20	1			2	1	
	VIVISOL CALABRIA	1							
	VIVISOL NAPOLI	1	1						
	VIVISOL SILARUS	1							
Netherlands	VIVISOL NEDERLAND	1	-					1	
Polonia	PALLMED	17						4	
United Kingdom	DOLBY VIVISOL	4	4	4				2	
Spain	VIVISOL IBERICA	4	3	4			1		
Switzerland	SITEX	1							
BIOTECHNOLO	GIES SECTOR								
Italy	CRYOLAB	1						-	
	DIATHEVA	1							
	BIOTECHSOL							1	
	PERSONAL GENOMICS	1							
DENEWARI E T	NEDCY BRODUCTION CT	CTOR							
Italy	ENERGETIKA	1							
TOTAL		151	77	31	3	8	19	11	30

In addition to the certifications shown in the table, the Pure Gas Plant (SGPM) in Monza, the company Sterimed in Italy, GTS in Albania and SOL SRBIJA have been accredited as test laboratories in accordance with **ISO 17025**. SGPM obtained accreditation according to **ISO 17034** as a producer of certified reference materials in 2021.

In 2019, the Group's Information Technology & Digitalisation Department obtained certification according to **ISO 22301**, a standard relating to business continuity management.

Because of the kind of gases they produce and the quantities they stock, 24 Group plants fall into the field of application of **Directive 2012/18/EU ("Seveso Directive")**. Directive 2012/18/EU requires the adoption of a specific safety management system and regular scrupulous auditing by the Authorities. In 2021, five audits were carried out (all audits concerned the Management System), all of which were successful.

Some Units of SOL Spa and SGP Srl fall under the field of application of European Directive no. 75 of 24/11/2010, "Industrial Emission Directive" (IED), which governs the granting, renewal and review of Integrated Environmental Authorisations. The company has authorisations for its Euro-

pean hydrogen (Ravenna), nitrous oxide (Cremona, Marcianise and Tilburg) and acetylene (Ancona, Pola and Aspropyrgos) production plants.

#### THE REGULATORY AFFAIRS DEPARTMENT

Oxygen, medical air and nitrogen oxide, Donopa (a mixture of oxygen and nitrogen oxide) and Neophyr® (whose active substance is nitrogen monoxide) are the main **drugs** that the Group distributes in hospitals and, with regard to oxygen, in patients' homes. Also in the healthcare sector, the Group produces and sells **gas for medical devices**, such as liquid nitrogen for cryopreservation and cryotherapy and carbon dioxide for laparoscopy, and medical equipment and systems that are used in medicine for diagnostic and therapeutic purposes (from oxygen distribution systems in hospitals to home mechanical fans).

Within the Corporate Executive Department for Quality, Safety and Environment and Regulatory Affairs, the **Regulatory and Pharmaceutical Affairs Department** (DARF) serves to support, control and coordinate all SOL Group companies in the authorisation process for the production, distribution and sale of gases for medical use and medical devices.

#### CERTIFICATIONS

## Accredited quality for gas mixtures

The SGPM plant in Monza specialises in the production of pure, special and medicinal gases and their mixtures used in research centres, university centres, analytical laboratories as well as in industry and healthcare facilities.

The site has been accredited by the Italian Accreditation Body AC-CREDIA for the production of calibration metrology mixtures since 2021. These mixtures are essential for ensuring maximum accuracy and a complete traceability chain within measurements, as they are produced in accordance with ISO 17034, which defines the quality assurance and technical competence requirements for

manufacturers of certified reference materials.

Accreditation stems from the need to ensure, particularly in the **environmental monitoring** sector, highly accurate gas mixtures employed for calibrating analytical instrumentation used to analyse air quality and the concentration of harmful gaseous substances in the air.



Drugs and medical devices are subject to strict controls and the documentation necessary for the authorisation process is increasingly complex. The **pharmaceutical workshops** which produce the drugs must be authorised by the Drug bodies that verify that all phases of the production process follow GMP (Good Manufacturing Practices) at national level. Compliance with these guidelines guarantees the quality of medical products, which in turn is a prerequisite for the medical product to be defined as safe and effective. The manufacturer of a medical device must obtain the **EC marking**, which proves that its product complies with the safety and health requirements laid down in the applicable legislation. EC markings (for Class 2 and 3 devices, which are the prevalent classes in the Group) are issued by Notified Bodies, facilities (laboratories or companies) authorised by the competent authorities of European Union countries.

The DARF is also responsible for managing all post-marketing activities. Once a medicinal product or medical device has been placed on the market, the manufacturer must regularly monitor any accidents, adverse effects or lack of efficacy of the products concerned (pharmaco-vigilance for medicinal products and material-vigilance for medical devices). The company procedures establish that each Group company sends specific reports to DARF for the collection of reports, for analyses and for the evaluation of any notification to the competent authority.

#### **RISK ANALYSIS**

SOL Group's activities, products, services and supply chain, as well as its commercial relations, are exposed to social and environmental risks.

The SOL Group adopts a business risk mapping and assessment methodology that assigns a relevance score to the risk according to its impact, the likelihood of occurrence and the level of detectability. The risks, and the related opportunities, have been determined by considering the expectations and needs of the main stakeholders with whom the Group interfaces. Action thresholds have been defined to identify the most relevant risks and actions have been identified to address and minimise them. At the same time, related opportunities have been identified along with actions defined to seize them.

The Group is exposed to the following main non-financial risks:

Climate change: during 2021, an in-depth analysis was carried out through interviews with the main company departments which was aimed at identifying the risk factors connected to climate change that are most important for the Group, with reference to both physical risks and transitional risks, as well as any opportunities connected thereto.

As a result of these activities, the Group considers the following risks as the most relevant among the transitional risks: aspects related to customers' requests concerning supply chain sustainability and that of purchased products, as well as those related to the increase in raw material costs (in particular, concerning the electricity used by the primary plants).

In this context, in line with the implementation of its Sustainability Plan, the Group has identified specific actions aimed at managing these risk factors with a view to minimising, in the foreseeable future, the possible consequences on the business. For example, the Group intends to strengthen the customer offer of sustainable products/services (BioCO<sub>2</sub>, LNG, BioLNG), implement measures to reduce greenhouse gas emissions generated both directly and indirectly (for example, progressively increasing the percentage of consumed energy from renewable sources, or using low-emission vehicles for deliveries to home care customers), and support customers in improving the sustainability of their processes (see also what is reported in the previous section "Sustainability, a global objective").



#### **MEDICINAL GASES**

Sales Authorisations in

18 European countries

62 production workshops in

8 countries (of which 13 in the EU)



#### MEDICAL DEVICES

Medical device gases produced

units and distributed in

countries



**Group companies are manufacturers** (i.e., holders of EC markings) for medical gas distribution plants or equipment

Instead with reference to physical risks, due to the type of activities carried out and the geographical location of the plants, as well as its past experience, the Group does not currently consider the possibility of suffering damage or interruption of activities as a consequence of atmospheric events due to climate change as significant in the short term.

In any case, the Group constantly monitors the exposure to these types of risk of its own infrastructures (both existing and, for new ones, since the design stage), in order to take appropriate mitigation measures. These assessments are also extended to the supply chain, in order to ensure the continuity of the raw materials supply even in case of extreme climatic events that may affect the Group's suppliers.

**Environment:** potential risks related to compliance with regulations and water withdrawals in water-stressed areas

**Social:** potential risks related to compliance with existing regulations regarding proper disclosure to customers and patients, risks related to the supply of products and services that address customers' needs, potential risks related to the traceability of the origin of products and services, potential risks regarding the suppliers of services in the home care sector and in general the management of social and environmental risks along the supply chain, potential risks related to the market and the respect for human rights, with particular reference to the supply chain.

**Employees:** potential risks related to employees' health and safety and to compliance with legislation concerning occupational health and safety.

**Compliance with laws and regulations:** potential risks of non-compliance with laws and regulations, including the issue of bribery and corruption.

To face the potential risks identified, the company carried out an assessment of the protections for each activity, of any shortcomings to be remedied and changes for improvement. Please refer to the table in the chapter "Materiality analysis" for the identification of risks and relative management methods related to the material issues.

The Company Managers are coordinated by the Corporate Executive Department for Quality, Safety and Environment and Regulatory Affairs and are the governing bodies that oversee the main **environmental**, **health and safety risks**.

Furthermore, the Company Managers, supported by any local or corporate designated functions, also oversee the **risks** related to staff management and the issues covered by

**the Code of Ethics.** The Code of Ethics, which includes issues such as protecting safety, health and environment, respect for human rights and preventing and combating corruption, applies to all those who come into contact with the Group, including suppliers, partners and customers.

The Group has activated **processes and management systems in order to mitigate the most relevant risks**, so as to guarantee the correct control of the topics. In particular, the Group's units have obtained certifications such as ISO 9001, ISO 45001, ISO 14001, ISO 50001, ISO 13485, ISO 27001, ISO 22000. Thanks to the requirements introduced by the new standards, a new risk analysis process was implemented in relation to business activities, as well as a process for assessing opportunities. The analysis refers to the sustainability issues that are relevant to the SOL Group, in particular the risks potentially present in product production phases and service delivery, as well as in business relationships.

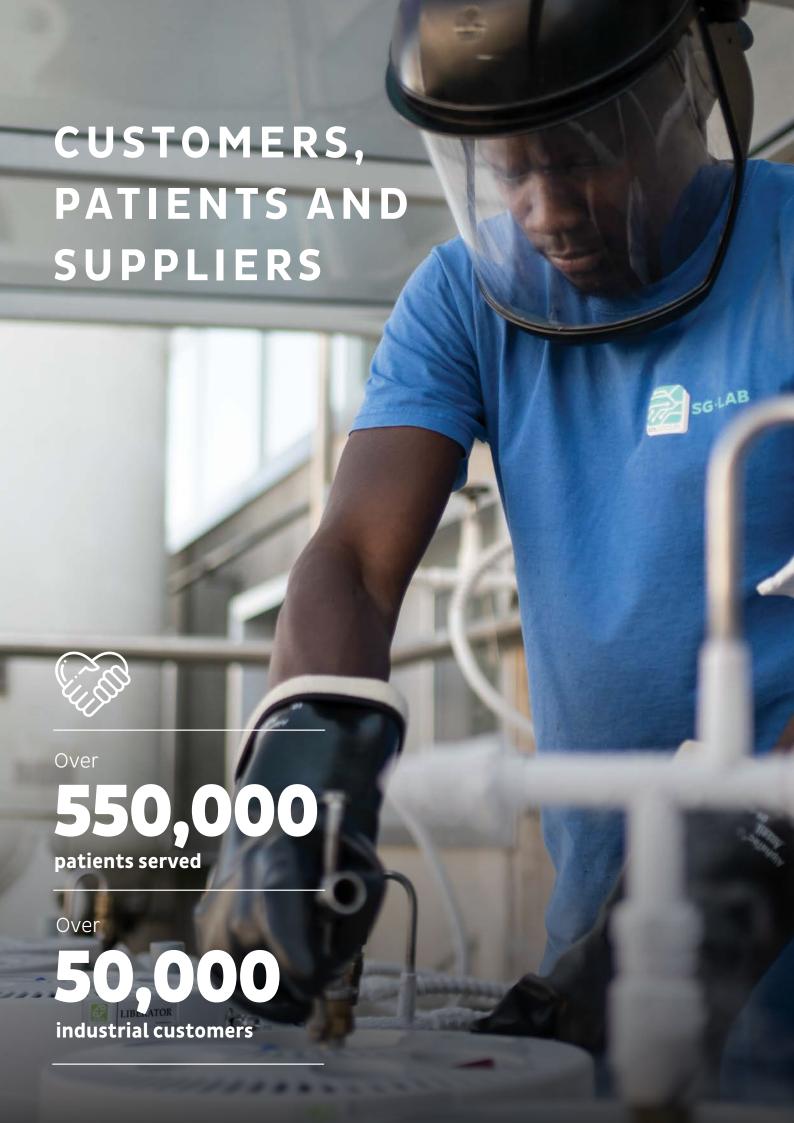
The risks to which the SOL Group is exposed in connection with the war between Russia and Ukraine that broke out in February 2022 are essentially indirect, in that there are no activities carried out directly by subsidiaries in the two countries involved.

In fact, the likely negative effects caused by the current conflict on the economic growth of European countries will lead to a lower rate of development of the SOL Group's sales during 2022 than that achieved during 2021.

Moreover, the war is contributing to keeping the cost of energy products at the high levels already reached in the last part of 2021, resulting in the continued high cost of purchasing electricity and fuel; this could mean the risk of not being able to fully transfer these costs to the sales prices of technical gases and services on the market, with a consequent negative effect on the Group's margins compared to the average of recent years.

In particular, a significant effect on home care activities is on the supply chain of medical equipment, for which there are delays and difficulties in deliveries and consequent shortages to meet growing demand.

At the moment, it is not possible to predict what the effects will be on the Group's margin performance, which, however, will continue in the investment programmes and, where possible, acquisitions, with the aim of achieving good sales growth and maintaining profitability at appreciable levels.



#### **COMMITMENT TO A SUSTAINABLE INDUSTRY**



#### FOCUS ON THE CUSTOMER

The SOL Group has always stood out for the accurate and timely service it offers its industrial customers. This is complemented by the ability to provide **innovative technological solutions** capable of making customers' industrial activities and their production processes increasingly **sustainable**.

Through the correct use of technical gases, we try to create genuine partnerships with our customers and help them achieve their objectives in terms of **energy and production efficiency**, reduction of **environmental** impact and **protection of the health** of employees.

In addition to technical gas supplies, we offer our customers the most advanced **gas application** technologies, together with the design and construction of specific systems to be combined with industrial processes, and provide them with the necessary maintenance and technical assistance services. Our technicians are constantly engaged in applied research that translates into a wide range of modern gas application technologies, combined with a variety of services developed and constantly updated by the Group's marketing services. We have specialists for every industry sector, from agri-food to metallurgy, from chemical-pharmaceuticals to petroleum, from mechanics to glass-ceramics. Specialists capable of creating tailor-made solutions, designed and built for the specific needs of each customer.

SOL produces and distributes the following gases: oxygen, nitrogen, argon, hydrogen, carbon dioxide, sulphur dioxide, acetylene, nitrous oxide, gas mixtures, high purity gases, food gases, gaseous helium, liquid helium, gases for electronics, ammonia, combustible gases for industrial use and liquefied natural gas (LNG).

#### **SUSTAINABLE MOBILITY**

#### BioLNG, paving the way towards more sustainable mobility

LNG (liquefied natural gas) is increasingly establishing itself in the world of heavy-duty vehicles as a viable alternative to traditional fossil fuels, significantly contributing to the reduction of atmospheric emissions and the final carbon footprint.

Thanks to **BioLNG**, namely LNG of biological origin obtained by way of a purification process (upgrading) of the biogas,  $CO_2$  emissions can be reduced even more, by over 90%.

In this context, the SOL Group has entered into a partnership with the Greenthesis Group for the **distribution of liquid bio** 

**methane** produced by the Borgo Montello landfill (Latina, Italy).

Thanks to the upgrading and liquefaction process developed by Greenthesis Group for the transformation of biogas and to SOL Group's technological and logistic service, several refuelling stations for heavy vehicles powered by liquid methane (LNG) present in Italy will be regularly supplied.



#### TECHNOLOGIES, PRODUCTS, SYSTEMS AND SERVICES

#### Food & Beverage



#### **INDUSTRIES SERVED**

#### **TECHNOLOGIES & SOLUTIONS**

- · Cooling, flash freezing, cryogenic freezing, IQF with Lin o LCO<sub>3</sub>: improved quality of frozen product, taste characteristics maintained, better aesthetic aspect, reduced freezing times and space saving.
- Packaging in atmosphere modified with N<sub>2</sub> and CO<sub>2</sub>: shelf life optimisation, improved aesthetic aspect, freshness maintained and waste minimisation.
- Transport at temperature controlled with Lin or dry ice: safeguarding of freezing chain to preserve quality of food and avoid spread of bacteria.
- Carbonic fertilisation with CO<sub>2</sub>: increase in production and in quality and look of the product.

- Fish and mussle farming with O<sub>3</sub>: increase in production and quality of the finished product.
- Sanitization and disinfection with CO<sub>2</sub>, avoiding the use of chemicals.
- Fumigation and pest control with CO<sub>2</sub> of biological agricultural products for which no chemical products, such as phosphine, can be used.
- Gassing, pressing with nitrogen, water dosage: plastic bottle weight reduction.

#### Metal **Production**



#### **INDUSTRIES SERVED**

#### **TECHNOLOGIES & SOLUTIONS**

- Oxy combustion and hyper oxygenation with oxygen: reduction of exhaust aas 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 NOX: 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.

7 7 7

- After burners with oxygen: complete treatment of emissions, limiting quantity and environmental impact.
- On-site installations: reduction energy consumption, transport activities and relative emissions.

#### Metal **Fabrication**



#### **INDUSTRIES SERVED**

#### **TECHNOLOGIES & SOLUTIONS**

- 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



specialities

Plastics and

#### **INDUSTRIES SERVED**

- Synthetic intermediates
- Polymers
- Fine chemistry

#### **TECHNOLOGIES & SOLUTIONS**

- 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 CO<sub>2</sub>: replaces cleaning methods using water, solvents or sandblasting, thus limiting the environmental impact of residues
- On-site installations: reduction energy consumption, transport activities and relative emissions.

### Oil & Gas



#### **INDUSTRIES SERVED**

- pipelines
- Raw materials and finished
- Off-shore

#### **TECHNOLOGIES & SOLUTIONS**

- EOR processes with nitrogen and CO<sub>3</sub>: 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 maintenance 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.
- LNG Services: gas stations, cryogenic equipment and LNG-powered trucks, cogenerators.

## **Energy & Environment**



#### **INDUSTRIES SERVED**

#### **TECHNOLOGIES & SOLUTIONS**

- Waste water treatment with O<sub>2</sub>: makes purification more effective and increases purification capacity, reducing environmental impact and giving better control on effluents.
- pH control with CO<sub>2</sub>: this substitutes mineral acids (sulphuric and hydrochloric), leaving less pollutants •
- Waste water treatment with ozone: reduction of colour, micro contaminants, nitrates: optimization of treatments, with reduced environmental impact
- AOP processes with ozone: on-site environmental clean-up, less removal of terrain and combustion treatments having higher environmental impact.
- Deodorising waste water with oxygen: reduced environmental impact.
- Disinfection with ozone: watercourses receiving

- treated wastewater are protected from bacterial pollution without the use of chlorine compounds.
- Reduction of surplus sludge with oxygen: less sludge to send for disposal, reduced environmental impact.
- Recarbonation and remineralisation of drinking water with CO<sub>a</sub>: makes water drinkable meeting legal requirements using a certified food additive.
- Oxycombustion of waste with  $O_2$ : reduction of aeriform emissions and increased control of incinerator plant with widely varying waste loads (tourist areas).
- Afterburners with O<sub>2</sub>: complete treatment of emissions, limiting quantity and environmental impact.
- VOC treatment and solvent recovery: reduced environmental emissions and recovery of the chemical products they contain.

#### **COMMITMENT TO HEALTH**



#### SOL IN THE HOSPITAL SECTOR

National Health Systems are increasingly orienting the treatment of the most critical diseases towards the so-called Smart Hospital, a hospital characterised by the most modern clinical and diagnostic technologies.

In this highly dynamic context, the SOL Group proposes itself as a **partner of the Health System** through the provision of medicinal products, services and technologies for the integrated management of operating flows within the hospital facility, to protect the quality and efficiency of healthcare services.

#### Medicinal Gases with AIC and Medical Devices

The range of Medicinal Gases includes both **drugs under the AIC regime** (traditional or innovative), and **gases classified as Medical Devices**. These include MD liquid nitrogen, which can be used for dermatological applications or for cryopreservation of biological samples (cells, tissues, organs) for transplantation, stored in Cryobiology Rooms certified as Tissue Institutes.

The SOL Group supports Hospital Pharmacists with its **EPGA Accredited Mobile Laboratory**, thanks to which it is possible to analyse medical gas samples at the delivery point and certify compliance with the purity requirements established by the European Pharmacopoeia, ensuring the compliance of the drug's characteristics from the storage centre to the patient's bed.

#### **Total Gas Management**

Medicinal gases are atypical, potentially dangerous drugs packaged at high pressure or cryogenic temperatures, mostly oxidising and complex to handle. For this reason, SOL supports healthcare facilities with the Total Gas Management service which, thanks to the **daily presence of specialised technicians**, provides for the supply of Medicinal Gases, their distribution within hospitals, as well as the control of packaging, medical administration devices and centralised distribution systems. The Total Gas Management service was essential during the Covid-19 pandemic to ensure ef-

fective distribution and the safe use of medical oxygen, considered in all respects the drug of choice for the treatment of this respiratory disease.

#### Training services

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

The training activities for all professionals active within the healthcare facility are carried out through courses delivered physically or remotely, which are also ECM accredited.

#### Medical Device classified Medicinal Gas Distribution Plants

The SOL Group designs, manufactures, certifies and manages centralised systems for the production and distribution of medicinal gases, endocavitary aspiration and anaesthetic gas evacuation within hospital facilities. The certified and high-quality components used are designed and produced by BEHRINGER, a SOL Group company active in the production and sale of devices for the supply and administration of medicinal gases.

#### InfoHealth SOLution

The InfoHealth® SOLution web platform is the control room from which all the activities carried out within the healthcare facilities that use the medicinal gases and medical devices provided by SOL are planned, coordinated and managed. The same platform monitors the routine and extraordinary maintenance of medical devices, electromedical equipment and technological systems, the results of EPGA analyses (to verify compliance with Pharmacopoeia monographs), the sanitisation of equipment as well as the traceability of medicinal gas packages (validated according to Good Manufacturing Practice) and mobile medical devices.

InfoHealth® Solution is also the tool for the integrated management of the maintenance of medical devices of ambulance fleets.

#### Global Service of electromedical equipment

The SOL Group is the primary operator in the **management** of electromedical equipment in health facilities, safety checks, routine maintenance and extraordinary emergency repair interventions, under the global service regime.

The skills acquired in over 30 years of activity by SOL Group companies, combined with the constant monitoring of the performance provided by the electromedical equipment, allow the Group to offer its experienced support to healthcare facilities in the definition of asset management programmes relating to the plyearsng of the entire life cycle and the periodic renewal of the machine fleet.

#### Hospital hygiene and environmental monitoring

The SOL Group offers integrated hospital hygiene management programmes: from the design, construction and operation of sanitary water and air conditioning treatment and sanitation systems, to the turnkey construction of surgical instrument sterilisation plants (including integrated management).

To protect the health of staff and patients, the Group offers healthcare companies environmental, particulate, microbiological, microclimatic and specific pollutant monitoring services (such as anaesthetic gases and formaldehyde in operating environments), scalable for each type of room, in order to make the impact on healthcare activities negligible according to the actual exposure limits established by current legislation.

Particular attention has been paid to environmental monitoring services during the pandemic, as SOL was able to provide specialised Covid-19 disinfection services, complete with surface analysis with dedicated tests.

#### **Total Ambulance Management**

Patient care begins from the moment patients are transferred to the hospital. The Total Ambulance Management service ensures emergency associations the complete operation of the vehicle fleet including both its sanitary compartment and medical equipment (maintenance, periodic checks, electrical safety checks, sanitation), and for the vehicle, with the related periodic maintenance activities.

#### **SOL IN THE HOSPITAL SECTOR**

# geaNOx, the new Medical Device for inhaled Nitric Oxide therapy

Thanks to the technical and regulatory know-how developed by SOL GROUP LAB with the **Penelope** project, it was possible to develop, mark and market the new **geaNOx** inhaled nitric oxide (iNO) therapy device.

Responding to the demands of the indian market for an easy-to-use device capable of dosing and monitoring gaseous medicinal mixtures containing nitric oxide, geaNOx, like Penelope, is able to dose the drug and monitor the parameters related to the administered amounts of NO, NO<sub>2</sub> and O<sub>2</sub> in a timely manner. These capabilities are crucial in the treatment of critical conditions such as persistent pulmonary hypertension in infants (PPHN), care of acute cardiac patients in postoperative care, or acute respiratory distress syndrome (ARDS).

#### **PENELOPE**

In 2020, SGLAB, a SOL Group company dedicated to technological innovation in the medical field, developed Penelope, a medical device that integrates the most advanced safety solutions with the best dosing and monitoring performance of inhaled nitric oxide.



#### Design and development of biobanks

The service of designing and creating cryo-biological rooms and plants is aimed at public and private structures that carry out scientific research, assisted fertilisation and manipulation for cell, tissue and organ transplants and need to preserve their biological samples for long periods of time in liquid nitrogen.

Turnkey solutions are offered, including the design, construction of premises, provision of all devices and maintenance and training services and, where requested, also specialised biotechnological services, including validated sample traceability software.

#### **Disaster Recovery**

The Disaster Recovery service guarantees the transfer and storage, in emergency situations, of biological samples from public and private structures to cryobiological rooms owned by the SOL Group.

CRYOLAB is authorised by the Italian Ministry of Health, the National Transplant Centre and the National Blood Centre for the long-term storage - or in cases of disaster recovery - of human gametes, stem cells and blood and blood derivatives.

#### Bioshipping

The Bioshipping service authorised by the Ministry of Health makes it possible to transport biological samples all over the world in completely safe and traceable conditions, with continuous temperature monitoring and tracking.

This service is highly important since it is also used for delicate and often unique samples such as gametes. CRYOLAB, in particular, is able to satisfy the reliability and very high specialisation requirements established by applicable regulations for Medically Assisted Procreation structures.

#### **CONTROL AND INNOVATION**

# **Artificial Intelligence for workplace safety**

In partnership with a specialised company, SOL has invested in an Artificial Intelligence system to safeguard people in "special" environments.

The aim of the project is to use artificial intelligence to interpret images from IP cameras installed in rooms and environments of potential risk to the people in them.

Thanks to the **geolocalisation capabilities** of the subjects within the space of interest, if **abnormal situations are detected** (e.g., man on the ground, man slumped over machinery), the neural network is able to autonomously decide what to do based on the implemented algorithmic instructions.

The implementation of the technology makes it possible to automate the **supervision process** and make it more efficient, complementing traditional **control systems** while generating real alarms autonomously.

The pilot project started at the **cryobank in Pavia (Italy)** and was extended to the **unit in Cremona (Italy)** with a specific focus on operator safety within the plant.

There are many areas of interest to which the technology can be extended for **future applications**.





#### VIVISOL FOR HOME CARE

VIVISOL has established itself in Italy, Europe and Brazil as one of the leading **Home Care Providers** of Technological and health services for complex therapies and often life support for chronic patients.

In a demographic context characterised by progressive population ageing and in an epidemiological panorama marked by an increase in major chronic diseases, the role of Home Care Providers becomes increasingly relevant for the **optimised management of chronic patients**, who often suffer from multiple conditions as well as vulnerability. In fact, adequate models of home care provided by specialised providers have a positive impact both on the health and well-being of patients and on the sustainability of different national healthcare systems.

VIVISOL has a **widespread presence in all the countries in which it operates** thanks to a local network of Health Service Centres and Operational Centres active 365 days a year, 24 hours a day, from which home activities are coordinated and managed for over 550,000 patients worldwide.

#### Respiratory therapies

VIVISOL provides **oxygen therapy** services for people suffering from chronic respiratory failure at home but also temporarily in other locations. In fact, the **ViviTravel** service is

capable of following the patient on the road, throughout Europe.

Thanks to close partnerships with well-established manufacturers worldwide, VIVISOL has used the best technologies over the years to guarantee the patient complete management of respiratory therapy through invasive and non-invasive home mechanical ventilation. Supporting ventilatory therapy, VIVISOL assists the most complex patients also with complementary technologies and assistance including bronchoaspiration, cough assistants and humidifiers. VIVISOL also carries out an aerosol therapy service, often used in the treatment of many diseases.

VIVISOL is one of the leading companies in the market for the diagnosis and **treatment of respiratory sleep disorders**. Innovative diagnostic solutions and personalised therapeutic care are supported by remote monitoring of patient status with the aim of improving treatment completion rates.

#### Infusion therapies

To support patients requiring intravenous or subcutaneous home drug therapy, VIVISOL (together with industry experts) has designed a series of dedicated services: services for artificial nutrition, for insulin therapy with pumps, for immunotherapy, for the treatment of pain and for Parkinson's disease.

#### VIVISOL EVOLUTION IN 30 YEARS OF EXPERIENCE







1986

Home oxygen therapy

Oxygen therapy resulted from the production of medical O<sub>2</sub>

1996

Device and services management

Progressive diversification of activities through high-tech home services

2005

Home health care services

Provision of health and rehabilitative services also of high assistance complexity (including palliative care) 2018

Management of chronic patients course of care

Integration of the health care element and technological one with a multidimensional and multi professional approach



#### **HOME CARE**

# We care: the new face of VIVISOL

During 2021, VIVISOL renewed its identity image with the revision and integration of its Brand book in order to strengthen its uniqueness and recognisability in relation to a diverse audience of stakeholders.

All VIVISOL communication projects for the coming years will be guided by the concept "**We care**".

Chosen because of the multiple meanings of the verb "to care", the slogan perfectly reflects VIVISOL's corporate identity and mission: to put patients at the centre of its attention in order to improve their quality of life.

Each service involves a careful **selection of the medical device** by a highly specialised multidisciplinary team. This is supported by **training** for the patient and their caregiver (clinicians, nurses or any family members) on the use of the device, the coordination of activities for the management of the patient upon return from the hospital and the dietary and nursing care dedicated to them, with the aim of ensuring therapeutic continuity at home, in complete serenity.

**InfuSol** was created in 2019, the new brand of the SOL Group's Home Care division dedicated to infusion therapies, and is now active in France.

#### **Advanced Home Care**

VIVISOL provides home healthcare and social care services for patients with temporary or chronic clinical needs through medical, nursing and rehabilitation teams. The various healthcare activities are managed from 24-hour Operations Centres and on IT platforms that allow a flow of communication between the VIVISOL operators, the patient's clinical referent and the patient himself/herself, gua-

ranteeing reliability and efficiency. VIVISOL has acquired specific know-how in the **management of highly complex patients**, who are guaranteed the personalised care of their assistance needs, integrating healthcare services with the management of life support technologies. VIVISOL has a structured **Palliative Care** network for patients with oncological and degenerative diseases for which there are either no therapies or such therapies are ineffective for a significant prolongation of life. These benefits can be provided at the patient's home or in **Hospices** (as in Germany and Poland). VIVISOL also has specialised facilities dedicated to psychogeriatrics to assist the neuro-psychological decay of elderly patients, and protected apartments for people with complex disabilities which are designed according to the clinical-care needs of the patient.

One of VIVISOL's strengths is the **continuous training** of its healthcare and technical operators, who are constantly specialised through specific training courses for the different home activities in order to offer increasingly high-quality service.

#### Telemedicine and digital services

VIVISOL has consolidated experience in **Telemedicine** services. The constant search for innovative solutions to improve the patient's quality of life and the related need for therapeutic adherence has led to the development of a model that combines home care with the possibility of remotely monitoring important clinical and vital patient parameters: advanced monitoring of respiratory function, predictive capacity for COPD flare-ups (using the innovative Resmon Pro Diary device), telemonitoring of nutritional therapy (via automated transmission of pump data) and home dialysis, remote supervision of skin lesion management with specialised vulnologists, technological enhancement of healthcare activities and home palliative care.

To manage the complexity of these activities and to improve the patient care path at home, VIVISOL has set up a **Remote Clinical Centre**. This is a health centre composed

entirely of medical staff and nurse coaches who support the patient in the management of their therapy and the hospital specialist (or local doctor) in the remote care of the patient, allowing constant monitoring of clinical outcomes.

#### Healthcare aids

VIVISOL has extensive experience and vast skills in the **management and supply of healthcare aids**, with which it offers a service including delivery to the patient's home, technical assistance, maintenance, sanitation, disinfection and online software for the computerisation of data.

Thanks to the information technologies applied to overcome disabilities, VIVISOL provides an **alternative augmentative communication** service that allows patients without motor skills to have autonomous communication, including through an **eye pointer**.

#### **HOME CARE**

# VIVISOL develops and integrates services for home dialysis

VIVISOL complements the services designed for the **home care of nephropathic patients**, with a special focus on **dialysis patients**.

Home dialysis with peritoneal or hemodialysis methods is indicated in the treatment of patients with end-stage chronic renal failure. The first treatment involves the infusion into the abdomen (peritoneal cavity) of an exchange liquid that can attract the toxic substances present in the blood and eliminate them; the second method involves the extraction of the patient's blood for extracorporeal purification.

The services developed by VIVISOL, in line with its **patient-centred approach**,

propose therapies that adapt dialysis treatment to the lifestyle and possible comorbidities of the kidney patient, providing continuous assistance at different stages of treatment.

During 2021, VIVISOL presented the first results of a study on the viability of new solutions for the implementation of therapies that promote increasing compatibility between treatment and related diseases, as well as possible care programmes to promote home care.



# THE NEW COMMITMENT IN THE FIELD OF BIOTECHNOLOGY



#### Diagnostics

**PERSONAL GENOMICS**, a medical genetics laboratory accredited by the Veneto Region and SIGUCERT certified, offers diagnostic services in the field of medical genetics analysis. The non-invasive prenatal screening service is an important element in ensuring the proper development of the newborn child. The laboratory in Verona carries out research and development of new diagnostic panels in the field of preventive medicine in oncology, cardiology, metabolism and rare diseases. These activities to support preventive and precision medicine are complemented by genetic and bioinformatics analyses, molecular swab analysis for the identification of Sars-Covid 19, possible thanks to Next Generation Sequencing technologies and advanced bioinformatics tools.

**DIATHEVA** develops innovative diagnostic systems which allow identification and quantification using DNA amplification techniques of pathogens in any matrix and for any requirements.

Compared to traditional techniques (which require several

days, such as cultures), the new DIATHEVA systems can reduce the time required to obtain results to just a few hours, and are aimed principally at the food and environmental control sectors where fast analytical results are critical for making decisions that affect the safety of people and the environment.

# Biotechnology and biomedical research and applications

DIATHEVA focuses on the research, development, production and marketing of innovative products (such as monoclonal antibodies, recombinant proteins, molecular kits) for research, diagnosis and clinical application in the hospital, environmental, veterinary and food sectors. In addition, the company has conducted studies and research that allow it to operate as a qualified partner of large pharmaceutical companies in the oncology sector, in relation to microbial and viral infections, and pharmacogenetics.

DIATHEVA aims to translate the results of basic research into industrial applications in the biomedical and industrial fields by cooperating with public and private companies and research institutions.



# PERSONAL GENOMICS' COMMITMENT IN THE RECOVERY PHASE IN ITALY

During 2021, PERSONAL GENOMICS provided particular support in the post-pandemic recovery phase in Italy through the provision of serological testing services from venous sampling, rapid antigen swabs and Covid-19 molecular swabs.

A mobile laboratory responded to the need for an agile, practical and effective solution for monitoring the state of people's health, allowing work to resume and continue in total safety.

Obtaining authorisation from the Ministry of Health to issue the unique identification codes for the Green Pass has facilitated the dissemination of Green Certification, which is required for free access to events, facilities and other public places.

#### **BIOTECHNOLOGIES**

### DIATHEVA for the production of experimental drugs

DIATHEVA, which already has authorisation for the production of biotechnological active ingredients, has started the authorisation process for the production of medicines as a finished product for clinical trials.

From the second half of 2022, DIATHEVA will be able to **produce the finished product for clinical trials** by internalising the **formulation and filling** phases (formulation of the active ingredient with excipients and subsequent breakdown and packaging in ampoules) previously outsourced.

To this end, DIATHEVA has equipped itself with suitable equipment, in particular an isolator with a semi-automatic filling system inside.

The internalisation of the process not only allows greater flexibility and autonomy in the gene-

ration of batches of dosed drug but also ensures more precise control of the production phases, with the possibility of offering the customer a safe, quality product that is ready for use in clinical trials.

#### **CUSTOMER AND PATIENT SATISFACTION**

The SOL Group monitors customer and patient satisfaction, with the aim of analysing the perception of its service and identifying the areas and services in which quality improvement is possible.

Their satisfaction is verified through the constant **monitoring** of some **key performance indicators** (customer and patient complaints, response times to customer orders and patient requests, etc.), allowing prompt activation of the necessary corrective actions.

During 2021, some Group companies carried out **ad hoc surveys** that involved **562 customers** in the technical gases division and **6,483 patients** in home care. These surveys proved very useful and showed a very positive perception of the SOL Group and the service provided by customers and patients in all the countries involved (Austria, Bosnia, Bulgaria, Croatia, Greece, England, Ireland, North Macedonia, the Netherlands, Poland, Slovenia, Spain, Turkey).

#### **SUPPLIERS**

The SOL Group is aware that the role of the supplier is becoming increasingly important to be able to effectively respond to the new sustainability challenges, seeking to involve the entire value chain more deeply. The suppliers with which the company comes into contact are asked to uphold SOL's value system, as it is deemed an effective and safe mechanism for the correct and transparent management of relations.

The main products and services purchased by the Group companies are electricity, resale gasses and transport, maintenance, technical and nursing assistance services. On the other hand, the choice of supply sources for capital goods and resale products is wider: mainly production facilities, tanks, reservoirs, cylinders for the technical gases division and medical devices for the home care division.

In 2018 the Group issued a **new Directive** (document valid for all Group companies) in relation to the **supplier evaluation** process in a **risk analysis** logic. When selecting its partners for the supply of goods and services that are critical for safety, quality and the environment, SOL uses a qualifying process to

establish whether a potential partner meets a series of requirements demanded by company procedures. Objective methods are used to check that these requirements have been met, such as special questionnaires and, where necessary, audits at the supplier's premises.

In 2021, **90% of the critical suppliers**<sup>1</sup> qualified during the year were **audited and assessed** in relation to environmental and social sustainability issues (including health, safety, environment, human rights, anti-corruption, compliance).

Furthermore, **126 supplier audits** were performed (142 in 2020), which mainly concerned aspects connected to quality, environment, health and safety.

Suppliers are required to respect the Group Code of Ethics and, in Italy, also the Organisation, Management and Control Model pursuant to Italian D.Lgs. 231/01, as well as the Group's safety and environment policies, and they are asked to apply them in the conduct of their activities.

<sup>1</sup> A critical supplier is a supplier that can have an impact on the Group in terms of risks related to quality, safety, environment, regulatory or social aspects.



### MAIN ENVIRONMENTAL ASPECTS

**Electricity consumption in production plants** and the distribution of products to customers, hospitals and patients are the most significant environmental aspects for the SOL Group.

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

Most of the raw materials used for the production of technical gases are renewable. Furthermore, the substances produced and handled by the SOL Group do not pose a polluting risk to the soil and subsoil. The table shows the raw materials used for the main types of production plants and the environmental aspects connected to these activities.

TYPE OF UNIT	N°	RAW MATERIALS	ENVIRONMENTAL ASPECTS
AIR SEPARATION UNITS (ASU)	17	The process of air separation for the production of oxygen, nitrogen and argon is a physical process that uses atmospheric air as its raw material.	The process has significant indirect environmental impacts due to the consumption of a large amount of electricity. On the other hand, it does not use raw materials other than atmospheric air and involves negligible emissions of $\mathrm{CO}_2$ , sulphur oxides $(\mathrm{SO}_\chi)$ and nitrogen oxides $(\mathrm{NO}_\chi)$ , already present in the treated air.
HYDROGEN PRODUCTION PLANTS	2	The raw materials are natural gas and water (steam) which chemically react with each other to produce hydrogen.	Hydrogen production plants emit $CO_2$ as a sub product of the chemical reaction and negligible quantities of nitrogen oxides $(NO_\chi)$ . Added to this is the consumption of methane for heating process currents.
NITROUS OXIDE PRODUCTION PLANTS	4	These use ammonium nitrate, either solid or in water solution, as a raw material in a thermal dissociation process.	N <sub>2</sub> O production plants can emit the gas produced (greenhouse gas) through vents, and consume electricity to bring the ammonium nitrate to reaction temperature. Chemicals (H <sub>2</sub> SO <sub>4</sub> , KMnO <sub>4</sub> , NaOH) are used for the purification of nitrogen oxide.
ACETYLENE PRODUCTION PLANTS	5	These use calcium carbide as a raw material, a solid that decomposes in water.	One by-product of this process is calcium hydroxide which, where possible, is used in industry or agriculture. Otherwise the lime is disposed of as waste.
PLANTS FOR PURIFYING AND LIQUEFYING CARBON DIOXIDE	5	The raw material is carbon dioxide itself, obtained as a by-product from chemical plants or from natural underground deposits. The carbon dioxide is purified and liquefied with the use of energy.	CO <sub>2</sub> production plants can emit the gas produced (greenhouse gas) from their vents. On the other hand, the carbon dioxide obtained in this way is used in industrial applications instead of being emitted directly into the atmosphere.
SULPHUR DIOXIDE PRODUCTION PLANTS	1	The raw materials are oxygen and sulphur, from chemical plants or petroleum refining processes. The sulphur is reacted in a controlled manner with an oxygen stream.	The main environmental aspects relate concern the storage of sulphur and possible emissions in an emergency.
NITRIC OXIDE PRODUCTION PLANTS	1	The process uses ferrosulphate and sodionitrite in an aqueous solution, in a batch process.	The reaction results in spent aqueous chemical solutions containing mainly sulphates as byproducts which are disposed of as waste.

# ENERGY CONSUMPTION

The SOL Group uses **electricity, methane and steam** as energy vectors.

The Group's most significant environmental impact is the electricity consumption in its primary production plants. In fact, both the compression of gases and their liquefaction are highly energy-intense operations: it is estimated that these activities constitute about 90% of the energy consumption of the whole Group. Conversely, the methane and steam consumption in primary production plants and the electricity consumption in secondary production plants and offices are considered negligible.

The actions to reduce energy consumption are not limited to the optimisation of processes and careful plant management but also extend to the design and choice of plant solutions and the upgrading of the machinery used in plants, for which a significant percentage of the investment budget is set aside each year.

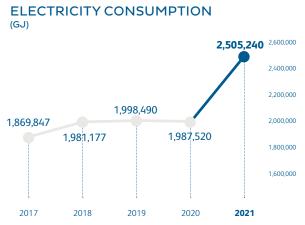
However, consumption trends are influenced by production levels and the operating speeds of production plants. In particular, there was an increase in electricity consumption in

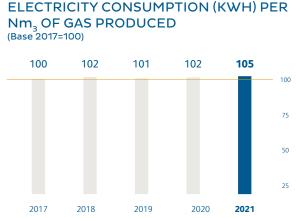
2021 due to the expansion of the Group's scope (acquisition and consolidation of companies), which has led to the inclusion of data from plants characterised by lower energy efficiency in the Group's reporting (which will be addressed, where possible, in the near future).

# ENERGY PRODUCTION FROM RENEWABLE SOURCES

In light of its highly energy-intensive activities, since 2002 the Group has invested in the production of energy from renewable sources with 16 hydroelectric power plants, amounting to a total installed capacity of around 31 MW, located in Slovenia, Albania, Bosnia Herzegovina and North Macedonia. The electricity produced and sold on the grid totalled 327,920 GJ in 2021, corresponding to 13% of the Group's energy consumption.

The **avoided emissions of CO\_2 equivalent** into the atmosphere in 2021 can be estimated to be **29,755 tonnes** thanks to the generation of electricity produced in the Group's hydroelectric power plants (30,440 tCO<sub>2</sub> equivalent in 2020).





The indicator is calculated on the basis of the electricity consumption of the air separation units (ASU)  $\,$ 

#### RENEWABLE ENERGY

### **SOL Group invests in renewables**

The commitment that **SOL INDIA** has been pursuing since 2017 in the purchase of **wind energy** to meet part of its needs, was extended during 2021 to the **purchase of solar energy** through the signing of a **Power Purchase Agreement (PPA)** that promoted the construction of two photovoltaic plants.

As of October 2021, SOL India has been able to supply its factories with energy from sustainable sources with the expectation of covering **25% of its current consumption within a year**, avoiding the corresponding emission of **around 5,000 tCO**<sub>2</sub>e.

At the same time, in Greece, **TAE HELLAS** signed a supply contract in July 2019 that provides energy from renewable sources. By 2021 all energy consumed will be from renewable sources.

Also **VIVISOL**, in Italy, thanks to an agreement with the electricity supplier, will be able to convert all users to contracts **powered exclusively by certified green energy**, produced from renewable sources from January 2022.



# GREENHOUSE GAS EMISSIONS

The SOL Group's greenhouse gas emissions can be separated into:

- direct emissions from its production plants;
- direct emissions connected with product deliveries to customers and patients;
- indirect emissions deriving from the consumption of electricity by the primary production plants;
- other indirect emissions from the supply chain activities.

In addition, the **emissions avoided** thanks to the installation of self-production systems for technical gases at customers' premises, called "**on-site plants**", have been calculated. This solution, where the characteristics of the gas and the customer's needs allow it, is an alternative to the traditional supply of cylinders or liquefied cryogenic gases. The environmental benefit is that on-site plants have lower specific energy consumption than centralised production plants, and emissions due to the road transport of gases are also avoided. In 2021, the avoided emissions of carbon dioxide amounted to **49,044 tonnes** of CO<sub>2</sub> e.

Aware of the impact created throughout its value chain, the SOL Group has calculated its Scope 3 emissions according to the GHG Protocol in 2021. In 2021, Scope 3 emissions were around 1.8 million tonnes of  $\mathrm{CO}_2\mathrm{e}$  (find more details on page 77).

#### **Direct emissions**

The direct emissions of greenhouse gases are caused by:

- carbon dioxide: a by-product generated by the plants producing hydrogen through the steam reforming of methane, emitted from the plants producing CO<sub>2</sub> or vented during the dry ice production process;
- nitrous oxide: emitted from plants producing N<sub>2</sub>O from ammonium nitrate;
- HFC (hydrofluorocarbons), used in plant refrigeration circuits

Direct emissions increased due to the increased production of dry ice and the expansion of the Group's scope. In addition, maintenance work on refrigeration units was carried out in 2021, leading to increased reintegration of FGas into the plants' refrigeration circuits.

Carbon dioxide is a gas with numerous applications in the industrial sector: from water treatment to metal processing to processes in the food industry, which use it for the cooling, freezing and transport of food. There are several sources of this gas, which can be obtained from natural underground deposits or as a by-product of chemical and biological processes.

For several years now, the SOL Group has decided to invest in plants that **recover** this gas from production processes, **which would otherwise be released into the atmosphere**. Thanks to SOL, the carbon dioxide is recovered, purified and marketed in liquid form.

Examples are the plants in Bulgaria (Ihtiman), Germany (Zeitz) and Belgium (Wanze) that recover  $\mathrm{CO}_2$  from bioethanol. In 2021 they recovered **89,963 tonnes of \mathrm{CO}\_2**, which would otherwise have been released into the atmosphere.

In 2019 a consortium was created in Italy, 50% of which is held by SOL, for the recovery of  $\rm CO_2$  from biogas generated by the anaerobic digestion of the organic fraction of municipal solid waste (FORSU).

#### Direct emissions from deliveries to customers and patients

The monitoring of emissions as a result of delivery activities has been extended to all product types:

- products in tankers and tube trailers;
- products in mobile containers;
- home care products and services.

Attention to transport is of fundamental importance as regards environmental and safety aspects.

Products are distributed mainly by road and to a customer base which is extremely widespread throughout the countries in which we operate.

The chemical and physical characteristics of the main products also make it necessary to use special vehicles for transportation (heavily insulated tankers for cryogenic liquids) or special containers (cylinders for compressed gases and base units for liquid oxygen for home care use). In both cases, the unfavourable ratio between the tare weight and the weight of the transported products results in a low level of fuel efficiency per product unit sold.

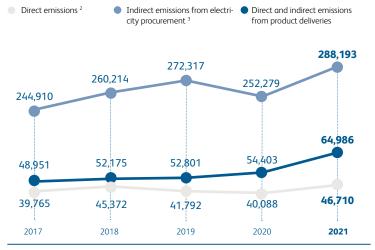
Bearing these restrictions in mind, the SOL Group's actions in order to reduce fuel consumption and therefore its environmental impact have focused on:

- developing production units spread as widely as possible across the country in order to shorten the distances that the vehicles must travel;
- implementation of nitrogen and oxygen self-production at the customer's premises by making "zero-mile" technical gases available (on-site plants);

- periodically upgrading the company fleet, through the purchase of next-generation heavily insulated tankers, with a better ratio between the weight of the transported product and the total weight;
- adoption of logistics management methods aimed at optimising routes.

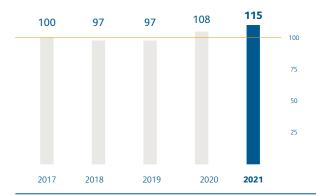
Rainbow, the software for plyearsng the distribution of liquid products adopted and fine-tuned in 2012 for companies operating in Italy, has gradually also been adopted by all of the other Group companies.

# GREENHOUSE GAS EMISSIONS<sup>1</sup> (tCO<sub>2</sub> e)



- Direct emissions from 2017 to 2020 are expressed in tonnes of CO<sub>2</sub>. From financial year 2021, the figure is reported in tonnes of CO<sub>2</sub> equivalent.
- Emissions from the Caserta and Cremona units in Italy and Ranipet in India have been estimated. The emissions from company cars are not currently available.
- Scope 2 emissions of European Countries are expressed in tons of CO<sub>2</sub>, nevertheless the percentage of methane and nitrous oxide has a negligible effect on total greenhouse gas emissions (CO<sub>2</sub> equivalent), as can be deduced from the reference technical literature.

#### KILOMETRES TRAVELLED PER M<sup>3</sup> OF CRYOGENIC GAS PRODUCED (Base 2017=100)



A total of 109 million kilometres were travelled in 2021.

Based on the type of vehicle for the three main types of products transported, total forecast emissions came to around **65 millions tonnes of CO<sub>2</sub> equivalent**.

The increase in the specification, calculated on the basis of tanker kilometres travelled per cubic metre of cryogenic gas produced, was influenced by the product shortage conditions that occurred in Italy and Central European countries during 2021. At the same time, the exceptional state of the health emergency caused an increase in transport to the Balkan area for the supply of medical oxygen, thus leading to a significant increase in the number of kilometres travel-

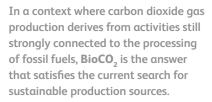
led by tankers for the same product transported.

#### **Indirect emissions**

Starting with an analysis of the energy supply mix, the indirect emissions generated by the production of the electricity acquired by the SOL Group for its production plants were calculated. These emissions amounted to **288,193 tonnes of CO<sub>2</sub> equivalent** (calculated using the "market-based" method), an increase compared to 2020. This increase was due to the increase in energy consumption.

#### SUSTAINABLE MOBILITY

# BioCO<sub>2</sub>: the green future of fuels



In fact, by BioCO<sub>2</sub> we mean **CO<sub>2</sub>** that is **obtained from biomass transformation processes**, a product generally understood as a renewable, and therefore environmentally sustainable, biological material.

The SOL Group, thanks to the development of dedicated plants for the recovery of  $\mathrm{CO}_2$  from bioethanol located in Ihtiman (Bulgaria) and Zeitz (Germany), is **one of the main producers** of bio- $\mathrm{CO}_2$  in Europe today. The construction of a new carbon dioxide liquefaction unit at the Biowanze

bioethanol production plant (in Wanze, Belgium) will in turn enable part of the gaseous  $\mathrm{CO}_2$  of biogenic origin to be recovered and transformed into high-purity liquid  $\mathrm{CO}_2$ , helping to **reduce carbon dioxide emissions into the atmosphere**.

In light of these major investments and the ambitious targets associated with them, SOL's Marketing Department developed and implemented the new brand  ${\rm BioCO_2}$ , which identifies the product on the market.

#### **EMISSIONS**

### SOL Oxygen for the CLEANKER project

The European CLEANKER project, which brings together 13 operators from five different countries (including research centres, plant manufacturers and cement producers), sets out to present one of the most promising technologies to eliminate CO<sub>2</sub> emissions from the fumes of cement factories through the oxygen combustion process.

In fact, the cement industry is a sector with a high impact on  ${\rm CO}_2$  emissions, so projects to develop sustainable technologies aim to facilitate the transition to Carbon Neutrality by 2050.

In this context, the Buzzi Unicem cement plant in Vernasca (Italy), a historic Italian company that stands out among the world leaders in the sector, has been selected for the installation of the demonstration pilot plant.

With its experience in the development and support of energy efficiency and environmental sustainability technologies, SOL participates in this important project by ensuring the **supply of oxygen** and providing **technological support for the combustion plants**.

The participation in this project means new applications can be validated, contributing to the **development of new sustainable technologies** to reduce greenhouse gas emissions and to **limit global warming**.

#### WASTE

The majority of the waste produced derives from activities carried out:

- in our primary production plants, connected with maintenance activities: non-hazardous waste (mainly scrap iron, packaging and insulating materials) and hazardous waste (mainly used oil, used for the lubrication of machines, and ammonia solution from ammonia conditioning);
- in the Group's specialist maintenance centres: testing
  of cylinders and cryogenic containers, repair of electric
  and electronic equipment.

The only waste material directly generated by the production processes adopted in the Group's Units is calcium hydroxide, a by-product of the acetylene production process which, when it cannot be sold as a sub-product, must be disposed of as hazardous or non-hazardous waste depending on its characteristics.

In 2021, the Group recorded an increase in hazardous waste related to the disposal of Medical Devices due to obsolescence and stock disposal.

On the other hand, non-hazardous waste remained stable despite the increase in scope.

The other types of waste produced vary from year to year depending on the number and type of maintenance activities carried out.

### WASTE PRODUCED

(tons

	2017	2018	2019	2020	2021
Non-hazardous waste	2,223	2,272	8,521	4,178	4,124
Hazardous waste	1,117	1,505	545	209	400

#### **RENEWABLE ENERGY**

# SOL bets on regenerated refrigerant gases

Freons or hydrofluorocarbons (HFCs) are the most common refrigerant gases on the market today, used in major refrigeration and air conditioning systems.

However, these gases are responsible for a significant environmental impact due to their contribution to the greenhouse effect quantified in terms of Global Warming Potential (GWP).

The European Regulation known as **"FGas"**, **517/2014**, has therefore called for the gradual reduction in the use of fluorinated greenhouse gases in favour of more sustainable gases.

In line with **European Directives** and attentive to the needs of customers who are increasingly sensitive to environmental issues, SOL plays an active role in the production and distribution chain of regenerated refrigerant gases and natural gases with a low environmental impact such as  ${\rm CO}_2$  R744 and propane R290, avoiding (for increasing quantities year after year) the introduction of new, highly polluting products onto the European market.

Thanks to this activity, SOL has avoided releasing more than  $\bf 200$  million  $\bf kg$  of  $\bf CO_2$  e. into the atmosphere in 2021.

Besides not compromising their efficiency, the regeneration of these gases guarantees carbon neutrality from an environmental point of view, thus proving, together with natural gases with low GWP, to be a more sustainable and eco-friendly solution within the refrigerant market.





#### WATER

## Responsible management of water resources

In order to significantly reduce the consumption of **well water** recorded by the **nitrous oxide production plant in Marcianise (Caserta, Italy),** SOL has planned to build **cooling towers**.

The installed circuit will reduce the temperature of the water (used to cool the production plant) through direct contact with atmospheric air in a special tower.

The cooling occurs by transferring **heat from the water to the air**, using the heat released by the evaporation of the water itself. The cooled liquid is then collected in a basin at the base of the tower for subsequent pumping into circulation.

This is a **semi-closed circuit**, where only the amount of water lost through evaporation will be replenished along with the drained water to avoid the excessive accumulation of salts in circulation (caused by the evaporation itself), avoiding the addition of chemical additives.

These plant modifications will allow for a **significant** reduction in the amount of water withdrawn from the well - about 65% of the **total** - bringing water consumption down from about 30 m3/h to about 10 m3/h.

During 2021, at the primary processing plants in **Verona** (**Italy**) and **Trichy** (**India**), work was carried out to modernise the process air pre-treatment system, allowing the **recovery of the water contained in it.** Due to its characteristics, this water is used to replenish the machine cooling circuit, thus **reducing the supply of primary water from aquifers**.

# WATER WITHDRAWAL AND WASTEWATER

The responsible management of water resources is a key element in line with the SOL Group's principles and strategy. For the Group, managing water resources means:

- optimising the use of water in its plants by reducing withdrawals to a minimum also through investments in recycling;
- promoting research and application at customer sites of technologies which, through the use of technical gases, improve processes such as the treatment of wastewater or the purification of water for public use.

Most of the withdrawn water is used in the **cooling circuits** of machinery inside the primary processing units. A small part is used as raw material for the production of hydrogen for the steam reforming process.

Consumption is given by:

- the loss of water through evaporation during the cooling process of compressors, particularly those involved in the production of gas from air;
- the use of water as a raw material for products such as hydrogen.

Regarding the cooling of ASUs, there are two types of systems in place: most units have systems where water evaporates during the cooling process and only a small amount of water is returned. In the remaining fractionation units, the water extracted and fed into the system for cooling is totally

returned. In this case the water consumption is considered zero. In both cases, the cooling process has no material impact on the quality of the returned water.

The quantities used in secondary processing units and offices are negligible and are therefore not reported.

The data for 2021 is affected by an increase in well water withdrawals due to increased production in some areas, combined with the enlargement of the scope considered compared to the previous year.

Production plant wastewater is periodically controlled. The analyses show that concentrations are well below the legal limits.

## WATER WITHDRAWALS<sup>1</sup> (Megalitres)

	2017	2018	2019	2020	2021
Water main	126	62	72 (27)	63 (22)	85 (61)
Well	1,289	1,435	1,317 (506)	1,266 (461)	1,552 (686)
TOTAL	1,415	1,498	1,390 (533)	1,329 (483)	1,637 (747)

<sup>1</sup> Water withdrawals data prior to 2021 have been recalculated as a result of a more accurate data collection.

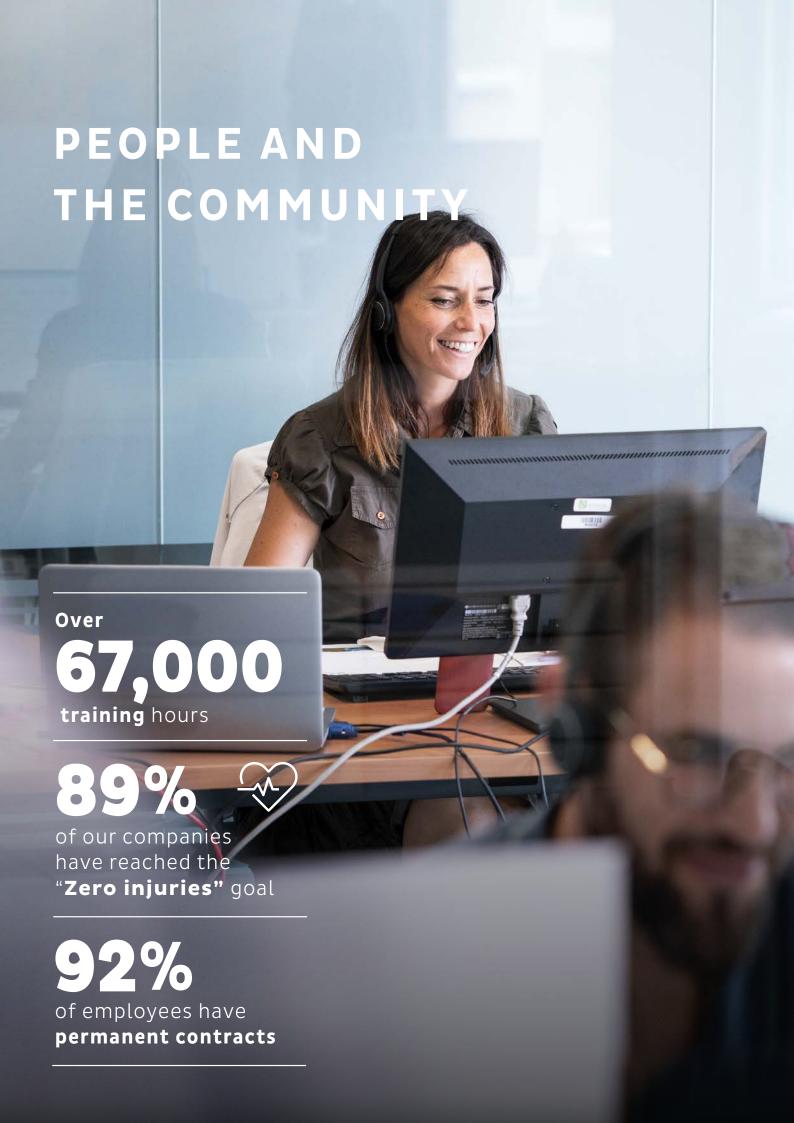
Withdrawals from high and very high water-stressed areas are shown in parentheses. The Aqueduct tool developed by the World Resources Institute was used to determine the areas subject to water stress

# PRIMARY PRODUCTION PLANTS CERTIFICATIONS

Country	Unit	Plant type	ISO 14001	EMAS	ISO 50001	ISO 45001
ALBANIA	Tirana	Sulphur dioxide production	+			+
BELGIUM	Feluy	Air separation (ASU)	+			
BOSNIA-HERZEGOVINA	Petrovo	Carbon dioxide production	+			
BULGARIA	Devnya	Carbon dioxide production				+
	Devnya	Air separation (ASU)				+
GERMANY	Burgbrohl	Carbon dioxide production			+	
	Frankfurt	Air separation (ASU)			+	
	Zeitz <sup>1</sup>	Carbon dioxide production			+	
GREECE	Florina	Carbon dioxide production	+			
	Schimatari	Air separation (ASU)	+			
ITALY	Ancona	Acetylene production	+			+
	Augusta	Air separation (ASU)				+
	Marcianise	Nitrous oxide production				+
	Cremona	Nitrous oxide production	+			+
	Cuneo	Air separation (ASU)				+
	Mantua	Air separation (ASU)	+	+		+
	Monza	Nitrous oxide production				+
	Novara	Air separation (ASU)				+
	Piombino	Air separation (ASU)				+
	Ravenna	Hydrogen production	+			+
	Salerno	Air separation (ASU)	+			+
	Verona	Air separation (ASU)	+	+		+
NETHERLANDS	Tilburg	Nitrous oxide production				+
SLOVENIA	Jesenice	Air separation (ASU)	+	+	+	+

 $<sup>^{1}</sup>$  Production plant of CT Biocarbonic, a jointly controlled company consolidated using the equity method and therefore excluded from the reporting scope of this Sustainability Report





#### **OUR PEOPLE**

Creating a favourable working environment is an essential requirement for a Group like SOL, which aims to attract the **talent** of younger people as well as those with more consolidated experience, in the hope that all employees feel they are **part of a broad and shared project**, and seeks to **foster their knowledge**.

#### STAFF TRENDS

During 2021, as a result of various acquisitions in Brazil, China, Germany, Greece, Italy and the Czech Republic and organic growth, the SOL Group recorded an **11% increase** in the total number of employees compared to the previous year. Net of the change in the scope of the company, the increase was 5%. At 31 December, the Group had **5,101** employees, of whom 61% were men and 39% women. 92% are employed with permanent contracts.

Attention to employees' well-being and stability is also ensured by the measures taken by SOL aimed at creating a collaborative environment that ensures adequate support for balancing work with the needs of personal and family life. The Group has 676 voluntary part-time positions in place, corresponding to 13% of employees.

In the face of the Group's continued growth, the contribution of young talent is considered a valuable and fundamental resource for future development open to innovation. This led to the **recruitment of 997 employees** in 2021, 32% of whom were under 30 years of age. 50% of new recruits were women, demonstrating the focus on equal opportunities

and the steady increase in female employment.

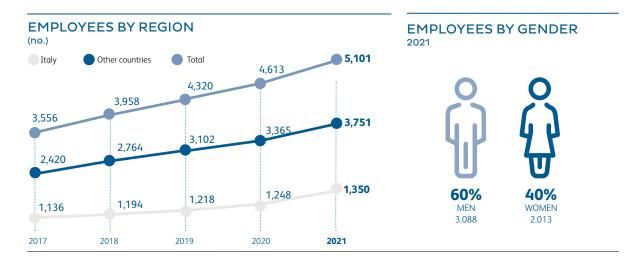
The Group's overall **turnover** was 12%: lower in Italy (5%) compared to the other countries (14%). Although improving compared to the previous year, the trend in turnover continued to feel the effects of strong competition on the international market for profiles linked to the healthcare sector, in which the Group is strongly exposed, and all those linked to the development of digitalisation projects.

The overall **absenteeism rate** was 5,6% in 2021, but the rates in Italy and abroad were quite different. In Italy it was 3%, while in the foreign companies there was an absenteeism rate of 6%. However, this figure is to be viewed positively considering the pandemic context that had strong effects in 2021 in all the countries in which the Group operates.

In addition to direct employees, the Group employs over 2,300 external staff, particularly for certain services provided to patients at home, such as nurses, doctors and physiotherapists.

# EMPLOYEES BY ROLE AND GENDER (no.)

	Men	Women
Senior Manager	111 (2%)	11 (0,2%)
Manager	349 (7%)	157 (3%)
White Collar Workers	1,370 (27%)	1,639 (32%)
Blue Collar Workers	1,258 (25%)	206 (4%)



#### TRAINING AND SKILLS DEVELOPMENT

The SOL Group believes in the continuous training of its people, in the recognition of performance and in the realisation of talent in all its forms: **professional growth in the company** is based on these three pillars.

The continuity of training is a strength despite the pandemic context that continued to limit in-person training activities in 2021. The HR departments are committed to delivering training projects for the development of cross-cutting skills through remote sessions, which are now much more accessible and richer in content.

In addition to ensuring that employees were enrolled in various webinars and training courses organised by external partners, all the meetings envisaged in the **On boarding** calendar, the Group's initiative to welcome new colleagues, even remotely, were held online. In addition to bringing the new arrivals into contact with the Group's world, its history and the organisation of its business, the activity offers initial training sessions on very important cross-cutting aspects (led by the quality, health and safety and regulatory affairs departments) and provides the opportunity to get to know the department manager of each new hire.

The **SOL YOUth Academy** is entirely dedicated to employees under the age of 35 and seeks to develop Project Management and Business Presentation skills through team working, sharing and collaboration activities, with the aim of identifying tomorrow's leaders.

In 2021, the training hours per employee recorded in 2020 (13 hours) were confirmed.

With the aim of promoting and encouraging the specialisation and growth of employees, SOL provides funding for several master's degrees and qualifying study courses, allowing employees of any age and level to pursue training suitable for their professional role.

The desire to maintain close contact with young graduates and serve as a reference point for them has always driven SOL to cultivate **partnerships with different universities** over the years. In particular, the Group interacts regularly with the Polytechnic University of Milan thanks to frequent meetings throughout the year. Through these moments of contact with students, SOL has the opportunity to make itself known and to provide assessment, orientation and recruiting activities, offering a fundamental service for young people.

The Group continues to provide training projects for the Collège des Ingénieurs Italia, a management training institute, by making the skills and experiences of its people available. The strength of this initiative is not limited to the sharing of specialist know-how, but lies in the opportunity for young talents to alternate a six-month work experience in the company with their Master's degree in the classroom.

Also in 2021, the Group's HR Department took part in several events in collaboration with leading Italian universities in order to introduce its business to the community of recent graduates in scientific subjects, particularly through the Almalaurea network.

Aware that the meeting and mingling of people, ideas and cultures is an endless source of enrichment for both the individual and the business environment, in June 2021, the SOL Group participated in **Digital Diversity Day**, an event dedicated to the inclusion of people with disabilities in employment. By approaching the selection process with this vision, people are no longer valued for their ability to assimilate to the corporate culture, but for their way of identifying with it, free to express their characteristics by making their own contribution.

#### PROTECTING DIVERSITY

The progressive extension of our activities in new countries requires us to pay increasing **attention** to the **national and cultural differences** present within the Group companies. The SOL Group's aim is to promote local resources at all levels of the organisation, giving priority to local managers and assigning control and monitoring tasks to central functions

The multiplicity and wealth of the SOL Group can also be seen when considering the following indicators:

- 39% of employees are women. The presence of women is more consistent among white-collar workers, who represent 59% of the total workforce;
- SOL employees are divided within the following age groups: 20-30 (12%), 30-40 (31%), 40-50 (30%), while the over 50s represent 26% of the company population.

Moreover, the percentage of women who sit on the Board of Directors of parent company SOL Spa is 55%.



#### **TRAINING**

# The SOL YOUth Academy goes international

**SOL YOUth Academy** was founded in 2018 as a **SOL Group advanced training school** for the development and growth of young talent under 35. Launched for the first time in Italy, the project takes the form of a learning course that aims to teach **cross-cutting management skills for the growth and consolidation of the professional**.

After two successful years in Italy, the Under-35 Academy is gradually opening its doors to all the Group's countries with the **first international edition in 2021**, involving 13 young professionals from all over the world.

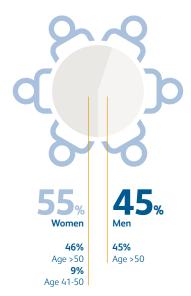
The composition of the class consisting of people with different company roles and tasks allowed for strong interaction between colleagues and offered an **enriching**, **educational and inclusive all-round experience**. The practical and

focused lectures featured professional lecturers from various sectors, as well as participation by our managers and senior executives, and direct input from the SOL Group Chairman.

"Courses like SOL Youth Academy bring value not only in terms of content, but also in terms of sense of belonging and enhancing people's potential. The international version adds to this the great opportunity to develop multicultural networks, something particularly relevant to the generation of Millennials": Silvia Pugliatti, Recruiting Training and Talent in the Corporate Human Resources Department, HR Business Partner for the Home Care

# COMPOSITION OF THE SOL SPA BOARD OF DIRECTORS

at 31/12/2021



#### COMMUNICATIONS AND ENGAGEMENT

The SOL Group considers internal communication an important support for motivation and for the creation of **corporate culture** and the **growth** of people and the organisation, encouraging and promoting the exchange of information, knowledge and experience.

The desire to inform and involve all people has led to the adoption of different communication tools. First and foremost, **SOLConnect**, a corporate intranet that is the link between headquarters and the territories. The platform is constantly updated and includes news, services for employees, information on the company and colleagues, as well as useful tools for everyday work. New applications, called iApps, have been developed (and will be constantly deployed) to ensure totally new workflows and update existing ones.

Another internal communication tool is **SOL News**, the corporate house organ which collects in-depth articles on the main innovations affecting the Group.

To promote the dissemination of national and international initiatives undertaken by the Group, the **Editorial Committee** (set up in 2020 and including representatives from the marketing, human resources and new facilities departments,

and coordinated by the Sustainability and Communication department) organises quarterly update and alignment sessions on future publications.

In order to guarantee a correct flow of communication towards the outside world, and in particular through social media, by all Group employees, a new edition of the **Social Media Policy** was published with the aim of drawing up a list of virtuous communication behaviours in which the employee is seen as a true Brand Ambassador of the Group's activities.

Thematic newsletters are another way of communicating with and reaching all colleagues: examples include **Safety Alerts** sent by HSE Management. Through these periodic communications, SOL intends to provide its people with the necessary tools to cope with new regulations or to manage critical situations, starting from specific events.

During 2021, the SOL Group worked on revising its **website**, renewing the graphic layout, images and content, with the aim of adequately and effectively communicating the Group's identity, the sectors in which it operates and its relationship with its stakeholders. Particular care was also taken to revise the "Work with Us" section, with the aim of making the process of applying for open positions in the Group easier and more user-friendly.

During 2021, climate surveys were carried out in France, the United Kingdom, Germany, Belgium, Austria and the Netherlands in the companies operating in both the Technical Gas and Home Care areas, targeting all employees with the aim of assessing strengths and areas for improvement in the corporate climate. In particular, the surveys focused on actions to improve the working environment and the corporate climate, with a specific focus on the results of exit interviews carried out by local HR departments in order to implement targeted actions to limit turnover.

The objective for 2022, postponed by one year due to the health emergency, is to create a real **HR Community** that brings together the HR Managers of the Group companies so that they can meet (also virtually) to share best practices and define guidelines at Corporate level on the main issues concerning human resources management.

# REMUNERATION AND INDUSTRIAL RELATIONS

The SOL Group strictly applies the legislation relating to National **Collective Labour Agreements** or, alternatively, wages in any case above the legal minimum. It is open to dialogue and discussion with trade unions, where required by local regulations. 63% of the SOL Group's employees are covered by collective labour agreements, in particular 100% of Italian employees and 50% of employees in other countries, where national or sectoral collective labour agreements exist without the obligation to adhere to them.

On average, wages and salaries, which are monitored by local managers and by the Corporate Executive Department for Staff and Legal Affairs, are better than those of the market. The SOL Group makes no gender distinction in the management of remuneration policies which, for each role, are based on merit, skills and results.

The SOL Group is also committed to adopting measures to promote equal treatment and equal opportunities for men and women throughout the organisation. In this regard, it should be noted that the analysis conducted on the Group's remuneration in Italy did not reveal any significant gender pay gap. In particular, it can be seen that the pay of female staff in middle management/managerial positions shows a pay differential of -3.2%, that of white-collar staff in category C a differential of -2%, while it is higher than that of men in categories D (+0.6%) and E (+4.3%). However, this figure should also be put into context with respect to the average age and seniority of men and women in the Group in Italy, both of which are higher for men than for women in all categories, with the exception of categories D and E. The younger age and shorter seniority of employment amply justify the already limited difference in pay highlighted above. On the other hand, there is no gender pay gap in the entry conditions for first-time employees with the same job and activity.

The same type of analysis will be extended in the coming years to the main countries where the Group operates.

In 2021, a short-term incentive (MBO) was introduced for **General Managers** which rewards the achievement of quantitative **objectives**, including those of an **ESG** nature, thus contributing to the sustainable success of the company. This approach has been maintained for 2022.

In 2021 the overall salary paid to Chairman and CEO Aldo Fumagalli Romario was 16.09 times the average overall gross annual salary of Group employees in Italy<sup>1</sup>.

Every year, all managers are required to **evaluate** the **performance of their staff** and to refer wage increase and/or career development proposals to the relevant departments and the Corporate Executive Department for Staff and Legal Affairs.

In any case, the wage increases established by collective bargaining for the sector or by law are guaranteed and, where union representation is present, supplementary contracts are negotiated that can include production and/or participation bonuses linked to the trend in company profitability and productivity parameters, such as improved quality and accident prevention.

Furthermore, the Group strives to incentivise **tools that protect the health of employees and their families**, and those that integrate the pension services established by local laws.

Other initiatives to both support and promote equal opportunities have been taken by the Group through corporate **diversity** programmes and work-life balance tools.

The Corporate Executive Department for Staff and Legal Affairs directly manages Industrial Relations for all Italian companies in the Group and supports overseas companies, intervening when necessary.

SOL is an active member of the chemical industry confederation (Federchimica) and takes part in negotiations in Italy for the renewal of the chemical and chemical-pharmaceutical national collective labour agreements and in other joint schemes by the social partners.

Where it was possible to negotiate with the trade unions for the agreements relating to **corporate welfare**, agreements were reached to strengthen contractual pension and health promotion instruments, and a regulation was established for Italy for the donation of holidays between colleagues. Moreover, for the Italian companies, collective bargaining and company supplements guarantee all employees, regardless of contractual form or part-time or term employment, pension, health and parental leave coverage. By joining the contractual welfare funds, for which employee contributions are subsidised, additional insurance coverage can be obtained in the event of death or disability.

In 2021, a specific survey was conducted on the diffusion of corporate welfare among the most relevant foreign Group companies where coverage by a local HR department is ensured. All the companies surveyed stated that they had implemented a welfare plan going beyond pure contractual obligations which, taking into account local legislation, covers certain general areas of services for employees. The most popular instruments include supplementary health coverage plans, voluntary additions by the company to employees' pension plans and life insurance. In most cases, such additional coverage regards the entire company population, regardless of whether permanent or temporary employees or working full-time or part-time. Only some categories of benefits (life insurance, car, fuel card) are intended for different jobs or classifications such as Senior Managers, Managers, sales roles and territory technicians.

The survey also shows that the use of **smart working** in a structural way (and not only to combat the pandemic) as a tool for reconciling work and family life is widespread in foreign companies.

At corporate level, SOL maintains periodic relations with its union representatives, based on the principles of utmost cooperation and transparency. There are **no situations of conflict** in any of the Group companies: during 2021, only 24 hours of strike were recorded due to the participation of some workers in a national initiative linked to dissent for certain restrictions introduced by the Government to fight the Covid-19 epidemic.

#### **SAFETY**

## Stay Alert, Be Safe: Let's not fall into bad habits!

During 2021, the SOL Group launched the "Stay Alert, Be Safe" campaign, an initiative entirely dedicated to raising awareness of the risks of falling, tripping and slipping.

The one-year campaign was promoted at Group level through the periodic distribution of **informative material** and the in-

volvement of all colleagues in **interactive** activities, specifically planned to stimulate learning through curiosity, play and teamwork.

The project proved to be an important opportunity to reflect on small, everyday, simple and trivial distractions which can sometimes lead to unexpected accidents.



#### **HEALTH AND SAFETY**

The SOL Group promotes the commitment to protecting the health and safety of workers within all its production processes and in third-party companies. This topic is a key aspect of sustainability for SOL: at the heart of its health and safety strategy are the constant commitment of everyone, training, sharing and the analysis of accidents and near misses throughout the Group.

Employee **training** is of utmost importance: all employees are involved in constant awareness and training activities aimed at reducing the possible impact of our activities on the environment and ensuring high levels of workplace safety. To this end, **periodic meetings** are organised, also with the contribution of external specialists, to enhance expertise and stimulate collaboration between units and to share management methods.

During 2021, **activities to verify workers' behaviour** continued. In particular, SOL Group units carried out more than 1,700 behavioural observations coded through checklists common to all Group companies, a significant increase compared to the previous year when there were around 1,100 observations.

During 2021, there was also a special focus on preventing accidents due to slips, trips and falls with the **"Stay Alert, Be Safe" campaign**.

The SOL Group has several specific **communication tools** at its disposal: among these, the "Safety Alerts" that, starting from events that have occurred in the sector, call for compliance with correct rules of conduct. And the "Quarterly Accident Reports" which explain and analyse any incidents that have occurred within the Group and in other companies in the sector belonging to Assogastecnici and EIGA.

As in 2020, energy and resources were invested for the management of the health crisis caused by the **pandemic from**Covid-19. The priorities were the protection of the health and safety of people in the forefront, the facilitation of agile and distance work, as well as the incessant support to all customers, in particular to health facilities and patients, home assisted, strongly affected by the health crisis. Among the prevention measures introduced are: the use of agile and remote work, the provision of Individual Protection Devices, the measurement of temperature at the entrance of the offices, the prohibition to carry out meetings in presence for the first part of the year and the installation of plexiglass as separators between the different workstations.

During 2021, the **frequency** (FI) and **severity** (SI) indices of the Group's employee's injuries remained **substantially stable**. The "Zero Accidents" target was achieved by 95% of companies in Italy and 82% of companies abroad. There were no cases of occupational illness.

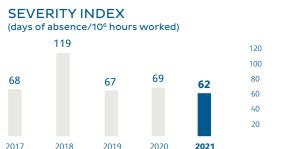


2020

2017

2018

2019



#### COMMITMENT TO THE COMMUNITY

The SOL Group's commitment to be an active and integral part of the communities in which it operates is reflected in its desire to listen, understand and accept their needs and expectations. This is why the Group supports bodies, institutions, associations and sports clubs that operate in harmony with its values, making financial contributions and offering them its expertise.

In Italy, the SOL Group provided its support to the La Meridiana Cooperative in Monza this year as well, promoting the **SLAncio project**, dedicated to people affected by invalidating neurological and neuromuscular diseases, and the **II Paese Ritrovato project**, a small village without architectural barriers designed for the free movement of people with dementia.

During 2021, the Group provided important support to Confindustria Dispositivi Medici, the national federation that represents and brings together Italian companies that develop and supply medical devices to healthcare facilities in the region. Equally significant is the contribution donated to the Istituti Clinici Scientifici Maugeri, active in the clinical-assistance, preventive and research fields, for an **integrated home management project for ALS patients** through **Telemedicine** services.

Recently active in the field of home-based artificial nutrition, VIVISOL supports a number of associations, such as the Associazione Nazionale Nutriti Artificialmente, which is committed to promoting scientific research, disseminating and raising awareness of Artificial Nutrition and developing reference treatment centres.

VIVISOL actively supports research by funding **grants and scholarships for various medical institutions**. One example is the Department of Medical, Surgical and Health Sciences at the University of Trieste, which received a grant for the Complex Operative Unit (UOC) of Pneumology to support clinical research. Still in terms of promoting research, support was provided to the Department of Systems Medicine of the University of Rome Tor Vergata, aimed at activities in the field of OSAS diseases with telemonitoring of therapeutic compliance.

Lastly, this year VIVISOL also made its contribution on the occasion of the **UILDM National Day** promoted by the Italian Union for the Fight against Muscular Dystrophy, providing medical consultations and hours of neuromotor and respiratory rehabilitation to patients suffering from neuromuscular diseases.

#### **SPORT EVENTS**

### **COPD Tour, a race for life**

For three years VIVISOL France has proudly supported the **COPD Tour**, the extraordinary sporting event that brings together patients with chronic obstructive pulmonary disease (COPD) in a cycling route to raise awareness among the public and health authorities.

The event is organised by the O2 & Cie Urgence COPD Association, and arose thanks to the enthusiasm of its President and founder Philippe Poncet, a chronic COPD patient. Philippe is pursuing two objectives through this initiative: to raise awareness of chronic obstructive pulmonary disease, and to demonstrate that the most effective tre-

atment is the **possibility of physical activity** that allows patients to live a better life.

For the past three years, **VIVISOL France** has been responsible for the supply of liquid oxygen during the stages of the route, involving numerous colleagues in the completion of the event.



Various contributions were made in favour of **university training activities in the field of pneumology**, promoted by the University of Messina; research studies in the field of sleep-related diseases, both from a psychological point of view through the project Psychological Distress in Patients with OSA Syndrome carried out by the Centre for Sleep Medicine in Messina; and purely clinical, such as the case of the Italian Association for Research and Education in Sleep Medicine.

In **Spain**, VIVISOL IBERICA and in France, VIVISOL FRANCE, FRANCE OXYGÈNE and MBAR supported organisations for clinical research into respiratory illnesses. In **Germany**, VIVISOL DEUTSCHLAND supported various organisations and associations active in the field of pulmonary and neuromuscular diseases. In **France**, for the third consecutive year VIVISOL FRANCE supported the COPD Tour, the cycling event dedicated to patients suffering from chronic obstructive pulmonary disease.

In **Austria**, VIVISOL HEIMBEHANDLUNGSGERATE provided important support for projects in the field of pulmonology, along with its sponsorship of World Chronic Obstructive Pulmonary Disease (COPD) Day and the IPF (Idiopathic Pulmonary Fibrosis) Symposium 2021, the largest scientific summit focusing on research advances in idiopathic pulmonary fibrosis.

Lastly in **Germany**, SOL KOHLENSAURE made a major contribution to aid in the Ahr region following the catastrophic flooding.

#### **ASSOCIATIONS**

#### **International industry associations**

SOL Spa and IRISH OXYGEN are members of **IOMA** (International Oxygen Manufacturers Association), which unites the world's leading operators in the technical and medical gases sector. The principal objective of the association is to coordinate the harmonisation of safety rules so that operational practices are the same throughout the world.

SOL Spa, SOL NEDERLAND, BTG, SOL DEUTSCHLAND, IRISH OXYGEN, VIVISOL AUSTRIA and DOLBY VIVISOL, GTS are members of **EIGA** (European Industrial Gases Association), which gathers together Europe's leading operators in the technical and medicinal gases sector.

To date, the SOL Group is present with its representatives on the Board of EIGA, in four Councils, 18 Working Groups and 19 Ad Hoc Groups/Task Forces, contributing to the definition of industry standards and best practices.

SOL Spa is a member of the European, Middle Eastern & African Society for Biopreservation & Biobanking (ESBB).

In Italy, SOL is a member of **FEDERCHIMICA** and **ASSO-GASTECNICI**; SOL is present in all the Steering Committees of Assogastecnici SOL.

#### THERAPEUTIC ASSISTANCE

# Lukas returns home and VIVISOL supports him in his new life

VIVISOL - through the association
"Amaci" (Associazione Genitori
e Amici Chirurgia Pediatrica
"Gozzadini") (Association of Parents
and Friends of "Gozzadini" Paediatric
Surgery) - donated a lung ventilator
to the family of Lukas, a two-year-old
Greek boy suffering from a severe
form of type-1 oesophageal atresia.

This is a congenital malformation of the upper gastrointestinal tract that obstructs part of the oesophagus, preventing substances from passing from the mouth to the stomach, and carries with it the risk of inhaling saliva into the respiratory tract.

Following a complex surgery in Italy at the Polyclinic of Sant'Orsola (Bologna, Italy), Lukas had to start a recovery process for which the support of a lung ventilator was essential. VIVISOL's donation

ensured that Lukas not only received **proper medical care** but was also able to **return to Greece** and see his brothers and father after having been away for several months.

#### **AWARDS**

# SOL Group received the Alberto Falck Family Business 2021 Award

The SOL Group received the **Alberto Falck Family Business 2021 Award**, which is given each year to the family business that has distinguished itself in several respects, such as positive economic performance over the last three years, consolidation on international markets, the presence of sound ownership and corporate governance systems and active social responsibility programmes.

**AIDAF** - Italian Family Business - was founded in 1997 by Alberto Falck and today brings **more than 200 family businesses** together



VIVISOL is a member of **Confindustria Dispositivi Medici** (Confindustria Medical Devices), in which it has promoted the creation of the association "Home & Digital Care" (of which Claudio Petronio is

Chairman), an association that brings the main Home Care providers and digital health professionals together.

In Italy, SOL is on the Board of Directors of the **Association H2IT** created to promote the progress of knowledge and the study of disciplines related to technologies and systems for the production and use of hydrogen.

#### Other associations

**FBN-I** – The Family Business Network unites over 3,600 family-run companies, with 16,000 members from 65 countries, with the goal of helping family businesses to develop and prosper over the generations through the exchange of experiences and new ideas.

**AIDAF** – Italian Association of Family Businesses, which brings together Italian family-run companies that share the guiding values of business ethics, meritocracy, social responsibility and a healthy development model of family businesses.

**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.

**ISPI** (Istituto Studi di Politica Internazionale) — Institute for International Political Studies, one of the oldest and most prestigious Italian institutions specialising in international activities which, among other things, constitutes a benchmark for companies and institutions intending to extend their range of action abroad, offering materials and ad hoc meetings.





1,112.9

million **net sales** 

14% then 2020 132.3

million in **investments** 

1,918.3

million capitalisation

42%

net sales in Italy

#### FINANCIAL DATA

During 2021 the **technical gases sector** recorded sales growth of 27.4% over the previous year, achieving sales to third parties totalling €558.4 million. On a like-for-like basis, organic growth was 18.6%.

Sales in the industrial gases area recorded very significant growth following the recovery of industrial activities in all European countries, after the year 2020 where many industrial sectors had experienced reductions in activity following lockdowns and several waves of COVID-19.

In addition to the recovery of industrial activities, medicinal gases also continued to experience strong demand from hospitals, especially in south-eastern European countries and also in India following the waves of the COVID-19 pandemic.

Home care activities grew by 3.5%, both in Italy and abroad, with sales to third-party customers amounting to €554.5 million. Growth in the sector was affected by the slow recovery of prescriptions for new patients, an activity that had come to a virtual standstill due to reduced activity in hospitals and laboratories as a result of the pandemic. In addition, the sales of medical equipment that had characterised 2020, especially during the first phase of the COVID-19 pandemic, did not materialise in 2021.

Overall, in the **health sector**, Group sales totalled €718.8 million, equal to **64.6% of total sales**.

The Group's EBITDA increased by  $\in$  5.4 million (2.1%) compared to 2020. The operating result decreased by  $\in$  4.2 million compared to 2020. The trend in margins was negatively affected, especially in the second half of the year by the rapid, unpredictable and abnormal increase in the cost of electricity, which is the main raw material in the production of technical gases. Towards the end of 2021, the cost of purchasing electricity was 5/6 times higher than at the beginning of the year. The Group companies reacted by trying to pass on the higher production costs in their sales prices, but given the speed and scale of the increases, it was not always possible to recover them completely in such a short space of time.

The Group's net debt increased by only  $\in$  60.6 million, compared to 31 December 2020, due to technical and intangible investments and acquisitions of  $\in$  234.3 million made in 2021.

Indebtedness indices remain very solid, with the debt/equity ratio of 0.43 and the cash flow cover equal to 1.19.



	2017	2018	2019	2020	2021
Number of countries	28	29	29	29	30
Market Capitalisation <sup>1</sup>	964.1	986.8	952.3	1,269.8	1,918.3
Group's net sales <sup>1</sup>	756.8	833.5	904.3	973.8	1,112.9
Technical gas area net sales¹	369.2	403.2	412.6	438.2	558.4
Home care area net sales¹	387.6	430.3	491.7	535.6	554.5
Gross operating margin <sup>1</sup>	167.2	186.9	211.3	255.4	260.8
Operating result <sup>1</sup>	76.2	89.7	88.7	140	135.8
Group's cash flow <sup>1</sup>	127.3	142.6	157.9	219.2	213.1
Net profit <sup>1</sup>	40.2	51.9	49.3	103	89.5
Group's investments <sup>1</sup>	99.3	99.8	103.3	112.9	132.3
% net sales in Italy	46,0	45,7	43,7	43,1	42

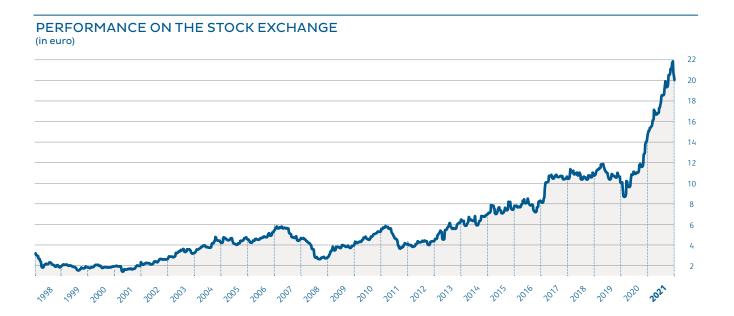
<sup>(1) €</sup> million

#### **FINANCIAL COMMUNITY**

The main shareholder communication tools are the Annual Report and the Sustainability Report, which are published on the Group's website (www.solgroup.com).

The communication activity with shareholders and investors is also conveyed by:

- the periodic publication of press releases on the Group's website and their dissemination to institutional investors;
- **2.** participation in conferences promoted by financial institutions;
- 3. meetings and conference calls with investors and analysts



#### **EUROPEAN TAXONOMY**

Inline with the contents of the 2015 Paris Climate Agreement and the 17 Sustainable Development Goals of the United Nations' 2030 Agenda, the European Union has developed an ambitious strategy towards more sustainable economic models for achieving the 2050 climate neutrality target. To achieve these goals, the EU will promote investments in sustainable assets and activities through the use of public and private resources.

In this context, the system of classification, or "taxonomy", of sustainable activities is established as part of the action plan on sustainable finance adopted in 2018 by the European Commission. It is set out in Regulation (EU) 2020/852 (hereinafter "the Regulation") in which the criteria for determining whether an economic activity can be considered environmentally sustainable are defined, thus allowing to identify the level of environmental sustainability of an investment associated with it. In particular, the Taxonomy Regulation classifies economic activities that can be potentially aligned with the six environmental objectives defined by the European Union:

- Climate change mitigation
- Climate change adaptation
- Sustainable use and protection of water and marine resources
- Transition to a circular economy
- Pollution prevention and reduction
- Protection and restoration of ecosystems and biodiversity

The legislation (EU Delegated Regulation 2021/2139 of 4 June 2021) has currently only defined technical screening criteria for the first two objectives. Thus for financial and non-financial companies falling within the scope of the Regulation, compliance with these first two objectives is required.

In order to classify an activity as "environmentally sustainable" within the meaning of the Taxonomy, a distinction must first be made between Taxonomy-Eligibility and Taxonomy-Alignment. As regards the former, the activities must be checked to assess whether they fall within those described in the Delegated Regulation, as only these

can be considered Taxonomy-eligible. On the other hand, in order to be considered Taxonomy-aligned, the activities carried out by the company must meet the technical screening criteria laid down in the delegated acts, must do no significant harm to any of the objectives and must be carried out in compliance with minimum safeguards.

Pursuant to Article 10 of EU Delegated Regulation 2021/2178 of 6 July 2021, as of publications after 1 January 2022, companies required to prepare a consolidated Non-Financial Statement (NFS) must disclose the proportion of their total turnover, capital expenditure (CapEx) and operating expenditure (OpEx) related to the Group's economic activities that qualify as potentially sustainable (so-called "eligible") from the environmental point of view. This assessment currently only concerns economic activities eligible for the climate change mitigation and adaptation objectives, the only ones for which technical screening criteria have been defined to date, as specified above.

SOL therefore conducted an **analysis of the economic activities carried out by the Group** in order to identify those to be considered "eligible" in relation to the objectives illustrated above, and to prepare the disclosures required by the reference legislation, also having regard to the interpretative clarifications provided by the European Commission in the form of a "Q&A" in December 2021 and February 2022<sup>1</sup>.

In particular, it should be noted that in carrying out the above-mentioned activities of analysis and preparation of disclosures relating to the Taxonomy, the company's Management adopted a prudential approach based on its understanding and interpretation of the applicable regulatory requirements to the best of its current knowledge.

In this context, the expected publication of the technical regulations for the additional environmental objectives defined in Article 9 of the Regulation, as well as further developments in the interpretation of the regulations, could lead to substantial changes in the assessments and the KPI calculation process for the next reporting year.

<sup>&</sup>lt;sup>1</sup> "Draft Commission notice on the interpretation of certain legal provisions of the Disclosures Delegated Act under Article 8 of EU Taxonomy Regulation on the reporting of eligible economic activities and assets", published on 2 February 2022.

# Identification of taxonomy-eligible activities and calculation of KPIs

The first step of the process allowed to identify, through an analysis of the activities included in the Annexes to EU Delegated Regulation 2021/2139, those applicable to the SOL Group's business in consideration of the description provided by the Annexes to the Regulation; based on the above analysis, the following **Group activities** can contribute to the achievement of the **climate change mitigation and adaptation objectives**:

- Hydrogen production (activity 3.10);
- Manufacture of organic basic chemicals for the Group's acetylene production activities (activity 3.14);
- Production of electricity from hydropower (activity 4.5);
- Residential care services (activity 12.1)

On the basis of the Group's Consolidated Financial Statements as at 31.12.2021 (hereinafter also referred to as the "Financial Statements"), the percentage of turnover, capital expenditure (CapEx) and operating expenditure (OpEx) in relation to the respective total values was calculated for each "eligible" activity identified. In particular, it should be noted that:

**Turnover:** the share of "eligible" turnover represents the portion of net revenues derived from services or products, including intangible products, that originate from economic activities consistent with the taxonomy, divided by total net revenues;

**Capex:** The CapEx KPI was calculated by dividing the value comprising "eligible" capital expenditure by the denominator value constituting total capital expenditure. Specifically, the

numerator for the calculation of CapEx is represented by additions to tangible and intangible assets and "eligible" rights of use during the year, before depreciation, of any revaluations and excluding changes due to fair value. The denominator instead comprises total capital expenditure and increases in usage rights, before depreciation, of any revaluations and excluding changes due to fair value;

**Opex:** The OpEx KPI was calculated by dividing the value comprising the portion of "eligible" operating expenses by the denominator value constituting total operating expenses. Specifically, the numerator for the calculation of OpEx is represented by the total value of non-capitalised indirect costs of research and development and any other direct expenditure related to the ordinary maintenance and repair of property, plant and equipment necessary to ensure the continuous and efficient operation of such assets. The denominator is instead the total value of these costs.

# TABLE ACCORDING TO REGULATION (EU) 2020/852

KPI <sup>2</sup>	Total (€ million)	% of assets eligible for the Taxonomy	% of activity not eligible for the Taxonomy
Turnover	1,112.9	1.0	99.0
СарЕх	132.3	8.6	91.4
ОрЕх	33.8	2.4	97.6





## IDENTIFICATION OF PRIORITY STAKEHOLDERS AND MATERIAL TOPICS

The SOL Group embraces the concept of a sustainable company as an entity capable of **creating value for all those involved** internally and externally, generating a consequent positive impact on the economic, environmental and social dimension. In this context, keeping all its stakeholders in consideration becomes a fundamental approach for grasping the main indications and expectations capable of determining the Group's behaviours and improvement actions.

The relationship of mutual influence between the SOL Group and its stakeholders therefore leads to the establishment of constant communication between the parties.

The SOL Group's **important stakeholders** are: Associations, Environmental associations, Authorities and public bodies, Shareholders, Investors and financial institutions, Patients and Doctors, Customers, Communities, Employees, Suppliers and Partners.

The **Materiality Matrix** was confirmed and updated in 2020 following the involvement of some categories of stakeholders. The matrix was shared with Top Management and presented to the Parent Company's Board of Directors (11 November 2021).

#### **ECONOMIC RESPONSIBILITY AND GOVERNANCE**

- 1. Sustainable economic growth
- 2. Compliace with voluntary lows, regulations and standards
- 3. Business ethics and integrity

#### PRODUCT RESPONSIBILITY

- 1. Customer and patient centricity
- 2. Sustainable solutions for customers
- 3. Traceability of products and services

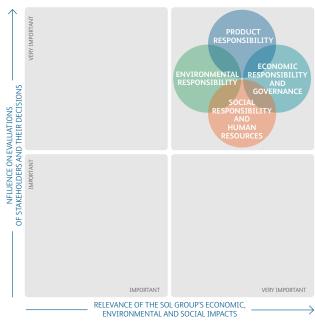
#### SOCIAL RESPONSIBILITY AND HUMAN RESOURCES

- 1. Attracting talents and developing human capital
- 2. Company welfare and employee well-being
- 3. Employee health and safety
- 4. Respect for human rights and workers' rights
- 5. Sustainable supply chain

#### **ENVIRONMENTAL RESPONSIBILITY**

- 1. Energy efficiency and climate change
- 2. Waste management
- 3. Efficient use of raw materials
- 4. Environmental impact of products
- 5. Environmental impact of transport

#### MATERIALITY MATRIX



Whore the

### TABLE OF THE BOUNDARY OF MATERIAL TOPICS FOR THE SOL GROUP AND RECONCILIATION WITH THE RELATED TOPIC GRI

Area	rea Material topic Topic-specific Standards		where the impacts occur	Type of impact
ECONOMIC RESPONSIBILITY AND	Balanced economic development	GRI 201: Economic performance (2016)	SOL Group	Caused by the Group
GOVERNANCE		GRI 205: Anti-corruption (2016)		
	Compliance with voluntary laws, regulations and standards	GRI 206 Anti-competitive behaviour (2016)	SOL Group, partners	Caused by the Group and directly connected through a business relationship
		Customer privacy (2016)		·
	Business ethics and integrity	GRI 207: Taxes (2019)	SOL Group	Caused by the Group

PRODUCT RESPONSIBILITY	Customer and patient centrality	GRI 416: Customer health and safety (2016)	SOL Group, partners	Caused by the Group and directly connected through a business relationship	
	Sustainable solutions for customers		SOL Group	Caused by the Group	
	Traceability of products and services	GRI 417: Marketing and labelling (2016)	SOL Group	Caused by the Group	
SOCIAL RESPONSIBILITY		GRI 401: Employment (2016)			
AND HUMAN RESOURCES	Ability to attract talent and human resources development	GRI 404: Training and education (2016)	SOL Group, partners	Caused by the Group and directly connected through a business	
		GRI 405: Diversity and equal opportunities (2016)		relationship	
	Corporate welfare and employee well-being	GRI 401: Employment (2016)	SOL Group	Caused by the Group	
	Health and safety of workers	GRI 403: Health and safety in the workplace (2018)	SOL Group	Caused by the Group	
	Respect for human rights and workers' rights	GRI 406: Non-discrimination (2016)			
	Sustainable supply chain	GRI 308: Supplier social assessment (2016)	SOL Group, partners	Caused by the Group and directly connected through a business relationship	
	Sustainable supply Chain	GRI 414: Supplier environmental assessment (2016)		· 	
ENVIRONMENTAL RESPONSIBILITY		GRI 302: Energy (2016)			
KESI ONSIBILITI	Energy efficiency and climate change	GRI 303: Water and discharges (2018)	SOL Group	Caused by the Group	
		GRI 305: Emissions (2016)			
	Waste management	GRI 306: Effluents and waste (2016)	SOL Group, suppliers and partners, customers, patients	Caused by the Group and directly connected through a business relationship	
	Efficient use of raw materials	GRI 301 Materials (2016)	SOL Group	Caused by the Group	
		GRI 302: Energy (2016)			
	Environmental impact of products	GRI 303: Water and discharges (2018)	SOL Group	Caused by the Group	
		GRI 305: Emissions (2016)			
	Environmental impact of transport	GRI 305: Emissions (2016)	SOL Group, suppliers and partners	Caused by the Group and directly connected through a business relationship	

#### Identification of risks related to material topics

For every non-financial aspect identified as significant in the materiality analysis, the following table summarises the main risks incurred or generated by the Group through its activities and along the value chain, as well as the major actions taken in response to such risks.

Topics of Italian Legislative	Material topics	Risk identification	Risk response
THE FIGHT AGAINST BRIBERY AND CORRUPTION	Compliance with voluntary laws, regulations and standards Business ethics and integrity	Potential risks related to non- compliance with laws and regulations (concerning anti- competitive behaviour, corruption, privacy)	<ul> <li>Implementation of the Code of Ethics</li> <li>Adoption of an integrated management system</li> <li>Adoption of a Model of organisation, management and control pursuant to Italian Legislative Decree no. 231/2001</li> <li>Employee training</li> <li>Audit activities</li> <li>Adoption of an Antitrust Compliance Program, an Antitrust Code and a Handbook</li> <li>Appointment of a DPO (Data Protection Officer) and publication of a procedure according to GDPR</li> <li>Certification according to ISO 27001/ISO 22301</li> <li>Investments in IT security systems</li> </ul>

SOCIAL TOPICS			- Monitoring customer and patient satisfaction
	Customer and patient centrality	Potential risk of losing customers and profits	<ul> <li>Audit activities</li> <li>Training employees and partners who work on behalf of SOL</li> <li>Adoption of an integrated quality, safety and environment management system</li> <li>Certification according to ISO 9001</li> </ul>
	Sustainable solutions for customers	Potential risk of losing customers and profits	Monitoring customer and patient satisfaction     Audit activities     Training employees and partners who work on behalf of SOL     Adoption of an integrated quality, safety and environment management system     Certification according to ISO 9001
	Traceability of products and services	Potential risk of failing to ensure product traceability and potential risk to the health and safety of consumers	Adoption of software for product traceability     Implementation of a management system for Pharmacovigilance and Materiovigilance     Training employees and partners who work on behalf of SOL     Audit activities     Certification according to ISO 13485
	Sustainable supply chain	Potential social and environmental risks along the supply chain	Adoption of a Directive on the qualification process of suppliers in terms of risk analysis     When selecting its partners for the supply of goods and services that are critical for safety, quality and the environment, SOL uses a qualifying process to establish whether a potential partner meets the requirements demanded by company procedures.
EMPLOYEE RELATED MATTERS	Ability to attract talent and human resources development Corporate welfare and employee well-being	Potential risk related to the lack of adequate and qualified staff	Collaboration with various universities, social development     Group training programme     Recognising and investing in young resources through international programmes     Structured company process of recruitment and onboarding     Retention and development plans
	Worker health and safety	Potential risks related to employees' health and safety and to compliance with legislation concerning occupational health and safety.	Adoption of an integrated quality, safety and environment management system     Staff training     Audit activities     Certification according to ISO 45001     Monthly monitoring of the main health and safety KPIs
RESPECT FOR HUMAN RIGHTS	Respect for human rights and workers' rights	Respect for human rights, with particular reference to the supply chain	Implementation of the Code of Ethics     Training and communication for employees and partners who work on behal of SOL     Approval of a Group Directive on the qualification process of suppliers in terms of risk analysis
ENVIRONMENTAL TOPICS	Environmental impact of products  Energy efficiency and climate change	Potential risks associated with the consumption of electricity by the Group's primary processing plants, the potential risks of direct and indirect emissions of greenhouse gases Potential risk that a major meteorological event may occur that could result in a period of unavailability of the company's buildings and assets, with the simultaneous interruption of the activities conducted there by the Group.	<ul> <li>Adoption of an integrated quality, safety and environment management system</li> <li>Monthly monitoring of the main environmental KPIs</li> <li>Audit activities</li> <li>Training employees and partners who work on behalf of SOL</li> <li>The Group already has business continuity procedures in place that cover the main areas of greatest risk posed by climate change, and monitors any critical areas also through compliance with the provisions of the integrated management system.</li> <li>Certification according to ISO 14001/50001</li> <li>Setting of qualitative and quantitative emission reduction targets in the Group's Sustainability Plan</li> <li>Analysis and monitoring of the exposure of corporate infrastructure to risks related to extreme climate events</li> </ul>
	Efficient use of raw materials	Potential risk of depletion of natural resources	<ul> <li>Adoption of an integrated quality, safety and environment management system</li> <li>Monthly monitoring of the main environmental KPIs</li> <li>Certification according to ISO 14001</li> </ul>
	Waste management	Potential risk associated with low waste management control throughout the value chain	<ul> <li>Compliance with local regulatory systems on waste management in relation to product life cycle</li> <li>Adoption of an integrated quality, safety and environment management system</li> <li>Certification according to ISO 14001</li> <li>Audit activities</li> <li>Training employees and partners who work on behalf of SOL</li> </ul>
	Environmental impact of transport	Potential risks related to outbound logistics, with particular reference to road transport	Progressive implementation of software for logistics plyearsng     Monitoring kilometres travelled



This document is the **Consolidated Non-Financial Statement** (hereinafter also the "Sustainability Report" or "NFS") of the SOL Group (hereinafter also "SOL" or "Group"), prepared in accordance with Italian Legislative Decree 254/2016 and, as set forth in art. 5 of the same Decree, constitutes a separate report from the management report.

This document reports on the issues deemed relevant and envisaged in Articles 3 and 4 of Italian Legislative Decree 254/2016 with reference to the financial year 2021 (1 January to 31 December), to the extent necessary to ensure an understanding of the business, its progress, its results and the social and environmental impact produced by the same.

The scope of the **information and economic data** contained in the NFS is the same as that in the SOL Group's Consolidated Financial Statements. The scope of **social**, **health and safety data and information** is composed of the companies consolidated on a line-by-line basis in the Consolidated Financial Statements (for the list of companies consolidated on a line-by-line basis, see the section "Group composition and consolidation area" in the Notes to the Financial Statements). With regard to **environmental data and information**, see the chapter "The environment", which explains any limitations in the scope of reporting, which do not affect the understanding of the Group's activities or its impact.

Also with reference to the reporting scope, it should be noted that some significant changes occurred in 2021, which consequentially led to a change in the scope of consolidation following:

- the inclusion of the company SOL Real Estate Deutschland GmbH established in December 2020;
- the inclusion of the company TAE Hellas S.A. acquired in February 2021;
- the inclusion of the company VIVICARE Hellas S.A. acquired in February 2021;
- the inclusion of the company OXYTECHNIC spol. s.r.o. acquired in May 2021;
- the inclusion of the company Shanghai Mu Kang Medical Device Distribution Service Co. Ltd acquired in August 2021;
- the inclusion of the company Shanghai Shenwei Medical Gas Co. Ltd acquired in August 2021;
- the inclusion of the company Portare LTDA acquired in November 2021;
- the inclusion of the company KSD Kohlensaure-Dienst GmbH acquired in November 2021;
- the inclusion of the company ISIMED Srl acquired in December 2021;

The content of this Report refers to 2021 and, in particular, the activities carried out by the SOL Group during the year, unless otherwise noted.

Data relating to previous years is reported where possible for comparative purposes, making it possible to assess longer-term trends in the Group's activities. Restatements to previously published comparative data are clearly indicated. Also, to give a fair view of the performance and to ensure the reliability of data, the use of estimates was limited as much as possible. Where estimates were used, they were based on the best available methodologies and suitably indicated.

The Sustainability Report has been prepared in accordance with the "Global Reporting Initiative Sustainability Reporting Standards" defined by GRI - Global Reporting Initiative, according to the option "In accordance - Core".

The information contained in the Report refers to topics identified as material and the related indicators that reflect the significant economic, environmental and social impacts of the organisation or that could substantially influence the evaluations and decisions of the Group's stakeholders. The materiality analysis already updated in 2020 and approved by the Board of Directors of SOL Spa on 11 November 2021 served as a guideline for defining the content to report, in line with the expectations of stakeholders. For details of the materiality analysis conducted by the Group, please refer to the section "Materiality analysis" in this document.

The emissions aspect was only relevant to  $\mathrm{CO}_2$  emissions. It should be noted, however, that with regard to other emissions, some production plants have an Integrated Environmental Authorisation. The Authorisation provides for the monitoring of emissions of NOx, COV, NH3 and CO into the atmosphere and the annual notification thereof to the Competent Authority. There were no out-of-bounds errors in the reporting period.

As a company required to prepare a Consolidated Non-Financial Statement pursuant to EU Directive 95/2014 (implemented in Italy by Legislative Decree 254/2016), SOL Spa has the obligation to include in this document, starting with publications after 1 January 2022, the disclosure required by the regulations in question in relation to the environmentally sustainable activities conducted by the Group.

Pursuant to Article 10 of EU Delegated Regulation 2021/2178 of 6 July 2021, this disclosure for financial year 2021 concerns the proportion of total turnover, investments and operating costs related to the Group's economic activities eligible for the objectives of climate change mitigation and adaptation, as covered by the annexes to EU Delegated Regulation 2021/2139 of 4 June 2021, as well as certain qualitative information.

In this regard, it should be noted that the limited review of this Consolidated Non-Financial Statement (Sustainability Report) carried out by the Independent Auditors Deloitte & Touche S.p.A. does not extend to such disclosure.

The Sustainability Report, which the Group has prepared annually since 2009, was approved by the Board of Directors of SOL Spa on 30 March 2022.

The Report has been subject to limited assurance engagement, in accordance with the criteria set out in ISAE 3000 Revised, by Deloitte & Touche Spa according to the procedures set out in the Independent Auditors' Report included in this document.

The Group has envisaged a continuous improvement process with regard to material sustainability issues in order to comply in an increasingly virtuous way with regulations

and best practices in the sector. In particular, with regard to anti-corruption, ethics and integrity in business, the Parent Company SOL Spa has adopted the 231/01 Management and Organisation Model. Instead, as regards the topic of respecting human rights, in 2006 the Group adopted a Code of Ethics (updated in 2017) which has specific provisions on human rights issues. In fact, the SOL Group undertakes to support the protection and defence of human rights according to the principles laid down by the Universal Declaration of Human Rights (1948), and acknowledges the principles established by the basic Conventions of the ILO (International Labour Organisation). The Code of Ethics applies to all employees, contract staff and directors of the SOL Group companies and to all those who, in various capacities, come in contact with the Group (such as suppliers, partners, customers etc.).

The Group will continue its commitment to analysing and reconciling SOL's activities and priorities with the Sustainable Development Goals (SDGs) of the United Nations. The Group also intends to further explore the analysis of risks and opportunities in relation to climate change and to integrate its own analyses in future Non-Financial Statements in relation to the impacts generated and suffered in this area, as well as the relative reporting, also based on the evolution of regulations on the subject.



# PERFORMANCE INDICATORS

PEOPLE
Employee performance (data at 31/12)

	2019	2020		2021		
Employees by gender and role	n.	%	n.	%	n.	%
Managers and White Collar Workers	3,038	100%	3,331	100%	3,637	100%
- Men	1,441	47%	1,662	50%	1,830	50%
- Women	1,597	53%	1,669	50%	1,807	50%
Blue Collar Workers	1,282	100%	1,282	100%	1,464	100%
- Men	1,144	89%	1,110	87%	1,258	86%
- Women	138	11%	172	13%	206	14%
Employees by age group and role	n.	%	n.	%	n.	%
Managers and White Collar Workers	3,038	100%	3,331	100%	3,637	100%
- Up to 30	384	13%	452	14%	476	13%
- 30-40 years	1,007	33%	1,068	32%	1,115	31%
- 41-50 years	964	32%	1,006	30%	1,112	30%
- Over 50	683	22%	805	24%	934	26%
Blue Collar Workers	1,282	100%	1,282	100%	1,464	100%
- Up to 30	143	11%	154	12%	158	11%
- 30-40 years	452	35%	450	35%	473	32%
- 41-50 years	339	27%	355	28%	425	29%
- Over 50	348	27%	323	25%	408	28%
Rate of absenteeism of employees by gender and region		%		%		%
Italy		2.4%		3.9%		3%
- Men	•	2.0%		4.2%		3%
- Women		3.5%	•	3.4%		4%
Other countries		5.0%	•	5.7%		6%
- Men	•	4.3%	•••••••••••••••••••••••••••••••••••••••	5.2%	•	5%
- Women		5.8%		6.3%		7%

	2019		2020		2021	
Employees by gender and employment contract	n.	%	n.	%	n.	%
Italy						
Permanent contract	1,153	100%	1,190	100%	1,284	100%
- Men	847	73%	868	73%	932	73%
- Women	306	27%	322	27%	352	27%
Fixed-term contract	65	100%	58	100%	66	100%
- Men	40	62%	38	66%	45	68%
- Women	25	38%	20	34%	21	32%
Other countries						
Permanent contract	2,834	100%	3,012	100%	3,417	100%
- Men	1,614	57%	1,704	57%	1,965	58%
- Women	1,220	43%	1,308	43%	1,452	42%
Fixed-term contract	268	100%	353	100%	334	100%
- Men	84	31%	162	46%	146	44%
- Women	184	69%	191	54%	188	56%
Employees by gender and contract type	n.	%	n.	%	n.	%
Part-time	576	100%	606	100%	676	100%
- Men	107	19%	111	18%	122	18%
- Women	469	81%	495	82%	554	82%
Full-time	3,744	100%	4,007	100%	4,425	100%
- Men	2,478	66%	2,661	66%	2,966	67%
- Women	1,266	34%	1,346	34%	1,459	33%
New hires	n.	%	n.	%	n.	%
By gender						
- Men	372	14.3%	684	24.7%	500	16.2%
- Women	405	23.3%	665	36.1%	497	24.7%
Total	777	17.9%	1,349	29.2%	997	19.5%
By Region						
- Italy	126	10.3%	144	11.5%	187	13.8%
- Other countries	651	20.9%	1,205	35.8%	810	21.6%
Total	777	17.9%	1,349	29.2%	997	19.5%
By age group						
- Up to 30	233	44.2%	426	70.3%	315	49.7%
- 30-40 years	272	18.6%	508	33.5%	353	22.2%
- 41-50 years	150	11.5%	271	19.9%	208	13.5%
- Over 50 years	122	11.8%	144	12.8%	121	9%
Total	777	17.9%	1.349	29.2%	997	19.5%
Turnover due to resignations and dismissals	n.	%	n.	%	n.	%
By gender						
- Men	324	12.5%	397	14.3%	302	9.7%
- Women	323	18.6%	441	24.0%	295	14.6%
Total	647	14.9%	838	18.2%	597	11.7%

	2019		2020		2021	
By Region						
- Italy	99	8.1%	91	7.3%	68	5%
- Other countries	548	17.6%	747	22.2%	529	14.1%
Total	647	14.9%	838	18.2%	597	11.7%
By age group						
- Up to 30	133	25.2%	197	32.5%	134	21.1%
- 30-40 years	210	14.3%	335	22.1%	235	14.8%
- 41-50 years	162	12.4%	192	14.1%	137	8.9%
- Over 50 years	142	13.7%	114	10.1%	91	6.7%
Total	647	14.9%	838	18.2%	597	11.7%
Training hours provided <sup>1</sup>	n.	%	n.	%	n.	%
By gender						
- Men	43,073	60%	36,389	60%	41,059	61%
- Women	28,748	40%	24,761	40%	26,222	39%
Total	71,821	100%	61,150	100%	67,281	100%
By Employee level						
- Senior Manager, Manger, White Collar workers	54,894	76%	48,689	80%	48,545	72,1%
- Blue collar workers	16,927	24%	12,462	20%	18,737	27,8%
Total	71,821	100%	61,150	100%	67,281	100%
Average training hours provided <sup>1</sup>	n.		n.		n.	
By gender						
- Men	16.66		13.13		13.29	
- Women	16.57		13.45		13.02	
Total	16.62		13.26		13.18	
By Employee level						
- Senior Manager, Manger, White Collar workers	18.07		14.62	•	13.34	
- Blue collar workers	13.20		9.72	•••••••••••••••••••••••••••••••••••••••	12.79	
Total	16.62		13.26		13.18	

<sup>&</sup>lt;sup>1b</sup> In Group companies where there is no system for collecting data on training hours by gender or role, these figures were estimated based on the composition of the population in the same company.

PEOPLE Health and Safety (data at 31/12)

		2017	2018	2019	2020	2021
Frequency index						
Italy						
Technical and medical gases sector	No.	1.8	3.5	4.1	3.3	1.7
Home care	No.	0.0	2.0	0.0	1.9	1.9
Biotechnologies sector	No.	3.9	2.1	5.7	8.2	1.9
Other countries						
Technical and medical gases sector and energy production	No.	3.0	5.3	4.1	5.3	8.4
Home care	No.	4.0	5.3	2.8	2.6	3.0

Severity index						
Italy						
Technical and medical gases sector	No.	55	42	151	194	37
Home care	No.	0	14	0	14	19
Biotechnologies sector	No.	146	16	106	251	82
Other countries						
Technical and medical gases sector and energy production	No.	114	203	55	58	141
Home care	No.	50	133	49	22	40
Employability						
Medical examinations	No.	653	1,130	1,335	1,231	1,648
Clinical analyses	No.	578	662	549	536	708
Additional tests (1)	No.	400	428	527	451	421

<sup>&</sup>lt;sup>1</sup> Electrocardiograms, spirometry, audiometry, etc.

#### **ENVIRONMENT**

Waste (data at 31/12)

		2017	2018	2019	2020	2021
Destination of waste produced						
Landfill						
Non-hazardous	t.	1,492	1,332	1,285	3,093	2,514
Hazardous	t.	1,069	1,463	457	104	156
Recovery						
Non-hazardous	t.	630	675	7,101	886	1,453
Hazardous	t.	44	31	57	94	180
Incineration						
Non-hazardous	t.	101	265	136	199	157
Hazardous	t.	4	11	27	11	64

#### **ENVIRONMENT**

LEmissions SCOPE 3 (data at 31/12)

For the calculation of Scope 3 emissions, the sources considered according to the categories of the GHG protocol are listed below. The category "Transport and downstream distribution" has been reported in the "Environment" chapter.

	Unit of Measurement	2021
Indirect GHG emissions (Scope 3)		
Goods and services purchased	Tonnes CO <sub>2</sub> e	427,805
Capital goods	Tonnes CO <sub>2</sub> e	49,607
Fuel and energy-related activities (item not included in Scope 1 or Scope 2)	Tonnes CO <sub>2</sub> e	103.269
Business trips	Tonnes CO <sub>2</sub> e	3,529
Home-work commute of employees	Tonnes CO <sub>2</sub> e	4,269
Use of products sold	Tonnes CO <sub>2</sub> e	1,265,915
Total	Tonnes CO <sub>2</sub> e	1,854,394

#### SUSTAINABILITY GOVERNANCE

Country by country reporting (data at 31/12/2020)

Country	Main activities	Society name	No. of employees	Revenues from third-party sales (€ MIn)	Revenues from intra-group transactions (€ million)	Profit/loss before tax (€ Mln)	Tangible assets other than cash and cash equivalents (€ million)	Corporate income tax paid on a cash basis (€ MIn)	Corporate income tax accrued on profit/loss (€ MIn)
Albania	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	G.T.S. Sh.p.K., HYDROENERGY Sh.p.K.	34	11.03	4.04	1.19	19.33	0.18	0.33
Austria	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	SOL T.G. GmbH, VIVISOL Heimbehandlungsgeräte GmbH	139	37.46	2.53	7.22	16.41	3.38	1.88
Belgium	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	B.T.G. Bvba, SOL SpA - Branch Belgio, VIVISOL B SprI	108	24.29	17.08	3.12	19.56	1.34	1.32
Bosnia	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	MEL a.d., T.G.P. A.D., T.G.T. A.D.	39	4.11	0.78	1.17	6.00	0.07	0.12
Brazil	Sales, marketing or distribution; provision of services to unrelated parties; Holding of shares or other equity instruments	DN GLOBAL HOMECARE LTDA, GLOBAL CARE LTDA, P PAR LTDA, UNIT CARE LTDA, VIVISOL Brasil Ltda	140	15.53	0.58	3.20	1.04	1.58	1.53
Bulgaria	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	SOL Bulgaria E.A.D.	50	5.66	1.16	-1.74	18.05	0.00	0.00
Croatia	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	SOL Croatia d.o.o., UTP d.o.o.	56	6.41	1.90	0.54	5.44	0.00	0.00
France	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	BEHRINGER France Sarl, France Oxygene Sarl, MBAR Assistance Respiratoire S.a.s., SOL France Sas, SOL SpA - Branch Francia, VIVISOL France Sarl.	539	109.81	3.64	19.38	53.14	5.68	5.92
Germany	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	Intensivservice Wyearsnger GmbH, Kompass GmbH, Medtek Medizintechnik GmbH, Pielmeier Medizintechnik GmbH, SOL Deutschland GmbH, SOL Kohlensaure GmbH & Co. KG, SOL Kohlensaure Verwaltungs GmbH, SOL Kohlensaure Werk GmbH & Co. KG, SOL SpA - Branch Francoforte, Vivicare GmbH, Vivicare Holding GmbH,	668	127.49	21.10	17.27	69.90	4.32	5.29
Greece	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	SOL Hellas S.A., VIVISOL Hellas S.A.	41	9.95	1.08	-1.43	5.19	0.00	0.00
India	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	SICGILSOL GASES PRIVATE LIMITED, SOL India Private Limited	93	2.01	0.27	0.06	7.19	0.05	0.00
Ireland	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	Direct Medical Limited, Irish Oxygen Company	44	10.19	0.02	3.61	4.86	0.67	0.43
Italy	Manufacture or production; Sales, marketing or distribution; Provision of services to unrelated parties; Internal group financing; Holding of shares or other equity instruments; Research and Development	AIRSOL Sri, BEHRINGER Sri, BiotechSol Sri, C.T.S. Sri, Cryolab Sri, CRYOS Sri, DIATHEVA Sri, I.C.O.A. Sri, II Point Sri, MEDES Sri, Personal Genomics Sri, REVI Sri, So LAB Sri, SOL Gas Primari Sri, SOL SpA Italia, Sterimed Sri, Tesi Sri Tecnologia & Sicurezza Sri, VIVISOL Calabria Sri, VIVISOL Napoli Sri, VIVISOL Silarus Sri, VIVISOL Sri.	1248	435.46	116.67	93.93	242.01	7.01	11.04
Kosovo	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	SOL-K Sh.p.K.	2	1.95	0.00	0.67	0.91	0.08	0.07
Macedonia	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	SOL Hydropower d.o.o., SOL SEE d.o.o., TGS A.D.	107	12.65	7.59	4.02	22.42	0.21	0.45
Morocco	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	FLOSIT S.A.	51	5.32	0.00	1.44	2.85	0.40	0.42
Netherlands	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	SOL Nederland B.V., VIVISOL Nederland B.V.	324	54.42	2.41	9.49	24.82	2.13	2.42
Poland	Sales, marketing or distribution; provision of services to unrelated parties	MEDSEVEN sp.zo.o., PALLMED sp.zo.o.	155	24.43	3.02	5.82	6.76	1.12	1.08

Hungary	Sales, marketing or distribution; provision of services to unrelated parties		17	4.20	0.01	-0.94	0.//	0.01	0.01
11	Calan annulustra and distribustra and distribus	SOL Hungary KFT	47	/ 20	0.01	-0.94	6.77	0.01	0.01
Turkey	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	GEBZE GAZ A.S., RESPITEK A.S., SOL TK A.S.	59	8.02	0.55	0.17	2.23	0.15	0.22
Switzerland	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	SITEX MAD SA, SITEX SA, SOL SpA - Branch Svizzera, SPITEX PERSPECTA.	173	19.23	0.02	2.68	1.36	0.51	0.36
Spain	Sales, marketing or distribution; provision of services to unrelated parties	VIVISOL Iberica S.L.U.	111	11.67	0.02	0.75	8.85	0.00	0.00
Slovenia	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	Energetika Z.J. d.o.o., SPG – SOL Plin Gorenjska d.o.o., T.P.J. d.o.o., VIVISOL Adria d.o.o.	53	13.41	7.95	2.36	23.75	0.43	0.52
Slovakia	Sales, marketing or distribution; provision of services to unrelated parties	SOL Slovakia s.r.o.	2	0.62	0.16	-0.33	0.91	0.00	0.00
Serbia	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	SOL Srbija d.o.o.	20	3.52	0.01	0.27	3.04	0.04	0.05
Romania	Manufacture or production; Sales, marketing or distribution; provision of services to unrelated parties	GTH GAZE INDUSTRIALE S.A.	17	2.12	0.00	0.09	5.56	0.00	0.00
United Kingdom	Manufacture or production; Sales, marketing or distribution; Provision of services to unrelated parties; Internal group financing; Holding of shares or other equity instruments	BTG GASES, Dolby Healthcare Limited, Dolby Medical Home Respiratory Care Limited.	268	26.91	0.49	3.13	25.22	0.41	0.23
Portugal	Sales, marketing or distribution; provision of services to unrelated parties	VIVISOL Portugal LDA	55	4.45	0.01	0.79	1.87	0.09	0.09

<sup>1</sup> Economic/capital data are expressed according to local accounting principles applicable in individual tax jurisdictions. Any differences between the income tax accrued on profits and the tax due (GRI 207-4-b-x), please refer to the Explanatory Notes of the Consolidated Financial Statements of the SOL Group at 31 December 2020.

Revenues before consolidation adjustments.

It should be noted that with regard to emissions, the reporting standard used (GRI Sustainability Reporting Standards) provides for two different approaches to calculating indirect emissions: "Location-based" and "Market-based".

The "Location-based" approach (shown in the "GRI Content Index" table) provides for the use of average emission factors related to the specific national energy mix of electricity production. The "Mar-

ket-based" approach (reported in the chapter "The environment") provides for the use of emission factors defined on a contractual basis with the electricity supplier. In the absence of specific contractual agreements between the Organisation and the electricity supplier (e.g. purchase of Guarantees of Origin), the emission factor related to the national "residual mix" was used for the "Market-based" approach, where available.

GREENHOUSE GAS EMISSIONS	SOURCES OF EMISSION FACTORS USED		
Direct emissions (Scope 1)			
Emissions from product deliveries (Scope 1 and 3)	UK Government GHG Conversion Factors for Company Reporting (DEFRA), Conversion Factors 2021		
Indirect emissions from the procurement of energy according to the market-based method (European Union countries (Scope2)	Association of Issuing Bodies (AIB), european Residual Mixes 2021		
Indirect emissions from the procurement of energy according to the market-based method (Bosnia-Herzegovina, North Macedonia and Morocco (Scope2)	International Energy Agency (IEA), Emissions Factors 2018 edition		
Indirect emissions according to the location-based method (Scope2)			
Other indirect emissions (Scope 3)	Cat. 1: Ecoinvent version 3.8, 2021 e UK Government GHG Conversion Factors for Company Reporting (DEFRA), Conversion Factors 2021 Cat. 2: Eurostat Input-Output tables Cat. 3: UK Government GHG Conversion Factors for Company Reporting (DEFRA), Conversion Factors 2021 Cat. 6: UK Government GHG Conversion Factors for Company Reporting (DEFRA), Conversion Factors 2021 Cat. 7: UK Government GHG Conversion Factors 5021 Cat. 7: UK Government GHG Conversion Factors for Company Reporting (DEFRA), Conversion Factors 5021 Cat. 11: GHG Protocol GWP Values - Fifth assessment report (ARS)		

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103-3	Evaluation of the management approach	11; 23-24	
GRI 206:	Anti-Competitive Practices (2016)		
206-1	Legal actions for anti-competitive behaviour, anti-trust, monopoly practices and relevant outcomes	With regard to the Antitrust procedure involving Vivi Srl with judgments No. 01096 of 15.2.2022 and No. 01269 of 22.2.2022, the Council of State has accepthe rescindent phase of Vivisol Srl's appeals for revot by annulling the previous negative judgments of the same adjudicating body. Therefore now the appeal redone (rescissory phase), excluding the errors recog as the basis of the acceptance of revocations. However, for the proceedings concerning Vivisol Napthe hearing in Cassation will take place on 5.4.2022.	: ted cation e will be ynized poli SrI,
	topic: TAXES Management Approach (2016)		
103-1	Explanation of the material topic and its Boundary	71-72	
103-2	The management approach and its components	24	
103-3	Evaluation of the management approach	24	
GRI 207:	Management Approach (2019)		
207-1	Approach to tax	24	
207-2	Tax governance, control and risk management	24	
207-3	Stakeholder engagement and management	24	
GRI 207:	Taxes (2019)		
207-4	Rendicontazione Paese per Paese	82-83; The income from intra-group transactions inc the income from transactions between companies established in the same tax jurisdiction.	ludes

#### **GRI 300: ENVIRONMENTAL SERIES (2016)**

GRI 103: N	Management Approach (2016)		
103-1	Explanation of the material topic and its Boundary	71-72	
103-2	The management approach and its components	10; 45; Safety and environment principles of SOL Group companies	
103-3	Evaluation of the management approach	10; 45	***************************************
GRI 301: N	Materials (2016)		
301-1	Materials used by weight or volume	10; 45	Quantitative information has not been provided in this Sustainability Report, since it is confidential data and any disclosure abroa could compromise the company's position or the market.
	copic: ENERGY Management Approach (2016)		
103-1	Explanation of the material topic and its Boundary	71-72	all control of the co
103-2	The management approach and its components	25-31; 45-46; 52; Energy management policy of SOL Group companies Safety and environment principles of SOL Group com- panies	
103-3	Evaluation of the management approach	25-31; 45-46; 52	
GRI 302: E	Energy (2016)		
302-1	Energy consumption within the organisation	46	
302-3	Energy intensity	46	
	copic: WATER AND EFFLUENTS Management Approach (2016)		
103-1	Explanation of the material topic and its Boundary	71-72	
103-2	The management approach and its components	30-31; 51; Safety and environment principles of SOL Group companies	
103-3	Evaluation of the management approach	30-31; 51	
GRI 303: N	Management Approach (2018)		
303-1	Interazione con l'acqua come risorsa condivisa	30-31; 51	
303-2	Gestione degli impatti correlati allo scarico dell'acqua	30-31; 51	
GRI 303: \	Water and effluents (2018)		
303-3	Water withdrawal	51; The water withdrawn is only fresh water (≤1,000 mg/l total dissolved solids)	
	copic: EMISSIONS Management Approach (2016)		
103-1	Explanation of the material topic and its Boundary	71-72	
103-2	The management approach and its components	25-31; 45; 47-49; Safety and environment principles of SOL Group companies	
103-3	Evaluation of the management approach	25-31; 45; 47-49	
GRI 305: E	Emissions (2016)		
305-1	Direct (Scope 1) GHG emissions	47-49	
305-2	Energy indirect (Scope 2) GHG emissions	47-49; Indirect emissions, calculated according to the location-based methodology, amounted to 264,742 tons of CO, equivalent	
305-3	Other indirect greenhouse gas emissions (Scope 3)	47; 81	
	copic: EFFLUENTS AND WASTE Management Approach (2016)		
103-1	Explanation of the material topic and its Boundary	71-72	
103-2	The management approach and its components	25-31; 51; Safety and environment principles of SOL Group companies	
103-3	Evaluation of the management approach	25-31; 51	
GRI 306: E	EWaste (2020)		
306-3	Waste by type and disposal method	51; 81	
	copic: SUPPLIER ENVIRONMENTAL ASSESSMENT Management Approach (2016)		
103-1	Explanation of the material topic and its Boundary	71-72	
103-2	The management approach and its components	43	
103-3	Evaluation of the management approach	43	

404-1

Average hours of training per year per employee

GRI 308: 9	Supplier Environmental Assessment (2016)	
308-1	New suppliers that were screened using environmental criteria	During 2021, 90% of the new suppliers considered critical were subject to the classification of the level of risk according to the relevant Group Directive (71% of the companies replied to the questionnaire on the implementation of the Group Directives).
GRI 400	D: SOCIAL SERIES (2016)	
	copic: EMPLOYMENT Management Approach (2016)	
103-1	Explanation of the material topic and its Boundary	71-72
103-2	The management approach and its components	55
103-3	Evaluation of the management approach	55
GRI 401: I	Employment (2016)	
401-1	New employee hires and employee turnover	79-80
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	59
	copic: HEALTH AND SAFETY IN THE WORKPLACE Management Approach (2016)	
103-1	Explanation of the material topic and its Boundary	71-72
103-2	The management approach and its components	12; 25-31;52;60; Safety and environment principles of SOL Group companies
103-3	Evaluation of the management approach	12; 25-31;52;60
GRI 403: I	Management Approach (2018)	
403-1	Occupational health and safety management system	12; 25-31;52;60; Safety and environment principles of SOL Group companies
403-2	Hazard identification, risk assessment and incident investigation	12; 25-31;52;60; Safety and environment principles of SOL Group companies
403-3	Occupational health services	12; 25-31;52;60; Safety and environment principles of SOL Group companies
403-4	Worker participation, consultation and communication on occupational health and safety	12; 25-31;52;60; Safety and environment principles of SOL Group companies
403-5	Worker training on occupational health and safety	12; 25-31;52;60; Safety and environment principles of SOL Group companies
403-6	Promotion of worker health	12; 25-31;52;60; Safety and environment principles of SOL Group companies
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	12; 25-31;52;60; Safety and environment principles of SOL Group companies
GRI 403: 0	Occupational Health and Safety (2018)	
403-9	Injuries at work	60; In 2021, 31 employee injuries were recorded. 3 injuries were recorded for third-party companies working on behalf of the SOL Group.  In relation to the incident that occurred at the end of September 2021 at the campus of the Humanitas  University in Rozzano, during which two employees of the company Pé Autotrasporti died, while carrying out the transport and supply of liquid nitrogen gas on behalf of SOL Spa at the Criobanca of Humanitas, the Milan Public Prosecutor's Office, as is the practice in these cases, has opened an investigation for the involuntary manslaughter.  At the moment, the legal action seems interesting to all the subjects involved in the event, that is to say Humanitas, the firm Pè' Autotrasporti and Sol SpA, together with the legal representatives of the same ones. The investigation activities are currently ongoing and, due to their complexity, these days have been extended for a further six months.  The hours worked by employees amounted to approximately 8.3 million.  Hours worked by external workers and relevant data referring to injury rates are currently not available. The Group is launching a more systematic collection of this indicator.
	copic: TRAINING AND EDUCATION Management Approach (2016)	
103-1	Explanation of the material topic and its Boundary	71-72
103-2	The management approach and its components	56
103-3	Evaluation of the management approach	56
GRI 404: 1	Training and Education (2016)	
1011		90

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Material to	opic: DIVERSITY AND EQUAL OPPORTUNITIES	
GRI 103: N	Management Approach (2016)	
103-1	Explanation of the material topic and its Boundary	71-72
103-2	The management approach and its components	56; SOL Group Code of Ethic
103-3	Evaluation of the management approach	56
GRI 405: D	Diversity and Equal Opportunities (2016)	
405-1	Diversity of governance bodies and employees	56-57; 78-80
Material to	opic: NON-DISCRIMINATION	
	Management Approach (2016)	
103-1	Explanation of the material topic and its Boundary	71-72
103-2	The management approach and its components	11; 56; SOL Group Code of Ethic
103-3	Evaluation of the management approach	11;56
GRI 406: N	Non-discrimination (2016)	
406-1	Incidents of discrimination and corrective actions taken	During 2021 there were no confirmed cases of discrimination.
	opic: SUPPLIER SOCIAL ASSESSMENT Management Approach (2016)	
103-1	Explanation of the material topic and its Boundary	71-72
103-1	The management approach and its components	43; SOL Group Code of Ethic
103-2	Evaluation of the management approach	43
	Supplier Social Assessment (2016)	During 2021 00% of the pay supplier considered critical
414-1	Nuovi fornitori sottoposti a screening utilizzando criteri sociali	During 2021, 90% of the new suppliers considered critical were subject to the classification of the level of risk according to the relevant Group Directive (71% of the companies replied to the questionnaire on the implementation of the Group Directives).
	opic: CUSTOMER HEALTH AND SAFETY Management Approach (2016)	
103-1	Explanation of the material topic and its Boundary	71-72
103-2	The management approach and its components	13-15; 29-30
103-3	Evaluation of the management approach	13-15; 29-30
GRI 416: C	Customer Health and Safety (2016)	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	In 2021 there were no cases of non-compliance con- cerning the health and safety impacts of products and services
Material to	opic: MARKETING AND LABELLING	
	Management Approach (2016)	
103-1	Explanation of the material topic and its Boundary	71-72
103-2	The management approach and its components	13-15
103-3	Evaluation of the management approach	13-15
GRI 417: N	MARKETING AND LABELLING (2016)	
417-1	Requirements for product and service information and labelling	13-15; 29-30
	opic: CUSTOMER PRIVACY Management Approach (2016)	
103-1	Explanation of the material topic and its Boundary	71-72
103-2	The management approach and its components	24; Information security management policy of SOL
		Group companies
103-3	Evaluation of the management approach	24
	Customer Privacy (2016)	
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	No data breaches were reported to the Guarantor of national privacy
	opic: SUSTAINABLE SOLUTIONS FOR CUSTOMERS Management Approach (2016)	
103-1	Explanation of the material topic and its Boundary	71-72
103-2	The management approach and its components	14-15
103-3	Evaluation of the management approach	21; 33-43; 49-50

#### REPORT OF THE INDEPENDENT AUDITORS



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INDEPENDENT AUDITOR'S REPORT
ON THE CONSOLIDATED NON-FINANCIAL STATEMENT PURSUANT TO ARTICLE 3,
PARAGRAPH 10 OF LEGISLATIVE DECREE No. 254 OF DECEMBER 30, 2016 AND
ART. 5 OF CONSOB REGULATION N. 20267 OF JANUARY 2018

To the Board of Directors of SOL S.p.A.

Pursuant to article 3, paragraph 10, of the Legislative Decree no. 254 of December 30, 2016 (hereinafter "Decree") and to article 5 of the CONSOB Regulation n. 20267/2018, we have carried out a limited assurance engagement on the Consolidated Non-Financial Statement of SOL S.p.A. and its subsidiaries (hereinafter "SOL Group" or "Group") as of December 31, 2021 prepared on the basis of art. 4 of the Decree and approved by the Board of Directors on March 30, 2022 (hereinafter "NFS").

Our limited assurance engagement does not extend to the information required by art. 8 of the European Regulation 2020/852 included in the paragraph "European Taxonomy".

#### Responsibility of the Directors and the Board of Statutory Auditors for the NFS

The Directors are responsible for the preparation of the NFS in accordance with articles 3 and 4 of the Decree and the "Global Reporting Initiative Sustainability Reporting Standards" established by GRI - Global Reporting Initiative ("GRI Standards"), which they have identified as reporting framework.

The Directors are also responsible, within the terms established by law, for such internal control as they determine is necessary to enable the preparation of NFS that is free from material misstatement, whether due to fraud or error.

The Directors are moreover responsible for defining the contents of the NFS, within the topics specified in article 3, paragraph 1, of the Decree, taking into account the activities and characteristics of the Group, and to the extent necessary in order to ensure the understanding of the Group's activities, its trends, performance and the related impacts.

Finally, the Directors are responsible for defining the business management model and the organisation of the Group's activities as well as, with reference to the topics detected and reported in the NFS, for the policies pursued by the Group and for identifying and managing the risks generated or undertaken by the Group.

The Board of Statutory Auditors is responsible for overseeing, within the terms established by law, the compliance with the provisions set out in the Decree.

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#### Auditor's Independence and quality control

We have complied with the independence and other ethical requirements of the *Code of Ethics for Professional Accountants* issued by the *International Ethics Standards Board for Accountants*, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Our auditing firm applies *International Standard on Quality Control 1* (ISQC Italia 1) and, accordingly, maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

#### Auditor's responsibility

Our responsibility is to express our conclusion based on the procedures performed about the compliance of the NFS with the Decree and the GRI Standards. We conducted our work in accordance with the criteria established in the "International Standard on Assurance Engagements ISAE 3000 (Revised) — Assurance Engagements Other than Audits or Reviews of Historical Financial Information" (hereinafter "ISAE 3000 Revised"), issued by the International Auditing and Assurance Standards Board (IAASB) for limited assurance engagements. The standard requires that we plan and perform the engagement to obtain limited assurance whether the NFS is free from material misstatement. Therefore, the procedures performed in a limited assurance engagement are less than those performed in a reasonable assurance engagement in accordance with ISAE 3000 Revised, and, therefore, do not enable us to obtain assurance that we would become aware of all significant matters and events that might be identified in a reasonable assurance engagement.

The procedures performed on NFS are based on our professional judgement and included inquiries, primarily with company personnel responsible for the preparation of information included in the NFS, analysis of documents, recalculations and other procedures aimed to obtain evidence as appropriate.

Specifically we carried out the following procedures:

- 1. analysis of relevant topics with reference to the Group's activities and characteristics disclosed in the NFS, in order to assess the reasonableness of the selection process in place in light of the provisions of art.3 of the Decree and taking into account the adopted reporting standard;
- 2. analysis and assessment of the identification criteria of the consolidation area, in order to assess its compliance with the Decree;
- comparison between the financial data and information included in the NFS with those included in the consolidated financial statements of the SOL Group;

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- 4. understanding of the following matters:
  - business management model of the Group's activities, with reference to the management of the topics specified by article 3 of the Decree;
  - policies adopted by the entity in connection with the topics specified by article 3 of the Decree, achieved results and related fundamental performance indicators;
  - main risks, generated and/or undertaken, in connection with the topics specified by article 3 of the Decree.

Moreover, with reference to these matters, we carried out a comparison with the information contained in the NFS and the verifications described in the subsequent point 5, letter a);

5. understanding of the processes underlying the origination, recording and management of qualitative and quantitative material information included in the NFS.

In particular, we carried out interviews and discussions with the management of SOL S.p.A. and with the employees of SOL Deutschland GmbH, SOL Kohlensaure GmbH & Co. KG, SOL Bulgaria E.A.D., SOL Hydropower d.o.o., TGS d.o.o., SOL SEE d.o.o., VIVISOL Heimbehandlungsgeräte GmbH, Pielmeier Medizintechnik GmbH, Medtek Medizintechnik GmbH, VIVISOL Deutschland GmbH, SITEX SA, SITEX MAD SA, Dolby Healthcare Limited, VIVISOL France Sarl, France Oxygene Sarl, MBAR Assistance Respiratoire S.a.s., and we carried out limited documentary verifications, in order to gather information about the processes and procedures which support the collection, aggregation, elaboration and transmittal of non-financial data and information to the department responsible for the preparation of the NFS.

In addition, for material information, taking into consideration the Group's activities and characteristics:

- at the parent company's and subsidiaries' level:
  - a) with regards to qualitative information included in the NFS, and specifically with reference to the business management model, policies applied and main risks, we carried out interviews and gathered supporting documentation in order to verify its consistency with the available evidence;
  - b) with regards to quantitative information, we carried out both analytical procedures and limited verifications in order to ensure, on a sample basis, the correct aggregation of data;
- for the following production sites, Pudukudi and Coimbatore (India) for SICGILSOL Gases Private Limited, Ranipet and Padamla (India) for SOL India Private Limited, Schimatari, Florina, Aspropyrgos and Salonicco (Greece) for TAE HELLAS S.A., and for the Tilburg (The Netherlands) headquarters for VIVISOL Nederland B.V., which we selected based on their activities, their contribution to the performance indicators at the consolidated level and their location, we carried out remote meetings, during which we have met their management and have gathered supporting documentation with reference to the correct application of procedures and calculation methods used for the indicators.

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#### Conclusion

Based on the work performed, nothing has come to our attention that causes us to believe that the NFS of the SOL Group as of December 31, 2021 is not prepared, in all material aspects, in accordance with articles 3 and 4 of the Decree and the GRI Standards.

Our conclusion on the NFS of SOL Group does not extend to the information required by art. 8 of the European Regulation 2020/852 included in the paragraph "European Taxonomy"

DELOITTE & TOUCHE S.p.A.

Signed by **Riccardo Raffo** Partner

Milan, Italy April 19, 2022

This report has been translated into the English language solely for the convenience of international readers.



## **GLOSSARY**

Accident: unexpected event with potential harmful effect to oneself, other people or thirdparty assets.

Adsorption: physico-chemical phenomenon by which the surface of a solid substance, so-called adsorbent, fixes one or more components (atoms, molecules or ions) of other substances originating from a gaseous or liquid phase with which it is in contact.

**Air separation:** process of separation, by distillation, of gas components of the air, obtaining liquid and gaseous products.

**Cold converter:** container with insulated vacuum chamber for highly refrigerated cryogenic gases, characterised by and constituting 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 the storage of full containers ready for delivery.

**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 EU Environmental Policy aimed at continually improving the environmental performance of the companies and businesses adopting it.

**Food safety:** hygienic and sanitary prevention, whereby food undergoes strict controls that ensure correct preparation in line with its use and consumption, assuring its safety for the consumer.

**Frequency index:** ratio between the number of injuries and hours worked multiplied by 1 million. It measures the frequency of injuries.

Global Reporting Initiative (GRI): a multistakeholder 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 causes bodily damage or objectively verifiable illness

IPPC (Integrated Pollution Prevention and Control: Strategy instituted with European Directive no. 75 of 24/11/2010 "Industrial Emission Directive" (I.E.D.) 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 area to another.

**ISO 9001:** recognised standard for Quality Management Systems which provides a method and reference standards for running an organisation in an intelligent and conscious manner for customer satisfaction.

#### ISO 45001 (ex OHSAS 18001): this

certification becomes even more important, as a guarantee for the top management, with the entry into force in Italy of Legislative Decree 81/2008, which establishes the adoption of a Management system in line with the OHSAS 18001 standard as a necessary condition for being exempted from the application of the sanctions established by Italian Legislative Decree no. 231 of 2001.

ISO 13485 (Medical devices - Quality management systems): a standard specifically aimed at companies operating in the medical sector such as SOL, designed for those who apply targeted quality controls to medical devices.

#### ISO 14001 (Environmental Management):

ISO 14001 is a guarantor of the precise control of environmental aspects, reducing impact and ensuring legislative compliance, aimed at maintaining an Environmental Management System.

#### ISO 22000 (Food Safety Management

**Systems):** the standard defined for the effective control, improvement and development of food safety management, for organisations that aim to ensure such safety.

ISO 27001 (Information Security): 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.

**ISO 50001 (Energy Management):** 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 or use of dangerous substances, that could cause grave danger for human health or the environment.

Medical Device (DM): 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 gases: both gases intended to be administered to the patient (such as medical oxygen, oxygen 93%, nitrous of medical nitrogen, medical air) and gases not intended for administration but used for other purposes in the processing of the same, such as air and nitrogen for foods or surgical instruments.

Mobile container: container for compressed, liquid, dissolved and cryogenic gases used for packaging products. Mobile containers include: 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 processing units:** units where gases are produced from raw materials.

**Primary storage:** liquefied cryogenic gas container filled directly by the production plant.

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

#### Raw materials – primary processing 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 no. 1907/2006 (Registration, Evaluation, Authorisation and Restriction of Chemicals). Its main aim is to improve the awareness of the dangers and risks deriving from chemical substances, aiming to ensure a high level of protection of human health and the environment.

Residual mix: refers to the average primary energy sources that were not intended for a specific entity or to an end consumer. If consumers use the power grid without having purchased a GO certificate, they then must use the residual mix in the calculation of their energy footprint.

The Residual mix is calculated for each year and country by organisations that are part of the European E-Track programme, such as RE-DISS.

Responsible Care: a voluntary programme 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 processing units: units where gases are conditioned and packaged, normally using gases coming from primary processing 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. These units also produce pure and high purity technical and medicinal 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 (2012/18/EU): European standard intended to prevent and control the occurrence of major accidents, through the identification of sites at risk.

It governs industrial activities that involve the storage and/or use of certain quantities of dangerous substances.

**SIGUCERT:** The SIGU (Italian Society of Human Genetics) standard certifies the organisational, operational, management and professional requirements of Medical Genetics Laboratories to carry out special investigations (genetic testing) for the identification of genetic diseases.

**Stakeholder:** any entity, 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 CO<sub>2</sub>.

Sustainability (see sustainable development)

**Sustainable development:** progress that helps meet current economic, environmental and social needs, consistent with the protection of the environment and the free goods (non-economic) of future generations.

#### **ACKNOWLEDGEMENTS**

The Sustainability Report has been a fundamental tool for us for years which seeks to communicate with all our stakeholders and clearly and efficiently share the initiatives and projects carried out.

We extend our sincere gratitude to all those who contributed to creating this document, whether by helping to collect the information published or, in particular, through their daily commitment to translating the values shared by the SOL Group people into appropriate behaviour.

For further details please contact:

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#### SOL Spa

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**Share Capital** 

Euro 47,164,000.00 fully paid up

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