



# 2024

## SUSTAINABILITY PROFILE **SOL GROUP**

SUMMARY



# LETTER TO STAKEHOLDERS

## Sustainable growth, amidst uncertainties and opportunities

Today, sixteen years after the reporting process began, we are pleased to present a Summary of the Sustainability Profile of the SOL Group for 2024.

This was another year marked by strong geopolitical tensions and a persistent slowdown in the global economy. The wars in Ukraine and Israel are still ongoing and continue to bring death, including to countless innocent civilians. The economic recovery that was expected in the course of 2024 did not take place, and is now scheduled to occur in the second half of 2025. Inflation and interest rates have begun to fall from the highs in 2022, albeit tentatively. There has been significant volatility in the prices of raw materials, posing challenges for forecasting and planning.

However, for SOL, 2024 was also a positive and important year, with many innovations and achievements, which underscored the strength of the workforce and the Group's ability to adapt to external challenges.

2024 thus ended with turnover rising to **€1,610.4 million**, an increase of €123,3 million, or 8.3%. Investments were also significant, amounting **€247.5 million**, including acquisitions. Margins remained at good levels. As at 31 December 2024, **7,291** people worked in the Group, over 919 more than at the end of the previous year.

In the more specific area of our commitment to sustainable and responsible development, 2024 coincided with important initiatives:

- award from the prestigious magazine **"TIME"**: the SOL Group was included among the top 500 companies in the world for sustainable development according to the first edition of the ranking **"World's Best Companies - Sustainable Growth 2025"**;

- **Gender Equality Certification:** during 2024 the SOL Group reached a significant milestone; indeed, **SOL Spa** and **VIVISOL Srl** - besides **STERIMED** in 2023 - obtained the UNI PdR 125:2022 Gender Equality Certification;
- **Responsible Care** prize for the "Pilot project and information campaign focused on **reducing collision and accident risks** within the SOL Group";
- increase in the percentage of **energy from renewable sources** used in our production plants around the world, which reached 24% of the Group's total energy consumption in 2024.



**Aldo Fumagalli Romario**  
*SOL Group Chairman*



**Marco Annoni**  
*SOL Group Vice Chairman*



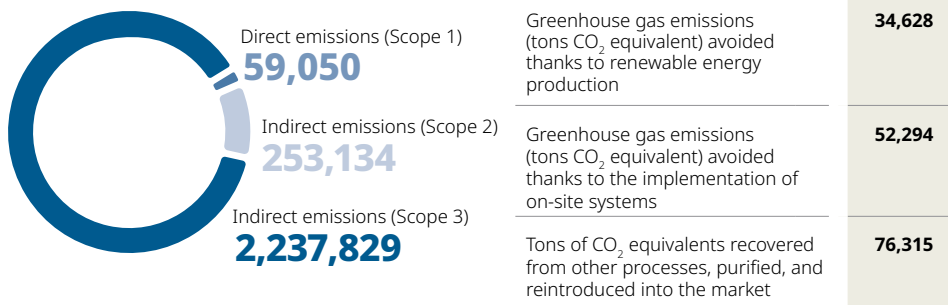
## KEY NUMBERS

	2020	2021	2022	2023	2024
<b>FINANCIAL PERFORMANCE</b> (millions of euro)					
Group turnover	973.8	1,112.9	1,379.2	1,487.1	<b>1,610.4</b>
Technical Gas Turnover	438.2	558.4	762.4	776.6	<b>788.3</b>
Home care turnover	535.6	554.5	616.7	710.5	<b>822.2</b>
Gross operating margin	255.4	260.8	328.3	382.2	<b>403.8</b>
Operating profit	140.0	135.8	192.5	227.1	<b>237.2</b>
Technical investments	112.9	132.3	131.2	183.5	<b>219.3</b>

## ENVIRONMENTAL PERFORMANCE - 2024

2024

### Greenhouse gas emissions (tonnes CO<sub>2</sub> equivalent)



	2020	2021	2022	2023	2024
<b>PEOPLE</b>					
Employees as at 31/12	4,613	5,101	5,751	6,372	<b>7,291</b>
- Italy	1,248	1,350	1,499	1,605	<b>1,707</b>
- Other countries	3,365	3,751	4,252	4,767	<b>5,584</b>
Training Hours	61,150	67,281	98,549	124,061	<b>158,094</b>





**1,610.4**

million Euro  
turnover

**7,291**

employees

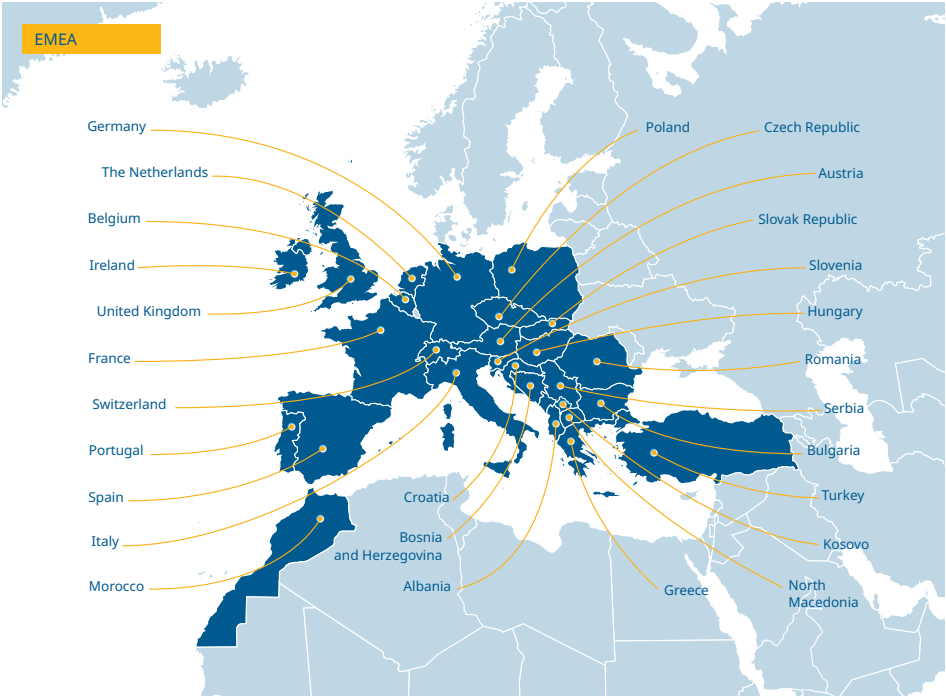
**32**

countries  
on 4 continents

**63**

pharmaceutical  
workshops

# THE SOL GROUP IN THE WORLD



## PROFILE

Founded in 1927 in Italy, the SOL Group is active in the production, applied research and marketing of **technical and medical gases**, in **home care**, in **biotechnology** and in **energy production from renewable sources**.

In the **industrial sector**, the Group supplies technical gases (compressed, liquefied and cryogenic), equipment, plants and services to customers in most industrial sectors.

In the **healthcare sector**, it supplies medical gases, medical devices for administering and dosing medical gases, equipment, gas distribution systems, facility management services, electro-medical equipment, sterilisation plants and the turnkey construction of cryobiological rooms and laboratories.

As regards **home care**, the Group, which has established itself as one of the leading Home Care Providers in Europe and beyond, provides services and treatments for chronic patients who, on behalf of the health systems of different countries, are cared for outside a protected setting such as a hospital. VIVISOL is able to comprehensively take care of chronic patients often suffering from crip-

pling diseases and socially fragile conditions, or in need of life-sustaining treatments, with the aim of keeping them in their social and emotional context, thus improving their quality of life and therapeutic consistency.

In the **biotechnology sector**, the Group develops tests and analytical services in the world of human and animal clinical research and diagnostics, conducts clinical trials for the development of 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.

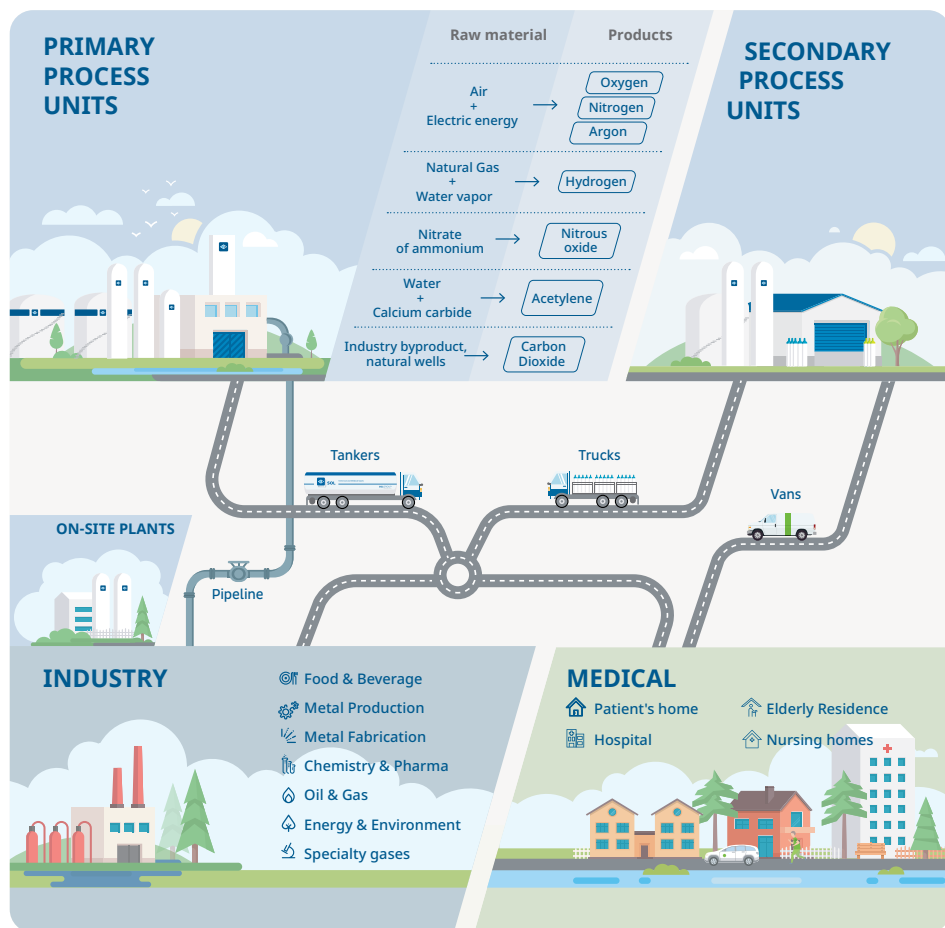
In the field of **production of energy from renewable sources** the Group operates 16 hydroelectric power plants in Albania, Bosnia Herzegovina, North Macedonia and Slovenia.

The parent company SOL Spa has been listed on the Italian stock exchange since July 1998.





# THE BUSINESS MODEL



**62%**

Health sector  
Turnover

**38%**

Industry  
Turnover

**39%**

Italy  
Turnover

**61%**

Other Countries  
Turnover

## MISSION AND VALUES

For over 90 years, our mission and values have guided us in the search for **innovative and technologically advanced solutions** and in the development of services for the **delivery of the best care**, contributing to improving the quality of life on the planet.

### Values

**Ethical behaviour** towards all stakeholders.

**Security** for employees, contractors, customers and patients.

**Customer satisfaction** providing innovative and technological solutions and improving patients' quality of life.

**Balanced and constant development over time** of economic value.

**Protecting the environment** through optimisation of processes and energy resources.

**Enhancement of human resources** through the continuous training of people.

Since 2006, the SOL Group has adopted its own **Code of Ethics**, a reference tool for members of corporate bodies, employees of the SOL Group, and any third parties who work in the name of, on behalf of or in the interest of the SOL Group.

### The contribution to the SDGs



**Medical gases for diagnostic examinations**

**Home care services to avoid hospitalisation**

**Prevention of diseases through genomic diagnostic tests**

**Commitment to health and well-being of all its employees**



**Commitment to overcome all gender differences, ensure equal opportunities and social inclusion**



**Responsible management of water resources through processes for water purification and the reduction of water consumption of our sites**



**Energy production through hydroelectric power plants**



**Promotion of sustainable mobility (hydrogen-fuelled, biofuel, LNG and BIOLNG)**



**Integrated Services for Healthcare**

**Development of innovative technologies for more efficient, safe and environmentally friendly processes in industry**



**We invest in plants that work for recovery of carbon dioxide that would otherwise be released into the atmosphere**



## GROUP DEVELOPMENT

### The main technical investments

#### Italy

In **Marcianise**, work began on the construction of the new logistics hub of VIVISOL NAPOLI; in **Palermo**, the new management and operational centre of CENTRO ORTOPEDICO FERRANTI was built, and in Bigarello (**Mantua**) a refrigerant gas storage and bottling site was built in the SOL secondary production plant. In addition, in the province of **Frosinone**, work began for the construction of a new CO<sub>2</sub> production plant.

#### Greece and Germany

Work began on the construction of new air separation plants for SOL HELLAS in **Thessaloniki** and for SOL Spa in **Frankfurt**.

#### India

The construction of a new air separation plant of the company SOL INDIA PRIVATE LIMITED in **Ranipet** (Tamil Nadu) was completed, and production commenced. In **Indapur**, instead, the project to expand the production capacity of the ultrapure plants of the company BHORUKA SPECIALTY GASES PRIVATE LIMITED is underway.

#### Slovenia

In Slovenia the refurbishment works of the penstock at the **Vintgar** hydroelectric plant in Energetika were completed.

The improvement and modernization of our primary production plants for technical gases, in particular in **Verona** and **Mantua**, was further pursued, along with that of our secondary production plants for technical and medical gases, in par-

ticular our units in **Ancona** and **Padua** in Italy, **Wiener Neustadt** in Austria and **Krefeld** in Germany.

The works on the new warehouse and new headquarters of **VIVISOL AUSTRIA** in Vienna were completed, as were the works for the new headquarters of **VIVISOL PORTUGAL** in Condeixa-a-Nova.

### Main corporate transactions

In the technical gases sector, the SOL Group has acquired 100% of the company PAC GASSERVICE GmbH in **Germany** and has entered into a majority strategic partnership with the company SISEMED in **Spain**.

In the home care sector, the SOL Group has acquired 100% of the companies SPITEX ALOHA GmbH in **Switzerland** and POR Group Srl in **Italy**. Moreover, the Group has entered into majority strategic partnerships with the companies MEDAIR in **Romania**, PRONEP SA in **Brazil** and SOLEOMED GmbH in **Germany**.



**200**

ISO 9001  
certified units  
(Quality)

**34**

ISO 13485  
certified units  
(Medical devices)

**31**

ISO 22000  
certified units  
(Food Safety)

**86**

ISO 45001  
certified units  
(Occupational  
Health and Safety)

**41**

ISO 14001  
certified units  
(Environment)

Sustainable Na

# SUSTAINABILITY GOVERNANCE

## Our Strategy

Sustainability is central to the strategy of the SOL Group, which considers its growth, since its establishment, to be closely linked to that of the world

in which it operates. Therefore, 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.

### The Sustainability Plan

**In 2021, the SOL Group drew up its first Sustainability Plan (SP), a fundamental tool to further strengthen the SOL Group's strategic vision of sustainability by translating it into qualitative and quantitative targets that the Group will pursue over time.**

The SP, which responds to some of the global challenges (United Nations Sustainable Development Goals, or SDGs), has been supplemented with initiatives, proposed by Group employees, gathered from the Little Big Innovations project.

The objectives of the Plan are reviewed annually, on the one hand, by verifying the results achieved and, on the other hand, by taking into account new initiatives that might be initiated.



#### SUSTAINABLE PRODUCTION PROCESS

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



#### DIALOGUE AND LISTENING

- strengthening the process of listening to patients and doctors
- listening to employees to improve the working environment with more systematic and periodic processes
- dissemination of our Code of Ethics principles
- community support



#### SUSTAINABILITY IN THE WORKING ENVIRONMENT

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



#### SUSTAINABLE INNOVATION

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





Over

**750,000**

patients served

Over

**50,000**

industrial customers

# CUSTOMERS AND PATIENTS

## Commitment to a sustainable industry

The SOL Group, through accurate and timely service, provides its industrial customers with **innovative technological solutions** capable of making the industry's activities and processes increasingly **sustainable** in terms of **energy and production efficiency, reduction of environmental impact and protection of employee health and safety**.

In addition to the supply of technical gases, SOL offers the most advanced technologies for **application of gases** along with the design and construction of specific plants to match industrial processes, and provides the necessary maintenance and technical assistance services.

SOL addresses its services to customers in most industrial sectors: steel, metallurgy, glass and ceramics, metal fabrication, chemicals and pharmaceuticals, food and beverages, oil industry and services for the environment and transport of goods and people.

## Healthcare commitment

National healthcare systems are increasingly directing the treatment of critical illnesses towards the so-called *Smart Hospital*, a hospital characterised by the presence of the most modern **clinical** and **diagnostic technologies**.

The SOL Group therefore proposes itself as **partner of Health Services** by supplying medicinal products, services and technologies for the integrated management of internal hospital work flows, safeguarding the quality and efficiency of healthcare services.

The SOL Group caters to **hospitals** (public and private), Scientific Hospitals, University Hospitals, Clinical Research Centres, Medically Assisted Reproduction Centres, nursing homes and assisted living facilities.

### The main gases produced and distributed by SOL are:

- oxygen
- nitrogen
- argon
- hydrogen
- carbon dioxide
- sulphur dioxide
- acetylene,
- nitrous oxide
- gas mixtures
- ultra high purity gases
- food gases
- gaseous helium
- liquid helium
- gases for electronics
- ammonia
- combustible gases for industrial use
- liquefied natural gas (LNG)



FOOD  
& BEVERAGE



METAL  
PRODUCTION



METAL  
FABRICATION



CHEMISTRY  
& PHARMA



OIL  
& GAS



ENERGY &  
ENVIRONMENT



SPECIALTY  
GASES

### Services in the health sector

- Medicinal Gases with MA and Medical Devices
- Total Gas Management Services
- Training Services
- Distribution and Dispensing Systems for Medical-Device Classified Medicinal Gases
- InfoHealth SOLution®
- Global Service of electromedical equipment
- Hospital hygiene and environmental monitoring
- Emergency Care
- Design and implementation of biobanks
- Disaster Recovery
- Bioshipping

## The home care sector

VIVISOL has established itself in Italy, Europe, Brazil and Turkey as one of the leading **Home Care Providers** able to provide technological and healthcare services for complex treatment and often *life support* for chronic patients.

In a demographic context characterised by a progressively ageing population and an epidemiological landscape marked by an increase in the incidence of major chronic diseases, the role of Home Care Providers becomes increasingly relevant for the **optimal management of chronic patients**, who are often in a frail condition of multimorbidity. Adequate models of home care delivered by specialised providers have a positive impact on the health and well-being of patients, as well as on the sustainability of the various national healthcare systems.

### Home care services

- **Respiratory therapies** oxygen therapy, mechanical ventilation, aerosol therapy, treatment of respiratory sleep disorders
- **Infusion therapies** artificial nutrition, insulin therapy, immunotherapy, pain treatment
- **Palliative home care**
- **Home dialysis**
- **Telemedicine and digital services**
- **Health aids** management and supply of health aids





VIVISOL has a **widespread presence in all the countries in which it operates**, thanks to a territorial network of Service Centres and Health Operating Centres active 365 days a year, 24 hours a day, from which home activities are coordinated and managed for over 585,000 patients worldwide.

### The biotechnology sector

**CRYOLAB** is a highly specialised cryopreservation laboratory, providing services for the transfer, storage and handling of biological samples.

**DIATHEVA** is an Italian biotechnology company, founded as an academic spin-off and now part of the SOL Group. It operates as CDMO (Contract Development and Manufacturing Organisation) and stands out for its expertise in the development and production of diagnostic and biological products.

**PERSONAL GENOMICS**, a medical genetics laboratory accredited by the Veneto Region and SIGU-CERT certified, offers diagnostic services in the field of medical genetic analyses.





# 34,628

tonnes of CO<sub>2</sub> eq.  
**avoided** by energy  
production from  
**renewable sources**

# 76,315

tonnes of CO<sub>2</sub>  
**recovered** from other  
processes, purified and  
put back into  
the market

# 52,294

tonnes of CO<sub>2</sub> eq. **avoided**  
by building **on-site**  
**installations**



## THE ENVIRONMENT

**Power consumption** in production facilities is the most important environmental aspect for the SOL Group.

The awareness of the environmental impact of the Group's highly energy-intensive primary activities has led the SOL Group, starting in 2002, to invest in energy production from **renewable sources**. To date, 16 hydroelectric power plants are in operation in Albania, Bosnia-Herzegovina, North Macedonia and Slovenia, with a total installed capacity of approximately 31 MW. Electricity produced and sold to the grid for the current year amounted to 351,597 GJ, and corresponded to 14% of the Group's energy consumption.

Careful **planning** and management of production sites, **process optimisation** and plant renovation cover significant portions of investment each year.

Where the characteristics of the gas and the customer's needs allow it, the installation - at the customer's premises - of self-production plants for technical gases, known as "**on-site plants**", is an alternative to the traditional supply of cylinders or liquefied cryogenic gases. The environmental benefit is the **lower specific energy** consumption compared to centralised production plants, along with the reduction of emissions caused by the transport of gas by road.

For several years now, the SOL Group has decided to invest in **facilities capable of recovering carbon dioxide** - otherwise released into the atmosphere - from production processes. Thanks to SOL, the gas is recovered, purified and marketed in liquid form. Examples are the plants built in Bulgaria (Ihtiman), Germany (Zeitz) and Belgium (Wanze), which recover CO<sub>2</sub> from bioethanol.





*We care*

**7,291**

total employees

**158,094**

hours of training provided

**94%**

permanent employees

## OUR PEOPLE

### Training and development

Training and development play an important role within the company's daily life.

From the very first days in the company, new hires are involved in the **initial Induction**, the initial moment of their training path, which continues over time. In fact, employees are encouraged to cultivate their skills and inclinations; the SOL Group finances **master's and qualifying study courses** for this purpose, enabling employees to pursue training suited to their professional figure and career development.

### The path dedicated to DE&I

In 2024, the SOL Group continued to work on DE&I, through awards, projects and tools:

- SOL Spa and VIVISOL Srl, besides STERIMED Srl in 2023, obtained the **UNI PdR 125:2022 Gender Equality Certification**;

- the **"SOL Group Women's Development Program"** project is being further pursued, with the aim of best supporting women in developing their careers within the company;
- DE&I issues are also underscored and made the focus of attention in the **"Diversity Equity and Inclusion Manifesto"**, that was approved in 2023 and is available to the entire Group;
- further training initiatives have been planned in 2024 and will be delivered in 2025 on the important topic of **inclusive language**.

### Health and safety at work

The SOL Group promotes a commitment to protecting the health and safety of workers within all its production processes and in third-party companies. The "Zero Accidents" goal was achieved by 81% of companies in Italy and 75% of companies abroad.



This document is a summary of the Sustainability Profile 2024.

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June 2025





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