



CAVAGNON GROUP

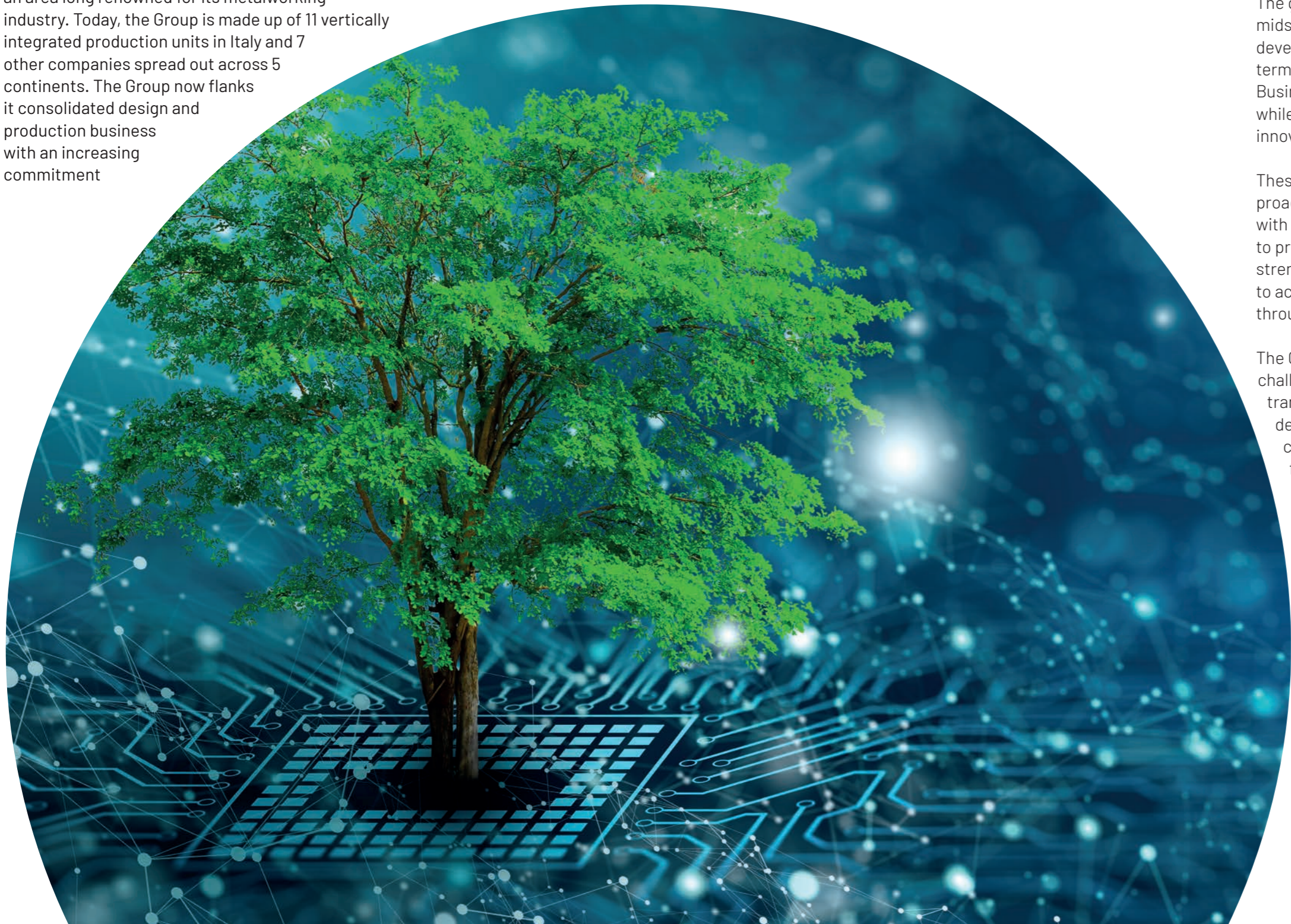
WHEREVER GAS IS USED, **WE ARE THERE.**



# The Cavagna Group

For over 70 years, the Cavagna Group has been a global leader providing advanced, integrated solutions for the control, regulation, metering and storage of compressed gases (gas for energy, alternative fuel gases, medical gases, industrial gases, cryogenic gases and specialty gases). It was founded in 1949 in northern Italy, near Brescia, an area long renowned for its metalworking industry. Today, the Group is made up of 11 vertically integrated production units in Italy and 7 other companies spread out across 5 continents. The Group now flanks its consolidated design and production business with an increasing commitment

to the sustainable energy transition and digital transformation of the sectors it operates in, with a focus on developing IoT solutions and digitally controlled technologies. It thus remains true to its original mission – wherever gas fuels progress and life, Cavagna is there – and brings innovative solutions to the twin transition.



The global socioeconomic situation leaves no doubt: we are in the midst of a historic moment of great transformation, one in which the development of humanity and the progress of nations must come to terms with fundamental demands for environmental sustainability. Businesses and governments must find new growth opportunities while striving to create a new balance between technological innovation, people's well-being and protection of the ecosystem.

These foundations and principles underpin the Cavagna Group's proactive participation in the transformations currently underway, with innovative solutions for gas regulation and control. And thanks to product diversification, targeted business decisions and a strengthening of dialogue with customers, the Group has been able to achieve positive results even as the world economy has gone through complicated times in recent years.

The Group has also been able to respond to the increasingly challenging demands that have arisen precisely from the major transformations taking place. Cavagna's organizational and decision-making capabilities, highlighted in this presentation, constitute an achievement in themselves but also a starting point for achievements to come.





## Serving the **twin transition**

The Cavagna Group believes in the strategic importance of molecules and gas in the eco-digital transition.


The synergy between digital and green – what is known as the “twin transition” – is fundamental for the world’s socioeconomic development and the planet’s future. It requires concrete responses and solutions that can truly find application in industry and across all sectors.

The Cavagna Group is committed to the twin transition in multiple fields in which molecules and gases are key to supporting and promoting manageable, relevant and competitive development. The Group has always viewed its work as serving people’s well-being and the environment through its high-quality products and technological innovation, which now includes several digital solutions.



# A global benchmark for the gas industry supply chain

The Group's products and services cover processing, storage, distribution, metering, and industrial and domestic use.



Governments and institutions continue to resoundingly reaffirm the crucial role of gas in the energy transition, especially given that not everything can be "electrified". And gas will continue to play an essential role as we witness the increasingly effective convergence of renewable and conventional energy sources. From this standpoint, it will be extremely important to enhance networks and distribution by making them greener.

That is exactly why the molecule and gas technology industry must play a key support role in sustainable development and responsible energy transition. In that regard, the Cavagna Group is one of the most committed and proactive industrial groups in the world, thanks in part to its status as a global benchmark for the entire gas industry supply chain.



# Solutions for the present by **looking to the future**

The Cavagna Group offers solutions that are compatible with the current needs of gas networks, with the added value of innovation.

With its experience and extensive operational capacity, the Cavagna Group has a broad but at the same time focused view of how things currently stand and of the “greenest” ways forward. The Group operates in various regions and markets and knows full well that awareness of environmental issues and sustainable development can vary based on the local situation, economic and cultural reasons, and different paces of modernization.

The Cavagna Group is constantly adding to its cluster of skills along the gas management chain – a chain that has much room for optimization from a sustainability perspective but also for improvement in managing the processing, transport, storage and safe use of molecules and gas. The Group's vision and dynamism make it an industry leader in technological evolution. It can also customize its products in even the most challenging of sectors, be it metering technology or the regulation and control of high-pressure gases.

By working in close contact with engineering teams at leading companies in their fields of application, the Cavagna Group's R&D team has developed many innovative solutions: one example is technology that successfully integrates valves with pressure regulators.





# The key elements of Cavagna's business strategy



## TARGETED ACQUISITIONS

The Cavagna Group – in keeping with its mission – constantly monitors the technological advancement market in order to enter new fields of application or seize on new business opportunities that can support its product offering and portfolio. This enables it to take on some of the main challenges facing the world today, such as the energy transition, sustainability and digital transformation.



## OPTIMIZATION OF PRODUCTION PROCESSES

The Cavagna Group's production processes are geared towards digital transformation and sustainability through ethical and responsible choices that minimize negative effects on the environment and improve energy use – for the here and now but also looking to the future. All this only further reaffirms the Group's vocation as a manufacturer that prioritizes flexibility and resilience.



## SUPPORT FOR A "CULTURE OF EFFICIENCY"

The Cavagna Group is constantly evolving from an organizational standpoint in order to generate improvements that can reduce waste and increase efficiency. A fundamental part in achieving this goal is played by human resources and new skills, which are key factors in making the Group's business smarter and transforming this corporate value into a competitive advantage.



## CONSTANT INVESTMENT IN R&D

Commitment to innovation leads to higher-quality products and services. IoT technology is a good example: the Cavagna Group uses it to connect devices made for the gas industry. The digital collection of data and remote management of smart devices generate advantages along the entire gas industry supply chain. The Group also takes part in cutting-edge initiatives for the energy transition, in which a key role is played by hydrogen, biomethane, bioLPG and other green molecules.



## AUTHORITATIVE AND WORTHY ADVOCACY

The Cavagna Group maintains a constant commitment at national and international level in partnership with institutions, associations and business groups. They all share a belief in the growing importance of "molecules" for the energy transition and social development. The Group takes part in projects to support ideas, actions and initiatives that aim to have a concrete, positive impact on the lives of communities, families and individuals.



**OUR VISION:**  
WHEREVER GAS IS USED,  
WE ARE THERE



## COMPATIBILITY AT THE SERVICE OF HYDROGEN DEVELOPMENT

Hydrogen is playing an increasingly key role in the “green” economy”, including when it comes to gas distribution networks. The goal is to come up with hydrogen/natural gas blends in order to reduce emissions. That is precisely why gas distribution companies around the world turn to Cavagna products, which are guaranteed to be safe and reliable.

The Cavagna Group is fully aware that hydrogen will play an increasingly key role in the sustainability and operational efficiency of future decarbonized energy systems. For this reason, it is actively investing a great deal in R&D and products. Furthermore, the Group is working on the compatibility of its devices – indeed, it now has regulators that are 100% compatible with hydrogen and certified as such. The Group is also working on other projects in the metering and automotive sectors, with specific technologies for fuel cells.

The Group’s strategy in the foreseeable future is to favor the use of existing infrastructure, with the realistic awareness that dedicated networks and infrastructure will need to be economically sustainable.

## Real opportunities for the energy transition

New solutions for the use of LPG, natural gas, hydrogen, and gases produced from renewable sources.

The energy transition is a challenge that will entail new infrastructural investments in the production of gases from non-conventional and renewable sources and, consequently, an increase in demand for related components (valves, regulators, meters, etc.) and services.

Knowledge in gas management is crucial for the development of new skills, which in turn are essential for a successful transition. The Cavagna Group is proof of just that, as it is currently working on projects involving biogas, renewable LPG, renewable DME and hydrogen. The Group does not just take a vertical, product- and systems-based approach but also a cross-cutting approach: one that encompasses research, development, engineering and equipment manufacturing, thanks in part to the recent acquisition of companies that have the capabilities to respond to an increasing demand for “green gas” equipment.



# Innovative solutions for the digital transformation

Digital technologies and IoT applied to the world of gas.

Digital transformation affects the entire industrial and socioeconomic landscape. And it is driving the world of gas to accelerate the introduction of Industry 4.0 technologies and solutions. The Cavagna Group's track record of developing patents and exclusive solutions demonstrates that it is one of the most active companies in the digital transformation of the gas industry. This transformation – which involves products and systems across a range of uses for molecules and gases – is driven in synergy with the engineering teams of customers, enabling the Group to meet even the most challenging of technological expectations with customized solutions.

In recent years, the Cavagna Group has invested in R&D and equipment in order to further promote the digital transformation of the industry. In particular, the Group has focused on the benefits of the digital control of valves and pressure regulators, including by equipping them with IoT capabilities. One such example is the Group's Viproxy® line of integrated medical valves for medical applications, through which the Group has brought the benefits of information communication technology to this critical field of application.



## SMART TECHNOLOGIES: VERSATILE AND ALWAYS CONNECTED

Thanks to the efforts of the Cavagna Group's R&D department, the Group has reached another key milestone in the field of digital transformation: the innovative Viproxy i-ITouch, a valve that not only lets users digitally manage data but also harnesses the power of IoT to let users transmit that data. It is a veritable smart valve: a product that can "talk". The product has great versatility, as demonstrated by a one-of-a-kind feature: an easy-to-apply, optional add-on that allows users to make it an IoT device when needed.

The add-on can even be installed at a later stage, which allows customers to implement a digital transformation plan for their cylinder stocks at their own pace and, when they are ready, benefit from the remote management of data relating to pressurized containers. Furthermore, the Group has its own IoT platform called OTUS, which permits easy monitoring of data from all connected devices.



## An advanced partner for the gas industry

The go-to company in various fields of application:  
design, engineering, and market development.

To the Cavagna Group, being a proactive partner of oil and gas companies, utility companies and industrial groups means being able to combine innovation and reliability.

Wherever gas is involved, fueling work and life, the Cavagna Group's technological and manufacturing prowess will be there, too. Whatever the type of gas, Cavagna's safe, efficient technological solutions make it the company to turn to.

To solidify its market position, the Group has continued to invest in organizational and structural improvements based on the concept of vertically integrated production units, in order to have total control over its entire production process: from project engineering up to the final check of every single product. Recent investments only reaffirm this approach, as the Group continues to expand its technological prowess in compressed gas management while also strengthening its position in the gas metering market (natural gas and LPG).

### AN INCREASINGLY KEY ROLE IN THE ENERGY OUTLOOK

The Cavagna Group is moving forward with its market strategy as it continues to reaffirm its status as a global benchmark for products and services in the gas industry. A new, significant step towards this positioning and identity is the recent acquisition of REPCo, global leader in the design, supply, commissioning, on-site start-up and after-sales service of power, oil and gas equipment. REPCo has the resources and expertise to manage the various, interconnected aspects that go into the development of turn-key projects: covering everything from the mechanical and electrical side of things to instrumentation and control. The acquisition highlights the clear synergy between all the companies involved: it has integrated various levels of the supply chain and led to an overall increase in product offering and geographical reach. REPCo also boasts extensive know-how in the power, oil and gas industry and is thus in a position to seize on the opportunities arising from developments related to the introduction of new "green" molecules – be they in gaseous or liquid form – and low-carbon molecules. And thanks to the Cavagna Group's work on hydrogen compatibility, REPCo is already able to meet customers' new specifications following the introduction of hydrogen/natural gas blends in gas distribution systems and networks.





# Organized to be a global presence

Production units and businesses building the future of gas use.

**18**

Production units in Italy and the rest of the world

**1,100**  
Employees

**150**  
Countries served

As the Cavagna Group has evolved, its business has come to cover the widest range of technological solutions. The Group is made up of several vertically integrated production companies in Italy and in countries on another four continents. It currently employs over 1,000 people around the world and has a sales and distribution network that reaches more than 150 countries.

The Group started out with systems for the regulation and control of gas and, over time, has expanded its company and its fields of interest through new investments. It has also implemented a strategy of targeted acquisitions, which have enabled it to establish a strong presence across numerous – and, in terms of know-how and business potential, complementary – fields of application.



The Cavagna Group's headquarters





### CERTIFIED COMMITMENT

All the subsidiaries and divisions that make up the Cavagna Group have obtained the most authoritative international certifications available in their respective industries and fields of application. These certifications – which include important environmental ethics certifications – attest to the Cavagna Group's know-how and excellence and are constantly updated and implemented in collaboration with international organizations and accreditation bodies

## The Group's values support **ethical progress**

A mission and vision in line with the principles underlying the planet's sustainable development.

The Cavagna Group is committed to promoting the development and use of molecules and gases as alternative energy sources. The Group is recognized as a driver of this development, which is based on ideas that combine business potential with social ethics and environmental sustainability. Cavagna is an active member of the gas world's main international associations and takes part in a number of institutional, technical/scientific, environmental and social solidarity initiatives, during which common goals often emerge.

One significant example is the global "Cooking For Life" campaign. Launched by the WLPGA and backed by the UN, this global campaign seeks to reduce the health and environmental risks caused by using solid fuels for cooking (with a focus on coal and wood) in several developing countries. The campaign shines the spotlight on LPG as a key step forward in the societal and cultural progress needed to safeguard the welfare of populations – especially women and children – around the world and protect ecosystems against deforestation and pollution.



The background features a large, semi-transparent watermark of the Cavagna Group logo, which is a stylized 'C' with a circular element inside, centered behind the text.

**The Cavagna Group's lines of business and company history**



# 6 divisions to cover all the market's needs

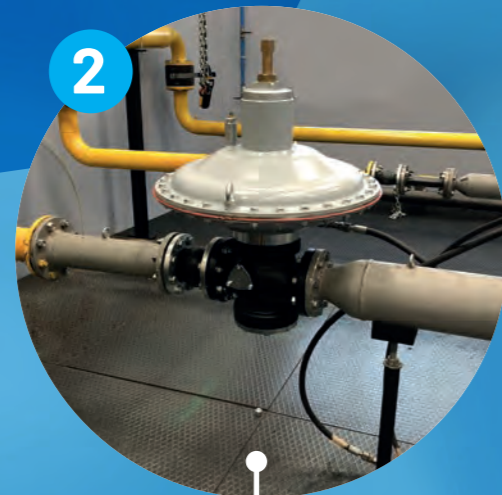
Wherever gas is involved, fueling work and life, the Cavagna Group's technological and manufacturing prowess will be there, too. The Group's business is currently organized into six lines of business: a testament to the Group's breadth of operations at the service of supply chains serving the full spectrum of gases.



1

## LIQUID GAS

Since its foundation in 1949, the Cavagna Group has been one of the industry's forerunners of equipment for the control and regulation of LPG. The Group has developed many innovative solutions over the years and is now regarded as a worldwide market leader in the field. The Group provides technological solutions for the entire value chain, from processing and storage to end-user applications.



2

## NATURAL GAS

The Group has a vast range of technologically advanced solutions for gas industry and multi-utility supply chains, which means distributors and users are guaranteed safe and effective control and regulation of natural gas, biomethane and blends. The Group's products are used in the various phases of gas supply – from transport to primary and secondary distribution – and are capable of handling a maximum inlet pressure of 100 bar and then reducing the pressure to that required in distribution networks, with specific devices for industrial, commercial and domestic users.



3

## COMPRESSED GASES

Whether in highly specialized fields or industrial applications, the Cavagna Group's product range meets the requirements. For highly specialized users, Cavagna boasts solutions for medical gases for home and hospital care oxygen systems, high-purity and ultra-high-purity gases for research and analysis laboratories, and air mixtures for firefighters and scuba divers in their breathing apparatuses. Industrial gas users rely on Cavagna technologies for the control and regulation of gases across numerous applications, including welding and metal-cutting.



4

## ALTERNATIVE FUELS

This division concentrates on the continuous development of alternative fuels for transport. Thanks to Cavagna's experience in the field of compressed gases and its recent partnerships, the Group specializes in the production of CNG and H2 for automotive use and offers complete systems for the conversion of diesel engines into diesel dual fuel (DDF) engines for use with natural gas, biomethane, LPG, renewable DME, biogas, LNG and hydrogen.



5

## GAS METERING

The Cavagna Group's offering ranges from meters for natural gas and LPG distribution networks to more sophisticated smart meters with digital, ultrasonic technology for more demanding networks and users. This makes the Group the ideal partner for gas companies and multi-utility companies. Its integrated solutions optimize metering in terms of continuity and precision, with the added benefit of IoT capabilities and remote data transmission/management.



6

## INDUSTRIAL PROCESS MANAGEMENT

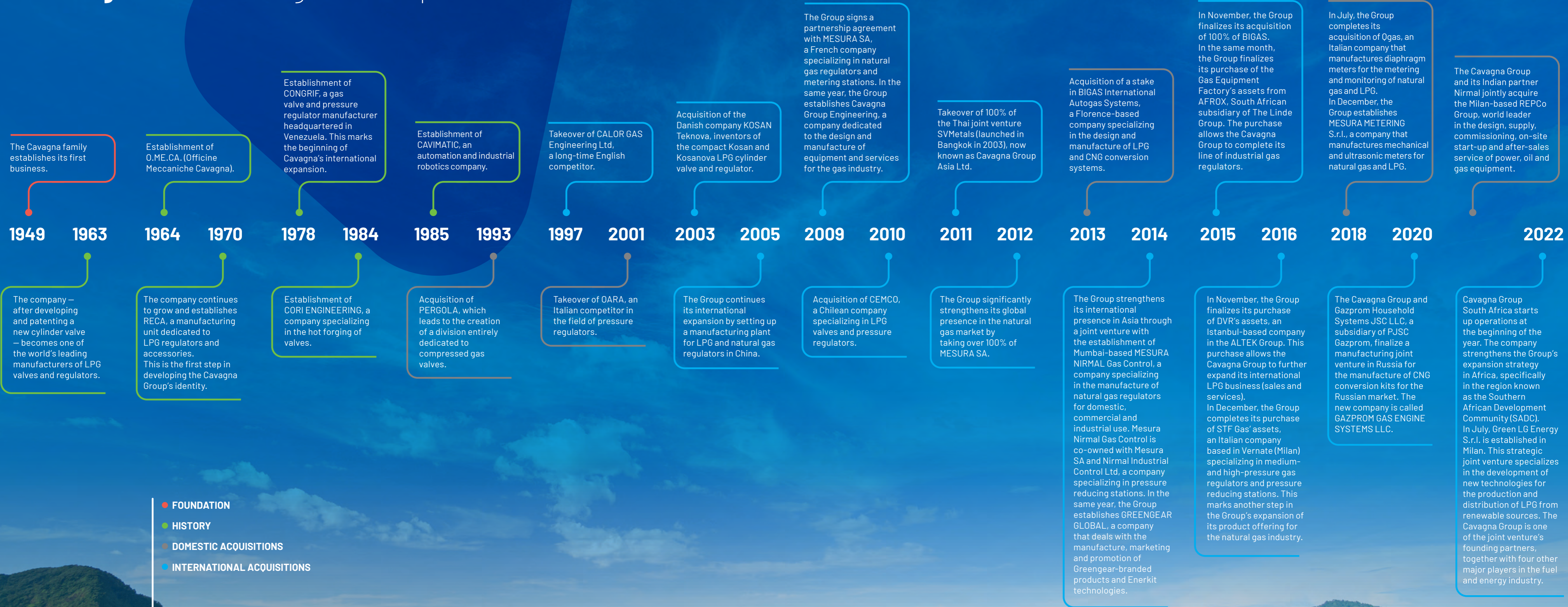
The Cavagna Group set up a dedicated industrial process management division in order to offer a full range of products that can meet the demands of electricity providers, oil and gas companies, and the gas industry supply chain. This division specializes in multidisciplinary engineering, ranging from basic design and shop-floor construction drawings to project management, procurement, assistance with construction and assembly, commissioning, and site surveys.







# History of the Cavagna Group



- FOUNDATION
- HISTORY
- DOMESTIC ACQUISITIONS
- INTERNATIONAL ACQUISITIONS





**cavagna group**

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